

**City of Frisco, Texas**  
**Design Manual for the Installation of**  
**Network Nodes and Node Support Poles**

**I. Purpose and Applicability**

**1.1 Purpose**

- A. The standards and procedures provided in this *Wireless Facilities Design Manual* are adopted to protect the health, safety, and welfare of the public by minimizing and reducing impacts to public safety within the City’s public right-of-way and to minimize and reduce impacts to the City, its residents, and visitors and to give assistance and guidance to wireless telecommunications providers to assist providers in the timely, efficient, safe, and aesthetically pleasing installation of technologically competitive equipment.
- B. Due, in part, to the increasing number of facilities in the City’s Public right-of-way, the City has adopted Chapter 78 (Streets, Sidewalks and Other Public Property) of the Code of Ordinances, which is applicable to all public service providers, including wireless service providers or network providers (collectively, “Providers”) as defined by Chapter 284 of the Texas Local Government Code.
- C. In addition, the City has adopted this *Wireless Facilities Design Manual* to provide technical criteria and details necessary for Providers seeking to install and construct network nodes and node support poles in the City’s public right-of-way.

**1.2 Applicability**

- A. Providers shall adhere to the requirements found in Chapter 78 (Streets, Sidewalks and Other Public Property) of the Code of Ordinances and this *Wireless Facilities Design Manual* for the installation, operation, maintenance, repair, modification, and replacement of wireless facilities within the City’s public right-of-way.
- B. This *Wireless Facilities Design Manual* governs siting and criteria for the installation of wireless facilities, including micro network nodes, network nodes, node support poles, and related ground equipment, being installed pursuant to Chapter 284 of the Texas Local Government Code. This *Wireless Facilities Design Manual* shall apply to any sitings, installations, collocations in, on, over or under the public rights-of-way of such wireless facilities, whether they are installed pursuant to Chapter 284, or installed pursuant to an agreement with the City in its discretion, or installed as may otherwise be allowed by state law.
- C. To the extent that the provisions of Chapter 284 of the Texas Local Government Code; Chapter 78 (Streets, Sidewalks and Other Public Property) of the Code of Ordinances; or other applicable laws, ordinances, codes, rules and regulations of the City are in conflict with provisions of this *Wireless Facilities Design Manual* or each other, the

provisions of Chapter 284 of the Texas Local Government Code; this *Wireless Facilities Design Manual*; Chapter 78 (Streets, Sidewalks and Other Public Property) of the Code of Ordinances; or other applicable laws, ordinances, codes, rules and regulations of the City shall prevail and control with regard to a Provider in that order.

## II. Definitions

For purposes of this *Wireless Facilities Design Manual*, the following terms shall have the meanings set forth herein. When not inconsistent with the context, words used in the present tense include the future; words in the plural number include the singular number, and words in the singular include the plural. The word “shall” is always mandatory and not merely permissive. Terms used but not defined herein shall have the meanings set forth in Chapter 284 of the Texas Local Government Code to the extent such terms are defined therein.

- A. “*Abandon*” and its derivatives means the facilities installed in the public right-of-way (including by way of example but not limited to: poles, wires, conduit, manholes, handholes, cuts, network nodes and node support poles, or portion thereof) that have been left by a Provider in an unused or non-functioning condition for more than 120 consecutive calendar days unless, after notice to Provider, Provider has established to the reasonable satisfaction of the City that the applicable wireless facilities, or portion thereof, are still in active use.
- B. “*Antenna*” means communications equipment that transmits or receives electromagnetic radio frequency signals used in the provision of wireless services.
- C. “*Chapter 284*” means Chapter 284 of the Texas Local Government Code, as it exists or may be amended.
- D. “*City*” means the City of Frisco, Texas and its officers and employees.
- E. “*Collocate*” and “*collocation*” mean the installation, mounting, maintenance, modification, operation, or replacement of network nodes in a public right-of-way on or adjacent to a pole.
- F. “*Concealed*,” “*Concealment*” and “*camouflaged*” means any wireless facility or pole that is covered, blended, painted, disguised, camouflaged, or otherwise concealed such that the wireless facility blends into the surrounding environment and is visually unobtrusive as allowed as a condition for City approval under Section 284.105 of Chapter 284 in historic districts or design districts. A concealed or camouflaged wireless facility or pole also includes any wireless facility or pole conforming to the surrounding area in which the wireless facility or pole is located and may include, but is not limited to any wireless facility or pole hidden beneath a façade, blended with surrounding area design, painted to match the supporting area, or disguised with artificial tree branches.
- G. “*Decorative pole*” means a streetlight pole specially designed and placed for aesthetic purposes and on which no appurtenances or attachments, other than specially designed

informational or directional signage or temporary holiday or special event attachments, have been placed or are permitted to be placed according to nondiscriminatory City laws, ordinances, codes, rules or regulations.

- H. “*Design district*” means an area that is zoned, or otherwise designated by City ordinance, and for which the City maintains and enforces unique design and aesthetic standards on a uniform and nondiscriminatory basis.
- I. “*Distributed Antenna System*” or “*DAS*” shall be included as a type of network node.
- J. “*Historic district*” means an area that is zoned or otherwise designated as a historic district under municipal, state, or federal law.
- K. “*Location*” means the City-approved and lawfully permitted location of a network node or other wireless facility.
- L. “*Macro tower*” means a guyed or self-supported pole or monopole greater than the height parameters prescribed by Section 284.103 of Chapter 284 and that supports or is capable of supporting antennas.
- M. “*Micro network node*” means a network node that is not larger in dimension than 24 inches in length, 15 inches in width, and 12 inches in height, and that has an exterior antenna, if any, not longer than 11 inches.
- N. “*Municipal Park*” means the various properties under the direction, control, or supervision of the Director of the City’s Parks and Recreation Department pursuant to authority granted by the City Council and the City Charter or City ordinances or resolutions.
- O. “*MUTCD*” means the Manual of Uniform Traffic Control Devices.
- P. “*Network node*” means equipment at a fixed location that enables wireless communications between user equipment and a communications network. The term:
  - (1) includes:
    - (i) equipment associated with wireless communications;
    - (ii) a radio transceiver, an antenna, a battery-only backup power supply, and comparable equipment, regardless of technological configuration; and
    - (iii) coaxial or fiber-optic cable that is immediately adjacent to and directly associated with a particular collocation; and
  - (2) does not include:
    - (i) an electric generator;
    - (ii) a pole; or
    - (iii) a macro tower.
- Q. “*Network provider*” or “*provider*” means:
  - (1) a wireless service provider; or
  - (2) a person that does not provide wireless services and that is not an electric utility but builds or installs on behalf of a wireless service provider:

- (i) network nodes; or
- (ii) node support poles or any other structure that supports or is capable of supporting a network node.

- R. “*Node support pole*” means a pole installed by a network provider for the primary purpose of supporting a network node.
- S. “*Permit*” means a document issued by the City authorizing installation, removal, modification and other work for Provider’s wireless facilities in accordance with the approved plans and specifications.
- T. “*Private easement*” means an easement or other real property right that is only for the benefit of the grantor and grantee and their successors and assigns.
- U. “*Provider*” has the same meaning as “network provider.”
- V. “*Public Right-of-Way*” means the area on, below, or above a public roadway, highway, street, public sidewalk, alley, waterway, city easement or utility easement in which the municipality has an interest. The term does not include a private easement or the airwaves above a public right-of-way with regard to wireless telecommunications.
- W. “*Service pole*” means a pole, other than a municipally owned utility pole, owned or operated by the City and located in a public right-of-way, including:
  - (1) a pole that supports traffic control functions;
  - (2) a structure for signage;
  - (3) a pole that supports lighting, other than a decorative pole; and
  - (4) a pole or similar structure owned or operated by the City and supporting only network nodes
- X. “*Small cell*” shall be included as a type of “network node.”
- Y. “*Stealth*” has the same meaning as “concealed.”
- Z. “*Street*” means only the paved portion of the public right-of-way used for vehicular travel, being the area between the inside of the curb to the inside of the opposite curb, or the area between the two parallel edges of the paved roadway for vehicular travel where there is no curb. It does not include the median. A “street” is generally part of, but smaller in width than the width of the entire public right-of-way; while a public right-of-way may include sidewalks and utility easements, a “street” does not. A “street” does not include the curb or the sidewalk, if either are present at the time of a permit application or if added later.
- AA. “*Traffic Signal*” means any device, whether manually, electrically, or mechanically operated by which traffic is alternately directed to stop, to slow down or alter current speed and to proceed.
- AB. “*Transport facility*” means each transmission path physically within a public right-of-way, extending with a physical line from a network node directly to the network, for the purpose

of providing backhaul for network nodes.

- AC. “*Underground Requirement Area*” means an area where poles, overhead wires, and associated overhead or aboveground structures have been removed and buried or have been approved for burial underground pursuant to municipal ordinances, zoning regulations, state law, private deed restrictions, and other public or private restrictions, that prohibit installing aboveground structures in a public right-of-way.
- AD. “*Utility pole*” means a pole that provides:
  - (1) electric distribution with a voltage rating of not more than 34.5 kilovolts; or
  - (2) services of a telecommunications provider, as defined by Chapter 284 or Section 51.002 of the Texas Utilities Code.
- AE. “*Wireless service*” means any service, using licensed or unlicensed wireless spectrum, including the use of Wi-Fi, whether at a fixed location or mobile, provided to the public using a network node.
- AF. “*Wireless service provider*” means a person that provides wireless service to the public.
- AG. “*Wireless facilities*” mean “micro network nodes,” “network nodes,” and “node support poles,” as those terms are defined in Chapter 284, and related ground equipment.

### **III. Permitting**

#### **3.1 Attachments to Existing Poles or Structures**

A Provider shall not install, modify or relocate a network node on an existing pole or structure or modify or relocate an existing node support pole within the public right-of-way without first obtaining a Right-of-Way Permit from the City. Prior to installation, modification or relocation of a network node on an existing pole or structure or modification or relocation of an existing node support pole, Provider shall complete and submit to the City a Commercial Building (Electrical) Permit application and a Right-of-Way Permit application in the form provided by the City, along with standard required documents and the following items:

- A. Payment of the permit application fee and all other fees required under Chapter 284, including but not limited to annual fees set forth in Section 284.053(a) of Chapter 284, as such fees may be adjusted from time to time pursuant to Section 284.054 of Chapter 284, and fees set forth in Section 284.055 and Section 284.056 of Chapter 284, as applicable;
- B. An aerial map showing the location of the existing pole or structure to which the network node is proposed to be attached, and a street view image of the same;
- C. Construction and engineering drawings prepared by a professional engineer licensed in the State of Texas, and for wireless facilities proposed to be attached to a service pole, a decorative pole or other City-owned or -controlled structure, a certification from the

engineer that the existing pole or structure and its foundations have sufficient structural stability to support the proposed network node and can bear the wind load without pole modification, or in the event the installation will require pole re-enforcement, that such re-enforced pole will have sufficient structural stability to support the proposed network node and can bear the wind load without further pole modification. Such construction and engineering drawings must also address the design of the connection of any item to the pole. If pole re-enforcement is necessary, Provider shall provide construction and engineering drawings for the proposed alteration to the existing pole. Any re-enforcement or replacement of a pole shall match the color of the existing pole. Any pole re-enforcement or replacement shall be at Provider's sole cost;

- D. Geographic Information System (GIS) data for the location of each proposed wireless facility in the form required by the City;
- E. Detailed drawings, with calculations, showing strict conformity to the size limitations as set forth in Chapter 284, in accordance with, but not limited to Section 284.002, (relating to size of a micro network node), Section 284.003 (relating to size of network nodes), and Section 284.103 (relating to maximum pole height), as applicable.
- F. A certificate that the network node complies with applicable regulations of the Federal Communications Commission;
- G. Certification that the proposed network node will be placed into active commercial service by or for a Provider not later than the sixtieth (60<sup>th</sup>) day after the date the construction and final testing of the network node is completed;
- H. Documentation identifying the frequency on which the proposed network node will operate and a certification that the proposed network node shall not cause any interference with the City's traffic signal system, public safety radio system, private police cell system, or other City communications infrastructure;
- I. The names and telephone numbers of at least two persons serving as emergency contacts for the Provider who can be reached by telephone 24 hours a day, seven days a week, in the event of an emergency;
- J. Sealed engineering drawings for the electrical service providing power to the proposed network node, which must include the conduit size, circuit size, calculations for amp, and distances running. Provider shall use 120 voltage when connecting to any City service pole or decorative pole and shall provide a key to meter upon inspection. The City is entitled to disconnect power to the network node or other wireless facilities in emergency situations;
- K. Scaled dimensional drawings or pictures of the proposed attachments of the network node to the existing poles or structures as well as any other proposed wireless facility, indicating the spacing from existing curbs, driveways, sidewalks, and other existing poles. This shall include a before-and-after image of the pole and all proposed

attachments thereto and associated standalone equipment;

- L. Scaled dimensional construction and engineering drawings indicating the current public right-of-way line and showing any proposed underground conduit and equipment and its spacing from the City's existing utility facilities. Such drawings shall also show a sectional profile of the public right-of-way and identify all existing utilities and existing utility conflicts;
- M. Where required by the City based on the proposed scope of work, Provider shall submit a traffic control plan, storm water pollution prevention plan, and/or trench safety plan;
- N. If the work proposed in the Right-of-Way Permit application involves more than five hundred (500) feet of continuous trenching or boring or the installation of more than three (3) new node support poles or more than three (3) electrical meter pedestals or ground boxes, then the Provider shall submit daily work location information, on the form provided by the City, before work can begin;
- O. If the location of the proposed wireless facility lies within right-of-way adjacent to a state or federal highway, the Provider must provide evidence of a permit from the state or federal government; and
- P. All other information required to be submitted by a right of user in connection with a Right of Way Permit application under Chapter 78 (Streets, Sidewalks and Other Public Property) of the Code of Ordinances or other applicable laws, ordinances, codes, rules and regulations of the City.

### 3.2 **Installation of Network Nodes on New Poles**

A Provider shall not install or modify a new node support pole or a network node on a new node support pole within the public right-of-way without first obtaining a Right-of-Way Permit from the City. Prior to installation or modification of a new node support pole or a network node on a new node support pole, Provider shall complete and submit to the City a Commercial Building (Electrical) Permit application and a Right-of-Way Permit application in the form provided by the City, along with standard required documents and the following items:

- A. Payment of the permit application fee and all other fees required under Chapter 284, including but not limited to annual fees set forth in Section 284.053(a) of Chapter 284, as such fees may be adjusted from time to time pursuant to Section 284.054 of Chapter 284, and fees set forth in Section 284.055 and Section 284.056 of Chapter 284, as applicable;
- B. An aerial map showing the location of the proposed new node support pole and a street view image of the same;
- C. Geographic Information System (GIS) data for the location of each proposed new node support pole in the form required by the City;

- D. Certification that the proposed new node support pole is spaced apart from existing utility poles or node support poles at the same distance as the spacing between existing utility poles in the immediate proximity, but no less than a minimum of three hundred (300) feet from an existing utility pole or another node support pole, or the submission of evidence or other materials supporting a Provider's claim that such requirement would have the effect of prohibiting the placement of new node support poles in the subject area;
- E. Scaled dimensional drawings or pictures of the proposed node support pole and any other proposed wireless facilities to be installed in connection with the proposal, indicating the spacing from existing curbs, driveways, sidewalks, and other existing poles. This shall include a before-and-after street view image of the pole and all proposed attachments and associated standalone equipment;
- F. Scaled dimensional construction and engineering drawings indicating the current public right-of-way line and showing any proposed underground conduit and equipment and its spacing from the City's existing utility facilities. Such drawings shall also show a sectional profile of the public right-of-way and identify all existing utilities and existing utility conflicts;
- G. Where required by the City based on the proposed scope of work, Provider shall submit a traffic control plan, storm water pollution prevention plan, and/or trench safety plan;
- H. Documentation identifying the frequency on which the proposed network node will operate and a certification that the proposed network node shall not cause any interference with the City's traffic signal system, public safety radio system, private police cell system, or other City communications infrastructure;
- I. The names and telephone numbers of at least two persons serving as emergency contacts for the Provider who can be reached by telephone 24 hours a day, seven days a week, in the event of an emergency;
- J. Sealed engineering drawings for the electrical service providing power to the proposed network node, which must include the conduit size, circuit size, calculations for amp, and distances running. Provider shall use 120 voltage when connecting to any City service pole or decorative pole and shall provide a key to meter upon inspection. The City is entitled to disconnect power to the network node or other wireless facilities in emergency situations;
- K. If the work proposed in the Right-of-Way Permit application involves more than five hundred (500) feet of continuous trenching or boring or the installation of more than three (3) new node support poles or more than three (3) electrical meter pedestals or ground boxes, then the Provider shall submit daily work location information, on the form provided by the City, before work can begin;
- L. If the location of the proposed new node support pole lies within right-of-way adjacent to a state or federal highway, the Provider must provide evidence of a permit from the state or federal government; and



M. All other information required to be submitted by a right of user in connection with a Right of Way Permit application under Chapter 78 (Streets, Sidewalks and Other Public Property) of the Code of Ordinances or other applicable laws, ordinances, codes, rules and regulations of the City.

### 3.3 **Installation of Transport Facilities**

A Provider shall not install or modify a new transport facility within the public right-of-way without first obtaining a Right-of-Way Permit from the City. Before beginning excavation in any public right-of-way, Provider shall be responsible for complying with all Laws relating to verifying the location of existing utility lines and facilities and avoiding encroachment thereon, including the requirements of Chapter 78 (Streets, Sidewalks and Other Public Property) of the Code of Ordinances.

Transport facilities shall be underground. Aerial power and fiber connections shall not be permitted. If the work proposed in the Right-of-Way Permit application involves more than five hundred (500) feet of continuous trenching or boring or the installation of more than three (3) new node support poles or more than three (3) electrical meter pedestals or ground boxes, then the Provider shall submit daily work location information, on the form provided by the City, before work can begin.

### 3.4. **Electrical Supply**

Provider shall be responsible for obtaining any required electrical power service to the Provider's wireless facilities. Provider's electrical supply shall be separately metered from the City and must match City infrastructure voltage. The City shall not be liable to the Provider for any stoppages or shortages of electrical power furnished to the wireless facilities, including without limitation, stoppages or shortages caused by any act, omission, or requirement of the public utility serving the wireless facility structure or the act or omission of any other tenant or Provider of the wireless facility structure, or for any other cause beyond the control of the City.

### 3.5. **Appeal**

A Provider who has been denied a permit required under this Article or who believes that fees imposed under this Article are invalid or that the City has violated this Article or Chapter 284 may appeal such denial, fee imposition or alleged violation pursuant to Section 78-43 (Appeal) of the Code of Ordinances

## **IV. Network Node and Node Support Pole Requirements**

### 4.1. **Installation**

Provider shall, at its own cost and expense, install all wireless facilities in a good and workmanlike manner and in accordance with the requirements promulgated by this *Wireless Facilities Design Manual*, other provisions of Chapter 78 (Streets, Sidewalks and

Other Public Property) of the Code of Ordinances, Chapter 284 of the Texas Local Government Code, and all other applicable laws, ordinances, codes, rules and regulations of the City, the state, and the United States (collectively, "Laws"), as such may be amended from time to time. Provider's work shall be subject to the regulation of the City. All work done in connection with the installation, operation, maintenance, repair, modification, and/or replacement of wireless facilities shall be in compliance with all applicable Laws. The following requirements apply to the installation, operation, maintenance, repair, modification, and/or replacement of wireless facilities:

- A. Wireless facilities shall be concealed or enclosed as much as possible in an equipment box, cabinet or other enclosure that may include ventilation openings. External cables and wires hanging off a pole shall be sheathed or enclosed in a conduit, so that wires are protected and not visible or visually minimized to the extent possible in strict accordance with Chapter 78 (Streets, Sidewalks and Other Public Property) of the Code of Ordinances and other applicable ordinances, except to the extent not consistent with Chapter 284;
- B. No wireless facility shall be located or placed in a manner that encroaches on existing or proposed City corner visibility triangles or sight line triangles, as defined by applicable Law, including Section 2.07 of the City's Engineering Standards, as it exists or may be amended;
- C. Electrical meters shall not be mounted on a service pole, decorative pole or other City-owned or -controlled structure. Standalone electrical meters shall be located on or within a pad-mounted pedestal that shall be powder coated Traffic Black (RAL 9017). Provider shall provide a key (#2195) to each meter upon inspection by City. All electrical meters serving network nodes must display the Provider's name and contact information;
- D. All power to a network node located on or attached to a service pole, decorative pole or other City-owned or -controlled structure must be able to be disconnected to provide a safe working environment;
- E. Use of City conduits for a Provider's wireless facilities is prohibited;
- F. A Provider shall not use more than ten percent (10%) of the inside diameter of a service pole or decorative pole, measured at the pole's narrowest point, for the installation of wiring or other equipment associated with a network node;
- G. Network node attachments to a pole shall be installed at least eight (8) feet above the ground in accordance with Section 284.108 of Chapter 284;
- I. In accordance with Section 284.003(a)(1)(C), Section 284.003 (a)(2)(C) and Section 284.003(a)(3)(B) of Chapter 284, no protrusion from the outer circumference of the existing structure or pole to which a network node is attached shall be more than two (2) feet;

- J. The color of network nodes shall match the color of the poles or structures to which they are attached such that the network nodes blend with the color of the poles or structures;
- K. Before beginning excavation in any public right-of-way, Provider shall be responsible for complying with all Laws relating to verifying the location of existing utility lines and facilities and avoiding encroachment thereon, including the requirements of Chapter 78 (Streets, Sidewalks and Other Public Property) of the Code of Ordinances;
- L. A pre-construction meeting is required before any work is commenced that involves installing a network node on an service pole or other City pole or structure;
- N. Wooden node support poles are prohibited in the public right-of-way. All new node support poles located within the public right-of-way must be installed on breakaway supports that meet the requirements contained in the American Association of State Highway and Transportation Officials' (AASHTO) Manual and must be powder-coated traffic black (RAL 9017) unless otherwise approved by the City in writing; and
- O. Unless otherwise approved by City in writing, new node support poles shall be spaced apart from existing utility poles or node support poles at the same distance as the spacing between utility poles in the immediate proximity, but no less than at a minimum of three hundred (300) feet from a utility pole or another node support pole to minimize the hazard of poles adjacent to roadways and to minimize the effect on property values and aesthetics in the area. Should a Provider seek an exception to this requirement on the ground that it would have the effect of prohibiting the placement of new node support poles in the subject area, the Provider shall submit to the City evidence or other materials supporting its claim.

#### 4.2 **Inspections**

The City may perform visual inspections of any wireless facilities located in the public right-of-way as the City deems appropriate without notice. If the inspection requires physical contact with any wireless facilities, the City shall provide written notice to the Provider within five (5) business days of the planned inspection. Provider may have a representative present during such inspection.

In the event of an emergency situation, the City may, but is not required to, notify Provider of an inspection. The City may take all actions necessary to remediate the emergency situation and the City shall notify Provider as soon as practicable after remediation is complete.

#### 4.3 **Placement**

- A. *Municipal Parks.* A provider shall neither allow the installation of nor install a new node support pole in any municipal park without the prior written consent of the City. Each permit application shall disclose whether the proposed location of a wireless

facility is within a municipal park.

- B. *City Property.* A provider shall neither allow the installation of nor install wireless facilities on any City property that is not public right-of-way without the prior written consent of the City. Each permit application shall disclose whether the proposed location of a wireless facility is on any City property that is not public right-of-way.
- C. *Residential Areas.* A provider shall neither allow the installation of nor install a new node support pole in public right-of-way that is adjacent to a street that is not more than fifty (50) feet wide and adjacent to single-family residential lots or other multifamily residences or undeveloped land that is designated for residential use by zoning or deed restrictions. Each permit application shall disclose whether the proposed location of a wireless facility is within such residential areas.
- D. *Historic Districts.* A provider shall neither allow the installation of nor install wireless facilities in public right-of-way that is located within a historic district without the prior written consent of the City. Each permit application shall disclose whether the proposed location of a wireless facility is within a historic district.
- E. *Design Districts.* A provider shall neither allow the installation of nor install wireless facilities in public right-of-way that is located within a design district without the prior written consent of the City. Each permit application shall disclose whether the proposed location of a wireless facility is within a design district.
- F. *Historic District and Design District Conditions.* As a condition for approval of wireless facilities in design districts or historic districts, the City shall require reasonable design or concealment measures for the wireless facilities. Therefore, any request for installation in a design district or historic district must be accompanied with proposed concealment measures in the permit application. The City requests that a Provider explore the feasibility of using camouflage measures to improve the aesthetics of the wireless facilities, or any portion thereof, to minimize the impact to the aesthetics in design districts or historic districts. Provider shall comply with and observe all applicable Laws relating to historic preservation.
- G. *Decorative Poles.* Provider shall neither allow the installation of nor install wireless facilities on a decorative pole without the prior written consent of the City. Each permit application shall disclose whether the proposed location of a wireless facility is on a decorative pole.
- H. *Public right-of-way.* To minimize any obstruction, impediment, or hindrance to the usual travel or public safety on a public right-of-way, node support poles shall be placed within three (3) feet of the outer edge of the public right-of-way line or as close as possible thereto. Wireless facilities shall not obstruct, impede, or hinder pedestrian or vehicular traffic in the public right-of-way or obstruct or interfere with the legal use of a public right-of-way by other utility providers. Provider shall promptly remove wireless facilities that are installed in a location that is not in accordance with

the plans approved by the City, that obstruct, impede, or hinder pedestrian or vehicular traffic, that obstruct or interfere with the legal use of a public right-of-way by other utility providers, that do not comply with applicable Laws, or that otherwise render the public right-of-way non-compliant with applicable Laws, including but not limited to the American Disabilities Act.

- I. *Existing telephone or electrical lines between existing utility poles.* Micro network nodes shall only be lashed on existing telephone or electrical lines between existing utility poles (electric poles or telephones poles), with notice to the pole owner as required by the Federal Pole Attachment Act, and not placed on utility poles, node support poles or service poles.
- J. *Notice to remove unauthorized wireless facilities and penalty.* If a provider fails to remove any unauthorized wireless facility or any wireless facility that is located in an improper location within the earlier of thirty (30) days after receiving written notice or the date required by the City the Provider shall be subject to a penalty of \$500.00 per day until the wireless facility is removed or relocated to the correct area within the permitted location, regardless of whether the Provider's contractor, subcontractor, or vendor installed the wireless facility in strict conformity with Chapter 78 (Streets, Sidewalks and Other Public Property) of the Code of Ordinances or other applicable Laws concerning improperly located facilities in the public right-of-way.

#### 4.4 **Fiber Connection**

Provider shall be responsible for obtaining access and connection to fiber optic lines or other backhaul solutions that may be required for its wireless facilities.

#### 4.5 **Generators**

Provider shall not allow or install generators or back-up generators in the public right-of-way.

#### 4.6 **Equipment Dimensions**

Provider's node support poles and network nodes shall comply with the dimensions set forth in Chapter 284.

#### 4.7 **Tree Maintenance**

Provider and/or its contractors or agents shall obtain written permission from the City before trimming trees hanging over the Provider's wireless facilities to prevent branches of such trees from contacting the Provider's wireless facilities. When directed by the City, Provider shall trim such trees under the supervision and direction of the Parks Director. The City shall not be liable for any damages, injuries, or claims arising from Provider's actions under this section.

#### 4.8 **Signage**

- A. Provider shall post its name, location identifying information, and emergency telephone number in an area on the cabinet of the node support poles and network nodes that is visible to the public. Signage required under this section shall not exceed 4" x 6", unless otherwise required by law (e.g. RF ground notification signs) or the City.
- B. Except as required by applicable Laws or by the utility pole owner, Provider shall not post any other signage or advertising on the node support poles and network nodes, or utility pole.

#### 4.9 **Underground Requirement Areas**

In an Underground Requirement Area, Provider shall neither allow nor install overhead lines connecting to node support poles or other poles. All overhead lines connecting to a node support pole or other pole where other overhead telecommunications or utility lines are or are planned to be buried below ground as part of a project shall be buried below ground. A Provider shall comply with all other requirements applicable to the Underground Requirement Area with respect to the installation of aboveground structures. Areas may be designated from time to time by the City as Underground Requirement Areas in accordance with filed plats, and/or conversions of overhead to underground areas, as may be allowed by law. Each permit application shall disclose if it is within an Underground Requirement Area.

If a location is designated by the City to transition to be an Underground Requirement Area, then a Provider's permit for the location of the micro network node, network node, node support pole, and related ground equipment at such location will be revoked ninety (90) days after the designation, with removal of said micro network node, network node, node support pole, and related ground equipment at such location within ninety (90) days of such designation, or as otherwise allowed by the City for the transition of other overhead facilities.

#### 4.10 **Repair**

Whenever the installation, placement, attachment, repair, modification, removal, operation, use, or relocation of wireless facilities, or any portion thereof, is required and such installation, placement, attachment, repair, modification, removal, operation, use, or relocation causes any property of the City to be damaged or to have been altered in such a manner as to make it unusable, unsafe, or in violation of any Laws, Provider, at its sole cost and expense, shall promptly repair and return such property to its original condition. If Provider does not repair such property or perform such work as described in this section, then the City shall have the option, upon seven (7) days' prior written notice to Provider or immediately if there is an imminent danger to the public, to perform or cause to be performed such reasonable and necessary work on behalf of Provider and to charge Provider for the reasonable and actual costs incurred by the City. Provider shall promptly

reimburse the City for the costs.

#### 4.11 **Graffiti Abatement**

Provider shall remove all graffiti on any of its wireless facilities located in the public right-of-way as soon as practical, but not later than seven (7) days from the date Provider receives notice thereof.

#### 4.12 **Inventory**

Provider shall maintain a list of its wireless facilities located in the City and provide City an inventory of the location of each such wireless facility within ten (10) days of installation. The inventory of wireless facilities shall include GIS coordinates, date of installation, City pole ID number (if applicable), type of pole used for installation, pole owner, and description/type of installation for each wireless facility.

Upon City's written request, Provider shall provide a cumulative inventory within thirty (30) days of City's request. With respect to wireless facilities that become inactive, the inventory shall include the same information as active installations in addition to the date the wireless facility was deactivated and the date the wireless facility was removed from the public right-of-way. City may compare the inventory to its records to identify any discrepancies.

In the event Provider's contact information changes and differs from the information provided on a permit application, Provider shall promptly provide updated contact information to the City for emergency purposes.

#### 4.13 **Ground Equipment**

A. *Ground Equipment near street corners and intersections.* Ground equipment shall be minimal and the least intrusive. Unless otherwise approved by City in writing, ground equipment may not be installed within two hundred fifty (250) feet of a street corner or a street intersection when no other ground equipment is present in such location to minimize any obstruction, impediment, or hindrance to the usual travel or public safety on a public right-of-way; to provide the maximum line of sight required to facilitate the safe travel of vehicular and pedestrian traffic; to maximize that line of sight at street corners and intersections; and to minimize hazards at those locations.

B. *Ground equipment density.* To enhance the safety requirements of line of sight of pedestrians, particularly small children, the City may deny a request for a proposed location if the Provider seeks to install ground equipment where existing ground equipment within three hundred (300) feet already occupies a footprint of twenty-five (25) square feet or more.

#### 4.14 **Municipal Service Poles**

Installation of wireless facilities on a service pole shall be in strict conformance with the agreement applicable to each such installation pursuant to Section 285.056 and Section 284.101(a)(3) and (b) of Chapter 284.

**4.15 Installations on Traffic Signals or Lighting Structures**

- A. Installations of wireless facilities on a traffic signal structure or lighting structure must not interfere with the integrity of the structure in any way that may compromise the safety of the public and must be in strict conformance with an agreement applicable to each such installation pursuant to Section 285.056 and Section 284.101(a)(3) and (b) of Chapter 284. Installation of wireless facilities on any traffic signal structure shall:
1. Be encased in a separate conduit than the traffic signal or lighting electronics;
  2. Have a separate electric power connection than the traffic signal or lighting structure; and
  3. Have a separate access point than the traffic signal or lighting structure; and
- B. Provider shall provide the City a key to each electrical meter providing power to a wireless facility at the time of inspection and shall have the ability to temporarily cut-off electricity to its wireless facilities for the safety of maintenance personnel. In the event of failure of components of the traffic signal system for whatever reason, including damage resulting from vehicular collisions, weather-related events, or malicious attacks, City will respond to restore traffic signal operations as a matter of public safety. Should the events that result in damage or failure of the traffic signal system also affect Provider's wireless facilities, Provider shall have the sole responsibility to repair or replace its wireless facilities and shall coordinate its own emergency efforts with the City.

**4.16 Installations on Street Signage or other Traffic Control Structures**

Installations of wireless facilities on a street signage or traffic control structure must not interfere with the integrity of the structure in any way that may compromise the safety of the public and must be in strict conformance with an agreement applicable to each such installation pursuant to Section 285.056 and Section 284.101(a)(3) and (b) of Chapter 284. Installation of wireless facilities on any street signage or traffic control structure that has electrical power shall:

- A. Be encased in a separate conduit than any City signage or traffic control electronics;
- B. Have a separate electric power connection than the signage or traffic control structure; and
- C. Have a separate access point than the signage or traffic control structure.



#### 4.17 **Reservation of Rights**

- A. The City reserves the right to install, and permit others to install, utility facilities in the public right-of-way. In permitting such work to be done by others, the City shall not be liable to Provider for any damage caused by those persons or entities.
- B. The City reserves the right to locate, operate, maintain, and remove City traffic signal poles in the manner that best enables the operation of its traffic signal system and protects public safety.
- C. The City reserves the right to locate, operate, maintain, and remove any City pole or structure located within the public right-of-way in the manner that best enables the City's operations and protects public safety.

### **V. Interference with Operations**

#### 5.1 **No Liability**

- A. The City shall not be liable to a Provider for any damage caused by other Providers with wireless facilities sharing the same pole or for failure of Provider's wireless facilities for whatever reason, including damage resulting from vehicular collisions, weather-related events, or malicious attacks.
- B. The City shall not be liable to a Provider by reason of inconvenience, annoyance, or injury to the Provider's wireless facilities or activities conducted by Provider related thereto, arising from the necessity of repairing any portion of the public right-of-way, or from the making of any necessary alterations or improvements in, or to, any portion of the public right-of-way or in, or to, City's fixtures, appurtenances, or equipment. The City will use reasonable efforts not to cause material interference to Provider's operation of its wireless facilities.

#### 5.2 **Signal Interference with City's Communications Infrastructure Prohibited**

- A. *No interference.* In the event that Provider's wireless facilities interfere with the City's traffic signal system, public safety radio system, private police cell system, or other City communications infrastructure operating on spectrum where the City is legally authorized to operate, Provider shall promptly cease operation of the wireless facility causing such interference upon receiving notice from the City and refrain from operating such wireless facility in the future. Provider shall respond to the City's notice to address the source of the interference as soon as practicable, but in no event later than twenty-four (24) hours of receiving notice. Documentation shall be submitted with the Provider's permit application that identifies the frequency on which the wireless facility will operate, which must not interfere with the City's traffic signal system, public safety radio system, private police cell system, or other City communications infrastructure. Wireless facilities shall not be located or collocated on the City's public safety radio infrastructure.

B. *Protocol for responding to event of interference.* For each event of prohibited interference, Provider shall provide the City an interference remediation report that includes the following items:

1. Remediation Plan. Provider shall devise a proposed remediation plan to stop the event of inference;
2. Time Frame for Execution. Provider shall provide the expected time frame for execution of the remediation plan; and
3. Additional Information. Provider shall include any additional information relevant to the execution of the remediation plan.

In the event that interference with City facilities, services, or operations cannot be eliminated, Provider shall shut down the interfering wireless facility and remove or relocate the wireless facility that is the source of the interference as soon as possible to a suitable alternative location approved by City.

C. Following installation or modification of a network node, the City may require Provider to test the network node's radio frequency and other functions to confirm it does not interfere with the City's facilities, services, or operations.

## **VI. Abandonment, Relocation and Removal**

### **6.1 Abandonment of Wireless Facilities**

Provider shall remove wireless facilities when such facilities are abandoned regardless of whether Provider receives notice from the City. Unless the City sends notice that removal must be completed immediately to ensure public health, safety, or welfare, the removal must be completed within the earlier of ninety (90) days of the wireless facilities being abandoned or within ninety (90) days of receipt of written notice from the City. When Provider removes or abandons permanent structures in the public right-of-way, the Provider shall notify the City in writing of such removal or abandonment and shall file with the City the location and description of each wireless facility removed or abandoned. The City may require the Provider to complete additional remedial measures necessary for public safety and to protect the integrity of the public right-of-way.

### **6.2 Relocation and Removal at Provider's Expense**

A. Provider shall remove and relocate a wireless facility at its own expense to an alternative location not later than one hundred twenty (120) days after receiving written notice that removal, relocation, and/or alteration of the wireless facility is necessary due to:

1. Construction, completion, repair, widening, relocation, or maintenance of, or use in connection with, any City construction or maintenance project or other public improvement project;
  2. Maintenance, upgrade, expansion, replacement, removal or relocation of the City's pole or structure upon which Provider's network nodes are attached;
  3. The wireless facility, or portion thereof, is adversely affecting proper operation of traffic signals, streetlights, or other City property;
  4. Closure of a street or sale of City property;
  5. Projects and programs undertaken to protect or preserve the public health, safety or welfare;
  6. Activities undertaken to eliminate a public nuisance;
  7. Provider's failure to obtain all applicable licenses, permits, and certifications required by Law for its wireless facility; or
  8. Duty otherwise arising from applicable Law.
- B. Provider's duty to remove and relocate its wireless facility at its expense is not contingent on the availability of an alternative location acceptable for relocation. City may make reasonable efforts to provide an alternative location within the public right-of-way for relocation, but regardless of the availability of an alternative site acceptable to Provider, Provider shall comply with the notice to remove its wireless facility as instructed.
- C. The City may remove the wireless facility if Provider does not remove the wireless facility within one hundred twenty (120) days. In such event, Provider shall reimburse City for the City's actual cost of removal of Provider's wireless facility within thirty (30) days of receiving an invoice from the City.

### **6.3 Removal or Relocation by Provider**

- A. If the Provider removes or relocates a wireless facility at its own discretion, it shall notify the City in writing not less than ten (10) days prior to removal or relocation. Provider shall obtain all permits required for relocation or removal of its wireless facilities prior to relocation or removal.
- B. The City shall not issue any refunds for any amounts paid by Provider for wireless facilities that have been removed.

### **6.4 Restoration**

Provider shall repair any damage to the public right-of-way and the property of any third party resulting from Provider's removal or relocation activities or any other of Provider's activities within ten (10) days following the date of such removal, relocation, or activity, at Provider's sole cost and expense, including restoration of the public right-of-way and such other property to substantially the same condition as it was immediately before the date Provider was granted a permit for the applicable location, including restoration or replacement of any damaged trees, shrubs, or other vegetation. Such repair, restoration and replacement shall be subject to the sole approval of the City.

#### **6.5 Provider Responsible**

Provider shall be responsible and liable for the acts and omissions of Provider's employees, temporary employees, officers, directors, consultants, agents, affiliates, subsidiaries, sublessees, and subcontractors in connection with the performance of activities within the City's public right-of-way, as if such acts or omissions were Provider's acts or omissions.