

FACILITY AUDIT REPORT

ENARSON HALL, Bldg 085

July 20, 1991

Prepared by:
The Ohio State University
Department of Physical Facilities
Division of Resource Management

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ABBREVIATIONS

BLDG.....	BUILDING
BUR.....	BUILT UP ROOF
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
HVAC.....	HEATING, VENTILATING AND AIR CONDITIONING SYSTEM
KV.....	KILOVOLTS
KVA.....	KILOVOLTS AMPS
KW.....	KILOWATTS
LC.....	LIQUID COOLED
MZ.....	MULTIZONE AIR HANDLING SYSTEM
N/A.....	NOT APPLICABLE
PSI.....	POUNDS PER SQUARE INCH
RM.....	ROOM
SR.....	STEAM RETURN LINE
SS.....	STEAM SUPPLY LINE
TR.....	TERMINAL REHEAT AIR HANDLING SYSTEM
V.....	VOLTS
VAV.....	VARIABLE AIR VOLUME SYSTEM

GENERAL BUILDING INFORMATION

ENARSON HALL #085

BUILDING ADDRESS: 154 W, TWELFTH AVENUE

GROSS SQ. FT.: 44,953

NET ASSIGNABLE SQ. FT.: 27,798

MECHANICAL/CUSTODIAL AREA SQ. FT.: 5,516

YEAR OF CONSTRUCTION: 1911

YEAR OF LAST RENOVATION: 1988

NUMBER OF STORIES/BASEMENT: 3 STORIES AND BASEMENT

AIR CONDITIONING (Percentage): 60%

CURRENT USE: 69% OFFICE AND RELATED; 18% MECH/CUST/TOILET; 13% CLASSROOM

TYPE OF CONSTRUCTION: WOOD FRAME WITH BRICK EXTERIOR - ORIGINAL PORTION
CAST-IN-PLACE CONCRETE WITH BRICK EXTERIOR - NEW SECT.

ESTIMATED REPLACEMENT COST: 5,428,000

BUILDING APPEARANCE: FINISHES ARE IN GOOD CONDITION ON BOTH EXTERIOR AND
INTERIOR.

HANDICAPPED ACCESSIBILITY: RAMP AT WEST ENTRANCE ON SOUTH SIDE OF
BUILDING TO LOBBY AND ELEVATOR. ACCESS TO UPPER FLOORS IS
ACCOMPLISHED WITH THE ELEVATOR.

OVERALL BUILDING CONDITION: SATISFACTORY

NUMBER OF EXIT STAIRWAYS: 2 STAIRWAYS

BUILDING SYSTEMS INFORMATION

ENARSON HALL #085

HEATING:

Source POWER PLANT STEAM AND HOT WATER

Type Heating System HOT WATER - FINNED TUBE RADIATION, CABINET HEATERS

Steam (Line size, valve location) 3", HIGH PRESSURE, RM 26M.

Building Htg Water (valve location) RM 26M

VENTILATION SYSTEM: AIR HANDLER (COOLING ONLY) VARIABLE AIR VOLUME

COOLING:

Bldg % 60 Chillers 1

Window Unit 0 Thru-the-wall 0 Direct exp. units 0

HVAC CONTROL SYSTEM: PNEUMATIC

ELECTRIC: Source Size(KVA) Primary/Secondary Switchgear & Main Disc. (Rm)

1. BUCKEYE 500 KV 13.2 KV/208 V RM 28M

PLUMBING:

Water (size, valve location) 3", APPROX. 30' EAST, 24' SOUTH OF SW CORNER

Gas (size, valve location) NONE

Domestic Hot Water (size, valve location) 1-1/4", RM 26M

Compressed Air (size, location) COMPRESSOR - RM 26M

SEWERS:

Storm COMBINED W/ SANITARY: 5 @ 6", 1 @ 8" Sanitary 1 @ 8", 1 @ 6"

METERS:

Gas (location) NONE

Water (location) RM 28M

Electric (location) RM 28M

ALARM SYSTEMS:

Fire Alarm YES Panel Location RM 28M

Fire Pump YES Pump Location RM 25M

Sprinklers YES Panel Location N/A

Other Alarms NONE

ELEVATORS:

Number ONE Type (passenger, freight) PASSENGER

Manufacturer DOVER Size 2100 LBS CAPACITY; 4'6" X 6'

EMERGENCY GENERATOR: Size N/A Location N/A

KEY BOX LOCATION: INSIDE WEST ENTRANCE ON SOUTH SIDE OF BUILDING

ASBESTOS SURVEY (1986):

BUILDING WAS RENOVATED IN 1988. ALL ASBESTOS WAS REMOVED AT THAT TIME.

ENARSON HALL NARRATIVE

GENERAL

This Building Audit was conducted by Physical Facilities for the purpose of evaluating the present condition of those aspects of the building for which Physical Facilities has a budgetary responsibility. This audit describes the current physical condition of those aspects of the facility and identifies existing corrective maintenance repairs and building component system replacement requirements.

It has been assumed that the program needs of the tenant departments are being met by the facility. This audit does not intend to assess the condition of those aspects of this facility that are the budgetary responsibility of tenant departments.

Audit goals and methodology are described in greater detail in the "Building Audit Methodology" section of this report.

HISTORY

The original portion of Enarson Hall, Building 085, was completed in 1911. The building had been constructed to serve as the first Ohio Union Building. Over the course of the next forty years the facility was expanded seven times. In 1951 this building was replaced as a student union by Building 058, which is now known as the Ohio Union. At that point, Building 085 was remodeled to serve as a student services center and also housed the student health center. Over the years, several of the additions were torn down.

In 1987, the building was completely renovated. All remaining additions except the extension of the north wing were removed and the entire structure was gutted and renovated. A large addition was constructed on the west side of the building consisting of a basement and first floor. The southwest section of the building was completely gutted and an elevator, concrete stairway and restrooms were built in this area. The oak woodwork was restored at the east and south entrances. The stairway and interior lighting fixtures on the east side of the building were also preserved.

In 1988, the building was officially named Enarson Hall and was reopened. Facility use is currently 69% office, 18% mechanical and custodial, and 13% classroom. The building houses the University College.

PRIMARY SYSTEMS

The remaining pre-1988 portions of Enarson Hall have a wooden frame with a brick, limestone, and concrete exterior. The exposed concrete foundation on the original section has been coated with a new concrete veneer. It has three stories and a basement. Floors in this section are composed of 2" x 14" oak floor joists. The 1911 roof consists of wooden rafters and a wooden deck supported by wood beams or steel trusses. The roof is covered with

slate tiles on the sloping sides and gables and copper sheathing on the flat portion at the top.

The 1988 addition on the west side of the building is composed of a reinforced concrete frame with a brick veneer exterior. It has one story and a basement. The structure appears to be in good condition with no signs of stress observed. The roof is wooden frame with a plywood deck covered with standing-seam sheet metal.

Roof coverings are in good condition. The only leak identified in the maintenance work order system appears to be occurring in the single ply membrane covering the north annex. The metal roofs and the slate tile roofs are in good condition.

There are a few spalling exterior bricks near ground level on the north and east sides of the 1911 section. Maintenance personnel reported that damaged brick had been replaced during the renovation. This section of the wall appears to have been below grade level when the building was originally constructed. The brick on the oldest portion appears to have been repointed recently and appears to be in good condition at about 3 feet above grade and up. The original wooden doors have been supplemented with aluminum doors to serve as a windbreak on the east side of the building. The original oak entry has also been preserved on the south side of the building. The windows were replaced with double-pane awning and fixed window units throughout during the 1988 renovation. The newer windows operate easily and fit the openings well.

SECONDARY SYSTEMS

The original interior partitions have been removed and replaced with metal stud and drywalled walls. Partitions in the new section are constructed of metal studs or concrete block. Wall surfaces are in good condition throughout. The original oak paneling and trim has been preserved in several areas of the 1911 section.

Hallway floors are typically vinyl tile. The vinyl tile is beginning to crack on the second floor at the juncture between the wooden and concrete subfloors. The seams of the plywood underlayment are visible in the common area to the south of the Rm 110 and in the second floor corridor. The vinyl tile appears to move excessively over the wooden floors that were left intact below. Maintenance personnel reported that there are usually problems of this nature when vinyl tile is installed over existing hardwood floors in high traffic areas. Floors appeared to be in good condition throughout the rest of the building.

Ceilings are predominantly suspended mineral fiber 2' x 2' panels. The east stairway has its original painted metal pan ceiling. The ceiling in room 312 is plastered and in good condition.

SERVICE SYSTEMS

The building has one elevator that was installed in 1988. It is a passenger elevator with handicapped-accessible controls and is in good condition. The building also has a dumbwaiter. Occupants reported that the dumbwaiter worked well.

Air conditioning and ventilation is provided by an air handler system. The chiller and air-cooled condenser both appeared to be running smoothly when inspected. No problems with the system were reported by either the occupants or maintenance personnel. The EMA work order system yielded only minor problems over the 6-month period that we surveyed.

Building heating is primarily accomplished with fin tube radiation using heating hot water. Additional heat is supplied by unit heaters and cabinet heaters in the entryways and stairwells. Occupants and maintenance personnel did not identify any problems with the system at this point.

Occupants and maintenance personnel interviewed agreed that the domestic hot water system is adequate and there were no complaints about the plumbing. Plumbing fixtures are in good condition throughout the building.

ELECTRICITY

The building transformer has a primary voltage of 13,200, secondary voltage of 208Y/120 and a 500 KVA capacity. Peak demand on June 20, 1991 was calculated to be 44% of available electrical capacity. The main and branch panels have spare capacity available.

The building electrical system was completely replaced in 1988. Fluorescent lighting is used throughout except in the east stairwell where the original incandescent fixtures have been maintained. Occupants reported these incandescent light bulbs were often burned out. There were no signs of overloaded outlets.

SAFETY STANDARDS

The building is equipped with a manual fire alarm system and smoke detectors throughout. There is a halon fire suppression system in the switch room in the basement. The rest of the building is equipped with a sprinkler system, hose cabinets and fire extinguishers. There are lighted exit signs throughout and an emergency lighting system. The west door on the south side of Enarson Hall is accessible via a ramp and is equipped with an electric opener for the handicapped. All floors are handicapped accessible by using the elevator.

ASBESTOS

All asbestos was removed during the 1988 renovation.

BUILDING PERIMETER

This building is located on the southwest side of the south oval. The lawn areas immediately surrounding the facility have mature trees and shrubbery. The lawn has a number of bare spots that appear to have been seeded recently. We observed a number of other bare areas. The sidewalk on the northeast side of the building is broken. The rest of the sidewalks are in fair to good condition.

CONCLUSION

Enarson Hall was completely renovated in 1988 and is in very good condition. The building was gutted, several additions were removed and all mechanical systems were replaced at that time. The interior finishes were replaced in most areas. The exterior brick was cleaned and repointed and the windows were replaced.

The only maintenance problems identifiable at this point are some spalling brick along the foundation and minor problems with the vinyl floor tile in two areas. No major maintenance projects are identifiable at this point in time for this building.

PROPOSED MAINTENANCE PROJECTS

ENARSON HALL #085

(R&R OR CAPITAL FUNDED)

A. Corrective Maintenance Projects:

NO PROJECTS IDENTIFIED AT THIS TIME

B. Building Improvement/Addition Project:

NO PROJECTS IDENTIFIED AT THIS TIME

C. Projected (over the next 5 yrs) Component Replacement Projects:

NO PROJECTS IDENTIFIED AT THIS TIME

D. Maintenance Projects (LESS THAN \$5000)

1. Replace broken tiles at west end of 2nd floor corridor and install threshold at transition from newer subfloor to original framing.

BUILDING EVALUATION SUMMARY

I. BUILDING INFORMATION

FAC # 085 FACILITY NAME: ENARSON HALL
 DATE: _____ INSPECTOR: JPH
 YEAR CONSTRUCTED: 1911, RENOVATION AND ADDITION: 1988
 GROSS SQ FT: 44,953 NET SQ FT: 27,798
 REPLACEMENT COST \$ 4,613,800 *

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	4.6	212,235	.98	207,990
Columns and Beams	13.0	599,794	.98	587,798
Exterior Walls	8.8	406,014	.98	397,894
Windows & Doors	2.8	129,186	.97	125,310
Roofing	5.2	239,918	.95	227,922
Partitions & Drs.	7.9	364,490	.98	357,200
Wall Finishes	3.2	147,642	.96	141,736
Floor Finishes	8.4	387,559	.98	379,808
Ceilings & Finish	8.3	382,945	.96	367,627
Conveying	2.4	110,731	.97	107,409
Plumbing	2.6	119,959	.96	115,161
Heating	4.4	203,007	.96	194,887
Cooling & Vent.	13.9	641,318	.95	609,252
Elec. Ser. & Dist	1.7	78,435	.98	76,866
Lighting & Power	11.8	544,428	.96	522,651
Safety Standards	1.0	46,138	.98	45,215
TOTALS	100.00	4,613,800	0.97	4,464,726

III. BUILDING RATING SUMMARY

Overall Building Rating = 97%

* Replacement Cost assigned January 1991 by The Office of Campus Planning and Space Utilization 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 # 085 DATE 6/20/91 INSPECTOR: JPH

A. SYSTEM DESCRIPTION

a. Footings:	N/A	Sat	Att
Individual Footings & Piers <u>INTERIOR COLUMN SUPPORTS</u>	[]	[X]	[]
Continuous Footings <u>EXTERIOR WALL SUPPORT</u>	[]	[X]	[]
Grade Beams _____	[X]	[]	[]
Piles _____	[X]	[]	[]
Caissons _____	[X]	[]	[]
 b. Foundation Wall Materials:			
Steel _____	[X]	[]	[]
Concrete Cast-in-place <u>1911 SECTION</u>	[]	[X]	[]
Concrete Block <u>1988 SECTION</u>	[]	[X]	[]
Other _____	[X]	[]	[]
 c. Waterproofing and Underdrain:			
Coating <u>NEW ADDITION</u>	[]	[X]	[]
Membrane _____	[X]	[]	[]
Board _____	[X]	[]	[]
Drain Tile <u>4" PIPE AROUND PERIMETER OF NEW ANNEX</u>	[]	[X]	[]
 d. Slab on Grade (floor):			
Plain _____	[X]	[]	[]
Reinforced _____	[]	[X]	[]
 e. Special Substructures:			
_____	[X]	[]	[]

B. COMMENTS:

C. COMPONENT RATING: $\frac{(\$212,235)}{\text{Possible Value}} \times \left(\frac{98\%}{\text{Condition Value Multiplier}} \right) = \frac{\$207,990}{\text{Component Value}}$

EXTERIOR WINDOWS & DOORS

FAC # 085 DATE 6/20/91 INSPECTOR: JPH

A. SYSTEM DESCRIPTION

a. Windows type & number:	N/A	Sat	Att
Wood <u>FIXED, LEADED ORIGINAL DECORATIVE ONLY</u>	[]	[X]	[]
Steel _____	[X]	[]	[]
Alum <u>203 AWNING-TYPE, 3 FIXED</u>	[]	[X]	[]
Other _____	[X]	[]	[]
b. Window glazing:			
Single pane _____	[X]	[]	[]
Double pane <u>ALL EXTERIOR WINDOWS</u>	[]	[X]	[]
Other _____	[X]	[]	[]
c. Doors type & number:			
Wood _____	[X]	[]	[]
Steel <u>2 SETS OF DOUBLE DOORS AND ONE SINGLE DOOR</u>	[]	[X]	[]
Alum <u>3 SETS OF DOUBLE DOORS AND 2 SINGLE DOORS</u>	[]	[X]	[]
Other _____	[X]	[]	[]
d. Shading Devices:			
Types <u>VENETIAN BLINDS</u>	[]	[X]	[]

B. COMMENTS:

WINDOWS AND DOORS ARE IN GOOD CONDITION.

C. COMPONENT RATING: $\frac{(\$129,200)}{\text{Possible Value}} \times \left(\frac{97\%}{\text{Condition Value Multiplier}} \right) = \frac{\$125,310}{\text{Component Value}}$

WALL FINISHES

FAC # 085 DATE 6/20/91 INSPECTOR: JPH

A. SYSTEM DESCRIPTION	<u>N/A</u>	<u>Sat</u>	<u>Att</u>
a. Paint <u>THROUGHOUT</u>	[]	[X]	[]
b. Wall Coating _____	[X]	[]	[]
c. Wall Coverings _____	[X]	[]	[]
d. Paneling			
Prefinished _____	[X]	[]	[]
Plank <u>PRESERVED PORTIONS OF 1911 SECTION</u>	[]	[X]	[]
e. Cork _____	[X]	[]	[]
f. Wallpaper _____	[X]	[]	[]
g. Ceramic Tile _____	[X]	[]	[]
h. Trim & Wainscot <u>PRESERVED PORTIONS OF 1911 SECTION</u>	[]	[X]	[]
i. Decoration _____	[X]	[]	[]
j. Glass <u>ENTRY AREA - SOUTH - 1911 SECTION</u>	[]	[X]	[]
k. Other _____	[X]	[]	[]

B. COMMENTS

C. COMPONENT RATING: $\frac{(\$147,600)}{\text{Possible Value}} \times \left(\frac{96\%}{\text{Condition Value Multiplier}} \right) = \frac{\$141,736}{\text{Component Value}}$

CONVEYING

FAC # 085 DATE 6/20/91 INSPECTOR: JPH

A. SYSTEM DESCRIPTION

	N/A	Sat	Att
a. Elevators:			
Number <u>ONE</u>	[]	[X]	[]
Type <u>DOVER, PASSENGER, HYDRAULIC</u>	[]	[X]	[]
Speed <u>100 FPM</u>	[]	[X]	[]
Capacity (lbs) <u>2,100</u>	[]	[X]	[]
Dimensions <u>4'6" X 6'</u>	[]	[X]	[]
Door Operation:			
Center <u>NO</u>	[X]	[]	[]
To Side <u>YES</u>	[]	[X]	[]
 b. Lifts and Hoists:			
Number <u>ONE DUMBWAITER</u>	[]	[X]	[]
Type <u>MATOT, 300 LB CAPACITY, 50 FPM</u>	[]	[X]	[]
 c. Moving Stairs and Walks:			
Number _____	[X]	[]	[]
Type _____	[X]	[]	[]
 d. Conveyors:			
Number _____	[X]	[]	[]
Type _____	[X]	[]	[]
 e. Pneumatic Tubes:			
Number _____	[X]	[]	[]
Type _____	[]	[]	[]

B. COMMENTS:

C. COMPONENT RATING: $\frac{(\$110,700)}{\text{Possible Value}} \times \left(\frac{97\%}{\text{Condition Value Multiplier}} \right) = \frac{\$107,409}{\text{Component Value}}$

COOLING & VENTILATING

FAC # 085 DATE 6/24/91 INSPECTOR: JPH

A. SYSTEM DESCRIPTION

	N/A	Sat	Att
a. System:			
Type <u>AIR HANDLER - VARIABLE AIR VOLUME</u>	[]	[X]	[]
Capacity <u>117 TONS</u>	[]	[X]	[]
b. Chillers:			
Centrifugal _____	[X]	[]	[]
Reciprocating <u>BOHN MODEL # RDC-140</u>	[]	[X]	[]
Absorption _____	[X]	[]	[]
c. Cooling Towers:			
Type _____	[X]	[]	[]
Capacity _____	[X]	[]	[]
d. Condensers: <u>BOHN AIR COOLED MODEL # SPD1215B</u>	[]	[X]	[]
e. Space Equipment:			
Direct Expansion -			
Window units _____	[X]	[]	[]
Thru-the-wall _____	[X]	[]	[]
Single zone _____	[X]	[]	[]
Single zone con. vol. _____	[X]	[]	[]
Other _____	[X]	[]	[]
Air/Water -			
2-pipe fan coil _____	[X]	[]	[]
Unit ventilators _____	[X]	[]	[]
Terminal reheat _____	[X]	[]	[]
Variable volume <u>MAIN SYSTEM FOR BUILDING</u>	[]	[X]	[]
Dual Duct _____	[X]	[]	[]
f. Special Systems:			
Type _____	[X]	[]	[]
Capacity _____	[X]	[]	[]
g. Control Systems:			
Pneu _____	[]	[X]	[]
Electric _____	[]	[X]	[]
Electronic _____	[X]	[]	[]
h. Fans:			
Exhaust <u>3 FANS</u>	[]	[X]	[]
Recirculating <u>1 SUPPLY</u>	[]	[X]	[]

B. COMMENTS:

C. COMPONENT RATING: (\$641,300) X (95 %) = \$609,252

Possible
Condition
Component
Value
Value Multiplier
Value

ELECTRICAL/SERVICE & DISTRIBUTION

FAC # 085 DATE 6/20/91 INSPECTOR: JPH

A. SYSTEM DESCRIPTION

(a) Service:

Substation BUCKEYE

Primary Voltage 13,200 VOLTS

Transformer:

Manufacturer	Type	KVA	Secondary Voltages
<u>WESTINGHOUSE</u>	<u>OIL(MINERAL)</u>	<u>500</u>	<u>208/120</u>

(b) Distribution System:

Panelboard (type) CIRCUIT BREAKER

Voltage 208 AND 120

Amperage 7 @ 200A, 5 @ 100A, 2 @ 60A AND 4 @ 30A

Conduit ALUMINUM AND STEEL

Conductor COPPER

Wire (type) VARIABLES

Armored Cable

Other

(c) Emergency System:

General or (type & capacity) NONE

B. COMMENTS:

C. COMPONENT RATING: $\frac{(\$78,400)}{\text{Possible Value}} \times \left(\frac{98\%}{\text{Condition Value Multiplier}} \right) = \frac{\$76,866}{\text{Component Value}}$

ELECTRICAL/LIGHTING & POWER

FAC # 085 DATE 6/20/91 INSPECTOR: JPH

A. SYSTEM DESCRIPTION

a. Lighting (lamp type):	<u>N/A</u>	<u>Sat</u>	<u>Att</u>
Fluor <u>2' X 2' AND 2' X 4' FIXTURES</u>	[]	[X]	[]
Incand <u>ORIGINAL FIXTURES AT EAST AND SOUTH ENTRANCES</u>	[]	[X]	[]
HID _____	[X]	[]	[]
Other _____	[X]	[]	[]
b. Receptacles & Switches:			
Type & Capacity <u>GROUNDING, 120 VOLT</u>	[]	[X]	[]
c. Special:			
Baseboard Heat _____	[X]	[]	[]
Lightning Protection _____	[]	[X]	[]
Communication & Alarm _____	[]	[X]	[]
Data Systems _____	[X]	[]	[]

B. COMMENTS:

C. COMPONENT RATING: $\frac{(\$544,400)}{\text{Possible Value}} \times \left(\frac{96\%}{\text{Condition Value Multiplier}} \right) = \frac{\$522,651}{\text{Component Value}}$

BUILDING PERIMETER EVALUATION

FAC # 085 DATE 6/24/91 INSPECTOR: JPH

A. SYSTEM DESCRIPTION

	N/A	Sat	Att
1. Building Access:			
Driveway <u>SOUTH SIDE OF BUILDING</u>	[]	[X]	[]
Loading Dock _____	[]	[X]	[]
Sidewalks			
Front <u>SOUTH SIDE - CONCRETE</u>	[]	[X]	[]
Side <u>EAST SIDE - CONCRETE, BRICK, ASPHALT</u>	[]	[]	[X]
Rear <u>NORTH SIDE - CONCRETE, BRICK, ASPHALT</u>	[]	[X]	[]
Steps			
Front _____	[]	[X]	[]
Side _____	[]	[X]	[]
Rear _____	[X]	[]	[]
Handicap Ramp _____	[]	[X]	[]
2. Lawn and Landscaping:			
Lawn <u>BARE SPOTS</u>	[]	[]	[X]
Shrubs _____	[]	[X]	[]
Trees _____	[]	[X]	[]
Undesirable Insect _____	[X]	[]	[]
Bedding Material _____	[]	[X]	[]
Watering System _____	[X]	[]	[]
3. General Site Information:			
Signage _____	[]	[X]	[]
Address Identification _____	[]	[X]	[]
Security Lights _____	[]	[X]	[]
Street Lights <u>LIGHT POLE ON NORTH SIDE NEEDS PAINT</u>	[]	[]	[X]
Drainage _____	[]	[X]	[]
Storm Drains _____	[]	[X]	[]

B. COMMENTS:

SIDEWALKS ARE BROKEN/HEAVING ON THE EAST. A PATH HAS BEEN WORN IN THE GRASS TO THE NORTHWEST OF THE BUILDING SUGGESTING THE NEED FOR ANOTHER SIDEWALK. MANY BARE PATCHES OF LAWN. SEVERAL AREAS OF STRAW SUGGESTING THE LAWN HAS BEEN SEEDED IN AREAS. TRANSFORMER AREA IS OVERGROWN WITH WEEDS.

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 172 OSU buildings that the Department of Physical Facilities is budgetarily responsible. These audits will be used to establish repair and renovation projects, budget cost estimates for these projects, and overall levels of required maintenance funding.

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. This building replacement cost is allocated to each building component to provide an estimated value for each component. Project cost estimates will exceed the building component values in most situations because of tear-out, handling and site limitations that occur in building component replacement projects.

5. DATA USAGE

Repair and Renovation Projects: provided to assist in the budgeting process for the Department of Physical Facilities.

Building Evaluation: provided to give a numerical rating for each

building on campus quantifying its percentage of deficiency.

6. 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. On going maintenance, replacement and renovation projects are not included.
- (b) Includes exterior building walls and attached items.
- (c) Includes the first step up at all entries. Ramps outside the buildings are included; the steps and walks up to the ramps are not included.
- (d) Blinds, drapes, light bulbs, and movable furniture are 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.

APPENDIX
Reduced-Scale Building Floor Plans
C-1 Building Space Assignments