

Aesthetic Plan and Guidelines for Utilities within the Right of Way

Purpose Statement

The City of Columbia desires to promote safe, cleanly organized, and aesthetically acceptable deployment of communications services and other services that may deploy on support structures within the Right of Way (ROW), using the smallest and least intrusive means available to provide communications services to the community.

These guidelines do not apply to deployments of infrastructure outside the ROW or to taller towers or monopoles traditionally used to provide communications/wireless services that are governed by TCA 13-24-304 and TCA 13-24-305, or to power distribution systems.

The overall goal of these guidelines is that all equipment deployed within the ROW should be “aesthetically compatible” with surrounding Potential Support Structures (PSS) and aesthetically pleasing. For the purposes of these guidelines, “aesthetically compatible” shall generally mean the same or closely compatible color, shape, and material type.

Definitions

- (1) "Aesthetic plan" means any publicly available written resolution, regulation, policy, site plan, or approved plat establishing generally applicable aesthetic requirements within the authority or designated area within the authority. An aesthetic plan may include a provision that limits the plan's application to construction or deployment that occurs after adoption of the aesthetic plan. For purposes of this document, such a limitation is not discriminatory as long as all construction or deployment occurring after adoption, regardless of the entity constructing or deploying, is subject to the aesthetic plan;
- (2) "Applicant" means any person who submits an application pursuant to this document;
- (3) "Application" means a request submitted by an applicant to an authority:
 - a. For a permit to deploy or collocate small wireless facilities in the ROW; or
 - b. To approve the installation or modification of a PSS associated with deployment or collocation of small wireless facilities in the ROW;
- (4)
 - a. "Authority" means:
 - i. Within a municipal boundary, the municipality, regardless of whether such municipality is a metropolitan government;
 - ii. Within a county and outside a municipal boundary, the county; or
 - iii. Upon state-owned property, the state;

- b. "Authority" does not include a government-owned electric, gas, water, or wastewater utility that is a division of, or affiliated with, a municipality, metropolitan government, or county for any purpose of this document, and the decision of the utility regarding a request to attach to or modify the plant, facilities, or equipment owned by the utility shall not be governed by this document.
- (5) "City-owned PSS" means a PSS owned by the City of Columbia but does not include a PSS owned by a distributor of electric power, regardless of whether an electric distributor is investor-owned, cooperatively-owned, or government-owned;
- (6) "Collocate," "collocating", and "collocation" mean, in their respective noun and verb forms, to install, mount, maintain, modify, operate, or replace small wireless facilities on, adjacent to, or related to a PSS. "Collocation" does not include the installation of a new PSS or replacement of authority-owned PSS;
- (7) "Communications facility" means the set of equipment and network components, including wires and cables and associated facilities, used by a communications service provider to provide communications service;
- (8) "Communications service" means cable service as defined in 47 U.S.C. § 522(6), telecommunications service as defined in 47 U.S.C. § 153(53), information service as defined in 47 U.S.C. § 153(24) or wireless service;
- (9) "Communications service provider" means a cable operator as defined in 47 U.S.C. § 522(5), a telecommunications carrier as defined in 47 U.S.C. § 153(51), a provider of information service as defined in 47 U.S.C. § 153(24), a video service provider as defined in § 7-59-303, or a wireless provider;
- (10) "Fee" means a one-time, nonrecurring charge;
- (11) "Historic district" means a property or area zoned as a historic district or zone pursuant to § 13-7-404 and defined by the City of Columbia Zoning Regulations;
- (12) "Micro wireless facility" means a small wireless facility that:
- a. Does not exceed twenty-four inches (24") in length, fifteen inches (15") in width, and twelve inches (12") in height; and
 - b. The exterior antenna, if any, does not exceed eleven inches (11") in length;
- (13) "Person" means an individual, corporation, limited liability company, partnership, association, trust, or other entity or organization, including an authority;
- (14) "Potential support structure for a small wireless facility" or "PSS" means a pole or other structure used for wireline communications, electric distribution, lighting, traffic control, signage, or a similar function, including poles installed solely for the collocation of a small wireless facility. When "PSS" is modified by the term "new," then "new PSS" means a PSS that does not exist at the time the application is submitted, including, but not limited to, a PSS that will replace an existing pole. The fact that a structure is a PSS does not alone authorize an applicant to collocate on, modify, or replace the PSS until an application is approved and all requirements are satisfied pursuant to this document;
- (15) "Residential neighborhood" means an area within the City of Columbia's city limits that is for single-family residences and does not include multiple commercial properties and is subject to speed limits and traffic controls consistent with residential areas;

(16) "Right-of-way" or "ROW" means the space, in, upon, above, along, across, and over all public streets, highways, avenues, roads, alleys, sidewalks, tunnels, viaducts, bridges, skywalks under the control of the City of Columbia, and any unrestricted public utility easement established, dedicated, platted, improved, or devoted for utility purposes and accepted as such public utility easement by the City of Columbia, but excluding lands other than streets that are owned by the City of Columbia;

(17)

a. "Small wireless facility" means a wireless facility with:

- i. An antenna that could fit within an enclosure of no more than six (6) cubic feet in volume; and
- ii. Other wireless equipment in addition to the antenna that is cumulatively no more than twenty-eight (28) cubic feet in volume, regardless of whether the facility is ground-mounted or pole-mounted. For purposes of this subdivision (19)(A)(ii), "other wireless equipment" does not include an electric meter, concealment element, telecommunications demarcation box, grounding equipment, power transfer switch, cut-off switch, or a vertical cable run for the connection of power and other services; and

b. "Small wireless facility" includes a micro wireless facility;

(18) "Wireless provider" means a person who provides wireless service; and

(19) "Wireless services" means any service using licensed or unlicensed spectrum, including the use of WiFi, whether at a fixed location or mobile, provided to the public.

General Construction and Aesthetic Guidelines

Generally, Small Wireless Facilities (SWFs) or other utility equipment installations within the ROW will be one of the following types:

- Collocation on Existing PSS
- Removal and Replacement of PSS
- New PSS

Potential Support Structures generally will be street lights, traffic signals and utility poles, but other structures in the ROW may be used as a PSS.



All deployments in the ROW shall be permitted through City of Columbia Development Services Department. All deployments on non-city owned support structures shall meet the requirements of the owner and City of Columbia.

Collocation: The City of Columbia desires and encourages collocations between limited numbers of multiple separate communications service providers on the same support structure whenever feasible. If the applicant chooses not to collocate when options appear available, demonstrative proof must be provided as to why collocation is not feasible. As the density of communications facilities increases, collocation will become a necessity to preserve the character and aesthetics of the City of Columbia streets and ways. Communications facilities shall be located and designed to not reduce, restrict, or occlude illumination on PSS's with luminaires. No equipment shall be attached to the support arms or heads of luminaires.

Concealment: All equipment including antenna, other wireless equipment, cabling, and mounts and hardware excluding cut-off switch, vertical cable run for power, grounding equipment, and electrical meter shall be concealed unless specifically referenced in the following guidelines.

Antennas for SWFs: Antenna(s) may either be mounted on top or side of PSS and concealed within an enclosure/shroud, with all materials matching in color, texture, and appearance. If mounted on top of a support structure, the antenna shall be mounted centrally with a smooth transition from the support structure. Antennas mounted on top of support structures shall be no more than 6 cubic feet in volume and a maximum diameter of 14" (roughly 5.5' tall at 14" diameter and 6 cubic feet). Antennas mounted on the side of support structures shall be a no more than 6 cubic feet in volume and a maximum of 16"W x 12"D.

Pole Mounted Equipment Cages/Shrouds: When pole-mounted equipment is either permitted or required, all equipment other than an antenna(s), electric meter, and disconnect switch must be concealed within a single equipment shroud. All cabling and connections shall be concealed within the shroud. Pole mounted equipment shall be no more than 28 cubic feet in volume and a maximum of 16"W x 12"D per SWF deployment. Pole mounted equipment cages/shrouds should be powder coated galvanized steel except for portions that require alternative materials for RF transmissivity. All materials used shall match in color, texture, and appearance. When possible, existing equipment that may be mounted on the pole shall be consolidated into a single equipment shroud.

Ground Mounted Equipment: Ground mounted equipment is permitted when placed in conjunction with an existing utility pole and concealed within a cabinet. Ground mounted cabinets 28 cubic feet or less must be square or rectangular in shape, a maximum of 48" in height, and accommodate for mounting electrical meters, if one is required, on the same pad. They shall be mounted on a pad that is level. Ground mounted equipment cabinets shall be powder coated galvanized steel either painted to match surrounding equipment and/or PSS or painted Gloss Black #17038 per Federal Color Standard 595. No ground mounted equipment shall be placed closer than 2.5 feet from the edge of pavement of a road system. Small ground mounted cabinets/enclosures less than 3 cubic feet

Health and Safety Regulations: All SWFs shall be designed, constructed, operated, and maintained in compliance with all generally applicable health and safety standards, regulations, including regulations for human exposure to RF emissions. All installations shall meet or exceed all applicable structural standards, clearance standards, and provisions of the National Electrical Safety Code and those of the electric service provider. In case of conflict, the most stringent requirements shall prevail. All necessary permits shall be obtained by the applicant prior to deployment.

SWF Replacement, Removal, and Relocation: All SWF equipment shall be removed and/or relocated at no cost to the City of Columbia if the PSS is removed, relocated, or replaced. The equipment shall be removed within a reasonable time frame that does not delay the removal or replacement of the PSS.

Repair and Maintenance: The applicant shall be responsible for repair of damage caused by the installation or maintenance of any facility installed in the ROW, including damage to public road ways, sidewalks, and infrastructure. Any alteration or cutting of City of Columbia accepted streets and sidewalks shall require a separate Street and Utility Cut Permit through the Department of Development Services. SWFs shall be maintained adequately and removed in a timely manner if no longer utilized.

Size: A new PSS installed for SWF deployments or an existing PSS replaced in the ROW shall not exceed the 50' above ground level or 40' above ground level for a PSS installed in a residential neighborhood. The size requirements shall also adhere to TCA 13-24-408a.

Location: In residential neighborhoods new PSS's or equipment shall not be deployed in public utility easements when the easements are not contiguous with paved roads or alleys on which vehicles are permitted, located along the rear of residential lots, and subject to the restriction that no distribution or telephone utility poles are permitted to be deployed.

ADA Requirements: All equipment located within the ROW shall be located such that it meets ADA requirements and does not obstruct, impede, or hinder usual pedestrian or vehicular travel.

Undergrounding: In areas where the City of Columbia has required all electric, communications, and cable facilities, other than City of Columbia owned PSS's and attachments, all deployments within the ROW shall comply with undergrounding requirements. A waiver can be requested for undergrounding requirements and shall be evaluated non-discriminatorily by the Department of Development Services.

Type 1 - Collocation on PSS



Example of improper collocation aesthetics

Color	Visible attachments and hardware shall be colored Brown (Pantone 477 C) if located on a wooden pole or colored to match PSS.
Antenna	<p>Antennas mounted on top of PSS shall be no more than 6 cubic feet in volume and a maximum diameter of 14" (roughly 5.5' tall at 14" diameter and 6 cubic feet).</p> <p>Antennas mounted on the side of PSS shall be a no more than 6 cubic feet in volume and a maximum of 16"W x 12"D.</p> <p>A maximum of one antenna on top of PSS is permitted. A maximum of 3 antennas mounted on the side of PSS is permitted. Such that all antennas are mounted concentrically, evenly, at the same elevation, and are identical in design language, color, texture, and material.</p> <p>Standoff mounts are permitted for the equipment shroud, but may not exceed six (6") inches and must include metal flaps (or "wings") to conceal the space between the shroud and the pole.</p>
Equipment	<p>Only one equipment shroud, shall be installed per pole.</p> <p>Except, one additional equipment shroud shall be allowed per pole if an antenna is located within the second equipment shroud.</p> <p>Pole mounted equipment shall be a minimum height of 10 ft. from ground level and shall not impede safe sight distance for any intersections or driveways.</p> <p>Ground mounted equipment shall be contained within a cabinet and painted black.</p>
Identification	A plate with the owner's name, location, and emergency telephone number shall be permanently fixed to each equipment cabinet/shroud.

Type 2 – Removal and Replacement of PSS

When possible, unless otherwise restricted in this document, new PSS shall match function and aesthetic qualities of PSS it is replacing. If the existing PSS has luminaires, the new PSS shall contain luminaires of same light temperature, intensity, and spread. All luminaires shall require approval by the City of Columbia and electrical utility provider.

When replacing a City of Columbia owned PSS, the replacement PSS becomes the property of the City of Columbia after a satisfactory inspection.

Color	Visible attachments and hardware shall be colored Brown (Pantone 477 C) if located on a wooden pole or colored to match PSS.
Antenna	Antennas mounted on top of PSS shall be no more than 6 cubic feet in volume and a maximum diameter of 14" (roughly 5.5' tall at 14" diameter and 6 cubic feet). Antennas mounted on the side of PSS shall be a no more than 6 cubic feet in volume and a maximum of 16"W x 12"D. A maximum of one antenna on top of PSS is permitted. A maximum of 3 antennas mounted on the side of PSS is permitted. Such that all antennas are mounted concentrically, evenly, and at the same elevation are identical in design language, color, texture, and material. Standoff mounts are permitted for the equipment shroud, but may not exceed six (6") inches and must include metal flaps (or "wings") to conceal the space between the shroud and the pole.
Equipment	Only one equipment shroud, containing all required small cell equipment shall be installed per pole. Except, one additional equipment shroud shall be allowed per pole if an antenna is located within the second equipment shroud. Pole mounted equipment shall be a minimum height of 10 ft. from ground level and shall not impede safe sight distance for any intersections or driveways. Ground mounted equipment shall be contained within a cabinet and painted black.
Identification	A plate with the owner's name, location, and emergency telephone number shall be permanently fixed to each equipment cabinet/shroud.

Type 3 - New PSS

When a new PSS is required for SWFs or Communications Services, the new PSS shall be a fully integrated “smart pole” that integrates into the background character of neighborhoods. Type 3 deployments shall be required in Historic Districts.

Color and Pole design shall to the maximum extent practicable match adjacent decorative poles, luminaires, and street character. If there are no decorative poles or luminaires adjacent, pole shall be painted Gloss Black #17038 per Federal Color Standard 595. Since the aesthetics may be different from one area to the other, every effort by the applicant shall be made to match existing infrastructure.



Examples of Type 3 Deployments

Type 3 Deployments shall not allow for installation of ground mounted equipment cabinets, unless the required equipment cabinet is over 28 cubic feet. All equipment shall be integrated and concealed in the pole design. No communications service provider equipment shall be permitted to be strapped or attached to the outside of the pole. When possible, Type 3 deployments shall allow for multiple tenants.

Type 3 components shall be sized to be visually pleasing. For a pole to be considered visually pleasing, the transition between the base/equipment cabinet and upper pole should be considered. A decorative transition shall be provided from the base to the upper pole. If not fully integrated into the structure of the pole, the equipment cabinet shall be mounted plumb. The upper pole and integrated antenna shall have a diameter between 8" (minimum) and 14" (maximum). The base/equipment cabinet shall be symmetrical in footprint and be between 1.5 and 2 times the diameter of the upper pole. All hardware connections shall be hidden from view. No horizontal flat spaces greater than 1.5 inches shall exist on the equipment cabinet to prevent cups, trash, and other objects from being placed on the equipment cabinet. Each pole component shall be architecturally compatible to create a cohesive aesthetic.

Color	To the maximum extent practicable match adjacent decorative poles, luminaires, and street character. If there are no decorative poles or luminaires adjacent, pole shall be painted Gloss Black #17038 per Federal Color Standard 595.
Antenna	Antennas mounted on top of PSS shall be no more than 6 cubic feet in volume and a maximum diameter of 14" (roughly 5.5' tall at 14" diameter and 6 cubic feet). No equipment or antennas are permitted to be mounted or strapped to the side.
Equipment	All equipment shall be integrated inside the pole or inside the base of the pole. A decorative transition shall be provided from the base to the upper pole. If not fully integrated into the structure of the pole, the equipment cabinet shall be mounted plumb. The base cabinet shall be symmetrical in footprint and be between 1.5 and 2 times the diameter of the upper pole. All hardware connections shall be hidden from view. No horizontal flat spaces greater than 1.5 inches shall exist on the equipment.
Identification	A plate with the owner's name, location, and emergency telephone number shall be permanently fixed to each equipment cabinet/shroud.