# FACILITY AUDIT REPORT
# CENTRAL SERVICE, Bldg 077
# APRIL 1996

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## EXECUTIVE SUMMARY AND PROJECT LIST FOR CENTRAL SERVICE BUILDING

The Central Service Building was constructed in 1949. It was never officially named by the Board of Trustees and has been known in the past as the Service Building. The building was constructed as a link between the new Stores and Receiving Building (also built in 1949) and the McCracken Power Plant. Over the years, the north part of the building was vacated by the Stores operation and occupied by the Physical Facilities Department. In 1988, the Stores and Receiving Departments moved to a new location and their building was renovated to become the new Central Classroom Building. However, the north part of the Central Service Building still receives its electrical power from the Central Classroom Building and one of the air conditioning units is located on the roof of the Central Classroom Building. The building has various heating systems which include hot water radiators, convector units, fan coil units and unit heaters as well as heated air from the air handlers. Cooling is provided by a variety of window units, through the wall units and five other DX units. Once the new chillers are installed in the McCracken Power Plant, the air conditioning system should be changed to a more efficient system that will take advantage of the new supply of chilled water and remove the various systems now in place. The windows are original and allow a great deal of air infiltration and causes moisture damage to the plaster at the windows. The windows should be replaced with more efficient units.

### PROPOSED MAINTENANCE PROJECTS:

| | | |
|---|---|---|
| **A. Corrective Maintenance Projects:** | | **Control #** |
| Re-carpet McCracken wing. | $ 10,000 | 3064 |
| Clean, seal and caulk brick. | | |
| Paint exposed blocks. | $ 42,000 | 0415 |
| **B. Building Improvement/Addition Projects:** | | |
| Upgrade power panels | $ 40,000 | 1477 |
| Install emergency exit lights. | $ 12,000 | 3065 |
| Renovate cooling and heating system. | $ 110,000 | 3066 |
| Replace windows. | $ 100,000 | 3067 |
| **C. Projected Component Replacement Projects:** | | |
| **Total cost for estimated projects =** | **$ 314,000** | |

APRIL 96

## GENERAL BUILDING INFORMATION

**CENTRAL SERVICE BUILDING 077**

BUILDING ADDRESS: 2003 MILLIKIN ROAD

GROSS SQ. FT.: 14,799

NET ASSIGNABLE SQ. FT.: 9,935

MECHANICAL/CUSTODIAL AREA SQ. FT.: 2,149

YEAR OF CONSTRUCTION: 1949

YEAR OF LAST RENOVATION: 1992

NUMBER OF STORIES/BASEMENT: GROUND FLOOR PLUS TWO STORIES

AIR CONDITIONING (Percentage): 70 %

CURRENT USE: OCCUPIED BY ADMINISTRATIVE UNITS OF PHYSICAL FACILITIES

TYPE OF CONSTRUCTION: CONCRETE FRAME WITH MASONRY EXTERIOR

ESTIMATED REPLACEMENT COST: $1,541,800 *

WHEELCHAIR ACCESSIBILITY: AT GRADE AT SOUTHWEST ENTRANCE. ACCESS TO FIRST FLOOR IS BY THE POWER PLANT ELEVATOR AND ACCESS TO THE SECOND FLOOR IS BY THE CENTRAL CLASSROOM BUILDING ELEVATOR.

OVERALL BUILDING CONDITION: SATISFACTORY **

NUMBER OF EXIT STAIRWAYS: 2

AREA SHOP RESPONSIBILITY: NORTH SHOP

* Replacement Cost assigned September 1994 by The Office of University Resource Planning and Institutional Analysis.

** Office of University Resource Planning and Institutional Analysis C-1 Report Condition Code.

## BUILDING SYSTEMS INFORMATION

CENTRAL SERVICE BUILDING 077

**HEATING:**
Source POWER PLANT
Type Heating System HOT WATER
Steam (Line size, valve location) N/A
Building Htg Water (line size, valve location) 2" FROM POWER PLANT

**VENTILATION SYSTEM:** CONSTANT VOL UNITS, WINDOW UNITS AND THROUGH THE WALL UNITS

**COOLING:**
Bldg % 70 Chillers N/A
Window Units 15 Thru-the-wall 4 Direct exp. units 5

**HVAC CONTROL SYSTEM:** LOCAL CONTROL - PNEUMATIC/ELECTRIC

**ELECTRIC:** Source Size(KVA) Primary/Secondary Switchgear & Main Disc. (Rm)
1. FROM POWER PLANT AND CENTRAL CLASSROOM BUILDING 13,200/ 480/277

**PLUMBING:**
Water (size, valve location) 1 1/2" FROM POWER PLANT
Gas (size, valve location) NONE
Domestic Hot Water (size, valve location) 2" FROM POWER PLANT
Compressed Air (size, location) 1/2" FROM POWER PLANT

**SEWERS:** Storm 4" & 6" Sanitary 4"

**METERS:**
Gas (size, location) N/A
Water (size, location) N/A
Electric (size, location) N/A

**ALARM SYSTEMS:**
Fire Alarm YES Panel Location RM 048 CENTRAL CLASSROOM
Fire Pump NO Pump Location N/A
Sprinklers NO Panel Location N/A
Other Alarms NONE

**ELEVATORS:**
Number NONE Type (passenger, freight)
Manufacturer N/A Size N/A

**EMERGENCY GENERATOR:** Size NONE Location N/A

**ASBESTOS SURVEY (1986):**
NO REPORT, BUT SOME WAS NOTED IN THE HEATING HOT WATER PIPE INSULATION AND IN THE FLOOR TILE.

# CENTRAL SERVICE BUILDING NARRATIVE

## HISTORY

The Central Service Building was built at the same time that the Stores and Receiving Building was constructed. It was built as a connector, linking the new building to the McCracken Power Plant. At first, the north part of the connector was occupied by the Stores personnel, but when they vacated to the Stores and Receiving Building, the Physical Facilities department took over the entire building. During the last few decades the interior space has been modified on several occasions, but the basic structure has never been modified. Building use by room category is 78% office and 22% mechanical/toilet/custodial.

## PRIMARY SYSTEMS

The building is constructed with continuous concrete footings at the exterior and individual footings under concrete columns. The floors of the building are cast-in-place concrete. The walls are concrete block with brick veneer and small areas of glass blocks. The roof is pitched with a copper cover and has a wood deck. There is a parapet wall on the east side of the roof. There did not appear to be any structural problems with the building and the roof is in good condition except for a few minor leaks at some roof vents. The gutter on the west side and the roof drains on the east side of the building need to be cleaned to allow proper drainage. Also, the gutter end cap at the Central Classroom Building should be sealed.

The building has 25 large steel awning windows, fourteen smaller steel windows and three small wood windows. All but the wood windows are original, have single panes and allow air infiltration to the extent that some offices are very cold on windy, winter days. It is recommended that the windows and frames be replaced. The exterior doors are steel and need to be repainted. The southwest door and frame are rusted and should be replaced.

## SECONDARY SYSTEMS

There are a variety of interior partitions in this building. Some consist of metal studs with drywall, some consist of concrete blocks, some consist of metal panels and some consist of masonry. All the surfaces are painted except the first floor area, which has wood paneling at the north end and wall covering in the south office area. The painted surfaces generally are in good condition. The base boards on the first floor, the risers of the steps leading to the second floor and the hand rails of the south stairs leading to the second floor need to be repainted. Some of the wall coverings in the west window openings on the second floor have sustained condensation damage and should be repaired.

Floor finishes consist of vinyl tile in west entrance areas, the ground floor offices, the stair landing areas at the north entrance and the corridor on the second floor. The rest of the floors are carpeted. There is a variety of carpeting throughout the building of various ages and condition and in general, the floors are in good condition. The carpeting in the office areas of the McCracken power plant adjacent to the service building needs to be replaced. The tiles on room 103 should be cleaned and sealed.

Most of the ceilings throughout the building consist of suspended ceiling tiles. There are some stained tiles on the ground floor entrance, outside room 148 and in rooms 148, 276, 030, 143, 111, 119a, 251 and 108 that should be replaced.

SERVICE SYSTEMS

There is no elevator in this 3-story building. Access to the first floor is by way of the McCracken Power Plant elevator and access to the second floor is by way of the Central Classroom elevators.

There is air conditioning in approximately 70% of the building. There are fifteen window units, four through-the-wall units, one heat pump and five separate DX units that service the building. The office areas in McCracken power plant that are considered part of the Central Service Building are cooled by one window unit per office and three additional DX units. This collection of various units should be replaced once the new chillers are installed in the power plant. For now, various offices enjoy and/or endure varying degrees of comfort. Total cooling capacity is approximately 50 tons.

Heat is provided by hot water from the Power Plant to radiators, convectors, fan coil units, unit heaters and heating coils in the air handlers. Again the variety of heating sources leads to varying degrees of comfort.

There is a problem with the domestic hot water supply from the power plant. There is no return line to the power plant and therefore one must run the hot water faucets continuously or do without hot water in the restrooms. The faucets in the second floor men's room and room 148T should be replaced.

ELECTRICITY

Electrical power is provided by the power plant on the south part of the building and by the Central Classroom transformer for the north part of the building. Power supply is adequate for current demand.

Forty watt fluorescent lights are the predominant light fixtures throughout the building. There is spare capacity at the breaker panels and there are sufficient convenience outlets in the building.

SAFETY STANDARDS

The building is equipped with lighted exit signs at only the southwest exit on the ground floor and lighted signs should be installed at the other exits. There are portable fire extinguishers throughout the building as well as one hose cabinet on the ground floor. There are manual pull alarms but no smoke detectors or sprinklers in the building.

ASBESTOS

There is no asbestos report on this building but asbestos was noted on the hot water pipes and in the floor tiles.

BUILDING PERIMETER

There is a driveway located on the west side of the building that has pot holes and cracks that need to be filled. The sidewalk on the northwest side of the building has some cracked concrete that needs to be repaired. The sidewalk on the northeast side has cracks that should be repaired. The steps at the northeast entrance need to be resealed and the holes in the concrete below this door should be filled. During heavy rains, there has been some flooding at the southwest entrance. The storm drain needs to be cleaned periodically. The security lights on the building exterior are in

good working order. The building entrances are well lit and unobscured. There are signs on Millikin Road that identify the building and the street address.

**MAINTENANCE PROJECTS (LESS THAN $5000)**

1. Repair concrete walks and steps on east and west sides of the building, as well as the concrete pillar at the west entrance.
   Work order # 01-5063-019519-51

2. Repair potholes and cracks in west side drive.
   Work order # 01-5063-019522-51

3. Clear drain at west entrance to manhole in street.
   Work order # 01-5063-019524-51

4. Repaint exterior metal doors and frames.
   Work order # 01-5064-221818-60

5. Replace stained ceiling tiles as needed.
   Work order # 01-5064-221819-65

6. Replace faucets in men's restroom.
   Work order # 01-5064-221820-65

7. Repair wall coverings at windows on the second floor.
   Work order # 01-5064-221821-65

8. Clean diffusers throughout.
   Work order # 01-5064-221822-65

9. Repaint baseboards on first floor and the risers and handrails on the south stairs.
   Work order # 01-5064-221824-65

10. Repair roof leaks at vents.
    Work order # 01-5064-221829-73

11. Clean gutters and roof drains and reseal coping and seal end cap.
    Work order # 01-5064-221831-73

12. Replace southwest door and frame.
    Work order # 01-5064-221834-71

13. Install ice guard on west roof.
    Work order # 01-5064-221835-73

April 1996

## BUILDING EVALUATION SUMMARY

**I. BUILDING INFORMATION**

FAC #077 FACILITY NAME: CENTRAL SERVICE BUILDING
DATE: 4/96 INSPECTOR: A. J. R. VAN BUREN
YEAR CONSTRUCTED: 1949
GROSS SQ FT: 14,799 NET SQ FT: 9,935
REPLACEMENT COST $ 1,541,000 *

**II. COMPONENT RATING**

| COMPONENT | BUILDING COMPONENT PERCENTAGE OF TOTAL COST ** | BUILDING COMPONENT REPLACEMENT COST | CONDITION VALUE MULTIPLIER FOR BLDG. COMPONENT | BUILDING COMPONENT CURRENT VALUE |
|---|---|---|---|---|
| Foundation | 5.6 | 86,296 | .85 | 73,352 |
| Columns and Beams | 13.7 | 211,117 | .85 | 179,449 |
| Exterior Walls | 9.5 | 146,395 | .72 | 105,404 |
| Windows & Doors | 4.6 | 70,886 | .54 | 38,278 |
| Roofing | 3.1 | 47,771 | .67 | 32,007 |
| Partitions & Drs. | 8.9 | 137,149 | .83 | 113,834 |
| Wall Finishes | 3.0 | 46,230 | .71 | 32,823 |
| Floor Finishes | 7.9 | 121,739 | .63 | 76,696 |
| Ceilings & Finish | 8.2 | 126,362 | .77 | 97,299 |
| Conveying | 0.0 | 0 | .00 | 0 |
| Plumbing | 3.1 | 47,771 | .77 | 36,784 |
| Heating | 10.1 | 155,641 | .73 | 113,618 |
| Cooling & Vent. | 7.8 | 120,198 | .64 | 76,927 |
| Elec. Ser. & Dist | 1.5 | 23,115 | .80 | 18,492 |
| Lighting & Power | 12.3 | 189,543 | .77 | 145,948 |
| Safety Standards | 0.7 | 10,787 | .63 | 6,796 |
| TOTALS | 100.00 | 1,541,000 | | 1,147,707 |

**III. BUILDING RATING SUMMARY**

**Overall Buildings Rating = 74%**

* Replacement Cost assigned September 1994 by The Office of University Resource Planning and Institutional Analysis without the furnishings and fixed equipment allocation.

** Percent allocation of each building component is calculated from The Means Standard Construction Cost data for College Classroom Buildings.

## FOUNDATIONS

FAC #077 DATE 4/96 INSPECTOR: AJR

**A. SYSTEM DESCRIPTION**

| **a. Footings:** | N/A | Sat | Att |
|---|---|---|---|
| Individual Footings & Piers | [ ] | [X] | [ ] |
| Continuous Footings UNDER EXTERIOR WALLS | [ ] | [X] | [ ] |
| Grade Beams | [X] | [ ] | [ ] |
| Piles | [X] | [ ] | [ ] |
| Caissons | [X] | [ ] | [ ] |
| **b. Foundation Wall Materials:** | | | |
| Steel | [X] | [ ] | [ ] |
| Concrete Cast-in-place | [ ] | [X] | [ ] |
| Concrete Block | [X] | [ ] | [ ] |
| Other | [X] | [ ] | [ ] |
| **c. Waterproofing and Underdrain:** | | | |
| Coating | [X] | [ ] | [ ] |
| Membrane | [X] | [ ] | [ ] |
| Board | [X] | [ ] | [ ] |
| Drain Tile | [X] | [ ] | [ ] |
| **d. Slab on Grade (floor):** | | | |
| Plain | [X] | [ ] | [ ] |
| Reinforced | [ ] | [X] | [ ] |
| **e. Special Substructures:** | | | |
| | [X] | [ ] | [ ] |

**B. COMMENTS**:

NO PROBLEMS WERE OBSERVED OTHER THAN AT THE EXTERIOR COLUMNS ON THE WEST SIDE THAT NEED TO BE PATCHED.

**C. COMPONENT RATING: ($ 86,300 ) ( 85 %) = $ 73,400**

| Possible Value | Condition Value | Multiplier | Component Value |
|---|---|---|---|

## COLUMNS AND BEAMS

FAC #077 DATE 4/96 INSPECTOR: AJR

**A. SYSTEM DESCRIPTION**

| **a. Columns and Beams:** | N/A | Sat | Att |
|---|---|---|---|
| Concrete-in-place | [ ] | [ ] | [X] |
| Precast Concrete | [X] | [ ] | [ ] |
| Steel COLUMNS AND ROOF SUPPORT | [ ] | [X] | [ ] |
| Steel Fireproofing | [X] | [ ] | [ ] |
| Wood | [X] | [ ] | [ ] |
| Other | [X] | [ ] | [ ] |
| **b. Floors:** | | | |
| Concrete Slab THROUGHOUT | [ ] | [X] | [ ] |
| Precast Slab | [X] | [ ] | [ ] |
| Metal Deck | [X] | [ ] | [ ] |
| Metal Deck w/concrete fill | [X] | [ ] | [ ] |
| Wood | [X] | [ ] | [ ] |
| Other | [X] | [ ] | [ ] |
| **c. Roof System:** | | | |
| Flat | [X] | [ ] | [ ] |
| Pitched | [ ] | [X] | [ ] |
| Concrete | [X] | [ ] | [ ] |
| Steel TRUSSES | [ ] | [X] | [ ] |
| Wood DECK | [ ] | [X] | [ ] |
| Other | [X] | [ ] | [ ] |

**B. COMMENTS:**

THERE WERE NO PROBLEMS DETECTED WITH THE COLUMNS OR BEAMS OTHER THAN NOTED ON PREVIOUS PAGE.

**C. COMPONENT RATING: ($ 211,100) ( 85 %) = $ 179,400**

| Possible Value | Condition Value | Multiplier | Component Value |
|---|---|---|---|

## EXTERIOR WALLS

FAC #077 DATE 4/96 INSPECTOR: AJR

| **a. Walls:** | N/A | Sat | Att |
|---|---|---|---|
| Concrete BLOCKS | [ ] | [ ] | [X] |
| Masonry BRICK VENEER | [ ] | [X] | [ ] |
| Metal Siding | [X] | [ ] | [ ] |
| Wood Siding | [X] | [ ] | [ ] |
| Other | [X] | [ ] | [ ] |

| **b. Finishes:** | | | |
|---|---|---|---|
| Stucco | [X] | [ ] | [ ] |
| Paint | [X] | [ ] | [ ] |
| Other | [X] | [ ] | [ ] |

**B. COMMENTS**:
THE WALLS WERE IN GOOD CONDITION BUT THE CONCRETE BLOCKS ON THE WEST AND EAST SIDE SHOULD BE PAINTED

**C. COMPONENT RATING: ($146,400) ( 72 %) = $105,400**

| Possible Value | Condition Value | Multiplier | Component Value |
|---|---|---|---|

## EXTERIOR WINDOWS & DOORS

FAC #077 DATE 4/96 INSPECTOR: AJR

| **a. Windows type & number:** | N/A | Sat | Att |
|---|---|---|---|
| Wood 3 WOOD IN UTILITIES OFFICES | [ ] | [X] | [ ] |
| Steel | [X] | [ ] | [ ] |
| Alum AWNING TYPE | [ ] | [ ] | [X] |
| Other | [X] | [ ] | [ ] |
| **b. Window glazing:** | | | |
| Single pane 14 FIXED , 25 AWNING | [ ] | [ ] | [X] |
| Double pane 3 WOOD | [ ] | [X] | [ ] |
| Other | [X] | [ ] | [ ] |
| **c. Doors type & number:** | | | |
| Wood | [X] | [ ] | [ ] |
| Steel 3 SINGLE | [ ] | [ ] | [X] |
| Alum | [X] | [ ] | [ ] |
| Other | [X] | [ ] | [ ] |
| **d. Shading Devices:** | | | |
| Types VENETIAN BLINDS | [ ] | [X] | [ ] |

**B. COMMENTS:**

THE WINDOWS ARE SINGLE PANE, ALUMINUM ORIGINAL WINDOWS. THE WINDOWS ARE DRAFTY AND SHOULD BE REPLACED. THE DOORS SHOULD BE REPAINTED. THE SOUTHWEST DOOR AND FRAME SHOULD BE REPLACED.

**C. COMPONENT RATING: ($ 70,900 ) ( 54 %) = $ 38,300**

| Possible Value | Condition Value | Multiplier | Component Value |
|---|---|---|---|

## ROOFING

FAC #077 DATE 2/96 INSPECTOR: AJR

**A. SYSTEM DESCRIPTION**

| **a. Roof Covering:** | N/A | Sat | Att |
|---|---|---|---|
| Built-up | [X] | [ ] | [ ] |
| Built-up w/gravel | [X] | [ ] | [ ] |
| Asphalt Shingle | [X] | [ ] | [ ] |
| Copper 4,391 SQ.FT. | [ ] | [X] | [ ] |
| Glass (Skylight) | [X] | [ ] | [ ] |
| Slate | [X] | [ ] | [ ] |
| Spanish Tile | [X] | [ ] | [ ] |
| Metal | [X] | [ ] | [ ] |
| Other | [X] | [ ] | [ ] |
| **c. Flashing:** | | | |
| Base & Counter | [ ] | [X] | [ ] |
| Cap | [X] | [ ] | [ ] |
| Through Wall | [X] | [ ] | [ ] |
| Valley & Ridge COPPER | [ ] | [X] | [ ] |
| **d. Gravel Stop & Edge Strips:** | | | |
| Type | [X] | [ ] | [ ] |
| **e. Drainage:** | | | |
| Gutters w/ Exterior Downspouts COPPER - WEST SIDE | [ ] | [ ] | [X] |
| Scuppers only ON THE EAST SIDE | [ ] | [X] | [ ] |
| Drains w/ Interior Storm Drains ON THE EAST SIDE | [ ] | [ ] | [X] |
| **f. Parapets:** | | | |
| Concrete | [X] | [ ] | [ ] |
| Brick ON THE EAST SIDE | [ ] | [X] | [ ] |
| Block | [X] | [ ] | [ ] |
| Precast | [X] | [ ] | [ ] |
| Other LIMESTONE COPING | [ ] | [ ] | [X] |
| **g. Insulation:** | | | |
| Type 3" FOAM GLASS | [ ] | [X] | [ ] |

**B. COMMENTS**

THE ROOF IS ORIGINAL AND IS 47 YEARS OLD HOWEVER IT IS IN GOOD CONDITION. THE GUTTER ON THE WEST SIDE NEEDS TO BE CLEANED AND THE NORTH END CAP NEEDS TO BE SEALED. THE ROOF DRAINS ON THE EAST SIDE NEED TO BE CLEANED. THERE WERE SOME LEAKS OBSERVED AT THE VENTS IN THE ROOF. THE COPING NEEDS TO BE RESEALED.

**C. COMPONENT RATING: ($ 47,800 ) ( 67 %) = $ 32,000**

| Possible Value | Condition Value | Multiplier | Component Value |
|---|---|---|---|

## PARTITIONS & DOORS

FAC #077 DATE 4/96 INSPECTOR: AJR

**A. SYSTEM DESCRIPTION**

| **a. Partition Framing:** | N/A | Sat | Att |
|---|---|---|---|
| Concrete Block LIMITED | [ ] | [X] | [ ] |
| Glazed Block | [X] | [ ] | [ ] |
| Wood Stud | [X] | [ ] | [ ] |
| Metal Stud IN OFFICE AREAS | [ ] | [X] | [ ] |
| Structural Tile | [X] | [ ] | [ ] |
| Rated | [X] | [ ] | [ ] |
| Other | [X] | [ ] | [ ] |
| **b. Special partitions and Walls:** | | | |
| Toilet METAL PARTITIONS | [ ] | [X] | [ ] |
| Screen Walls | [X] | [ ] | [ ] |
| Gate | [X] | [ ] | [ ] |
| Other | [X] | [ ] | [ ] |
| **c. Wall Material:** | | | |
| Plaster AT WINDOWS ON FIRST FLOOR NEEDS TO BE FIXED | [ ] | [ ] | [X] |
| Plaster Board IN OFFICE AREA | [ ] | [X] | [ ] |
| Glass | [X] | [ ] | [ ] |
| Plywood | [X] | [ ] | [ ] |
| Paneling ENTRANCE AREA OF THE FIRST FLOOR | [ ] | [X] | [ ] |
| Trim & Wainscot | [X] | [ ] | [ ] |
| Tile/Glazed | [X] | [ ] | [ ] |
| Other METAL PANELS ON THE SECOND FLOOR | [ ] | [X] | [ ] |
| **d. Interior Doors & Frames:** | | | |
| Met Door/Met Frame GROUND FLOOR | [ ] | [X] | [ ] |
| Wood Door/Wood Frame | [X] | [ ] | [ ] |
| Wood Door/Metal Frame | [ ] | [X] | [ ] |
| Glazing LIMITED | [ ] | [X] | [ ] |
| Rollup | [X] | [ ] | [ ] |
| Sliding | [X] | [ ] | [ ] |
| Other | [X] | [ ] | [ ] |
| **e. Hardware:** | | | |
| Door Closers | [ ] | [X] | [ ] |
| Lock Sets | [ ] | [X] | [ ] |
| Kick/Push Plates | [ ] | [X] | [ ] |
| Thresholds | [ ] | [X] | [ ] |
| Panic Devices | [ ] | [X] | [ ] |
| Security & Detection | [X] | [ ] | [ ] |
| Automatic Openers WEST ENTRANCE | [ ] | [X] | [ ] |
| Other | [X] | [ ] | [ ] |

**B. COMMENTS:**

THE PARTITIONS CONSIST OF A VARIETY OF MATERIALS BUT OVERALL ARE IN GOOD CONDITION EXCEPT AT THE FIRST FLOOR WINDOWS.

**C. COMPONENT RATING: ($137,100 ) ( 83 %) = $113,800**

| Possible Value | Condition Value | Multiplier | Component Value |
|---|---|---|---|

## WALL FINISHES

FAC #077 DATE 4/96 INSPECTOR: AJR

| **A. SYSTEM DESCRIPTION** | N/A | Sat | Att |
|---|---|---|---|
| a. Paint BASE BOARDS | [ ] | [ ] | [X] |
| b. Wall Coating | [X] | [ ] | [ ] |
| c. Wall Coverings VINYL ON FIRST FLOOR | [ ] | [ ] | [X] |
| d. Paneling | | | |
| Prefinished FIRST FLOOR | [ ] | [X] | [ ] |
| Plank | [X] | [ ] | [ ] |
| e. Cork | [X] | [ ] | [ ] |
| f. Wallpaper | [X] | [ ] | [ ] |
| g. Ceramic Tile | [X] | [ ] | [ ] |
| h. Trim & Wainscot | [X] | [ ] | [ ] |
| i. Decoration | [X] | [ ] | [ ] |
| j. Glass | [X] | [ ] | [ ] |
| k. Other | [X] | [ ] | [ ] |

**B. COMMENTS**

THE BASE BOARDS ON THE FIRST FLOOR NEED TO BE REPAINTED.THE WALL COVERING ON THE FIRST FLOOR IN THE WINDOW CASEMENTS HAS SUSTAINED CONDENSATION DAMAGE AND NEEDS TO BE REPAIRED.

**C. COMPONENT RATING: ($ 46,200 ) ( 71 %) = $ 32,800**

| Possible Value | Condition Value | Multiplier | Component Value |
|---|---|---|---|

## FLOOR FINISHES

FAC #077 DATE 4/96 INSPECTOR: AJR

**A. SYSTEM DESCRIPTION**

| | N/A | Sat | Att |
|---|---|---|---|
| **a. Carpet:** | | | |
| Rolled | [ ] | [X] | [ ] |
| Tile IN SOME PRIVATE OFFICES ON SECOND FLOOR | [ ] | [X] | [ ] |
| **b. Composition:** | | | |
| Epoxy | [X] | [ ] | [ ] |
| Synthetic | [X] | [ ] | [ ] |
| Other | [X] | [ ] | [ ] |
| **c. Concrete Topping:** | | | |
| Clear Sealant MECHANICAL ROOMS | [ ] | [X] | [ ] |
| Abrasive | [X] | [ ] | [ ] |
| Epoxy | [X] | [ ] | [ ] |
| Aggregate | [X] | [ ] | [ ] |
| **d. Resilient:** | | | |
| Vinyl Tile AT ENTRANCES, SOME OFFICES, 2ND FL. CORRIDOR | [ ] | [X] | [ ] |
| Linoleum | [X] | [ ] | [ ] |
| Vinyl | [X] | [ ] | [ ] |
| Rubber | [X] | [ ] | [ ] |
| Cork | [X] | [ ] | [ ] |
| **e. Ceramic Tile** | [X] | [ ] | [ ] |
| **f. Masonry** | [X] | [ ] | [ ] |
| **g. Terrazzo** | [X] | [ ] | [ ] |
| **h. Wood** | [X] | [ ] | [ ] |
| **i. Metal** | [X] | [ ] | [ ] |

**B. COMMENTS**

FLOOR FINISHES VARY IN AGE AND CONDITION, ALTHOUGH OVERALL THE FLOORS ARE IN GOOD CONDITION. THE STEP RISERS AND THE HAND RAIL OF THE STAIRS LEADING TO THE SECOND FLOOR ON THE SOUTH SIDE OF THE BUILDING NEED TO BE REPAINTED.

**C. COMPONENT RATING: ($121,700 ) ( 63 %) = $ 76,700**

| Possible Value | Condition Value | Multiplier | Component Value |
|---|---|---|---|

## CEILINGS AND FINISHES

FAC #077 DATE 4/96 INSPECTOR: AJR

| **a. System Type:** | N/A | Sat | Att |
|---|---|---|---|
| Exposed IN MECHANICAL | [ ] | [X] | [ ] |
| Applied to Structure | [X] | [ ] | [ ] |
| Suspended THROUGHOUT | [ ] | [ ] | [X] |
| **b. Materials:** | | | |
| Drywall RM 051M | [ ] | [X] | [ ] |
| Plaster | [X] | [ ] | [ ] |
| Mineral Fiber Board | [ ] | [X] | [ ] |
| Metal Pan | [X] | [ ] | [ ] |
| Luminous Panels | [X] | [ ] | [ ] |
| Other | [X] | [ ] | [ ] |
| **c. Finishes:** | | | |
| Paint | [X] | [ ] | [ ] |
| Fabric | [X] | [ ] | [ ] |
| Prefinished TILES, STAINED IN SEVERAL PLACES | [ ] | [ ] | [X] |
| Other | [X] | [ ] | [ ] |
| **d. Openings & Inserts:** | | | |
| Air Distribution DIFFUSERS NEED TO BE CLEANED | [ ] | [ ] | [X] |
| Lighting Fixtures | [ ] | [X] | [ ] |
| Access Panels | [X] | [ ] | [ ] |
| Skylights | [X] | [ ] | [ ] |
| Fire Protection | [X] | [ ] | [ ] |
| Other | [X] | [ ] | [ ] |

**B. COMMENTS:**

SUSPENDED CEILINGS HAVE SOME STAINED TILES IN ROOMS 276, 251, 148 AND OFF ROOM 048.

**C. COMPONENT RATING: ($126,400 ) ( 77 %) = $ 97,300**

| Possible Value | Condition Value | Multiplier | Component Value |
|---|---|---|---|

## CONVEYING

FAC #077 DATE 4/96 INSPECTOR: AJR

**A. SYSTEM DESCRIPTION**

| **a. Elevators:** | N/A | Sat | Att |
|---|---|---|---|
| Number | [X] | [ ] | [ ] |
| Type | [X] | [ ] | [ ] |
| Speed | [X] | [ ] | [ ] |
| Capacity (lbs) | [X] | [ ] | [ ] |
| Dimensions | [X] | [ ] | [ ] |
| Door Operation: | | | |
| Center | [X] | [ ] | [ ] |
| To Side | [X] | [ ] | [ ] |
| **b. Lifts and Hoists:** | | | |
| Number | [X] | [ ] | [ ] |
| Type | [X] | [ ] | [ ] |
| **c. Moving Stairs and Walks:** | | | |
| Number | [X] | [ ] | [ ] |
| Type | [X] | [ ] | [ ] |
| **d. Conveyors:** | | | |
| Number | [X] | [ ] | [ ] |
| Type | [X] | [ ] | [ ] |
| **e. Pneumatic Tubes:** | | | |
| Number | [X] | [ ] | [ ] |
| Type | [X] | [ ] | [ ] |

**B. COMMENTS:**

NO ELEVATOR IN THIS BUILDING.

**C. COMPONENT RATING: ($ 00 ) ( 0 %) = $ 00**

| Possible Value | Condition Value | Multiplier | Component Value |
|---|---|---|---|

## MECHANICAL/PLUMBING

FAC #077 DATE 4/96 INSPECTOR: AJR

**A. SYSTEM DESCRIPTION**

| | N/A | Sat | Att |
|---|---|---|---|
| **a. Services Available:** | | | |
| Cold Water 3" FROM POWER PLANT | [ ] | [X] | [ ] |
| Hot Water 2" FROM POWER PLANT | [ ] | [X] | [ ] |
| Acid Waste | [X] | [ ] | [ ] |
| Oxygen | [X] | [ ] | [ ] |
| Natural Gas | [X] | [ ] | [ ] |
| Vacuum | [X] | [ ] | [ ] |
| Distilled Water | [X] | [ ] | [ ] |
| Compressed Air FROM POWER PLANT | [ ] | [X] | [ ] |
| Other | [X] | [ ] | [ ] |
| **b. Piping & Fittings:** | | | |
| Cast Iron WASTE AND VENTS | [ ] | [X] | [ ] |
| Copper Tubing WATER PIPING | [ ] | [X] | [ ] |
| Plastic | [X] | [ ] | [ ] |
| Steel HOT WATER HEATING | [ ] | [X] | [ ] |
| Glass | [X] | [ ] | [ ] |
| Other | [X] | [ ] | [ ] |
| **c. Water Heaters:** | | | |
| Electric | [X] | [ ] | [ ] |
| Gas | [X] | [ ] | [ ] |
| Oil | [X] | [ ] | [ ] |
| Steam Converter | [X] | [ ] | [ ] |
| Other | [X] | [ ] | [ ] |
| **d. Drainage:** | | | |
| Storm Drains 1 @ 4" AND 1 @ 6" | [ ] | [X] | [ ] |
| Sanitary Drainage 1 @ 4" | [ ] | [X] | [ ] |
| Combined Storm/San. | [X] | [ ] | [ ] |
| Floor Drains AT THE SOUTHWEST ENTRANCE | [ ] | [X] | [ ] |
| **e. Fixtures:** | | | |
| Water Closets 4 | [ ] | [X] | [ ] |
| Urinals 2 | [ ] | [X] | [ ] |
| Lavatories 4 | [ ] | [X] | [ ] |
| Showers | [X] | [ ] | [ ] |
| Kitchen Sinks 1 | [ ] | [X] | [ ] |
| Service Sinks 3 | [ ] | [X] | [ ] |
| Drinking Fountains | [X] | [ ] | [ ] |
| Electric Water Coolers 3 | [ ] | [X] | [ ] |
| **f. Sprinkler Systems:** | | | |
| Wet | [X] | [ ] | [ ] |
| Dry | [X] | [ ] | [ ] |
| **g. Standpipe Systems:** | | | |
| Wet | [ ] | [X] | [ ] |
| Dry | [X] | [ ] | [ ] |
| Valves | [ ] | [X] | [ ] |
| Hose Cabinets 1 AT ROOM 058 | [ ] | [X] | [ ] |

**B. COMMENTS:**

THE AVAILABILITY OF DOMESTIC HOT WATER IS LIMITED BECAUSE THERE IS NO RETURN LINE FROM THE POWER PLANT. THE FIXTURES IN THE MENS ROOM ON THE SECOND FLOOR SHOULD BE REPLACED.

**C. COMPONENT RATING: ($ 47,800 ) ( 77 %) = $ 36,800**

| Possible Value | Condition Value | Multiplier | Component Value |
|---|---|---|---|

## MECHANICAL/HEATING

FAC #077 DATE 4/96 INSPECTOR: AJR

**A. SYSTEM DESCRIPTION**

| **a. Heat Source:** | N/A | Sat | Att |
|---|---|---|---|
| Central Plant Steam | [X] | [ ] | [ ] |
| Central Plant Hot Water | [ ] | [X] | [ ] |
| Boilers: Type | [X] | [ ] | [ ] |
| Size | [X] | [ ] | [ ] |
| Furnace: Type | [X] | [ ] | [ ] |
| Size | [X] | [ ] | [ ] |
| Heat Pump: Type FOR RM 054 | [ ] | [X] | [ ] |
| Size 3 TON | [ ] | [X] | [ ] |
| Electric heating coils: | [X] | [ ] | [ ] |
| **b. System Type:** | | | |
| Steam | [X] | [ ] | [ ] |
| Hot Water | [ ] | [X] | [ ] |
| Air CONSTANT VOLUME AIR HANDLERS | [ ] | [X] | [ ] |
| Multizone | [X] | [ ] | [ ] |
| Dual Duct | [X] | [ ] | [ ] |
| Terminal Reheat | [X] | [ ] | [ ] |
| Variable Volume | [X] | [ ] | [ ] |
| Other | [X] | [ ] | [ ] |
| **c. Space Equipment:** | | | |
| Radiators | [ ] | [X] | [ ] |
| Convectors | [ ] | [X] | [ ] |
| 2-Pipe Fan Coil | [ ] | [X] | [ ] |
| Unit Heaters AT ENTRANCES | [ ] | [ ] | [X] |
| Other | [X] | [ ] | [ ] |
| **d. Control Type:** | | | |
| Pneu | [ ] | [X] | [ ] |
| Electric | [ ] | [X] | [ ] |
| DDC | [X] | [ ] | [ ] |
| Manual Valves | [ ] | [X] | [ ] |

**B. COMMENTS:**

THE HEATING SYSTEM IS A HOT WATER SYSTEM SUPPLIED BY THE POWER PLANT. THE BUILDING HAS A VARIETY OF HEATING DEVICES, INCLUDING RADIATORS, FAN COIL UNITS, UNIT HEATERS AND HEATING COILS IN THE AIR HANDLERS. THERE HAVE BEEN COMPLAINTS ABOUT THE LACK OF HEAT IN SOME OFFICES; HOWEVER, THIS IS BECAUSE OF AIR FILTRATION THROUGH THE SINGLE PANE WINDOWS.

**C. COMPONENT RATING: ($155,600 ) ( 73 %) = $113,600**

| Possible Value | Condition Value | Multiplier | Component Value |
|---|---|---|---|

## COOLING & VENTILATING

FAC #077 DATE 4/96 INSPECTOR: AJR

**A. SYSTEM DESCRIPTION**

| | N/A | Sat | Att |
|---|---|---|---|
| **a. System:** | | | |
| Type CONSTANT VOLUME | [ ] | [X] | [ ] |
| Capacity APPROXIMATELY 50 TONS | [ ] | [X] | [ ] |
| **b. Chillers**: | | | |
| Centrifugal | [X] | [ ] | [ ] |
| Reciprocating | [ ] | [X] | [ ] |
| Absorption | [X] | [ ] | [ ] |
| **c. Cooling Towers:** | | | |
| Type | [X] | [ ] | [ ] |
| Capacity | [X] | [ ] | [ ] |
| **d. Condensers:** AIR COOLED | [ ] | [X] | [ ] |
| **e. Space Equipment:** | | | |
| Direct Expansion - | | | |
| Window units 6 | [ ] | [X] | [ ] |
| Thru-the-wall 4 | [ ] | [X] | [ ] |
| Single zone | [X] | [ ] | [ ] |
| Single zone con. vol. FIVE 5-TON UNITS | [ ] | [X] | [ ] |
| Other | [X] | [ ] | [ ] |
| Air/Water - | | | |
| 2-pipe fan coil | [X] | [ ] | [ ] |
| Terminal reheat | [X] | [ ] | [ ] |
| Variable volume | [X] | [ ] | [ ] |
| Dual Duct | [X] | [ ] | [ ] |
| Multizone | [X] | [ ] | [ ] |
| Other | [X] | [ ] | [ ] |
| **f. Special Systems:** | | | |
| Type HEAT PUMP | [ ] | [X] | [ ] |
| Capacity 2 1/2 TONS FOR RM 058 | [ ] | [X] | [ ] |
| **g. Control Systems:** | | | |
| Pneu | [ ] | [X] | [ ] |
| Electric | [ ] | [X] | [ ] |
| Electronic | [ ] | [X] | [ ] |
| **h. Fans:** | | | |
| Exhaust 5 | [ ] | [X] | [ ] |
| Recirculating | [X] | [ ] | [ ] |

**B. COMMENTS:**

THERE ARE FIVE UNITS THAT COOL MOST OF THE BUILDING. THESE UNITS ARE AUGMENTED BY SIX WINDOW UNITS AND FOUR THRU-THE-WALL UNITS. EXCEPT FOR FUMES ENTERING THE BUILDING AT THE SOUTHWEST ENTRANCE, THERE ARE NO COMPLAINTS ABOUT THE COOLING OR VENTILATION IN THE BUILDING.

**C. COMPONENT RATING: ($120,200 ) ( 64 %) = $ 76,900**

| Possible Value | Condition Value | Multiplier | Component Value |
|---|---|---|---|

## ELECTRICAL/SERVICE & DISTRIBUTION

FAC #077 DATE 4/96 INSPECTOR: AJR

**A. SYSTEM DESCRIPTION**

**(a)Service:**

Substation FROM CENTRAL CLASSROOM AND POWER PLANT
Primary Voltage N/A
Transformer:

| Manufacture | Type | KVA | Secondary Voltages |
|---|---|---|---|
| N/A | | | |

**(b)Distribution System:**

Panelboard (type) CIRCUIT BREAKER
Voltage 208/120
Amperage N/A
Conduit ALUMINUM
Conductor COPPER
Wire (type) VARIES
Armored Cable LIMITED
Other NONE

**(c)Emergency System:**

General or (type & capacity) FROM POWER PLANT

**B. COMMENTS:**

THE BUILDING RECEIVES ITS ELECTRIC SERVICE FROM THE CLASSROOM BUILDING FOR THE NORTH PART OF THE BUILDING AND FROM THE POWER PLANT FOR THE SOUTH PART OF THE BUILDING. THERE IS ADEQUATE POWER FOR THE BUILDINGS OCCUPANTS.

**C. COMPONENT RATING: ($ 23,100 ) ( 80 %) = $ 18,500**

| Possible Value | Condition Value | Multiplier | Component Value |
|---|---|---|---|

## ELECTRICAL/LIGHTING & POWER

FAC #077 DATE 4/96 INSPECTOR: AJR

**A. SYSTEM DESCRIPTION**

| **a. Lighting (lamp type):** | N/A | Sat | Att |
|---|---|---|---|
| Fluor HAVE BEEN INSTALLED THROUGHOUT THE BUILDING | [ ] | [X] | [ ] |
| Incand | [X] | [ ] | [ ] |
| HID EXTERIOR SECURITY LIGHTS | [ ] | [X] | [ ] |
| Other | [X] | [ ] | [ ] |
| **b. Receptacles & Switches:** | | | |
| Type & Capacity GROUNDED DUPLEX, 120 VOLT | [ ] | [X] | [ ] |
| **c. Special:** | | | |
| Baseboard Heat | [X] | [ ] | [ ] |
| Lightning Protection | [X] | [ ] | [ ] |
| Communication & Alarm | [X] | [ ] | [ ] |
| Data Systems L A N SYSTEM | [ ] | [X] | [ ] |

**B. COMMENTS:**

THERE WERE NO CONCERNS NOTED ABOUT THE LIGHTING OR THE ADEQUACY OF THE OUTLETS.

**C. COMPONENT RATING: ($ 189,500) ( 77 %) = $145,900**

| Possible Value | Condition Value | Multiplier | Component Value |
|---|---|---|---|

## SAFETY STANDARDS

FAC #077 DATE 4/96 INSPECTOR: AJR

### A. SYSTEM DESCRIPTION

| | N/A | Sat | Att |
|---|---|---|---|
| **(a)Exits:** | | | |
| Stair Construction: | | | |
| concrete | [X] | [ ] | [ ] |
| steel | [ ] | [X] | [ ] |
| wood | [X] | [ ] | [ ] |
| Number of exits 3 | [ ] | [X] | [ ] |
| **(b)Fire Rating:** | | | |
| Construction Type: I X II III IV V VI | | | |
| Building Height: 41 ft., 2 + GROUND FLOOR stories | | | |
| **(c)Extinguishing Systems:** | | | |
| Portable ABC, CO2 AND 1PW | [ ] | [X] | [ ] |
| Standpipe | [ ] | [X] | [ ] |
| Hose Cabinets | [ ] | [X] | [ ] |
| Sprinklers | [X] | [ ] | [ ] |
| Suppression | [X] | [ ] | [ ] |
| Other | [X] | [ ] | [ ] |
| **(d)Detection & Alarm Systems:** | | | |
| Manual Alarm | [ ] | [X] | [ ] |
| Annunciator | [ ] | [X] | [ ] |
| Smoke Detectors | [X] | [ ] | [ ] |
| Other | [X] | [ ] | [ ] |
| **(e)Lighting Systems:** | | | |
| Exit Signs LIGHTED ON GROUND FLOOR ONLY | [ ] | [X] | [ ] |
| Exit Lighting | [X] | [ ] | [ ] |
| Emergency Lighting | [ ] | [ ] | [X] |
| Emergency Generator | [X] | [ ] | [ ] |

### B. COMMENTS:

THERE ARE NO EMERGENCY LIGHTS AND NO LIGHTED EXIT SIGNS EXCEPT AT THE SOUTHWEST ENTRANCE. EMERGENCY LIGHTS NEED TO BE INSTALLED IN STAIRWELLS.

### C. COMPONENT RATING: ($ 10,800 ) ( 63 %) = $ 6,800

| Possible Value | Condition Value | Multiplier | Component Value |
|---|---|---|---|

## BUILDING PERIMETER EVALUATION

FAC #077 DATE 4/96 INSPECTOR: AJR

**A. SYSTEM DESCRIPTION**

| 1. Building Access: | N/A | Sat | Att |
|---|---|---|---|
| Driveway PAVED DRIVE ON WEST SIDE, CRACKS AND POT HOLE | [ ] | [ ] | [X] |
| Loading Dock | [X] | [ ] | [ ] |
| Sidewalks | | | |
| Front CRACKS AT NORTHWEST ENTRANCE | [ ] | [ ] | [X] |
| Side | [X] | [ ] | [ ] |
| Rear CRACKED CONCRETE AT NORTHWEST ENTRANCE | [ ] | [ ] | [X] |
| Steps | | | |
| Front RESEAL STEPS AND FILL IN HOLES AT ENTRANCE | [ ] | [ ] | [X] |
| Side | [ ] | [X] | [ ] |
| Rear | [X] | [ ] | [ ] |
| Handicap Ramp AT GRADE AT WEST ENTRANCE | [ ] | [X] | [ ] |

| 2. Lawn and Landscaping: | | | |
|---|---|---|---|
| Lawn | [X] | [ ] | [ ] |
| Shrubs | [ ] | [X] | [ ] |
| Trees | [ ] | [X] | [ ] |
| Undesirable Insect | [X] | [ ] | [ ] |
| Bedding Material | [ ] | [X] | [ ] |
| Watering System | [X] | [ ] | [ ] |

| 3. General Site Information: | | | |
|---|---|---|---|
| Signage ON MILLIKIN ROAD | [ ] | [X] | [ ] |
| Address Identification ON SIGN | [ ] | [X] | [ ] |
| Security Lights AT THE EXIT DOORS | [ ] | [X] | [ ] |
| Street Lights ON MILLIKIN ROAD | [ ] | [X] | [ ] |
| Drainage | [ ] | [X] | [ ] |
| Storm Drains INADEQUATE ON THE SOUTHWEST SIDE | [ ] | [ ] | [X] |

**B. COMMENTS:**

THE SIDEWALKS ON THE EAST AND WEST SIDES HAVE CRACKS THAT SHOULD BE REPAIRED. THE BLACK TOP DRIVE ON THE WEST SIDE HAS CRACKS AND HOLES THAT NEED TO BE FILLED. THE STEPS AT THE NORTHEAST ENTRANCE NEED TO BE RESEALED AND THE HOLES IN THE CONCRETE AT THE ENTRANCE NEED TO BE FILLED. THE STORM DRAIN AT THE SOUTHWEST ENTRANCE NEEDS TO BE CLEANED.

**The Ohio State University**
**Department of Physical Facilities**

**BUILDING AUDIT METHODOLOGY**

## 1. BUILDING AUDIT PROGRAM OBJECTIVE

To provide a building-by-building inventory, including maintenance deficiencies that currently exist, for the OSU buildings that the Department of Physical Facilities has budgetary responsibility for. These audits will be used to establish corrective maintenance projects and budget cost estimates.

## 2. BUILDING AUDIT APPROACH

A five-step procedure is used to meet the program objectives:

1. Collect Historical and Inventory Data on each building.
2. Interview Building Occupants.
3. Perform a Building Inspection.
4. Complete Building Evaluation Forms.
5. Issue Written Report.

## 3. DATA ORGANIZATION

The data collected is stored by hard copy with field notes in a building file established for each building. The report data is being stored in a database program that allows retrieval of specific data as it is needed. The "Building Evaluation" forms contain ratings for the condition of each building component and a description of any deficiencies for those components. The "Building Information" sheets provide data on the utilities to the buildings and the type of systems in each building.

## 4. COST ESTIMATES

Costs are for budgeting purposes only and are based on The Means Standard Construction Cost data, auditor experience, industry sources and OSU project cost data. Costs are reported current to the year of the audit. The building component values assigned in the "Building Evaluation" forms are not cost estimates. These values are calculated from the replacement cost provided by The Office of Campus Planning and Space Utilization for each OSU building.

## 5. LIMITATIONS

(1) All inspections are visual and do not include physical tests, instrumentation or metering measurements, sampling, or monitoring.

(2) Only random typical offices or laboratories are entered. Typical spaces are deemed to be representative of average conditions throughout each building.

(3) The scope of the analysis does not include complete OSHA, energy, or physical impaired access study. Buildings and components are inspected for condition and general safety requirements rather than specialized code conformance.

(4) It is assumed that the buildings inspected were approved by the State of Ohio Division of Factory and Building Inspection at the time of construction. The recommendations listed in the reports are not an attempt to bring these

existing buildings up to present day code standards. Rather, the intent is to eliminate obvious problems and to upgrade the buildings in a reasonable manner in regard to occupant safety.

(5) Cost estimates are in current year dollars and include contractor mark-ups, construction administration costs, and architectural/engineering costs where applicable. Escalation factors must be applied for future work. Combining of projects should serve to decrease costs. These estimates are strictly for purposes of budgeting, and final pricing will be required when the specific scope of work for the project is defined.

(6) The building inspections are defined to include the following:

(a) Includes general repainting, redecorating and wholesale replacement of building and system components. Ongoing maintenance, replacement and renovation projects are included.

(b) Includes exterior building walls and attached items.

(c) Includes the entrance steps at all entries. Ramps outside the buildings are included. Plantings around the building exterior are included.

(d) Movable furniture is not included.

(e) Fixed equipment inside the buildings that is installed and maintained by a specific academic department or using agency is not included.

(f) Utility lines supplying the buildings are not included.

(g) The program needs of the using department are assumed to be satisfied. No consideration has been given to anticipate any changes in current occupant space needs.

**ABBREVIATIONS**

ATT.....ATTENTION
BLDG.....BUILDING
BUR.....BUILT UP ROOF
COND.....CONDENSATE WATER
DD.....DUAL DUCT AIR HANDLING SYSTEM
DDHV.....DUAL DUCT HIGH VELOCITY
DHWR.....DOMESTIC HOT WATER RETURN
DHWS.....DOMESTIC HOT WATER SUPPLY
DX.....DIRECT EXPANSION AIR CONDITIONER
FPM.....FEET PER MINUTE
HID.....HIGH INTENSITY DISCHARGE LIGHT
HPS.....HIGH PRESSURE STEAM (125 PSI)
HVAC.....HEATING, VENTILATING AND AIR CONDITIONING SYSTEM
KV.....KILOVOLTS
KVA.....KILOVOLTS AMPS
KW.....KILOWATTS
LC.....LIQUID COOLED
LPS.....LOW PRESSURE STEAM (15 PSI)
MPS.....MEDIUM PRESSURE STEAM (50 PSI)
MZ.....MULTIZONE AIR HANDLING SYSTEM
N/A.....NOT APPLICABLE
PSI.....POUNDS PER SQUARE INCH
RM.....ROOM
SAT.....SATISFACTORY
SR.....STEAM RETURN LINE
SS.....STEAM SUPPLY LINE
TR.....TERMINAL REHEAT AIR HANDLING SYSTEM
V.....VOLTS
VAV.....VARIABLE AIR VOLUME SYSTEM

**APPENDIX**

Reduced Scale Building Floor Plans

C-1 Building Space Assignments