





SMALL WIRELESS FACILITY DESIGN GUIDELINES FOR PROPERTIES ON PRIVE OR CITY-OWNED LAND

PREPARED BY THE SHREVEPORT-CADDO METROPOLITAN PLANNING COMMISSION PUBLISHED APRIL 2019, LAST REVISED DECEMBER 2021

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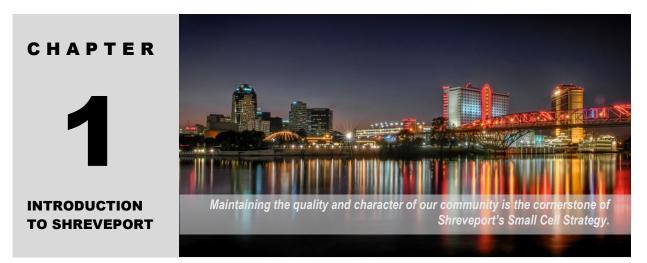
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1. INTRODUCTION

Shreveport is a dynamic, creative and flourishing powerhouse of the Ark-La-Tex region. Our region combines the economic opportunity, diversity and cultural excitement of a growing city with the friendliness of a small town. Looking simultaneously through the present and the future is how we create new worlds and make them real. We must see ourselves holding hands in the present to hand future generations a sustainable and beautiful Shreveport....

1.1. BACKGROUND

Numerous wireless providers and wireless infrastructure companies have contacted the City of Shreveport with requests to locate small cell facilities in the public right of way (ROW) and elsewhere in the City. These low-powered antennas provide cellular and data coverage to supplement the provider's cellular network. These Guidelines will improve the providers' ability to meet the community's current and future needs.

These Guidelines provide aesthetic requirements and specifications that all small cell facilities installed in the City of Shreveport are expected to meet. As this new technology begins to deploy, the City is primarily concerned with providing its residents all the improved access the technology promises while maintaining the quality and character of the community. Accordingly, network providers shall consider the aesthetics of the existing vertical infrastructure (such as streetlights, traffic signals, utility poles, etc.) and adjacent neighborhoods prior to applying for new small cell infrastructure.

1.2. PURPOSE AND USE

The purpose of these Small Wireless Design Guidelines ("Guidelines") is to provide a framework for the deployment, construction, installation, collocation, modification, operation, relocation and removal for small cell wireless facilities within the City's territorial boundaries, consistent with and to the extent permitted under federal and Louisiana state law, all while balancing the need for reliable telecommunication services with preserving the quality and character of the City of Shreveport.

- A. The standards and procedures contained in this Guidelines are intended to, and should be applied to, protect and promote public health, safety and welfare, and balance the benefits that flow from robust, advanced wireless services with the City's local values, which include without limitation the aesthetic character of the City, its neighborhoods and community. These Guidelines are also intended to reflect and promote the community interest by:
 - 1. Ensuring that the balance between public and private interest is maintained;



- 2. Protecting the City's visual character from potential adverse impacts or visual blight created or exacerbated by small wireless facilities and related communications infrastructure;
- 3. Protecting and preserving the City's environmental resources; and
- **4.** Promoting access to high- quality, advanced wireless services for the City's residents, businesses and visitors.
- **B.** These Guidelines are not intended to, nor shall it be interpreted or applied to:
 - 1. Prohibit or effectively prohibit any personal wireless service provider's ability to provide personal wireless services;
 - 2. Unreasonably discriminate among providers of functionally equivalent services;
 - Deny any request for authorization to place, construct or modify personal wireless service facilities on the basis of environmental effects of radio frequency emissions to the extent that such wireless facilities comply with the FCC's regulations concerning such emissions;
 - 4. Prohibit any collocation or modification that the City may not deny under federal or Louisiana state law;
 - **5.** Impose any unfair, unreasonable, discriminatory or anticompetitive fees that exceed the reasonable cost to provide the services for which the fee is charged; or
 - 6. Otherwise authorize the City to preempt any applicable federal or Louisiana law.

1.3. SMALL CELL AESTHETIC STRATEGY

The City has configured its internal policies around an agile infrastructure approach. In this approach, it has developed small cell standards and deployment strategies intended to assure our community develops and sustains an information ecosystem serving the changing interests of all stakeholders. In undertaking this strategy, the City has engaged the community and industry to assure the planning and processes result in a policy that supports all interests. These Guidelines, informed by federal and state statutes, provide a framework of cooperation enabling wireless providers to bring structures and installations in order to assure the community is always at the forefront of technology development.

A. Principles Related to Vertical Infrastructure.

- 1. Utilize existing vertical infrastructure locations with new structures capable of concealing the facility.
- 2. Place facilities to minimize visibility from residential homes.
- **3.** Make sure the new facility is complementary to the character of the surroundings and provide additional capability beyond wireless service.

B. Preference for Small Cell Facilities.

The preferred locations for small cell sites, in order are:

- 1. On existing commercial buildings;
- 2. In alleys;
- 3. At intersections of streets where taller intersection streetlight and traffic signal poles are already located;
- 4. Mounted to existing Streetscape streetlights or a Streetscape-look pole with light that replaces an existing Streetscape pole. (These poles must have plugs for Christmas decorations and come with banner arms);
- 5. Standalone poles that mimic Streetscape poles in design and coloration;
- 6. Existing utility poles for small cell sites. (When using an existing utility pole, the City prefers the equipment



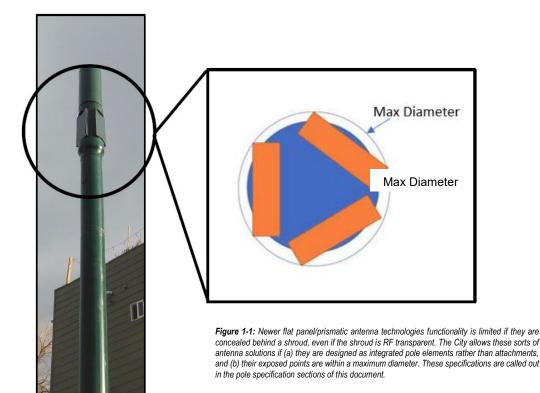
be in the vertical portion to preserve views).

C. Concealment and Shrouding.

- **1.** All facilities, new or replacement, should conceal all related wireless equipment within the pole, be concealed with an opaque shroud or radome, or must be buried below grade in vaults.
- 2. Panel/prismatic antennas whose proper function prevents them from being fully enclosed within an enclosure shall be considered enclosed if their installation is substantially within the pole boundary See Figure 1-1.
- 3. No above-ground ancillary facilities such as pedestals and cabinets separate from the pole will be allowed.
- 4. No secondary attachments unrelated to power metering and distribution are allowed.

D. Elements of Design.

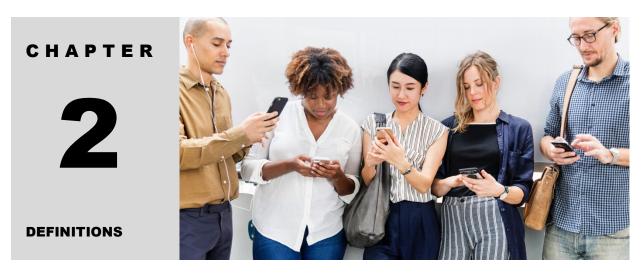
- 1. Poles and all new equipment must be the same color and finish as surrounding streetlight poles and should be complementary to existing Streetscape poles;
- 2. Poles must be in alignment with existing trees, utility poles and streetlights;
- 3. Poles must be placed in a manner that does not impede, restrict or obstruct pedestrian or vehicular traffic;
- 4. Poles must be equal distance between trees when possible;
- 5. The standard pole shape throughout Shreveport shall be round.





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2. GENERAL ABBREVIATIONS AND DEFINITIONS

The following words, terms, phrases and abbreviations associated with Small Wireless Facilities may be used in these Guidelines, the Shreveport City Code, the Shreveport Unified Development Code, City policies, procedures, and applications and shall have the meaning given below unless the context indicates otherwise. If there is a conflict between the definitions in these Guidelines and the context used elsewhere in the document, the definitions in this section shall prevail.

2.1. ABBREVIATIONS

The following abbreviations may be used within this chapter, the Shreveport Unified Development Code, and city policies, procedures and applications:

"FCC" is an abbreviation for the "Federal Communications Commission."
"MPC" is an abbreviation for the Shreveport "Metropolitan Planning Commission" of Caddo Parish.
"ROW" is an abbreviation for city public "right-of-way" and/or "rights-of-way."
"RF" is an abbreviation for "radio frequency."
"SWF" is an abbreviation for "small wireless facility."
"SWFs" is an abbreviation for the Shreveport "Unified Development Code."
"WTF" is an abbreviation for "wireless telecommunications facilities."
"WTFP" is an abbreviation for "wireless telecommunications facilities."
"WTFP" is an abbreviation for "wireless telecommunications facility permit."

2.2. DEFINED TERMS

Action or to act on a siting application. A siting authority's grant of a siting application or issuance of a written decision denying a siting application. Action or to act has the same meaning as provided in 47 C.F.R. § 1.6002(a), as may be amended.

Antenna. An apparatus designed for the purpose of emitting radiofrequency (RF) radiation, to be operated or operating from a fixed location pursuant to Federal Communications Commission (FCC) authorization, for the provision of personal wireless services 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 Part 15 of Title 47. Antenna has the same meaning as provided in 47 C.F.R. § 1.6002(b), as may be amended.



Antenna equipment. 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. Antenna equipment has the same meaning as provided in 47 C.F.R. § 1.6002(c), as may be amended.

Antenna facility. An antenna and associated antenna equipment. Antenna facility has the same meaning as provided in 47 C.F.R. § 1.6002(d), as may be amended.

Antenna, building- or structure-mounted. Any antenna, other than an antenna with its supports resting on the ground, directly attached or affixed to a building, tank or structure, other than a telecommunication tower.

Antenna, ground-mounted. An antenna with its support structure placed directly on the ground.

Antenna structure, monopole. A ground-mounted antenna structure, often tubular in shape, made of metal, reinforced concrete or wood, which is at least 17 feet in height. A retractable monopole is a monopole antenna structure which is capable of being lowered, either manually or electronically, a vertical distance of at least 30 percent of its fully extended height.

Applicable codes. Generally, applicable building, structural, electrical, and safety codes and other laws codifying objective standards reasonably related to health and safety.

Applicant. A person or entity that submits a siting application and the agents, employees, and contractors of such person or entity. Upon approval of any application the applicant will become the "permittee". Applicant has the same meaning as provided in 47 C.F.R. § 1.6002(e), as may be amended.

Application or siting application. a written submission to a siting authority (e.g. City of Shreveport) requesting authorization for the deployment of a personal wireless service facility at a specified location. Application or siting application has the same meaning as provided in 47 C.F.R. § 1.6002(j), as may be amended.

Attacher, existing attacher. Any entity with equipment on a utility pole. Existing attacher has the same meaning as provided in 47 C.F.R. § 1.1411(a)(3), as may be amended.

Attacher, new attacher. A cable television system or telecommunications carrier requesting to attach new or upgraded facilities to a pole owned or controlled by a utility. New attacher has the same meaning as provided in 47 C.F.R. § 1.1411(a)(2), as may be amended.

Attachment. Any attachment by a cable television system or provider of telecommunications service to a pole owned or controlled by a utility. Attachment has the same meaning as provided in 47 C.F.R. § 1.1411(a)(1), as may be amended.

Authorization. Any approval that a siting authority must issue under applicable law prior to the deployment of personal wireless service facilities, including, but not limited to, zoning approval and building permit. Authorization has the same meaning as provided in 47 C.F.R. § 1.6002(f), as may be amended.

Batched submittal (for small wireless facility permits). A type of application process for a small wireless facility (SWF) permit, issued pursuant to chapter 105 of this Code, when certain small wireless facilities (SWFs) are proposed to be located in the city's public right-of-way (ROW). The batched submittal process allows an applicant to combine individual applications (that are for a single project but that would otherwise be processed as separate individual applications) into a single batched submittal containing the individual applications to be processed at the same time. Up to ten individual applications, for SWF permits, involving an eligible facilities request and/or a Section 6409(a) modification (to be located in the city's public ROW) may be combined into a single batched submittal. No more than two batched submittals, for a maximum total of 20 locations or permits, shall be submitted by, for or on behalf of a single person or entity in any 30 calendar-day period.



Base station. Has the same meaning as provided in 47 C.F.R. § 1.40001(b)(1), as may be amended, which defines that term as follows:

A structure or equipment at a fixed location that enables FCC-licensed or authorized wireless telecommunications between user equipment and a communications network. The term does not encompass a tower as defined in 47 C.F.R. § 1.40001(b)(9) or any equipment associated with a tower.

- 1. The term includes, but is not limited to, equipment associated with wireless telecommunications services such as private, broadcast, and public safety services, as well as unlicensed wireless services and fixed wireless services such as microwave backhaul.
- The term includes, but is not limited to, radio transceivers, antennas, coaxial or fiber-optic cable, regular and backup power supplies, and comparable equipment, regardless of technological configuration (including distributed antenna systems and small-cell networks).
- 3. The term includes any structures other than a tower that, at the time the relevant application is filed under this section, supports or houses equipment described in subsections (1) and (2) of this definition that has been reviewed and approved under the applicable zoning or siting process, or under another state or local regulatory review process, even if the structure was not built for the sole or primary purpose of providing such support.
- **4.** The term does not include any structure that, at the time the relevant application is filed under this section, does not support or house equipment described in subsections (1) and (2) of this definition.

City. The City of Shreveport, Louisiana.

Collocation. Has the same meaning as provided in 47 C.F.R. § 1.6002(g), as may be amended. Collocation means:

- 1. Mounting or installing an antenna facility on a pre-existing structure, and/or
- 2. Modifying a structure for the purpose of mounting or installing an antenna facility on that structure.

Communications space. The lower usable space on a utility pole, which typically is reserved for low-voltage communications equipment. Communications space has the same meaning as provided in 47 C.F.R. § 1.1402(r), as may be amended.

Complex make-ready. Transfers and work within the communications space that would be reasonably likely to cause a service outage(s) or facility damage, including work such as splicing of any communication attachment or relocation of existing wireless attachments. Any and all wireless activities, including those involving mobile, fixed, and point-to-point wireless communications and wireless internet service providers, are to be considered complex. Complex make-ready has the same meaning as provided in 47 C.F.R. § 1.1402(p), as may be amended.

Coverage requirement or coverage gap. A current or anticipated gap in the coverage or capacity of a wireless provider's own personal wireless service that can be demonstrated through reasonable supporting evidence submitted by the applicant.

Deployment. Placement, construction, or modification of a personal wireless service facility. Deployment has the same meaning as provided in 47 C.F.R. § 1.6002(h), as may be amended.

Distributed antenna system or DAS. A network of one or more antennas and related fiber optic nodes typically mounted to or located at streetlights poles, utility poles, sporting venues, arenas or convention centers which provide access and signal transfer for wireless service providers. A distributed antenna system also includes the equipment location, sometimes called a "hub" or "hotel" where the DAS network is interconnected antenna nodes of the DAS system and/or with one or more wireless service provider's facilities to provide the signal transfer service.



Eligible facilities request. Has the same meaning as provided in 47 C.F.R. § 1.40001(b)(3), as may be amended, which defines that term as "[a]ny request for modification of an existing tower or base station that does not substantially change the physical dimensions of such tower or base station, involving: (i) collocation of new transmission equipment; (ii) removal of transmission equipment; or (iii) replacement of transmission equipment."

Eligible support structure. Has the same meaning as provided in 47 C.F.R. § 1.40001(b)(4), as may be amended, which defines that term as "[a]ny tower or base station as defined in this section, provided that it is existing at the time the relevant application is filed with the state or local government under this section."

Enclosure building, shed, or shelter. A building, shed, fence, or other enclosure used to house equipment associated with a wireless telecommunications facility.

Equipment cabinet. a cabinet used to house equipment associated with a wireless telecommunications facility.

Existing. Has the same meaning as provided in 47 C.F.R. § 1.40001(b)(4), as may be amended, which provides that "[a] constructed tower or base station is existing for purposes of [the FCC's Section 6409(a) regulations] if it has been reviewed and approved under the applicable zoning or siting process, or under another state or local regulatory review process, provided that a tower that has not been reviewed and approved because it was not in a zoned area when it was built, but was lawfully constructed, is existing for purposes of this definition."

Existing attacher. Any entity with equipment on a utility pole. Existing attacher has the same meaning as provided in 47 C.F.R. § 1.1411 (a)(3), as may be amended.

Federal Communications Commission ("FCC"). An independent United States government agency responsible for the regulation of interstate and international communications by radio, television, wire, satellite, and cable.

Height of a wireless telecommunications facility. The vertical distance measured from the natural undisturbed ground surface below the center of the base of said facility to the top of the facility itself or, if higher, to the tip of the highest antenna or piece of equipment attached thereto. In the case of building-mounted facilities the height of the facility includes the height of the portion of the building on which it is mounted. In the case of crank-up or other similar towers whose height can be adjusted, the height of the facility shall be the maximum height to which it is capable of being raised.

Make-ready. Means the modification or replacement of a utility pole, or of the lines or equipment on the utility pole, to accommodate additional facilities on the utility pole. Make-ready has the same meaning as provided in 47 C.F.R. § 1.1402(o), as may be amended.

Make-ready, complex make-ready. Means transfers and work within the communications space that would be reasonably likely to cause a service outage(s) or facility damage, including work such as splicing of any communication attachment or relocation of existing wireless attachments. Any and all wireless activities, including those involving mobile, fixed, and point-to-point wireless communications and wireless internet service providers, are to be considered complex. Complex make-ready has the same meaning as provided in 47 C.F.R. § 1.1402(p), as may be amended.

Make-ready, simple make-ready. Means make-ready where existing attachments in the communications space of a pole could be transferred without any reasonable expectation of a service outage or facility damage and does not require splicing of any existing communication attachment or relocation of an existing wireless attachment. Simple make-ready has the same meaning as provided in 47 C.F.R. § 1.1402(q), as may be amended.

Monopole. means a single freestanding pole, post, or similar non-lattice structure used to support antennas and equipment associated with a wireless telecommunications facility.

Mount. To attach, fix, or otherwise place antenna(s) to or on a structure or building.

Necessary or necessity or need. All mean what is reasonably required or recommended for the equipment to function as designed by the manufacturer.



New attacher. A cable television system or telecommunications carrier requesting to attach new or upgraded facilities to a pole owned or controlled by a utility. New attacher has the same meaning as provided in 47 C.F.R. § 1.1411(a)(2), as may be amended.

Notification of final completion. A document the permittee is required to send notifying the city in writing of the final completion date of the facility and said notification shall be received by the city no later than 30 days after final completion. Said notification shall contain a statement from the permittee that the facility was constructed as approved and permitted in accordance with the issued permit.

Personal wireless service facility. An antenna facility or a structure that is used for the provision of personal wireless service, whether such service is provided on a stand-alone basis or commingled with other wireless communications services. Personal wireless service facility has the same meaning as provided in 47 C.F.R. § 1.6002(i), as may be amended.

Personal wireless services. Has the same meaning as provided in 47 U.S.C. § 332(c)(7)(C)(i), as may be amended, which defines the term as "commercial mobile services, unlicensed wireless services, and common carrier wireless exchange access services."

Public right-of-way. The area on, below, or above a roadway, highway, street, sidewalk, alley, utility easement, or similar property, but not including a federal interstate highway.

Public safety facilities. Facilities used for public safety functions such as police, fire and emergency operations.

Radio frequency ("RF"). A rate of oscillation, which corresponds to the frequency of radio waves, and the alternating currents which carry radio frequency, electromagnetic, or other wireless signals.

Related equipment. All equipment ancillary to the antenna used for transmission and reception of radio frequency, electromagnetic, or other wireless signals. Such equipment may include, but is not limited to, cable, conduit and connectors.

Roof-mounted or building-mounted antenna. An antenna directly attached or affixed to the roof of, on the facade, or elsewhere on an existing building, tank or similar structure other than a wireless telecommunications facility or utility pole.

Section 6409(a). Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, 126 Stat. 156, codified as 47 U.S.C. § 1455(a), as may be amended from time to time.

Section 6409(a) modification. Any eligible facilities request that does not cause a substantial change for approval pursuant to Section 6409(a) and the FCC's regulations at 47 C.F.R. § 1.40001 et seq.

Simple make-ready. Has the same meaning as provided in 47 C.F.R. § 1.1402(q), as may be amended. Simple make-ready means make-ready where existing attachments in the communications space of a pole could be transferred without any reasonable expectation of a service outage or facility damage and does not require splicing of any existing communication attachment or relocation of an existing wireless attachment.

Site. Has the same meaning as provided in 47 C.F.R. § 1.40001(b)(6), as may be amended, which provides that "[f]or towers other than towers in the public rights-of-way, the current boundaries of the leased or owned property surrounding the tower and any access or utility easements currently related to the site, and, for other eligible support structures, further restricted to that area in proximity to the structure and to other transmission equipment already deployed on the ground."

Siting application or application. A written submission to a siting authority (e.g. City of Shreveport) requesting authorization for the deployment of a personal wireless service facility at a specified location. Siting application or application has the same meaning as provided in 47 C.F.R. § 1.6002(j), as may be amended.



Siting authority. A state government, local government (e.g. City of Shreveport), or instrumentality of a state government or local government, including any official or organizational unit thereof, whose authorization is necessary prior to the deployment of personal wireless service facilities. Siting authority has the same meaning as provided in 47 C.F.R. § 1.6002(k), as may be amended.

Small wireless facility ("SWF") and small wireless facilities ("SWFs"). Have the same meaning as provided in 47 C.F.R. § 1.6002(I), as may be amended. Small wireless facility ("SWF") and small wireless facilities ("SWFs") are facilities that meet each of the following conditions:

- 1. The facilities: a. Are mounted on structures 50 feet or less in height including their antennas; b. Are mounted on structures no more than ten 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 tall or by more than ten percent in height, whichever is greater;
- 2. Each antenna associated with the deployment, excluding associated antenna equipment, is no more than three cubic feet (3 ft 3) in volume;
- 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 (28 ft 3) in volume;
- **4.** The facilities do not require antenna structure registration under C.F.R. Title 47, Chapter 1 Federal Communications Commission, Part 17;
- 5. The facilities are not located on Tribal lands, as defined under 36 CFR 800.16(x); and
- **6.** The facilities do not result in human exposure to radiofrequency radiation in excess of the applicable safety standards.

Small wireless facility (SWF) permit. Means the official document or permit by which an applicant is approved to construct and use a small wireless facility (SWF), and if applicable, associated utility poles or other support structures, in accordance with this chapter and any other applicable requirements contained in the City Code.

Stealth facility. Means any wireless telecommunications facility which is designed to blend into the surrounding environment (including other similar facilities) or support structure by means of screening, concealment, design (such as monopole), or camouflage (including being of comparable color to any support structure and/or to the immediate environment where applicable).

Structure. A pole, tower, base station, other building, or other structure used to accommodate one or more personal wireless facilities, whether or not it has an existing antenna facility, that is used or to be used for the provision of personal wireless service (whether on its own or comingled with other types of services). Structure has the same meaning as provided in 47 C.F.R. § 1.6002 (k), as may be amended.

Substantial change. Has the same meaning as provided in 47 C.F.R. § 1.40001(b)(7), as may be amended, which defines that term differently based on the particular facility type and location. For clarity, the definition in this chapter organizes the FCC's criteria and thresholds for a substantial change according to the facility type and location.

- **1.** For towers outside the public rights-of-way, a substantial change occurs when:
 - **a.** The proposed collocation or modification increases the overall height more than ten percent or the height of one additional antenna array not to exceed 20 feet (whichever is greater);
 - b. The proposed collocation or modification increases the width more than 20 feet from the edge of the wireless tower or the width of the wireless tower at the level of the appurtenance (whichever is greater);
 - c. The proposed collocation or modification involves the installation of more than the standard number of equipment cabinets for the technology involved, not to exceed four; or



- **d.** The proposed collocation or modification involves excavation outside the current boundaries of the leased or owned property surrounding the wireless tower, including any access or utility easements currently related to the site.
- 2. For towers in the public rights-of-way and for all base stations, a substantial change occurs when:
 - a. The proposed collocation or modification increases the overall height more than ten percent or ten feet (whichever is greater);
 - **b.** The proposed collocation or modification increases the width more than six feet from the edge of the wireless tower or base station;
 - c. The proposed collocation or modification involves the installation of any new equipment cabinets on the ground when there are no existing ground-mounted equipment cabinets;
 - **d.** The proposed collocation or modification involves the installation of any new ground-mounted equipment cabinets that are ten percent larger in height or volume than any existing ground-mounted equipment cabinets; or
 - e. The proposed collocation or modification involves excavation outside the area in proximity to the structure and other transmission equipment already deployed on the ground.
- 3. In addition, for all towers and base stations wherever located, a substantial change occurs when:
 - **a.** The proposed collocation or modification would defeat the existing concealment elements of the support structure as determined by the city engineer; or
 - b. The proposed collocation or modification violates a prior condition of approval; provided, however, that the collocation need not comply with any prior condition of approval related to height, width, equipment cabinets or excavation that is inconsistent with the thresholds for a substantial change described in this section.
- **4.** As to all measurements set forth herein, the following principles shall govern:
 - a. The thresholds for height increases are cumulative limits.
 - b. For sites with horizontally separated deployments, the cumulative limit is measured from the originally permitted support structure without regard to any increases in size due to wireless equipment not included in the original design.
 - c. For sites with vertically separated deployments, the cumulative limit is measured from the permitted site dimensions as they existed on February 22, 2012, the date of passage of Section 6409(a).

Tower. Has the same meaning as provided in 47 C.F.R. § 1.40001(b)(9), as may be amended, which defines that term as "[a]ny structure built for the sole or primary purpose of supporting any [FCC]-licensed or authorized antennas and their associated facilities, including structures that are constructed for wireless telecommunications services including, but not limited to, private, broadcast, and public safety services, as well as unlicensed wireless services and fixed wireless services such as microwave backhaul, and the associated site." Examples include, but are not limited to, monopoles, mono-trees and lattice towers.

Transmission equipment. Has the same meaning as provided in 47 C.F.R. § 1.40001(b)(8), as may be amended, which defines that term as "[e]quipment that facilitates transmission for any [FCC]-licensed or authorized wireless telecommunications service, including, but not limited to, radio transceivers, antennas, coaxial or fiber-optic cable, and regular and backup power supply. The term includes equipment associated with wireless telecommunications services including, but not limited to, private, broadcast, public safety services, as well as fixed wireless services, such as microwave backhaul."

Utility pole. A pole or similar structure that is used in whole or in part for the purpose of carrying electric distribution lines or cables or wires for telecommunications, cable or electric service, or for lighting. Such term shall not include structures supporting only wireless facilities.



Wireless infrastructure provider. Any person, including a person authorized to provide telecommunications service in the state, that builds or installs wireless communication transmission equipment, wireless facilities or wireless support structures, but that is not a wireless services provider.

Wireless provider. A wireless infrastructure provider or a wireless services provider.

Wireless services. Any services, whether at a fixed location or mobile, provided to the public using wireless facilities.

Wireless services provider. A person who provides wireless services.

Wireless telecommunications facility ("WTF"). An unstaffed facility, generally consisting of antennas, an equipment cabinet or enclosure building, shed, or shelter, and related equipment, which receives and/or transmits radio frequency, electromagnetic, or other wireless signals for the purpose of transmitting voice or data.

Wireless telecommunications facility permit ("WTFP"). The official document or permit by which an applicant is approved to construct and use a wireless telecommunications facility (WTF) in accordance with the requirements of Chapter 105 of the Shreveport City Code, any other applicable requirements contained in the City Code, or the Shreveport Unified Development Code.

2.3. UNDEFINED TERMS

Undefined phrases, terms or words in these Guidelines will have the meanings assigned to them in Article 5 of the Shreveport UDC, as well as Chapter 105 of the Shreveport City Code, as may be amended or superseded, and, if not defined therein, will have their ordinary meanings. If any definition assigned to any phrase, term or word in these Guidelines conflicts with any federal or state-mandated definition, the federal or state-mandated definition will control.





3. SMALL WIRELESS FACILITIES

3.1. APPLICABILITY; REQUIRED PERMITS AND APPROVALS

- A. Applicable Wireless Facilities. Except as expressly provided otherwise in these Guidelines, the provisions in these Guidelines shall be applicable to all existing small wireless facilities and all applications and requests for authorization to construct, install, attach, operate, collocate, modify, reconstruct, relocate or otherwise deploy small wireless facilities within the City's jurisdictional and territorial boundaries within the public rights-of-way or on private property.
- B. Wireless Telecommunications Facilities Cell Permit, WTFP. A "WTFP" subject to the approval authority's prior review and approval, is required for any small wireless facility proposed on an existing, new or replacement support structure.
- C. Request for Approval Pursuant to Section 6409. Notwithstanding anything in the Policy to the contrary, requests for approval to collocate, replace or remove transmission equipment at an existing wireless tower or base station submitted pursuant to Section 6409 (47 U.S.C. §1455(a)) will be subject to the provisions to either Article 22 of the Shreveport UDC or Chapter 105 of the Shreveport City Code, as applicable, which may be amended or superseded
- D. Other Permits and Approvals. In addition to a WTFP, the applicant must obtain all other permits and regulatory approvals as may be required by any other federal, state or local government agencies, which includes without limitation any ministerial permits and/or approvals issued by other City departments or divisions. All applications for ministerial permits submitted in connection with a proposed small wireless facility must contain a valid WTFP issued by the City for the proposed facility. Any application for any ministerial permit(s) submitted without such WTFP may be denied without prejudice. Furthermore, any permit or approval granted under these Guidelines shall remain subject to all lawful conditions and/or legal requirements associated with such other permits or approvals.



3.2. WTFP APPLICATION REQUIREMENTS

- **A. WTFP Application Contents.** All applications for a WTFP must include all the information and materials as required on the Small Wireless Facilities Application, unless exempted by the approval authority.
 - **1. Application Form.** The applicant shall submit a complete, duly executed Small Wireless Facilities Application on the then-current form prepared by the approval authority:
 - a. Applications for sites with the City's public rights-of-way shall be submitted to the City of Shreveport.
 - **b.** Applications for sites of private or City-owned property shall be submitted to the Office of the Metropolitan Planning Commission.
 - 2. Application Fee. The applicant shall submit to the approval authority all documents and fees. An application shall not be accepted if the accompanying fees are not included. All associated fee amounts described for SWF have been adopted by ordinance by City Council. The City and Office of the MPC may, at their discretion, utilize a third-party reviewer and shall pay for said services from the application processing fees paid by the applicant:
 - **a.** New facilities—Individual application. All individual applications for small wireless facilities shall be accompanied by the required application processing fee.
 - b. Batched submittals for new facilities. All individual applications for small wireless facilities shall be accompanied by the required application processing fee. The first application, in a batched submittal, shall be charged at the same fee for an individual application. The additional Any additional application contained in a batched submittal will be charged at a reduced rate.
 - c. Non-Section 6409(a) modifications (substantial change). All individual applications for small wireless facilities purporting to make non-Section 6409(a) modifications (modifications that cause a substantial change) shall be accompanied by the required application processing fee.
 - **d. Routine maintenance.** There is no application or fee required for routine maintenance of a small cell facility.
 - 3. Construction Details. The applicant shall submit true and correct construction drawings, prepared, signed and stamped by professionally licensed engineer, that depict all the existing and proposed improvements, equipment and conditions related to the proposed project, which includes without limitation any and all poles, posts, pedestals, traffic signals, towers, streets, sidewalks, pedestrian ramps, driveways, curbs, gutters, drains, handholes, manholes, fire hydrants, equipment cabinets, antennas, cables, trees and other landscape features. The construction drawings must contain:
 - a. GPS Coordinates (latitude and longitude) in decimal degrees for the proposed small wireless facility location.
 - b. Manufacturer's cut sheets that contain the technical specifications for all existing and proposed antennas, enclosures, and all other wireless accessory equipment meeting all size limitations, which includes without limitation the manufacturer, model number and physical dimensions;
 - c. A foundation plan, certified by a licensed structural engineer;
 - d. The applicant's plan for electric and data backhaul utilities, which shall include the locations for all conduits, cables, wires, handholes, junctions, transformers, meters, disconnect switches, and points of connection; and
 - e. A demonstration that proposed project will be in full compliance with all applicable health and safety laws, regulations or other rules, which includes without limitation all building codes, electric codes, local street standards and specifications, and public utility regulations and orders.



- 4. **Photo Simulations.** The applicant shall submit site photographs and photo simulations that show the existing location and proposed small wireless facility in context from at least three vantage points within the public streets or other publicly accessible spaces, together with an aerial map that shows the proposed site location and the photo location for each vantage point.
- 5. **Project Narrative, Justification and Permission.** The applicant shall submit a written statement that explains in plain factual detail whether and why the proposed wireless facility qualifies as a "small wireless facility" Provide written evidence of approval of the owner of any utility pole, building, structure and/or light pole to which a small wireless facility or any of its associated equipment is proposed to be attached.
- 6. **Required Exhibits.** The applicant shall submit the following along with a completed application form:
 - **a.** 300-foot Distance Analysis Exhibit verifying there are no other poles with small wireless facilities in that area;
 - **b.** Confirmation of non-interference with City Safety Communication Networks;
 - c. Certificate of Insurance including the City as an additional insured if the small wireless facility is to be installed on property owned by the City or in the City's public right-of-way;
 - d. Pre-Approval Letter from SWEPCO / Third-Party (if proposed on SWEPCO / Third-Party pole).
 - e. State or Federal Right-of-Way permit (if on their ROW).
- 7. RF Compliance Report. The applicant shall submit an RF exposure compliance report that certifies that the proposed small wireless facility, as well as any collocated wireless facilities, will comply with applicable federal RF exposure standards and exposure limits. The RF report must be prepared and certified by an RF engineer acceptable to the City. The RF report must include the actual frequency and power levels (in watts ERP) for all existing and proposed antennas at the site and exhibits that show the location and orientation of all transmitting antennas and the boundaries of areas with RF exposures in excess of the uncontrolled/general population limit (as that term is defined by the FCC) and also the boundaries of areas with RF exposures in excess of the controlled/ occupational limit (as that term is defined by the FCC). Each such boundary shall be clearly marked and identified for every transmitting antenna at the project site.
- 8. Site Agreement. For any small wireless facility proposed to be installed on any structure on private property, owned or controlled by the City, or on a SWEPCO/Third-Party utility pole, the applicant shall submit a pre-approval letter that gives the applicant permission for access to the site. No changes shall be permitted to the site agreement except as may be indicated within the letter itself. Any unpermitted changes to the site agreement shall be deemed a basis to deem the application incomplete.
- 9. Additional Requirements. Both the City Engineer (for sites located within the City's public rightsof-way) or the Executive Director of the MPC (for sites located on private or City-owned property) shall has the authority to develop, publish and from time to time update or amend permit application requirements, forms, checklists, guidelines, informational handouts and other related materials that he or she finds necessary, appropriate or useful for processing any application governed under the jurisdictional approving body identified in these Guidelines. All such requirements and materials must be in written form and publicly stated to provide all interested parties with prior notice.
- **10. Waivers.** Any applicant may seek a waiver of the requirements in this chapter, which may be granted by either the City Engineer (for sites located within the City's public rights-of-way) or the Executive Director of the MPC (for sites located on private or City-owned property), upon good cause shown, as determined by the the approving authority. Such waivers shall be granted in a nondiscriminatory manner.



3.3. WTFP APPLICATION SUBMITTAL AND COMPLETENESS REVIEW

- **A. Requirements for a Duly Filed Application.** Any application for a WTFP will not be considered duly filed unless submitted in accordance with the requirements in this subsection (a).
 - 1. **Pre-Submittal Conferences.** While encouraged, neither the City, nor the Office of the MPC, require applicants to schedule and attend a pre-submittal conference with the approval authority for any small wireless facility application. This voluntary pre-submittal conference does not cause the FCC Shot Clock to begin and is intended to streamline the review process through informal discussion that includes, without limitation, the appropriate project classification and review process; any latent issues in connection with the proposed project, including compliance with generally applicable rules for public health and safety; potential concealment issues or concerns (if applicable); coordination with other City departments responsible for application review; and application completeness issues. To mitigate unnecessary delays due to application incompleteness, applicants are encouraged (but not required) to bring any draft applications or other materials so that the approving authority may provide informal feedback and guidance about whether such applications or other materials may be incomplete or unacceptable. The approval authority shall use reasonable efforts to provide the applicant with an appointment as soon as reasonable possible after receiving a written request for a pre-submittal conference.
 - 2. Application Completeness Review. Within 10 calendar days after the approval authority receives a duly filed SWF application, the approval authority shall review the application for completeness and, if any application does not contain all the materials required in Section 3.2 or any other publicly stated requirements, send a written notice to the applicant that identifies the missing or incomplete requirements.
 - 3. Applications Deemed Withdrawn. To promote efficient review and timely decisions, and to mitigate unreasonable delays or barriers to entry caused by chronically incomplete applications, any application governed under these Guidelines will be automatically deemed withdrawn by the applicant when the applicant fails to tender a substantive response to the approval authority within 60 calendar days after the approval authority deems the application incomplete in a written notice to the applicant. As used in this subsection (C), a "substantive response" must include the materials identified as incomplete in the approval authority's notice.
 - 4. Batched Applications. Applicants may submit up to ten individual applications for a SWF in a batch; provided, however, that small wireless facilities in a batch must be proposed with substantially the same equipment in the same configuration on the same support structure type. Each application in a batch must meet all the requirements for a complete application, which includes without limitation the application fee for the first application, along with a reduced batched application fee for each additional application in the batch. If any application in a batch is incomplete, only that application shall be deemed incomplete. If any application is withdrawn or deemed withdrawn from a batch, the batch will continue to be processed for review. The denial of any individual application for a site within a single batched submittal shall not affect other individual applications for sites submitted in the same batched submittal. The approving authority shall grant a permit for any and all individual applications for sites in a single batched submittal that it does not deny subject to the requirements of this section, or other applicable law.
 - 5. **Timeframe for Review.** An application for a SWF shall be reviewed by the approving authority within the applicable timeframes in accordance with federal regulations or law, as may be applicable and as may be amended.
 - 6. Additional Procedures. The Shreveport City Council authorizes the approval authority to establish other reasonable rules and regulations for duly filed applications, which may include without limitation regular hours for appointments with applicants, as the approval authority deems necessary or appropriate to organize, document and manage the application intake process. All such rules and regulations must be in written form and publicly stated to provide all interested parties with prior notice.



3.4. STANDARD CONDITIONS OF WTFP APPROVAL

- **A. General Conditions.** In addition to all other conditions adopted by the approval authority for a WTFP, all WTFPs issued under these Guidelines shall be automatically subject to the conditions in this subsection.
 - 1. **Permit Term.** Any approved and issued SWF permit will automatically expire at 12:01 a.m. local time exactly ten years from the issuance date. Provided that the subject small wireless facilities are being operated in accordance with the requirements of this chapter and that the wireless provider has not elected to remove the subject facilities, the SWF permit automatically will renew at 12:01 a.m. local time for an additional ten-year period every ten years from the issuance date.
 - 2. Certificate of Completion. Within 30 calendar days after the permittee commences full, unattended operations of a small wireless facility approved or deemed-approved, the permittee shall provide the approval authority with documentation reasonably acceptable to the approval authority that the small wireless facility has been installed and/or constructed in strict compliance with the approved construction drawings and photo simulations. Such documentation shall include without limitation as-built drawings, GIS data and site photographs.
 - 3. **Build-Out Period.** Any WTFP will automatically expire twelve (12) months from the approval date (the "build-out period"), provided that the deadline to commence construction shall be extended for any delays attributable to the lack of commercial power or communications facilities at the site or by mutual agreement of the applicant and the approving authority. If this build-out period expires, the approving authority will not extend the build-out period but the permittee may resubmit a complete application, including all application fees, for the same or substantially similar project.
 - 4. Site Maintenance. The permittee shall keep the site, which includes without limitation any and all improvements, equipment, structures, access routes, fences and landscape features, in a neat, clean and safe condition in accordance with the approved construction drawings and all conditions in this WTFP. The permittee shall keep the site area free from all litter and debris at all times. The permittee, at no cost to the City or property owner, shall remove and remediate any graffiti or other vandalism at the site within 48 hours after the permittee receives notice or otherwise becomes aware that such graffiti or other vandalism occurred.
 - 5. Compliance with Laws. The permittee shall maintain compliance at all times with all federal, state and local statutes, regulations, orders or other rules that carry the force of law ("laws") applicable to the permittee, the subject property, the small wireless facility or any use or activities in connection with the use authorized in this WTFP, which includes without limitation any laws applicable to human exposure to RF emissions. The permittee expressly acknowledges and agrees that this obligation is intended to be broadly construed and that no other specific requirements in these conditions are intended to reduce, relieve or otherwise lessen the permittee's obligations to maintain compliance with all laws. No failure or omission by the City, or property owner, to timely notice, prompt or enforce compliance with any applicable provision in the Shreveport City Code, Shreveport Unified Development Code or these Guidelines, any permit, any permit condition or any applicable law or regulation, shall be deemed to relieve, waive or lessen the permittee's obligation to comply in all respects with all applicable provisions in the Shreveport Unified Development Code or these functions or any applicable law or regulation.
 - 6. Adverse Impacts on Other Properties. The permittee shall use all reasonable efforts to avoid any and all unreasonable, undue or unnecessary adverse impacts on nearby properties that may arise from the permittee's or its authorized personnel's construction, installation, operation, modification, maintenance, repair, removal and/ or other activities on or about the site. The permittee shall not perform or cause others to perform any construction, installation, operation, modification, maintenance, repair, removal or other work that involves heavy equipment or machines except during normal construction work hours authorized by the Shreveport City Code. The approval authority may issue a stop work order for any activities that violates this condition in whole or in part.



- 7. Inspections; Emergencies. The permittee expressly acknowledges and agrees that the City's officers, officials, staff, agents, contractors or other designees may enter onto the site and inspect the improvements and equipment upon reasonable prior notice to the permittee. Notwithstanding the prior sentence, the City's officers, officials, staff, agents, contractors or other designees may, but will not be obligated to, enter onto the site area without prior notice to support, repair, disable or remove any improvements or equipment in emergencies or when such improvements or equipment threatens actual, imminent harm to property or persons. The permittee, if present, may observe the City's officers, officials, staff or other designees while any such inspection or emergency access occurs. The permittee shall obtain an encroachment permit for any installation within the public right of way. All construction improvements within public right of way shall be per the Shreveport City Code and City of Shreveport, Louisiana Standard Specifications and Plans for Infrastructure Improvements.
- 8. Permittee's Contact Information. The permittee shall furnish the approving authority with accurate and up-to-date contact information for a person responsible for the small wireless facility, which includes without limitation such person's full name, title, direct telephone number, facsimile number, mailing address and email address. The permittee shall keep such contact information up-to- date at all times and promptly provide the approving authority with updated contact information if either the responsible person or such person's contact information changes.
- 9. Indemnification. The Applicant shall defend, indemnify, and hold harmless the City, its Council, Boards, Commissions, Officials, Officers, Agents, Contractors, Volunteers, and Employees from and against any and all loss, damages, liability, claims, suits, costs and expenses, including court costs and reasonable attorney's fees resulting from the alleged acts or omissions of Permittee, Applicant's Officers, Agents, or Employees in connection with the permitted work. This indemnity provision shall be applicable regardless of the merit or outcome of such claim or suit.
- **10. Permit Revocation.** Any permit granted under these Guidelines may be revoked in accordance with the provisions and procedures in this condition. The City Engineer (for sites located within the City's public rights-of-way) or the Executive Director of the MPC (for sites located on private or City-owned property) may initiate revocation proceedings when the approval authority has information that the facility may not be in compliance with all applicable laws, which includes without limitation, any permit in connection with the facility and any associated conditions with such permit(s). Before any public hearing is conducted to revoke any permit granted under these Guidelines, the approval authority must issue a written notice to the permittee that specifies:
 - **a.** The facility;
 - **b.** The violation(s) to be corrected;
 - c. The timeframe in which the permittee must correct such violation(s); and
 - **d.** That, in addition to all other rights and remedies the approval authority may pursue, the approval authority may initiate revocation proceedings for failure to correct such violation(s).

A permit granted under these Guidelines may be revoked only by the City Council after a duly notice public hearing. The City Council may revoke a permit when it finds substantial evidence in the written record to show that the facility is not in compliance with any applicable laws, which includes without limitation, any permit in connection with the facility and any associated conditions with such permit(s). Any decision by the City Council to revoke or not revoke a permit shall be final and not subject to any further appeals. Within five business days after the City Council adopts a resolution to revoke a permit, the approval authority shall provide the permittee with a written notice that specifies the revocation and the reasons for such revocation.



- 11. Record Retention. Throughout the permit term, the permittee must maintain a complete and accurate copy of the written administrative record, which includes without limitation the WTFP application, WTFP, the approved plans and photo simulations incorporated into this approval, all conditions associated with this approval, any ministerial permits or approvals issued in connection with this approval and any records, memoranda, documents, papers and other correspondence entered into the public record in connection with the WTFP (collectively, "records"). If the permittee does not maintain such records as required in this condition, any ambiguities or uncertainties that would be resolved by inspecting the missing records will be construed against the permittee. The permittee shall protect all records from damage from fires, floods and other hazards that may cause deterioration. The permittee may keep records in an electronic format; provided, however, that hard copies or electronic records kept in the City's regular files will control over any conflicts between such City-controlled copies or records and the permittee's electronic copies, and complete originals will control over all other copies in any form. The requirements in this condition shall not be construed to create any obligation to create or prepare any records not otherwise required to be created or prepared by other applicable laws. Compliance with the requirements in this condition shall not excuse the permittee from any other similar record-retention obligations under applicable law.
- 12. Emergency removal or relocation of facilities. The City retains the right and privilege to cut or move any small wireless facility located within the rights-of-way of the City, as the City may determine to be necessary, appropriate or useful in response to any public health or safety emergency. If circumstances permit, the City shall notify the wireless provider and provide the wireless provider an opportunity to move its own facilities prior to cutting or removing a facility and shall notify the wireless provider after cutting or removing a small wireless facility.
- **13. Abandoned Wireless Facilities.** Upon abandonment of a small wireless facility, the wireless provider shall notify the city within 90 days. Following receipt of such notice the approval authority may direct the wireless provider to remove all or any portion of the small wireless facility if the approval authority determines that such removal will be in the interest of the public health, safety and welfare.
- 14. Landscaping. The permittee shall replace any landscape features, damaged or displaced by the construction, installation, operation, maintenance or other work performed by the permittee or at the permittee's direction on or about the site. If any trees are damaged or displaced, the permittee shall plant and maintain replacement landscaping in an appropriate location for the species. Any replacement tree must be, as close as possible, to the same size as the damaged tree. The permittee shall, at all times, be responsible to maintain any replacement landscape features.
- 15. Cost Reimbursement. The permittee acknowledges and agrees that:
 - a. the permittee's request for authorization to construct, install and/ or operate the wireless facility will cause the City to incur costs and expenses;
 - b. the permittee shall be responsible to reimburse the City for all costs incurred in connection with the permit, which includes without limitation costs related to application review, permit issuance, site inspection and any other costs reasonably related to or caused by the request for authorization to construct, install and/ or operate the wireless facility;
 - c. any application fees required for the application may not cover all such reimbursable costs and that the permittee shall have the obligation to reimburse City for all such costs 10 days after a written demand for reimbursement and reasonable documentation to support such costs; and
 - **d.** the City shall have the right to withhold any permits or other approvals in connection with the wireless facility until and unless any outstanding costs have been reimbursed to the City by the permittee.
- **16. Signage.** Small wireless facilities may bear only that signage required or recommended by federal, state, or local law or regulation.



- B. Conditions for Small Wireless Facilities in the Public Rights-of-Way. In addition to all conditions in subsection (A), all WTFPs for small wireless facilities in the public rights-of-way issued under these Guidelines shall be automatically subject to the conditions in this subsection (B).
 - 1. Future Undergrounding Programs. If other public utilities or communications providers in the public rights-of-way underground their facilities in the segment of the public rights-of-way where the permittee's small wireless facility is located, the permittee must underground its equipment except the antennas, any electric meter and any other equipment that must be placed above ground to function. Accessory equipment such as radios and computers that require an environmentally controlled underground vault to function shall not be exempt from this condition. Small wireless facilities installed on wood utility poles that will be removed pursuant to the undergrounding program may be reinstalled on a streetlight that complies with the City's standards and specifications. Such undergrounding shall occur at the permittee's sole cost and expense except as may be reimbursed through tariffs approved by the state public utilities commission for undergrounding costs.
 - 2. Electric Meter Upgrades. If the commercial electric utility provider adopts or changes its rules obviating the need for a separate or ground- mounted electric meter and enclosure, the permittee on its own initiative and at its sole cost and expense shall remove the separate or ground- mounted electric meter and enclosure. Prior to removing the electric meter, the permittee shall apply for any encroachment and/or other ministerial permit(s) required to perform the removal. Upon removal, the permittee shall restore the affected area to its original condition that existed prior to installation of the equipment.
 - **3. Rearrangement and Relocation.** The permittee acknowledges that the City, in its sole discretion and at any time, may:
 - a. Change any street grade, width or location;
 - b. Add, remove or otherwise change any improvements in, on, under or along any street owned by the City or any other public agency, which includes without limitation any sewers, storm drains, conduits, pipes, vaults, boxes, cabinets, poles and utility systems for gas, water, electric or telecommunications; and/ or
 - c. Perform any other work deemed necessary, useful or desirable by the City (collectively, "City work").

The City reserves the rights to do any and all City work without any admission on its part that the City would not have such rights without the express reservation in any WTFP. If the City Engineer's determines that any City work will require the permittee's small wireless facility located in the public rights-of-way to be rearranged and/ or relocated, the permittee shall, at its sole cost and expense, do or cause to be done all things necessary to accomplish such rearrangement and/or relocation. If the permittee fails or refuses to either permanently or temporarily rearrange and/or relocate the permittee's small wireless facility within a reasonable time after the City Engineer's notice, the City may but will not be obligated to) cause the rearrangement or relocation to be performed at the permittee's sole cost and expense.





4. LOCATION AND DESIGN STANDARDS

4.1. GENERAL GUIDANCE

- **A.** The specifications provided in this chapter are for single carrier with single technology installations within the City when there is no other available vertical infrastructure.
- B. All freestanding small cell permitting applications shall be approved by prior to installation. All equipment shall meet SWEPCO's utility requirements and the City of Shreveport's design aesthetics. The same small cell pole aesthetic is to be used along adjacent blocks to maintain a cohesive appearance.
- **c.** All small cell carrier equipment shall be housed internal to the equipment cabinet or hidden behind the cantenna. No network provider equipment shall be strapped to the outside of the pole. If a dual-carrier pole is approved by the approval authority, all the network provider equipment shall be located internal to the pole and cantenna.

4.2. LOCATION REQUIREMENTS

- A. Preface to Location Requirements. This subsection (A) provides guidance as to how to interpret and apply the location requirements in this Section. To better assist applicants and decision makers understand and respond to the community's aesthetic preferences and values, subsections (B), (C), (D), (E), and (F) set out listed preferences for locations and support structures to be used in connection with small wireless facilities in ordered hierarchies. Applications that involve lesser-preferred locations or structures may be approved so long as the applicant demonstrates that either:
 - 1. No more preferred locations or structures exist within 250 feet from the proposed site; or
 - 2. Any more preferred locations or structurers within 250 feet from the proposed site would be technically infeasible as supported by clear and convincing evidence in the written record.
- B. Preferred Locations. The preferred locations for small cell sites, in order are:
 - 1. On existing commercial buildings;
 - 2. In alleys;
 - 3. At intersections of streets where taller intersection streetlight and traffic signal poles are already located;



- 4. A mount to existing Streetscape streetlights or a Streetscape-look pole with light that replaces an existing Streetscape pole. (These poles must have plugs for Christmas decorations and come with banner arms);
- 5. Standalone poles that mimic Streetscape poles in design and coloration;
- 6. Existing utility poles for small cell sites. (When using an existing utility pole, the City prefers the equipment be in the vertical portion to preserve views).
- **C.** Locations in the Public Rights-of-Way. The City prefers small wireless facilities in the public rightsof-way to be installed in locations, ordered from most preferred to least preferred, as follows:
 - 1. Locations within commercial or industrial districts on or along arterial roads;
 - 2. Locations within commercial or industrial districts on or along collector roads;
 - 3. Locations within commercial or industrial districts on or along local roads;
 - 4. Locations within residential districts on or along arterial roads;
 - 5. Locations within residential districts on or along collector roads;
 - 6. Any location in any district within 250 feet from any structure approved for a residential use.
- D. Locations Outside the Public Rights-of-Way. As set forth in Shreveport Unified Development Code, the City prefers small wireless facilities outside the public rights-of- way to be installed in locations, ordered from most preferred to least preferred, as follows:
 - **1.** City-owned, non-residentially zoned property;
 - 2. Parcels within industrial zones;
 - 3. Parcels within commercial zones;
 - 4. Parcels within institutional zones;
 - 5. Parcels within parks and open space;
 - 6. Parcels within agricultural zones; and
 - 7. Parcels within residential or mixed-use zones.
- E. Support Structures in the Public Rights-of-Way. The City prefers small wireless facilities to be installed on support structures in the public rights-of-way, ordered from most preferred to least preferred, as follows:
 - 1. Existing or replacement streetlight poles;
 - 2. Existing or replacement wood utility poles;
 - 3. New, non-replacement streetlight poles;
 - 4. New, non-replacement poles for small wireless facilities.
- F. Support Structures Outside the Public Rights-of-Way. The City prefers small wireless facilities to be installed on support structures outside the public rights-of-way, ordered from most preferred to least preferred, as follows:
 - 1. Existing buildings or other non-tower structures previously approved for use as a support structure for personal wireless service facilities;
 - 2. Other existing buildings or non-tower structures;



- 3. Existing or replacement poles or towers;
- 4. New, non-replacement towers for small wireless facilities.

4.3. **DESIGN STANDARDS**

The pole design shall match the aesthetics of existing streetlights/poles installed in the vicinity to the pole. The Carrier shall perform a visual inspection (online street images are considered enough unless the pole standards were updated after the images were published) prior to submitting a permitting application to determine existing aesthetics.

A. General Standards.

- Noise. Small wireless facilities and all accessory equipment and transmission equipment must comply with all applicable noise control standards and regulations in the Shreveport City Code, Chapter 58 (Nuisances), as may be amended or superseded, and shall not exceed, either on an individual or cumulative basis, the noise limit as allowed.
- 2. Lights. Small wireless facilities shall not include any lights that would be visible from publicly accessible areas, except as may be required under Federal Aviation Administration, FCC, other applicable regulations for health and safety. All equipment with lights (such as indicator or status lights) must be installed in locations and within enclosures that mitigate illumination impacts visible from publicly accessible areas. The provisions in this subsection (a)(2) shall not be interpreted or applied to prohibit installations on streetlights or luminaires installed on new or replacement poles as may be required under these Guidelines.
- 3. Landscape Features. Small wireless facilities located on private or City-owned poperty shall not displace any existing landscape features unless:
 - **a.** such displaced landscaping is replaced with native and/ or drought-resistant plants, trees or other landscape features approved by the approval authority,
 - b. and the applicant submits and adheres to a landscape maintenance plan. The landscape plan must include existing vegetation, and vegetation proposed to be removed or trimmed, and the landscape plan must identify proposed landscaping by species type, size and location. Landscape maintenance must be performed in accordance with Article 10 of the Shreveport Unified Development Code, as it may be amended or superseded.
- 4. Site Security Measures. Small wireless facilities may incorporate reasonable and appropriate site security measures, such as locks and anti- climbing devices, to prevent unauthorized access, theft or vandalism. The approval authority shall not approve any barbed wire, razor ribbon, electrified fences or any similarly dangerous security measures. All exterior surfaces on small wireless facilities shall be constructed from or coated with graffiti-resistant materials.
- 5. Signage; Advertisements. All small wireless facilities must include signage that accurately identifies the site owner/operator, the owner/operator's site name or identification number and a toll-free number to the owner/operator's network operations center. Small wireless facilities may not bear any other signage or advertisements unless expressly approved by the approval authority, required by law or recommended under FCC, OSHA or other United States governmental agencies for compliance with RF emissions regulations.
- 6. Compliance with Health and Safety Regulations. All small wireless facilities shall be designed, constructed, operated and maintained in compliance with all generally applicable health and safety regulations, which includes without limitation all applicable regulations for human exposure to RF emissions.



B. Small Wireless Facilities in the Public Right-of-Way.

- 1. Overall Height. Small wireless facilities must:
 - **a.** Be 50 feet or less in height including their antennas;
 - b. Be mounted on structures no more than ten percent taller than other adjacent structures; or
 - c. Not extend existing structures on which they are located to a height of more than 50 feet tall or by more than ten percent in height, whichever is greater.

2. Antennas.

- a. **Concealment.** All antennas and associated mounting equipment, hardware, cables or other connecters must be completely concealed within an opaque antenna shroud or radome. The antenna shroud or radome must be painted a flat, non- reflective color to match the underlying support structure.
- b. Antenna Volume. Each antenna associated with the deployment, excluding associated antenna equipment, is no more than three cubic feet (3 ft³) in volume. 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 (28 ft³) in volume;

3. Accessory Equipment.

- a. Installation Preferences. All non-antenna accessory equipment shall be installed in accordance with the following preferences, ordered from most preferred to least preferred:
 - (1) Underground in any area in which the existing utilities are primarily located underground;
 - (2) On the pole or support structure; or
 - (3) Integrated into the base of the pole or support structure. Applications that involve lesserpreferred installation locations may be approved so long as the applicant demonstrates that no more preferred installation location would be technically infeasible as supported by clear and convincing evidence in the written record.

b. Undergrounded Accessory Equipment.

- (1) To the extent permitted under applicable regulations or law the City retains its rights to require undergrounding of antenna equipment or any other associated equipment, other than the antennae, for small wireless facilities to be installed in an environmentally controlled vault that is load-rated to meet the City's standards and specifications. Underground vaults located beneath a sidewalk must be constructed with a slip-resistant cover. Vents for airflow shall be flush-to-grade when placed within the sidewalk and may not exceed two feet above grade when placed off the sidewalk. Applicants shall not be permitted to install an underground vault in a location that would cause any existing tree to be materially damaged or displaced.
- (2) To the extent doing so would not result in an effective prohibition under federal law, the applicant shall comply with requirements that prohibit communications service providers from installing structures or antenna equipment aboveground in the public right-of-way in areas designated solely for underground or buried cable and utility facilities where the city has required all cable and utility facilities, other than city poles and attachments, to be placed underground by a date certain that is three months prior to the submission of the application. The City Engineer may authorize the replacement of city poles in the designated area upon good cause shown, as determined by the City Engineer.



- c. Pole-Mounted Accessory Equipment. All pole-mounted accessory equipment must be installed flush to the pole to minimize the overall visual profile. All pole-mounted equipment and required or permitted signage must be placed and oriented away from adjacent sidewalks and structures. Pole-mounted equipment may be installed behind street, traffic or other signs to the extent that the installation complies with applicable public health and safety regulations. All cables, wires and other connectors must be routed through conduits within the pole, and all conduit attachments, cables, wires and other connectors cannot be routed through the pole, applicants shall route them through a single external conduit or shroud that has been finished to match the underlying support structure.
- d. Base-Mounted Accessory Equipment. All base-mounted accessory equipment must be installed within a shroud, enclosure or pedestal integrated into the base of the support structure. All cables, wires and other connectors routed between the antenna and base-mounted equipment must be concealed from public view.
- e. Ground-Mounted Accessory Equipment. The approval authority shall not approve any ground-mounted accessory equipment including, but not limited to, any utility or transmission equipment, pedestals, cabinets, panels or electric meters.
- f. Accessory Equipment Volume. All accessory equipment associated with a small wireless facility installed above ground level, including the wireless equipment associated with the antenna and any pre-existing associated equipment on the structure, is no more than 28 cubic feet (28 ft ³) in volume. The volume calculation shall include any shroud, cabinet or other concealment device used in connection with the non-antenna accessory equipment. The volume calculation shall not include any equipment or other improvements placed underground.
- g. Streetlights. Applicants that propose to install small wireless facilities on an existing streetlight must remove and replace the existing streetlight with one substantially similar to the City's standards and specifications but designed to accommodate wireless antennas and accessory equipment. To mitigate any material changes in the street lighting patterns, the replacement must:
 - (1) Be located as close to the removed pole as possible and be aligned with the other existing streetlights; and
 - (2) Include a LED luminaire at substantially the same height and distance from the pole as the luminaire on the removed pole.

All antennas must be installed above the pole within a single, canister style shroud or radome that tapers to the pole, to the satisfaction of the City Engineer.

- 4. Wood Utility Poles. Applicants that propose to install small wireless facilities on an existing wood utility pole must install all antennas above the pole unless the applicant demonstrates it would be technically infeasible as supported by convincing evidence in the written record. Side-mounted antennas must be concealed within a shroud. All cables, wires and other connectors must be concealed within the side-arm mount or extension arm. The maximum horizontal separation between the antenna and the pole shall be the minimum separation required by applicable health and safety regulations.
- 5. New, Non-Replacement Poles. Applicants that propose to install small wireless facilities on a new, non-replacement pole must install a new LED streetlight substantially similar to the City's standards and specifications but designed to accommodate wireless antennas and accessory equipment located immediately adjacent to the proposed location. If there are no existing streetlights in the immediate vicinity, the applicant may install a metal or composite pole capable of concealing all the accessory equipment either within the pole or within an integrated enclosure located at the base of the pole. The pole diameter shall not exceed twelve (12) inches and any base enclosure diameter shall not exceed sixteen (16) inches. All antennas, whether on a new streetlight or other new pole, must be installed above the pole within a single, canister style shroud or radome.



- 6. Encroachments over Private Property. Small wireless facilities may not encroach onto or over any private or other property outside the public rights-of-way without the property owner's express written consent.
- 7. Backup Power Sources. Fossil-fuel based backup power sources shall not be permitted within the public rights-of-way; provided, however, that connectors or receptacles may be installed for temporary backup power generators used in an emergency declared by federal, state or local officials.
- 8. **Obstructions; Public Safety.** Small wireless facilities and any associated equipment or improvements shall not physically interfere with or impede access to any:
 - (1) Worker access to any above-ground or underground infrastructure for traffic control, streetlight or public transportation, including without limitation any curb control sign, parking meter, vehicular traffic sign or signal, pedestrian traffic sign or signal, barricade reflectors;
 - (2) Access to any public transportation vehicles, shelters, street furniture or other improvements at any public transportation stop;
 - (3) Worker access to above-ground or underground infrastructure owned or operated by any public or private utility agency;
 - (4) Fire hydrant or water valve;
 - (5) Access to any doors, gates, sidewalk doors, passage doors, stoops or other ingress and egress points to any building appurtenant to the rights- of-way; or
 - (6) Access to any fire escape.
- 9. Utility Connections. All cables and connectors for telephone, data backhaul, primary electric and other similar utilities must be routed underground in conduits large enough to accommodate future collocated wireless facilities. Undergrounded cables and wires must transition directly into the pole base without any external doghouse. All cables, wires and connectors between the underground conduits and the antennas and other accessory equipment shall be routed through and concealed from view within:
 - (1) Internal risers or conduits if on a concrete, composite or similar pole; or
 - (2) A cable shroud or conduit mounted as flush to the pole as possible if on a wood pole or other pole without internal cable space.

The approval authority shall not approve new overhead utility lines or service drops merely because compliance with the undergrounding requirements would increase the project cost.

- 10. Spools and Coils. To reduce clutter and deter vandalism, excess fiber optic or coaxial cables shall not be spooled, coiled or otherwise stored on the pole outside equipment cabinets or shrouds.
- 11. Electric Meters. Small wireless facilities shall use flat-rate electric service or other method that obviates the need for a separate above-grade electric meter. If flat-rate service is not available, applicants may install a shrouded smart meter. The approval authority shall not approve a separate ground- mounted electric meter pedestal.
- 12. Street Trees. To preserve existing landscaping in the public rights-of-way, all work performed in connection with small wireless facilities shall not cause any street trees to be trimmed, damaged or displaced. If any street trees are damaged or displaced, the applicant shall be responsible, at its sole cost and expense, to plant and maintain replacement trees at the site for the duration of the permit term.

C. Small Wireless Facilities Outside the Public Rights-of-Way.

 Overall Height. Small wireless facilities on private property may not exceed the applicable height limit for structures in the applicable zoning district or overlay zone, except as may otherwise be required by federal law or regulation.



- 2. **Setbacks.** Small wireless facilities on private property may not encroach into any applicable setback for structures in the subject zoning district.
- Backup Power Sources. The approval authority shall not approve any diesel generators or other similarly noisy or noxious generators in or within 250 feet from any residence; provided, however, the approval authority may approve sockets or other connections used for temporary backup generators.
- 4. Parking; Access. Any equipment or improvements constructed or installed in connection with any small wireless facilities must not reduce any parking spaces below the minimum requirement for the subject property. Whenever feasible, small wireless facilities must use existing parking and access rather than construct new parking or access improvements.
- 5. Towers, Poles and Other Freestanding Small Wireless Facilities. All new towers, poles or other freestanding structures that support small wireless facilities must be made from a metal or composite material capable of concealing all the accessory equipment, including cables, mounting brackets, radios, and utilities, either within the support structure or within an integrated enclosure located at the base of the support structure. All antennas must be installed above the pole in a single, canister-style shroud or radome. The support structure and all transmission equipment must be painted with flat/neutral colors that match the support structure. The pole height shall not exceed thirty-five (35) feet or the height limit for the applicable zoning district or overlay zone, whichever is less. The pole diameter shall not exceed twelve (12) inches and any base enclosure diameter shall not exceed sixteen (16) inches.

6. Building-Mounted Small Wireless Facilities.

- a. Preferred Concealment Techniques. All applicants must propose new non- tower small wireless facilities that are completely concealed and architecturally integrated into the existing facade or rooftop features with no visible impacts from any publicly accessible areas at ground level examples include, but are not limited to, antennas behind existing parapet walls or facades replaced with RF- transparent material and finished to mimic the replaced materials). Alternatively, if the applicant demonstrates with clear and convincing evidence that integration with existing features is technically infeasible, the applicant may propose completely concealed new structures or appurtenances designed to mimic the support structure's original architecture and proportions (examples include, but are not limited to, steeples and chimneys).
- b. Facade-Mounted Equipment. When small wireless facilities cannot be placed behind existing parapet walls or other existing screening elements, the approval authority may approve facade- mounted equipment in accordance with this subsection (c)(6)(B). All facade- mounted equipment must be concealed behind screen walls and mounted flush to the facade. The approval authority may not approve "pop-out" screen boxes. Except in industrial zones, the approval authority may not approve any exposed facade-mounted antennas, including but not limited to exposed antennas painted to match the facade.