

Campus Management System

Observations

The original campus management system was a Honeywell Delta 1000 central control system. The Delta 1000 was intended to control building fans and air supply units. The system was abandoned several years prior to the 1997 Master Plan and was disassembled. As recommended by the 1997 Master Plan, the antiquated Delta 1000 system is being removed and a new Johnson Controls "Metasys" central control system has been installed in its place. The new campus management system has proven to provide the following benefits:

- Facility wide information management.
- Increase production of maintenance staff by directing their efforts towards more urgent need and away from man-power hungry hit and miss inspections and repairs.
- Energy conservation through optimum control of HVAC systems, lighting (both interior and exterior), demand limiting and load shedding.

The new campus management system has the capacity to provide monitoring and control over the following:

- Geothermal hot water monitoring and control of supply temperatures, return temperatures, and flow rates.
- Building monitoring of exterior temperature, interior temperature by zone, and controlling on/off of supply fans and air handling units.
- Monitoring building fire alarm systems. OIT is in the process of upgrading the fire alarm systems of the Gymnasium Building, Boivin Hall, the Student Union, and portions of Cornett Hall.
- Building security systems which use a cyber-lock electronic key for traceability.
- Lighting control.
- Irrigation system controls which has all devices on automated moisture sensors and timers. The campus has timers currently.

Most of the campus' larger buildings have been converted to the new Metasys management system. However, several of the Campus' small buildings remain offline.

The 1997 Master plan recommended energy audits be done for all campus buildings as suggested by the Oregon Department of Energy (ODOE). Energy plans have been completed with significant energy conservation results:

- Existing fluorescent fixtures with T12 and/or magnetic ballasts have been retrofitted or replaced with T8 or T5 lamps and electronic ballasts.
- Incandescent light fixtures or obsolete fluorescent light fixtures have been replaced with new energy efficient fluorescent light fixtures.

Conditions and Recommendations (continued)

- Motion sensors and night sweep systems have been placed where practical to turn off light when not in use, with the exception of classrooms in Owens Hall and Semon Hall.
- Daylight controls have been added where practical, these include the recent Student Union and Snell Hall renovations.

ODOE provided some of the initial funding for these upgrades. Today OIT is working toward meeting the Governor's energy mandate for sustainability.

Campus Management System Recommendations

- Continue to expand the campus management system with additional network control units to include areas and buildings that are not yet online.
- Continue adding motion detectors and expanding night sweep systems where practical to turn off lights when not in use.
- As the campus management system grows, continue integrating lighting controls into the management system.

Fire Protection and Alarm Systems

Observations

With some minor maintenance modifications campus buildings meet the NFPA 101 Life Safety requirements for existing structures. However, several buildings do not meeting minimum requirements for new construction which include:

- A fire alarm control panel with secondary power with supervised detection and alarm circuits.
- Properly zoned areas with annunciation at a predetermined fire department entrance to the building.
- Ionization smoke detectors in all interior corridors and other selected areas as required.
- Heat detection in all mechanical rooms and mechanical buildings.
- Transmission of an alarm to local fire department and the campus security office.
- Fire sprinkler flow and tamper switches zoned separately at the fire alarm control panel.
- Combination horn and strobes as required, meeting ADA visibility standards while maintaining audibility through each building. Strobes in public restrooms, meeting and conference rooms are required.

All buildings should be brought into conformance with the minimum standards for new buildings. Since the 1997 Master Plan, OIT has completed fire alarm upgrades to the following buildings:

- Gymnasium Building
- Boivin Hall
- Student Union
- Portions of Cornett Hall

As a minimum, new fire alarm control panels will be required at the following additional locations:

- Remaining portions of Cornett Hall
- Semon Hall
- Facilities Services Building

With the new Center for Health Professions building grows a concern regarding fire vehicle access to buildings and pedestrian areas within the campus core. This includes providing access ways for fire vehicles, areas for turning these vehicles, locating fire

Conditions and Recommendations (continued)

hydrants to service the fire vehicles during a fire, and clearly marked fire alarm panels within each building. Facilities Services is aware of these concerns.

Fire Protection and Alarm System Recommendations

- Continue upgrading fire alarm and detection systems within buildings to meet minimum requirements of NFPA, IBC and ADA for new construction.
- Continue to integrate the fire alarm systems into the campus management system.
- Provide and maintain fire access routes throughout the campus including internal pedestrian ways.

Security Systems

Observations

The Campus' security office is located on the north end of Cornett Hall. The office is under staffed and not able to provide coverage around the clock.

Reported crime at OIT is comparable or less than the other schools with the Oregon University System.

At the time of the 1997 master plan the following security systems were in use:

- A portable Varda alarm system monitored the Student Union. The unit had an infrared intrusion detector which after detection sends a voice message to the security officer's radio. This has been replaced with a new system as part of the recent College Union renovation and expansion project.
- The laser labs have key button locks with no remote annunciation. These have been replaced with a key-pad electronic key access.
- The swimming pool has a panic alarm which reports to a monitoring company via a digital dialer.
- A card swipe system has been added to the fuel island which has dramatically reduced fuel theft.

Since the 1997 Master Plan, the key-pad electronic key access system has been expanded to most building entrances and other areas where expensive or sensitive equipment is stored. The key access system has not yet been tied to the campus management system. Information is currently downloaded at each lock to a PDA during security rounds.

A blue-light kiosk is planned for the Cornett North Lot. Additional blue-light kiosks will be added where needed as funding becomes available.

Several areas within the campus are concerns in terms of accidental or deliberate chemical discharge. Additional precautions should be implemented to assure the safety of the items stored under applicable codes. These areas include:

- Chemical Storage (Boivin Hall)
- Hazardous waste storage (Cornett Hall)
- medical waste storage (Cornett Hall)
- Chloride tank storage (Heat Exchange Building)

The use of video recorders has been considered, but may not be appropriate in student activity areas. The use of cameras may be restricted to access tapes only if an event has occurred. With this approach, locating surveillance cameras in parking areas and at faculty lounge/office entry points may be a fitting crime deterrent.

Conditions and Recommendations (continued)

Security System Recommendations

- Implement cyber-lock key access system to include all building entrances and all rooms containing valuable or sensitive equipment.
- Consider tying the electronic key access devices at all existing and new buildings into the campus management system.
- Exterior doors on all campus buildings should be reviewed and possible upgraded to assure they close and lock properly.
- Continue adding blue light kiosks where needed.
- Consider the use of surveillance cameras, tied to recording devices, in specific areas of safety concern, such as parking lots and entrances to faculty lounge/office areas.

Clock Systems

Observations

Originally, the clocks in the Campus' older buildings (Facilities Services Building, Cornett Hall, Boivin Hall, Owens Hall, Snell, and Student Union) were centrally controlled from the Facilities Services Building. However, the central controller never worked properly and was disconnected several years prior to the 1997 Master Plan. Today, clocks in these buildings are adjusted manually at their service point of entry into the building. Maintenance of these clocks is a burden.

Clocks in the newer buildings (Learning Resource Center, renovated portions of the Student Union, Purvine Hall and Residence Hall) are either hard-wired 120 volt non-corrective clocks or battery clocks.

There is no central bell system to notify students of class change. Currently, the instructor releases classes based on the time indicated by the classroom or lab wall clock. With the older clocks reaching their maturity and the newer non-corrective clocks, there can be quite a variation in time throughout the campus.

Clock System Recommendations

- Evaluate all campus buildings to determine if the continued use of a master clock system is practical for individual buildings based on cost, ease of installation, ease of maintenance, and quality of clocks.
- Consider adding a central chime or bell tower to the campus as an element of campus identity and to coordinate class changes.
- Consider a central public announcement system for better preparedness regarding possible emergency events.

Conditions and Recommendations (continued)

Telephone and Data Systems

Observations

During the 1997 Master Plan, OIT was upgrading its technology infrastructure through the Department of Computing and Information Technology (CITS). The design included a CISCO 7000 router, a CISCO Catalyst 5000 switch, ChipCom/3Com concentrators, category 5 wiring inside buildings, and fiber optic wiring between buildings.

Some institutions are moving from category 5 to category 6 cabling. Category 5 cabling was installed at OIT about 13 years ago and has been recertified on two occasions since. Information Technology (IT) personnel believe the category 5 cabling is serving the campus well and may not need upgrading. The Campus Union, on the other hand, has been upgraded with category 6 cabling as part of its recently completed renovation and expansion project.

Snell Hall contains the campus' Point of Presence (POP), which serves as the central computer room for IT on the OIT Klamath Campus. Prior to the Snell Hall upgrade project, air conditioning units and UPS units were added to this main computer room. Equipment racks were also reconfigured, but the room has limited area to add more racks. A suggestion has been made to consolidate the two UPS units into one larger unit to make way for more rack space. This suggestion would provide a few additional feet of rack as a short term solution. A long term solution is to consider a second POP located elsewhere on the Campus. This second POP can offer some redundancy to the IT system as well as providing additional capacity.

All buildings are interconnected and the network infrastructure, including fiber backbone and 10BaseT wiring, is in place to individual building IT equipment closets. The campus lacks a current diagram to describe its distribution network and equipment locations.

IT closets must be secured, should not be shared with other utilities, and should never be used for storage. The following buildings have existing IT closets that need attention regarding these concerns:

- Owens Hall has a shallow closet with sliding doors that are not secure.
- Semon Hall has unsecured IT equipment located within a faculty break room.
- Learning Resource Center has an unsecured IT closet.

IT closet need to be sized so IT equipment has adequate clearance and technicians can work inside with the door(s) closed. IT personnel propose 1 SF of closet space be provided for each 1,000 SF of net building area whenever possible. Power requirements within each IT closet has also increase significantly since the 1997 Master Plan. The equipment in IT closets kick out a great deal of heat and sufficient cooling capacity must be provided to prevent overheating. These factors need to be considered when opportunities arise to renovate existing buildings as well as when construction new buildings.

Wiring for voice, data and video has been extended into select classrooms. These "smart" classrooms also contain ceiling mounted projectors and/or flat screen monitors

Conditions and Recommendations (continued)

when appropriate. Ideally, each campus building should have at least two smart classrooms.

The campus has expanded its number of computer labs since the 1997 Master Plan. The OIT Klamath Falls Campus has approximately 70 labs today and this will increase as new buildings are added and existing buildings are renovated.

The growing number of computers has required a growing number of power outlets. The addition of branch circuit panels with surge protection have been added in coordination with data infrastructure upgrades as buildings are renovated.

Voice and imaging needs for Health Services require capacity to handle and store large volumes of data. IT capacities in the proposed Center for Health Professions should consider providing additional capacity beyond the campus standard.

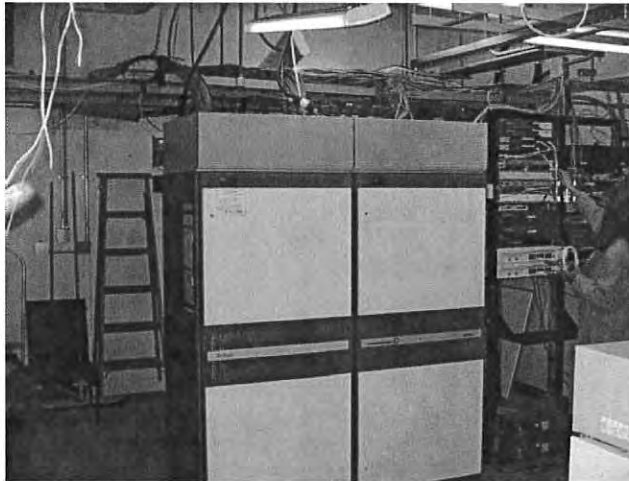


Unsecured and cramped closet at Owens Hall

Conditions and Recommendations (continued)

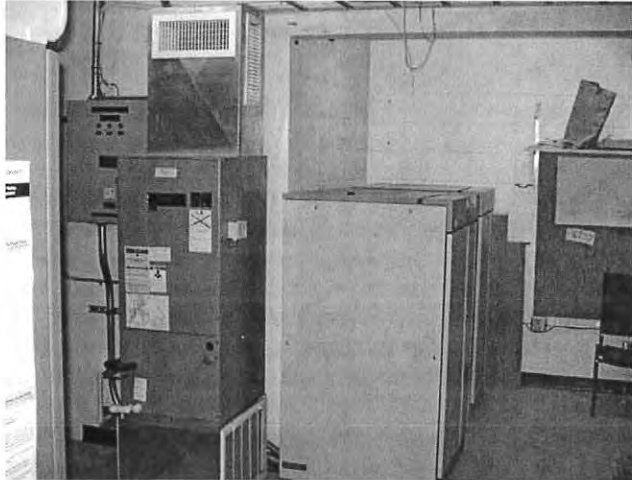


Unsecured Closet at Semon Hall



Point of Presence

Conditions and Recommendations (continued)



Point of Presence Showing Air Conditioning Unit and UPS Units



New Electrical Service for Point of Presence

Conditions and Recommendations (continued)

Telephone and Data Systems Recommendations

- Comprise a line diagram to illustrate IT system distribution and major equipment locations.
- Continue extending wiring for voice, data and video into classrooms.
- Continue to coordinate the extension of data, voice and video with appropriate electrical branch circuit panels and surge protection as buildings are renovated.
- Modify existing closets and provide new closets where appropriate to meet OIT Information Technology standards regarding size, security, cooling capacity, and power requirements.

TV Systems

Observations

During the 1997 Master Plan, the Physical Plant indicated a need for cable television in select classrooms throughout the campus. TCI Cable (Klamath Falls' local cable TV carrier) stated they would provide the wiring if OIT provided the raceway system. The 1997 Master Plan highly recommended negotiating an agreement with TCI only if OIT maintained ownership of the campus video network.

*** [Was an agreement reached?]

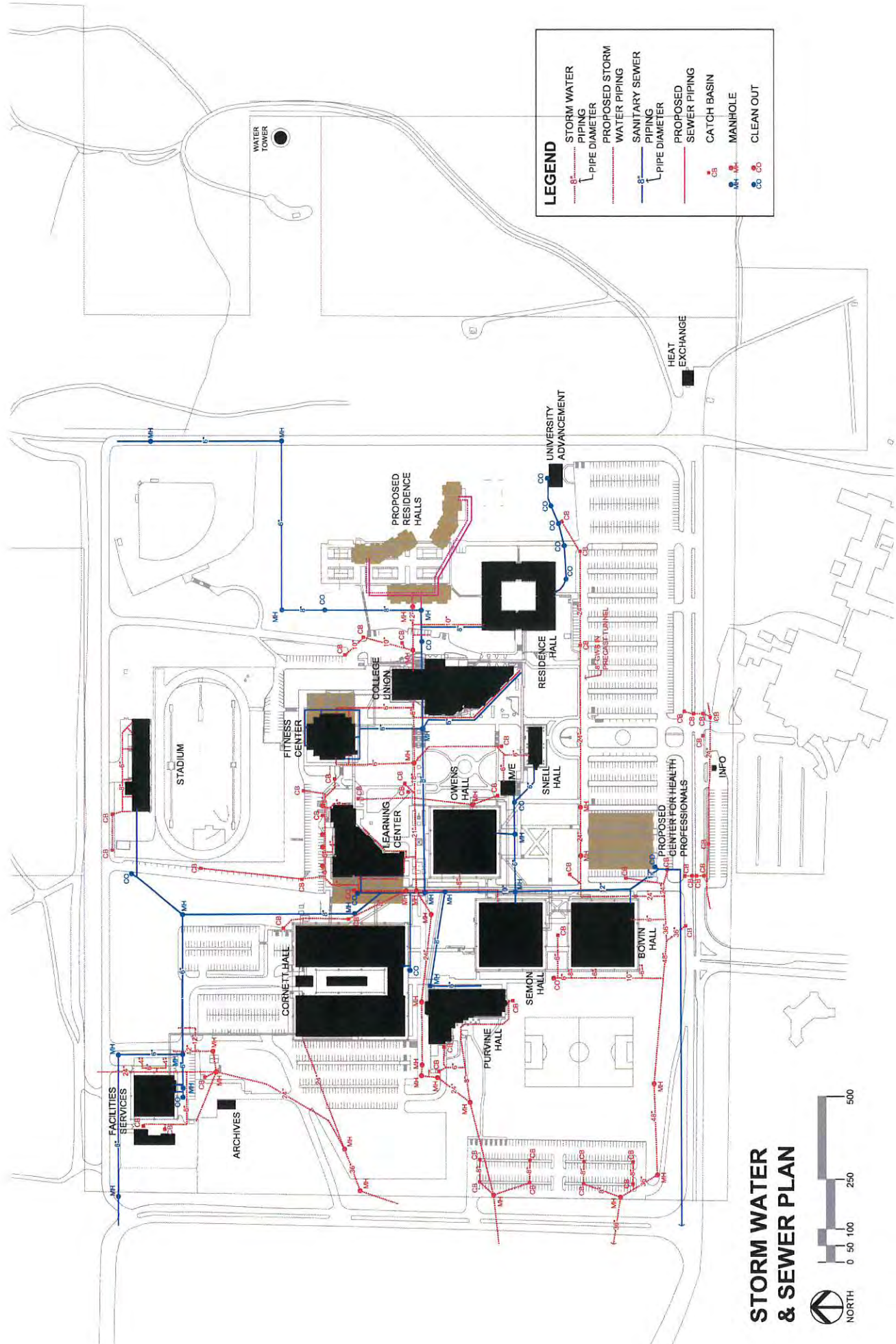
As cable access has made available throughout the campus, there are times when programs are requested that are not offered by TCI. These occurrences include demands for other satellite programming or local origination programs.

Consideration should always be given to how cable TV might utilize the same raceway and outlet system as the communications infrastructure. At the time of the 1997 Master Plan, only the Residence Hall was served by cable TV. Since then, cable access has been extended into select classrooms of several other buildings.

*** [How is the cable TV transmitted; as digital TV using existing cabling or as broad-band using dedicated cabling?]

TV Systems Recommendations

- Continue extending TV access into classrooms.
- Consider digital television as an alternative to broad-band cable TV.

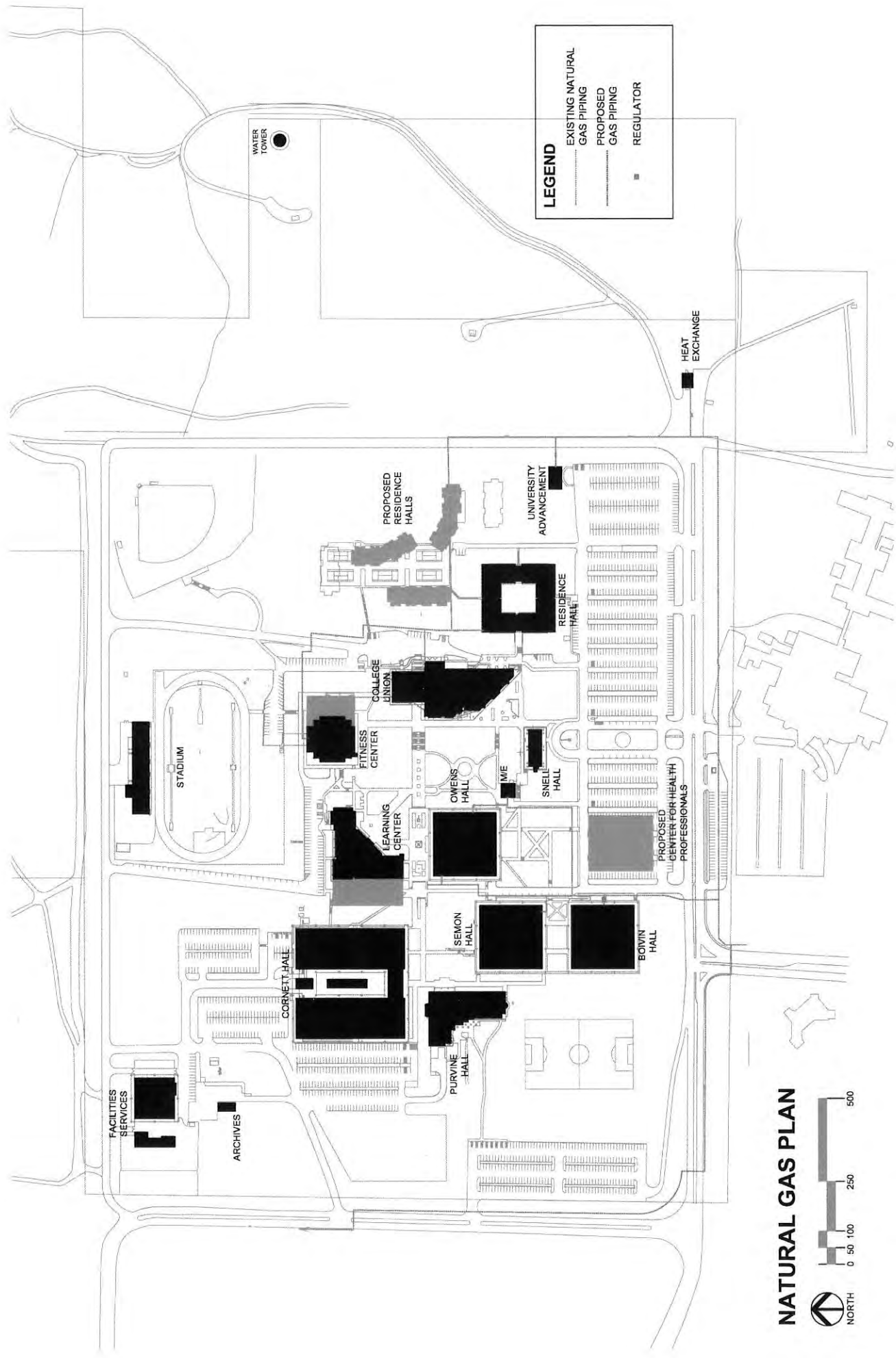


LEGEND

- STORM WATER PIPING
- PIPE DIAMETER
- PROPOSED STORM WATER PIPING
- SANITARY SEWER PIPING
- PIPE DIAMETER
- PROPOSED SEWER PIPING
- CATCH BASIN
- MANHOLE
- CLEAN OUT

STORM WATER & SEWER PLAN

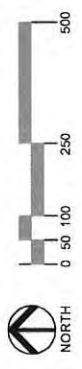




LEGEND

- EXISTING NATURAL GAS PIPING
- PROPOSED GAS PIPING
- REGULATOR

NATURAL GAS PLAN



FACILITIES SERVICES

ARCHIVES

CORNETT HALL

PURVINE HALL

SEMON HALL

LEARNING CENTER

OWENS HALL

ME

SNELL HALL

COLLEGE UNION

FITNESS CENTER

STADIUM

PROPOSED RESIDENCE HALLS

UNIVERSITY ADVANCEMENT

RESIDENCE HALL

PROPOSED CENTER FOR HEALTH PROFESSIONALS

BOVIN HALL

HEAT EXCHANGE

WATER TOWER

BUILDINGS

Owens Hall

<i>Date of Construction:</i>	1964
<i>Gross Area:</i>	38,127 SF
<i>Net Assignable Area:</i>	37,130 SF
<i>Building Function:</i>	Classrooms, Laboratories and Offices
<i>Academic Programs:</i>	Civil Engineering Management Communications Humanities Mathematics

General Condition:

Owens Hall has 17 classrooms ranging in capacity from 15 to 17 student stations. Most of the classroom space is heavily utilized with only a few instances when classrooms are not well scheduled. The drafting lab, Room 224 for example, is not as well scheduled as other rooms due to its dedicated type of instruction. However, it is well utilized for after-hours class work.

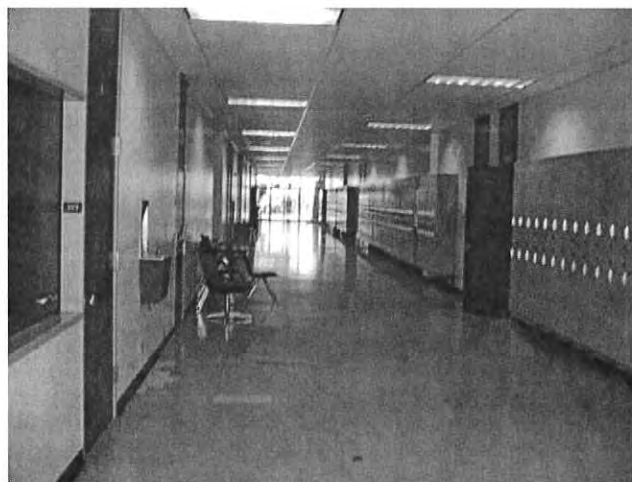
Notes:

- Many classrooms are too small and some have more student stations than code allows.
- Outdated classrooms including some with no changes for over 30 years, except for painting.
- Offices are crowded with many shared double occupancy offices.
- Some classrooms have been converted into open office areas with landscape furnishings.
- Building exterior was painted in 2003.
- Furniture is old and failing.
- Noise concerns due to an abundance of hard surfaces.
- Lighting upgrades have been completed.
- Electrical and HVAC concerns due to the age of the building.
- Poor window coverings.

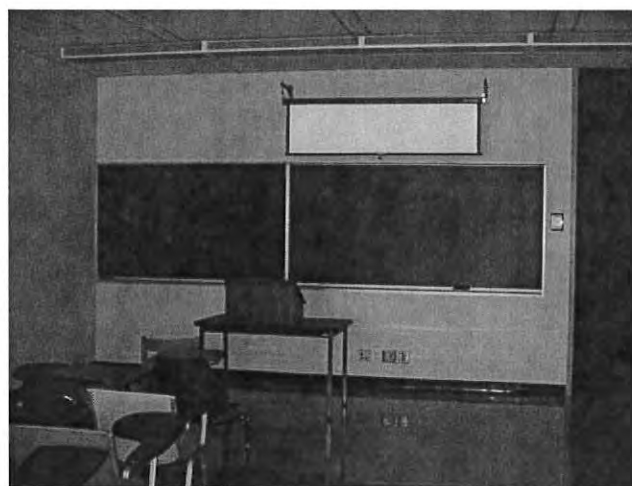
Conditions and Recommendations (continued)



Owens Hall Exterior

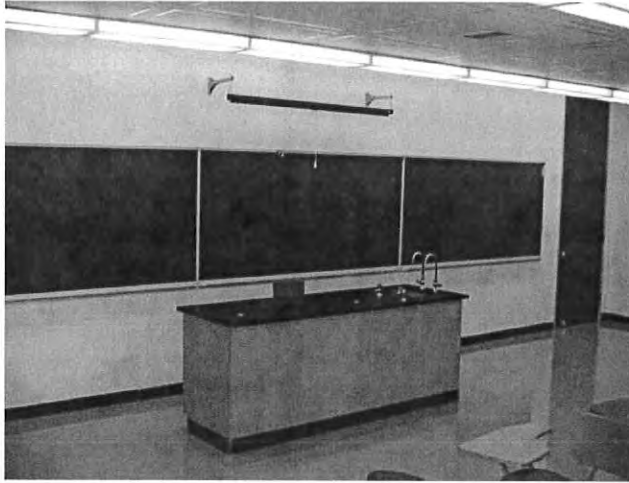


Owens Hall Interior Corridor

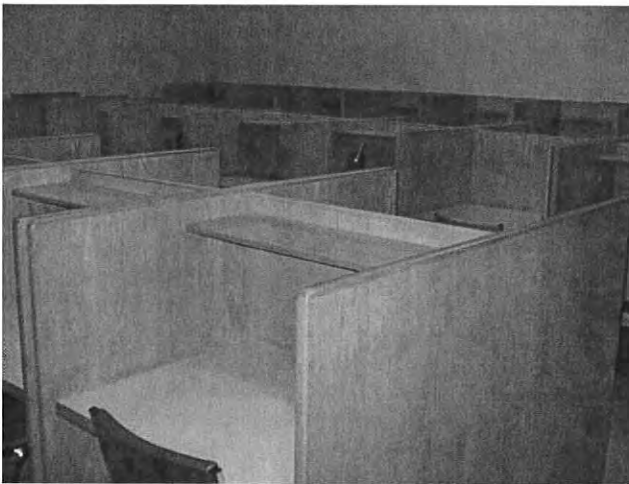


Owens Hall Classroom

Conditions and Recommendations (continued)



Owens Hall Classroom

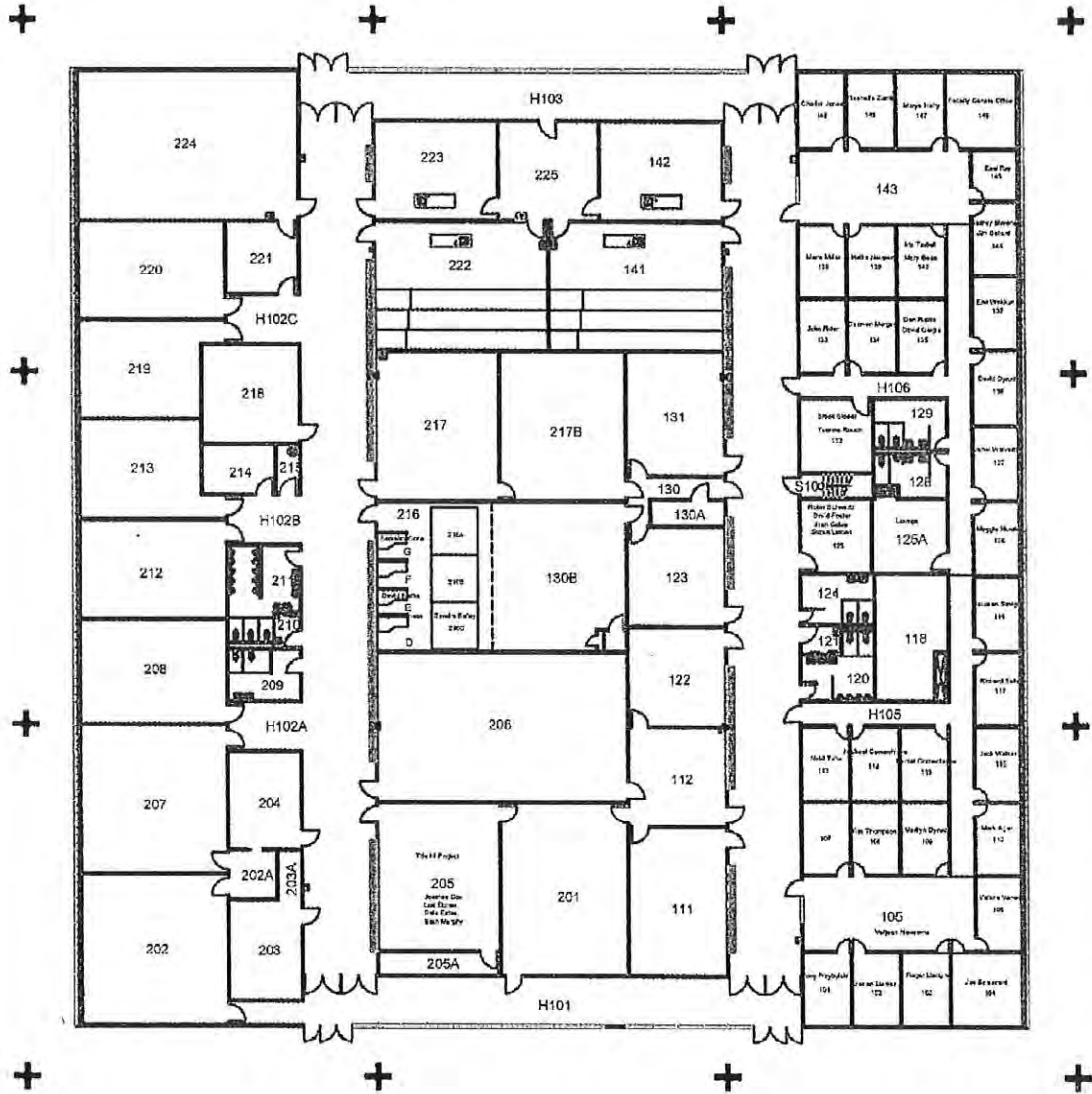


Owens Hall Individual Study



Owens Hall Faculty Offices

Conditions and Recommendations (continued)



Owens Hall Main Floor Plan

Semon Hall

<i>Date of Construction:</i>	1964
<i>Gross Area:</i>	35,930 SF
<i>Net Assignable Area:</i>	34,151 SF
<i>Building Function:</i>	Classrooms, Laboratories and Offices
<i>Academic Programs:</i>	Dental Hygiene Health Technologies Nursing Medical Imaging

General Condition:

Semon Hall has no formal classrooms, which is a major need. All of its laboratories are dedicated labs. Lectures are sometimes scheduled in the Physics Lab due to lack of instructional space. Since its labs are dedicated, they are utilized by specific programs who utilize their labs on a regular basis.

Most of the programs currently housed in this building are planned to be moved into the new Center for Health Professions upon completion. Once vacated, this building's generous structural bay spacing and high ceiling will easily accommodate renovations to expand other OIT programs in need of space.

Notes:

- Outdated laboratories.
- Outdated equipment. However, the Dental Hygiene Lab has just been equipped with new dental chairs and associated equipment. To honor this investment, consideration should be given to relocate this recently installed equipment into the new Center for Health Professions.
- Building exterior was painted in 2003.
- Noise concerns due to an abundance of hard surfaces.
- HVAC dampers and controls are functional but are in poor shape and need upgrading.
- Asbestos tile floors have been replaced in hallways, but some areas remain.
- Portions of asbestos ceiling tiles have been replaced, but much of the original ceiling remains.
- New hygiene lab and related classroom renovations, approximate cost \$1 million.

Conditions and Recommendations (continued)



Semon Hall Exterior

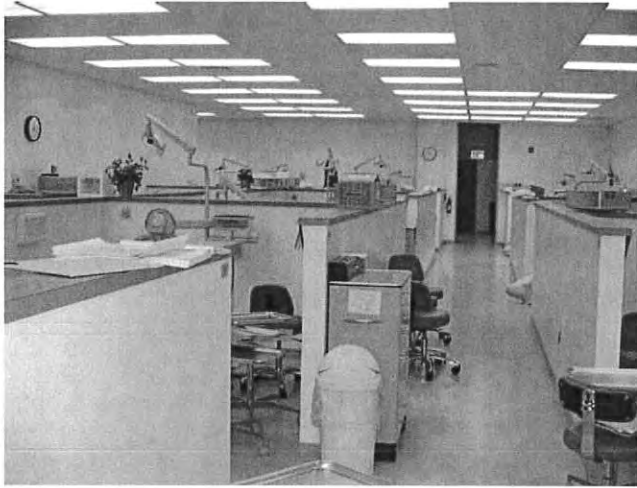


Semon Hall Interior Corridor

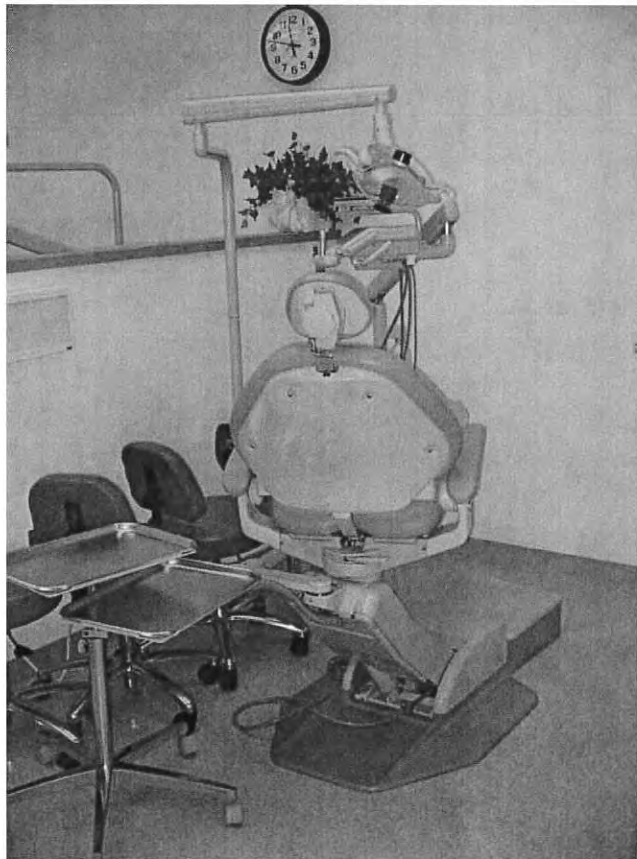


Semon Hall Interior Corridor

Conditions and Recommendations (continued)

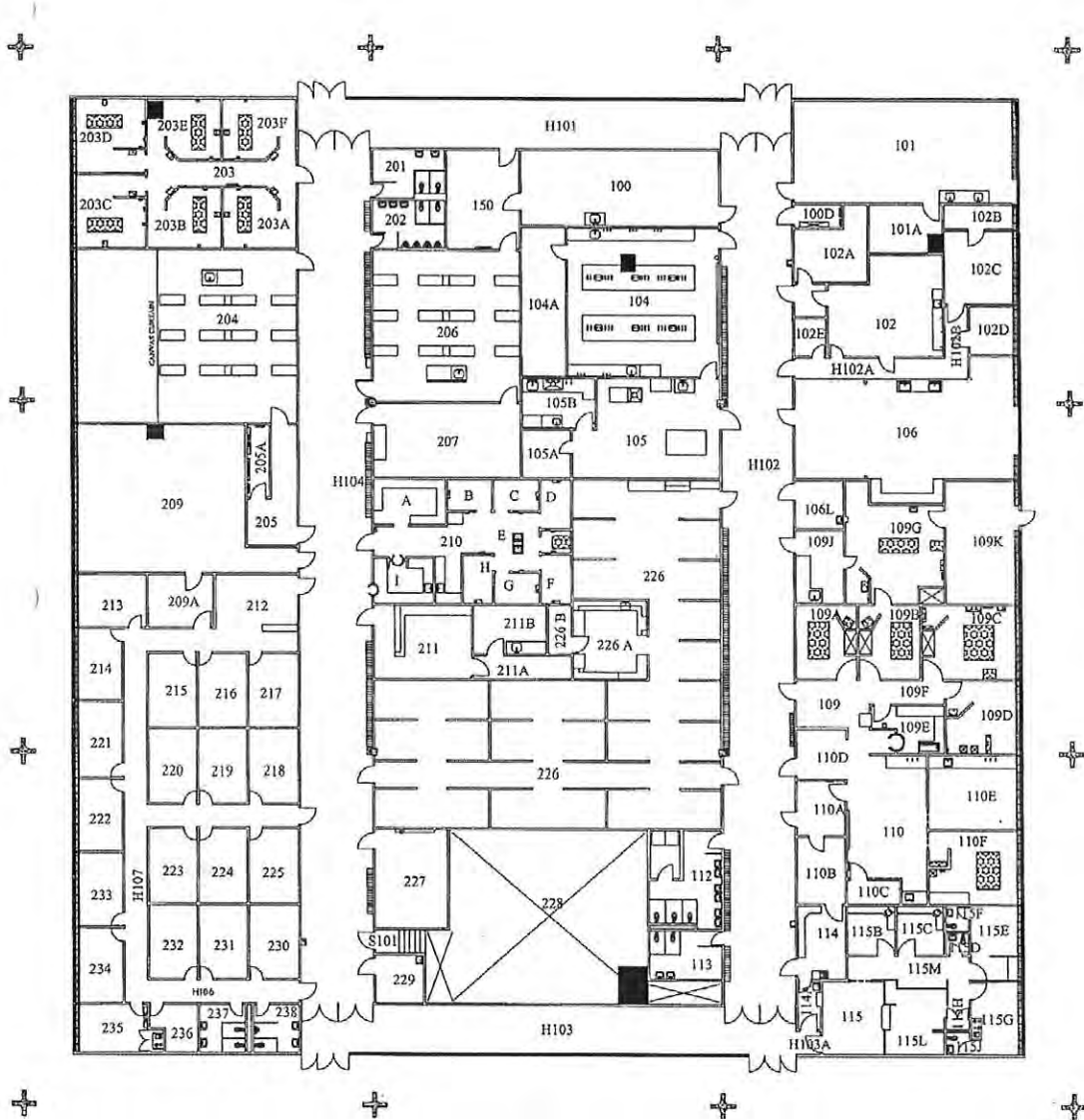


Semon Hall Dental Hygiene



Semon Hall Dental Hygiene

Conditions and Recommendations (continued)



Semon Hall Main Floor Plan

Boivin Hall

<i>Date of Construction:</i>	1977
<i>Gross Area:</i>	44,927 SF
<i>Net Assignable Area:</i>	41,726 SF
<i>Building Function:</i>	Classrooms, Laboratories and Offices
<i>Academic Programs:</i>	Computing Sciences (CITS) Manufacturing and Mechanical Engineering Nursing Natural Sciences

General Condition:

Formerly referred to as South Hall, Boivin Hall has 9 classrooms ranging in capacity from 15 to 66 student stations. These classrooms are generally well utilized. Boivin Hall also has 5 Chemistry/Biology Labs and 4 Computer Labs. There are periods during the week when these labs are underutilized. However, they are quite extensively utilized for after-hours student work.

Boivin Hall has 11 double occupancy faculty offices primarily used for the School of Health, Arts and Sciences. Once these offices have been relocated to the new Center for Health Professionals Building, they may be converted to private offices for the remaining faculty or the space may be used to accommodate other program expansion needs.

Small Business Development offices and Geothermal Heating offices are currently housed in Boivin Hall. The 2000 Facility Assessment Study suggested relocating these offices to other locations to open up internal expansion space within Boivin Hall.

The nursing programs housed in this building are planned to be moved into the new Center for Health Professions upon completion. The vacated space will allow some expansion of the remaining programs.

Consider moving all electronics (IT services, the phone group, and associated personnel) to the basement as a way to create a one-stop-shop for voice/data systems and to free up space for more classrooms and offices on the main floor. This would also consolidate much of the building's cooling load to one location.

Notes:

- Basement needs an accessible access to meet ADA compliance.
- Mechanical systems were upgraded in 2001 and are in good shape except for the IT server room which lacks appropriate cooling capacity.
- Interior finishes, especially floors, are in need of upgrading.
- All rooms need painting.

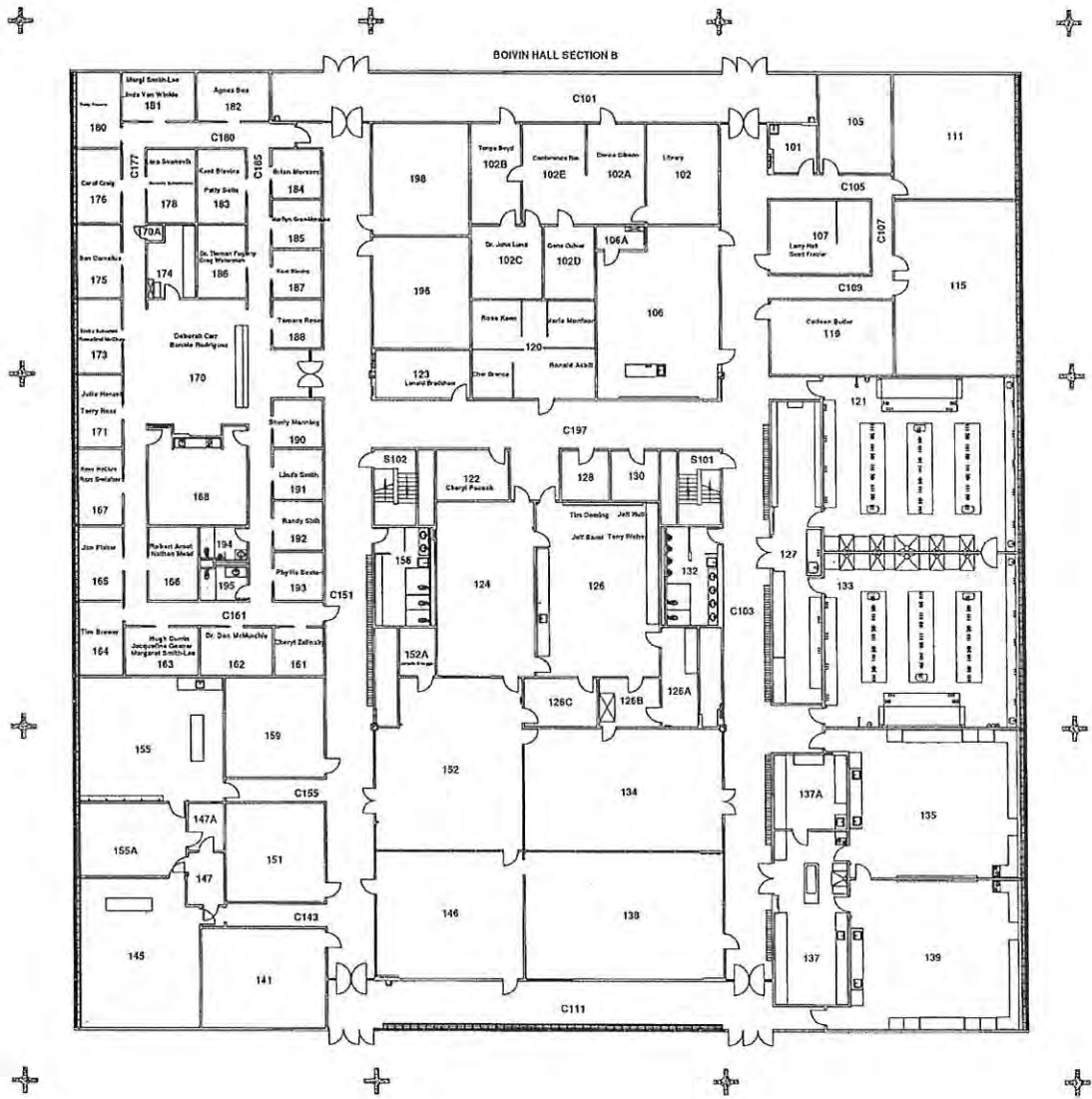
Conditions and Recommendations (continued)

- Exterior classrooms need new wall coverings.
- Noise concerns due to an abundance of hard surfaces.
- Building exterior was painted in 2003.
- Outdated classroom furnishings and equipment.
- Shared faculty offices are crowded.



Boivin Hall Exterior

Conditions and Recommendations (continued)



Bovin Hall Main Floor Plan

Conditions and Recommendations (continued)

Purvine Hall

<i>Date of Construction:</i>	1987
<i>Gross Area:</i>	49,696 SF
<i>Net Assignable Area:</i>	47,376 SF
<i>Building Function:</i>	Classrooms, Laboratories and Offices
<i>Academic Programs:</i>	Computing Systems Engineering Electronic Engineering Technology

General Condition:

Purvine Hall has two levels of instructional space. The lower level has 12 laboratories used strictly for Electronics, Laser and Computer engineering Technologies. There are no classrooms on this lower level. The Electronics and Laser Labs have a generally lower utilization than the Computer Labs due to the specific technologies which occupy those labs. More Computer Labs are desired at this lower level.

The upper level of Purvine Hall has 10 classrooms, 2 auditoriums, and 4 Electronic Engineering Technology (EET) Laboratories. The classrooms range in size from 20 to 37 student stations and are generally fully utilized. The EET labs are under utilized due to the specific technologies occupying those labs.

Notes:

- This building is in generally good condition. However, some painting and new window coverings are needed.



Purvine Hall Exterior

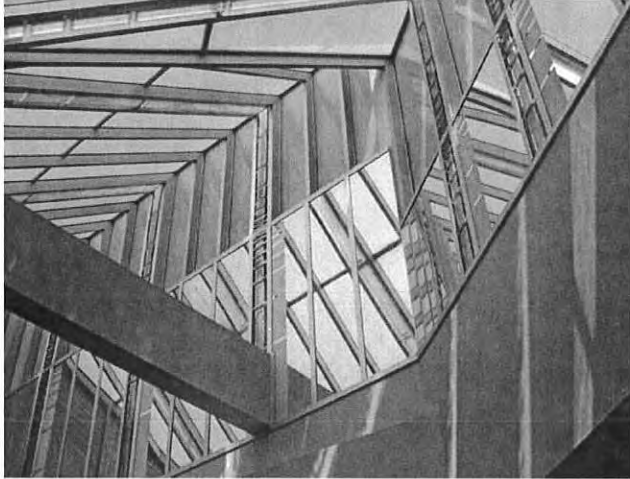


Purvine Hall Exterior



Purvine Hall Interior

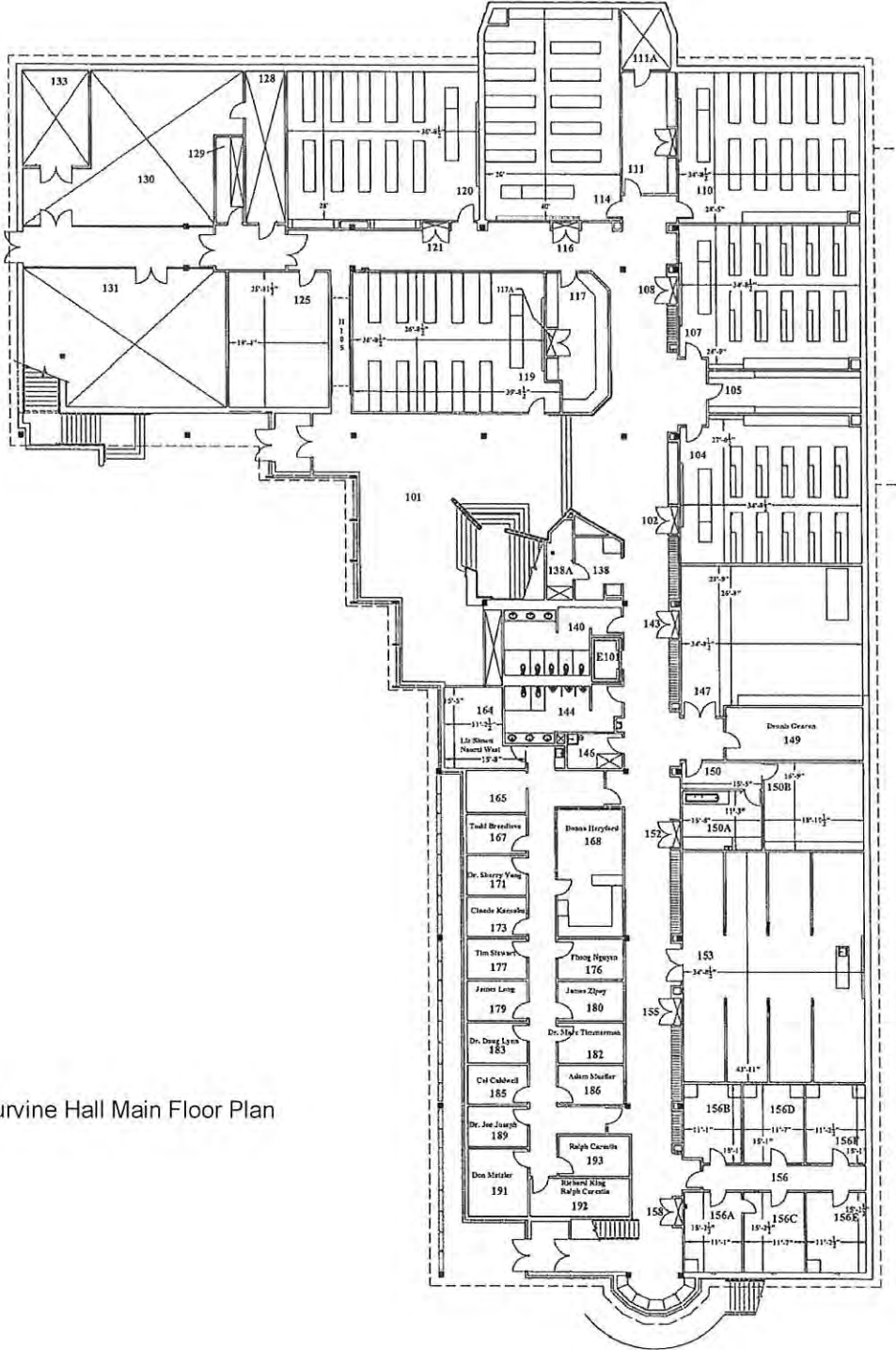
Conditions and Recommendations (continued)



Purvine Hall Skylight

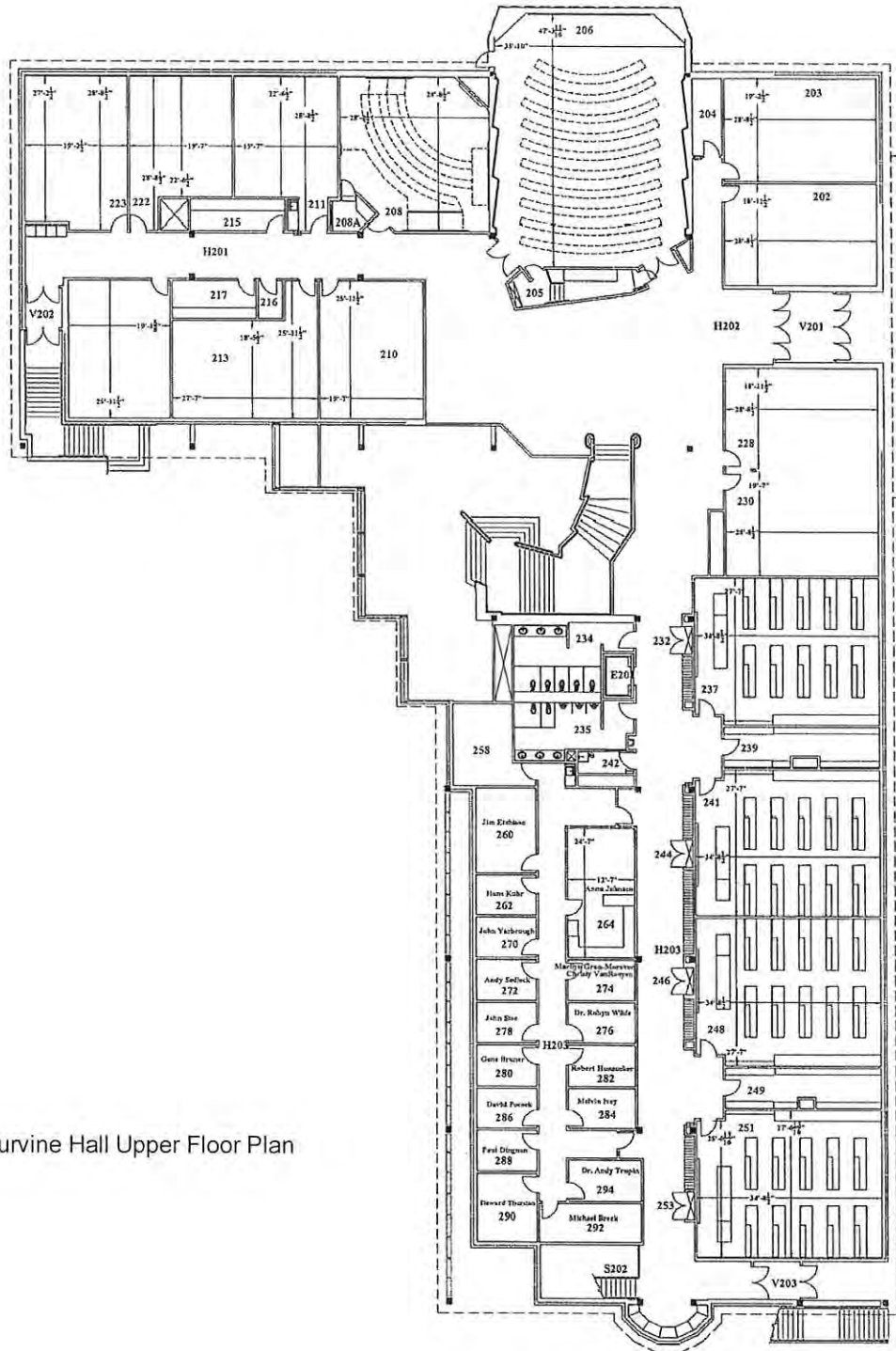


Purvine Hall Computer Lab



Purvine Hall Main Floor Plan

Conditions and Recommendations (continued)



Purvine Hall Upper Floor Plan

Cornett Hall

<i>Date of Construction:</i>	1965 (remodeled 1999)
<i>Gross Area:</i>	109,000 SF
<i>Net Assignable Area:</i>	92,125 SF
<i>Building Function:</i>	Classrooms, Laboratories and Offices
<i>Academic Programs:</i>	Health Sciences Civil Engineering Manufacturing and Mechanical Engineering

General Condition:

Cornett Hall was remodeled in 1999 to accommodate two schools, the School of Health Arts and Sciences and the School of Engineering and Industrial Technology. The newer programs (School of Health, Arts and Sciences) in Cornett Hall are specific to their specialties and are well utilized for their programs. The older programs (School of Engineering and Industrial Technology), on the other hand, are not as efficiently utilized in terms of space usage. Some function with obsolete and unused equipment, such as the wind tunnel testing equipment.

A new anatomy/physiology lab was also added during the 1999 renovations.

The Health, Arts and Sciences programs will be moving into the new Center for Health Professions building. Once these areas have vacated, this building's generous structural bay spacing and high ceiling will easily accommodate renovations to expand other OIT programs in need of space.

Notes:

- There is a lack of accessibility to major parts of the building in order to meet ADA compliance.
- Storage of obsolete equipment.
- Poor space utilization.
- Mechanical systems concerns.
- Interior finishes need updating.
- The building's exterior needs repair.
- Noise concerns due to an abundance of hard surfaces and noise generating equipment.

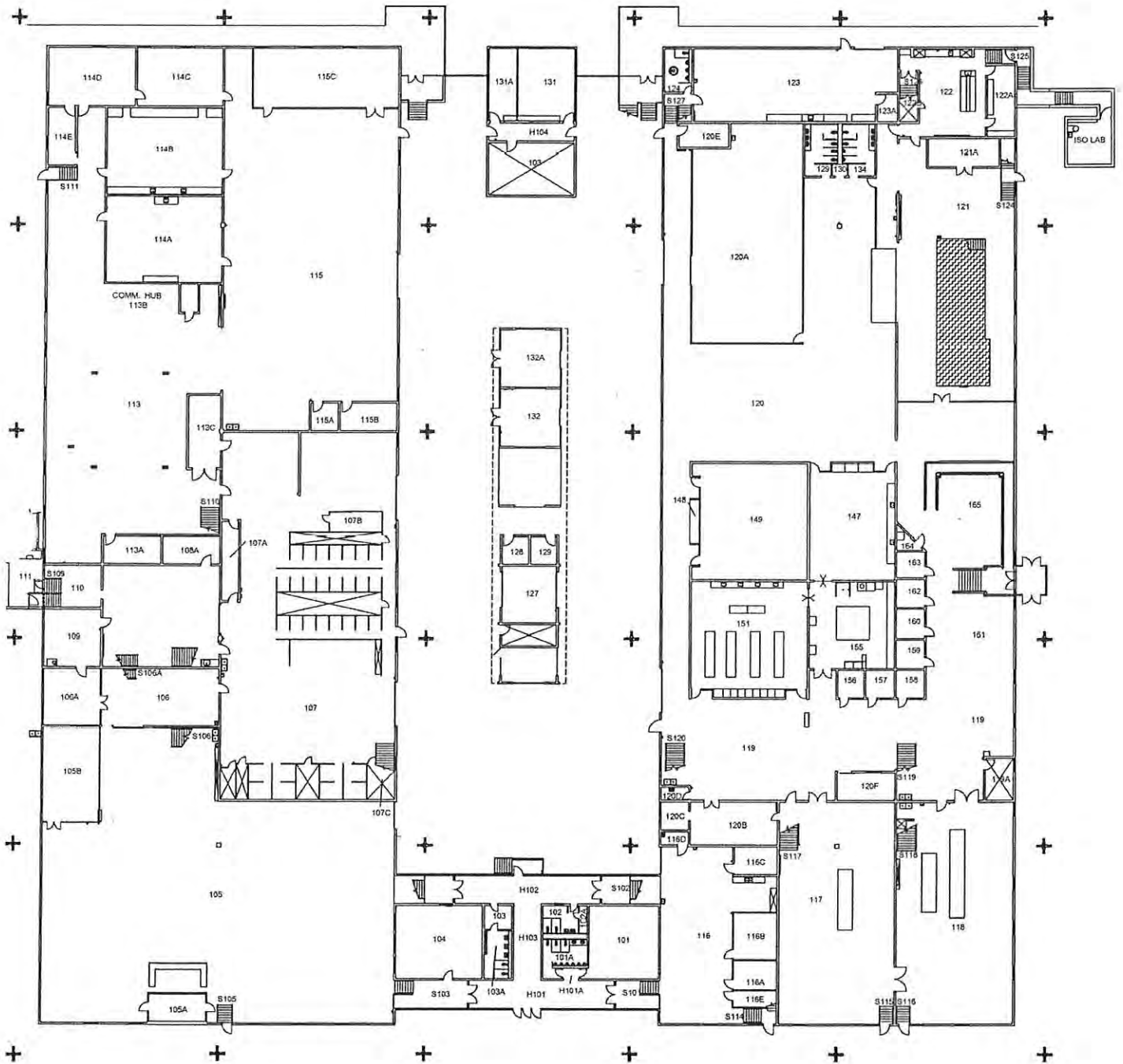
Conditions and Recommendations (continued)



Cornett Hall Exterior



Cornett Hall Interior



Cornett Hall Main Floor Plan

Conditions and Recommendations (continued)

Snell Hall

<i>Date of Construction:</i>	1964
<i>Gross Area:</i>	14,784 SF
<i>Net Assignable Area:</i>	14,190 SF
<i>Building Function:</i>	Administration
<i>Academic Programs:</i>	Administrative Offices Business Office Cashier Human Resources Marketing and Development Office

General Condition:

Snell Hall houses the main Campus' administration and requires privacy, security and suitable space to meet the public.

Snell Hall is currently undergoing restoration, which should correct most of the building's short comings. Upgrades, totaling just under \$2 million in construction costs, will include:

- Structural upgrade to lateral resisting system to meet current seismic compliance.
- Improved lighting and lighting circuit panels.
- Improved electrical ground system.
- Improved switchgear equipment.
- Windows re-glazed with high performance glass.
- Improvements to HVAC system.

The building is located prominently at the end of the Campus' entry drive. Although Snell Hall will continue to contain the administrative and executive offices for the Institute, OIT does not feel the appearance of Snell Hall properly symbolizes the Institute's desired marketing image.

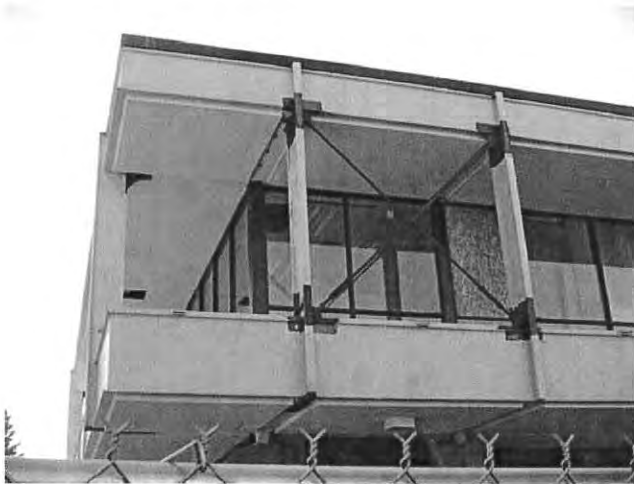
Notes:

- Office areas are overcrowded.
- Conference room space is very limited.
- Basement areas lack suitable accommodations for offices.

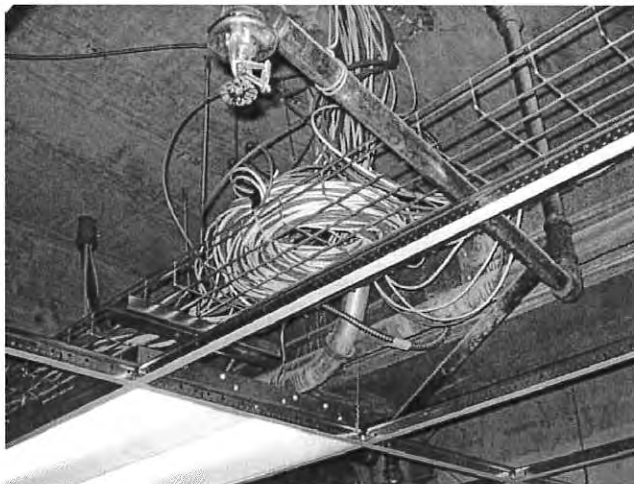
Conditions and Recommendations (continued)



Snell Hall Exterior

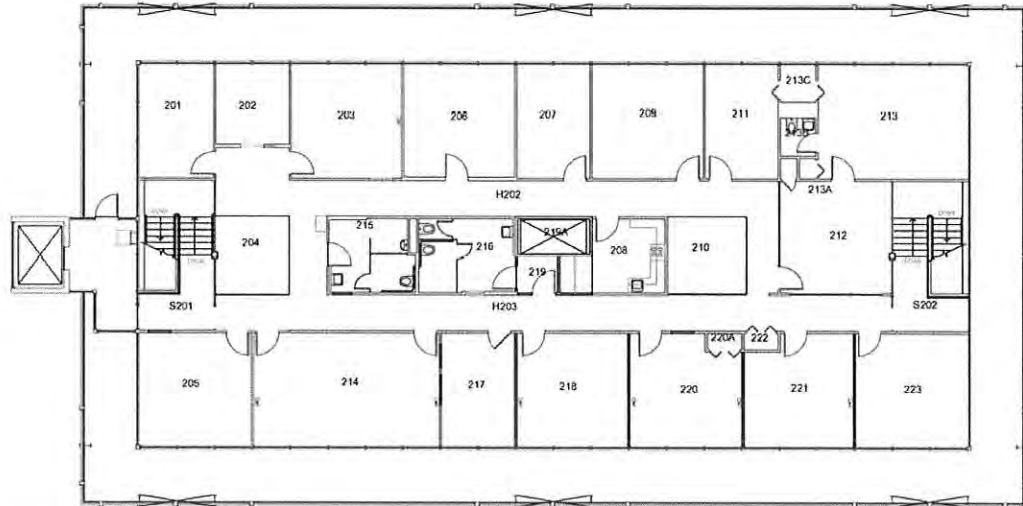


Snell Hall Structural Upgrade

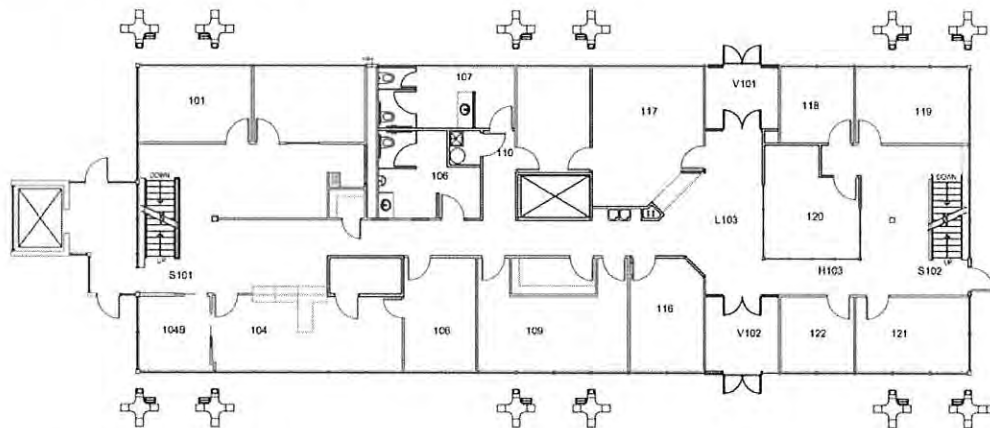


Snell Hall Utility Upgrade

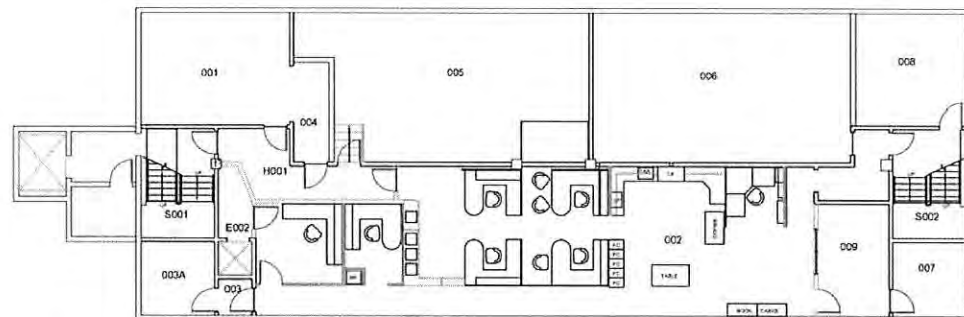
Conditions and Recommendations (continued)



Snell Hall Upper Floor Plan



Snell Hall Main Floor Plan



Snell Hall Lower Floor Plan

Learning Resource Center

<i>Date of Construction:</i>	1981
<i>Gross Area:</i>	51,000 SF
<i>Net Assignable Area:</i>	48,129 SF
<i>Building Function:</i>	Library
<i>Academic Programs:</i>	Library Shaw Historical Library Media Services Academic Support Center Television Studio Counseling and Testing Career Services

General Condition:

The library was originally designed to hold 117,000 volumes and it now has more than 120,000 in its stacks. According to the 2000 Facilities Assessment Study, the Northwest Association of Schools and Colleges' Commission on Colleges has recommended that OIT address the issue of collection space and adequate study space in the Learning Resource Center.

In order to enlarge the stack space by the suggested 5,000 SF as well as provide additional group study rooms, certain programs within the Learning Resource Center may need to be relocated for improved efficiency. For example, relocating Counseling and Testing, Career Services, and Academic Support to another location like the recently remodeled Student Union would free up about 3,400 SF. Another option might be to expand the building externally to the west or north to accommodate the growing need for more stacks and study space.

Notes:

- The Learning Resource Center appears to be in generally good condition.
- More space is a need to add more shelving to keep up with the Institute's growing volume of resource materials.
- According to the 2000 Facilities Assessment Study, mixed uses in the building may be impacting operational efficiencies.
- Overhead planters leak.
- Interior finishes are in need of upgrading.
- Additional student study and meeting spaces are needed.

Conditions and Recommendations (continued)



Learning Resource Center Exterior



Learning Resource Center Exterior



Learning Resource Center Exterior

Conditions and Recommendations (continued)

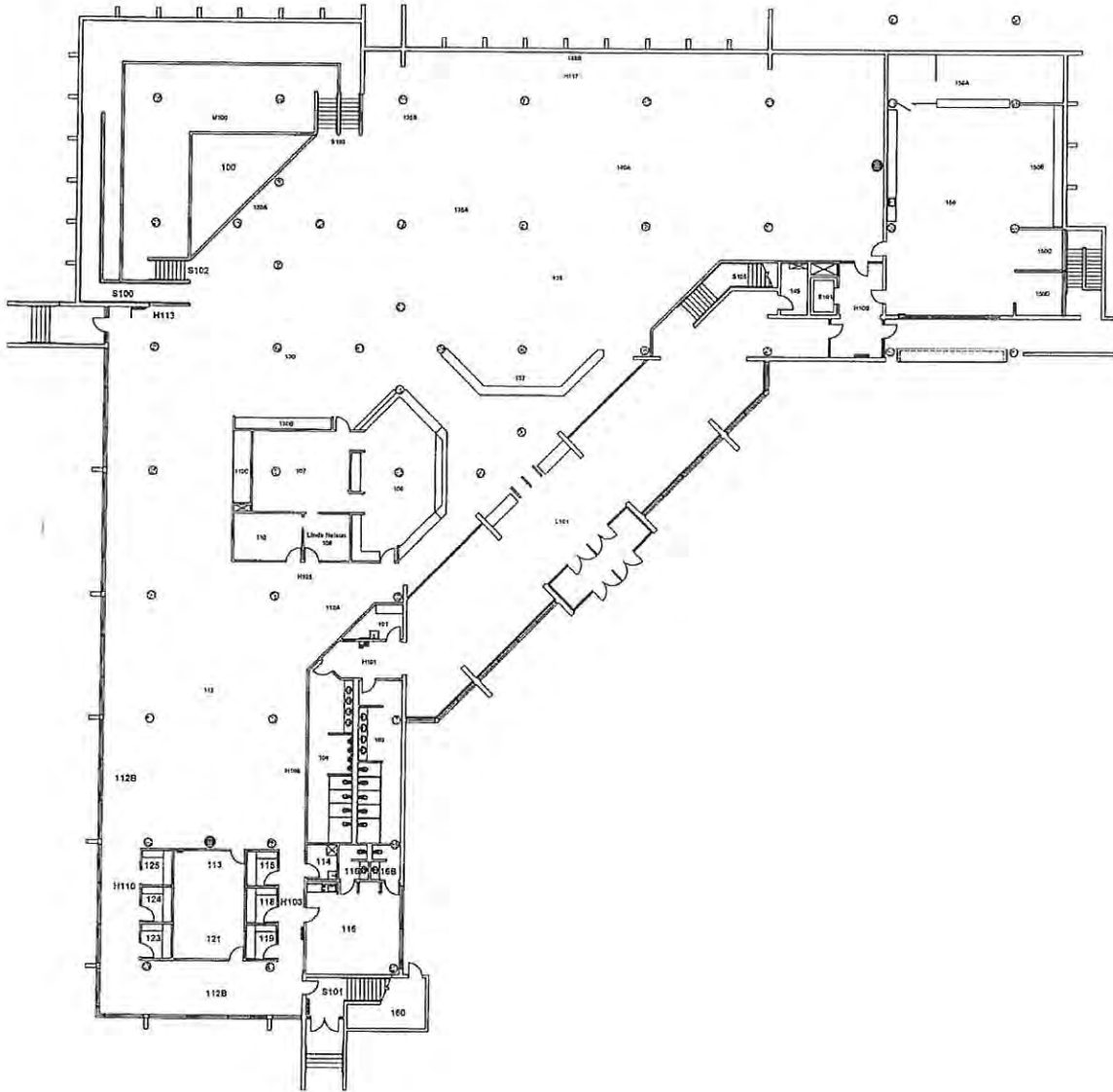


Learning Resource Center Interior



Learning Resource Center Interior

Conditions and Recommendations (continued)



Learning Resource Center Main Floor Plan

Conditions and Recommendations (continued)

College Union

<i>Date of Construction:</i>	1964 (renovated 1971, 1978 and 2003)
<i>Gross Area:</i>	79,735 SF
<i>Net Assignable Area:</i>	75,769 SF
<i>Building Function:</i>	Student Activities
<i>Academic Programs:</i>	Financial Aid Career Services Office of the Vice President of Student Affairs Multi-Cultural Student Services ASOIT Programming Board Bookstore Food Service Conference Center Outdoor Program Radio Station Student Newspaper Student Print Center

General Condition:

The College Union has been recently expanded and renovated correcting the concerns mentioned in the 2000 Facility Assessment Study and 1997 Master Plan. The 2003 expansion/renovation project included 10,000 square feet of new space and cost just over \$7 million in construction costs.

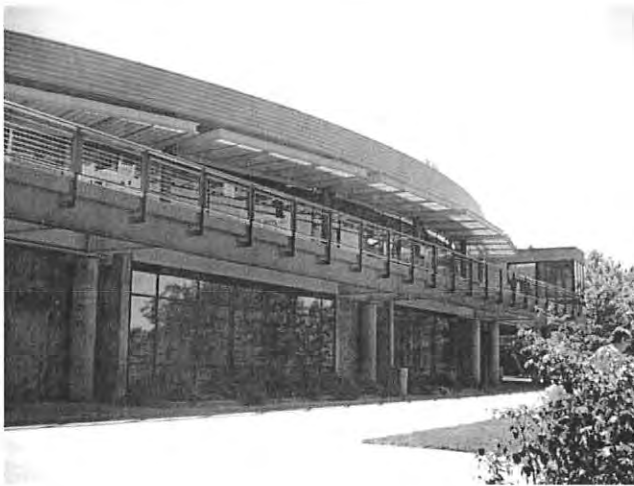
The centralization of student services in the College Union creates a hub of activity the campus had been lacking. The project has made it easier and more efficient for students to take care of their business without having to run all over campus. While there was pressure to move this activity hub toward the eastern academic zone, it was not practical or cost effective to move the food preparation and service access functions already in place at the College Union.

Expansion of the College Union has also brought interest from the community. The new exterior plaza overlooking the Campus' pedestrian plaza provides a picturesque setting for community and college events.

Conditions and Recommendations (continued)



Steps Leading to the College Union Plaza



College Union Exterior

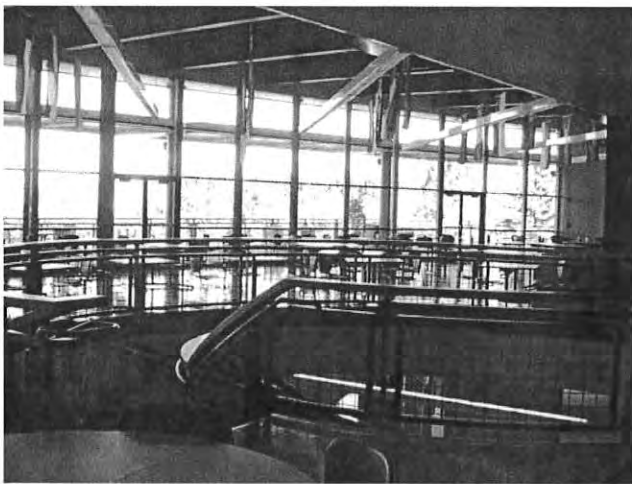


College Union Upper Plaza

Conditions and Recommendations (continued)



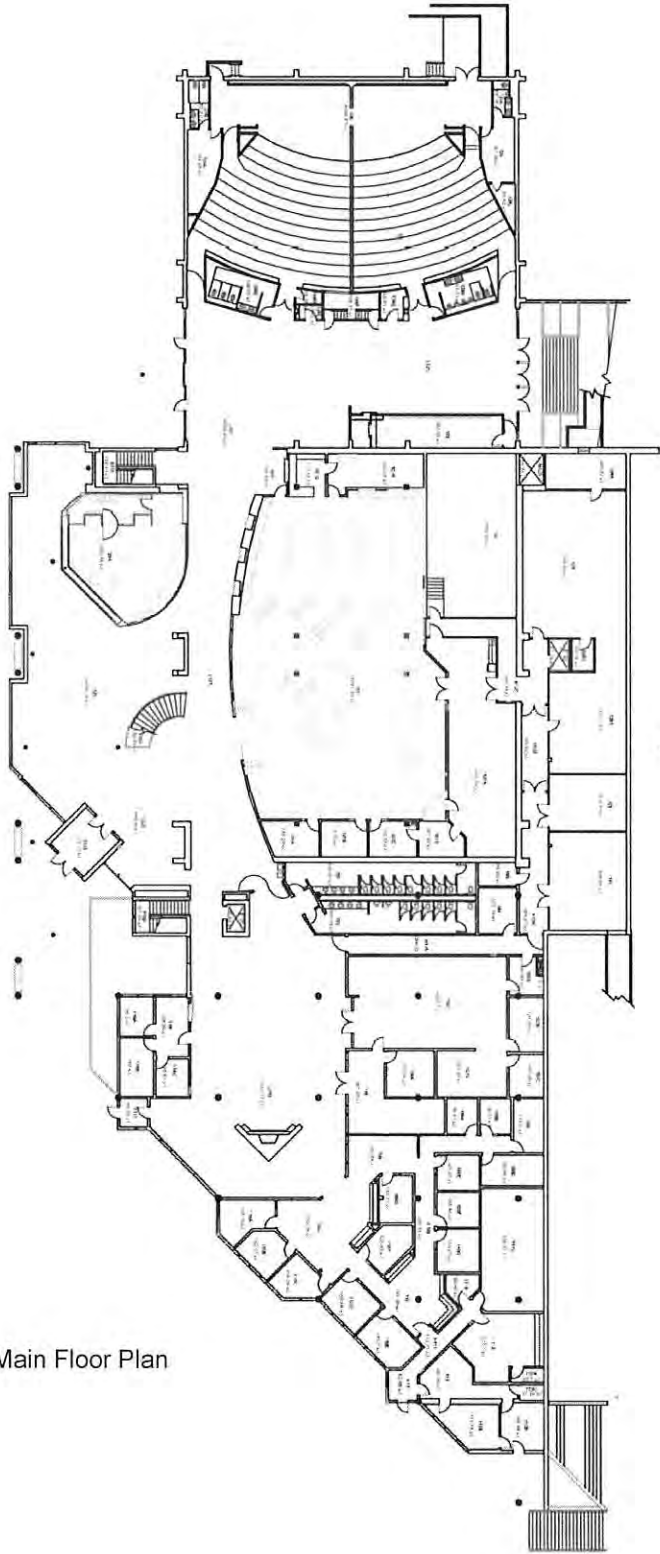
College Union Interior



College Union Interior



College Union Interior



College Union Main Floor Plan

Gymnasium and Fitness Center

Date of Construction: 1965 (addition 2003)

Gross Area: 57,535 SF

Net Assignable Area: 50,598 SF

Building Function: Physical Education

Academic Programs: Gymnasium
Swimming Pool
Fitness Center

General Condition:

The original Gymnasium and Fitness Center was designed to accommodate a student body of only 800. Although a recent expansion has provided additional locker rooms space, the building remains undersized for the current student population.

An addition (approx. \$400K construction cost) was erected to move the fitness center down to a more convenient location on the ground floor. Even with the addition, the building remains too crowded to accommodate the programs in place. As a result, programs are being compromised by continued overuse, crowding, and poor circulation. In order to support the goals of OITs Strategic plan, a significant addition and renovation of this building is warranted.

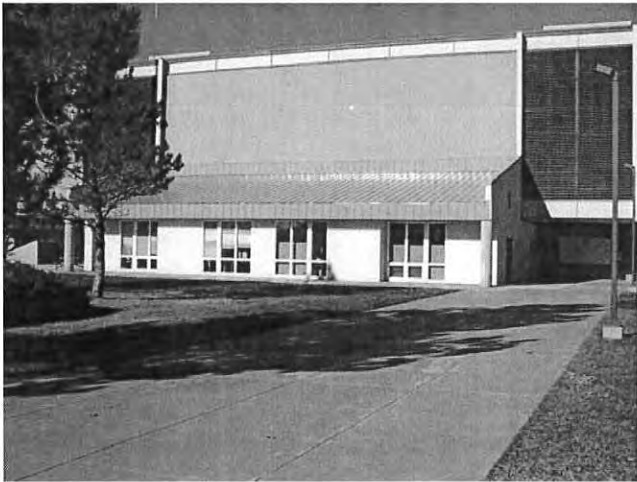
Notes:

- Crowded.
- Outdated facility for Intercollegiate Athletics.
- HVAC systems, dampers, and controls are in very poor condition.
- The outdoor running track was resurfaced in 2003.

Conditions and Recommendations (continued)



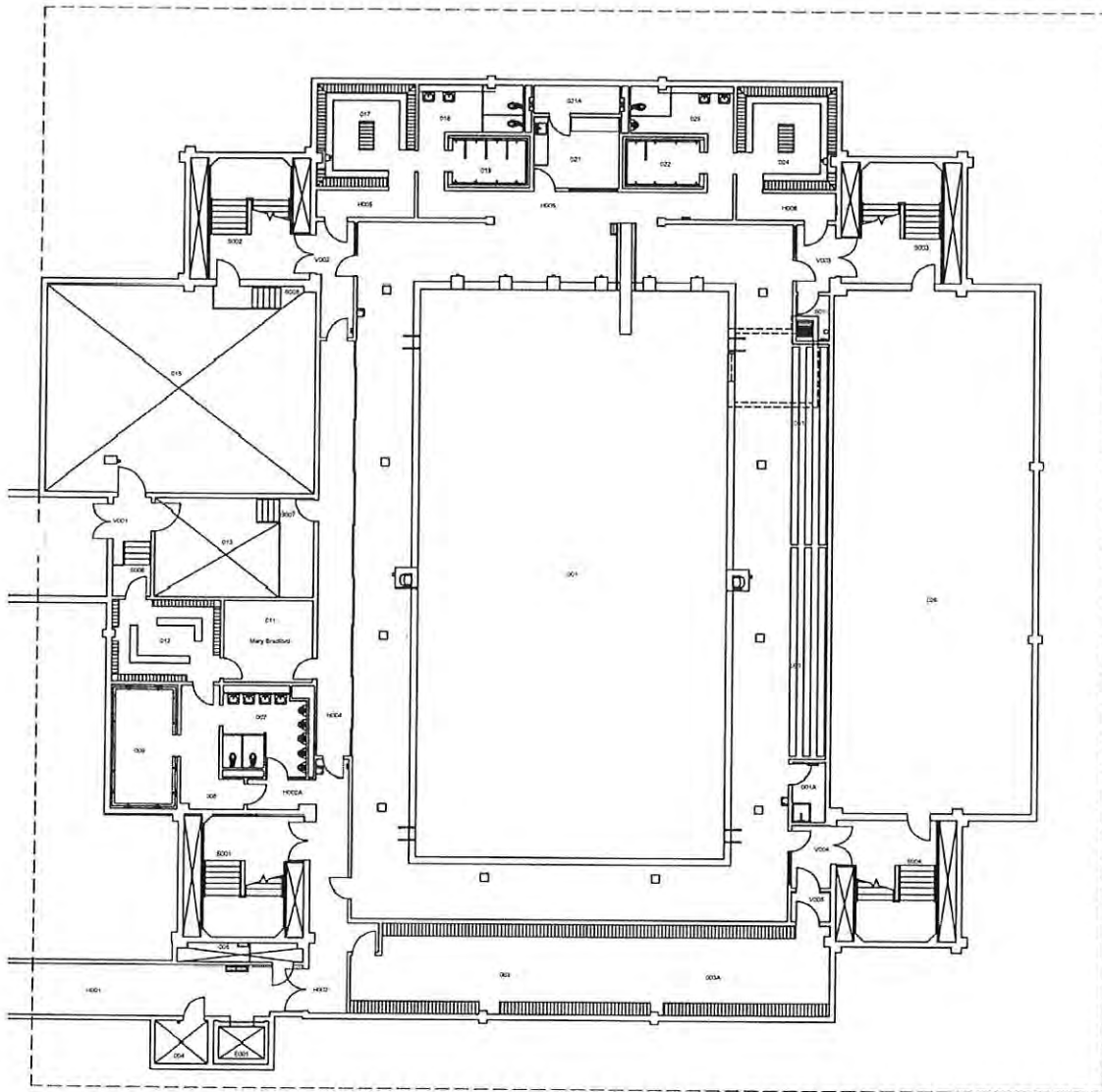
Fitness Center Exterior



Fitness Center Showing a Recent Addition

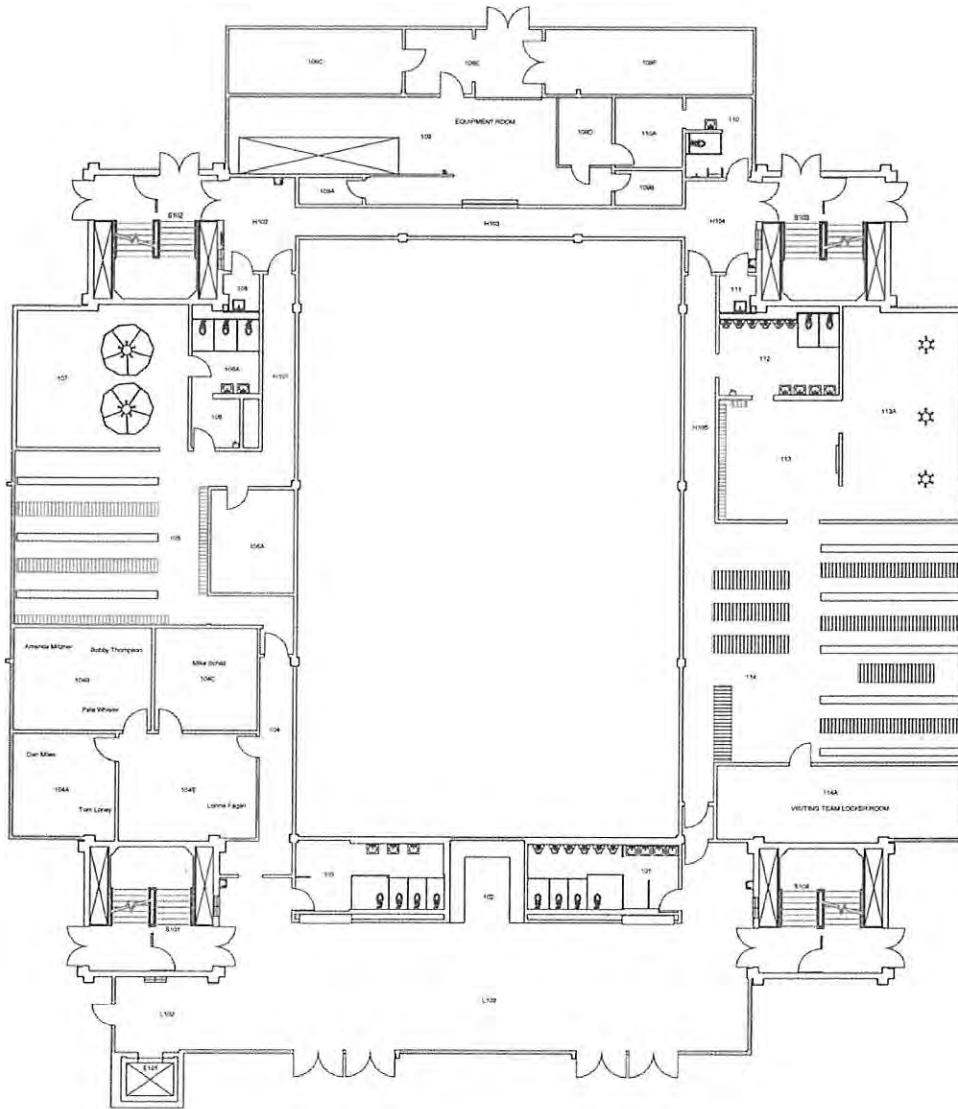


Fitness Center Interior

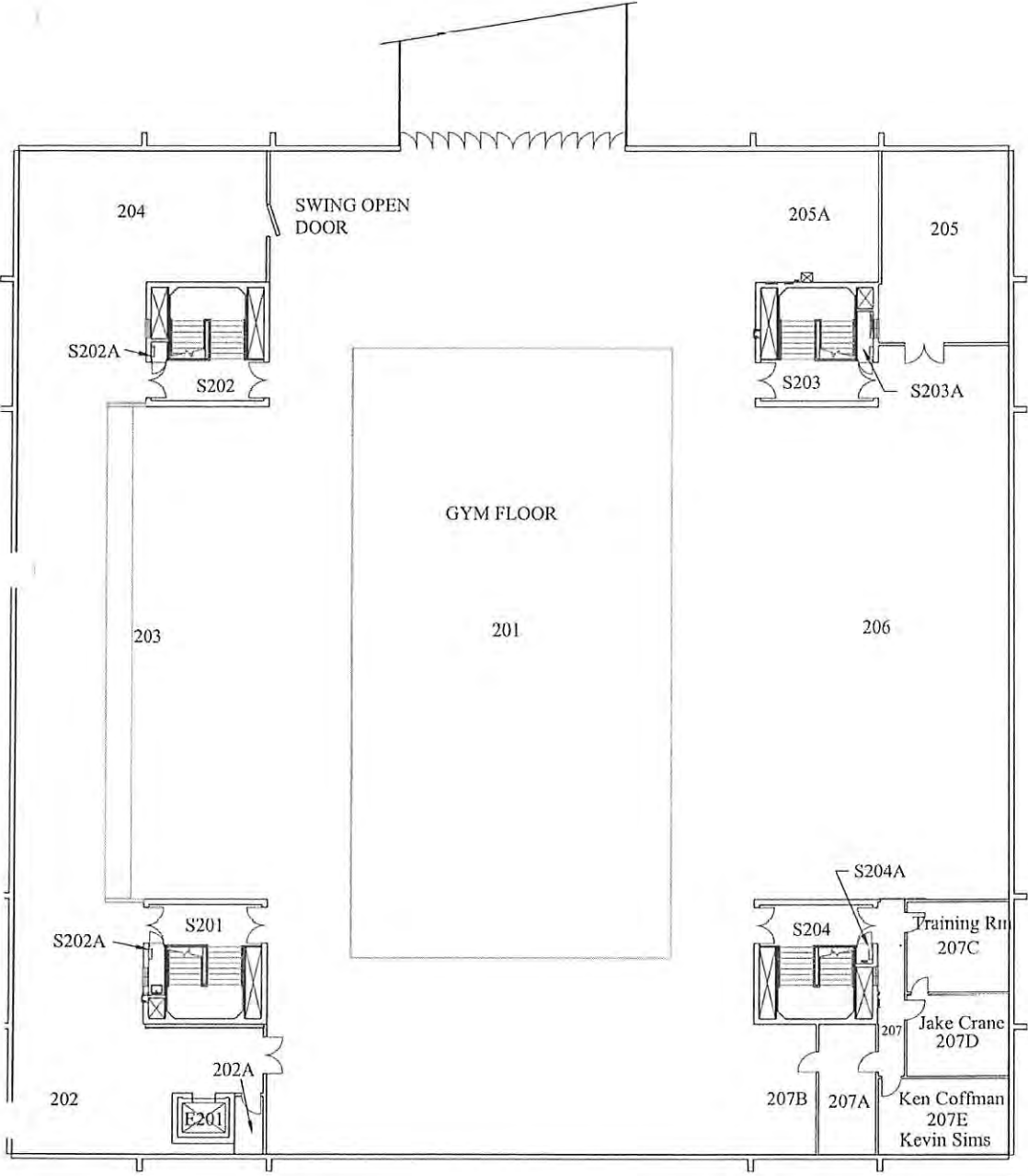


Fitness Center Pool Floor Plan

Conditions and Recommendations (continued)



Fitness Center Locker Floor Plan



Fitness Center Gymnasium Floor Plan

Conditions and Recommendations (continued)

Moehl Stadium

Date of Construction: 1979
Gross Area: 1,903 SF
Net Assignable Area: 1,436 SF
Building Function: Offices, Concessions, Storage
Academic Programs: Athletics
General Condition:
[Insert Text]



Stadium Exterior

Residence Hall

Date of Construction: Phase I - 1964 (renovated 1967)
Phase II - 1969

Gross Area: 57,535 SF

Net Assignable Area: 50,598 SF

Building Function: Student Housing

Academic Programs: Dormitory Rooms
Laundry Rooms
Commons Area

General Condition:

The Residence Hall is a three and one-half story building comprised of communal restrooms and showers with dormitory rooms set up in a detention-like arrangement. A partial lower entry level provides secured access for the student dorm rooms on the floors above. Due to this building's age and configuration this building has become outdated when compared to newer apartment-style dormitories of other colleges and universities. The building has not been significantly renovated since the 1960's.

New apartment-style dormitories are planned for the area to the east of Residence Hall. The first of several buildings is to begin construction in the next year or two as soon as funding is secured. Each of these new dormitories will be designed with a zero energy consumption goal to rally around the Governor's mandate for sustainability and to demonstrate OIT's sustainability commitment to its students, alumni and perspective contributors.

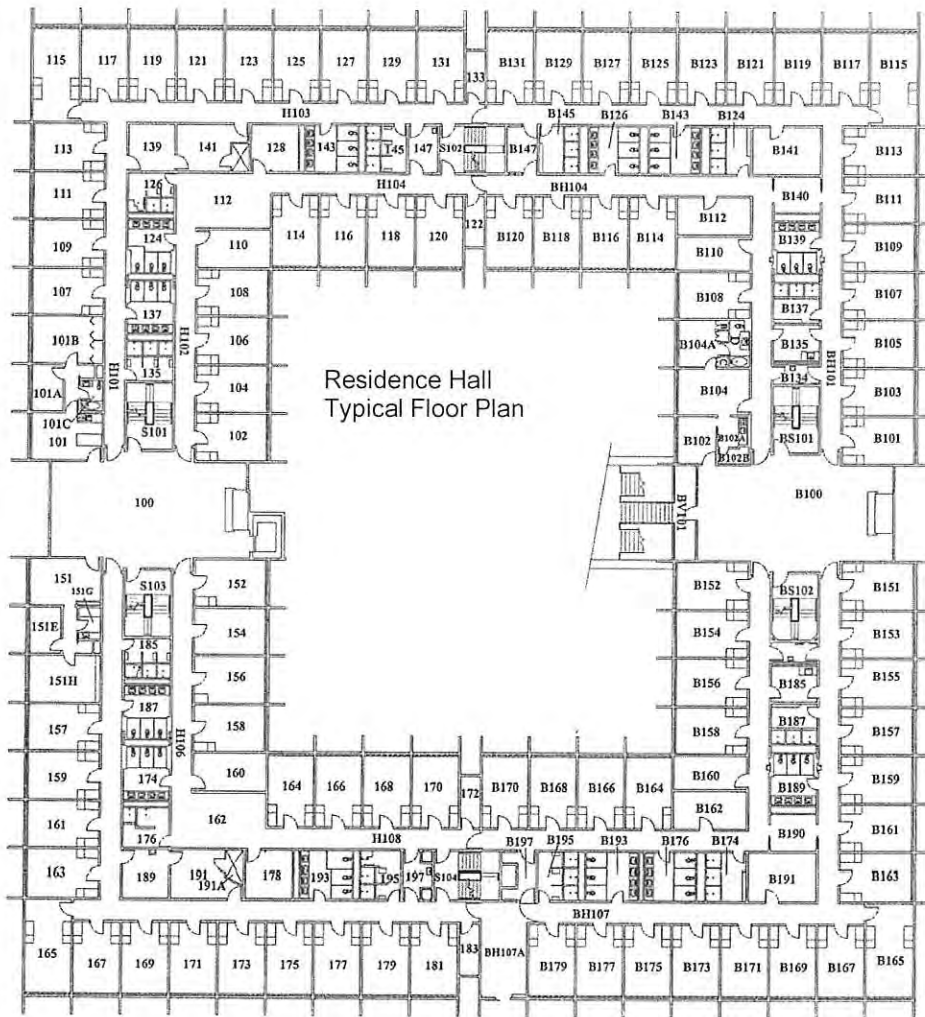
Notes:

- Outdated furnishings.
- Narrow corridors.
- Shared/communal restroom and shower facilities.
- Inadequate lighting.
- Lack of data, phone and TV connections.
- Lack of common/group study space.
- Not fully accessible to meet ADA compliance.
- Very limited number of power outlets.

Conditions and Recommendations (continued)



Residence Hall Exterior



Residence Hall
Typical Floor Plan

University Advancement Building

<i>Date of Construction:</i>	1997
<i>Gross Area:</i>	2,557 SF
<i>Net Assignable Area:</i>	2,449 SF
<i>Building Function:</i>	Offices
<i>Academic Programs:</i>	Institute Advancement Oregon Tech Foundation Publications Alumni Relations

General Condition:

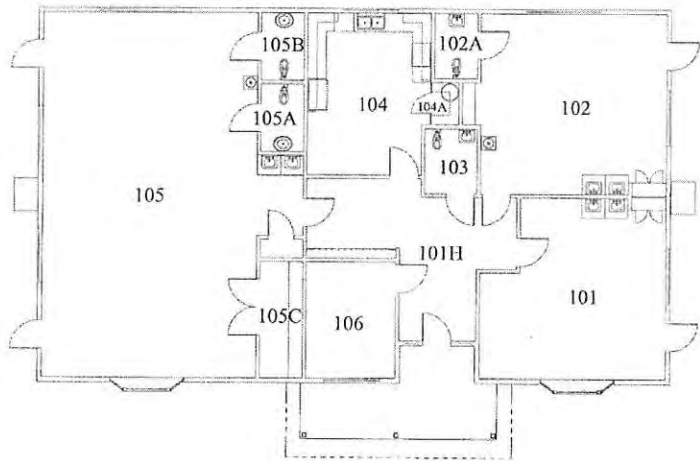
This building was originally constructed as a daycare facility for staff and students with children. However, the program lacked financial sustainability and the program was quickly ended. Today the building houses several office functions centered on the University Advancement program. University Advancement promotes Oregon Institute of Technology and involves philanthropic, legislative and volunteer resources in the life of the University.

Since the building is only a few years old, it appears to be in good condition. However, the building was not designed as an office building. There are a few organizational concerns, but the University Advancement staff has done well to work around them.

Conditions and Recommendations (continued)



University Advancement Building
Main Floor Plan



Conditions and Recommendations (continued)

Facilities Services Building

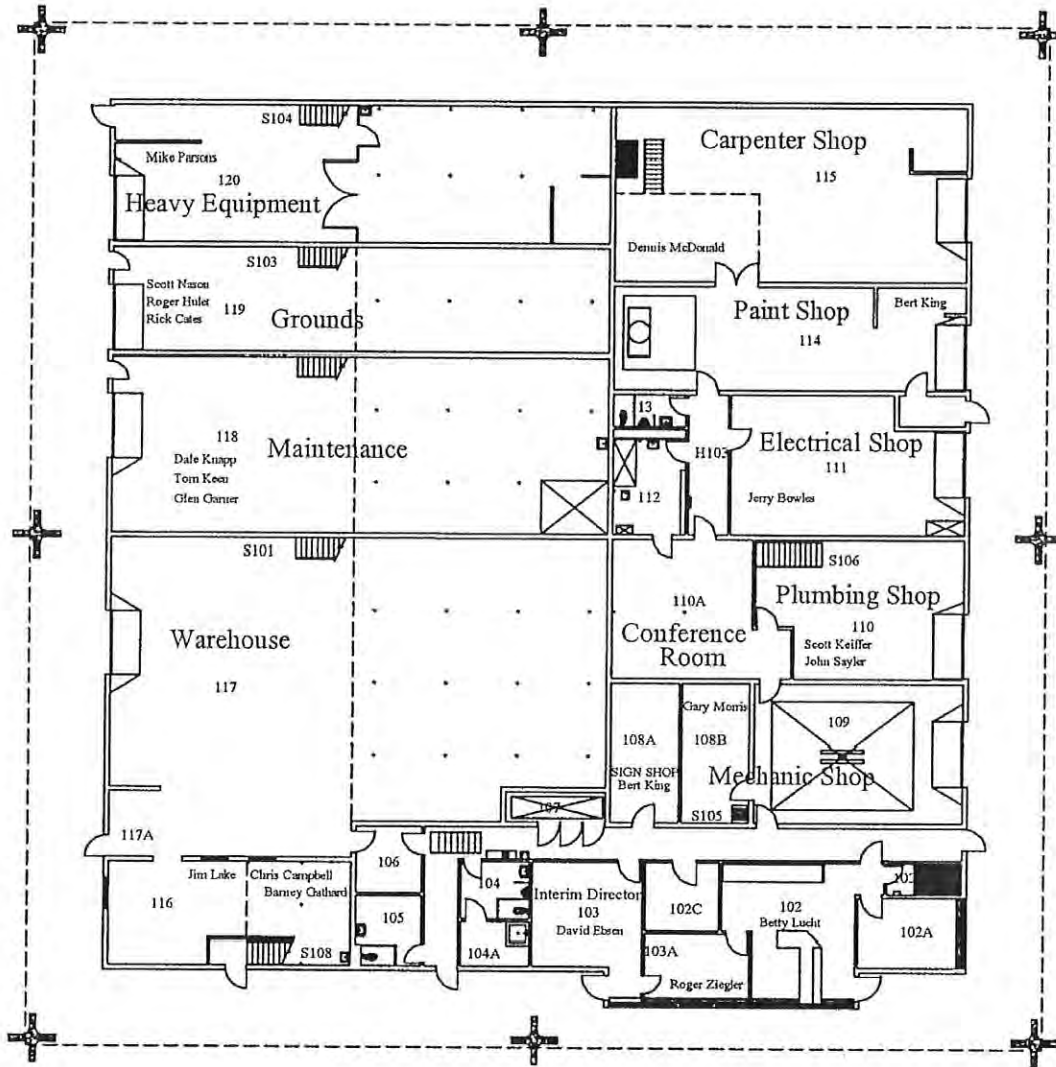
Date of Construction: 1965
Gross Area: 21,054 SF
Net Assignable Area: 20,058 SF
Building Function: Offices
Academic Programs: None
General Condition:

[Insert Text]



Facilities Services Building Exterior

Conditions and Recommendations (continued)



Facilities Services Building Main Floor Plan

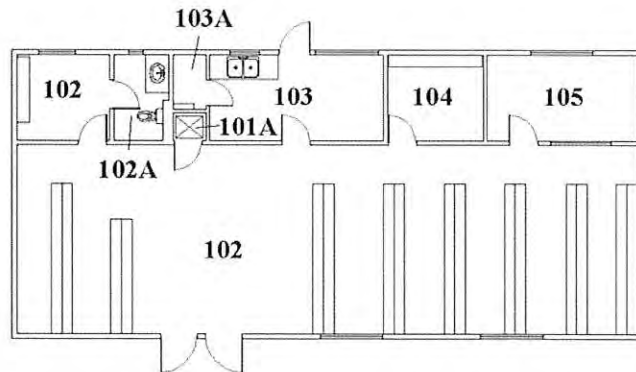
Archive Building

Date of Construction: 1996
Gross Area: -- SF
Net Assignable Area: -- SF
Building Function: Offices
Academic Programs: None
General Condition:

[Insert Text]



Archive Building Exterior



Archive Building Floor Plan

Conditions and Recommendations (continued)

Metro Center

<i>Date of Construction:</i>	1950's (OIT took occupancy in 1992)
<i>Gross Area:</i>	55,471 SF
<i>Net Assignable Area:</i>	49,677 SF
<i>Building Function:</i>	Instructional
<i>Academic Programs:</i>	OIT Classrooms, Laboratories, Library and Offices Clackamas Community College Classrooms and Offices Gymnasium Conference Center

General Condition:

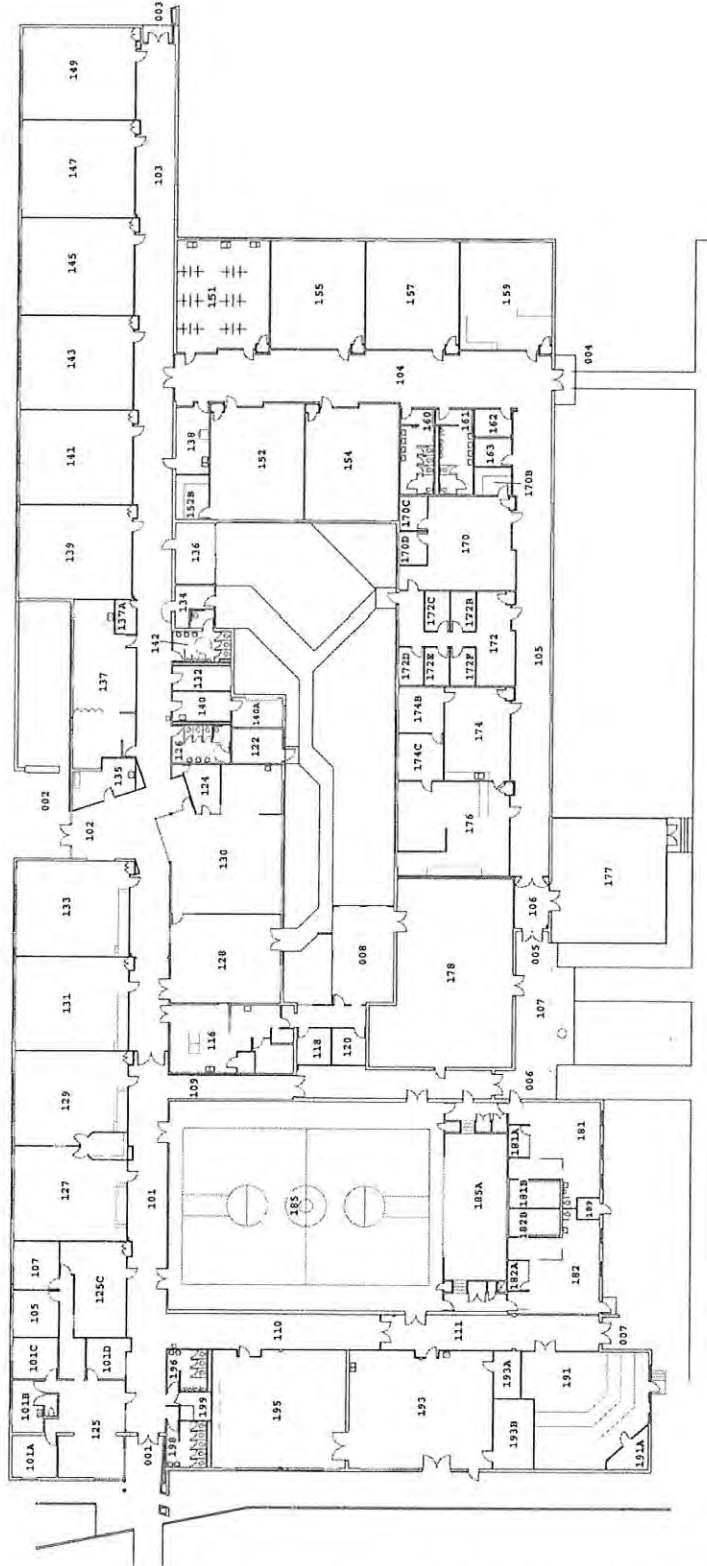
This building was originally built in the 1950's so many of its systems may be reaching their end of life; repair or replacement may be needed. OIT began using the building in 1992. Although OIT occupies the majority of the building, a 13,000 portion is used by Clackamas Community College. The building also contains a 3,400 SF gymnasium and 1,680 SF conference center which are shared between the two institutions.

Notes:

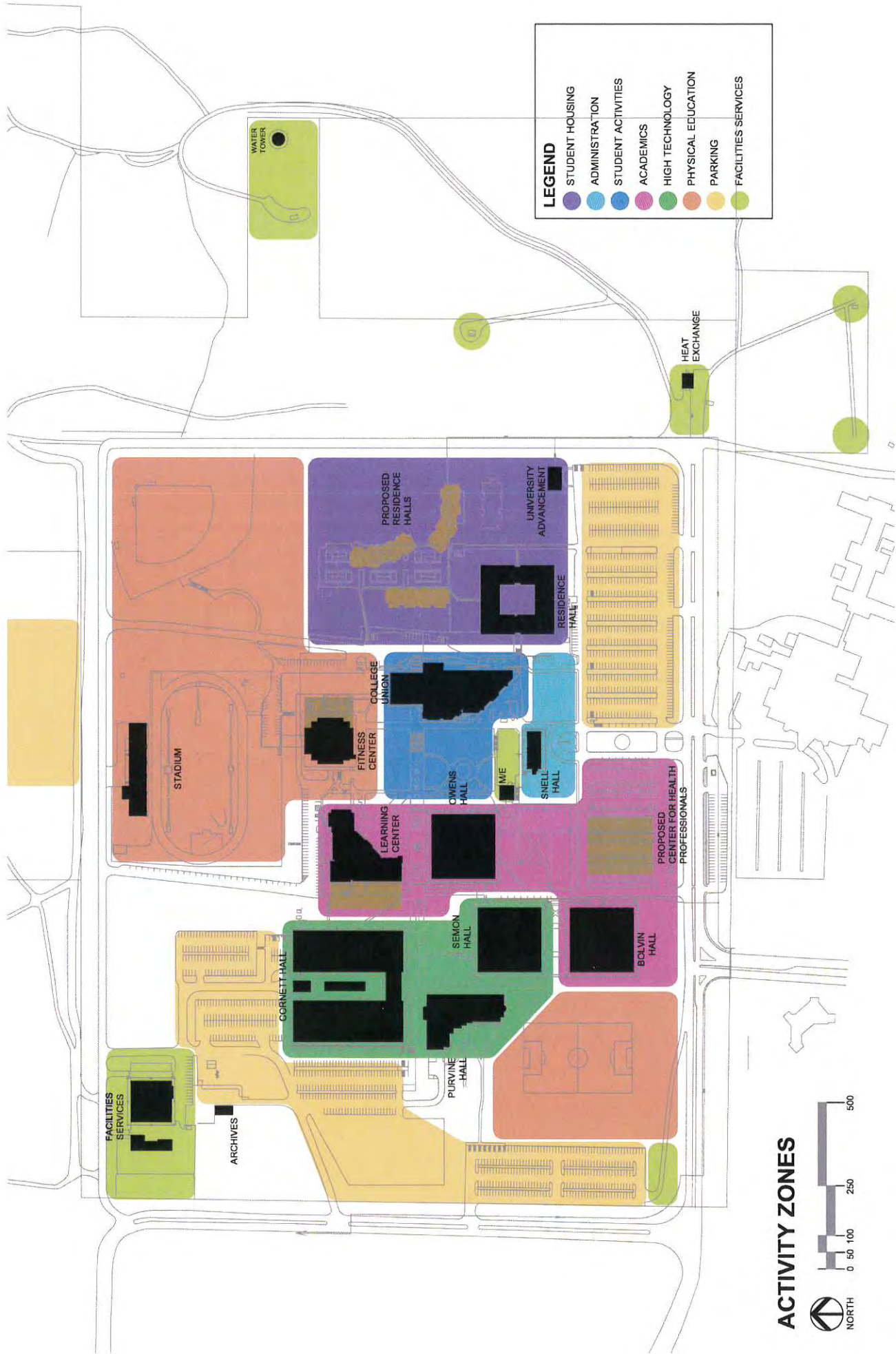
- Furnishings are in relatively good condition.
- Roof, HVAC system, and plumbing system were upgraded in 1999. This renovation included the replacement of outdated galvanized piping with copper.
- Computer labs have outdated equipment which needs upgrading.

Conditions and Recommendations (continued)

Portland Metro Building
Main Floor



Conditions and Recommendations (continued)

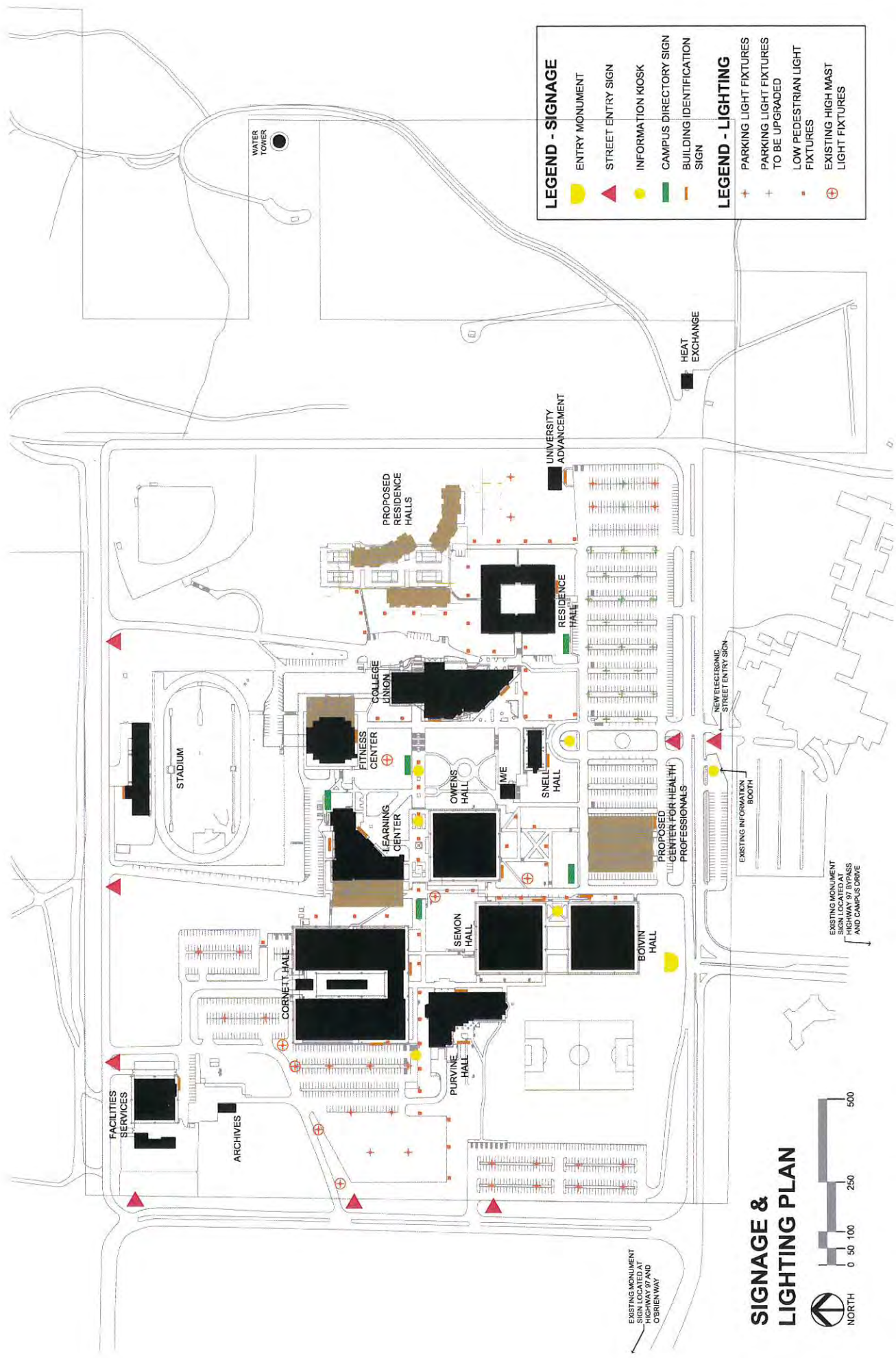


LEGEND

●	STUDENT HOUSING
●	ADMINISTRATION
●	STUDENT ACTIVITIES
●	ACADEMICS
●	HIGH TECHNOLOGY
●	PHYSICAL EDUCATION
●	PARKING
●	FACILITIES SERVICES

ACTIVITY ZONES





LEGEND - SIGNAGE	
	ENTRY MONUMENT
	STREET ENTRY SIGN
	INFORMATION KIOSK
	CAMPUS DIRECTORY SIGN
	BUILDING IDENTIFICATION SIGN
LEGEND - LIGHTING	
	PARKING LIGHT FIXTURES
	PARKING LIGHT FIXTURES TO BE UPGRADED
	LOW PEDESTRIAN LIGHT FIXTURES
	EXISTING HIGH MAST LIGHT FIXTURES

FACILITIES SERVICES

ARCHIVES

CORVETT HALL

PURVINE HALL

SEMON HALL

OWENS HALL

SNELL HALL

ME

RESIDENCE HALL

PROPOSED RESIDENCE HALLS

UNIVERSITY ADVANCEMENT

HEAT EXCHANGE

STADIUM

FITNESS CENTER

COLLEGE UNION

LEARNING CENTER

PROPOSED CENTER FOR HEALTH PROFESSIONALS

BOVIN HALL

NEW ELECTRONIC STREET ENTRY SIGN

EXISTING INFORMATION BOOTH

EXISTING MONUMENT SIGN LOCATED AT HIGHWAY 97 BYPASS AND CAMPUS DRIVE

EXISTING MONUMENT SIGN LOCATED AT HIGHWAY 97 AND O'BRIEN WAY

SIGNAGE & LIGHTING PLAN



CAMPUS PROGRAMS AND ACTIVITIES

To avoid confusing visitors and to assure cohesion of programs, the OIT Klamath Falls Campus needs clear separation of its activities into concise and pure zones. It is not prudent to expect a master plan address specific program allocations or specific space improvement requests. These details should be handled as separate projects outside of the planning process, but guided by that plan. The general recommendation of grouping degree programs, when possible, should be sufficient direction for program relocation. When program moves are made as the campus develops, the following goals should be carefully considered as appropriate:

- Group student services
- Group degree programs
- Group activities with consideration fro the Campus' Activity Zone Map

Care should be taken to avoid placing programs or functions where there is open space to meet immediate or short-term needs. Serious consideration must also be given to other criteria such as efficiency and organization of the Campus as a whole.

The OIT Klamath Falls Campus' Activity Zones are defined as follows:

Student Housing

Located in the southeast corner of the main campus, this zone includes the existing Residence Hall and the proposed new apartment-style student housing buildings. This rectangular zone also includes the University Advancement building, which may be displaced if the need for student housing grows beyond the projects mentioned in this report.

Administration

This zone includes Snell Hall and the area to the east.

Student Activities

The College Union Building and the fountain plaza to the west comprise this student activity zone.

Academics

Included in this zone are the Learning Resource Center, Owens Hall, Boivin Hall and the proposed Center for Health Professions Buildings.

High Technology

Cornett Hall, Purvine Hall and Semon Hall are included in this high technology zone.

Physical Education

The Campus' physical education zone includes two areas. The first is the soccer field located to the west of Boivin Hall. The second hold the stadium with it related sports apparatuses, the ball field, and the Fitness Center Building.

Conditions and Recommendations (continued)

Parking

Although there are some parking stalls provided in each activity zone, the majority of the campus' parking is allocated to three areas. The first is located south of Residence Hall and east of the proposed Center for Health Professions Building. The second is located along the west edge of the campus with easy access from Industrial Park Drive. The third is a large gravel lot located north of the John F. Moehl Stadium Building.

Over the years there has been a conscious effort made by OIT leadership to keep parking at the perimeter of the college grounds assuring a safe pedestrian campus within.

Facilities Services

The facilities services zone includes several pockets of activity distributed throughout the college grounds. The main pocket is located at the northwest corner of the campus and contains the Facilities Services Building. A smaller pocket is located near the campus center and contains the Mechanical / Electrical Building as a central hub of the campus' utility tunnel network. Other pockets of facilities services include the Heat Exchange Building, the water tower and the numerous wells.

Conditions and Recommendations (continued)

[Insert Campus Activities Plan]

CAMPUS CONSTRUCTION

The construction projects listed are in no particular order of implementation or priority. The largest of the proposed projects include a new Center for Health Professions and new Student Housing. The remaining projects are of a much smaller scope and scale. Some planning and design work has begun on the two large projects and some cost information is available. The remaining projects are only conceptual and, therefore, no cost information is available at this time.

Center for Healthcare Professions

Recognizing that successful programs of the future will be those that merge high technology with health technologies, OIT is developing a plan to construct a \$20+ million Center for Health Professions. This Center will enable OIT to meet workforce shortages by doubling the number of graduates in the high-demand health professions of Medical Imaging Technology (Radiologic Science, Diagnostic Medical Sonography, Nuclear Medicine Technology and Vascular Technology), Dental Hygiene, Clinical Lab Science and Respiratory Care.

The proposed project is planned for implementation in two phases with each space provided approximately 40,000 SF, totaling 80,000 SF of new space. Funding for this project has been secured for the first phase and preliminary planning is underway with construction expected to begin in 2007.

Student Housing

New student housing buildings are proposed to be built north of the existing Residence Hall. Preliminary planning has been completed and further development is on hold while funding is being secured.

One of this proposed project's key goals is to achieve net-zero-energy, a goal which should attract national attention given its scale. The design blends forward thinking energy systems within the context of a residential village. This approach will provide for a dynamic combination of technology and livability.

Implementation is expected to be in two phases.

- The first phase will consist of three buildings totaling 100,000 SF arranged around a common pedestrian plaza. Each building will house approximately 100 students. Incorporated into one of the three buildings is an academic floor containing classrooms, a demonstration mechanical space, an adjacent lab, and a 70 seat tiered auditorium. The cost of this first phase is estimated at approximately \$15 million.
- The second phase will consist of two additional buildings totaling approximately 56,000 SF. They will be configured similar to the phase one buildings with each housing approximately 100 students.

The need and timing of this project should be balanced against other privately funded low cost housing projects located near the OIT Klamath Falls Campus.

Conditions and Recommendations (continued)

Cornett Hall Remodel

Once the new Center for Health Professions Building is completed, several Health Sciences components currently located in Cornett Hall will be moved into the new building. The building will have enough free space to upgrade and reconfigure its interior for flexible instructional space needed to accommodate growing engineering technologies.

The cost to renovate and upgrade this building may run high based on costs to upgrade Snell Hall. An alternative to remodeling may include replacing this aging building with a new structure. Prior to soliciting funding, a feasibility study should be conducted to compare the advantages and disadvantages of these two approaches.

Classroom Modernization

Once the new Center for Health Professions Building is completed, several Health Sciences components currently located in Boivin Hall, Semon Hall, and Owens Hall will be moved into the new building. These buildings will then have vacated space that may be reconfigured or upgraded to modernize classrooms, offices and lab spaces to support the remaining occupants. This reconfiguring or upgrading should be conducted on a building by building basis.

Pedestrian Way Enhancement

The 1997 Master Plan proposed enhancements to the campus' pedestrian way to connect the west and east campuses. This enhancement includes a terminus plaza near the Cornett West Parking Lots, improvements and extension of the existing east-west campus pedestrian corridor to the proposed residence hall buildings with their new pedestrian plaza.

A second enhancement (not mentioned in the 1997 Master Plan) includes improvements of the pedestrian way which connects the Snell Hall Parking Lot with the Fitness Center Building. These enhancements are needed to improve the experience of visitor coming to OIT for sporting events and other events.

Learning Resource Center Expansion

A two story addition to the west of the existing Learning Resource Center has been suggested to accommodate OIT's growing need for collection space and additional study areas. Preliminary planning for this project has not begun and funding has not been requested.

Fitness Center Expansion

Although a small addition to the Fitness Center Building has been recently completed, the addition was only intended to address immediate needs for convenience. The addition did not address the disparity between its original design to support an 800 student campus and today's student head count of over 3,300. To accommodate this significant increase in student population, another more substantial multi-story addition has been proposed to the east of the current building. Preliminary planning for this project has not begun and funding has not been requested.

Conditions and Recommendations (continued)

[Insert Construction Plan]

MASTER PLAN CONCLUSIONS

[Insert text]

