PENNSTATE

Office of Physical Plant

The Pennsylvania State University
Physical Plant Building
University Park, PA 16802-1118

DATE: February 17, 2012

SUBJECT: Steidle Building Renovation,
University Park

TO: Short Listed Firms

EYP
Goody Clancy
Stantec

I am pleased to inform you that the above listed firms have been chosen to be interviewed by the Screening Committee in anticipation of selecting a team for appointment by the Board of Trustees.

Interviews will be conducted at The Penn Stater Conference Center, University Park on Friday, March 2, 2012. The interview schedule is as follows:

EYP	9:20 A.M. – 10:20 A.M. Room 213
Goody Clancy	10:30 A.M. – 11:30 A.M. Room 211
Stantec	12:30 P.M. – 1:30 P.M. Room 211

Each firm will be limited to no more than 40 minutes for their presentation allowing us 20 minutes for follow-up questions. I urge you to use the time wisely and refrain from simply repeating the material already submitted in your proposal. We are most interested in your approach to our specific project, your understanding of the key issues that will shape it and any initial broad ideas or concepts that you may have developed during this process. To help you assemble your presentation, enclosed you will find building plans and the latest condition report. In addition, we are interested in hearing how you address diversity within your team. It is most important to us that the key team members assigned to this project and any major consultants be present for the interview; however, please limit the number of team attendees to five. A projection screen will be provided for your use.

In the event that your firm is selected, we will show the Board of Trustees examples representative of your work; with this in mind, we require that you submit to us photographs in digital format no later than 12:00 noon on Monday March 12, 2012. Requirements for the photographs are described in the attached sheet. It is important that the photographs be representative of the type of project and function that we are addressing. In addition, I have also included a diagram of the interview room.

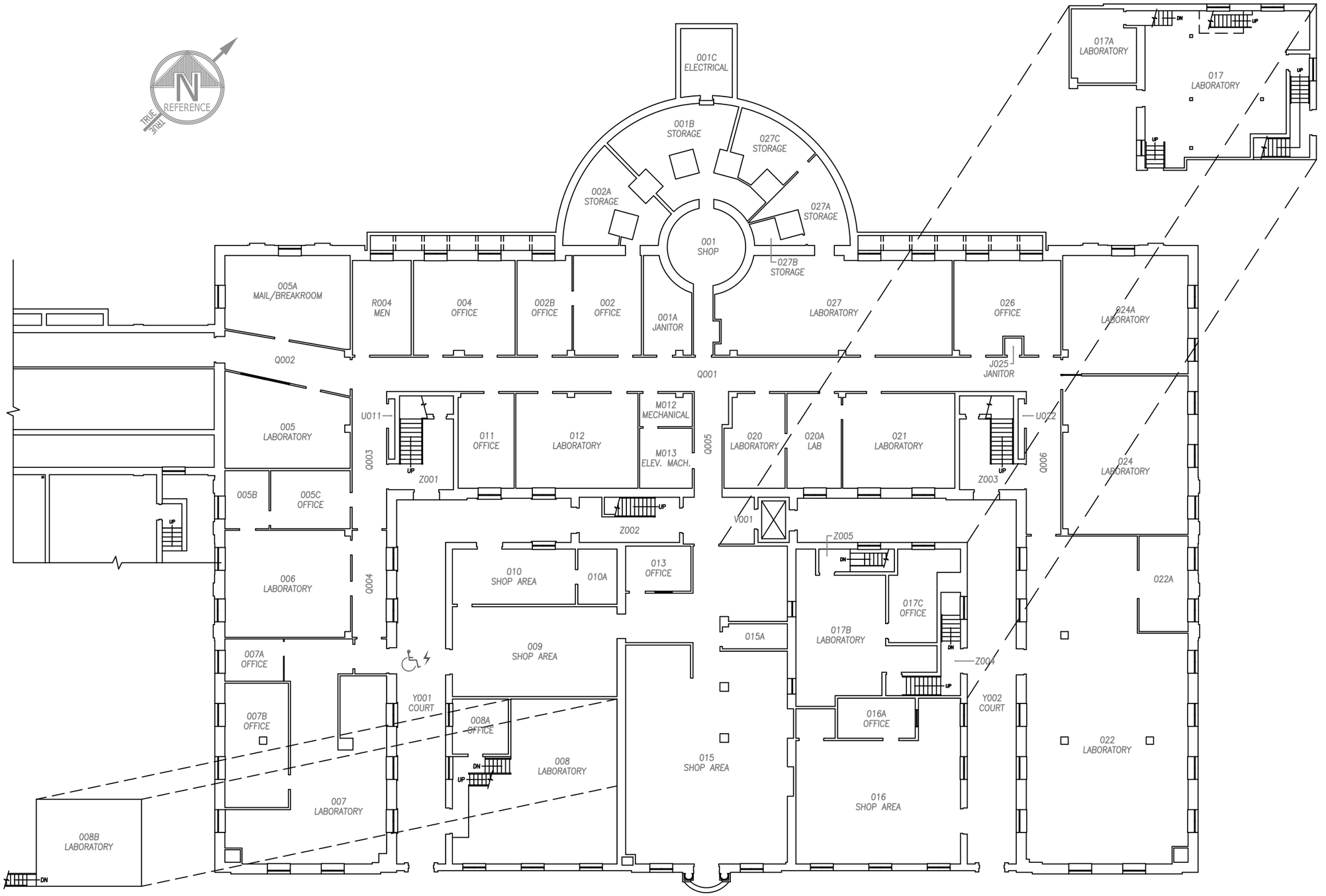
The result of the interviews will be announced at the Board of Trustees meeting on Friday March 16, 2012 and posted to our website.

Please do not hesitate to call me if we can be of further assistance.

Sincerely,

David Zehngut
University Architect
(814) 863-3158, fax (814) 863-7757,
E-mail dxz3@psu.edu

Enclosures



0501-000
BS
1 OF 4

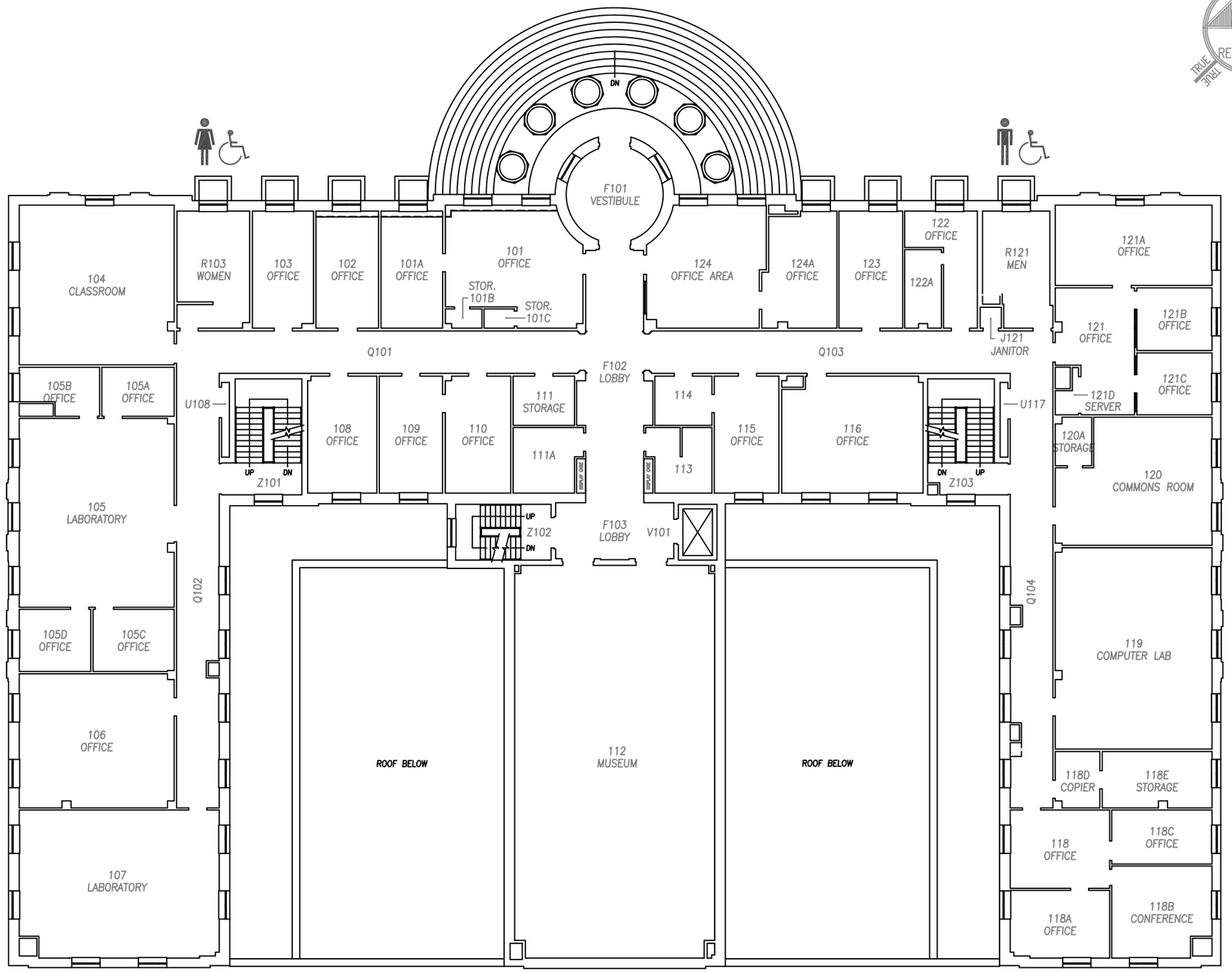
THE PENNSYLVANIA STATE UNIVERSITY
OFFICE OF PHYSICAL PLANT

CREATION DATE: 11/4/97 REVISION DATE: 09/23/07

BASMENT PLAN

STEIDLE BUILDING

UNIVERSITY PARK CAMPUS, UNIVERSITY PARK, PA



SCALE: 0 10' 20' 40' / 5' 15'

REFERENCE TRUE

0501-000
1
2 OF 4

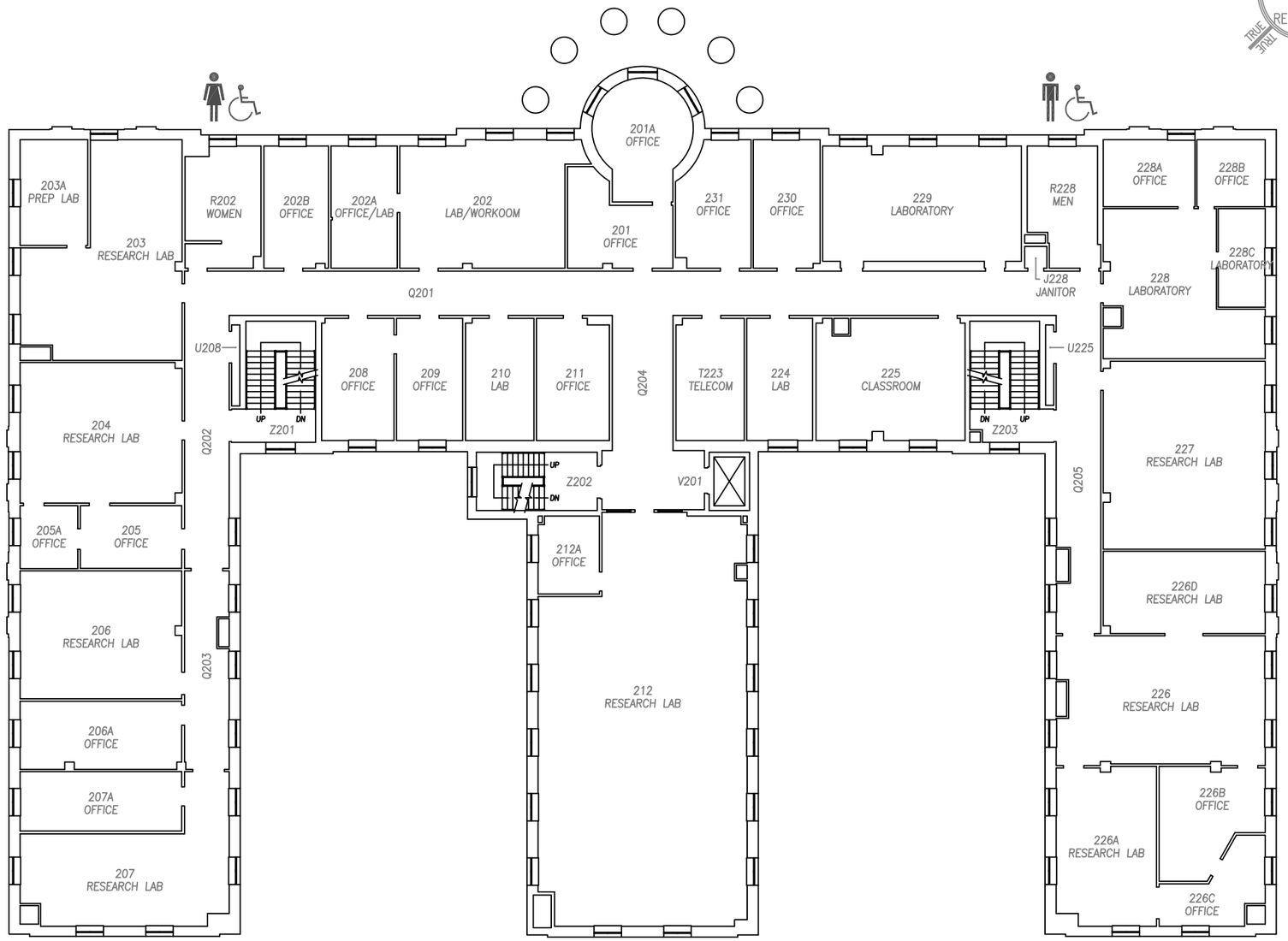
THE PENNSYLVANIA STATE UNIVERSITY
OFFICE OF PHYSICAL PLANT

CREATION DATE: 10/2/97 REVISION DATE: 08/12/02

FIRST FLOOR PLAN

STEIDLE BUILDING

UNIVERSITY PARK CAMPUS, UNIVERSITY PARK, PA



SCALE: 0 5' 10' 15' 20' 40'

0501-000
2
3 OF 4

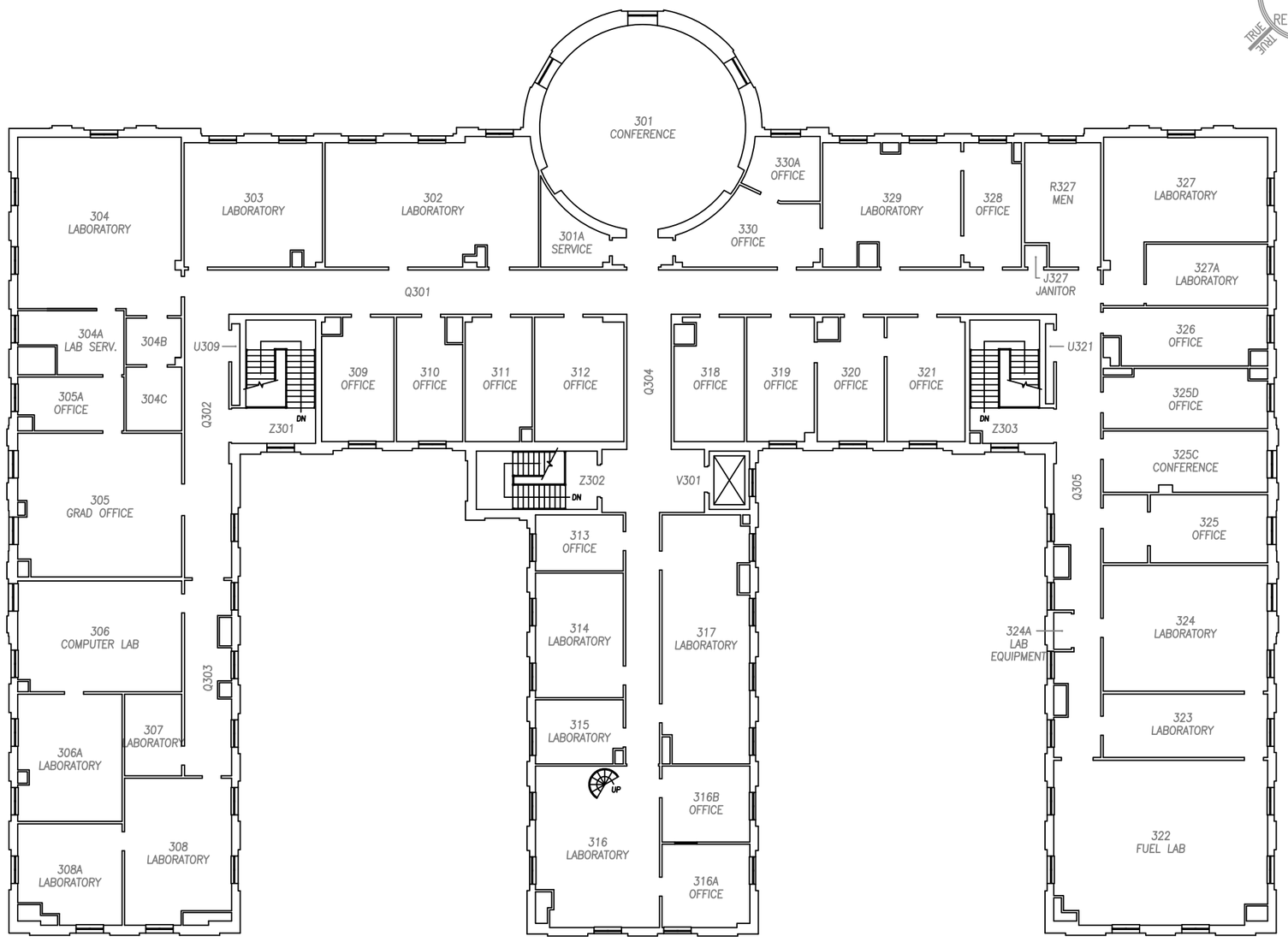
THE PENNSYLVANIA STATE UNIVERSITY
OFFICE OF PHYSICAL PLANT

CREATION DATE: 11/04/97 REVISION DATE: 05/23/04

SECOND FLOOR PLAN

STEIDLE BUILDING

UNIVERSITY PARK CAMPUS, UNIVERSITY PARK, PA



SCALE: 0 10' 20' 40' / 5' 15'

0501-000
3
4 OF 4

THE PENNSYLVANIA STATE UNIVERSITY
OFFICE OF PHYSICAL PLANT

CREATION DATE: 11/04/97 REVISION DATE: 05/23/04

THIRD FLOOR PLAN

STEIDLE BUILDING

UNIVERSITY PARK CAMPUS, UNIVERSITY PARK, PA

PENNSYLVANIA STATE UNIVERSITY
Facility Condition Analysis

STEIDLE BUILDING

BUILDING NUMBER: 0501-000
2008 UPDATE

FACILITY CONDITION ANALYSIS

AUGUST 19, 2008

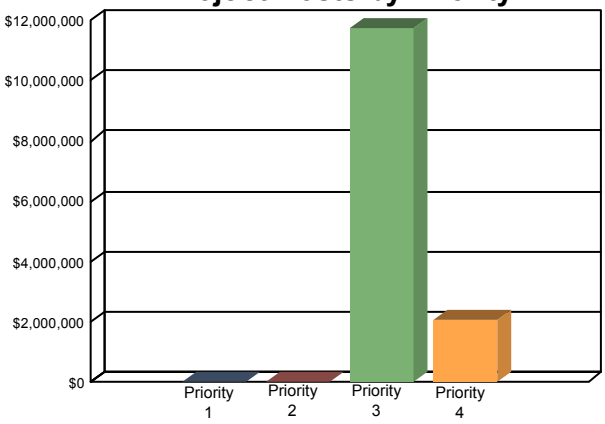
PENNSYLVANIA STATE UNIVERSITY
Facility Condition Analysis

TABLE OF CONTENTS

A. EXECUTIVE SUMMARY - STEIDLE BUILDING

Building Code: 0501-000
Building Name: STEIDLE BUILDING
Year Built: 1931
Building Use: Research Laboratory
Square Feet: 76,605

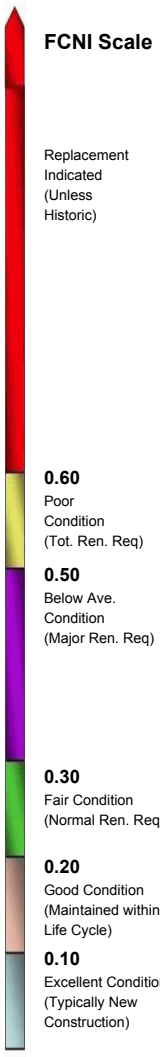
Project Costs by Priority



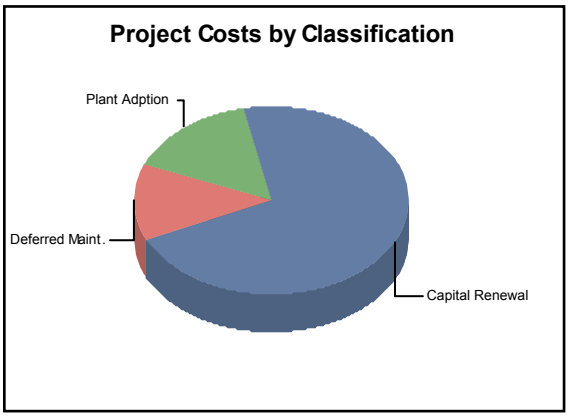
Project Costs by Priority

Priority 1:	$0
Priority 2:	$23,385
Priority 3:	$11,728,742
Priority 4:	$2,071,786
Total Project Costs:	**$13,823,913**
Facility Replacement Cost:	**$25,960,699**

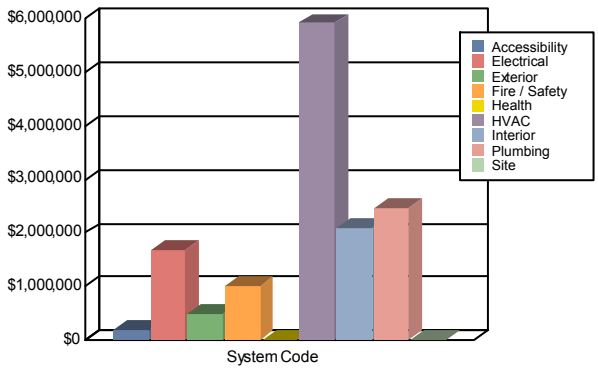
Facility Condition Needs Index (FCNI): **0.53**
(Project Costs / Replacement Cost)



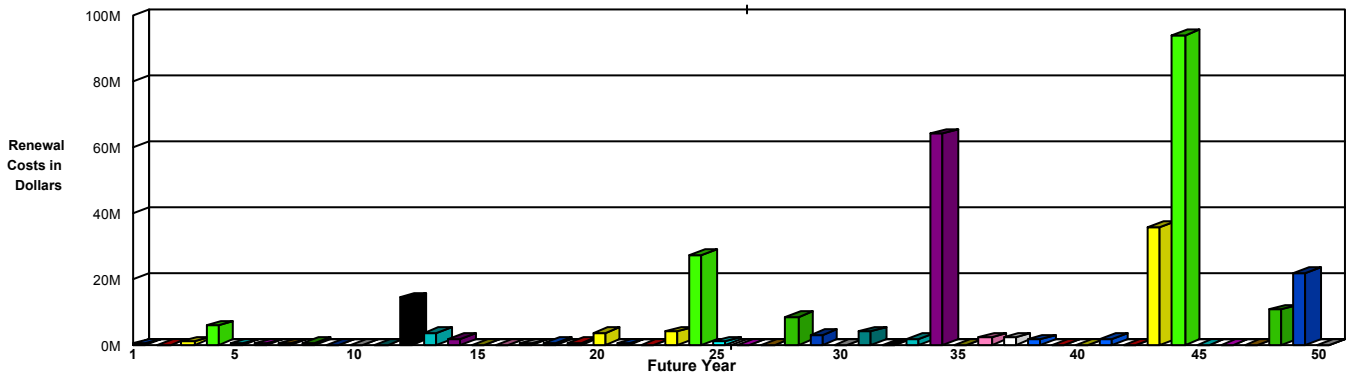
Project Costs by Classification



Project Costs by System Code



Life Cycle Model Expenditure Projections



Average Annual Renewal Cost per SqFt **$10.18**

PENNSYLVANIA STATE UNIVERSITY
Facility Condition Analysis
Section One

ADMINISTRATIVE OVERVIEW

This analysis is intended to update the initial Facility Condition Analysis prepared for Steidle Building. The facility was reinspected by ISES Corporation personnel to determine the number of previously recommended projects which had been completed and to ascertain the extent of new damage to the facility since the original inspection. The building was also surveyed for compliance with the Americans with Disabilities Act (ADA). This document is a reproduction of the original report information updated for subsequent damage, inflation, and new legislative requirements. Previously estimated project costs have been inflated based upon construction cost information published in Engineering News Record. Deficiencies which have been corrected since the original inspection have been eliminated from this report. New deficiencies observed during the reinspection have been incorporated into this report by either editing existing projects or adding new ones. Edited projects are identified by the addition of "(REV 2/08)" to the project title. New projects are indicated by the addition of "(2/08)" at the end of the title.

B. ASSET SUMMARY

The Steidle Building is located in the southwest section of the University Park campus of Pennsylvania State University in State College, Pennsylvania. Built in 1931 as the Mineral Industries Building with an addition added in 1938, it is listed on the National Register of Historic Places as part of the Old Campus historic district. The upper floors of this three-story, E-shaped, reinforced concrete-framed building primarily have brick facades with understated Georgian Revival details and concrete facades at the above-grade areas of the full basement level. A flight of exterior steps at the west facade leads to the two-story, semi-circular entry portico with a copper dome. The Steidle Building is connected to the Hosler Building on the south via a basement level corridor. It is named for Edward Steidle, former Dean of the School of Mineral Industries. The building has a listed area of 76,605 gross square feet.

Much of this building is occupied by laboratories, classrooms, computer labs, and offices and administration space for the Department of Material Science and Engineering, including the NSF Center for Computational Materials Design and the Material, that formerly housed the Earth and Mineral Sciences museum and art gallery (now located in the Deike Building), appeared to be a specimen archive and storage area.

SITE

The site slopes to the east, with half of the ground floor below grade on the west side of the building. Replacement of damaged sections of the concrete sidewalk adjacent to the building is recommended in the Exterior Structure section of this report.

The asphalt pavement on the southern side of the building is in average condition and should be crack sealed and slurry coated within the next six to eight years. This pavement work should include restriping the existing parking spaces, including ADA parking spaces.

EXTERIOR STRUCTURE

The existing roof consists of an EPDM roofing system. The roof is out of warranty and near the end of its life cycle depletion. It is recommended that the existing roofing system be replaced with a modified bitumen system. This roof replacement should include new insulation, roof drains, and flashing. The existing cast stone coping detail on the roof is becoming a heavy maintenance item. It is recommended that a continuous metal coping detail be installed to better control harmful water infiltration. The exterior brick veneer and accent stone need to be pressure washed and selectively re-pointed and caulked on all elevations. This exterior upgrade should be completed within the next five years.

The main entry stoop has damaged concrete steps, with spalling and signs of water infiltration in the basement level service area. The repair and sealing of the concrete stoops and the installation of handicapped ramps and new ADA-compliant, metal handrail sections are recommended. Also replace the sections of damaged concrete sidewalk near the north building entry.

Most of the building's windows have been replaced. The replacement units have both fixed and operable sashes and appeared to be in good condition at the time of inspection. The exterior, three panel, wood doors around the 1938 vintage addition are in average to fair condition, but it is anticipated that these doors will need to be upgraded within the next three to five years. Replace these grade level double doors in kind, and include ADA-compliant door hardware with each upgrade.

INTERIOR FINISHES / SYSTEMS

The interior finishes in some of the offices have been updated, but many of the corridors and some of the lab areas have vintage finishes. This building has a mixture of worn vinyl floor tile in the corridors, some offices, and most laboratory spaces. New vinyl floor tile should be installed in the laboratories and corridors. Carpeting in many of the offices is showing wear and should be replaced with new commercial, roll carpeting at the same time that the corridors and laboratories receive new vinyl tile. Furthermore, the three main stair towers have vinyl floor tile finishes, which will soon need to be replaced. It is recommended that rubber stair treads be installed in all three stair towers. The vinyl floor tile is anticipated to contain asbestos, and an abatement allowance is provided with this recommendation.

There are painted walls and some painted plaster ceilings throughout the building. The interior wall finishes are in good condition and will require an almost continuous program of renewal in order to maintain an acceptable appearance. Cyclical painting should be considered as a standard approach to maintaining the quality of the interior finishes. It is recommended that all previously painted surfaces be repainted according to established cycles for this occupancy and use type. Budgetary considerations are taken into account for the next ten years for interior repair and maintenance. Minor repairs should be completed before work begins.

Some of the ceilings will have to be removed to facilitate the proposed building system upgrades. This recommendation assumes that the plaster contains asbestos containing material (ACM) and will have to be abated. Therefore, an allowance for ACM abatement related to the plaster ceiling demolition work is included. Once these building system upgrades are completed and the ceiling areas are cleaned, install new 2 x 2 foot, lay-in ceiling systems in the corridors, office areas, and some of the dry laboratories.

The laboratory casework and countertops vary in design, age, and degree of deterioration from floor to floor and laboratory to laboratory. Overall, the original laboratory benches are at or near the end of their useful

life cycles. The newer laboratory benchwork is in better condition but should also be replaced. Roughly 50 percent of the older base cabinets and countertops should be replaced within three to five years, and the replacement of the remaining laboratory cabinets anticipated within six to ten years.

Room 118 has been turned into a break area, but there is no real cabinetry in the room. The break room on the third floor off of the main conference room 301 has cabinetry, but it is timeworn. Install new modular cabinets and countertops in each of these areas to upgrade this break room and kitchenette area. Also provide basic appliances and a small refrigerator with each upgrade.

The original interior wood door assemblies and stair tower french doors vary in condition, but they are generally aging and no longer meet industry standards. These doors also do not have accessible hardware and need to be upgraded. The interior corridor doors are solid core wood but are also timeworn and lack accessible door hardware. Replace all of these doors with new flush, hollow metal door assemblies, and provide ADA-compliant, lever actuated hardware with each new door assembly. Coordinate this work with the recommended building fire suppression upgrade for best results.

ACCESSIBILITY

The building is accessible at the grade-level entrances on the east side. The installation of a handicapped ramp at the main entrance is recommended during the repair of the entry steps in the Exterior Structure section of this report.

An elevator provides vertical transportation between floors. However, the passenger elevator in this building lacks an accessible emergency call system in the elevator cab. Installation of a hands-free, two-way commutation unit in the existing telephone box, and removal of the telephone box access door is recommended to maintain accessibility to the new unit.

The existing stair tower handrails in the three main interior egress stairs are original and only partially accessible. The wall-mounted rails have partially accessible railing extensions that will need to be replaced. The inner railings will need to be fitted with a graspable handrail design, and the openings between balustrades are also too wide and will need to be modified. The guardrails do not conform to the required height of 42 inches. Retrofit new inner and outer painted metal handrails and guardrails in each of these egress stair towers.

The building signage is ADA compliant. Updating of the existing knob hardware is addressed in the recommendation for the replacement of the interior doors that is included in the Interior Finishes / Systems section of this report.

The restrooms on the basement, first, and second floors have all had ADA upgrades, but the remainder of the restrooms in this building still have aging fixtures and finishes. Also, the third floor and basement level have only one restroom and one bathroom, respectively. Although the current percentage of restrooms meets the minimum ADA requirements, it is recommended that all of the remaining older restrooms be upgraded to ADA standards and that a total of two additional restrooms be added to provide two facilities on each floor level.

The existing drinking fountains are a mixture of older single-level, wall-mounted units and original white porcelain, wall-hung fountains. The newer fountains are showing their age, and the older fountains are

beyond their life cycle. All of the fountains in the building should be replaced within the next three to five years with new dual-level fountains. Each new installation should be set in a wheelchair accessible alcove or flanked by wing walls to comply with current ADA standards.

HEALTH

Recommendations to replace the plaster ceilings and vinyl tile floors that may require asbestos abatement is included in the Interior Finishes / Systems section of this report. No other health related issues were observed or reported by facility personnel at the time of the on-site review for this building. Therefore, no recommendations or assessment comments are included in this report.

FIRE / LIFE SAFETY

Non-rated penetrations through rated corridor walls, such as those noted above the door to laboratory 327, should be sealed with approved fire rating materials. Inspect the boxed duct chases in the corridors and the old chases in the south wings constructed in 1938 for additional penetrations, and seal them as required. Unsealed openings in the rated chase walls, corridor walls, and between floors pose a significant fire rating compromise for egress passages, and these compromises should be sealed as soon as possible. Coordinate this work with the recommended plaster ceiling upgrades to determine if there are additional penetrations above the ceiling finish, and seal them as required.

The wooden display cases in the second floor egress corridor do not have tempered glazing and should be modified to improve egress safety in this passageway. The double corridor doors that close off the second floor suite rooms in the southwest wing are propped open, causing a potential dead end corridor situation. In conjunction with the proposed interior door upgrades, install magnetic door holdbacks on these doors that will allow these corridor doors to remain open but still close in the event of an emergency.

The Pyrotronics fire alarm system does not comply with ADA requirements for visual alarms and pull station locations. Remove the existing aged system, and install a modern, addressable point fire alarm system in its place. This work includes panels, pull stations, audible / visual and visual devices, and smoke and heat detectors. Install all devices in accordance with current NFPA and ADA requirements. This system should report activation or trouble to an applicable receiving station, such as campus security and / or the local fire department.

There is a wet standpipe system with fire hose connections throughout the building. No other fire suppression was noted. A facility of this size and use type should be fully protected by an automatic fire suppression system. Install fire suppression throughout the facility, including piping, sprinkler heads, pipe bracing, and supervising and alarm devices, as needed. This will aid the university in terms of reduced liability and risk of loss.

This facility is equipped with eyewash showers and emergency fountains, but there are not enough in some areas to provide a high margin of safety. Remove the existing worn or low-grade showers and eyewashes. Install new emergency showers and eyewash fountains in all areas where related hazards exist. These should be permanent fixtures that are connected to the building's water supply network and provided with drains. They need to be clearly identified and located in unobstructed areas for easy access.

The exit signs throughout the building are becoming timeworn and are recommended for replacement. LED applications are proposed for their low maintenance and energy-efficient features. Connect the new exit signs to the proposed emergency circuit.

HVAC

This building is supplied with heating water and chilled water from the Hosler Building. There is a small air-cooled chiller in a mechanical enclosure off the east elevation on the north end. This appears to be for process cooling for the laboratory equipment. It is at the end of its life cycle and should be scheduled for replacement.

The HVAC system components consist of air handling systems, fan coil units, rooftop package units, window air conditioners, hot water radiators, and split DX air conditioners. These components vary in age and type. While much of the equipment appears to be 1980s vintage, there are older components and some that are nearly new. HVAC upgrades are recommended throughout the building to replace all of the aged systems / components with new efficient equipment. Demolish and dispose of the existing aged equipment. Install a new modern HVAC system with variable air volume (VAV) and constant volume air distribution, as needed. This includes new air handlers, ductwork, terminal units, heat exchangers, pumps, piping, controls, and electrical connections. Specify direct digital controls (DDCs) for the new equipment. Incorporate variable frequency drives (VFDs) into the new HVAC design, as applicable. Due to the age of some of the systems / components, it is suspected that ACM will be encountered during the demolition phase. This must be removed and disposed of in accordance with all pertinent regulations. This work accounts for approximately 80 percent of the existing HVAC air and water systems.

There are fume hoods in the teaching laboratories and research areas. The fume hood fans are located on the roof. Many of the fume hoods are fairly new, including their mechanical systems. Still, older hoods are present with mechanical systems that have exceeded their life cycles. In conjunction with the proposed HVAC upgrades, replacement of the old fume hoods with new modern units is recommended. Remove all the aged fume hoods and their mechanical systems. Install new fume hood systems that are integrated with the air distribution system. Provide DDCs for the new hoods. There are several exhaust fans on the roof that are due for replacement that are not part of the fume hood systems. Replace these fans, and clean and recondition their associated duct systems, replacing dampers and air registers, as needed.

ELECTRICAL

An exterior fluid-filled transformer provides 480 volt power to this facility. The transformer feeds a Westinghouse main switchboard rated at 2,500 amps. This was new in 1987 and is exhibiting corrosion at the base due to moisture in the vault. Within the ten-year purview of this report, the switchgear will reach the end of its life cycle. Replacement is recommended with an appropriately-sized switchboard in six to ten years.

The secondary electrical system includes a combination of old and newer components. There are newer Westinghouse breaker panels along with obsolete Trumbull panels and even some ancient fused panels. Some of the branch circuits are not grounded, having two wire receptacles. Devices, including switches and receptacles, are generally timeworn. Some areas do not have enough receptacles. One example is the museum, where extension cords and multi-plug adapters are being used. Upgrade the secondary electrical

system by replacing all aged, obsolete panels, replacing all worn and damaged devices, and replacing branch circuitry as needed. Install additional branch circuits to meet the present demands of the occupants. Specify ground fault circuit interrupter (GFCI) receptacles in the appropriate areas to reduce shock hazard.

The lighting throughout the facility is mainly fluorescent, but there are incandescent lights in some areas. The lights have been upgraded in a few of the laboratories and offices, but most are inefficient applications with outdated T12 lamps. In addition, many of the older fixtures have been fitted with T8 lamps, but the fixtures remain antiquated in appearance. Lighting levels tend to be low. Approximately 75 percent of the lighting is recommended for upgrade. Replace incandescent and old fluorescent light fixtures with new energy-efficient fixtures. Install occupancy sensors in select areas as an energy conservation measure.

The exterior lights are older vintage, incandescent fixtures that have been retrofitted with compact fluorescent lamps. These decorative lights could not be replaced and add to the overall exterior facade aesthetics. However, they are in need of attention. Several have missing or cracked glass lenses, and the compact fluorescent lamps do not provide good illumination. It is recommended that the exterior lights be refurbished and converted to HID fixtures. This will improve illumination levels, while leaving the original lighting fixtures in place.

Emergency power for the building consists of a 200 amp capacity, ASCO transfer switch and small step transformer connected to the campus emergency power network. The available power appears to be inadequate for a modern laboratory facility of this size. It is recommended that an appropriately-sized emergency generator and power network be installed. The emergency network should supply power to select light fixtures to maintain code required illumination levels along egress paths. Emergency power should also be provided for the exit signs, fire alarm system, elevator, and critical laboratory and mechanical equipment. If deemed more cost-effective, the university may opt to increase the emergency feeder size and transfer switch in lieu of the generator installation.

PLUMBING

This laboratory facility includes piping for domestic water, natural gas, distilled water, compressed air, and other specialty systems. Water supply piping is a mixture of copper and galvanized steel. Laboratory process fluids piping materials include copper, steel, and plastic. Shutoff valves and gas cocks are uniformly worn. Failure to replace the water and process piping within the scope of this report will result in frequent leaks and consequential maintenance costs. In coordination with other recommended plumbing upgrades, replacement of most of the water and process piping is recommended.

Drain piping types include glass, cast-iron bell-n-spigot, and plastic. Interconnections between all types were noted. Where it could be viewed, the drain piping appeared aged and due for replacement. There are laboratories in the basement with grated, open trenches with sump pumps. Replacement of the storm, acid, and sanitary waste drain piping is recommended in the near-term future. This work includes new floor drains and redesign of the open trench layout in the basement laboratories.

The restrooms on the third floor and basement have aged fixtures, while the ones on the second and first floors are practically new. Replace the older vintage restroom fixtures on the third floor and basement in conjunction with the proposed accessibility upgrades. Specify automatic flush valves and faucets for the replacement fixtures. Some of the water closets and urinals in the first and second floor restrooms already

have automatic flush valves. Replace the remaining manual flush valves with automatic units, and install automatic faucets for the lavatories. The janitor sinks on each floor are deteriorated from long-time use. Replace these with new service sinks.

The laboratory sinks and specialty fixtures vary in age and condition. The newer units appear to be from the 1980s. All of the laboratory sinks should be scheduled for replacement within the next ten years. To coordinate this work with the proposed laboratory bench upgrades, two recommendations were created. The first recommends replacement of the older vintage laboratory fixtures, approximately 50 percent, in the near term future and the remaining fixtures in the later term future. The other recommends replacement of the remaining laboratory fixtures in six to ten years. No water heater was noted in this building. It was reported that the domestic hot water is generated in Hosler Building.

VERTICAL TRANSPORTATION

The facility is served by one hydraulic passenger elevator that was installed in 1987. This unit has a travel of four floors with a capacity of 2,500 pounds and a speed of 125 fpm. The elevator appears to be in good condition and no recommendations are necessary for the extent of this report.

WORK COMPLETED SINCE LAST INSPECTION

- Some construction joint repair and brick re-pointing has been performed since the last survey in 2003.
- The basement level men's restroom has been upgraded for handicapped accessibility.

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.

Backlog Retirement Summary
Completed and Partially Completed Projects
0501-000 : STEIDLE BUILDING

Project Number	Project Title	Pri Cls	Date	Project Notes	Total Cost	Actual Cost To Date	Remaining Cost	Percen Complete
0501-000AC01	RESTROOM ACCESSIBILITY UPGRADES	3	2/12/2008	Basement mens restroom has been upgraded.	$90,842	22,357	$68,485	25%
			Subtotal for Priority Class 3		**$90,842**	**$22,357**	**$68,485**	
			Grand Totals		**$90,842**	**$22,357**	**$68,485**	

Backlog Retirement Summary
Completed Projects

0501-000 : STEIDLE BUILDING

Project Number	Project Title	Pri Cls	Date	Project Notes	Total Cost	Actual Cost To Date	Variance
				Subtotal for Priority Class	**$0**	**$0**	**$0**
				Grand Totals	**$0**	**$0**	**$0**

D. INSPECTION TEAM DATA

DATE OF INSPECTION: February 12, 2008

INSPECTION TEAM PERSONNEL:

NAME	POSITION	SPECIALTY
Mark Byrd	Facility Analyst	Interior Finishes / Exterior / ADA-Handicapped Accessibility / Site / Fire Safety / Life Safety / Health
Doug Fredendall	Facility Analyst	Mechanical / Electrical / Plumbing / Energy / Fire Safety / Life Safety / Health
Rob Gasaway	Facility Analyst	Interior Finishes / Exterior / ADA-Handicapped Accessibility / Site / Fire Safety / Life Safety / Health
Matthew Gregory	Project Engineer	Mechanical / Electrical / Plumbing / Energy / Fire Safety / Life Safety / Health
Michael Jordan	Project Engineer	Mechanical / Electrical / Plumbing / Energy / Fire Safety / Life Safety / Health
Laura Voisin George	Facility Analyst	Interior Finishes / Exterior / ADA-Handicapped Accessibility / Site / Fire Safety / Life Safety / Health

FACILITY CONTACTS:

NAME	POSITION
Kathy Bamat	Manager, Work Control Center

REPORT DEVELOPMENT:

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

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

E. FACILITY CONDITION ANALYSIS - DEFINITIONS

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

1. **REPORT DESCRIPTION**

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

Section 2: Detailed Project Summaries and Totals

A. Detailed Project Totals – Matrix with FCNI Data and Associated Charts
B. Detailed Projects by Priority Class / Priority Sequence
C. Detailed Projects by Cost within range [$0 - <$25,000]
D. Detailed Projects by Cost within range [≥ $25,000 - < $1,000,000]
E. Detailed Projects by Cost within range [≥ $1,000,000]
F. Detailed Projects by Project Classification
G. Detailed Projects by Project Rating Type - Energy Conservation
H. Detailed Projects by Category / System Code
I. Detailed Projects by Score

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

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

Section 3: Specific Project Details Illustrating Description / Cost

Section 4: Drawings with Iconography

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

Section 5: Life Cycle Model Building Component Summary

Section 6: Photographic Log

Note: For Sections 2 and 3, at the end of the reports and project detail, an *Inflation Adjustment Factor* will be designed and built into the program for update purposes. Updates will not be reflected in the original report.

2. PROJECT CLASSIFICATION

A. Plant / Program Adaption: Expenditures required to adapt the physical plant to the evolving needs of the institution and to changing codes or standards. These are expenditures beyond normal maintenance. Examples include compliance with changing codes (e.g. accessibility), facility alterations required by changed teaching or research methods, and improvements occasioned by the adoption of modern technology (e.g., the use of personal computer networks).

B. Deferred Maintenance: Refers to expenditures for repairs which were not accomplished as a part of normal maintenance or capital repair which have accumulated to the point that facility deterioration is evident and could impair the proper functioning of the facility. Costs estimated for deferred maintenance projects should include compliance with applicable codes even if such compliance requires expenditures beyond those essential to effect the needed repairs. Deferred maintenance projects represent catch up expenses.

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

3. PROJECT SUBCLASS TYPE

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

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

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

Example:

PRIORITY CLASS 1

CODE	PROJECT NO.	PRIORITY SEQUENCE
HV2C	0401-000HV04	01
PL1D	0401-000PL02	02

PRIORITY CLASS 2

CODE	PROJECT NO.	PRIORITY SEQUENCE
IS1E	0401-000IS06	03
EL4C	0401-000EL03	04

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

PRIORITY 1 - Currently Critical (Immediate)

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

PRIORITY 2 - Potentially Critical (Year One)

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

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

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

PRIORITY 4 - Recommended (Years Six to Ten)

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

6. **COST SUMMARIES AND TOTALS**

The cost summaries and totals are illustrated by Detailed Projects sorted in multiple formats (shown in Sections 1, 2, and 3).

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

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

Global Markup Percentages		R.S. MEANS
Local Labor Index:	90.6 %	of National Average
Local Materials Index:	95.6 %	of National average
General Contractor Markup:	20.0 %	Contractor profit and overhead, bonds and insurance
Professional Fees:	15.0 %	Arch. / Eng. Firm design fees and in-house design cost

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

Example:

Project Number = 0401-000-EL-04 (unique for each independent project)

0401-000 - Building Identification Number
EL - System Code, EL represents Electrical
04 - Sequential Assignment Project Number by Category / System

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

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

Example: 0401-000006e

Building Number	Photo Sequence	Arch / Eng
0401-000	006	e

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

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

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

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

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

Refer to the following Category Code Report.

Example: Category Code = EL5A

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

CATEGORY CODE			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 / FINISH SYSTEMS
PL1A	-	PL5A	PLUMBING
SI1A	-	SI4A	SITE
SS1A	-	SS7A	SECURITY SYSTEMS
VT1A	-	VT7A	VERTICAL TRANSPORTATION

CATEGORY CODE REPORT			
CODE	**COMPONENT DESCRIPTION**	**ELEMENT DESCRIPTION**	**DEFINITION**
SYSTEM DESCRIPTION: ACCESSIBILITY			
AC1A	SITE	STAIR AND RAILINGS	Includes exterior stairs and railings which are not part of the building entrance points.
AC1B	SITE	RAMPS AND WALKS	Includes sidewalks, grade change ramps (except for a building entrance), curb ramps, etc.
AC1C	SITE	PARKING	Designated parking spaces including striping, signage, access aisles and ramps, etc.
AC1D	SITE	TACTILE WARNINGS	Raised tactile warnings located at traffic crossing and elevation changes.
AC2A	BUILDING ENTRY	GENERAL	Covers all aspects of entry into the building itself including ramps, lifts, doors and hardware, power operators, etc.
AC3A	INTERIOR PATH OF TRAVEL	LIFTS/RAMPS/ ELEVATORS	Interior lifts, ramps and elevators designed to accommodate level changes inside a building. Includes both installation and retrofitting.
AC3B	INTERIOR PATH OF TRAVEL	STAIRS AND RAILINGS	Upgrades to interior stairs and handrails for accessibility reasons.
AC3C	INTERIOR PATH OF TRAVEL	DOORS AND HARDWARE	Accessibility upgrades to the interior doors including widening, replacing hardware power, assisted operators, etc.
AC3D	INTERIOR PATH OF TRAVEL	SIGNAGE	Interior building signage upgrades for compliance with ADA.
AC3E	INTERIOR PATH OF TRAVEL	RESTROOMS/ BATHROOMS	Modifications to and installation of accessible public restrooms and bathrooms. Bathrooms, which are an integral part of residential suites, are catalogued under HC4A.
AC3F	INTERIOR PATH OF TRAVEL	DRINKING FOUNTAINS	Upgrading/replacing drinking fountains for reasons of accessibility.
AC3G	INTERIOR PATH OF TRAVEL	PHONES	Replacement/modification of public access telephones.
AC4A	GENERAL	FUNCTIONAL SPACE MODIFICATIONS	This category covers all necessary interior modifications necessary to make the services and functions of a building accessible. It includes installation of assistive listening systems, modification of living quarters, modifications to laboratory workstations, etc. Bathrooms, which are integral to efficiency suites, are catalogued here.
AC4B	GENERAL	OTHER	All accessibility issues not catalogued elsewhere.
SYSTEM DESCRIPTION: ELECTRICAL			
EL1A	INCOMING SERVICE	TRANSFORMER	Main building service transformer.
EL1B	INCOMING SERVICE	DISCONNECTS	Main building disconnect and switchgear.
EL1C	INCOMING SERVICE	FEEDERS	Incoming service feeders. Complete incoming service upgrades, including transformers, feeders, and main distribution panels are catalogued here.
EL1D	INCOMING SERVICE	METERING	Installation of meters to record consumption and/or demand.
EL2A	MAIN DISTRIBUTION PANELS	CONDITION UPGRADE	Main distribution upgrade due to deficiencies in condition.
EL2B	MAIN DISTRIBUTION PANELS	CAPACITY UPGRADE	Main distribution upgrades due to inadequate capacity.
EL3A	SECONDARY DISTRIBUTION	STEP DOWN TRANSFORMERS	Secondary distribution stepdown and isolation transformers.
EL3B	SECONDARY DISTRIBUTION	DISTRIBUTION NETWORK	Includes conduit, conductors, sub-distribution panels, switches, outlets, etc. Complete interior rewiring of a facility is catalogued here.
EL3C	SECONDARY DISTRIBUTION	MOTOR CONTROLLERS	Mechanical equipment motor starters and control centers.
EL4A	DEVICES AND FIXTURES	EXTERIOR LIGHTING	Exterior building lighting fixtures including supply conductors and conduit.
EL4B	DEVICES AND FIXTURES	INTERIOR LIGHTING	Interior lighting fixtures (also system wide emergency lighting) including supply conductors and conduits.
EL4C	DEVICES AND FIXTURES	LIGHTING CONTROLLERS	Motion sensors, photocell controllers, lighting contactors, etc.

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

CATEGORY CODE REPORT			
CODE	**COMPONENT DESCRIPTION**	**ELEMENT DESCRIPTION**	**DEFINITION**
ES6E	GENERAL	OTHER	Any exterior work not specifically categorized elsewhere including finish and structural work on freestanding boiler stacks.
SYSTEM DESCRIPTION: FIRE / LIFE SAFETY			
FS1A	LIGHTING	EGRESS LIGHTING/EXIT SIGNAGE	R & R work on exit signage and packaged AC/DC emergency lighting.
FS2A	DETECTION/ALARM	GENERAL	Repair or replacement of fire alarm/detection system/components including alarms, pull boxes, smoke/heat detectors, annunciator panels, central fire control stations, remote dialers, fire station communications, etc.
FS3A	SUPPRESSION	SPRINKLERS	Repair or installation of water sprinklers type automatic fire suppressions including wet pipe & dry pipe systems, heads, piping, deflectors, valves, monitors, associated fire pump, etc.
FS3B	SUPPRESSION	STANDPIPE/HOSE	Repair or installation of standpipe system or components including hardware, hoses, cabinets, nozzles, necessary fire pumping system, etc.
FS3C	SUPPRESSION	EXTINGUISHERS	Repairs or upgrades to F.E. cabinets/wall fastenings and handheld extinguisher testing/replacement.
FS3D	SUPPRESSION	OTHER	Other fire suppression items not specifically categorized elsewhere including fire blankets, carbon dioxide automatic systems, Halon systems, dry chemical systems, etc.
FS4A	HAZARDOUS MATERIALS	STORAGE ENVIRONMENT	Installation or repair of special storage environment for the safe holding of flammable or otherwise dangerous materials/supplies including vented flammables storage cabinets, holding pens/rooms, cages, fire safe chemical storage rooms, etc.
FS4B	HAZARDOUS MATERIALS	USER SAFETY	Improvements, repairs, installation, or testing of user safety equipment including emergency eyewashes, safety showers, emergency panic/shut-down system, etc.
FS5A	EGRESS PATH	DESIGNATION	Installation, relocation or repair of posted diagrammatic emergency evacuation routes.
FS5B	EGRESS PATH	DISTANCE/ GEOMETRY	Work involving remediation of egress routing problems including elimination of dead end corridors, excessive egress distance modifications and egress routing inadequacies.
FS5C	EGRESS PATH	SEPARATION RATING	Restoration of required fire protective barriers including wall rating compromises, fire rated construction, structural fire proofing, wind/safety glazing, transom retrofitting, etc.
FS5D	EGRESS PATH	OBSTRUCTION	Clearance of items restricting the required egress routes.
FS5E	EGRESS PATH	STAIRS RAILING	Retrofit of stair/landing configurations/structure, railing heights/geometries, etc.
FS5F	EGRESS PATH	FIRE DOORS/ HARDWARE	Installation/replacement/repair of fire doors and hardware including labeled fire doors, fire shutters, closers, magnetic holders, panic hardware, etc.
FS5G	EGRESS PATH	FINISH/FURNITURE RATINGS	Remediation of improper fire/smoke ratings of finishes and furniture along egress routes.
FS6A	GENERAL	OTHER	Life/fire safety items not specifically categorized elsewhere.
SYSTEM DESCRIPTION: HEALTH			
HE1A	ENVIRONMENTAL CONTROL	EQUIPMENT AND ENCLOSURES	Temperature control chambers (both hot and cold) for non-food storage. Includes both chamber and all associated mechanical equipment.
HE1B	ENVIRONMENTAL CONTROL	OTHER	General environmental control problems not catalogued elsewhere.
HE2A	PEST CONTROL	GENERAL	Includes all measures necessary to control and destroy insects, rodents and other pests.
HE3A	REFUSE	GENERAL	Issues related to the collection, handling and disposal of refuse.
HE4A	SANITATION EQUIPMENT	LABORATORY AND PROCESS	Includes autoclaves, cage washers, steam cleaners, etc.
HE5A	FOOD SERVICE	KITCHEN EQUIPMENT	Includes ranges, grilles, cookers, sculleries, etc.
HE5B	FOOD SERVICE	COLD STORAGE	Includes the cold storage room and all associated refrigeration equipment.
HE6A	HAZARDOUS MATERIAL	STRUCTURAL ASBESTOS	Testing, abatement and disposal of structural and building finish materials containing asbestos.

CATEGORY CODE REPORT			
CODE	**COMPONENT DESCRIPTION**	**ELEMENT DESCRIPTION**	**DEFINITION**
HE6B	HAZARDOUS MATERIAL	MECHANICAL ASBESTOS	Testing, abatement and disposal of mechanical insulation materials containing asbestos.
HE6C	HAZARDOUS MATERIAL	PCBs	Includes testing, demolition, disposal and cleanup of PCB contaminated substances.
HE6D	HAZARDOUS MATERIAL	FUEL STORAGE	Includes monitoring, removal and replacement of above and below ground fuel storage and distribution systems. Also includes testing and disposal of contaminated soils.
HE6E	HAZARDOUS MATERIAL	LEAD PAINT	Testing, removal and disposal of lead-based paint systems.
HE6F	HAZARDOUS MATERIAL	OTHER	Handling, storage, and disposal of other hazardous materials.
HE7A	GENERAL	OTHER	Health related issues not catalogued elsewhere.
SYSTEM DESCRIPTION: HVAC			
HV1A	HEATING	BOILERS/STACKS/ CONTROLS	Boilers for heating purposes including their related stacks, flues, and controls.
HV1B	HEATING	RADIATORS/ CONVECTORS	Including cast iron radiators, fin tube radiators, baseboard radiators, etc.
HV1C	HEATING	FURNACE	Furnaces and their related controls, flues, etc.
HV1D	HEATING	FUEL SUPPLY/STORAGE	Storage and/or distribution of fuel for heating purposes, including tanks and piping networks and related leak detection/monitoring.
HV2A	COOLING	CHILLERS/ CONTROLS	Chiller units for production of chilled water for cooling purposes, related controls (not including mods for CFC compliance).
HV2B	COOLING	HEAT REJECTION	Repair/replacement of cooling towers, dry coolers, air-cooling and heat rejection. (Includes connection of once-through system to cooling tower.)
HV3A	HEATING/COOLING	SYSTEM RETROFIT/ REPLACE	Replacement or major retrofit of HVAC systems.
HV3B	HEATING/COOLING	WATER TREATMENT	Treatment of hot water, chilled water, steam, condenser water, etc.
HV3C	HEATING/COOLING	PACKAGE/SELF-CONTAINED UNITS	Repair/replacement of self-contained/package type units including stand up units, rooftop units, window units, etc; both air conditioners and heat pumps.
HV3D	HEATING/COOLING	CONVENTIONAL SPLIT SYSTEMS	Repair, installation, or replacement of conventional split systems; both air conditioners and heat pumps including independent component replacements of compressors and condensers.
HV4A	AIR MOVING/ VENTILATION	AIR HANDLERS/ FAN UNITS	Includes air handlers & coils, fan coil units, unit ventilators, filtration upgrades, etc., not including package/self-contained units, split systems or other specifically categorized systems.
HV4B	AIR MOVING/ VENTILATION	EXHAUST FANS	Exhaust fan systems including fans, range and fume hoods, controls, and related ductwork.
HV4C	AIR MOVING/ VENTILATION	OTHER FANS	Supply, return, or any other fans not incorporated into a component categorized elsewhere.
HV4D	AIR MOVING/ VENTILATION	AIR DISTRIBUTION NETWORK	Repair, replacement, or cleaning of air distribution network including ductwork, terminal reheat/cool, VAV units, induction units, power induction units, insulation, dampers, linkages, etc.
HV5A	STEAM/HYDRONIC DISTRIBUTION	PIPING NETWORK	Repair/replacement of piping networks for heating and cooling systems including pipe, fittings, insulation, related components, etc.
HV5B	STEAM/HYDRONIC DISTRIBUTION	PUMPS	Repair or replacement of pumps used in heating and cooling systems, related control components, etc.
HV5C	STEAM/HYDRONIC DISTRIBUTION	HEAT EXCHANGERS	Including shell and tube heat exchangers and plate heat exchangers for heating and cooling.
HV6A	CONTROLS	COMPLETE SYSTEM UPGRADE	Replacement of HVAC control systems.

CATEGORY CODE REPORT			
CODE	**COMPONENT DESCRIPTION**	**ELEMENT DESCRIPTION**	**DEFINITION**
HV6B	CONTROLS	MODIFICATIONS/ REPAIRS	Repair or modification of HVAC control system.
HV6C	CONTROLS	AIR COMPRESSORS/ DRYERS	Repair or modification of control air compressors and dryers.
HV7A	INFRASTRUCTURE	STEAM/HOT WATER GENERATION	Generation of central steam and/or hot water including boilers and related components.
HV7B	INFRASTRUCTURE	STEAM/HOT WATER DISTRIBUTION	Distribution system for central hot water and/or steam.
HV7C	INFRASTRUCTURE	CHILLED WATER GENERATION	Generation of central chilled water including chillers and related components.
HV7D	INFRASTRUCTURE	CHILLED WATER DISTRIBUTION	Distribution system for central chilled water.
HV7E	INFRASTRUCTURE	TUNNELS/ MANHOLES/ TRENCHES	Repairs, installation, replacement of utility system access chambers.
HV7F	INFRASTRUCTURE	OTHER	HVAC infrastructure issues not specifically categorized elsewhere.
HV8A	GENERAL	CFC COMPLIANCE	Chiller conversions/replacements for CFC regulatory compliance, monitoring, etc.
HV8B	GENERAL	OTHER	HVAC issues not catalogued elsewhere.
SYSTEM DESCRIPTION: INTERIOR / FINISH SYSTEMS			
IS1A	FLOOR	FINISHES-DRY	R & R of carpet, hardwood strip flooring, concrete coating, vinyl linoleum & tile, marble, terrazzo, rubber flooring, underlayment in predominantly dry areas ("dry" includes non-commercial kitchens)
IS1B	FLOOR	FINISHES-WET	Flooring finish/underlayment work in predominantly "wet" areas including work with linoleum, rubber, terrazzo, concrete coating, quarry tile, ceramic tile, epoxy aggregate, etc.
IS2A	PARTITIONS	STRUCTURE	Structural work on full height permanent interior partitions including wood/metal stud & drywall systems, CMU systems, structural brick, tile, glass block, etc.
IS2B	PARTITIONS	FINISHES	Work on full height permanent interior partitions including R & R to gypsum board, plaster, lath, wood paneling, acoustical panels, wall coverings, column coverings, tile, paint, etc.
IS3A	CEILINGS	REPAIR	Repair of interior ceilings (<40% of total) including tiles, gypsum board, plaster, paint, etc.
IS3B	CEILINGS	REPLACEMENT	Major refurbishments (>40% of total) to interior ceiling systems including grid system replacements, structural framing, new suspended systems, paint, plastering, etc.
IS4A	DOORS	GENERAL	Any work on interior non-fire rated doors, roll-up counter doors, mechanical/plumbing access doors, and all door hardware (except for reasons of access improvement).
IS5A	STAIRS	FINISH	Any finish restorative work to stair tower walking surfaces including replacement of rubber treads, safety grips, nosings, etc. (except as required to accommodate disabled persons).
IS6A	GENERAL	MOLDING	R & R to interior trim/molding systems including rubber/vinyl/wood base, crown/chair/ornamental moldings, cased openings, etc.
IS6B	GENERAL	CABINETRY	R & R work to interior casework systems including cabinets, countertops, wardrobes, lockers, mail boxes, built-in bookcases, lab/work benches, reagent shelving, etc. (except as required for access by the disabled).
IS6C	GENERAL	SCREENING	Work on temporary or partial height partitioning systems including toilet partitions, urinal/vanity screens, etc.
IS6D	GENERAL	OTHER	Any work on interior elements not logically or specifically categorized elsewhere including light coves, phone booths, interior light wells, etc.
SYSTEM DESCRIPTION: PLUMBING			
PL1A	DOMESTIC WATER	PIPING NETWORK	Repair or replacement of domestic water supply piping network, insulation, hangers, etc.

CATEGORY CODE REPORT			
CODE	**COMPONENT DESCRIPTION**	**ELEMENT DESCRIPTION**	**DEFINITION**
PL1B	DOMESTIC WATER	PUMPS	Domestic water booster pumps, circulating pumps, related controls, etc.
PL1C	DOMESTIC WATER	STORAGE/ TREATMENT	Equipment or vessels for storage or treatment of domestic water.
PL1D	DOMESTIC WATER	METERING	Installation, repair, or replacement of water meters.
PL1E	DOMESTIC WATER	HEATING	Domestic water heaters including gas, oil, and electric water heaters, shell and tube heat exchangers, tank type and instantaneous.
PL1F	DOMESTIC WATER	COOLING	Central systems for cooling and distributing drinking water.
PL1G	DOMESTIC WATER	FIXTURES	Plumbing fixtures including sinks, drinking fountains, water closets, urinals, etc.
PL1H	DOMESTIC WATER	CONSERVATION	Alternations made to the water distribution system to conserve water.
PL1I	DOMESTIC WATER	BACKFLOW PROTECTION	Backflow protection devices including backflow preventers, vacuum breakers, etc.
PL2A	WASTEWATER	PIPING NETWORK	Repair or replacement of building wastewater piping network.
PL2B	WASTEWATER	PUMPS	Pump systems used to lift wastewater including sewage ejectors and other sump systems.
PL3A	SPECIAL SYSTEMS	PROCESS GAS/FLUIDS	Generation and/or distribution of process steam, compressed air, natural and LP gas, process water, vacuum, etc.
PL4A	INFRASTRUCTURE	POTABLE WATER STORAGE/ TREATMENT	Storage and treatment of potable water for distribution.
PL4B	INFRASTRUCTURE	INDUSTRIAL WATER DISTRIBUTION/ TREATMENT	Storage and treatment of industrial water for distribution.
PL4C	INFRASTRUCTURE	SANITARY WATER COLLECTION	Sanitary water collection systems, sanitary sewer systems; including combined systems.
PL4D	INFRASTRUCTURE	STORM WATER COLLECTION	Storm water collection systems, storm sewer systems; storm water only.
PL4E	INFRASTRUCTURE	POTABLE WATER DISTRIBUTION	Potable water distribution network.
PL4F	INFRASTRUCTURE	WASTEWATER TREATMENT	Wastewater treatment plants, associated equipment, etc.
PL5A	GENERAL	OTHER	Plumbing issues not categorized elsewhere.
SYSTEM DESCRIPTION: SITE			
SI1A	ACCESS	PEDESTRIAN	Paved pedestrian surfaces including walks, site stairs, step ramps, paths, pedestrian signage, sidewalk bridges/canopies, pedestrian plaza/mall areas, etc.
SI1B	ACCESS	VEHICULAR	Paved vehicular surfaces including roads, paths, curbs, guards, bollards, bridges, skyways, joints, shoulder work, culverts, ditches, vehicular signage, etc.
SI2A	LANDSCAPE	GRADE/FLORA	Landscape related work including new grass/turf refurbishment, grade improvements, catch basins, swales, berms, pruning, new ornamental flora, etc.
SI3A	HARDSCAPE	STRUCTURE	Permanent hard site features, predominantly ornamental, including terraces, fences, statues, freestanding signage, fountains, benches, etc.
SI4A	GENERAL	OTHER	Other site work not specifically categorized elsewhere.
SYSTEM DESCRIPTION: SECURITY SYSTEMS			
SS1A	LIGHTING	EXTERIOR	Fixtures, stanchions, foliage interference, cleanliness, locations, etc.
SS2A	SITE	FENCING	Perimeter campus fencing, individual building fencing, includes both pedestrian and vehicular control fences.

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

FACILITY CONDITION ANALYSIS

SECTION 2

DETAILED PROJECT SUMMARIES AND TOTALS

Detailed Project Totals
Facility Condition Analysis
System Code by Priority Class
0501-000 : STEIDLE BUILDING

System Code	System Description	Priority Classes 1	2	3	4	Subtotal
AC	ACCESSIBILITY	0	0	177,641	0	177,641
EL	ELECTRICAL	0	0	1,592,911	75,733	1,668,644
ES	EXTERIOR	0	0	509,014	0	509,014
FS	FIRE/LIFE SAFETY	0	23,385	180,958	804,731	1,009,075
HV	HVAC	0	0	5,911,393	0	5,911,393
IS	INTERIOR/FINISH SYS.	0	0	1,378,233	705,290	2,083,522
PL	PLUMBING	0	0	1,978,593	478,434	2,457,027
SI	SITE	0	0	0	7,597	7,597
	TOTALS	$0	$23,385	$11,728,742	$2,071,786	$13,823,913

Facility Replacement Cost	$25,960,699
Facility Condition Needs Index	0.53

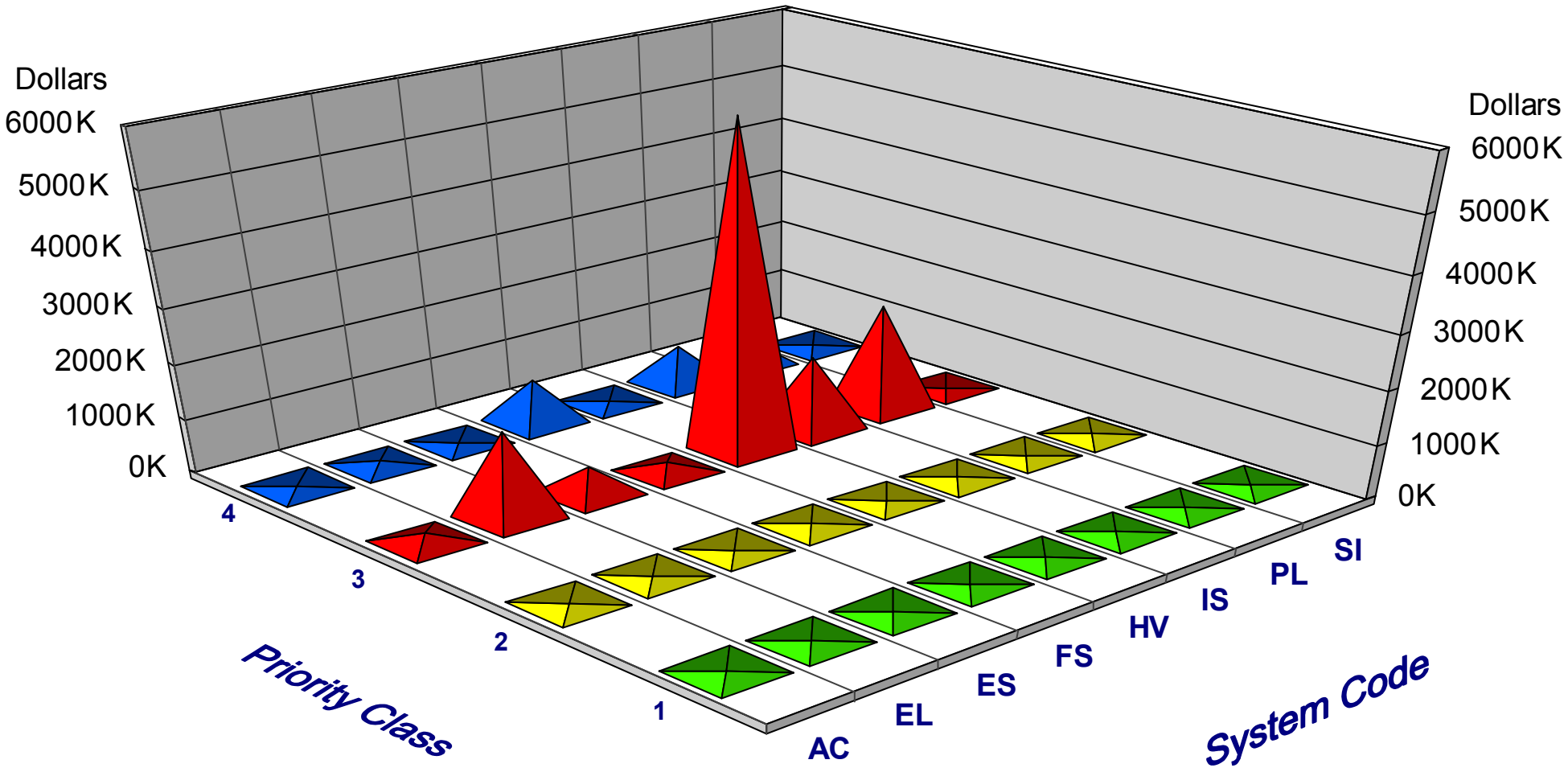
Gross Square Feet	76,605

Total Cost Per Square Foot	$180.46

FACILITY CONDITION ANALYSIS

System Code by Priority Class

0501-000 : STEIDLE BUILDING



Detailed Project Totals
Facility Condition Analysis
System Code by Project Class
0501-000 : STEIDLE BUILDING

System Code	System Description	Project Classes			
		Capital Renewal	Deferred Maintenance	Plant Adaption	Subtotal
AC	ACCESSIBILITY	0	0	177,641	177,641
EL	ELECTRICAL	1,131,706	409,098	127,840	1,668,644
ES	EXTERIOR	84,902	112,134	311,977	509,014
FS	FIRE/LIFE SAFETY	12,872	21,313	974,889	1,009,075
HV	HVAC	5,911,393	0	0	5,911,393
IS	INTERIOR/FINISH SYS.	1,207,616	374,950	500,957	2,083,522
PL	PLUMBING	1,514,113	942,915	0	2,457,027
SI	SITE	7,597	0	0	7,597
	TOTALS	$9,870,199	$1,860,410	$2,093,304	$13,823,913

Facility Replacement Cost	$25,960,699
Facility Condition Needs Index	0.53

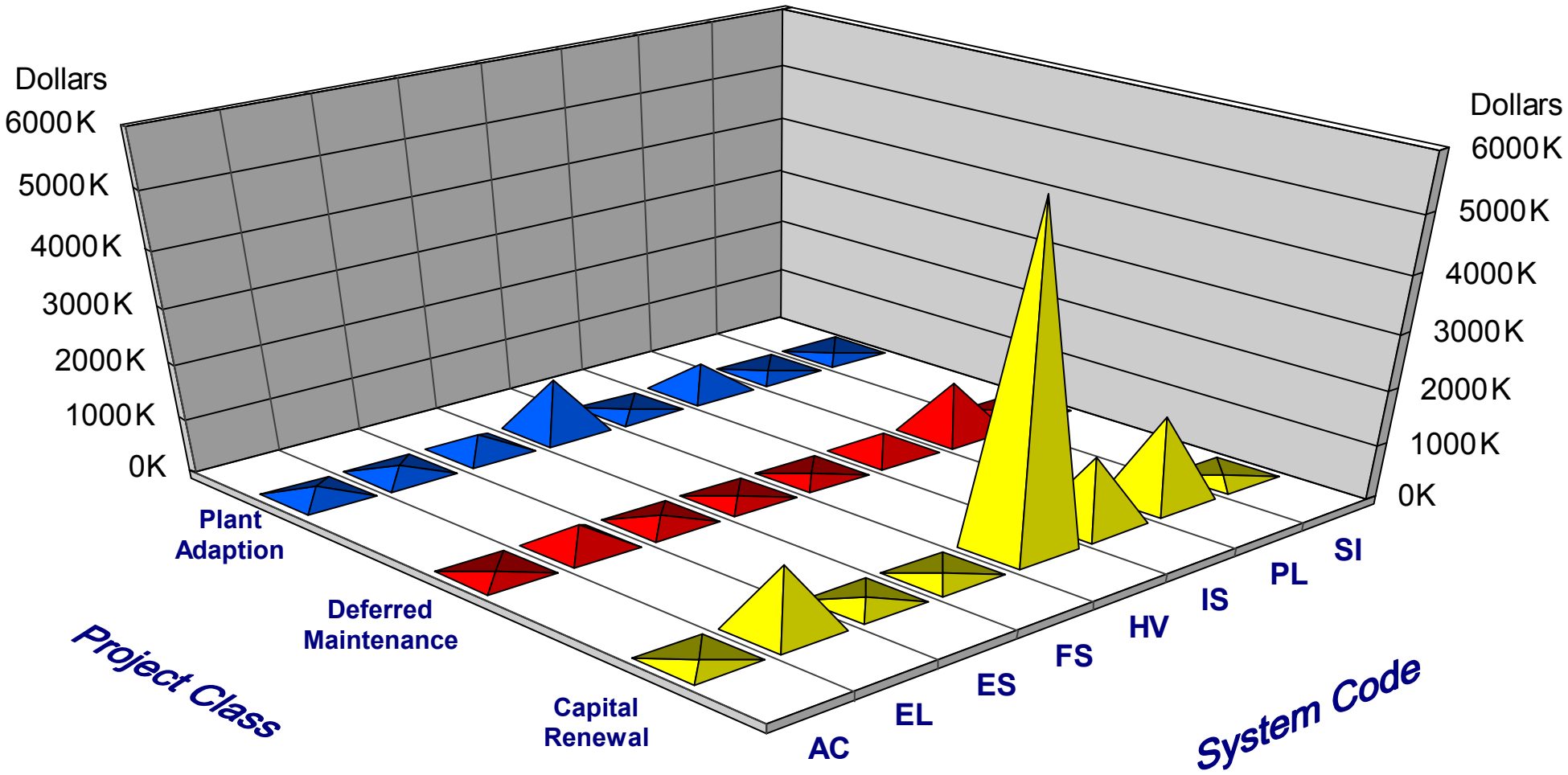
Gross Square Feet	76,605

Total Cost Per Square Foot	$180.46

FACILITY CONDITION ANALYSIS

System Code by Project Class

0501-000 : STEIDLE BUILDING



Detailed Project Summary
Facility Condition Analysis
Project Class by Priority Class
0501-000 : STEIDLE BUILDING

Project Class	Priority Classes 1	2	3	4	Subtotal
Capital Renewal	0	0	8,603,145	1,267,054	9,870,199
Deferred Maintenance	0	21,313	1,839,096	0	1,860,410
Plant Adaption	0	2,072	1,286,501	804,731	2,093,304
TOTALS	$0	$23,385	$11,728,742	$2,071,786	$13,823,913

Facility Replacement Cost	$25,960,699
Facility Condition Needs Index	0.53

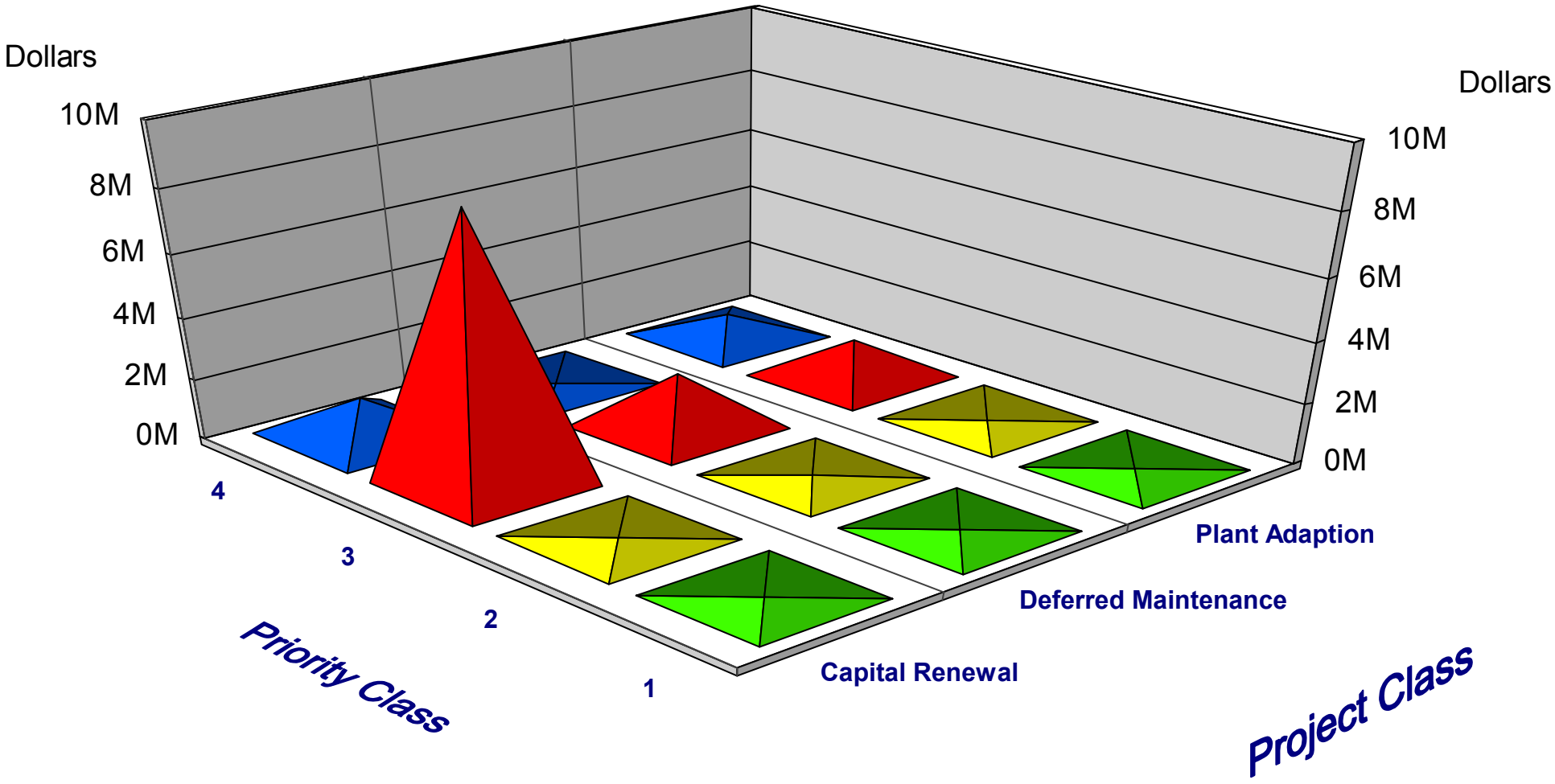
Gross Square Feet	76,605

Total Cost Per Square Foot	$180.46

FACILITY CONDITION ANALYSIS

Project Class by Priority Class

0501-000 : STEIDLE BUILDING



Detailed Project Summary

Facility Condition Analysis

Section Two

Priority Class - Priority Sequence

0501-000 : STEIDLE BUILDING

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Actual Cost to Date	Remaining Cost
FS5B	0501-000FS03	2	1	DEAD END CORRIDOR CORRECTION	1,802	270	0	2,072
FS6A	0501-000FS01	2	2	GENERAL FIRE RATING COMPROMISE REPAIRS	18,533	2,780	0	21,313
				Totals for Priority Class 2	**20,335**	**3,050**	**0**	**23,385**
FS4B	0501-000FS06	3	3	UPGRADE EYEWASH FOUNTAINS AND EMERGENCY SHOWERS	141,805	21,271	0	163,075
FS5G	0501-000FS02	3	4	DISPLAY CASE TEMPERED GLAZING UPGRADES	4,357	654	0	5,011
FS1A	0501-000FS07	3	5	REPLACE EXIT SIGNS	11,193	1,679	0	12,872
AC3A	0501-000AC04	3	6	PASSENGER ELEVATOR COMMUNICATION UPGRADES	4,663	699	0	5,363
AC3E	0501-000AC01	3	7	RESTROOM ACCESSIBILITY UPGRADES	78,993	11,849	22,357	68,485
AC3B	0501-000AC03	3	8	INTERIOR STAIR HANDRAIL ADA UPGRADES (REV 2/08)	39,142	5,871	0	45,013
AC3F	0501-000AC02	3	9	DUAL-LEVEL DRINKING FOUNTAIN INSTALLATIONS	51,113	7,667	0	58,780
ES6A	0501-000ES02	3	10	FRONT ENTRY STOOP REPAIRS AND UPGRADES (REV 2/08)	79,471	11,921	0	91,392
ES5A	0501-000ES01	3	11	EXTERIOR SECONDARY ENTRY DOOR UPGRADES	18,036	2,705	0	20,742
ES2B	0501-000ES03	3	12	EXTERIOR BRICK MASONRY REPOINTING	73,828	11,074	0	84,902
ES4A	0501-000ES04	3	13	ROOF REPLACEMENT (REV 2/08)	271,285	40,693	0	311,977
HV3A	0501-000HV01	3	14	HVAC UPGRADES	4,306,704	646,006	0	4,952,710
HV4B	0501-000HV02	3	15	FUME HOOD UPGRADES	762,026	114,304	0	876,330
HV2A	0501-000HV04	3	16	REPLACE SMALL AIR-COOLED CHILLER	39,226	5,884	0	45,110
HV4B	0501-000HV03	3	17	REPLACE EXHAUST FANS ON THE ROOF	32,385	4,858	0	37,243
EL5A	0501-000EL03	3	18	EMERGENCY POWER SYSTEM UPGRADE	111,165	16,675	0	127,840
EL4A	0501-000EL05	3	19	EXTERIOR LIGHTING UPGRADE	12,174	1,826	0	14,001
EL3B	0501-000EL04	3	20	UPGRADE SECONDARY ELECTRICAL SYSTEM	918,237	137,736	0	1,055,973
EL4B	0501-000EL02	3	21	UPGRADE INTERIOR LIGHTING	343,563	51,534	0	395,098

Detailed Project Summary

Facility Condition Analysis

Section Two

Priority Class - Priority Sequence

0501-000 : STEIDLE BUILDING

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Actual Cost to Date	Remaining Cost
IS4A	0501-000IS02	3	22	INTERIOR DOOR REPLACEMENTS	305,977	45,897	0	351,873
IS6B	0501-000IS03	3	23	SELECTIVE LABORATORY BENCH UPGRADES - PHASE 1	431,099	64,665	0	495,764
IS1A	0501-000IS04	3	24	INTERIOR FLOOR FINISH RESTORATION	326,043	48,907	0	374,950
IS3B	0501-000IS01	3	25	LAY-IN, ACOUSTICAL CEILING SYSTEM UPGRADES	129,638	19,446	0	149,084
IS6B	0501-000IS05	3	26	BREAK ROOM CABINETRY UPGRADES	6,562	0	0	6,562
PL1G	0501-000PL03	3	27	REPLACE RESTROOM PLUMBING FIXTURES AND SERVICE SINKS	47,946	7,192	0	55,138
PL2A	0501-000PL02	3	28	REPLACE DRAIN PIPING	819,926	122,989	0	942,915
PL1A	0501-000PL01	3	29	REPLACE WATER SUPPLY AND PROCESS FLUIDS PIPING	436,669	65,500	0	502,170
PL1A	0501-000PL04	3	30	REPLACE LABORATORY FIXTURES - PHASE 1	415,975	62,396	0	478,371
				Totals for Priority Class 3	**10,219,203**	**1,531,896**	**22,357**	**11,728,742**
FS2A	0501-000FS05	4	31	REPLACE THE FIRE ALARM SYSTEM	191,896	28,784	0	220,680
FS3A	0501-000FS04	4	32	BUILDING-WIDE FIRE SPRINKLER SYSTEM	507,871	76,181	0	584,051
EL2A	0501-000EL01	4	33	REPLACE PRIMARY SWITCHGEAR	65,855	9,878	0	75,733
IS6B	0501-000IS06	4	34	SELECTIVE LABORATORY BENCH UPGRADES - PHASE 2	431,099	64,665	0	495,764
IS2B	0501-000IS07	4	35	INTERIOR PAINT FINISH UPGRADE (2/08)	182,197	27,330	0	209,526
PL1A	0501-000PL05	4	36	REPLACE LABORATORY FIXTURES - PHASE 2	416,030	62,404	0	478,434
SI1B	0501-000SI01	4	37	ASPHALT SERVICE LOT PAVEMENT IMPROVEMENTS	6,606	991	0	7,597
				Totals for Priority Class 4	**1,801,553**	**270,233**	**0**	**2,071,786**
				Grand Total:	**12,041,091**	**1,805,179**	**22,357**	**13,823,913**

Detailed Project Summary

Facility Condition Analysis

Section Two

Priority Class - Priority Sequence - Projects < 25,000

0501-000 : STEIDLE BUILDING

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Actual Cost to Date	Remaining Cost
FS5B	0501-000FS03	2	1	DEAD END CORRIDOR CORRECTION	1,802	270	0	2,072
FS6A	0501-000FS01	2	2	GENERAL FIRE RATING COMPROMISE REPAIRS	18,533	2,780	0	21,313
				Totals for Priority Class 2	**20,335**	**3,050**	**0**	**23,385**
FS5G	0501-000FS02	3	4	DISPLAY CASE TEMPERED GLAZING UPGRADES	4,357	654	0	5,011
FS1A	0501-000FS07	3	5	REPLACE EXIT SIGNS	11,193	1,679	0	12,872
AC3A	0501-000AC04	3	6	PASSENGER ELEVATOR COMMUNICATION UPGRADES	4,663	699	0	5,363
ES5A	0501-000ES01	3	11	EXTERIOR SECONDARY ENTRY DOOR UPGRADES	18,036	2,705	0	20,742
EL4A	0501-000EL05	3	19	EXTERIOR LIGHTING UPGRADE	12,174	1,826	0	14,001
IS6B	0501-000IS05	3	26	BREAK ROOM CABINETRY UPGRADES	6,562	0	0	6,562
				Totals for Priority Class 3	**56,986**	**7,564**	**0**	**64,550**
SI1B	0501-000SI01	4	37	ASPHALT SERVICE LOT PAVEMENT IMPROVEMENTS	6,606	991	0	7,597
				Totals for Priority Class 4	**6,606**	**991**	**0**	**7,597**
				Grand Totals For Projects < 25,000	**83,928**	**11,605**	**0**	**95,533**

Detailed Project Summary

Facility Condition Analysis

Section Two

Priority Class - Priority Sequence - Projects >= 25,000 and < 1,000,000

0501-000 : STEIDLE BUILDING

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Actual Cost to Date	Remaining Cost
FS4B	0501-000FS06	3	3	UPGRADE EYEWASH FOUNTAINS AND EMERGENCY SHOWERS	141,805	21,271	0	163,075
AC3E	0501-000AC01	3	7	RESTROOM ACCESSIBILITY UPGRADES	78,993	11,849	22,357	68,485
AC3B	0501-000AC03	3	8	INTERIOR STAIR HANDRAIL ADA UPGRADES (REV 2/08)	39,142	5,871	0	45,013
AC3F	0501-000AC02	3	9	DUAL-LEVEL DRINKING FOUNTAIN INSTALLATIONS	51,113	7,667	0	58,780
ES6A	0501-000ES02	3	10	FRONT ENTRY STOOP REPAIRS AND UPGRADES (REV 2/08)	79,471	11,921	0	91,392
ES2B	0501-000ES03	3	12	EXTERIOR BRICK MASONRY REPOINTING	73,828	11,074	0	84,902
ES4A	0501-000ES04	3	13	ROOF REPLACEMENT (REV 2/08)	271,285	40,693	0	311,977
HV4B	0501-000HV02	3	15	FUME HOOD UPGRADES	762,026	114,304	0	876,330
HV2A	0501-000HV04	3	16	REPLACE SMALL AIR-COOLED CHILLER	39,226	5,884	0	45,110
HV4B	0501-000HV03	3	17	REPLACE EXHAUST FANS ON THE ROOF	32,385	4,858	0	37,243
EL5A	0501-000EL03	3	18	EMERGENCY POWER SYSTEM UPGRADE	111,165	16,675	0	127,840
EL4B	0501-000EL02	3	21	UPGRADE INTERIOR LIGHTING	343,563	51,534	0	395,098
IS4A	0501-000IS02	3	22	INTERIOR DOOR REPLACEMENTS	305,977	45,897	0	351,873
IS6B	0501-000IS03	3	23	SELECTIVE LABORATORY BENCH UPGRADES - PHASE 1	431,099	64,665	0	495,764
IS1A	0501-000IS04	3	24	INTERIOR FLOOR FINISH RESTORATION	326,043	48,907	0	374,950
IS3B	0501-000IS01	3	25	LAY-IN, ACOUSTICAL CEILING SYSTEM UPGRADES	129,638	19,446	0	149,084
PL1G	0501-000PL03	3	27	REPLACE RESTROOM PLUMBING FIXTURES AND SERVICE SINKS	47,946	7,192	0	55,138
PL2A	0501-000PL02	3	28	REPLACE DRAIN PIPING	819,926	122,989	0	942,915
PL1A	0501-000PL01	3	29	REPLACE WATER SUPPLY AND PROCESS FLUIDS PIPING	436,669	65,500	0	502,170
PL1A	0501-000PL04	3	30	REPLACE LABORATORY FIXTURES - PHASE 1	415,975	62,396	0	478,371
				Totals for Priority Class 3	**4,937,276**	**740,591**	**22,357**	**5,655,510**
FS2A	0501-000FS05	4	31	REPLACE THE FIRE ALARM SYSTEM	191,896	28,784	0	220,680

Detailed Project Summary

Facility Condition Analysis

Section Two

Priority Class - Priority Sequence - Projects >= 25,000 and < 1,000,000

0501-000 : STEIDLE BUILDING

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Actual Cost to Date	Remaining Cost
FS3A	0501-000FS04	4	32	BUILDING-WIDE FIRE SPRINKLER SYSTEM	507,871	76,181	0	584,051
EL2A	0501-000EL01	4	33	REPLACE PRIMARY SWITCHGEAR	65,855	9,878	0	75,733
IS6B	0501-000IS06	4	34	SELECTIVE LABORATORY BENCH UPGRADES - PHASE 2	431,099	64,665	0	495,764
IS2B	0501-000IS07	4	35	INTERIOR PAINT FINISH UPGRADE (2/08)	182,197	27,330	0	209,526
PL1A	0501-000PL05	4	36	REPLACE LABORATORY FIXTURES - PHASE 2	416,030	62,404	0	478,434
				Totals for Priority Class 4	**1,794,946**	**269,242**	**0**	**2,064,188**
				Grand Totals For Projects >= 25,000 and < 1,000,000	**6,732,222**	**1,009,833**	**22,357**	**7,719,698**

Detailed Project Summary

Facility Condition Analysis

Section Two

Priority Class - Priority Sequence - Projects >= 1,000,000

0501-000 : STEIDLE BUILDING

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Actual Cost to Date	Remaining Cost
HV3A	0501-000HV01	3	14	HVAC UPGRADES	4,306,704	646,006	0	4,952,710
EL3B	0501-000EL04	3	20	UPGRADE SECONDARY ELECTRICAL SYSTEM	918,237	137,736	0	1,055,973
				Totals for Priority Class 3	**5,224,941**	**783,741**	**0**	**6,008,682**
				Grand Totals For Projects >= 1,000,000	**5,224,941**	**783,741**	**0**	**6,008,682**
				Grand Total for All Projects:	**12,041,091**	**1,805,179**	**22,357**	**13,823,913**

Detailed Project Summary

Facility Condition Analysis

Section Two

Project Classification

0501-000 : STEIDLE BUILDING

Cat. Code	Project Number	Pri Seq	Project Classification	Pri Cls	Project Title	Construction Cost	Prof Fees	Actual Cost to Date	Remaining Cost
FS1A	0501-000FS07	5	Capital Renewal	3	REPLACE EXIT SIGNS	11,193	1,679	0	12,872
ES2B	0501-000ES03	12	Capital Renewal	3	EXTERIOR BRICK MASONRY REPOINTING	73,828	11,074	0	84,902
HV3A	0501-000HV01	14	Capital Renewal	3	HVAC UPGRADES	4,306,704	646,006	0	4,952,710
HV4B	0501-000HV02	15	Capital Renewal	3	FUME HOOD UPGRADES	762,026	114,304	0	876,330
HV2A	0501-000HV04	16	Capital Renewal	3	REPLACE SMALL AIR-COOLED CHILLER	39,226	5,884	0	45,110
HV4B	0501-000HV03	17	Capital Renewal	3	REPLACE EXHAUST FANS ON THE ROOF	32,385	4,858	0	37,243
EL3B	0501-000EL04	20	Capital Renewal	3	UPGRADE SECONDARY ELECTRICAL SYSTEM	918,237	137,736	0	1,055,973
IS6B	0501-000IS03	23	Capital Renewal	3	SELECTIVE LABORATORY BENCH UPGRADES - PHASE 1	431,099	64,665	0	495,764
IS6B	0501-000IS05	26	Capital Renewal	3	BREAK ROOM CABINETRY UPGRADES	6,562	0	0	6,562
PL1G	0501-000PL03	27	Capital Renewal	3	REPLACE RESTROOM PLUMBING FIXTURES AND SERVICE SINKS	47,946	7,192	0	55,138
PL1A	0501-000PL01	29	Capital Renewal	3	REPLACE WATER SUPPLY AND PROCESS FLUIDS PIPING	436,669	65,500	0	502,170
PL1A	0501-000PL04	30	Capital Renewal	3	REPLACE LABORATORY FIXTURES - PHASE 1	415,975	62,396	0	478,371
EL2A	0501-000EL01	33	Capital Renewal	4	REPLACE PRIMARY SWITCHGEAR	65,855	9,878	0	75,733
IS6B	0501-000IS06	34	Capital Renewal	4	SELECTIVE LABORATORY BENCH UPGRADES - PHASE 2	431,099	64,665	0	495,764
IS2B	0501-000IS07	35	Capital Renewal	4	INTERIOR PAINT FINISH UPGRADE (2/08)	182,197	27,330	0	209,526
PL1A	0501-000PL05	36	Capital Renewal	4	REPLACE LABORATORY FIXTURES - PHASE 2	416,030	62,404	0	478,434
SI1B	0501-000SI01	37	Capital Renewal	4	ASPHALT SERVICE LOT PAVEMENT IMPROVEMENTS	6,606	991	0	7,597
			Totals for Capital Renewal			**8,583,638**	**1,286,561**	**0**	**9,870,199**

Detailed Project Summary

Facility Condition Analysis

Section Two

Project Classification

0501-000 : STEIDLE BUILDING

Cat. Code	Project Number	Pri Seq	Project Classification	Pri Cls	Project Title	Construction Cost	Prof Fees	Actual Cost to Date	Remaining Cost
FS6A	0501-000FS01	2	Deferred Maintenance	2	GENERAL FIRE RATING COMPROMISE REPAIRS	18,533	2,780	0	21,313
ES6A	0501-000ES02	10	Deferred Maintenance	3	FRONT ENTRY STOOP REPAIRS AND UPGRADES (REV 2/08)	79,471	11,921	0	91,392
ES5A	0501-000ES01	11	Deferred Maintenance	3	EXTERIOR SECONDARY ENTRY DOOR UPGRADES	18,036	2,705	0	20,742
EL4A	0501-000EL05	19	Deferred Maintenance	3	EXTERIOR LIGHTING UPGRADE	12,174	1,826	0	14,001
EL4B	0501-000EL02	21	Deferred Maintenance	3	UPGRADE INTERIOR LIGHTING	343,563	51,534	0	395,098
IS1A	0501-000IS04	24	Deferred Maintenance	3	INTERIOR FLOOR FINISH RESTORATION	326,043	48,907	0	374,950
PL2A	0501-000PL02	28	Deferred Maintenance	3	REPLACE DRAIN PIPING	819,926	122,989	0	942,915
			Totals for Deferred Maintenance			**1,617,748**	**242,662**	**0**	**1,860,410**
FS5B	0501-000FS03	1	Plant Adaption	2	DEAD END CORRIDOR CORRECTION	1,802	270	0	2,072
FS4B	0501-000FS06	3	Plant Adaption	3	UPGRADE EYEWASH FOUNTAINS AND EMERGENCY SHOWERS	141,805	21,271	0	163,075
FS5G	0501-000FS02	4	Plant Adaption	3	DISPLAY CASE TEMPERED GLAZING UPGRADES	4,357	654	0	5,011
AC3A	0501-000AC04	6	Plant Adaption	3	PASSENGER ELEVATOR COMMUNICATION UPGRADES	4,663	699	0	5,363
AC3E	0501-000AC01	7	Plant Adaption	3	RESTROOM ACCESSIBILITY UPGRADES	78,993	11,849	22,357	68,485
AC3B	0501-000AC03	8	Plant Adaption	3	INTERIOR STAIR HANDRAIL ADA UPGRADES (REV 2/08)	39,142	5,871	0	45,013
AC3F	0501-000AC02	9	Plant Adaption	3	DUAL-LEVEL DRINKING FOUNTAIN INSTALLATIONS	51,113	7,667	0	58,780
ES4A	0501-000ES04	13	Plant Adaption	3	ROOF REPLACEMENT (REV 2/08)	271,285	40,693	0	311,977
EL5A	0501-000EL03	18	Plant Adaption	3	EMERGENCY POWER SYSTEM UPGRADE	111,165	16,675	0	127,840
IS4A	0501-000IS02	22	Plant Adaption	3	INTERIOR DOOR REPLACEMENTS	305,977	45,897	0	351,873

Detailed Project Summary

Facility Condition Analysis

Section Two

Project Classification

0501-000 : STEIDLE BUILDING

Cat. Code	Project Number	Pri Seq	Project Classification	Pri Cls	Project Title	Construction Cost	Prof Fees	Actual Cost to Date	Remaining Cost
IS3B	0501-000IS01	25	Plant Adaption	3	LAY-IN, ACOUSTICAL CEILING SYSTEM UPGRADES	129,638	19,446	0	149,084
FS2A	0501-000FS05	31	Plant Adaption	4	REPLACE THE FIRE ALARM SYSTEM	191,896	28,784	0	220,680
FS3A	0501-000FS04	32	Plant Adaption	4	BUILDING-WIDE FIRE SPRINKLER SYSTEM	507,871	76,181	0	584,051
			Totals for Plant Adaption			**1,839,706**	**275,956**	**22,357**	**2,093,304**
				Grand Total:		**12,041,091**	**1,805,179**	**22,357**	**13,823,913**

Detailed Project Summary

Facility Condition Analysis

Section Two

Energy Conservation

0501-000 : STEIDLE BUILDING

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Total Cost	Annual Savings	Simple Payback
FS1A	0501-000FS07	3	5	REPLACE EXIT SIGNS	12,872	235	54.78
HV3A	0501-000HV01	3	14	HVAC UPGRADES	4,952,710	12,473	397.07
EL4B	0501-000EL02	3	21	UPGRADE INTERIOR LIGHTING	395,098	8,177	48.32
				Totals for Priority Class 3	**5,360,679**	**20,885**	256.68
				Grand Total:	**5,360,679**	**20,885**	256.68

Detailed Project Summary

Facility Condition Analysis

Section Two

Category/System Code Update Report

0501-000 : STEIDLE BUILDING

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fees	Actual Cost to Date	Remaining Cost
AC3A	0501-000AC04	3	6	PASSENGER ELEVATOR COMMUNICATION UPGRADES	4,663	699	0	5,363
AC3E	0501-000AC01	3	7	RESTROOM ACCESSIBILITY UPGRADES	78,993	11,849	22,357	68,485
AC3B	0501-000AC03	3	8	INTERIOR STAIR HANDRAIL ADA UPGRADES (REV 2/08)	39,142	5,871	0	45,013
AC3F	0501-000AC02	3	9	DUAL-LEVEL DRINKING FOUNTAIN INSTALLATIONS	51,113	7,667	0	58,780
	Totals for System Code:			**ACCESSIBILITY**	**173,911**	**26,087**	**22,357**	**177,641**
EL5A	0501-000EL03	3	18	EMERGENCY POWER SYSTEM UPGRADE	111,165	16,675	0	127,840
EL4A	0501-000EL05	3	19	EXTERIOR LIGHTING UPGRADE	12,174	1,826	0	14,001
EL3B	0501-000EL04	3	20	UPGRADE SECONDARY ELECTRICAL SYSTEM	918,237	137,736	0	1,055,973
EL4B	0501-000EL02	3	21	UPGRADE INTERIOR LIGHTING	343,563	51,534	0	395,098
EL2A	0501-000EL01	4	33	REPLACE PRIMARY SWITCHGEAR	65,855	9,878	0	75,733
	Totals for System Code:			**ELECTRICAL**	**1,450,995**	**217,649**	**0**	**1,668,644**
ES6A	0501-000ES02	3	10	FRONT ENTRY STOOP REPAIRS AND UPGRADES (REV 2/08)	79,471	11,921	0	91,392
ES5A	0501-000ES01	3	11	EXTERIOR SECONDARY ENTRY DOOR UPGRADES	18,036	2,705	0	20,742
ES2B	0501-000ES03	3	12	EXTERIOR BRICK MASONRY REPOINTING	73,828	11,074	0	84,902
ES4A	0501-000ES04	3	13	ROOF REPLACEMENT (REV 2/08)	271,285	40,693	0	311,977
	Totals for System Code:			**EXTERIOR**	**442,620**	**66,393**	**0**	**509,014**
FS5B	0501-000FS03	2	1	DEAD END CORRIDOR CORRECTION	1,802	270	0	2,072
FS6A	0501-000FS01	2	2	GENERAL FIRE RATING COMPROMISE REPAIRS	18,533	2,780	0	21,313
FS4B	0501-000FS06	3	3	UPGRADE EYEWASH FOUNTAINS AND EMERGENCY SHOWERS	141,805	21,271	0	163,075
FS5G	0501-000FS02	3	4	DISPLAY CASE TEMPERED GLAZING UPGRADES	4,357	654	0	5,011

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fees	Actual Cost to Date	Remaining Cost
FS1A	0501-000FS07	3	5	REPLACE EXIT SIGNS	11,193	1,679	0	12,872
FS2A	0501-000FS05	4	31	REPLACE THE FIRE ALARM SYSTEM	191,896	28,784	0	220,680
FS3A	0501-000FS04	4	32	BUILDING-WIDE FIRE SPRINKLER SYSTEM	507,871	76,181	0	584,051
	Totals for System Code:			**FIRE/LIFE SAFETY**	**877,456**	**131,618**	**0**	**1,009,075**
HV3A	0501-000HV01	3	14	HVAC UPGRADES	4,306,704	646,006	0	4,952,710
HV4B	0501-000HV02	3	15	FUME HOOD UPGRADES	762,026	114,304	0	876,330
HV2A	0501-000HV04	3	16	REPLACE SMALL AIR-COOLED CHILLER	39,226	5,884	0	45,110
HV4B	0501-000HV03	3	17	REPLACE EXHAUST FANS ON THE ROOF	32,385	4,858	0	37,243
	Totals for System Code:			**HVAC**	**5,140,342**	**771,051**	**0**	**5,911,393**
IS4A	0501-000IS02	3	22	INTERIOR DOOR REPLACEMENTS	305,977	45,897	0	351,873
IS6B	0501-000IS03	3	23	SELECTIVE LABORATORY BENCH UPGRADES - PHASE 1	431,099	64,665	0	495,764
IS1A	0501-000IS04	3	24	INTERIOR FLOOR FINISH RESTORATION	326,043	48,907	0	374,950
IS3B	0501-000IS01	3	25	LAY-IN, ACOUSTICAL CEILING SYSTEM UPGRADES	129,638	19,446	0	149,084
IS6B	0501-000IS05	3	26	BREAK ROOM CABINETRY UPGRADES	6,562	0	0	6,562
IS6B	0501-000IS06	4	34	SELECTIVE LABORATORY BENCH UPGRADES - PHASE 2	431,099	64,665	0	495,764
IS2B	0501-000IS07	4	35	INTERIOR PAINT FINISH UPGRADE (2/08)	182,197	27,330	0	209,526
	Totals for System Code:			**INTERIOR/FINISH SYS.**	**1,812,615**	**270,908**	**0**	**2,083,522**
PL1G	0501-000PL03	3	27	REPLACE RESTROOM PLUMBING FIXTURES AND SERVICE SINKS	47,946	7,192	0	55,138
PL2A	0501-000PL02	3	28	REPLACE DRAIN PIPING	819,926	122,989	0	942,915
PL1A	0501-000PL01	3	29	REPLACE WATER SUPPLY AND PROCESS FLUIDS PIPING	436,669	65,500	0	502,170
PL1A	0501-000PL04	3	30	REPLACE LABORATORY FIXTURES - PHASE 1	415,975	62,396	0	478,371

Category/System Code Update Report

0501-000 : STEIDLE BUILDING

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fees	Actual Cost to Date	Remaining Cost
PL1A	0501-000PL05	4	36	REPLACE LABORATORY FIXTURES - PHASE 2	416,030	62,404	0	478,434
	Totals for System Code:			**PLUMBING**	**2,136,545**	**320,482**	**0**	**2,457,027**
SI1B	0501-000SI01	4	37	ASPHALT SERVICE LOT PAVEMENT IMPROVEMENTS	6,606	991	0	7,597
	Totals for System Code:			**SITE**	**6,606**	**991**	**0**	**7,597**
				Grand Total:	**12,041,091**	**1,805,179**	**22,357**	**13,823,913**

Detailed Project Summary

Facility Condition Analysis

Section Two

Score Report

0501-000 : STEIDLE BUILDING

Cat. Code	Project Number	Score	Risk Lvl	Pri Seq	Project Title	Construction Cost	Prof Fees	Actual Cost to Date	Remaining Cost
ES5A	0501-000ES01	9.40	3	11	EXTERIOR SECONDARY ENTRY DOOR UPGRADES	18,036	2,705	0	20,742
				Totals for Score	9.40	**18,036**	**2,705**	**0**	**20,742**
IS3B	0501-000IS01	9.30	3	25	LAY-IN, ACOUSTICAL CEILING SYSTEM UPGRADES	129,638	19,446	0	149,084
				Totals for Score	9.30	**129,638**	**19,446**	**0**	**149,084**
FS6A	0501-000FS01	9.28	2	2	GENERAL FIRE RATING COMPROMISE REPAIRS	18,533	2,780	0	21,313
ES6A	0501-000ES02	9.28	3	10	FRONT ENTRY STOOP REPAIRS AND UPGRADES (REV 2/08)	79,471	11,921	0	91,392
ES4A	0501-000ES04	9.28	3	13	ROOF REPLACEMENT (REV 2/08)	271,285	40,693	0	311,977
EL4B	0501-000EL02	9.28	3	21	UPGRADE INTERIOR LIGHTING	343,563	51,534	0	395,098
IS1A	0501-000IS04	9.28	3	24	INTERIOR FLOOR FINISH RESTORATION	326,043	48,907	0	374,950
PL1A	0501-000PL01	9.28	3	29	REPLACE WATER SUPPLY AND PROCESS FLUIDS PIPING	436,669	65,500	0	502,170
				Totals for Score	9.28	**1,475,565**	**221,335**	**0**	**1,696,900**
IS6B	0501-000IS03	9.20	3	23	SELECTIVE LABORATORY BENCH UPGRADES - PHASE 1	431,099	64,665	0	495,764
				Totals for Score	9.20	**431,099**	**64,665**	**0**	**495,764**
HV3A	0501-000HV01	8.28	3	14	HVAC UPGRADES	4,306,704	646,006	0	4,952,710
HV4B	0501-000HV02	8.28	3	15	FUME HOOD UPGRADES	762,026	114,304	0	876,330
HV4B	0501-000HV03	8.28	3	17	REPLACE EXHAUST FANS ON THE ROOF	32,385	4,858	0	37,243
PL1G	0501-000PL03	8.28	3	27	REPLACE RESTROOM PLUMBING FIXTURES AND SERVICE SINKS	47,946	7,192	0	55,138
PL1A	0501-000PL04	8.28	3	30	REPLACE LABORATORY FIXTURES - PHASE 1	415,975	62,396	0	478,371

Detailed Project Summary

Facility Condition Analysis

Section Two

Score Report

0501-000 : STEIDLE BUILDING

Cat. Code	Project Number	Score	Risk Lvl	Pri Seq	Project Title	Construction Cost	Prof Fees	Actual Cost to Date	Remaining Cost
				Totals for Score 8.28		**5,565,037**	**834,755**	**0**	**6,399,792**
AC3F	0501-000AC02	7.28	3	9	DUAL-LEVEL DRINKING FOUNTAIN INSTALLATIONS	51,113	7,667	0	58,780
IS6B	0501-000IS05	7.28	3	26	BREAK ROOM CABINETRY UPGRADES	6,562	0	0	6,562
EL2A	0501-000EL01	7.28	4	33	REPLACE PRIMARY SWITCHGEAR	65,855	9,878	0	75,733
PL1A	0501-000PL05	7.28	4	36	REPLACE LABORATORY FIXTURES - PHASE 2	416,030	62,404	0	478,434
SI1B	0501-000SI01	7.28	4	37	ASPHALT SERVICE LOT PAVEMENT IMPROVEMENTS	6,606	991	0	7,597
				Totals for Score 7.28		**546,166**	**80,941**	**0**	**627,106**
IS6B	0501-000IS06	7.20	4	34	SELECTIVE LABORATORY BENCH UPGRADES - PHASE 2	431,099	64,665	0	495,764
IS2B	0501-000IS07	7.20	4	35	INTERIOR PAINT FINISH UPGRADE (2/08)	182,197	27,330	0	209,526
				Totals for Score 7.20		**613,295**	**91,994**	**0**	**705,290**
FS4B	0501-000FS06	14.28	3	3	UPGRADE EYEWASH FOUNTAINS AND EMERGENCY SHOWERS	141,805	21,271	0	163,075
AC3E	0501-000AC01	14.28	3	7	RESTROOM ACCESSIBILITY UPGRADES	78,993	11,849	22,357	68,485
EL5A	0501-000EL03	14.28	3	18	EMERGENCY POWER SYSTEM UPGRADE	111,165	16,675	0	127,840
IS4A	0501-000IS02	14.28	3	22	INTERIOR DOOR REPLACEMENTS	305,977	45,897	0	351,873
FS2A	0501-000FS05	14.28	4	31	REPLACE THE FIRE ALARM SYSTEM	191,896	28,784	0	220,680
				Totals for Score 14.28		**829,836**	**124,475**	**22,357**	**931,954**
FS5B	0501-000FS03	14.00	2	1	DEAD END CORRIDOR CORRECTION	1,802	270	0	2,072
				Totals for Score 14.00		**1,802**	**270**	**0**	**2,072**

Detailed Project Summary

Facility Condition Analysis

Section Two

Score Report

0501-000 : STEIDLE BUILDING

Cat. Code	Project Number	Score	Risk Lvl	Pri Seq	Project Title	Construction Cost	Prof Fees	Actual Cost to Date	Remaining Cost
EL3B	0501-000EL04	11.28	3	20	UPGRADE SECONDARY ELECTRICAL SYSTEM	918,237	137,736	0	1,055,973
			Totals for Score	11.28		**918,237**	**137,736**	**0**	**1,055,973**
FS5G	0501-000FS02	10.28	3	4	DISPLAY CASE TEMPERED GLAZING UPGRADES	4,357	654	0	5,011
FS1A	0501-000FS07	10.28	3	5	REPLACE EXIT SIGNS	11,193	1,679	0	12,872
AC3A	0501-000AC04	10.28	3	6	PASSENGER ELEVATOR COMMUNICATION UPGRADES	4,663	699	0	5,363
AC3B	0501-000AC03	10.28	3	8	INTERIOR STAIR HANDRAIL ADA UPGRADES (REV 2/08)	39,142	5,871	0	45,013
ES2B	0501-000ES03	10.28	3	12	EXTERIOR BRICK MASONRY REPOINTING	73,828	11,074	0	84,902
HV2A	0501-000HV04	10.28	3	16	REPLACE SMALL AIR-COOLED CHILLER	39,226	5,884	0	45,110
EL4A	0501-000EL05	10.28	3	19	EXTERIOR LIGHTING UPGRADE	12,174	1,826	0	14,001
PL2A	0501-000PL02	10.28	3	28	REPLACE DRAIN PIPING	819,926	122,989	0	942,915
FS3A	0501-000FS04	10.28	4	32	BUILDING-WIDE FIRE SPRINKLER SYSTEM	507,871	76,181	0	584,051
			Totals for Score	10.28		**1,512,381**	**226,857**	**0**	**1,739,238**
				Grand Total:		**12,041,091**	**1,805,179**	**22,357**	**13,823,913**

FACILITY CONDITION ANALYSIS

SECTION 3

SPECIFIC PROJECT DETAILS ILLUSTRATING DESCRIPTION / COST

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000FS03	**Title:**	DEAD END CORRIDOR CORRECTION
Priority Sequence:	1		
Priority Class:	2		
Category Code:	FS5B	**System:**	FIRE/LIFE SAFETY
		Component:	EGRESS PATH
		Element:	DISTANCE/GEOMETRY
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	NFPA A5-6.1		

Project Class:	Plant Adaption	**Score:**	14.00
Project Date:	04/10/2003		
Project Location:	Item Only: Floor(s) 2		

Project Description

The double corridor doors that close off the second floor suite rooms in the southwest wing are propped open, causing a potential dead end corridor situation. In conjunction with the proposed interior door upgrades, install magnetic door holdbacks on these doors that will allow these corridor doors to remain open but still close in the event of an emergency.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000FS03

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Interior door magnetic holdback	EA	2	$255	$510	$315	$630	$1,140
	Project Totals:			**$510**		**$630**	**$1,140**

Material/Labor Cost		$1,140
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$1,058
General Contractor Mark Up at 20.0%	+	$212
Inflation	+	$532
Construction Cost		$1,802
Professional Fees at 15.0%	+	$270
Total Project Cost		**$2,072**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000FS01	**Title:**	GENERAL FIRE RATING COMPROMISE REPAIRS
Priority Sequence:	2		
Priority Class:	2		
Category Code:	FS6A	**System:**	FIRE/LIFE SAFETY
		Component:	GENERAL
		Element:	OTHER
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	NFPA 6.2		

Project Class:	Deferred Maintenance	**Score:**	9.28
Project Date:	04/10/2003		
Project Location:	Undefined: Floor(s) 1, 2, 3, B		

Project Description

Non-rated penetrations through rated corridor walls, such as those noted above the door to laboratory 327, should be sealed with approved fire rating materials. Inspect the boxed duct chases in the corridors and the old chases in the south wings constructed in 1938 for additional penetrations, and seal them as required. Unsealed openings in the rated chase walls, corridor walls, and between floors pose a significant fire rating compromise for egress passages, and these compromises should be sealed as soon as possible. Coordinate this work with the recommended plaster ceiling upgrades to determine if there are additional penetrations above the ceiling finish, and seal them as required.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000FS01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Fireproof caulking and other approved fire stopping materials	LOT	1	$2,100	$2,100	$9,800	$9,800	$11,900
	Project Totals:			**$2,100**		**$9,800**	**$11,900**

Material/Labor Cost		$11,900
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$10,886
General Contractor Mark Up at 20.0%	+	$2,177
Inflation	+	$5,470
Construction Cost		$18,533
Professional Fees at 15.0%	+	$2,780
Total Project Cost		**$21,313**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000FS06	**Title:**	UPGRADE EYEWASH FOUNTAINS AND EMERGENCY SHOWERS
Priority Sequence:	3		
Priority Class:	3		
Category Code:	FS4B	**System:**	FIRE/LIFE SAFETY
		Component:	HAZARDOUS MATERIALS
		Element:	USER SAFETY
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	OSHA 29 CFR 1910.151C		

Project Class:	Plant Adaption	**Score:**	14.28
Project Date:	04/10/2003		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, B		

Project Description

This facility is equipped with eyewash showers and emergency fountains, but there are not enough in some areas to provide a high margin of safety. Remove the existing worn or low grade showers and eyewashes. Install new emergency showers and eyewash fountains in all areas where related hazards exist. These should be permanent fixtures that are connected to the building's water supply network and provided with drains. They need to be clearly identified and located in unobstructed areas for easy access.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000FS06

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Eyewash fountain, drain, and rough-in	EA	55	$480	$26,400	$400	$22,000	$48,400
Emergency shower, drain, and rough-in	EA	55	$346	$19,030	$400	$22,000	$41,030
	Project Totals:			**$45,430**		**$44,000**	**$89,430**

Material/Labor Cost		$89,430
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$83,295
General Contractor Mark Up at 20.0%	+	$16,659
Inflation	+	$41,851
Construction Cost		$141,805
Professional Fees at 15.0%	+	$21,271
Total Project Cost		**$163,075**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000FS02	**Title:**	DISPLAY CASE TEMPERED GLAZING UPGRADES
Priority Sequence:	4		
Priority Class:	3		
Category Code:	FS5G	**System:**	FIRE/LIFE SAFETY
		Component:	EGRESS PATH
		Element:	FINISH/FURNITURE RATINGS
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		

Project Class:	Plant Adaption	**Score:**	10.28
Project Date:	04/10/2003		
Project Location:	Item Only: Floor(s) 2		

Project Description

The wooden display cases in the second floor egress corridor do not have tempered glazing and should be modified to improve egress safety in this passageway.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000FS02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Tempered replacement glazing for display case	SF	300	$4.82	$1,446	$4.33	$1,299	$2,745
	Project Totals:			**$1,446**		**$1,299**	**$2,745**

Material/Labor Cost		$2,745
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$2,559
General Contractor Mark Up at 20.0%	+	$512
Inflation	+	$1,286
Construction Cost		$4,357
Professional Fees at 15.0%	+	$654
Total Project Cost		**$5,011**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000FS07	**Title:**	REPLACE EXIT SIGNS
Priority Sequence:	5		
Priority Class:	3		
Category Code:	FS1A	**System:**	FIRE/LIFE SAFETY
		Component:	LIGHTING
		Element:	EGRESS LTG./EXIT SIGNAGE
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Energy Conservation $235.00		
Code Application:	NFPA 101-47		
Project Class:	Capital Renewal	**Score:**	10.28
Project Date:	04/10/2003		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, B		

Project Description

The exit signs throughout the building are becoming timeworn and are recommended for replacement. LED applications are recommended for their low maintenance and energy-efficient features. Connect the new exit signs to the proposed emergency circuit.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000FS07

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Replacement of existing exit signs with LED units	EA	50	$75.00	$3,750	$66.00	$3,300	$7,050
	Project Totals:			**$3,750**		**$3,300**	**$7,050**

Material/Labor Cost		$7,050
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$6,575
General Contractor Mark Up at 20.0%	+	$1,315
Inflation	+	$3,303
Construction Cost		$11,193
Professional Fees at 15.0%	+	$1,679
Total Project Cost		**$12,872**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000AC04	**Title:**	PASSENGER ELEVATOR COMMUNICATION UPGRADES
Priority Sequence:	6		
Priority Class:	3		
Category Code:	AC3A	**System:**	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	LIFTS/RAMPS/ELEVATORS
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG 407		
Project Class:	Plant Adaption	**Score:**	10.28
Project Date:	04/10/2003		
Project Location:	Item Only: Floor(s) 1		

Project Description

The passenger elevator in this building lacks an accessible emergency call system in the elevator cab. Install a hands-free, two-way commutation unit in the existing telephone box, and remove the telephone box access door to maintain accessibility to the new unit.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000AC04

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
ADA-compliant, two-way communication system upgrade	LOT	1	$1,800	$1,800	$1,124	$1,124	$2,924
	Project Totals:			**$1,800**		**$1,124**	**$2,924**

Material/Labor Cost		$2,924
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$2,739
General Contractor Mark Up at 20.0%	+	$548
Inflation	+	$1,376
Construction Cost		$4,663
Professional Fees at 15.0%	+	$699
Total Project Cost		**$5,363**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000AC01	**Title:**	RESTROOM ACCESSIBILITY UPGRADES
Priority Sequence:	7		
Priority Class:	3		
Category Code:	AC3E	**System:**	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	RESTROOMS/BATHROOMS
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG 604.1, 604.8, 605.1, 606.1		

Project Class:	Plant Adaption	**Score:**	14.28
Project Date:	04/10/2003		
Project Location:	Room Only: Floor(s) 3, B		

Project Description

Although restrooms on the first and second floors have had ADA upgrades, the remainder of the restrooms in this building still have aging fixtures and finishes. Also, the third floor and basement level have only one restroom and one bathroom, respectively. Although the current percentage of restrooms meets the minimum ADA requirements, this project recommends that all of the remaining older restrooms be upgraded to ADA standards and that two additional restrooms be added to provide two facilities on each floor level.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000AC01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Medium size restroom: ADA-compliant plumbing fixtures and accessories and ceramic tile finishes	EA	2	$5,450	$10,900	$6,100	$12,200	$23,100
New medium size restroom: ADA-compliant plumbing fixtures and accessories, ceramic tile finishes, etc.	EA	2	$6,185	$12,370	$7,230	$14,460	$26,830
	Project Totals:			**$23,270**		**$26,660**	**$49,930**

Material/Labor Cost		$49,930
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$46,400
General Contractor Mark Up at 20.0%	+	$9,280
Inflation	+	$23,313
Construction Cost		$78,993
Professional Fees at 15.0%	+	$11,849
Total Project Cost		**$90,842**
Less Backlog Reduction	-	$22,357
Remaining Cost		**$68,485**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000AC03	**Title:**	INTERIOR STAIR HANDRAIL ADA UPGRADES (REV 2/08)
Priority Sequence:	8		
Priority Class:	3		
Category Code:	AC3B	**System:**	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	STAIRS AND RAILINGS
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG 505		
Project Class:	Plant Adaption	**Score:**	10.28
Project Date:	04/10/2003		
Project Location:	Item Only: Floor(s) 1, 2, 3, B		

Project Description

The existing stair tower handrails in the three main interior egress stairs are original and only partially accessible. The wall-mounted rails have partially accessible railing extensions that will need to be replaced. The inner railings will need to be fitted with a graspable handrail design, and the openings between balustrades are also too wide and need to be modified. The guardrails do not conform to the required height of 42 inches. Retrofit new inner and outer painted metal handrails and guardrails in each of these egress stair towers.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000AC03

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Painted metal handrails and guardrails per floor, per stair tower	EA	12	$1,246	$14,952	$800	$9,600	$24,552
	Project Totals:			**$14,952**		**$9,600**	**$24,552**

Material/Labor Cost		$24,552
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$22,992
General Contractor Mark Up at 20.0%	+	$4,598
Inflation	+	$11,552
Construction Cost		$39,142
Professional Fees at 15.0%	+	$5,871
Total Project Cost		**$45,013**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000AC02	**Title:**	DUAL-LEVEL DRINKING FOUNTAIN INSTALLATIONS
Priority Sequence:	9		
Priority Class:	3		
Category Code:	AC3F	**System:**	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	DRINKING FOUNTAINS
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG 211, 602		

Project Class:	Plant Adaption	**Score:**	7.28
Project Date:	04/10/2003		
Project Location:	Item Only: Floor(s) 1, 2, 3, B		

Project Description

The existing drinking fountains are a mixture of older single-level, wall-mounted units and original white porcelain, wall-hung fountains. The newer fountains are showing their age, and the older fountains are beyond their life cycle. All of the fountains in the building should be replaced within the next three to five years with new dual-level fountains. Each new installation should be set in a wheelchair accessible alcove or flanked by wing walls to comply with current ADA standards.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000AC02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Studs, drywall, fasteners, tools, paint (2 coats), and supplies	EA	11	$350	$3,850	$1,050	$11,550	$15,400
Dual-level drinking fountain, piping, supplies, and tools	EA	11	$1,040	$11,440	$320	$3,520	$14,960
Dump truck rental and dumping fee	DAY	3	$475	$1,425	$144	$431	$1,856
	Project Totals:			**$16,715**		**$15,501**	**$32,216**

Material/Labor Cost		$32,216
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$30,023
General Contractor Mark Up at 20.0%	+	$6,005
Inflation	+	$15,085
Construction Cost		$51,113
Professional Fees at 15.0%	+	$7,667
Total Project Cost		**$58,780**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000ES02	**Title:**	FRONT ENTRY STOOP REPAIRS AND UPGRADES (REV 2/08)
Priority Sequence:	10		
Priority Class:	3		
Category Code:	ES6A	**System:**	EXTERIOR
		Component:	GENERAL
		Element:	ATTACHED STRUCTURE
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		

Project Class:	Deferred Maintenance	**Score:**	9.28
Project Date:	04/10/2003		
Project Location:	Area Wide: Floor(s) 1, B		

Project Description

The main entry stoop has damaged concrete steps, with spalling and signs of water infiltration in the basement level service area. The repair and sealing of the concrete stoops and the installation of handicapped ramps and new ADA-compliant, metal handrail sections is recommended. Also replace the sections of damaged concrete sidewalk near the north building entry.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000ES02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Concrete sidewalk removal and replacement	LOT	1	$925	$925	$2,145	$2,145	$3,070
Epoxy grout, concrete sealer, and metal, exterior, ADA-compliant handrails	LOT	1	$3,845	$3,845	$27,400	$27,400	$31,245
Concrete handicapped ramp installation, including galvanized steel handrails, tools and supplies	SYS	1	$9,096	$9,096	$3,200	$3,200	$12,296
Power-assisted door operator, signage and accessories	SYS	1	$2,718	$2,718	$1,280	$1,280	$3,998
	Project Totals:			**$16,584**		**$34,025**	**$50,609**

Material/Labor Cost		$50,609
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$46,681
General Contractor Mark Up at 20.0%	+	$9,336
Inflation	+	$23,454
Construction Cost		$79,471
Professional Fees at 15.0%	+	$11,921
Total Project Cost		**$91,392**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000ES01	**Title:**	EXTERIOR SECONDARY ENTRY DOOR UPGRADES
Priority Sequence:	11		
Priority Class:	3		
Category Code:	ES5A	**System:**	EXTERIOR
		Component:	FENESTRATIONS
		Element:	DOORS
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG 309.4		

Project Class:	Deferred Maintenance	**Score:**	9.40
Project Date:	04/10/2003		
Project Location:	Item Only: Floor(s) B		

Project Description

The exterior, three panel, wood doors around the 1938 south addition are in average to fair condition, but it is anticipated that these doors will need to be upgraded within the next three to five years. Replace these grade level, double doors in kind, and include ADA-compliant door hardware with each upgrade.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000ES01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Exterior, double, three panel, wood door assembly and ADA hardware	EA	5	$1,445	$7,225	$685	$3,425	$10,650
Dump truck rental and dumping fee	DAY	1	$475	$475	$144	$144	$619
	Project Totals:			**$7,700**		**$3,569**	**$11,269**

Material/Labor Cost		$11,269
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$10,594
General Contractor Mark Up at 20.0%	+	$2,119
Inflation	+	$5,323
Construction Cost		$18,036
Professional Fees at 15.0%	+	$2,705
Total Project Cost		**$20,742**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000ES03	**Title:**	EXTERIOR BRICK MASONRY REPOINTING
Priority Sequence:	12		
Priority Class:	3		
Category Code:	ES2B	**System:**	EXTERIOR
		Component:	COLUMNS/BEAMS/WALLS
		Element:	FINISH
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	IBC		

Project Class:	Capital Renewal	**Score:**	10.28
Project Date:	04/10/2003		
Project Location:	Building-wide: Floor(s) 1,2,3,B		

Project Description

The exterior brick veneer and accent stone need to be pressure washed and selectively repointed and caulked on all four elevations. This exterior upgrade should be completed within the next five years.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000ES03

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Brick / stone pressure washing, caulking, and repointing - up to six stories	LOT	1	$18,400	$18,400	$28,450	$28,450	$46,850
	Project Totals:			**$18,400**		**$28,450**	**$46,850**

Material/Labor Cost		$46,850
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$43,366
General Contractor Mark Up at 20.0%	+	$8,673
Inflation	+	$21,789
Construction Cost		$73,828
Professional Fees at 15.0%	+	$11,074
Total Project Cost		**$84,902**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000ES04	**Title:**	ROOF REPLACEMENT (REV 2/08)
Priority Sequence:	13		
Priority Class:	3		
Category Code:	ES4A	**System:**	EXTERIOR
		Component:	ROOF
		Element:	REPAIR
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		

Project Class:	Plant Adaption	**Score:**	9.28
Project Date:	04/10/2003		
Project Location:	Floor-wide: Floor(s) R		

Project Description

The existing roof consists of an EPDM roofing system. The roof is out of warranty and near the end of its life cycle depletion. It is recommended that the existing roofing system be replaced with a modified bitumen system. This roof replacement should include new insulation, roof drains, and flashing. The existing cast stone coping detail on the roof is becoming a heavy maintenance item. It is recommended that a continuous metal coping detail be installed to better control harmful water infiltration.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000ES04

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Continuous metal coping installation	LOT	1	$18,000	$18,000	$27,500	$27,500	$45,500
Modified bitumen roofing, insulation, tools and supplies	SF	19,150	$3.12	$59,748	$2.88	$55,152	$114,900
Flashing	LOT	1	$3,500	$3,500	$7,500	$7,500	$11,000
	Project Totals:			**$81,248**		**$90,152**	**$171,400**

Material/Labor Cost		$171,400
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$159,351
General Contractor Mark Up at 20.0%	+	$31,870
Inflation	+	$80,064
Construction Cost		$271,285
Professional Fees at 15.0%	+	$40,693
Total Project Cost		**$311,977**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000HV01	**Title:**	HVAC UPGRADES
Priority Sequence:	14		
Priority Class:	3		
Category Code:	HV3A	**System:**	HVAC
		Component:	HEATING/COOLING
		Element:	SYSTEM RETROFIT/REPLACE
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Energy Conservation $12,473.00		
Code Application:	ASHRAE 62-1999		
	EPA 40 CFR 61.M, 763		
	OSHA 29 CFR 1910.1001, 1926.1101		
Project Class:	Capital Renewal	**Score:**	8.28
Project Date:	04/10/2003		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, B		

Project Description

The HVAC system components consist of air handling systems, fan coil units, rooftop package units, window air conditioners, hot water radiators, and split DX air conditioners. These components vary in age and type. While much of the equipment appears to be 1980s vintage, there are older components and some that are nearly new. HVAC upgrades are recommended throughout the building to replace all of the aged systems / components with new efficient equipment. Demolish and dispose of the existing aged equipment. Install a new modern HVAC system with VAV and constant volume air distribution, as needed. This includes new air handlers, ductwork, terminal units, heat exchangers, pumps, piping, controls, and electrical connections. Specify DDCs for the new equipment. Incorporate VFDs into the new HVAC design, as applicable. Due to the age of some of the systems / components, it is suspected that ACM will be encountered during the demolition phase. This must be removed and disposed of in accordance with all pertinent regulations. This work accounts for approximately 80 percent of the existing HVAC air and water systems.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000HV01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Air handlers, ductwork, VAVs, VFDs, DDCs, heat exchangers, pumps, piping, electrical connections, demolition of existing equipment, and asbestos abatement	SF	60,000	$24.40	$1,464,000	$20.79	$1,247,400	$2,711,400
	Project Totals:			**$1,464,000**		**$1,247,400**	**$2,711,400**

Material/Labor Cost		$2,711,400
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$2,529,728
General Contractor Mark Up at 20.0%	+	$505,946
Inflation	+	$1,271,030
Construction Cost		$4,306,704
Professional Fees at 15.0%	+	$646,006
Total Project Cost		**$4,952,710**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000HV02	**Title:**	FUME HOOD UPGRADES
Priority Sequence:	15		
Priority Class:	3		
Category Code:	HV4B	**System:**	HVAC
		Component:	AIR MOVING/VENTILATION
		Element:	EXHAUST FANS
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	IMC Chapter 5		
Project Class:	Capital Renewal	**Score:**	8.28
Project Date:	04/10/2003		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, B		

Project Description

There are fume hoods in the teaching laboratories and research areas. The fume hood fans are located on the roof. Many of the fume hoods are fairly new, including their mechanical systems. Still, older hoods are present with mechanical systems that have exceeded their life cycle. In conjunction with the proposed HVAC upgrades, replacement of the old fume hoods with new modern units is recommended. Remove all aged fume hoods and their mechanical systems. Install new fume hood systems, integrated with the air distribution system. Provide direct digital controls for the new hoods.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000HV02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Fume hood replacement, including mechanical systems, controls, demolition, and disposal fees	SYS	24	$15,500	$372,000	$4,230	$101,520	$473,520
	Project Totals:			**$372,000**		**$101,520**	**$473,520**

Material/Labor Cost		$473,520
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$447,609
General Contractor Mark Up at 20.0%	+	$89,522
Inflation	+	$224,896
Construction Cost		$762,026
Professional Fees at 15.0%	+	$114,304
Total Project Cost		**$876,330**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000HV04	**Title:**	REPLACE SMALL AIR-COOLED CHILLER
Priority Sequence:	16		
Priority Class:	3		
Category Code:	HV2A	**System:**	HVAC
		Component:	COOLING
		Element:	CHILLERS/CONTROLS
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		

Project Class:	Capital Renewal	**Score:**	10.28
Project Date:	04/10/2003		
Project Location:	Item Only: Floor(s) 1		

Project Description

There is a small air-cooled chiller in a mechanical enclosure off the east elevation on the north end. This appears to be for process cooling for laboratory equipment. It is at the end of its life cycle and should be scheduled for replacement. Remove the existing unit, and replace it in kind.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000HV04

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Air-cooled chiller installation and removal of existing unit	EA	1	$15,075	$15,075	$9,525	$9,525	$24,600
	Project Totals:			**$15,075**		**$9,525**	**$24,600**

Material/Labor Cost		$24,600
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$23,041
General Contractor Mark Up at 20.0%	+	$4,608
Inflation	+	$11,577
Construction Cost		$39,226
Professional Fees at 15.0%	+	$5,884
Total Project Cost		**$45,110**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000HV03	**Title:**	REPLACE EXHAUST FANS ON THE ROOF
Priority Sequence:	17		
Priority Class:	3		
Category Code:	HV4B	**System:**	HVAC
		Component:	AIR MOVING/VENTILATION
		Element:	EXHAUST FANS
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		

Project Class:	Capital Renewal	**Score:**	8.28
Project Date:	04/10/2003		
Project Location:	Floor-wide: Floor(s) R		

Project Description

There are several exhaust fans on the roof that are due for replacement that are not part of the fume hood systems. Replace the fans, and clean and recondition their associated duct systems, replacing dampers and air registers, as needed.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000HV03

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Duct system cleaning and repairs, including new dampers and registers, as needed	EA	7	$400	$2,800	$800	$5,600	$8,400
Centrifugal roof exhauster, connections, and demolition	EA	7	$1,040	$7,280	$680	$4,760	$12,040
	Project Totals:			**$10,080**		**$10,360**	**$20,440**

Material/Labor Cost		$20,440
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$19,023
General Contractor Mark Up at 20.0%	+	$3,805
Inflation	+	$9,558
Construction Cost		$32,385
Professional Fees at 15.0%	+	$4,858
Total Project Cost		**$37,243**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000EL03	**Title:**	EMERGENCY POWER SYSTEM UPGRADE
Priority Sequence:	18		
Priority Class:	3		
Category Code:	EL5A	**System:**	ELECTRICAL
		Component:	EMERGENCY POWER SYSTEM
		Element:	GENERATION/DISTRIBUTION
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	NEC Article 700		

Project Class:	Plant Adaption	**Score:**	14.28
Project Date:	04/10/2003		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, B		

Project Description

Emergency power for the building consists of an ASCO transfer switch connected to the campus emergency power network. The available power appears to be inadequate for a modern laboratory facility of this size. The current circuit provides 200 amp emergency power to this facility. It is recommended that an appropriately-sized emergency generator and power network be installed. The emergency network should supply power to select light fixtures to maintain code required illumination levels along egress paths. Emergency power should also be provided for the exit signs, fire alarm system, elevator, and critical laboratory and mechanical equipment. If deemed more cost-effective, the university may opt to increase the emergency feeder size and transfer switch in lieu of the generator installation.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000EL03

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Generator set, including battery charger, muffler and transfer switch, and diesel engine with fuel tank	KW	75	$450	$33,750	$47.00	$3,525	$37,275
Emergency power network, including breaker panels, raceways, conductors, and miscellaneous connection materials	SF	76,605	$0.18	$13,789	$0.24	$18,385	$32,174
	Project Totals:			**$47,539**		**$21,910**	**$69,449**

Material/Labor Cost		$69,449
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$65,298
General Contractor Mark Up at 20.0%	+	$13,060
Inflation	+	$32,808
Construction Cost		$111,165
Professional Fees at 15.0%	+	$16,675
Total Project Cost		**$127,840**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000EL05	**Title:**	EXTERIOR LIGHTING UPGRADE
Priority Sequence:	19		
Priority Class:	3		
Category Code:	EL4A	**System:**	ELECTRICAL
		Component:	DEVICES AND FIXTURES
		Element:	EXTERIOR LIGHTING
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	NEC 410		

Project Class:	Deferred Maintenance	**Score:**	10.28
Project Date:	04/10/2003		
Project Location:	Floor-wide: Floor(s) B		

Project Description

The exterior lights are older vintage, incandescent fixtures that have been retrofitted with compact fluorescent lamps. These decorative lights could not be replaced and add to the overall exterior facade aesthetics. However, they are in need of attention. Several have missing or cracked glass lenses, and the compact fluorescent lamps do not provide good illumination. It is recommended that the exterior lights be refurbished and converted to HID fixtures. This will improve illumination levels, while leaving the original lighting fixtures in place.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000EL05

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Exterior light fixture repair and conversion to HID	EA	10	$350	$3,500	$420	$4,200	$7,700
	Project Totals:			**$3,500**		**$4,200**	**$7,700**

Material/Labor Cost		$7,700
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$7,151
General Contractor Mark Up at 20.0%	+	$1,430
Inflation	+	$3,593
Construction Cost		$12,174
Professional Fees at 15.0%	+	$1,826
Total Project Cost		**$14,001**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000EL04	**Title:**	UPGRADE SECONDARY ELECTRICAL SYSTEM
Priority Sequence:	20		
Priority Class:	3		
Category Code:	EL3B	**System:**	ELECTRICAL
		Component:	SECONDARY DISTRIBUTION
		Element:	DISTRIBUTION NETWORK
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	NEC Chapters 2, 3		

Project Class:	Capital Renewal	**Score:**	11.28
Project Date:	04/10/2003		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, B		

Project Description

The secondary electrical system includes a combination of old and newer components. There are newer Westinghouse breaker panels along with obsolete Trumbull panels and even some ancient fused panels. Some of the branch circuits are not grounded, having two wire receptacles. Devices, including switches and receptacles, are generally timeworn. Some areas do not have enough receptacles. One example is the museum, where extension cords and multi-plug adapters are being used. Upgrade the secondary electrical system by replacing all aged, obsolete panels, replacing all worn and damaged devices, and replacing branch circuitry as needed. Install additional branch circuits to meet the present demands of the occupants. Specify GFCI receptacles in the appropriate areas to reduce shock hazard.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000EL04

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Breaker panels, raceways, conductors, devices, demolition, and disposal costs	SF	57,500	$4.05	$232,875	$6.08	$349,600	$582,475
	Project Totals:			**$232,875**		**$349,600**	**$582,475**

Material/Labor Cost		$582,475
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$539,366
General Contractor Mark Up at 20.0%	+	$107,873
Inflation	+	$270,998
Construction Cost		$918,237
Professional Fees at 15.0%	+	$137,736
Total Project Cost		**$1,055,973**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000EL02	**Title:**	UPGRADE INTERIOR LIGHTING
Priority Sequence:	21		
Priority Class:	3		
Category Code:	EL4B	**System:**	ELECTRICAL
		Component:	DEVICES AND FIXTURES
		Element:	INTERIOR LIGHTING
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Energy Conservation $8,177.00		
Code Application:	NEC Chapter 4, Article 410		
Project Class:	Deferred Maintenance	**Score:**	9.28
Project Date:	04/10/2003		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, B		

Project Description

The lighting throughout the facility is mainly fluorescent, but there are incandescent lights in some areas. The lights have been upgraded in a few of the laboratories and offices, but most are inefficient applications with outdated T12 lamps. In addition, many of the older fixtures have been fitted with T8 lamps, but the fixtures remain antiquated in appearance. Lighting levels tend to be low. Approximately 75 percent of the lighting is recommended for upgrade. Replace incandescent and old fluorescent light fixtures with new energy-efficient fixtures. Install occupancy sensors in select areas as an energy conservation measure.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000EL02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
High efficiency fluorescent lighting, occupancy sensors, and demolition costs	SF	57,500	$1.70	$97,750	$2.08	$119,600	$217,350
	Project Totals:			**$97,750**		**$119,600**	**$217,350**

Material/Labor Cost		$217,350
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$201,807
General Contractor Mark Up at 20.0%	+	$40,361
Inflation	+	$101,395
Construction Cost		$343,563
Professional Fees at 15.0%	+	$51,534
Total Project Cost		**$395,098**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000IS02	**Title:**	INTERIOR DOOR REPLACEMENTS
Priority Sequence:	22		
Priority Class:	3		
Category Code:	IS4A	**System:**	INTERIOR/FINISH SYS.
		Component:	DOORS
		Element:	GENERAL
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG 309.4		
Project Class:	Plant Adaption	**Score:**	14.28
Project Date:	04/10/2003		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, B		

Project Description

The original interior wood door assemblies and stair tower french doors vary in condition, but they are generally aging and no longer meet industry standards. These doors also do not have accessible hardware and need to be upgraded. The interior corridor doors are solid core wood but are also timeworn and lack accessible door hardware. Replace all of these doors with new flush, hollow metal door assemblies, and provide ADA-compliant, lever actuated hardware with each new door assembly. Coordinate this work with the recommended building fire suppression upgrade for best results.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000IS02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Flush, hollow metal, interior door and frame with vision panel and lever actuated hardware	EA	175	$740	$129,500	$338	$59,150	$188,650
Dump truck rental and dumping fee	DAY	4	$475	$1,900	$144	$574	$2,474
	Project Totals:			**$131,400**		**$59,724**	**$191,124**

Material/Labor Cost		$191,124
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$179,729
General Contractor Mark Up at 20.0%	+	$35,946
Inflation	+	$90,302
Construction Cost		$305,977
Professional Fees at 15.0%	+	$45,897
Total Project Cost		**$351,873**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000IS03	**Title:**	SELECTIVE LABORATORY BENCH UPGRADES - PHASE 1
Priority Sequence:	23		
Priority Class:	3		
Category Code:	IS6B	**System:**	INTERIOR/FINISH SYS.
		Component:	GENERAL
		Element:	CABINETRY
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG Chapter 9		
Project Class:	Capital Renewal	**Score:**	9.20
Project Date:	04/10/2003		
Project Location:	Undefined: Floor(s) 1, 2, 3, B		

Project Description

The laboratory casework and countertops vary in design, age, and degree of deterioration from floor to floor and laboratory to laboratory. Overall, the original laboratory benches are at or near the end of their useful life cycles. Newer laboratory benchwork is in better condition but should also be replaced within the ten-year timeframe of this study. This later benchwork upgrade is addressed in a separate project in this report. Roughly 50 percent replacement of both base cabinets and countertops should be anticipated within three to five years.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000IS03

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Dump truck rental and dumping fee	DAY	2	$475	$950	$144	$287	$1,237
Base cabinets, epoxy resin countertop, and reagent shelving	LF	460	$395	$181,700	$188	$86,480	$268,180
	Project Totals:			**$182,650**		**$86,767**	**$269,417**

Material/Labor Cost		$269,417
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$253,224
General Contractor Mark Up at 20.0%	+	$50,645
Inflation	+	$127,229
Construction Cost		$431,099
Professional Fees at 15.0%	+	$64,665
Total Project Cost		**$495,764**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000IS04	**Title:**	INTERIOR FLOOR FINISH RESTORATION
Priority Sequence:	24		
Priority Class:	3		
Category Code:	IS1A	**System:**	INTERIOR/FINISH SYS.
		Component:	FLOOR
		Element:	FINISHES-DRY
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	EPA 40 CFR 61. M, 763 OSHA 29 CFR 1910.1001, 1926.1101		
Project Class:	Deferred Maintenance	**Score:**	9.28
Project Date:	04/10/2003		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, B		

Project Description

This building has a mixture of worn vinyl floor tile in the corridors, some offices, and most laboratory spaces. New vinyl floor tile should be installed in the laboratories and corridors. Carpeting in many of the offices is showing wear and should be replaced with new commercial, roll carpeting at the same time corridors and laboratories receive new vinyl tile. Furthermore, the three main stair towers have vinyl floor tile finishes, which will soon need to be replaced. It is recommended that rubber stair treads be installed in all three stair towers. The vinyl floor tile is anticipated to contain asbestos, and an abatement allowance is provided with this project.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000IS04

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Dump truck rental and dumping fee	DAY	4	$475	$1,900	$144	$574	$2,474
40 oz. nylon, level loop, direct glue-down carpet, mastic, tools, and supplies	SY	844	$18.00	$15,192	$12.00	$10,128	$25,320
Rubber treads and landing finish	SF	2,250	$6.35	$14,288	$2.00	$4,500	$18,788
Marbleized vinyl floor tile, mastic, tools, and supplies	SF	53,500	$1.00	$53,500	$1.05	$56,175	$109,675
Asbestos abatement allowance	LOT	1	$14,400	$14,400	$35,250	$35,250	$49,650
	Project Totals:			**$99,280**		**$106,627**	**$205,907**

Material/Labor Cost		$205,907
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$191,516
General Contractor Mark Up at 20.0%	+	$38,303
Inflation	+	$96,225
Construction Cost		$326,043
Professional Fees at 15.0%	+	$48,907
Total Project Cost		**$374,950**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000IS01	**Title:**	LAY-IN, ACOUSTICAL CEILING SYSTEM UPGRADES
Priority Sequence:	25		
Priority Class:	3		
Category Code:	IS3B	**System:**	INTERIOR/FINISH SYS.
		Component:	CEILINGS
		Element:	REPLACEMENT
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	EPA 40 CFR 61.M, 763 OSHA 29 CFR 1910.1001, 1926.1101		
Project Class:	Plant Adaption	**Score:**	9.30
Project Date:	04/10/2003		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, B		

Project Description

Most of the ceilings in this building are plaster. These ceilings will have to be removed to facilitate the proposed building system upgrades. Also, this project assumes that the plaster contains asbestos and will have to be abated. Therefore, an allowance for ACM abatement related to the plaster ceiling demolition work is included. Once these building system upgrades are completed and the ceiling areas are cleaned, install new 2 x 2 foot, lay-in ceiling systems in the corridors, office areas, and some of the dry laboratories.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000IS01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Suspended, acoustical ceiling system, etc.	SF	15,300	$2.46	$37,638	$1.25	$19,125	$56,763
Asbestos abatement and disposal allowance for plaster ceilings	LOT	1	$13,750	$13,750	$10,700	$10,700	$24,450
	Project Totals:			**$51,388**		**$29,825**	**$81,213**

Material/Labor Cost		$81,213
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$76,148
General Contractor Mark Up at 20.0%	+	$15,230
Inflation	+	$38,260
Construction Cost		$129,638
Professional Fees at 15.0%	+	$19,446
Total Project Cost		**$149,084**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000IS05	**Title:**	BREAK ROOM CABINETRY UPGRADES
Priority Sequence:	26		
Priority Class:	3		
Category Code:	IS6B	**System:**	INTERIOR/FINISH SYS.
		Component:	GENERAL
		Element:	CABINETRY
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		

Project Class:	Capital Renewal	**Score:**	7.28
Project Date:	04/10/2003		
Project Location:	Room Only: Floor(s) 1, 3 Room(s) 301A, 118		

Project Description

Room 118 has been turned into a break area, but there is no real cabinetry in the room. The break room on the third floor off of the main conference room 301 has cabinetry, but it is timeworn. Install new modular cabinets and countertops in each of these areas to upgrade this break room and kitchenette area. Also provide basic appliances and a small refrigerator with each upgrade.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000IS05

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Modular wood cabinetry and plastic laminate counter, small refrigerator, etc.	LOT	2	$1,400	$2,800	$650	$1,300	$4,100
	Project Totals:			**$2,800**		**$1,300**	**$4,100**

Material/Labor Cost		$4,100
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$3,855
General Contractor Mark Up at 20.0%	+	$771
Inflation	+	$1,937
Construction Cost		$6,562
No Professional Fees Required	+	$0
Total Project Cost		**$6,562**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000PL03	**Title:**	REPLACE RESTROOM PLUMBING FIXTURES AND SERVICE SINKS
Priority Sequence:	27		
Priority Class:	3		
Category Code:	PL1G	**System:**	PLUMBING
		Component:	DOMESTIC WATER
		Element:	FIXTURES
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	IPC Chapter 4		
Project Class:	Capital Renewal	**Score:**	8.28
Project Date:	04/10/2003		
Project Location:	Item Only: Floor(s) 1, 2, 3, B		

Project Description

The third floor and basement restrooms have aged fixtures, while the ones on the second and first floors are in good condition. Replace the older vintage restroom fixtures on the third floor and the basement in conjunction with the proposed accessibility upgrades. Specify automatic flush valves and faucets for the replacement fixtures. Some of the water closets and urinals in the first and second floor restrooms already have automatic flush valves. Replace the remaining manual flush valves with automatic units, and install automatic faucets for the lavatories. The janitor sinks on each floor are deteriorated from long-time use. Replace these with new service sinks.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000PL03

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Urinal, automatic flush valve, rough-in, and demolition	EA	2	$595	$1,190	$560	$1,120	$2,310
Water closet, automatic flush valve, rough-in, and demolition	EA	4	$865	$3,460	$515	$2,060	$5,520
Janitor sink and rough-in	EA	4	$780	$3,120	$620	$2,480	$5,600
Lavatory, automatic faucets, trap, rough-in, and demolition	EA	5	$625	$3,125	$525	$2,625	$5,750
Automatic flush valves and faucets	LOT	1	$7,680	$7,680	$3,200	$3,200	$10,880
	Project Totals:			**$18,575**		**$11,485**	**$30,060**

Material/Labor Cost		$30,060
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$28,163
General Contractor Mark Up at 20.0%	+	$5,633
Inflation	+	$14,150
Construction Cost		$47,946
Professional Fees at 15.0%	+	$7,192
Total Project Cost		**$55,138**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000PL02	**Title:**	REPLACE DRAIN PIPING
Priority Sequence:	28		
Priority Class:	3		
Category Code:	PL2A	**System:**	PLUMBING
		Component:	WASTEWATER
		Element:	PIPING NETWORK
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	IPC Chapter 6		
Project Class:	Deferred Maintenance	**Score:**	10.28
Project Date:	04/10/2003		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, B		

Project Description

Drain piping types include glass, cast-iron bell-n-spigot, and plastic. Interconnections between all types were noted. Where it could be viewed, drain piping appears aged and due for replacement. There are laboratories in the basement with grated, open trenches with sump pumps. Replacement of the storm, acid, and sanitary waste drain piping is recommended within two to five years. This work includes new floor drains and redesign of the open trench layout in the basement laboratories.

Project Cost

Project Number: 0501-000PL02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Drain pipe and fittings suitable for laboratory environment, hangers, floor drains, and demolition costs	SF	76,605	$1.80	$137,889	$5.04	$386,089	$523,978
	Project Totals:			**$137,889**		**$386,089**	**$523,978**

Material/Labor Cost		$523,978
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$481,619
General Contractor Mark Up at 20.0%	+	$96,324
Inflation	+	$241,983
Construction Cost		$819,926
Professional Fees at 15.0%	+	$122,989
Total Project Cost		**$942,915**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000PL01	**Title:**	REPLACE WATER SUPPLY AND PROCESS FLUIDS PIPING
Priority Sequence:	29		
Priority Class:	3		
Category Code:	PL1A	**System:**	PLUMBING
		Component:	DOMESTIC WATER
		Element:	PIPING NETWORK
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	IPC Chapter 6		
Project Class:	Capital Renewal	**Score:**	9.28
Project Date:	04/10/2003		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, B		

Project Description

This laboratory facility includes piping for domestic water, natural gas, distilled water, compressed air, and other specialty systems. Water supply piping is a mixture of copper and galvanized steel. Laboratory process fluids piping materials include copper, steel, and plastic. Shutoff valves and gas cocks are uniformly worn. Failure to replace the water and process piping within the scope of this report will result in frequent leaks and consequential maintenance costs. In coordination with other recommended plumbing upgrades, replacement of most of the water and process piping is recommended. Some of the laboratory areas received piping upgrades in the past and are not included in this scope of work.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000PL01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Pipe and fittings, valves, backflow prevention devices, gas cocks, insulation, hangers, demolition, and cut and patch materials	SF	61,000	$1.47	$89,670	$3.09	$188,490	$278,160
	Project Totals:			**$89,670**		**$188,490**	**$278,160**

Material/Labor Cost		$278,160
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$256,496
General Contractor Mark Up at 20.0%	+	$51,299
Inflation	+	$128,873
Construction Cost		$436,669
Professional Fees at 15.0%	+	$65,500
Total Project Cost		**$502,170**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000PL04	**Title:**	REPLACE LABORATORY FIXTURES - PHASE 1
Priority Sequence:	30		
Priority Class:	3		
Category Code:	PL1A	**System:**	PLUMBING
		Component:	DOMESTIC WATER
		Element:	PIPING NETWORK
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		

Project Class:	Capital Renewal	**Score:**	8.28
Project Date:	04/10/2003		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, B		

Project Description

The laboratory sinks and specialty fixtures vary in age and condition. While all the laboratory fixtures are recommended for replacement within the ten-year purview of this report, this project is for replacement of the oldest fixtures, approximately 50 percent, in the near term future. Coordinate this work with the proposed laboratory bench and cabinetry upgrades.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000PL04

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Resin laboratory cup sinks, wash sinks, rough-ins, fittings, and hazardous materials remediation costs	SF	38,300	$3.29	$126,007	$3.57	$136,731	$262,738
Project Totals:				**$126,007**		**$136,731**	**$262,738**

Material/Labor Cost		$262,738
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$244,341
General Contractor Mark Up at 20.0%	+	$48,868
Inflation	+	$122,766
Construction Cost		$415,975
Professional Fees at 15.0%	+	$62,396
Total Project Cost		**$478,371**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000FS05	**Title:**	REPLACE THE FIRE ALARM SYSTEM
Priority Sequence:	31		
Priority Class:	4		
Category Code:	FS2A	**System:**	FIRE/LIFE SAFETY
		Component:	DETECTION ALARM
		Element:	GENERAL
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	NFPA 1, 101 ADAAG 702.1		
Project Class:	Plant Adaption	**Score:**	14.28
Project Date:	04/10/2003		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, B		

Project Description

The fire alarm system does not comply with ADA requirements for visual alarms and pull station locations. Remove the existing aged system. Install a modern, addressable point fire alarm system in its place. This work includes panels, pull stations, audible / visual and visual devices, and smoke and heat detectors. Install all devices in accordance with current NFPA and ADA requirements. The system should report activation or trouble to an applicable receiving station, such as campus security and / or the local fire department.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000FS05

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Fire alarm control panel(s), annunciator, smoke and heat detectors, manual pull stations, audible and visual alarms, wiring, raceways, and cut and patching materials	SF	76,605	$0.98	$75,073	$0.59	$45,197	$120,270
	Project Totals:			**$75,073**		**$45,197**	**$120,270**

Material/Labor Cost		$120,270
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$112,718
General Contractor Mark Up at 20.0%	+	$22,544
Inflation	+	$56,634
Construction Cost		$191,896
Professional Fees at 15.0%	+	$28,784
Total Project Cost		**$220,680**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000FS04	**Title:**	BUILDING-WIDE FIRE SPRINKLER SYSTEM
Priority Sequence:	32		
Priority Class:	4		
Category Code:	FS3A	**System:**	FIRE/LIFE SAFETY
		Component:	SUPPRESSION
		Element:	SPRINKLERS
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	NFPA 1, 13, 13R, 101		

Project Class:	Plant Adaption	**Score:**	10.28
Project Date:	04/10/2003		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, B		

Project Description

There is a wet standpipe system with fire hose connections throughout the building. No other fire suppression was noted. A facility of this size and use type should be fully protected by an automatic fire suppression system. Install fire suppression throughout the facility, including piping, sprinkler heads, pipe bracing, and supervising and alarm devices, as needed. This will aid the university in terms of reduced liability and risk of loss.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000FS04

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Install a wet-pipe sprinkler system, including valves, schedule 40 black pipe, sprinkler heads, and associated materials	SF	76,605	$1.60	$122,568	$2.61	$199,939	$322,507
	Project Totals:			**$122,568**		**$199,939**	**$322,507**

Material/Labor Cost		$322,507
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$298,320
General Contractor Mark Up at 20.0%	+	$59,664
Inflation	+	$149,887
Construction Cost		$507,871
Professional Fees at 15.0%	+	$76,181
Total Project Cost		**$584,051**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000EL01	**Title:**	REPLACE PRIMARY SWITCHGEAR
Priority Sequence:	33		
Priority Class:	4		
Category Code:	EL2A	**System:**	ELECTRICAL
		Component:	MAIN DISTRIBUTION PANELS
		Element:	CONDITION UPGRADE
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	NEC Chapter 2		
Project Class:	Capital Renewal	**Score:**	7.28
Project Date:	04/10/2003		
Project Location:	Room Only: Floor(s) B Room(s) 1B		

Project Description

An outdoor, pad-mounted, oil-filled transformer provides 480 volt power to this facility. The transformer feeds a Westinghouse main switchboard rated at 2,500 amps. This was new in 1987 and is exhibiting corrosion at the base. Within the ten-year purview of this report, the switchgear will reach the end of its life cycle. Replacement is recommended with an appropriately-sized switchboard in six to ten years.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000EL01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Switchgear and all connections and terminations	EA	1	$25,300	$25,300	$16,000	$16,000	$41,300
	Project Totals:			**$25,300**		**$16,000**	**$41,300**

Material/Labor Cost		$41,300
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$38,683
General Contractor Mark Up at 20.0%	+	$7,737
Inflation	+	$19,436
Construction Cost		$65,855
Professional Fees at 15.0%	+	$9,878
Total Project Cost		**$75,733**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000IS06	**Title:**	SELECTIVE LABORATORY BENCH UPGRADES - PHASE 2
Priority Sequence:	34		
Priority Class:	4		
Category Code:	IS6B	**System:**	INTERIOR/FINISH SYS.
		Component:	GENERAL
		Element:	CABINETRY
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG Chapter 9		

Project Class:	Capital Renewal	**Score:**	7.20
Project Date:	04/10/2003		
Project Location:	Undefined: Floor(s) 1, 2, 3, B		

Project Description

Laboratory casework and countertops vary in design, age, and degree of deterioration from floor to floor. The remaining original laboratory cabinets are being recommended for upgrade sooner than other newer bench work in the building. The remaining 50 percent of laboratory cabinets not addressed in the three to five year replacement project are addressed in this cabinet upgrade project. Roughly fifty percent replacement of both base cabinets and countertops should be anticipated within six to ten years.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000IS06

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Dump truck rental and dumping fee	DAY	2	$475	$950	$144	$287	$1,237
Base cabinets, epoxy resin countertop, and reagent shelving	LF	460	$395	$181,700	$188	$86,480	$268,180
	Project Totals:			**$182,650**		**$86,767**	**$269,417**

Material/Labor Cost		$269,417
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$253,224
General Contractor Mark Up at 20.0%	+	$50,645
Inflation	+	$127,229
Construction Cost		$431,099
Professional Fees at 15.0%	+	$64,665
Total Project Cost		**$495,764**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000IS07	**Title:**	INTERIOR PAINT FINISH UPGRADE (2/08)
Priority Sequence:	35		
Priority Class:	4		
Category Code:	IS2B	**System:**	INTERIOR/FINISH SYS.
		Component:	PARTITIONS
		Element:	FINISHES
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		

Project Class:	Capital Renewal	**Score:**	7.20
Project Date:	02/12/2008		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, B		

Project Description

There are painted walls and some painted ceilings throughout the building. The interior finishes are in good condition and will require an almost continuous program of renewal in order to maintain an acceptable appearance. Cyclical painting should be considered as a standard approach to maintaining the quality of the interior finishes. It is recommended that all previously painted surfaces be repainted according to established cycles for this occupancy and use type. Budgetary considerations are taken into account for the next ten years for interior repair and maintenance. Minor repairs should be completed before work begins.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000IS07

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Masking, surface preparation, and tools	SF	191,500	$0.03	$5,745	$0.20	$38,300	$44,045
Paint (2 coats), supplies, and tools	SF	191,500	$0.08	$15,320	$0.42	$80,430	$95,750
Clean-up, masking, and stripping	SF	191,500	$0.01	$1,915	$0.10	$19,150	$21,065
Minor repairs	FLR	4	$250	$1,000	$1,100	$4,400	$5,400
	Project Totals:			**$23,980**		**$142,280**	**$166,260**

Material/Labor Cost		$166,260
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$151,831
General Contractor Mark Up at 20.0%	+	$30,366
Inflation	+	$0
Construction Cost		$182,197
Professional Fees at 15.0%	+	$27,330
Total Project Cost		**$209,526**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000PL05	**Title:**	REPLACE LABORATORY FIXTURES - PHASE 2
Priority Sequence:	36		
Priority Class:	4		
Category Code:	PL1A	**System:**	PLUMBING
		Component:	DOMESTIC WATER
		Element:	PIPING NETWORK
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Capital Renewal	**Score:**	7.28
Project Date:	04/10/2003		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, B		

Project Description

Laboratory sinks and specialty fixtures vary in age and condition, and all should be scheduled for replacement within the next ten years. A separate project recommends replacement of the oldest fixtures, approximately 50 percent, in the later term future. This project is for replacement of the remaining laboratory fixtures in six to ten years.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000PL05

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Resin laboratory cup sinks, wash sinks, rough-ins, fittings, and hazardous materials remediation costs	SF	38,305	$3.29	$126,023	$3.57	$136,749	$262,772
Project Totals:				**$126,023**		**$136,749**	**$262,772**

Material/Labor Cost		$262,772
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$244,373
General Contractor Mark Up at 20.0%	+	$48,875
Inflation	+	$122,782
Construction Cost		$416,030
Professional Fees at 15.0%	+	$62,404
Total Project Cost		**$478,434**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	0501-000SI01	**Title:**	ASPHALT SERVICE LOT PAVEMENT IMPROVEMENTS
Priority Sequence:	37		
Priority Class:	4		
Category Code:	SI1B	**System:**	SITE
		Component:	ACCESS
		Element:	VEHICULAR
Building Code:	0501-000		
Building Name:	STEIDLE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		

Project Class:	Capital Renewal	**Score:**	7.28
Project Date:	04/10/2003		
Project Location:	Item Only: Floor(s) B		

Project Description

The asphalt pavement on the southern side of the building is in average condition and should be crack sealed and slurry coated within the next six to eight years. This pavement work should include restriping the existing parking spaces, including ADA parking spaces.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: 0501-000SI01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Reseal and restripe parking lot	CSF	74	$22.65	$1,676	$33.98	$2,515	$4,191
Project Totals:				**$1,676**		**$2,515**	**$4,191**

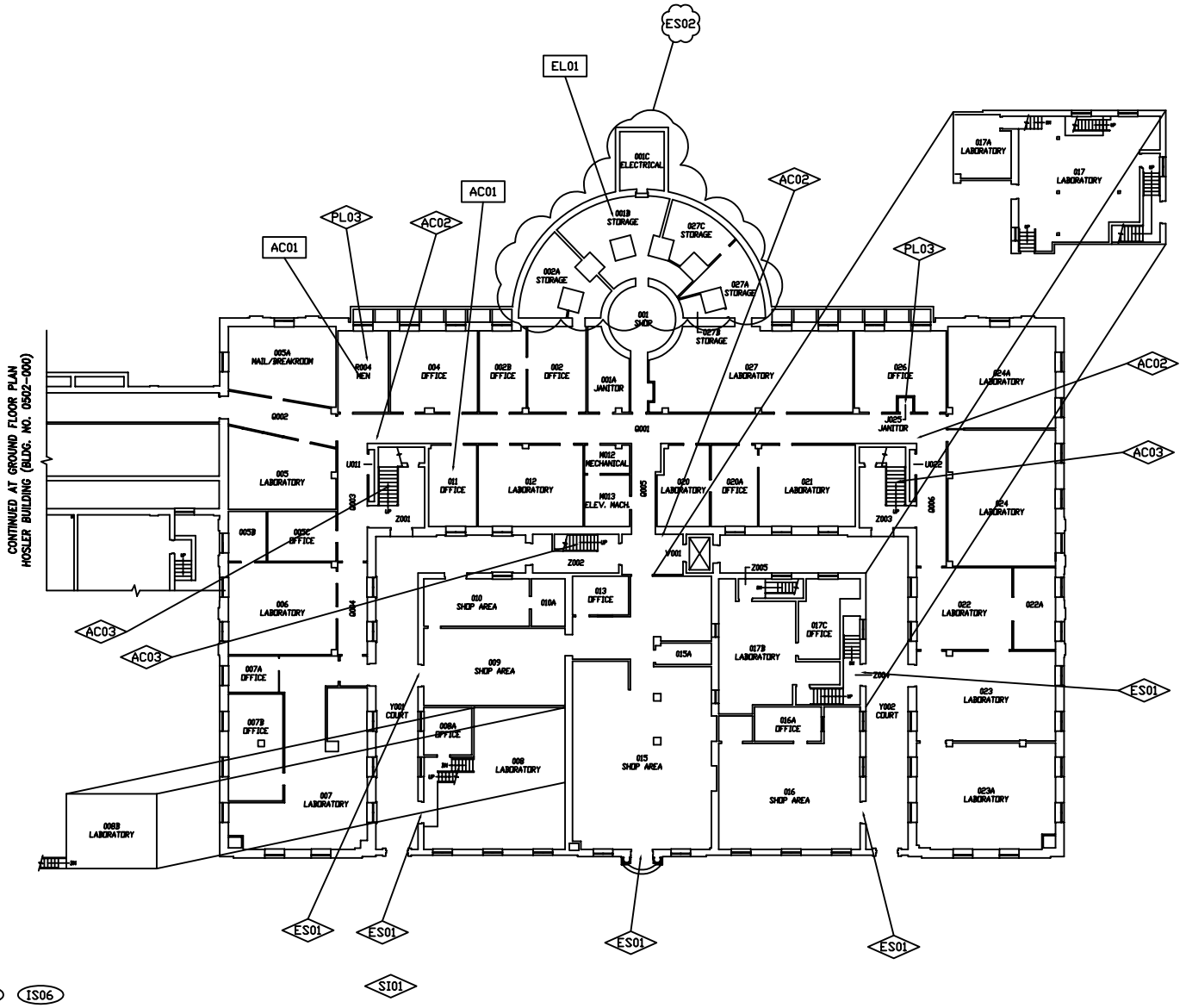
Material/Labor Cost		$4,191
Material Index		95.6%
Labor Index		90.6%
Material/Labor Indexed Cost		$3,881
General Contractor Mark Up at 20.0%	+	$776
Inflation	+	$1,950
Construction Cost		$6,606
Professional Fees at 15.0%	+	$991
Total Project Cost		**$7,597**

FACILITY CONDITION ANALYSIS

SECTION 4

DRAWINGS AND PROJECT LOCATIONS

PENNSYLVANIA STATE UNIVERSITY



FS01 IS03 IS06

EL02 EL03 EL04 EL05 FS04 FS05

FS06 FS07 HV01 HV02 IS01 IS02

IS04 IS07 PL01 PL02 PL04 PL05

0 10' 20' 40'

5' 15'

N

STEIDLE BUILDING

BLDG NO. 0501-000

ISES CORPORATION

FACILITY CONDITION ANALYSIS

2185 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

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

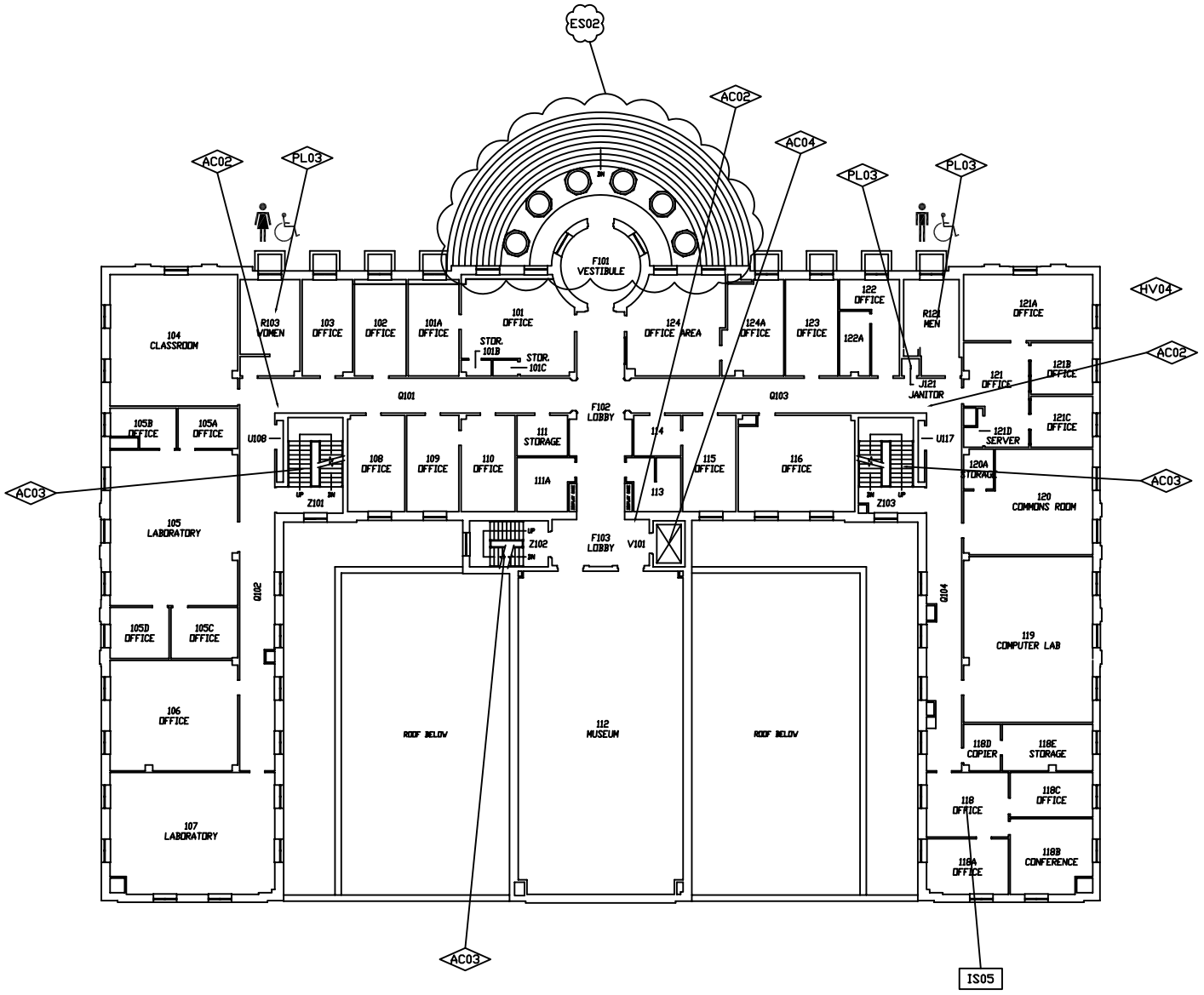
Date: 08/13/08
Drawn: J.T.V.
Project No. 08-007
Drawing: 0501000B

BASEMENT FLOOR PLAN

Sheet No.

1 of 4

PENNSYLVANIA STATE UNIVERSITY



ES03 FS01 IS03 IS06

EL02 EL03 EL04 FS04 FS05 FS06

FS07 HV01 HV02 IS01 IS02 IS04

IS07 PL01 PL02 PL04 PL05

0 10′ 20′ 40′

5′ 15′

N

STEIDLE BUILDING

BLDG NO. 0501-000

ISES CORPORATION

FACILITY CONDITION ANALYSIS

2185 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

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

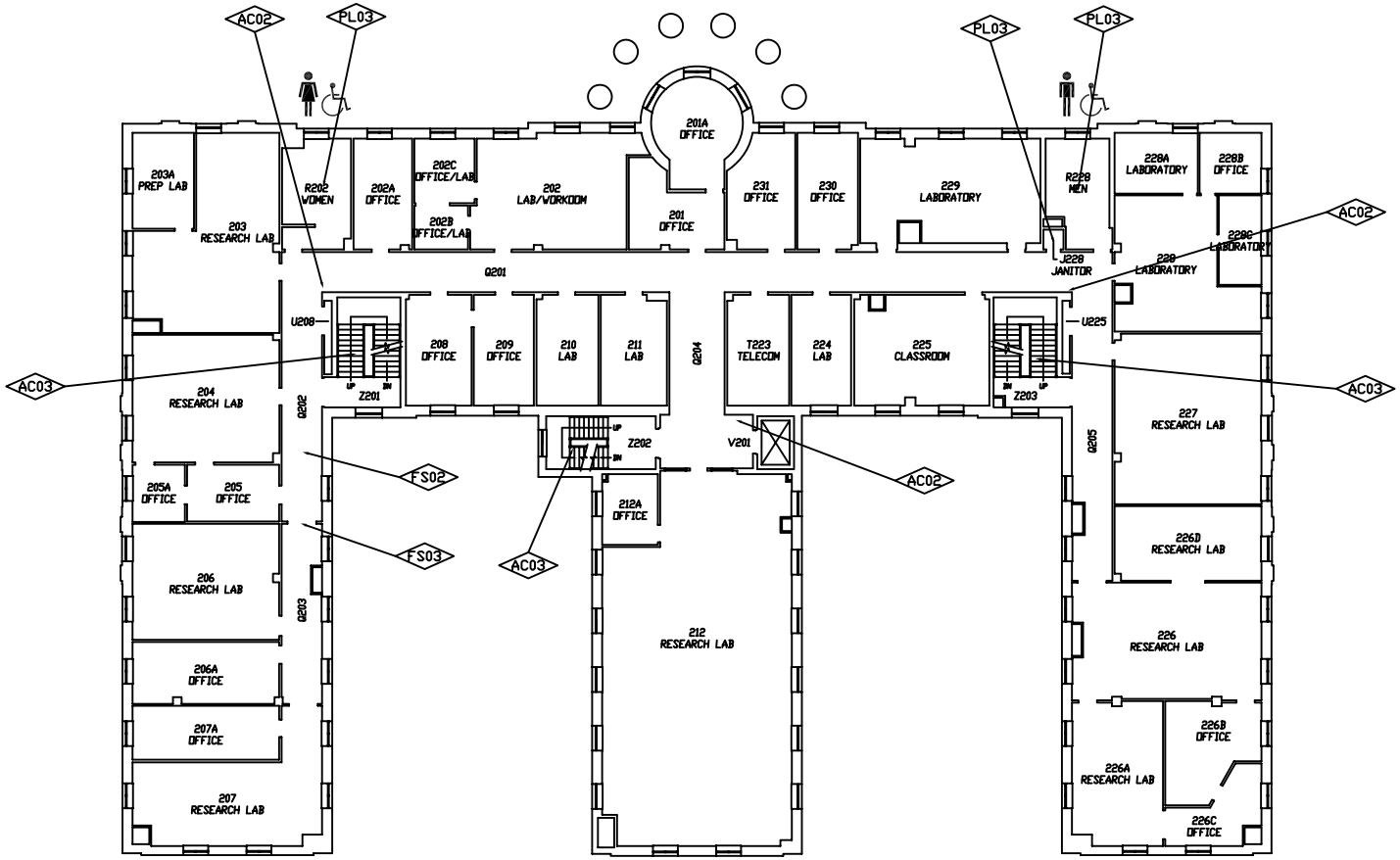
Date: 08/13/08
Drawn: J.T.V.
Project No. 08-007
Drawing: 05010001

FIRST FLOOR PLAN

Sheet No.

2 of 4

PENNSYLVANIA STATE UNIVERSITY



FS01 IS03 IS06

EL02 EL03 EL04 FS04 FS05 FS06

FS07 HV01 HV02 IS01 IS02 IS04

IS07 PL01 PL02 PL04 PL05

0 10′ 20′ 40′

5′ 15′

N

STEIDLE BUILDING

BLDG NO. 0501-000

ISES CORPORATION

FACILITY CONDITION ANALYSIS

2185 West Park Court Suite N
Stone Mountain, GA 30087
(770) 879-7276

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

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

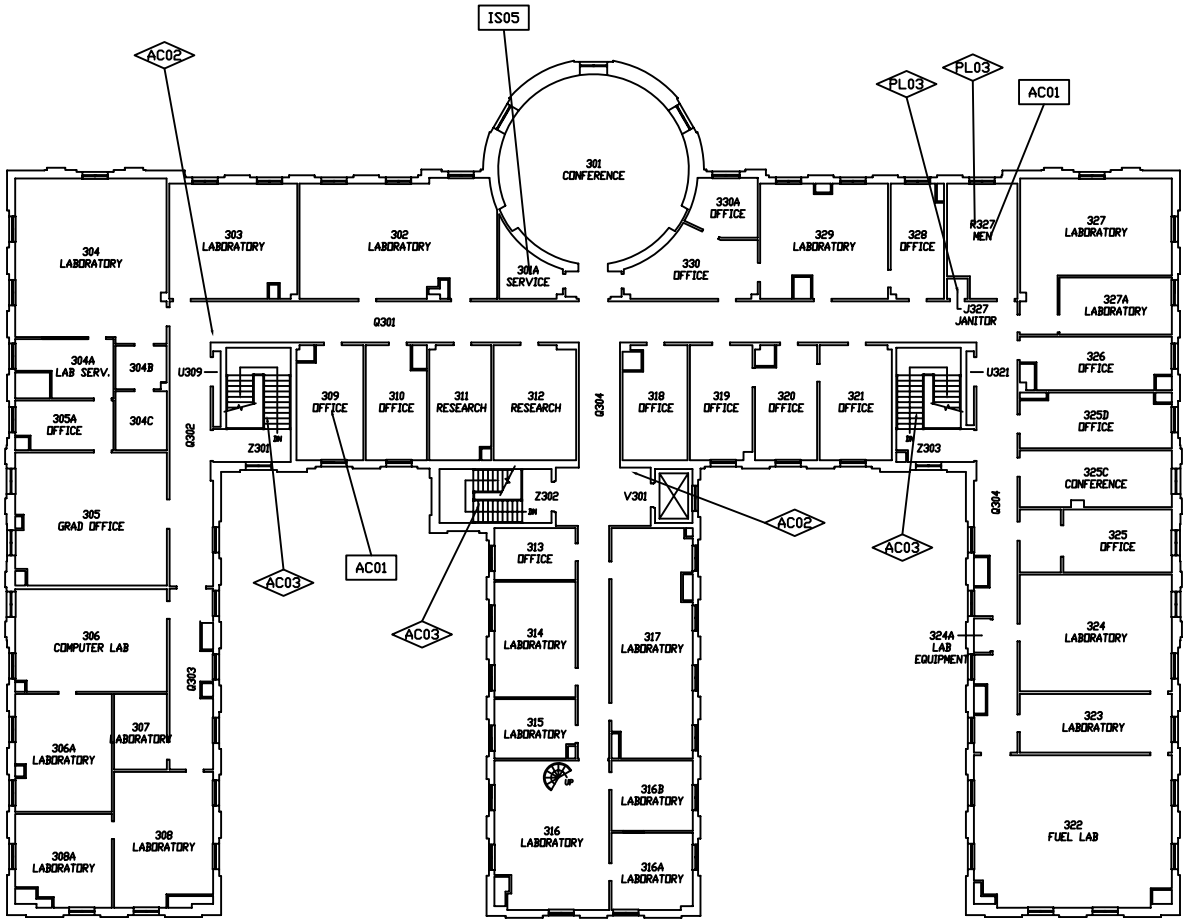
Date: 08/13/08
Drawn: J.T.V.
Project No. 08-007
Drawing: 05010002

SECOND FLOOR PLAN

Sheet No.
3 of 4

PENNSYLVANIA STATE UNIVERSITY

ROOF
ES04 HV03



FS01 IS03 IS06

EL02 EL03 EL04 FS04 FS05 FS06

FS07 HV01 HV02 IS01 IS02 IS04

IS07 PL01 PL02 PL04 PL05

0 10′ 20′ 40′
5′ 15′

N

STEIDLE BUILDING

BLDG NO. 0501-000

ISES CORPORATION

FACILITY CONDITION ANALYSIS

2105 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

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

Date: 08/13/08
Drawn: J.T.V.
Project No. 08-007
Drawing: 05010003

THIRD FLOOR PLAN

Sheet No.
4 of 4

FACILITY CONDITION ANALYSIS

SECTION 5

LIFE CYCLE MODEL SUMMARY AND PROJECTIONS

Life Cycle Model

Building Component Summary

0501-000 : STEIDLE BUILDING

Uniformat Code	Component Description	Qty	Units	Unit Cost	Cmplx Adj	Total Cost	Install Date	Life Exp
A2020	FOUNDATION WATERPROOFING (DEPTHS UP TO 10 INC EXCAVATION)	2,200	SF	$60.81		$133,782	1930	25
B2010	EXTERIOR PRESSURE WASHING AND RECAULKING	24,800	SF	$2.17		$53,816	1930	20
B2020	CUSTOM WOOD DOORS	14	EA	$17,531.39		$245,439	1938	50
B2020	WINDOW REPLACEMENT (OPERABLE)	4,100	SF	$94.09		$385,769	1995	70
B2030	HI - USE EXT. DOOR LOCKSET REPLACEMENT	22	EA	$504.08		$11,090	1930	5
B2030	EXTERIOR DOORS (METAL)	8	EA	$3,340.58		$26,725	1930	30
B3010	FLAT ROOFING SYSTEM (UNBALLASTED 1 - PLY)	19,100	SF	$9.15		$174,765	1995	20
B3020	VINYL FLOOR TILE UPGRADES (NO ACM)	53,500	SF	$8.26		$441,910	1930	20
C1020	HI - USE INT. DOOR LOCKSET REPLACEMENT	175	EA	$504.08		$88,214	1930	5
C1020	INTERIOR DOOR REPLACEMENTS (LESS HARDWARE)	175	EA	$1,759.10		$307,843	1930	30
C3010	INTERIOR PAINTING (DRYWALL PLASTER REPAIR INCLD)	111,800	SF	$1.48		$165,464	1930	6
C3010	PLASTER WALL REPLACEMENT	111,800	SF	$9.11		$1,018,498	1930	72
C3020	LO - USE CARPET REPLACEMENT	445	SY	$57.01		$25,369	1930	10
C3020	CERAMIC FLOOR TILE	1,500	SF	$17.02		$25,530	1930	50
C3030	PLASTER CEILING REPLACEMENT	15,300	SF	$8.15		$124,695	1930	72
D1010	ELEVATOR HATCH AND LANDING RENOVATION	4	EA	$13,571.41		$54,286	1988	12
D1010	UNDER 4000 LBS CAP. ELEVATOR MACHINE - HYDRAULIC	1	EA	$30,267.64		$30,268	1988	25
D1010	ELEVATOR JACK REPLACEMENT - HYDRAULIC	1	EA	$39,151.82		$39,152	1988	25
D1010	ELEVATOR CAB RENOVATION - PASSENGER	1	EA	$35,078.30		$35,078	1988	12
D2010	DUAL-LEVEL DRINKING FOUNTAIN	11	EA	$3,604.88		$39,654	1930	10
D2010	PLUMBING FIXTURE COMPONENTS	76,605	SF	$2.33		$178,490	1931	8
D2010	PLUMBING FIXTURES	76,605	SF	$9.98		$764,518	1931	32
D2020	WATER SUPPLY PIPING - SPECIALTY PIPING	76,605	SF	$8.11		$621,267	1931	25
D2030	DRAIN PIPING SYSTEMS	76,605	SF	$12.14		$929,985	1931	40
D2030	SUMP PUMP SYS (2 PUMPS CONTROLS)	2	SYS	$9,241.80		$18,484	1931	20
D2050	AIR COMPRESSOR PACKAGE (MEDIUM SIZE)	1	SYS	$6,457.44		$6,457	1931	25
D3030	PACKAGE CHILLER - AIR COOLED UP TO 80 TONS	10	TON	$2,534.12		$25,341	1931	20
D3030	ROOFTOP HVAC UNIT	27	TON	$2,795.24		$75,471	1931	15
D3040	EXHAUST SYSTEM DUCTWORK	10,000	CFM	$11.22		$112,200	1931	30
D3040	EXHAUST FAN - CENTRIFUGAL ROOF EXHAUSTER OR SIMILAR	13	EA	$3,233.49		$42,035	1931	20

Life Cycle Model

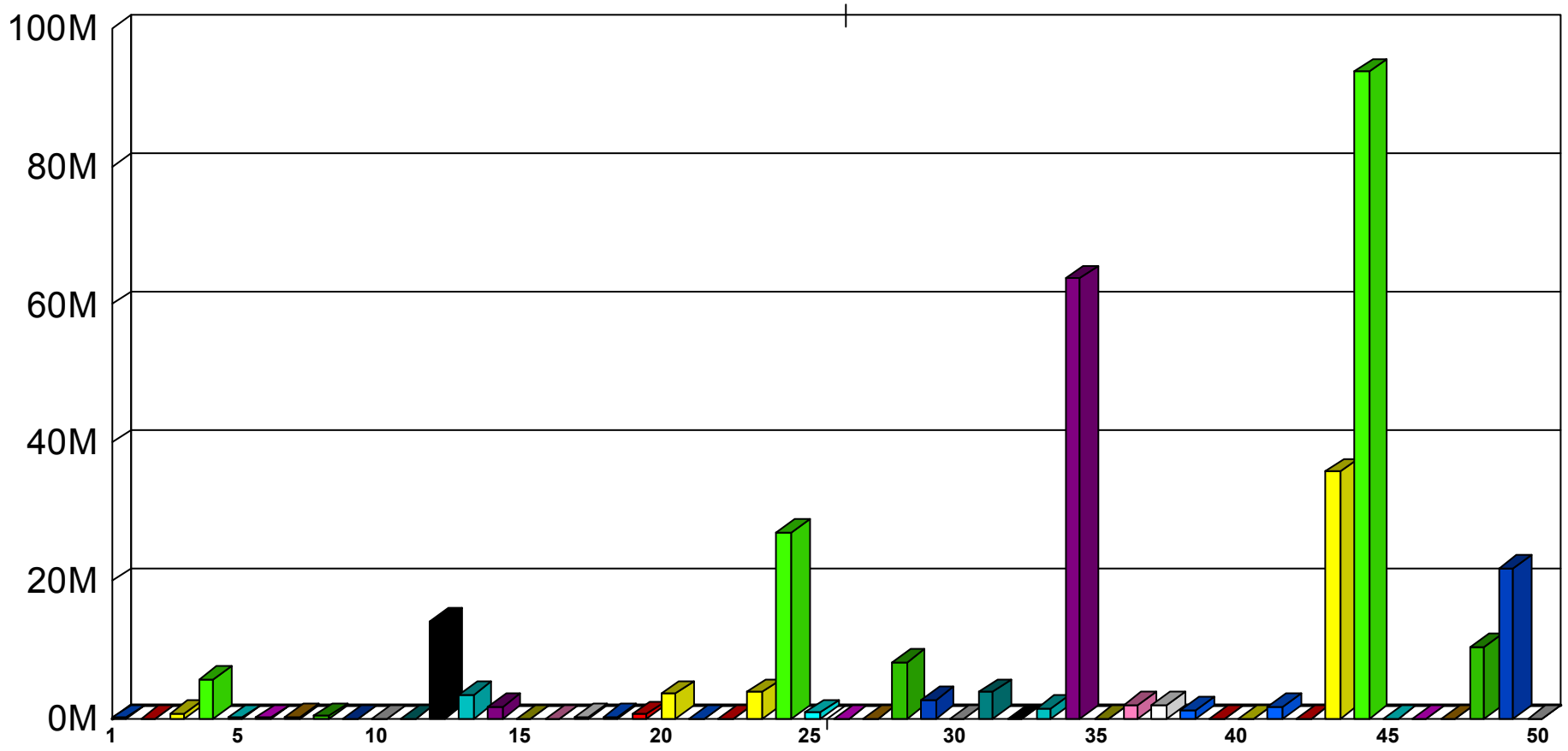
Building Component Summary

0501-000 : STEIDLE BUILDING

Uniformat Code	Component Description	Qty	Units	Unit Cost	Cmplx Adj	Total Cost	Install Date	Life Exp
D3040	FUME HOOD INCLUDING MECH. SYS	48	SYS	$42,940.16		$2,061,128	1931	20
D3040	HVAC SYSTEM	76,605	SF	$79.89		$6,119,973	1931	22
D3050	SPLIT DX SYSTEM	7	TON	$2,345.25		$16,417	1931	15
D3050	THRU-WALL AC UNIT	5	TON	$1,681.53		$8,408	1931	10
D5010	SECONDARY ELECTRICAL SYSTEM	76,605	SF	$19.05		$1,459,325	1931	50
D5010	ELECTRICAL SWITCHGEAR 2000A 208V	1	EA	$93,933.24	1.20	$112,720	1931	20
D5010	TRANSFORMER OIL 5-15KV 500 TO 1500 KVA	500	KVA	$47.61		$23,805	1931	30
D5020	EXIT SIGNS (CENTRAL POWER)	65	EA	$195.64		$12,717	1931	20
D5020	INTERIOR LIGHTING	76,605	SF	$9.04		$692,509	1931	20
D5020	SWITCHES AND RECEPTACLES	76,605	SF	$3.40		$260,457	1931	10
D5030	FIRE ALARM SYSTEM NON-ADDRESSABLE	76,605	SF	$2.65		$203,003	1931	15
E2010	LAB CASEWORK REPLACEMENTS	920	LF	$853.66		$785,367	1930	15
E2010	CABINETRY	20	LF	$165.99		$3,320	1930	20
F1050	ELEVATOR CONTROLLER - HYDRAULIC	1	EA	$24,181.43		$24,181	1988	20
						$17,984,924		

Life Cycle Model Expenditure Projections

0501-000 : STEIDLE BUILDING



Average Annual Renewal Cost per SqFt **$10.18**

FACILITY CONDITION ANALYSIS

SECTION 6

PHOTOGRAPHIC LOG

Photo ID No.	Description	Location	Date
0501-000001a	Fully-adhered membrane roof	Upper roof	04/10/2003
0501-000001e	Deteriorating air handler	Roof	04/10/2003
0501-000002a	Lower EPDM roof	Lower central roof	04/10/2003
0501-000002e	Fairly new exhaust fan	Roof	04/10/2003
0501-000003a	Copper domed roof	Roof, over round conference room 301	04/10/2003
0501-000003e	Older vintage utility fans	Roof	04/10/2003
0501-000004a	Spalling caulking and grout	Circular tower, exterior walls	04/10/2003
0501-000004e	Large fume hood exhaust fan	Roof	04/10/2003
0501-000005a	Exterior view	Central wing, rear west elevation	04/10/2003
0501-000005e	Deteriorating exhaust fan	Roof	04/10/2003
0501-000006a	Deteriorated roof drain area	Upper main roof	04/10/2003
0501-000006e	Laboratory sink and fume hood	Laboratory 308	04/10/2003
0501-000007a	Typical level of finish in upgraded laboratory	Third floor, laboratory 308	04/10/2003
0501-000007e	Fan coil unit application	Laboratory 308	04/10/2003
0501-000008a	Aging, wood corridor door	Third floor, corridor	04/10/2003
0501-000008e	Antiquated fan coil unit	Room 305	04/10/2003
0501-000009a	Dissimilar vinyl floor tile upgrades	Third floor, laboratory 306	04/10/2003
0501-000009e	Westinghouse breaker panel and aged exit sign	Third floor, corridor	04/10/2003
0501-000010a	Wire glass french door stair access doors	Third floor, corridor	04/10/2003
0501-000010e	Obsolete Trumbull breaker panel	Electrical closet across from room 304	04/10/2003
0501-000011a	Partially accessible handrails	Interior stair tower	04/10/2003
0501-000011e	Eyewash fountain	Third floor, corridor	04/10/2003
0501-000012a	Utility chase	Third floor, chase U309	04/10/2003
0501-000012e	Janitor service sink	Janitor closet 327	04/10/2003
0501-000013a	Wall-mounted water fountain	Third floor, corridor	04/10/2003
0501-000013e	Old lavatories	Third floor, men's restroom	04/10/2003
0501-000014a	Aging laboratory benches	Third floor, wet laboratory 303	04/10/2003
0501-000014e	Urinals	Third floor, men's restroom	04/10/2003
0501-000015a	Typical level of finish in office	Third floor, office 309	04/10/2003
0501-000015e	Inefficient water closet	Third floor, men's restroom	04/10/2003
0501-000016a	Peeling paint on domed ceiling	Third floor, conference room 301	04/10/2003
0501-000016e	Four-pipe fan coil unit	Laboratory 226A	04/10/2003

Photo ID No.	Description	Location	Date
0501-000017a	Typical level of finish in break room	Third floor, break area, off conference room 301	04/10/2003
0501-000017e	Fume hood and laboratory sink	Laboratory 226A	04/10/2003
0501-000018a	Lack of two-way communication in elevator	Passenger elevator cab	04/10/2003
0501-000018e	Older lighting, Pyrex drain piping, and roof drain	Laboratory 226A	04/10/2003
0501-000019a	Aging, non-accessible fixturing	Third floor, men's restroom R327	04/10/2003
0501-000019e	Void	Void	04/10/2003
0501-000020a	Typical level of finish in restroom	Third floor, men's restroom R327	04/10/2003
0501-000020e	Window air conditioner, outdated light fixture, and ductwork	Room 224	04/10/2003
0501-000021a	Surface spalling on cast concrete sill ledge	Eastern stair tower, south end	04/10/2003
0501-000021e	Fire hose cabinet	Second floor, stair	04/10/2003
0501-000022a	Fire rating compromise above door	Laboratory 327, corridor wall	04/10/2003
0501-000022e	Museum lighting scheme	Museum	04/10/2003
0501-000023a	Upgraded accessible restroom	Second floor, men's restroom R228	04/10/2003
0501-000023e	Lack of adequate number of receptacles	Museum	04/10/2003
0501-000024a	Upgraded finishes in restroom	Second floor, men's restroom R228	04/10/2003
0501-000024e	Older vintage drain and utility piping	Room 111A	04/10/2003
0501-000025a	Non-tempered glazing in corridor display cases	Second floor, corridor	04/10/2003
0501-000025e	Ungrounded receptacle	First floor, corridor	04/10/2003
0501-000026a	Original white porcelain water fountain	Second floor, corridor	04/10/2003
0501-000026e	Very old electrical panels	First floor, corridor	04/10/2003
0501-000027a	Dead end corridor situation	Second floor, corridor, at area 206	04/10/2003
0501-000027e	Fire alarm control panel	First floor, corridor	04/10/2003
0501-000028a	Makeshift cabinetry in kitchen area	Staff break area 118	04/10/2003
0501-000028e	Fire alarm components	First floor, corridor	04/10/2003
0501-000029a	Combustible storage at base of stair tower	Basement level, stair tower	04/10/2003
0501-000029e	Glass piping connected to cast-iron	Room 109	04/10/2003
0501-000030a	Typical finishes in corridor	Basement level, corridor	04/10/2003
0501-000030e	Incandescent lights	Office 103	04/10/2003
0501-000031a	Signs of water infiltration causing concrete spalling	Basement level, under the porch area	04/10/2003
0501-000031e	Open sump with submersible pump in occupied space	Laboratory 007	04/10/2003
0501-000032a	Typical finishes in narrow outdoor courtyard	Narrow courtyard area between rear wings	04/10/2003

Photo ID No.	Description	Location	Date
0501-000032e	Distilled water spigot and fire pull	Across from room 5C	04/10/2003
0501-000033a	Exterior view	South elevation	04/10/2003
0501-000033e	Distilled water piping	Pipe chase across from room 5C	04/10/2003
0501-000034a	Small asphalt parking area	South end of site	04/10/2003
0501-000034e	Water closet and galvanized water piping	Basement, men's restroom	04/10/2003
0501-000035a	Rear building entry	South entry on 1938 wing	04/10/2003
0501-000035e	Connection of PVC and cast-iron drain piping	Basement, men's restroom	04/10/2003
0501-000036a	Weathered exterior doors	South exterior detail on 1938 wing	04/10/2003
0501-000036e	Electrical duct bus and typical lighting	Basement, corridor	04/10/2003
0501-000037a	Exterior view	East elevation	04/10/2003
0501-000037e	1987 vintage switchgear	Room 1B	04/10/2003
0501-000038a	Exterior view	North elevation	04/10/2003
0501-000038e	Water damage at base of switchgear	Room 1B	04/10/2003
0501-000039e	Exterior light	Outside room 8	04/10/2003
0501-000040a	Non-accessible exterior handrails	North entry steps	04/10/2003
0501-000040e	Aged air-cooled chiller	East elevation, mechanical enclosure	04/10/2003
0501-000041a	Spalling nosing on concrete entry steps	North entry steps	04/10/2003
0501-000041e	Decorative exterior light	Main entrance	04/10/2003
0501-000042a	Settlement cracks in concrete sidewalk	Northern sidewalks	04/10/2003
0501-000042e	Main transformer	West side	02/12/2008
0501-000043a	Roof condition	Portico roof	02/12/2008
0501-000043e	Typical nostalgic coach light	West side	02/12/2008
0501-000044a	Roof condition and exterior finishes	Roof	02/12/2008
0501-000044e	Dimly lit, older design exit sign	First floor, west entry foyer	02/12/2008
0501-000045a	Corridor finishes	Third floor, center leg	02/12/2008
0501-000045e	Incandescent lamps in entry chandelier	First floor, west entrance foyer area	02/12/2008
0501-000046a	Corridor finishes and power bus	Third floor	02/12/2008
0501-000046e	Fire alarm controller	First floor, west entrance	02/12/2008
0501-000047a	Corridor finishes and bus duct	Third floor	02/12/2008
0501-000047e	Power bus visibly routed in the corridor	Basement, corridor	02/12/2008
0501-000048a	Corridor finishes	Second floor	02/12/2008
0501-000048e	Supply fan #3	Roof	02/12/2008
0501-000049a	Laboratory finishes	Room 212	02/12/2008

Photo ID No.	Description	Location	Date
0501-000049e	Rooftop exhaust fan	Roof	02/12/2008
0501-000050a	Main entrance finishes	First floor	02/12/2008
0501-000050e	Vertical DX condenser	Roof	02/12/2008
0501-000051a	Corridor finishes	First floor	02/12/2008
0501-000051e	Strobic stack fan with heat recovery	Roof	02/12/2008
0501-000052a	Edward Steidle plaque	First floor	02/12/2008
0501-000052e	Mushroom exhauster	Roof	02/12/2008
0501-000053a	Museum area finishes	First floor	02/12/2008
0501-000053e	DX rooftop package unit	Roof	02/12/2008
0501-000054a	Corridor finishes	Basement level	02/12/2008
0501-000054e	Supply Fan #2	Roof	02/12/2008
0501-000055a	Moisture intrusion and spalled concrete	Below main entrance steps	02/12/2008
0501-000055e	Mushroom exhaust fan	Roof	02/12/2008
0501-000056a	Restroom finishes and shower	Basement, men's restroom	02/12/2008
0501-000056e	Overhead view of HVAC equipment	Lower roof area, east side	02/12/2008
0501-000057a	Corridor finishes	Basement level	02/12/2008
0501-000057e	DX condenser	Roof	02/12/2008
0501-000058a	Exterior finishes	Southeast corner	02/12/2008
0501-000058e	SF1 air handler	Roof	02/12/2008
0501-000059a	Exterior finishes	South facade	02/12/2008
0501-000059e	Dry cooler	Roof	02/12/2008
0501-000060a	Exterior finishes	Southwest corner of the building	02/12/2008
0501-000060e	Suspended terminal HVAC unit	Room 316	02/12/2008
0501-000061a	Exterior finishes	Northwest corner of the building	02/12/2008
0501-000061e	Old lighting fixtures	Room 316	02/12/2008
0501-000062a	Exterior finishes	North facade	02/12/2008
0501-000062e	Fume hood	Room 314	02/12/2008
0501-000063a	Exterior finishes	Northeast corner of the building	02/12/2008
0501-000063e	Smoke detector	Third floor, corridor	02/12/2008
0501-000064a	Entrance to exterior passage	North facade	02/12/2008
0501-000064e	Eyewash basin	Third floor, west wing, east section	02/12/2008
0501-000065a	North entrance with name plaque	North facade	02/12/2008
0501-000065e	Old Trumbell breaker panel	Third floor, corridor	02/12/2008

Photo ID No.	Description	Location	Date
0501-000066e	Old janitor sink	Third floor, janitor closet	02/12/2008
0501-000067e	Upgraded breaker panel	Third floor, north wing	02/12/2008
0501-000068e	Leaky drain piping has trough installed to catch drips	Room 226B	02/12/2008
0501-000069e	Updated lighting in renovated restroom	Second floor, restroom	02/12/2008
0501-000070e	Pyrex lab drain piping	Second floor, research lab	02/12/2008
0501-000071e	DX evaporator fan	Second floor, closet	02/12/2008
0501-000072e	Non-compliant horn strobe	Second floor, central wing	02/12/2008
0501-000073e	Galvanized steel domestic water supply piping	Second floor, south wing pipe chase	02/12/2008
0501-000074e	Old fume hood	Room 023	02/12/2008
0501-000075e	Corroded switchgear	Western stairs, vault area	02/12/2008
0501-000076e	Transfer switch	Western stairs, vault area	02/12/2008
0501-000077e	Overhead air handler	Room 015	02/12/2008
0501-000078e	New suspended terminal air handler	Room 009	02/12/2008
0501-000079e	Gas regulator	East facade	02/12/2008
0501-000080e	Outdoor fire bell has no visual indicator	East facade	02/12/2008
0501-000081e	Old deteriorated drains	Basement, men's restroom	02/12/2008

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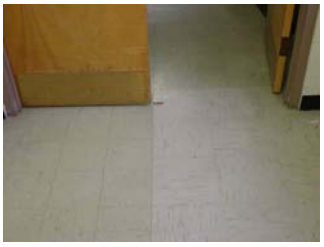

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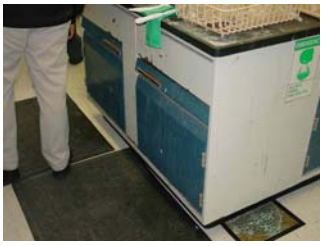

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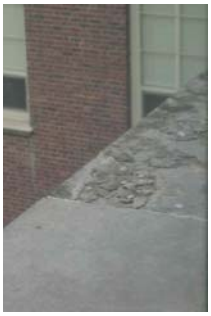

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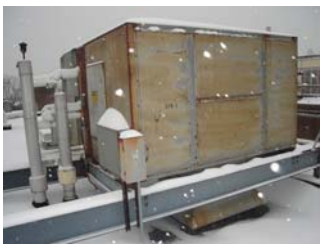

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PENNSTATE

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The Pennsylvania State University
Physical Plant Building
University Park, PA 16802-1118

REQUIREMENTS FOR COLOR PHOTOGRAPHS OF BUILT PROJECTS

Examples of the Architect's / Engineers's built projects are required for presentation to the Board of Trustees as part of the approval process. Images will be used for a Powerpoint presentation and will be presented via widescreen LED monitors.

Approximately (6) high quality exterior and (12) high quality interior photos should be submitted along with a very brief description of each photo. Photos must be of BUILT projects and should be relevant to the proposed project. Hand drawn renderings, computer drawn renderings and models, and photos of study models will NOT be accepted. It is highly recommended that interior shots include people using the space. Please send digital photographs that meet the following minimum standards.

Minimum photo dimensions:
6.5 x 10 inches (975 x 1500 pixels)
Minimum resolution: 150 pixels/inch

(Photos will be inserted into Powerpoint with a 16:9 aspect ratio at a maximum resolution of 220pixels/inch)

Preferred photo formats: .tif, .jpg, .gif for use in a PC environment

File transfer methods:
-email is preferred with a maximum attachment file size of about 5mb/email.
-Files may be zipped (compressed) using WinZip and/or emailed individually.
-photos on CD-rom are acceptable.

Photos should NOT contain any text. A descriptive reference document should be included that provides a project name and location for each photo. Please send to:

Madeline Cantú, RLA
Design Resources Coordinator
Campus Planning & Design
203 Physical Plant Building
University Park, PA 16802
mac56@psu.edu
(814) 863-4242

Please don't hesitate to call or email with any questions or concerns.

Board of Trustees Architect / Engineering Interview Room Layout