



1505 Westlake Ave N

Seattle, WA 98109

Phone: (206) 336-2889

Fax:

[www.crowncastle.com](http://www.crowncastle.com)

## **PROJECT NARRATIVE - ROW at 8215 SE 78<sup>th</sup> ST (MIV 43)**

### **PROJECT DESCRIPTION**

Crown Castle proposes to collocate new small cell equipment on an existing small cell facility located in the public right-of-way adjacent to 8215 SE 78<sup>th</sup> Street (zoning designation P). Attachment of Verizon Wireless equipment to an existing utility pole was recently approved under WCF22-001. However, as Puget Sound Energy has determined that the pole will need to be replaced prior to installation of the new small cell equipment, a new approval is requested to attach the equipment as previously approved to a REPLACEMENT wood utility pole. No other changes to the design or scope of work are proposed. PSE will obtain separate ROW use permits for the replacement of the wood pole.

As part of the small cell deployment, the exiting wireless equipment will be removed, and the wood pole replaced by PSE. Following pole replacement, (1) pole top antenna will be installed within a new pole top shroud. Ancillary equipment will be concealed within the equipment shroud at 13' AGL.

The proposed small cell equipment includes the following:

- (1) Charles Industries antenna shroud. The proposed shroud is 61" x 20", located on a replacement pole extender on an replacement wood utility pole. The antenna shroud will be painted to match the wood pole and will have a tip height of 51'-0" AGL.
- (1) 4G JMA Wireless CYL2Q24GR-1 xyz antenna, located within the proposed antenna shroud.
- Associated cabling located within conduit. All exterior conduit will be painted to match the wood utility pole.
- All other existing equipment and concealment to be reinstalled, per plans.

The proposed small installation will comply with the applicable City of Mercer Island Code sections as follows:

#### **19.06.070 Small cell facilities deployment**

**The following provisions establish standards for small cell facilities deployments; provided, however, that any small cell or small cell network component which is not exempt from SEPA review shall also comply with Chapter 19.07 MICC:**

**A. Small Cell Facility Approval Required. Small cell facilities are permitted in all zoning designations subject to a Type II land use review process pursuant to Chapter 19.15 MICC. In addition to the small cell approval, one or more right-of-way use permits may also be required for small cell deployment.**

[Applicant Response: The subject application has been submitted as an Eligible Facility Request under Section 6409 of the Spectrum Act. The proposal is for approval of a Type II land use application for collocation on an existing small wireless facility.](#)

**B. Previously Approved Small Cells on Existing or Replacement Utility Poles.** Eligible small cell facilities permitted under the provisions of a franchise approval prior to the adoption of these standards shall be considered to have satisfied the design and concealment standards when installed and maintained in accordance with the franchise agreement.

Applicant Response: Not applicable.

**C. Replacement Utility Pole – Street Lighting.** With the express permission of the city, a replacement utility pole or a new utility pole may be permitted in the form of a new street light standard. The design of the street light standard shall be in accordance with the city lighting requirements in effect at the time of application. Wherever technologically feasible, all equipment and cabling shall be internal to the replacement street lighting standard or concealed through the design and implementation of a concealment plan.

Applicant Response: The existing lighting features of the subject pole will be reinstalled by PSE at the time of pole replacement and shall not be impacted by the proposed collocation. Installation of lighting shall be in accordance with the standards of Puget Sound Energy and the City of Mercer Island.

**D. Undergrounded Utility Areas.** A service provider or infrastructure company desiring to locate any aboveground infrastructure in an undergrounded utility area shall provide a separate, standalone pole. Pole design to be approved by the city pursuant to MICC 19.06.075.

Applicant Response: Not applicable. The project is not located within an underground utility area.

#### **19.06.075 Small cell deployments – Design and concealment standards**

Small cell deployments, whether permitted on the right-of-way pursuant to a franchise or in accordance with this chapter, shall conform to the design standards set forth in this section.

**A. Small Cell Deployment Design Standards – General Requirements.** All small cell deployments shall comply with the following provisions:

**1. Ground-mounted equipment in the rights-of-way is prohibited unless such facilities are placed underground or the applicant can demonstrate that pole-mounted or undergrounded equipment is technically infeasible.** If ground-mounted equipment is necessary, then the applicant shall submit a concealment plan pursuant to subsection G of this section. Generators located in the rights-of-way are prohibited.

Applicant Response: Not applicable. All proposed small cell equipment will be attached to a replacement wood utility pole.

**2. No equipment shall be operated so as to produce noise in violation of Chapter 8.24 MICC.**

Applicant Response: The proposed radio units require fans for operation, which have a minimal noise profile as to have a negligible impact on existing noise levels at this location. A noise analysis to demonstrate compliance with City of Mercer Island noise limitations has been provided as part of this resubmittal package. As the radios required for proper network function at this location require cooling fans, no noiseless equipment options exist for this location. As such, Crown Castle requests that the City make the approval finding for this criterion.

**3. Small cell facilities are not permitted on traffic signal poles.**

Applicant Response: The proposed pole not include a traffic signal.

**4. Replacement poles and new poles shall comply with the Americans with Disabilities Act (ADA), city construction and sidewalk clearance standards, and state and federal regulations in order to provide a clear and safe passage within the rights-of-way.**

Applicant Response: The proposed equipment will be located on a replacement wood utility pole. The replacement pole will be installed in the approximate location of the pole to be removed as to not impact existing right-of-way conditions once construction is complete. As such, the installation of small cell equipment at this location shall not create any non-compliance with the Americans with Disabilities Act (ADA), city construction and sidewalk clearance standards, and state and federal regulations in order to provide a clear and safe passage within the rights-of-way.

**5. Replacement poles shall be located as near as possible subject to approval by the city engineer to the existing pole with the requirement to remove the abandoned pole.**

Applicant Response: The replacement pole will be installed in the approximate location of the pole to be removed as to not impact existing right-of-way conditions once construction is complete.

**6. No signage, message or identification other than the manufacturer's identification or identification required by governing law is allowed to be portrayed on any antenna, and any such signage on equipment enclosures shall be of the minimum amount possible to achieve the intended purpose; provided, that signs are permitted as concealment element techniques where appropriate.**

Applicant Response: No signage, message, or identification other than the manufacturer's identification or identification required by governing law shall be portrayed on any antenna. Please refer to sheets A1.2 and D1.1 of the revised project plans for location and details for the required RF warning signage.

**7. Antennas and related equipment shall not be illuminated except for security reasons, required by a federal or state authority, or unless approved as part of a concealment plan.**

Applicant Response: No illumination is proposed.

**8. Side arm mounts for antennas or equipment are prohibited.**

Applicant Response: No side mounts are proposed.

**9. The preferred location of a small cell facility on a pole is the location with the least visible impact.**

Applicant Response: The subject application proposes collocation on an existing small cell facility and has been submitted as an Eligible Facility Request under Section 6409 of the Spectrum Act. The replacement wood pole and small cell installation have been designed and located to integrate with existing above ground utilities in the vicinity. The proposed antennas are in a pole top canister, with ancillary equipment located in a shroud at 13' AGL. All equipment will be painted to match the wood utility pole, with additional mitigation of any visual impacts provided by surrounding landscape. As such, the proposed collocation shall not result in any additional visual impact to the surrounding land uses and complies with this section.

**10. Antennas, equipment enclosures, and ancillary equipment, conduit and cable shall be located within the building or pole to the maximum extent feasible.**

Applicant Response: The proposed small cell antenna will be attached at the top of the pole, as to appear as a continuation of the wood pole. All other small cell equipment shall remain flush mounted and located within a shroud painted to match the wood pole.

**11. Antennas, equipment enclosures and ancillary equipment, conduit and cable shall not adversely affect the aesthetic appearance or visual character of the building or pole upon which they are attached.**

Applicant Response: The proposed small cell antenna will be mounted at the top of the replacement wood pole in a manner as to appear as a continuation of the pole. All other equipment will be flush mounted to the pole and painted to match as to minimize visual impacts. The proposed placement and size of the proposed equipment shall not adversely impact the aesthetic appearance or visual character of the pole. Photo simulations are being provided as part of this application to demonstrate compliance with this requirement.

**12. The city may consider the cumulative visual effects of small cells mounted on poles, together with existing utility equipment, within the rights-of-way when assessing proposed siting locations so as to not adversely affect the visual character of the city. This provision shall not be applied to limit the number of permits issued when no alternative sites are reasonably available nor to impose a technological requirement on the service provider.**

Applicant response: Provision noted.

**13. The design criteria as applicable to small cell facilities described herein shall be considered concealment elements and such small cell facilities may only be expanded upon an eligible facilities request described in this chapter, when the modification does not defeat the concealment elements of the facility.**

Applicant response: Provision noted.

**C. Wooden Pole Design Standards. Small cell facilities located on wooden poles shall conform to the following design criteria in addition to the general requirements set forth in subsection A of this section:**

**1. The wooden pole at the proposed location may be replaced with a taller pole for the purpose of accommodating a small cell facility; provided, that the replacement pole shall not exceed a height that is a maximum of 10 feet taller than the existing pole, unless a further height increase is required and confirmed in writing by the pole owner and such height extension is the minimum extension possible to provide sufficient separation and/or clearance from electrical and wireline facilities.**

Applicant Response: The subject application has been submitted as an eligible facility request to collocate equipment on an existing small cell facility. The proposed collocation does not constitute a substantial change as defined by 47 CFR 1.6100. As such, the proposal meets the criteria for approval.

**2. A pole extender may be used instead of replacing an existing pole but may not increase the height of the existing pole by more than 10 feet unless a further height increase is required and confirmed in**

**writing by the pole owner and such height increase is the minimum extension possible to provide sufficient separation and/or clearance from electrical and wireline facilities. The pole extender shall be painted to approximately match the color of the pole and shall substantially match the diameter of the pole measured at the top of the pole.**

Applicant Response: The subject application has been submitted as an Eligible Facility Request to collocate equipment on an existing small cell facility. With respect to height, Section 6409 of the Spectrum Act and its implementing rules allow for an increase of 10' above the height of the previously established small cell facility. The proposed canister will be mounted on a replacement pole extension on a replacement wood pole, bringing the overall height of the facility to 51'. As the 2.5' height increase in less than 10%, the proposed collocation does not constitute a substantial change and complies with this section.

**3. Replacement wooden poles may either match the approximate color and materials of the replaced pole or shall be the standard new wooden pole used by the pole owner in the city.**

Applicant Response: The new pole shall match the colors and materials or the pole to be replaced. Please refer to the provided photo simulations.

**4. Antennas, equipment enclosures, and all ancillary equipment, boxes and conduit shall be colored, powder coated, or other permanent coloration, to match the approximate color of the surface of the wooden pole on which they are attached.**

Applicant response: All existing and proposed small cell equipment shall be painted to match the replacement wood utility pole. Please refer to the provided photo simulations for renderings.

**5. Panel antennas shall not be mounted on the side of a pole more than 12 inches from the surface of the wooden pole, measured from the exterior surface of the pole to the furthest extent of the panel antenna.**

Applicant Response: Not applicable. No side mount antennas are proposed.

**6. Antennas should be placed in an effort to minimize visual clutter and obtrusiveness. Multiple antennas are permitted on a wooden pole; provided, that each antenna enclosure shall not be more than three cubic feet in volume, with a cumulative total antenna volume not to exceed 12 cubic feet.**

Applicant Response: The subject application has been submitted as an Eligible Facility Request to collocate equipment on an existing small cell facility. The small cell antennas will be located within a pole top canister that shall not result in a substantial change to the existing facility as defined by 47 CFR 1.6100. As such, the proposal meets the criteria for approval.

**7. In addition to the increased antenna height allowed in subsection (C)(2) of this section, a canister antenna may be mounted on top of an existing wooden pole, which may not exceed the height requirements described in subsection (C)(1) of this section. A canister antenna mounted on the top of a wooden pole shall not exceed 16 inches, measured at the top of the pole, and shall be colored or painted to match the pole. The canister antenna must be placed to look as if it is an extension of the pole. In the alternative, the applicant may propose a side-mounted canister antenna, so long as the inside edge of the antenna is no more than 12 inches from the surface of the wooden pole. All cables**

**shall be concealed either within the canister antenna or within a sleeve between the antenna and the wooden pole.**

Applicant Response: The proposed pole top shroud will be attached on a replacement pole extender at the top of a replacement wood utility pole. The proposed shroud will be painted to match and appear as a continuation of the wood pole. All cabling will be placed in conduits on the exterior of the pole, flush mounted and painted to match. All other equipment will be flush mounted to the pole and painted to match as to minimize visual impacts. The proposed placement and size of the proposed equipment does not constitute a substantial change under Section 6409 of the Spectrum Act and shall not adversely impact the aesthetic appearance or visual character of the pole. As such, the proposal meets the approval criteria for this section.

**8. In addition to the increased antenna height allowed in subsection (C)(2) of this section, an omnidirectional antenna may be mounted on the top of an existing wooden pole, provided such antenna is no more than four feet in height and is mounted directly on the top of a pole or attached to a sleeve made to look like the exterior of the pole as close to the top of the pole as technically feasible. All cables shall be concealed within the sleeve between the bottom of the antenna and the mounting bracket.**

Applicant Response: Not applicable. The proposed antennas shall be mounted in a pole top shroud.

**9. All related equipment including but not limited to ancillary equipment, radios, cables, associated shrouding, microwaves, and conduit which are mounted on wooden poles shall not be mounted more than six inches from the surface of the pole, unless a further distance is technically required, and is confirmed in writing by the pole owner.**

Applicant Response: The subject application has been submitted as an Eligible Facility Request to collocate equipment on an existing small cell facility. All ancillary equipment shall remain in a pole mounted shroud 13' AGL and shall not constitute a substantial change to the existing facility. As such, the proposed collocation meets this criterion.

**10. Equipment for small cell facilities must be attached to the wooden pole, unless otherwise permitted to be ground-mounted pursuant to subsection A of this section. The equipment must be placed in the smallest enclosure possible for the intended purpose. The equipment enclosure may not exceed 17 cubic feet. Multiple equipment enclosures may be acceptable if designed to more closely integrate with the pole design and do not cumulatively exceed 17 cubic feet. The applicant is encouraged to place the equipment enclosure behind any banners or road signs that may be on the pole if such banners or road signs are allowed by the pole owner.**

Applicant response: All existing and proposed wireless equipment shall be attached to a replacement wood utility pole. No ground mounted equipment is proposed.

**11. The visual effect of the small cell facility on all other aspects of the appearance of the wooden pole shall be minimized to the greatest extent reasonably possible.**

Applicant Response: The proposed pole top shroud will be attached on a replacement pole extender at the top of a replacement wood utility pole. The proposed shroud will be painted to match and appear as a continuation of the wood pole. All cabling will be placed in conduits on the exterior of the pole, flush

mounted and painted to match. All other equipment will be flush mounted to the pole and painted to match as to minimize visual impacts. The proposed placement and size of the proposed equipment does not constitute a substantial change under Section 6409 of the Spectrum Act, and shall not adversely impact the aesthetic appearance or visual character of the pole. As such, the proposal meets this criterion.

**12. The use of the wooden pole for the siting of a small cell facility shall be considered secondary to the primary function of the pole. If the primary function of a pole serving as the host site for a small cell facility becomes unnecessary, the pole shall not be retained for the sole purpose of accommodating the small cell facility and the small cell facility and all associated equipment shall be removed.**

Applicant Response: Puget Sound Energy shall maintain ownership of the pole; with PSE service provision remaining the primary use for the pole.

**13. All cables and wires shall be routed through conduit along the outside of the pole. The outside conduit shall be colored, powder coated, or other permanent coloration, to match the pole. The number and size of conduits shall be minimized to the number technically necessary to accommodate the small cell.**

Applicant Response: All cables and wires shall be routed through a conduit, painted to match, attached to the outside of the wood pole. In addition, flex conduit will be used to provide screening for the cable path from the main conduit to the concealed antennas.