

**CITY OF SILVERTON**  
**RESOLUTION**  
**19-16**

**A RESOLUTION OF THE SILVERTON CITY COUNCIL ADOPTING STANDARDS AND FEES FOR SMALL WIRELESS FACILITIES**

**WHEREAS**, The FCC recently passed an Order related to design and construction standards that cities can apply to small wireless facilities (“SWF”) within the Right-of-Way, and permitting and siting fees that can be charged (*In the Matter of Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment*, WT Docket No. 17-79, WC Docket No. 17-84 (September 26, 2018)) (the “Order”); and

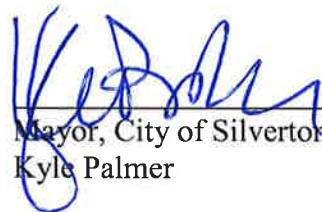
**WHEREAS**, in consideration of the direction provided in the Order, staff is recommending the adoption of standards and fees to regulate SWF within the Right-of-Way.

**NOW THEREFORE, BE IT RESOLVED BY THE CITY OF SILVERTON, AS FOLLOWS:**


Section 1: The City Council authorizes and adopts the attached standards and fees marked “Exhibit A”, and the standards and fees shall take effect upon the effective date of this resolution.

Section 2: That this resolution is and shall be effective after its passage by the City Council.

Resolution adopted by the City Council of the City of Silverton, this 1<sup>st</sup> day of April, 2019.

  
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Mayor, City of Silverton  
Kyle Palmer

ATTEST

  
\_\_\_\_\_  
City Manager/Recorder, City of Silverton  
Christy S. Wurster

**City of Silverton Small Wireless Facility Standards**

**1 Permitting Process**

A Network Provider shall comply with the following permitting process when seeking to install Small Wireless Facilities (SWF) in the public right-of-way (ROW):

- a. Obtain a City of Silverton franchise or license;
- b. Obtain a Public Facilities Improvement (PFI) Permit;
- c. Submit written evidence of authorization from the road authority in control of any ROW where SWF are proposed;
- d. Submit written evidence of authorization from the utility/light pole/infrastructure owner where the SWF are proposed to be sited.
- e. Submit a \$500 non-refundable deposit with the initial application for up to five SWF sites, and an additional \$100 for each additional SWF site proposed as part of the same application. Any additional expenses incurred by the City in reviewing the application exceeding the deposit amount are the responsibility of the applicant. Any such additional expenses will be billed to the applicant and no permits shall be issued until the outstanding balance for processing the application is paid to the City.
- f. Pay an annual fee of \$270 per SWF approved to be installed in the ROW. Approval of any SWF shall become void if payment of the \$270 is not received within 30 days of such approval, or within 30 days of the anniversary of such approval for any subsequent year. Any SWF for which the annual \$270 has not been paid shall be removed within 30 days of written notice of such nonpayment by the City. If the SWF for which the annual payment has not been paid is not removed by the Network Provider within 30 days, the City may cause it to be removed at the Network Provider's sole expense.

**2 General Provisions**

- A. Small Wireless Facilities, for the purposes of these standards, includes any pole, conduit/cabling, cabinets, equipment or other materials used in the installation of a wireless network.

- B. A Network Provider shall construct and maintain Wireless Facilities in a manner that does not:
- a. Obstruct, impede or hinder the usual travel or public safety on the Public Right-of-Way;
  - b. Obstruct the legal use of the Public Right-of-Way by other providers;
  - c. Violate or conflict with any Laws, including but not limited to the City of Silverton ordinances or standards;
  - d. Obstruct, impede, or hinder any operations of the City's infrastructure or systems (existing or future), including but not limited to Smart City equipment, street light equipment, traffic signal equipment, etc.
  - e. Any items installed after the initial application will require an additional approval process with the City and will be required to comply with any currently adopted standards at the time of installation.
- C. In locations where a new pole is installed to support a SWF, the City requires the pole be designed to internally conceal and hold all Wireless Facilities equipment. In instances where an existing pole is located in the desired location, and the existing pole is deemed structurally sound to support the proposed network equipment, the Wireless Facilities may attach to the existing pole so long as every effort is made to conceal the equipment inside the pole. In the event the proposed equipment cannot reasonably fit within the existing pole itself, and with the approval of the City Engineer, the Wireless Facilities shall be concealed or enclosed in one (1) equipment box, cabinet or other unit that may include ventilation openings.
- D. Any newly installed street light poles shall be PGE Option A.
- E. There shall be no surface mounted conduit or exposed wiring on any exterior surface of the supporting pole.
- F. There shall be no more than one (1) Network Node on any one (1) Pole.
- G. A Network Node installed on a street light pole must connect to a PGE power source that is separate from the power supply to the street light pole.
- H. Aerial cable spans and/or aerial span power connections are not permitted.
- I. Network Provider installations are limited within the public right-of-way to installation on:
- a. Street light poles (City and/or PGE owned)
  - b. Utility poles

- c. Network Provider installed poles, which will require a separate land use approval process. See City of Silverton Municipal Code for additional information.
- J. Network Providers are required to send the City of Silverton a Geographical Information System (GIS) file of all current installations within the City's geographical boundary on an annual basis. Current installations are defined as those that are active/in use or contain installed equipment waiting to be activated. Data in the GIS file must include locational coordinates, facility type, support type, mounting height, installation date, PGE pole ID (where applicable) and other data the City deems necessary for inventory management.
- K. Complete Construction plans for the proposed infrastructure must be submitted through a PFI permit application and bundled into a single PDF file, formatted to 11"x 17" sheets, sealed by a Professional Engineer licensed in the State of Oregon, and including:
- a. Each pole represented by a set of plans within the overall file, designed so that if any single pole is removed from the application, the remaining plan set remains valid. Overall sheets including details & notes are encouraged.
  - b. Structural analysis for each identified pole sealed by a Professional Engineer in the State of Oregon indicating the pole and foundation can handle the proposed equipment load, and where and existing pole is utilized, any existing loading. Foundations must also be approved by PGE.
  - c. Electrical load analysis showing that the existing transformer, circuit and any associated wiring can handle the additional power load from the proposed equipment, or any proposed upgrades as needed, and approval of the design by PGE.
  - d. Each plan set shall include the following:
    - 1. A cover sheet containing a scaled City map including all pole locations included in the subject application, a list of each pole location including GPS coordinate, PGE pole ID (where applicable), and a legend of all sheets.
    - 2. A page for each specific pole location referenced with pole title, name, location information, PGE pole ID (where applicable), and photograph of the proposed location of the pole.
    - 3. "Required Notes for Each set of Pole Plans" only if unique to the location and as such cannot be part of Overall sheet notes.
    - 4. Labeled and dimensioned site plan and elevation plan, including the following as applicable:
      - i. Key symbols, ROW lines, property lines, etc.
      - ii. Street information including names, curb-lines, sidewalk, street amenities, vegetation, existing and proposed utilities

- iii. Identification of immediately adjacent property owner(s) and/ or easements
  - iv. Structural Plans for pole and associated foundations that reference structural calculations and include depth, diameter, grounding, reinforcing, and foundation information as necessary
  - v. Labeled construction materials, color, finish, etc.
  - vi. Pole dimensions and total max height from adjacent grade
  - vii. Size and dimension of any projection(s) from pole
  - viii. Proposed voltage, maximum transmission wattage and radio frequency for all equipment associated with each Network Node, as allowed under FCC regulations
  - ix. Detail of proposed communication conduit and electrical connection location
  - x. Typical conduit / duct bank installation section detail
  - xi. All existing utilities, including but not limited to:
    - 1) Storm & Sanitary Sewer pipes and appurtenances
    - 2) Any utilities 24" and greater depicted as double-lines
    - 3) Gas line (indicate size, High Pressure, services, etc.)
    - 4) Electric lines (indicate power pole number, anchor pole, overhead line, and duct bank in actual dimensions)
    - 5) Water infrastructure including valves, fire hydrants, etc.
    - 6) Adjacent private service line locations where known
5. Certification for each proposed site showing the wireless facility operates within radio frequency exposure guidelines as established by the FCC.

L. Once installation is completed, the applicant is required to provide the City with a complete set of as-built drawings meeting the same information and requirements as the application set outlined in item K of this section, but updated for any approved changes that occurred in the field.

### **3 Location**

- A. All Wireless Facilities shall be located to avoid any physical or visual obstruction to pedestrian or vehicle traffic, or in any manner create safety hazards to pedestrians, bicyclists or motorists.
- B. All Wireless Facilities shall be positioned to not encroach or effectively narrow the clear path of any pedestrian, bicycle, or roadway facility.
- C. Wireless facilities proposed to be sited in the ROW shall be sited according to the following priorities, in descending order of preference. If the priority is not followed, the owner must demonstrate why a higher priority is not available for use. For purposes of this subsection, streets shall have the classification set forth in the Silverton Transportation System Plan.
  - a. First priority: principal arterials;

- b. Second priority: arterials;
- c. Third priority: collectors;
- d. Fourth priority: neighborhood collectors;
- e. Fifth priority: local residential streets.

#### **4 Separation**

- A. The separation between Network Provider (i.e. those not owned by the City of Silverton or its agency partners) installed Wireless Facilities shall be a minimum of two-hundred fifty (250) feet to minimize impacts to aesthetics and interaction between Network Provider equipment.
- B. The separation between Wireless Facilities and City of Silverton or its agency partners owned/operated Smart City technology shall be a minimum of three hundred (300) feet to minimize signal interference.
- C. In residential areas, the Wireless Facilities shall be located where the shared property line between two residential parcels intersects the Public Right-of-Way.
- D. In no instance shall a Wireless Facility be located in front of a building entrance or exit.

#### **5 Wireless Facilities**

##### **Cabinets and Equipment**

- A. Where Wireless Facilities are installed in the location of an existing street light, and the additional structural load cannot be accommodated by the existing street light pole and foundation, a new street light pole and foundation shall be installed and all equipment shall be concealed and located inside the pole, except for the antenna.
- B. Where Wireless Facilities are installed and the additional structural load can be accommodated by the existing street light pole and foundation, every effort must be made to conceal the equipment inside the pole. In instances where the proposed equipment cannot reasonably be accommodated within the existing pole, the Wireless Facilities shall be concealed or enclosed in an equipment box, cabinet or other unit that may include ventilation openings as follows:
  - a. The Network Provider is limited to one (1) equipment box or cabinet per pole per installation. All other equipment must be located either within the pole itself, or in a below ground vault.

- b. The Network Provider shall not install ground mounted cabinets or other equipment without written approval of the Public Works Director. Ground mounted cabinets shall be designed as a functional furniture item, such as a historic plaque podium, clock, public art, bike rack, etc.
- c. The base of all cabinets and equipment attached to poles shall be installed at least seven (7) feet above the ground, and if a Network Node attachment is projecting toward the street and/or bicycle facilities, for the safety and protection of the public and vehicular traffic, the base of the attachment shall be installed no less than seventeen (17) feet above the bicycle facility and/or street.
- d. No protrusion from the outer circumference of the pole shall be more than eighteen (18) inches and twenty four (24) inches in height.
- e. The color of all cabinets and equipment shall match its location.
- f. The total volume of all installed equipment external to the pole (including, but not limited to cabinets, vaults, boxes, antennas) shall not exceed twenty-one (21) cubic feet. This maximum applies to all equipment installed at the time of original application, and including any equipment to be installed at a future date. If a Network Provider wishes to install equipment that exceeds this maximum, the installation will be redefined as a Radio Frequency Transmission Facility application under Section 1.6.620 of the Silverton Development Code, including all the associated standards and rates for siting Radio Frequency Transmission facilities will be applied.
- g. Equipment shall be orientated away from nearby residential windows, doorways and entrances.
- h. Where permitted, equipment located on poles must be attached with stainless steel banding sized to support the required equipment load.
- i. Equipment shall not be placed adjacent to the walkway in a manner that diminishes the usability of the Pedestrian Walkway.

### **Antennas**

- A. Network Antennas shall be built into any newly installed poles.
- B. Where the Network Provider has demonstrated an existing pole can be used, the antenna must be mounted to existing pole in a manner that preserves the structural integrity and aesthetics of the pole and painted to match the existing pole.
- C. Antennas shall not exceed:
  - a. Maximum ten (10) feet in height or 10% of the pole height, whichever is less; and

- b. Maximum diameter/width of nine (9) inches.
  - c. If a network provider wishes to install an antenna that exceeds these limitations, the installation will be redefined as a Radio Frequency Transmission Facility application under Section 1.6.620 of the Silverton Development Code, including all the associated standards and rates for siting Radio Frequency Transmission facilities will be applied.
- D. Network Antenna placement shall not impair light, air or views from adjacent windows.
- E. For Equipment that include a GPS antenna, integrate the GPS antenna into the same cylindrical shape on top of the main antenna in order to form the appearance of a single unit.
- F. Minimal profiles and shrouds are preferred.
- G. Use antennas with electronic tilt mechanisms that reduce the need for bulky mechanical tilt brackets.
- H. Use single element side-arm or top-mount cylindrical antennas.
- I. Panel antennas are not permitted.
- J. For side-mounted antennas, use an arm that features flanges/channels so that cabling and passive radio frequency gear can be better hidden from view.
- K. For top-mounted antennas, use a shroud around the base of the antenna, especially for antennas models with four or more cabling ports. If a shroud cannot be used, utilize cable ties (or similar) to neatly arrange cabling and note such on the site completion checklist on the cover sheet of the plans.
- L. Pole top antenna mounts should not appear offset from the pole.
- M. Only one (1) antenna shall be allowed per pole. If a Network Provider wishes to upgrade or replace their antenna at any point during their permitted use of the right-of-way, they must remove any existing antenna so the maximum number of antennas at any time does not exceed one (1).

## **6 Network Provider Installed Poles**

- A. A Network Provider installed pole is defined as any pole installed by the Network Provider. This can be either to replace an existing pole in its current location that cannot structurally support the Wireless Facilities, or a pole installed in a new location where it can be shown that no existing location can be utilized.



- B. New Network Provider installed poles must be designed to be consistent in size, color, and character with the existing street lighting within the project area and/or block face. This includes tapering the poles so they have the appearance of street lighting.
- C. Network Provider poles that are installed to replace or supplement existing street lighting must be submitted with an accompanying photometric analysis that meets the Illuminating Engineering Society (IES) RP-08-14 for street lighting. The photometric analysis must be sealed by a Professional Engineer in the State of Oregon.
- D. The maximum diameter of any Network Provider installed pole shall not exceed two and a half feet (2.5').
- E. Network Provider installed pole set back from curbs, offset from driveways and offset from street trees shall be directed by City Staff.
- F. Network Provider installed poles and accessory equipment shall not be located within 10 feet of any energized line. Installation shall conform to OAR 437-002-0047 and 437-002-2316.
- G. Caution shall be exercised during design and installation of new Network Provider installed poles so they do not interfere or conflict with existing building overhangs and awnings.
- H. Network Provider installed poles shall use breakaway technology, unless otherwise directed by the City Engineer.
- I. Network Provider installed poles shall provide for pole banner brackets to accommodate a 24" x 36" banner.
- J. Network Provider installed poles that are not a replacement street light shall provide a downward facing 20 watt (minimum) street light.

## **7 Electrical Service**

- A. The Network Provider shall be responsible for coordinating with PGE for electrical service to the Wireless Facility. The City shall not be liable to the Network Provider for any stoppages or shortages of electrical power furnished to the Wireless Facilities, including without limitation, stoppages or shortages caused by any act, omission or requirement of a public utility serving the structure or the act or omission of any other tenant or Network Provider of the structure, or for any other cause beyond the control of the City.
- B. The Network Provider shall not receive power via a metered service used to supply power to any street lights, traffic signals, or other City asset without accompanying

documentation from PGE that demonstrates to the City's satisfaction that measures are in place to ensure the City and Network Provider usages are tracked separately for billing purposes.

- C. Meter and other enclosures shall match the infrastructure that it is attached to and shall be maintained, including regular painting and use of a graffiti-resistant paint.
- D. Disconnect switches must be present and accessible by City and local utility staff for each Wireless Facility installation and shall be stacked above or below the meter, instead of attached to the side of the meter.
- E. Electric meters and disconnect switches shall be located as required by the City and local utility company. Electric meters and disconnect switches shall not be located on the side of the pole that faces the sidewalk.
- F. All electrical service conduit and wiring shall be located inside the pole.
- G. A Network Provider shall not allow or install generators or backup generators in the right-of-way.

## **8 Logo, Decals, Flashing Lights, and RF Warning Sticker**

- A. The Network Provider shall post its name, identifying information, permit number and 24 -hour emergency telephone number in an area of the Wireless Facility that is visible to the public. Signage required under this section shall not exceed two (2) inches by four (4) inches, unless otherwise required by law (e.g. RF ground notification signs).
  - a. Place the identifying information on the side of the enclosure facing on-coming vehicle traffic for the side of the road where the equipment is installed. Consider combining with disconnect information.
  - b. Use sticker colors that are muted (e.g. tan), complementary or the same color as the equipment but with white colored lettering.
  - c. Utilize the smallest and lowest visibility (e.g. yellow instead of blue) radio-frequency (RF) warning sticker required by government or electric utility regulations. Place the RF sticker as close to the antenna as possible, facing directly out toward the street, or directly away from the street if there is no window or doorway within twenty-five (25) feet of the pole (preferred).
- B. All equipment manufacturer decals shall be removed. Except as required by Law or by the Utility Pole owner, Network Provider shall not post any signage or advertising on the Wireless Facilities.

- C. Equipment shall not have static or flashing light that are visible when the enclosures are closed.
- D. Equipment related features (e.g. cooling system fans) shall not exceed a 50 decibels during the day and 40 decibels at night.

## **9 Conduit and Cabling**

- A. Electrical systems for Wireless Facilities located within the City and/or PGE owned street light poles shall be contained in a dedicated conduit labeled to identify its dedicated use for Wireless Facilities.
- B. All conduit runs must be marked with an underground marking tape per 00960.42(e) of the *Oregon Standard Specifications for Construction* and contain locate wires.
- C. All conduits shall be Schedule 40 PVC and all elbows shall be fiberglass.
- D. Install bushings on all conduit ends and seal the ends with an approved conduit plug.
- E. All in ground conduit must be located in the public utility easement (PUE) where available.
- F. Installations that utilize fiber connections to the Network Provider's Wireless Facilities must be accompanied by the following:
  - a. Six (6) or more terminated and tested strands of fiber dedicated for City use.
  - b. Dedicated City fibers must run the duration of any newly installed conduit runs by the Network Provider for the proposed Wireless Facility site.
  - c. Dedicated City fibers must be located in a dedicated conduit clearly marked for City use.
  - d. City fibers can be terminated in the same vaults, but City of Silverton must have access to the vaults for ease of maintenance work. Alternatively, dedicated vaults for City use may be provided.
  - e. Dedicated City fibers must meet specifications provided by the City's IT Manager. The Network Provider must provide testing results to show fibers are functional at completion of construction.

## **10 Equipment and Structure Finishes**

- A. Pole colors shall match the existing street light pole color scheme.

- B. The antennas, mounting brackets, PVC, steel risers, strap and/or other materials used in installation must match the color of the infrastructure to which it is attached.
- C. Poles and associated wireless facilities equipment shall be prepared and powder coated consistent with Section 00593 of the 2018 ODOT Standard Specifications.

## **11 Graffiti Abatement**

As soon as practical, but not later than ten (10) calendar days from the date that the Network Provider receives notice thereof, Network Provider shall remove all graffiti on any of its Network Node, Node Support Pole, and related equipment located in the right-of-way. The foregoing shall not relieve the Network Provider from complying with any City graffiti or visual blight ordinance or regulation. A Public Facility Improvement (PFI) Permit will be required to conduct maintenance activities.

## **12 Trees and Vegetation**

- A. Except in cases where normal tree or vegetation trimming is necessary to ensure the safe operation of the communications service or to protect the Network Provider's Wireless Facilities, the removal, cutting, marring, defacing or destruction of any trees or other vegetation (other than grass) by Network Providers within the right-of-way is prohibited.
- B. All such normal tree or vegetation trimming by the Network Provider must be performed in accordance with the requirements of existing or subsequently enacted City ordinances and shall be at the network Provider's own expense. A Public Facility Improvement (PFI) Permit will be required to conduct maintenance activities.