



AGENDA
PLANNING COMMISSION
Monday, October 12, 2020
6:00 pm Virtual Work Session

Commissioner John Savory (Chair)

Commissioner Larry Boatright (Vice Chair)

Commissioner Jeff Mills

Commissioner Jason Taylor

Commissioner Derrick Mottern

Commissioner Jennifer Trundy

Commissioner Michael Hutchinson

- 1. CALL TO ORDER**
- 2. DISCUSSION: 5g Micro Cell Technology Text Amendment**
- 3. ADJOURN**

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**TELECOMMUNICATIONS FACILITIES
CODE LANGUAGE & TEXT AMENDMENTS
(CITY FILE# TA 20-01)
(PLANNING COMMISSION WORK SESSION 10-12-20)**

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City of Canby

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MEMORANDUM

DATE: October 2, 2020
MEETING DATE: October 12, 2020
TO: Planning Commission
FROM: Erik Forsell, Associate Planner
RE: Planning Commission Work Session II

Follow-up from Work Sessions

This memorandum is intended to address suggested revisions related to the proposed telecommunications text amendments received from City Council and the Planning Commission at work sessions held on September 16 and 28, 2020. The memorandum details how those suggested revisions were addressed in the current version of the draft text amendment proposal. Staff has endeavored to include these items while maintaining an appropriate balance with what federal regulations allow local jurisdictions to enforce and regulate.

Comments Received and Changes Made

Staff received a number of comments from City Council and Planning Commission. Many of the comments were focused on undergrounding and removal requirements, design standards, visual appearance of telecommunications equipment and overall organization of the code. The table below describes the suggestions received by Staff and how those were implemented in the current version of the draft text amendments.

Table – Summary of Revisions to Draft of Proposed Text Amendments

Suggestion / Revision	Description of Change	Page
“Strand Mounted” Definition	16.55.015(O) Defined as telecommunications antennas that are mounted on cable, conduit, wire or other similar materials between two or more poles or structures.	4
Removal Requirements	16.55.30(C)(10) Includes removal responsibilities.	10
Antenna(s)	16.55.045(B)(1) and (2) Added specific requirements regarding antennae size and concealment.	13-14
Undergrounding	16.55.045(B)(3) and 16.55.045(G) Includes changes as part of the design standards to locate ancillary equipment underground when technically feasible.	15, 16-19
Noise	16.55.045(B)(7) Includes changes as part of the design standards to place restrictions on the amount of noise produced by equipment.	15

General Restrictions	16.55.045(C)(1)-(4) Restrictions on placing telecommunications equipment on certain objects and structures.	16
Macro Telecommunications Facilities	16.55.040 and 16.55.50 Changes to collocation standards, removal of some items, and clarification on what applies. Staff is still trying to honor and fold in the work previously done regarding acceptable and preferred sites. This section was broken up to better fit the overall flow of the new code layout.	19-24

Next Steps

Following the conclusion of this work session, staff will have conducted four work sessions regarding the proposed telecommunications text amendments. At this point, we will collect final suggestions and revisions and move forward with internal staff review and a finalization of the work product. The Planning Commission meeting scheduled for October 26, 2020 will be a public hearing on the proposed amendments. Depending on the determinations made by the Planning Commission, Planning Staff will prepare to bring this item to a first reading at City Council, likely sometime in November of 2020.

Chapter 16.55

Telecommunications Facilities

Sections:

16.55.010	Purpose.
16.55.015	Definitions
16.55.020	Applicability
16.55.025	Administration
16.55.030	Permit Requirements
16.55.035	Micro Telecommunications Permit Requirements
16.55.040	Macro Telecommunications Permit Requirements
16.55.045	Micro Telecommunications Facility Siting and Design Standards
16.55.050	Macro Telecommunications Facility Siting and Design Standards
16.55.055	Exemptions
16.55.100	Severability

16.55.010 Purpose.

A. The purpose this chapter is to:

- 1.** Manage the deployment of wireless telecommunications facilities and ancillary equipment consistent with Federal law and regulations.
- 2.** Place reasonable and appropriate time, place and manner restrictions on telecommunications deployment consistent with federal law and regulations.
- 3.** Encourage the placement of telecommunications facilities in appropriate locations for both the provider and the City.
- 4.** Provide City of Canby residents and businesses with a wide range of telecommunications and wireless options.
- 5.** Provide for the safe construction, location, erection and maintenance of telecommunications equipment.
- 6.** Encourage collocation of telecommunications equipment wherever possible.
- 7.** Contribute to a simple and efficient regulatory process.

8. Develop a consistent and well understood application process for telecommunications providers and for city staff.
9. Ensure that the public will have access to a variety of wireless telecommunications systems and providers.
10. Reduce the visual impact of certain wireless telecommunications systems facilities by encouraging collocation;
11. Implement the applicable provision of the Federal Telecommunications Act of 1996;
12. Implement Section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012, 47 U.S.C. § 1455(a), commonly referred to as the Spectrum Act and;
13. Implement FCC Order 18-133, effective August 15, 2019.

16.55.015 Definitions.

- A. Abandoned Telecommunications Equipment. Defined as a facility and / or equipment that has been in disuse continuously for 365 days and no longer has a known owner or FCC licensee.
- B. Antenna. Defined in 47 C.F.R. § 1.6002(b). The term includes an apparatus designed for the purpose of emitting radio frequencies (RF) to be operated or operating from a fixed location pursuant to Federal Communications Commission authorization, for the provision of personal wireless service and any commingled information services. For purposes of this definition, the term antenna does not include an unintentional radiator, mobile station, or device authorized under 47 C.F.R. Part 15
- C. Antenna (Ancillary) Equipment. Defined in 47 C.F.R. § 1.6002(c). The term includes equipment, switches, wiring, cabling, power sources, shelters or cabinets associated with an antenna, located at the same fixed location as the antenna, and, when collocated on a structure, is mounted or installed at the same time as such antenna.
- D. Applicant. Defined as any person who represents and submits an application on behalf of a wireless provider.
- E. Application – Telecommunications. A written request submitted by an applicant (1) for permission to collocate wireless facilities; or (2) to approve the installation, modification or replacement of a structure on which to collocate a small wireless facility in the rights-of-way or on private property where required. The application consists of a form provided by the City with accompanying materials provided by the applicant.
- F. City. Defined as the City of Canby, Oregon. (Ord. 740 section 10.1.20(B)[part], 1984)

- G. City Engineer.** The Oregon registered Professional Engineer designated to review development within the city.
- H. City-Owned Infrastructure.** Means infrastructure within the city limits and urban growth boundary, public rights-of-way or public easements, including but not limited to street lights, traffic devices and signals, towers, structures, buildings, and utilities that are owned, operated and/or maintained by the City.
- I. Collocation.** Defined in 47 C.F.R. § 1.6002(g). Term describes: (1) mounting or installing an antenna facility on a preexisting structure, and/or (2) modifying a structure for the purpose of mounting or installing an antenna facility on that structure. “Collocate” has a corresponding meaning.
- J. Day.** A calendar day. For purposes of land use application timelines determined by ORS 227.178(1) and FCC “shot clock” regulations for decisions related to telecommunications, a terminal day that falls on a holiday or weekend shall be deemed to be the next immediate business day.
- K. Designee.** A city staff person authorized by the City Engineer or Planning Director to process telecommunications facility permits.
- L. Licensee.** A telecommunication utility registered with the City and the Telecommunications Section of the Development Code 16.55.
- M. Macro Cell Wireless Facility.** A telecommunications facility that meets each of the following conditions:
1. Facilities mounted on structures greater than 50 feet including the antennas.
 2. Facilities mounted on structures that are more than 10 percent taller than any other adjacent structures.
 3. Facilities that extend in height existing structure(s) on which the antennas are located by more than 50 feet or more than 10 percent whichever is greater.
 4. The facilities do not result in human exposure to radio frequency in excess of the applicable safety standards specified in 47 C.F.R. § 1.1307(b).
- N. Micro Cell Wireless Facility.** A facility that meets each of the following conditions per 47 C.F.R § 1.6002(l), as may be amended or superseded:
1. Facilities mounted on structures 50 feet or less in height including the antennas.

2. Facilities mounted on structures no more than 10 percent taller than other adjacent structures.
 3. Each antenna associated with the deployment, excluding associated antenna equipment, is no more than three cubic feet in volume;
 4. All other wireless equipment associated with the structure, including wireless equipment associated with the antenna and any pre-existing associated equipment on the structure, is no more than 28 cubic feet in volume;
 5. The facilities do not result in human exposure to radio frequency in excess of the applicable safety standards specified in 47 C.F.R. § 1.1307(b).
- O. NESC. The current up to date version of the National Electric Safety Code (NESC) as approved by the Institute of Electric and Electronics Engineers (IEEE).
- P. Planning Director. The City staff person who oversees the Planning Department and reviews or appoints staff to review land use applications for telecommunications facilities.
- Q. Public Rights-of-Way. Defined as the space in, upon, above, along, across, over or under the public streets, roads, highways, lanes, courts, ways, alleys, boulevards, bridges, trails, paths, sidewalks, bicycle lanes, public utility easements, and all other public ways or areas, including the subsurface under and air space over these areas, excluding parks, parklands and other City property that is not generally open to the public for the purposes of travel. The definition only applies to the extent of the City's right, title and interest to grant a license to occupy and use such areas for utility facilities.
- R. Strand Mounted Equipment. Defined as telecommunications antennas that are mounted on cable, conduit, wire or other similar materials strung between two or more poles or structures.

16.55.020 Applicability

- A. The Telecommunications Chapter applies to the following:
1. Proposed new telecommunications facilities, collocations, antennas, equipment, poles, towers, and ancillary facilities typically associated with telecommunications equipment.
 2. Replacement poles, towers, collocations and antennas and equipment.
 3. Modifications to existing or proposed telecommunications facilities, collocations, antennas, equipment, poles and ancillary facilities typically associated with telecommunications equipment.

16.55.025 Administration.

- A. Permit Required.** All telecommunications equipment deployed, collocated, placed, replaced, installed and erected after the effective date of this chapter, other than telecommunications equipment that is exempt from permit requirements per 16.55.50 shall require a permit. Applications shall be made on forms provided by the Planning Director with attached required information stated in the application form and in the Permit Requirements Section 16.55.30.
- B. Fee.** A fee as established by resolution of the City Council shall be paid to the City of Canby upon the filing of an application. Such fees shall not be refundable.
- C. Construction and Maintenance.** All telecommunications equipment and ancillaries, including: poles, cabinets, power supplies whether above or underground shall meet all applicable requirements of building, structural, mechanical and electrical codes.

 - 1.** All telecommunications equipment shall be kept in good repair and maintained in a safe, neat, clean condition. Telecommunications equipment shall be designed and deployed to reduce the impact of visual appearance.
 - 2.** No telecommunications equipment shall be erected or maintained in such a manner that any portion of its surface will interfere with the free use of, or any access to any fire escape, exit or standpipe.
 - 3.** No telecommunications equipment shall be deployed in a location that creates an immediate danger to the safety and welfare of the public by blocking vision for either pedestrians or motorists, at public and/or private roadways, intersections, driveways, paths, sidewalks or railroad crossings.
- D. Appeal.** Appeals are limited to procedures set forth in Chapter 16.89 for land use decisions pursuant to requirements in Chapter 16.89. Appeals of building permit decisions are decided by the Clackamas County Building Official.
- E. Permit Expiration.** Every permit issued by the Clackamas County Building Official under the provisions of this chapter shall expire by limitation and become null and void if the building or work authorized by such permit is not commenced within 180 days from the date of such permit, or if the building or work authorized by such permit is suspended or abandoned at any time after the work is commenced for a period of 180 days. Before such work can be recommenced, a new permit shall be first obtained to do so, and the fee therefore shall be one-half of the amount required for a new permit for such work, provided no changes have been made or will be made in the original plans and specifications for such work; and provided further, that such suspension or abandonment has not exceeded one year.
- F. Permit Suspension or Revocation.** The Planning Director and City Engineer or duly authorized representative may, in writing, suspend or revoke a permit issued under

provisions of this chapter whenever the permit is issued on the basis of incorrect information supplied, or in violation of applicable ordinance or regulation or any of the provisions of this chapter.

- G. Variance / Deviation from Standards. The procedures which allow variations from the strict application of the regulations of this Title, by reason of exceptional circumstances and other specified conditions, are set forth in 16.55(H) and when applicable Chapter 16.53.
- H. Conditional Use Telecommunications Equipment and Design Review. Telecommunications equipment that is proposed and does not meet the Type I Review Process shall be processed under a Design Review Type II or III process at the discretion of the City Engineer or Planning Director. A Conditional Use Permit for certain major installations of macro telecommunications equipment shall be required.
- I. Timelines ‘Shot Clock’ for Processing Telecommunications Equipment. Pursuant to the Telecommunications Act of 1996, provisions of the Middle-Class Tax Relief and Job Creation Act of 2012 (Commonly Referred to as the Spectrum Act) and; FCC 18-133 (Small Cell Order), applications to permit telecommunications shall be consistent with 47 CFR Section 1.6003 – Reasonable Periods of Time to Act of Siting Applications.

1. Review Periods for Individual Applications

- a. **Micro Telecommunications Facility Minor Installation Permit** – Collocations on existing infrastructure. Applications shall comply with regulation and documentations/permissions as set forth by federal, state, and city standards. The review period for applications will be 60 days following reception of a materially complete application. These applications will be reviewed through a Type I Site / Design Review process.
- b. **Micro Telecommunications Facility Major Installation Permit** – Deployment and construction of proposed new infrastructure. Applications for compliant sizes, locations, and aesthetics with necessary supportive documentation permissions as set forth by Federal, State, and City standards. The review period for these applications will be 90 days following reception of a materially complete application. These applications will be reviewed through a Type I Site / Design Review process.
- c. **Macro Telecommunications Minor Installation Permit** – Collocations on existing infrastructure. Applications shall comply with regulation and documentations/permissions as set forth by federal, state, and city standards. The review period for applications will be 90 days following reception of a materially complete application. These applications will be reviewed through a Type I Site / Design Review process.

- d. **Macro Telecommunications Tower / Structure Major Installation Permit** – Deployment and construction of a macro telecommunications tower and associated equipment. Applications shall comply with regulation and documentation/permissions as set forth by federal, state and city standards. The review period for applications shall be 150 days following reception of a materially complete application. These applications will be reviewed through a Type II or III Site / Design Review and under certain proposals with a Conditional Use Permit process.

2. Incomplete Applications.

- a. For an initial application to deploy Micro Wireless Facilities, if the Planning Director / City Engineer or designee notifies the applicant on or before the 10th day after submission that the application is materially incomplete, and clearly and specifically identifies the missing documents or information and the specific rule or regulation creating the obligation to submit such documents or information, the shot clock date calculation shall restart at zero on the date on which the applicant submits all the documents and information identified by the siting authority to render the application complete.
- b. For an initial application to Deploy a new Macro Telecommunications Tower / Structure or major installation permit. Incomplete applications shall be treated the same as described in ORS 227.178.

3. Complete Applications

- c. Applications shall be deemed complete when the Planning Director and/or City Engineer or designee(s) have determined that the applicant has supplied sufficient information as required by Section 16.55.30 and that the application materials are accurate, true and addresses the criteria of this division and all other applicable sections of Canby Municipal Code.

16.55.30 Telecommunications Equipment Permit Applications

- A. Telecommunications facilities within the Public rights-of-way are reviewed by the City Engineer and/or Planning Director, or authorized designee(s), in accordance with the process described below:
 - 1. Micro Telecommunications Facility Minor Installation Permit – installations on existing third-party infrastructure. Applications shall comply with regulation and documentations/permissions as set forth by federal, state, and city standards. Applications shall clearly denote the below outlined requirements.
 - 2. Micro Telecommunications Facility Major Installation Permit – installations on existing City-owned infrastructure or proposed new infrastructure. Applications

for compliant sizes, locations, and aesthetics with necessary supportive documentation permissions as set forth by Federal, State, and City standards.

- B.** Telecommunications facilities within private and public property that are outside the public rights-of-way are reviewed by the Planning Director, or authorized designee(s), in accordance with the process described below:

- 1.** Macro Telecommunications Minor Installation Permit – installations on existing third-party infrastructure and certain new deployments. Applications shall comply with regulation and documentations/permissions as set forth by federal, state, and city standards. Applications shall clearly denote the below outlined requirements.
- 2.** Macro Telecommunications Major Installation Permit – installations on existing third party infrastructure or proposed new infrastructure. Applications for compliant sizes, locations, and aesthetics with necessary supportive documentation permissions as set forth by Federal, State, and City standards.

C. General Application Requirements

- 1.** Aerial vicinity map indicating the location of the existing and/or proposed wireless support tower/structure to which the telecommunications facility will be attached. The vicinity map shall also indicate all known telecommunications facilities within a 1000 foot radius centered on the proposed deployment area.
- 2.** Aerial vicinity map detailing the propagation area for the proposed telecommunication equipment as well as existing propagations of facilities owned or leased by the applicant.
- 3.** Street view images, rendering or photographs showing the existing and proposed conditions of the project site. The images shall demonstrate how equipment will be visually screened, shrouded, concealed or blended with the surroundings.
- 4.** A scaled site plan, prepared by a professional engineer or surveyor licensed in the State of Oregon indicating at a minimum:
 - a.** Proposed tower, pole or structure to which the small cell equipment will be attached; including: lease area (if applicable).
 - b.** Location of supporting ancillary equipment, including: power supply, cooling equipment, cable, etc.

- 7.** Permission to use utility pole or alternative antenna structure: The operator of a wireless telecommunication facility shall submit to the City a copy of the written approval from the owner of an existing utility pole, monopole, or an alternative antenna structure, to mount the wireless telecommunication facility on that specific pole, tower, or structure, prior to issuance of the City permit. This permission can be provide in a form that clearly indicates authorized permission, such as a provided:

 - a.** Lease or franchise agreement, memorandum of understanding, signed authorization form or other format deemed acceptable to the City Engineer / Planning Director or their designee.
- 8.** Manufacturer’s specification sheets for proposed telecommunications facility equipment, including wireless support structures, equipment cabinets, shrouds or concealment devices, antennas, meters, radios, switches, telecommunications demarcation boxes, and grounding equipment.
- 9.** Certification by an Oregon-registered professional engineer that the new or amended telecommunication facility complies with the non-ionizing electromagnetic radiation (NIER) emission standards as set forth by the Federal Communications Commission (FCC).
- 10.** A signed statement of the equipment owner’s removal responsibilities should the equipment no longer be used and abandoned. The statement shall indicate that after 365 days of continuous non-use that the equipment is subject to removal by the City of Canby or the utility provider.
- 11.** Documentation showing that the applicant has an FCC license for the geographic region and for the service proposed by the collocation if applicable.
- 12.** A secured bond providing for the required tower or pole removal cost and replacement and repair of lease or deployment area to pre-deployment condition.
- 13.** A statement with accompanying diagrams and plans that describes visual shrouding and concealment design techniques for antennas and ancillary equipment.
- 14.** Other information requested in the application form provided by the City Engineer / Planning Director and their designee(s), such as but not limited to, peer review by an independent engineering firm of the proposed telecommunications facility system design. During the review and approval

process, the Director may request additional information including but not limited to, balloon tests, photo simulations, and other measures of visual impact.

16.55.035 Micro Telecommunications Additional Permit Requirements

A. In addition to the General Permit Requirements stated in 16.55.030 above, the applicant shall provide a detailed narrative with accompanying objective information describing how the proposed collocation meets the definition of Small Wireless Facilities established with FCC 18-133, listed below.

1. The micro telecommunications facilities:

- a.** Are mounted on structures 50 feet or less in height including their antennas as defined in § 1.1320(d)ii; or
- b.** Are mounted on structures no more than 10 percent taller than other adjacent structures; or
- c.** Do not extend existing structures on which they are located to a height of more than 50 feet or by more than 10 percent, whichever is greater.
- d.** Contain antenna(s) associated with the deployment, excluding associated antenna equipment (as defined in the definition of “antenna” in § 1.1320(d)), which are no more than three (3) cubic feet in volume.
- e.** All other wireless equipment associated with the structure, including the wireless equipment associated with the antenna and any pre-existing associated equipment on the structure, is no more than 28 cubic feet in volume.
- f.** Do not require antenna structure registration.
- g.** Do not result in human exposure to radiofrequency radiation in excess of the applicable safety standards specified in § 1.1307(b).

16.55.40 Macro Telecommunications Additional Permit Requirements

A. In addition to the General Permit Requirements stated in 16.55.030 above, the applicant shall provide the following applicable information:

- 1.** A copy of the lease agreement (or lease memo) with the property owner, facility removal within 90 days of the abandonment and a bond to guarantee removal shall be submitted for review prior to development permit approval.

2. A map of the city showing the approximate geographic limits of the cell coverage area to be generated by the facility. This map shall include the same information for all other facilities owned or operated by the applicant within the city, or extending within the city from a distant location, and any existing detached telecommunications facilities of another provider within 1,000 feet of the proposed site.
3. Anticipated capacity of the telecommunications facility (including number and types of antennas which can be accommodated).
4. The method(s) of stealth design (where applicable).
5. The radio frequency range in megahertz and the wattage output of the equipment.
6. A description of the type of service offered (voice, data, video, etc.) and the consumer receiving equipment.
7. Identification of the provider and backhaul provider, if different.
8. A facilities maintenance regimen.
9. The zoning and comprehensive plan designation of the proposed site.
10. The FAA determination for the proposed tower.
11. The distance from the nearest telecommunications facility.
12. Major Permit Applications Additional Requirements:
 - a. Items in section (E) above.
 - b. Alternatives for locating/relocating support structures within 250 feet of the proposed site.
 - c. Photo simulations of the proposed telecommunications facility from the four cardinal compass points and/or abutting right-of-way, whichever provides the most accurate representation of the proposed facility from a variety of vantage points.
 - d. An engineer's statement demonstrating the reasons why the telecommunications facility must be located at the proposed site (service demands, topography, dropped coverage, etc.).

- e. An engineer's statement demonstrating the reasons why the telecommunications facility must be constructed at the proposed height.
- f. Verification of good faith efforts made to locate or design the proposed telecommunications facility to qualify for a less rigorous approval process (building permit and/or building permit and site and design review approval).

16.55.045 Micro Telecommunications Facility Siting and Design Standards

A. The purpose of this section is provide review procedures and acceptable time, place, and manner constraints on the installation, placement and deployment of micro cell wireless telecommunications facilities within the public-rights-of-way in the City of Canby.

B. General Requirements.

1. Antenna(s).

- a. Antenna(s) shall be the smallest possible to achieve the coverage objective.
- b. All antennae shall be shrouded or sun shielded when technically feasible. All shrouds and equipment shall be painted to match the existing pole or new pole as applicable. Paint shall be maintained regularly and shrouds replaced or repainted if necessary to maintain visual concealment.
- c. The total volume of multiple antennas on one structure shall not exceed fifteen (15) cubic feet, unless additional antenna volume is requested and approved pursuant to Section I.
- d. Antennas and antenna equipment shall not be illuminated, except as required by municipal, federal or state authority, provided this shall not preclude deployment on a new or replacement street light.

2. Replacement and/or New poles.

- a. Replacement poles and all antenna equipment shall comply with the Americans with Disabilities Act (ADA), city construction and sidewalk clearance standards and city, state and federal laws and regulations in order to provide a clear and safe passage within, through and across the right-of-way. Further, the location of any replacement pole, new pole,

- a. Safety signage as required by applicable laws, regulations, and standards.
 - b. Identifying information and 24-hour emergency telephone number (such as the telephone number for the operator's network operations center) on wireless equipment in an area that is visible.
 - 6. Small wireless facilities may not displace any existing street tree or landscape features unless:
 - a. Such displaced street tree or landscaping is replaced with native and/or drought-resistant trees, plants or other landscape features approved by the City.
 - i. The replaced trees and/or landscaping shall be maintained for a minimum of 2 years from initial planting. Any trees that do not survive shall be replanted subject to the same 2 year survivor standards.
 - b. The applicant submits and adheres to a landscape maintenance plan or agrees to pay an appropriate in-lieu fee for the maintenance costs.
 - 7. In residential areas with an average 24-hour noise level (Ldn) at or below 70 decibels (dB), noise generated by telecommunications equipment shall not cause the Ldn exceed 60dB or to increase by 5.0 dB or more, even if the resulting Ldn would remain below 70 dB. In residential areas with an Ldn above 70 dB, noise generated by telecommunications equipment shall not cause the average to increase by 3.0 decibels (dB) or more.
- C. General Restrictions. Small wireless facilities are not permitted on the following:
 - 1. Decorative street lighting.
 - 2. Street furniture, artwork or monuments.
 - 3. Flag poles.
 - 4. Structures with historic significance to the City of Canby; including all national, state or other registered structures.
- D. Microcell Facilities Attached to Wooden Poles, Non-Wooden Poles and Structures with Overhead Lines. Small wireless facilities located on wooden utility poles, non-wooden

utility poles and structures with overhead lines shall conform to the following design criteria unless a deviation is requested and approved pursuant to Section I:

- 1.** Proposed antenna and related equipment shall meet:
 - a.** The City's design standards for small wireless facilities.
 - b.** The pole owner requirements.
 - c.** National Electric Safety Code (NESC) and National Electric Code (NEC) standards.
- 2.** The pole at the proposed location may be replaced with a taller pole or extended for the purpose of accommodating a small wireless facility; provided that the replacement or extended pole, together with any small wireless facility, does not exceed 50 feet in height or 10 percent taller than adjacent poles, whichever is greater. The replacement or extended pole height may be increased if required by the pole owner, and such height increase is the minimum necessary to provide sufficient separation and/or clearance from electrical and wireline facilities. Such replacement poles may either match the approximate color and materials of the replaced pole or shall be the standard new pole used by the pole owner in the city.
- 3.** Ancillary equipment such as cooling equipment, cabinets, shelters, switches, wiring, cabling, power sources, or similar equipment shall be required to be placed underground wherever feasible. If not technically feasible, this equipment shall be concealed, shrouded, blended or otherwise have its visual impact reduced to the greatest extent feasible.
- 4.** To the extent technically feasible, antennas, equipment enclosures, and all ancillary equipment, boxes, and conduit shall match the approximate material and design of the surface of the pole or existing equipment on which they are attached, or adjacent poles located within the contiguous right-of-way. Near matches may be permitted by the City when options are limited by technical feasibility considerations, such as when high-frequency antennas cannot be placed within an opaque shroud but could be wrapped with a tinted film.
- 5.** Antennas which are mounted on poles shall be mounted as close to the pole as technically feasible and allowed by the pole owner.

6. No antenna shall extend horizontally more than 20 inches past the outermost mounting point (where the mounting hardware connects to the antenna), unless additional antenna space is requested and approved pursuant to Section I.
 7. Antenna equipment, including but not limited to radios, cables, associated shrouding, disconnect boxes, meters, microwaves and conduit, which is mounted on poles shall be mounted as close to the pole as technically feasible and allowed by the pole owner.
 8. Antenna equipment for small wireless facilities must be attached to the pole, unless otherwise required by the pole owner or permitted to be ground-mounted pursuant to subsection (C)(1) above. The equipment must be placed in an enclosure reasonably related in size to the intended purpose of the facility.
 9. All cables and wiring shall be covered by conduits and cabinets to the extent that it is technically feasible, if allowed by pole owner. The number of conduits shall be minimized to the extent technically feasible.
- E. Microcell Wireless Facilities Attached to Non-Wooden Light Poles, Non-Wooden Utility Poles and Structures without Overhead Utility Lines. Small wireless facilities attached to existing or replacement non-wooden light poles, non-wooden utility poles and structures without overhead lines shall conform to the following design criteria unless a deviation is requested and approved pursuant to Section I.
1. External Equipment. The antennas and associated equipment enclosures must be camouflaged to appear as an integral part of the pole or be mounted as close to the pole as feasible and must be reasonably related in size to the intended purpose of the facility and reasonable expansion for future frequencies and/or technologies, not to exceed the volumetric requirements described in Section B. If the equipment enclosure(s) is mounted on the exterior of the pole, the applicant is encouraged to place the equipment enclosure(s) behind any decorations, banners or signs that may be on the pole. Conduit and fiber must be fully concealed within the pole.
 2. Ancillary equipment such as cooling equipment, cabinets, shelters, switches, wiring, cabling, power sources, or similar equipment shall be required to be placed underground wherever feasible. If not technically feasible, this equipment shall be concealed, shrouded, blended or otherwise have its visual impact reduced to the greatest extent feasible.
 3. Concealed Equipment. All equipment (excluding disconnect switches), conduit and fiber must be fully concealed within the pole. The antennas must be

camouflaged to appear as an integral part of the pole or be mounted as close to the pole as feasible.

4. Any replacement pole shall substantially conform to the material and design of the existing pole or adjacent poles located within the contiguous right-of-way unless a different design is requested and approved pursuant to Section I.
 5. The height of any replacement pole may not extend more than 10 feet above the height of the existing pole, unless such further height increase is required in writing by the pole owner.
- F. New Poles. Small wireless facilities may be attached to new poles that are not replacement poles under sections D or E, installed by the wireless provider, subject to the following criteria:
1. Antennas, antenna equipment and associated equipment enclosures (excluding disconnect switches), conduit and fiber shall be fully concealed within the structure. If such concealment is not technically feasible, or is incompatible with the pole design, then the antennas and associated equipment enclosures must be camouflaged to appear as an integral part of the structure or mounted as close to the pole as feasible, and must be reasonably related in size to the intended purpose of the facility, not to exceed the volumetric requirements in Section (B)(6) above.
 2. Ancillary equipment such as cooling equipment, cabinets, shelters, switches, wiring, cabling, power sources, or similar equipment shall be required to be placed underground wherever feasible. If not technically feasible, this equipment shall be concealed, shrouded, blended or otherwise have its visual impact reduced to the greatest extent feasible.
 3. To the extent technically feasible, all new poles and pole-mounted antennas and equipment shall substantially conform to the material and design of adjacent poles located within the contiguous right-of-way unless a different design is requested and approved pursuant to Section I.
 4. New poles shall be no more than forty (40) feet in height unless additional height is requested and approved pursuant to Section I.
 5. The city requires whenever feasible that wireless providers install small wireless facilities on existing or replacement poles instead of installing new poles, unless the wireless provider can document that installation on an existing or replacement pole is not technically feasible or otherwise not possible (due to a

lack of owner authorization, safety considerations, or other reasons acceptable to the City Engineer or Planning Director or the designee).

G. Undergrounding Requirements. Ancillary equipment shall be deployed underground whenever feasible.

1. Microcell wireless ancillary equipment deployed within the rights-of-way shall be located in underground vaults whenever technically feasible.
2. Antennas and other equipment that cannot be sited underground shall comply with all other applicable standards of this chapter.

H. Strand Mounted Equipment. Strand mounted small wireless facilities are permitted, subject to the following criteria:

1. Each strand mounted antenna shall not exceed 3 cubic feet in volume, unless a deviation is requested and approved pursuant to Section I.
2. Only 2 strand mounted antennas are permitted between any two existing poles.
3. Strand mounted devices shall be placed as close as possible to the nearest pole and in no event more than five feet from the pole unless a greater distance is required by the pole owner.
4. No strand mounted device will be located in or above the portion of the roadway open to vehicular traffic.
5. Strand mounted devices must be installed with the minimum excess exterior cabling or wires (other than original strand) to meet the technological needs of the facility.

I. Deviation from Design Standards.

1. An applicant may obtain a deviation from these design standards if compliance with the standard:
 - a. Is not technically feasible.
 - b. Impedes the effective operation of the small wireless facility.
 - c. Significantly impairs a desired network performance objective.
 - d. Conflicts with pole owner requirements.

- e. Materially inhibits or limits the provision of wireless service.
2. When requests for deviation are sought under subsections (l)(1)(a)-(e), the request must be narrowly tailored to minimize deviation from the requirements of these design standards, and the City Engineer / Planning Director or designee must find the applicant's proposed design provides similar aesthetic value when compared to strict compliance with these standards.
 3. The City Engineer / Planning Director or designee may also allow for a deviation from these standards when it finds the applicant's proposed design provides equivalent or superior aesthetic value when compared to strict compliance with these standards.
 4. The small wireless facility design approved under Section I must meet the conditions of 47 C.F.R. Sec. 1.6002(l).
 5. The City Engineer / Planning Director or designee will review and may approve a request for deviation to the minimum extent required to address the applicant's needs or facilitate a superior design.

16.55.50 Macro Telecommunications Facilities Siting and Design Standards

- A. The siting and review process for Macro telecommunications facilities is based on the type of facility (lattice, monopole, attached, stealth design or collocation) and its proposed location in a Preferred Site (M-1 or M-2 zoning districts), Acceptable Site (C-2 or C-M zoning districts), or Conditionally Suitable Site (C-R, C-C or C-1 zoning districts).
 1. Standards for siting telecommunications facilities shall be as follows:
 - a. Site plan review permits for macro telecommunications facilities that meet the Minor Permit (Type 1 – Site Plan Review) requirements.
 - b. Site and Design Review standards and criteria (section 16.49.040) shall apply to all telecommunications facilities described as a (Major Permit Type II/III Site and Design Review)
 - c. Site and Design Review standards and criteria (section 16.49.040 and Conditional Use Permit standards and criteria (section 16.50.010) shall apply to all telecommunications facilities described as a (Major Permit Type II/III Site and Design Review and Conditional Use Permit)
- B. Minor Permit (Type I – Site Plan Review):

1. An attached macro telecommunications facility (existing structure, including collocation on cell tower), including equipment shelters, buildings and cabinets housing land line switching/connection equipment, on any previously approved telecommunications pole, tower or structure, where the height of the attached facility is no more than 10 feet higher than the existing structure.
2. A detached macro telecommunications facility (monopole), including equipment shelters, buildings and cabinets housing telecommunications land line switching/connection equipment, on a Preferred Site, set back at least 660 feet from Highway 99E or land either planned or zoned for residential use, and less than 150 feet in height, including antennas.
3. A detached, stealth design macro telecommunications facility (monopole), including equipment shelters, buildings and cabinets housing land line switching/connection equipment, on an Acceptable Site, set back from all property lines a distance equal to or greater than the height of the tower, and less than 60 feet high.

C. Major Permit (Type II/III – Site and Design Review):

1. A detached telecommunications facility (monopole), including equipment shelters, buildings and cabinets housing land line switching/connection equipment, on a Preferred Site, set back at least 660 feet from Highway 99E or land either planned or zoned for residential use, and equal to or over 150 feet in height, including antennas.
2. A detached telecommunications facility (monopole), including equipment shelters, buildings and cabinets housing land line switching/connection equipment, on a Preferred Site, within 660 feet from Highway 99E or land either planned or zoned for residential use, and under 100 feet in height, including antennas.
3. A detached telecommunications facility (lattice tower), including equipment shelters, buildings and cabinets housing telecommunications land line switching/connection equipment, on a Preferred Site, set back at least 660 feet from Highway 99E or land either planned or zoned for residential use, and under 150 feet in height, including antennas.
4. A detached, stealth design telecommunications facility (monopole), including equipment shelters, buildings and cabinets housing land line switching/connection equipment, on an Acceptable Site, set back from all property lines a distance equal to or greater than the height of the tower, and less than 100 feet high, including antennas.

5. An attached telecommunications facility (existing structure, including collocation on cell tower), including equipment shelters, buildings and cabinets housing telecommunications land line switching/connection equipment, on a Preferred Site or Acceptable Site, where the height of the attached telecommunications facility is more than 10 feet higher than the existing structure.
 6. A detached telecommunications facility (monopole), including equipment shelters, buildings and cabinets housing telecommunications land line switching/connection equipment, on a Preferred Site, set back at least 660 feet from Highway 99E or land either planned or zoned for residential use, and equal to or over 150 feet in height, including antennas.
 7. A detached telecommunications facility (monopole), including equipment shelters, buildings and cabinets housing telecommunications land line switching/connection equipment, on a Preferred Site, within 660 feet from Highway 99E or land either planned or zoned for residential use, and under 100 feet in height, including antennas.
 8. A detached telecommunications facility (lattice tower), including equipment shelters, buildings and cabinets housing telecommunications land line switching/connection equipment, on a Preferred Site, set back at least 660 feet from Highway 99E or land either planned or zoned for residential use, and under 150 feet in height, including antennas.
 9. A detached, stealth design telecommunications facility (monopole), including equipment shelters, buildings and cabinets housing telecommunications land line switching/connection equipment, on an Acceptable Site, set back from all property lines a distance equal to or greater than the height of the tower, and less than 100 feet high, including antennas.
- D. Major Permit (Type II/III – Site and Design Review and Conditional Use Permit)**
1. A detached telecommunications facility (monopole), including equipment shelters, buildings and cabinets housing telecommunications land line switching/connection equipment, on a Preferred Site, within 660 feet from Highway 99E or land either planned or zoned for residential use, and equal to or over 100 feet in height, including antennas.
 2. A detached telecommunications facility (lattice tower), including equipment shelters, buildings and cabinets housing telecommunications land line switching/connection equipment, on a Preferred Site, set back at least 660 feet from Highway 99E or land either planned or zoned for residential use, and equal to or over 150 feet in height, including antennas.

- 3.** A detached, stealth design telecommunications facility (monopole), including equipment shelters, buildings and cabinets housing telecommunications land line switching/connection equipment, on an Acceptable Site, set back from all property lines a distance equal to or greater than the height of the tower, including, unless it is demonstrated that locating the proposed facility within the required setback area will take advantage of an existing natural or artificial feature to conceal the facility or minimize its visual impacts, and equal to or over 100 feet high, with a maximum height of 130 feet.
- 4.** An attached telecommunications facility (on an existing structure that is not a telecommunications pole or tower on a Conditionally Suitable Site, including equipment shelters, buildings and cabinets housing telecommunications land line switching/connection equipment, where the height of the attached telecommunications facility is no more than 10 feet higher than the existing structure.
 - A.** All macro telecommunications facilities shall observe minimum lot size, lot coverage, building height and building setback requirements of the underlying zoning district unless specifically exempted or otherwise regulated by this section. Underground facilities may encroach upon required yards or may be placed in appropriate easements.
 - B.** All detached macro telecommunications facilities shall be landscaped at the base of the towers/poles, and completely around the equipment shelters. The landscaping shall conform to the ODOT standards for plant size and spacing.
 - C.** Lighting for all telecommunications facilities shall be as required by the FAA or recommended by ODOT Aeronautics Division. All other lighting must be deflected away from adjoining property.
 - D.** All detached macro telecommunications facilities shall be screened from the public right-of-way and abutting property by a security fence or wall at least 6 feet in height consisting of chain link fencing with vinyl slats, solid wood fencing, concrete masonry unit block, or brick.
 - E.** Attached macro telecommunications facilities shall be painted to match the color of the mechanical screen wall or building to which it is attached.
 - F.** Equipment shelters, buildings and cabinets housing telecommunications ancillary equipment shall be concealed, camouflaged or placed underground.
 - G.** Any telecommunications facility sited on or designed with any of the following attributes shall first receive FCC approval, as specified in FCC Rules 1.1301 - 1.1319, as a condition of city approval prior to construction; Wilderness Area; Wildlife Preserve;

Endangered Species; Historical Site; Indian Religious Site; Flood Plain; Wetlands; High Intensity White lights in residential neighborhoods; Excessive radio frequency radiation exposure.

16.55.055 Exemptions

- A. Private amateur radio (HAM) antennas, their support structures, and direct to home satellite receiving antennas are exempt from this section (16.08.120), but shall otherwise comply with the applicable provisions of the underlying zoning district in which they are located to the extent that such provisions comply with Federal Communications Commission policy. (Ord. 981 section 19, 1997)

16.55.100 Severability

- A. Invalidity of a section of this ordinance shall not affect the validity and application of the remaining sections or parts of sections of this ordinance or prohibit the regulation of telecommunications facilities within rights-of-way, public and private real property.