University of Oregon
Telecommunications Facilities Guidelines

March 7, 2002
DPIT Subcommittee of the Campus Planning Committee
University Planning Office

I. Purpose:

The purpose of these guidelines is to clarify the intent of the Long Range Campus Development Plan (LRCDP) when considering the placement and design of telecommunications facilities on campus. At the time the LRCDP was written (1991), the demand for telecommunications facilities to serve cell phone users was not an issue. As a result, the LRCDP does not specifically address the installation of telecommunications facilities except to state that:

> "Selection and installation of telephone / data cable equipment will be coordinated through the Telecommunications Services Office of the Department of Business Affairs."

The LRCDP's policies and patterns addressing campus design and development, however, apply to all physical development on campus including telecommunications facilities.

Issues beyond physical development, such as possible health concerns, are not within the purview of the LRCDP, but can be addressed by the Office of Environmental Health and Safety. As recommended by the Office of Environmental Health and Safety, these guidelines do not attempt to determine whether there is a health risk associated with exposure to radio frequency transmissions from telecommunications facilities. They take into account, however, the perceived health risks associated with prolonged exposure, particularly for young children, that have been expressed by concerned faculty, staff, students, and community members. Due to the controversy and differing opinions, the university chooses to err on the conservative side at this time.

II. Background:

The development of these guidelines is in response to two proposals for off-campus towers adjacent to the university. One of the criteria for City of Eugene approval of telecommunications facilities requires applicants to prove that no other collocation sites exist in the area. Both applicants stated that the university did not express an interest in collocation sites on campus (there are already two antennas placed on PLC). The university did not actively pursue options because no one had complained about

current cell phone service on campus and initial review of possible collocation sites did not reveal any ideal locations. However, in an effort to eliminate the need for incompatible off-campus towers, these guidelines for on-campus sites have been developed to define how telecommunications needs can be accommodated while preserving the campus character. The guidelines are designed to allow on-campus facilities that would have much less of a negative impact on the university than the proposed off-campus towers.

III. Definitions of Terms:

The City of Eugene Land Use code definitions related to telecommunications facilities are the basis of these guidelines. Refer to the attachment titled "Definitions of Terms Related to Telecommunications Facilities." The term "facilities" refers to all physical development associated with a telecommunications facility.

IV. Review Requirements:

Review of all proposed facilities shall include, but is not limited to, the following:

Telecommunications Services: All installations shall be subject to review and approval by Telecommunications Services.

Facilities Services: Facilities Services shall also review all installation plans for potential impact on building structures, roofs, and campus utility infrastructures.

Office of Environmental Health and Safety: All potential health concerns associated with exposure to radio frequency transmissions from telecommunications facilities shall be addressed by the Office of Environmental Health and Safety. The guidelines shall be modified as recommended by the Office of Environmental Health and Safety as new information about health risks becomes available.

Campus Planning Committee: All facilities visible from a public location shall be subject to Campus Planning Committee review and approval based upon the guidelines below. The review process shall include soliciting comments from the official representatives of affected neighborhoods as described in the LRCDP. Documentation including photo simulations and/or a balloon test shall be required from the applicant to demonstrate that the guidelines are being met.

V. Guidelines:

The following guidelines shall apply to all proposed telecommunications facilities on campus, including pole / antenna and ancillary facilities. They are not intended to supersede any existing university and / or City policies. All telecommunications facilities:

1. General:

1A. Shall adhere to LRCDP policies and patterns – The LRCDP contains patterns and policies addressing height, massing, design, quality, and location for all development on campus.

1B. Shall be removed if they become obsolete - If a facility becomes obsolete, it shall be removed within six months or within the time frame required by City code, whichever time is less.

2. Location:

2A. Shall not interfere with the university's telecommunications and research needs - Given that appropriate sites for university-related telecommunications and research facilities are very limited on campus, placement shall not interfere with existing or future university telecommunications needs. Every effort shall be made by the university to identify future needs. The university reserves the right, however, to require the provider to remove a facility at the provider's expense if the need arises.

2B. Shall not interfere with future development - Placement shall not occur where it will likely interfere with future development plans. Every effort shall be made by the university to identify future development sites. The university reserves the right, however, to require the provider to remove a facility at the provider's expense if the need arises.

2C. Shall meet the needs of multiple providers - The proposed location shall accommodate the needs of multiple providers, if at all possible, in an effort to reduce the total number of required facilities on campus and in the surrounding area.

2D. Shall not be adjacent to residential uses - Due to the perceived health risks associated with long-term exposure to radio frequency transmissions from telecommunications facilities, such facilities shall be not be located within 100 feet of residential uses, residentially-zoned lands, or areas designated for residential development in the LRCDP. Areas with low occupancy or use are more appropriate locations. *(Note: This guideline shall be amended as deemed necessary by the Office of Environmental Health and Safety as new information becomes available.)*

2E. Shall not be adjacent to child care facilities - Due to the perceived health risks associated with young children's exposure to radio frequency transmissions from telecommunications facilities, such facilities shall be not be located within 100 feet

of child care facilities or areas specifically designated for child care facilities in the LRCDP. *(Note: This guideline shall be amended as deemed necessary by the Office of Environmental Health and Safety as new information becomes available.)*

2F. Shall protect open spaces - Placement is discouraged in LRCDP designated open spaces or identified historic open spaces, although a carefully designed, compatible, stealth facility (e.g. a flag pole) may be considered appropriate. Proposed installations on a site listed on the National Register of Historic Places are subject to the Secretary of the Interior Standards for Rehabilitation. National Register properties and City Landmark properties are subject to City Historic Alteration review.

2G. Shall preserve historic buildings - Collocation on a historic building is discouraged and not allowed on a building designated as a Historic Landmark by the National Register. Facilities shall not interfere with the historic character of a building. Installation on a building listed on the National Register of Historic Places is subject to the Secretary of the Interior Standards for Rehabilitation. National Register properties and City Landmark properties are subject to City Historic Alteration review.

2H. Shall be easy to maintain - Placement shall be designed to provide easy maintenance of and access to the facility and the adjacent landscaping and buildings.

3. Design:

3A. Shall be collocation facilities whenever possible – Collocation facilities versus freestanding monopoles are encouraged on campus due to a monopole's inherent incompatibility with the campus scale and design, and very limited development space on campus. Towers are not allowed with the exception of monopoles designed with a stealth antenna array (antennas are hidden inside the pole).

3B. Shall minimize visual intrusion – A facility shall not be in prominent public view unless it is a carefully designed and compatible stealth facility (e.g. a flag pole). Particular care shall be taken to protect views of and from designated open spaces, significant public gathering places, main entrances, historic sites, and historic buildings. Every effort shall be made to camouflage the facility and integrate it with the character and scale of the existing buildings and landscape.

3C. Shall minimize the actual and perceived height of the facility - Every effort shall be made to minimize the height of a proposed facility, while at the same time recognizing the benefit of providing a taller pole to accommodate multiple providers rather than constructing another facility. High elevation locations and / or places where buildings or features are large in scale are encouraged to help minimize the actual and perceived height of facilities.

3D. Shall minimize the size of the ancillary facility - The ancillary facility shall be integrated with a campus structure if at all possible and its size shall be minimized.

Definitions of Terms Related to Telecommunications Facilities
According to the City of Eugene Land Use Code – 2001 [unless noted]

Telecommunications Ancillary Facilities. The buildings, cabinets, vaults, closures, and equipment required for operation of telecommunications systems including but not limited to repeaters, equipment housing, ventilation and other mechanical equipment.

Telecommunications Antennas. An electrical conductor or group of electrical conductors that transmit or receive radio waves, excluding amateur radio antennas.

Telecommunications Attachment. An antenna or other piece of related equipment affixed to a transmission tower, building, light or utility pole, or water tower.

Telecommunications Collocation. Placement of an antenna on an existing transmission tower, building, light or utility pole, or water tower where the antenna and all supports are located on the existing structure.

Telecommunications Facility. A facility designed and used for the purpose of transmitting, receiving, and relaying voice and data signals from various wireless communication devices, including transmission towers, telecommunications antennas and ancillary facilities. For purposes of this Land Use Code, amateur radio transmission facilities and facilities used exclusively for the transmission of television and radio signals are not "telecommunications facilities."

Telecommunications Facility Stealth Design. A telecommunications facility that is designed or located in such a way that the facility is not readily recognizable as telecommunications equipment.

Telecommunications Monopole. A single, self-supporting vertical pole with no guy wire anchors, usually consisting of a galvanized or other unpainted metal or a wooden pole with below-grade foundations. [Not from City code]

Telecommunications Provider. A person in the business of designing and using telecommunications facilities, including cellular radio-telephones, personal communications services, enhanced / specialized mobile radios, and commercial paging services.

Telecommunications Tower. A vertical structure supporting telecommunications antenna(s). [Not from City code]