



## **Design Manual – Rev. March 2021**

*For the Installation of Network Facilities pursuant to Tex. Loc. Gov. Code, Chapter 284*

### **Purpose**

- A. The City of West University Place, Texas ("City") recognizes that the State of Texas has delegated to the City the fiduciary duty, as a trustee, to manage the public rights-of-way for the health, safety, and welfare of the public to Texas municipalities.
- B. The City of West University Place encourages the deployment of state-of-the-art small cell wireless technology within the City for the many benefits it promises the citizens of West University Place including increased connectivity and reliable networks and services.
- C. Chapter 284 of the Texas Local Government Code ("Chapter 284") allows certain wireless Network Providers to install in the public rights-of-way their network facilities, described and defined as "Transport Facilities," "Network Nodes," and "Node Support Poles."
- D. As expressly allowed by Chapter 284, the City enacts this Wireless Services (Small Cells) Design Manual ("Design Manual") in order to meet its fiduciary duty to the citizens of the City, and to give assistance and guidance to wireless telecommunications providers to assist such companies in the timely, efficient, safe, and aesthetically pleasing installation of technologically competitive equipment.
- E. The standards and procedures provided in this 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 Rights-of-Way and to minimize and reduce impacts to the City, its residents and visitors; and for the general health and welfare of the public.
- F. This Design Manual shall apply to any sitings, installations, collocations in, on, over or under the Rights-of-Way of Network nodes, Node support poles, Transport Facilities, Micro network nodes, Distributed Antenna Systems, microwave communications, or other Wireless Facilities, by whatever nomenclature, whether they are installed pursuant to Chapter 284, or installed pursuant to an agreement as agreed to and consented to by the City in its discretion, or installed as may otherwise be allowed by state law.
- G. Providers shall adhere to the requirements found in Chapter 70, Street Areas and Public Places, of the City's Code of Ordinances, and this Design Manual for the placement of their facilities within the City's Right-of-Way.

**II. Definitions.**

The definitions as used in Article VIII of Chapter 70 of the City of West University Place, Texas Code of Ordinances (the "Code") shall be used in this Design Manual, unless otherwise noted in this section.

**III. Design Requirements for all Network Facilities in All ROWs**

**3.1. Installation.**

Provider shall, at its own cost and expense, install the network nodes, transport facilities, and node support poles in a good and workmanlike manner in accordance with the requirements promulgated by the City's applicable ordinances, the Design Manual, and all other applicable laws, ordinances, codes, rules and regulations of the City, the state, and the United States ("Laws"), as such may be amended from time to time. Provider's work shall be subject to the regulation, control and direction of the City. All work done in connection with the installation, operation, maintenance, repair, modification, and/or replacement of the network nodes, transport facilities, and node support poles shall be in compliance with all applicable Laws.

**3.2 Inspections.**

- A. The City may perform visual inspections of any network nodes, transport facilities, and node support poles located in the ROW as the City deems appropriate without notice. If the inspection requires physical contact with the network nodes, transport facilities, or node support poles, 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.
- B. In the event of an emergency situation, the City may, but is not required to, notify Provider of an inspection. The City may take action necessary to remediate the emergency situation and the City shall notify the Provider as soon as practically possible after remediation is complete.

**3.3 Locations for small nodes.**

**A. The City shall consider the following preferences for small node locations:**

**1. Preferred locations\*:**

- a. On existing utility poles for colocation that satisfy the placement specifications in 3.5. All colocations within the City's Design District require photo simulations before and after installation during the permitting process.

**2. Alternative locations (only if unable to utilize a preferred location)\*:**

- a. New Small Node Poles on Major Thoroughfares that satisfy the placement specifications in 3.4, and the additional permit requirements for alternative locations in 2.5.
- b. Placing new poles on commercial streets with fifty (50) feet wide or less of pavement that satisfy the minimum placement specifications in 3.4, and the additional permit requirements for alternative locations in 2.5.

\* Locations are organized in order of preference by the City of West University Place.

## **2.5. Additional permit requirements for alternative locations.**

1. Any request to place a new pole requires the following information and to be submitted to prove that the new pole is a necessity and other preferred locations are not viable:
  - a. Provide evidence for the need of a new pole and that there are no collocation locations that are feasible.
  - b. Provide a photo simulation before and after installation.
  - c. Submit a justification letter and any additional backup for the proposed location(s) for new poles to be reviewed by a technical expert.

## **3.4. Placement.**

- A. *Installation near schools and parks.* For the safety of pedestrians, particularly small children, and to allow full lines of sight near school property and Parks, a Provider shall not install ground equipment or new Poles within a Right-of-way inside the boundary line of school property or within two-hundred fifty (250) feet of the boundary line of school property. A Provider shall not install ground equipment within a Right-of-way inside the boundary line of a Park or within two-hundred fifty (250) feet of the boundary line of a Park.
- B. *City Infrastructure.* Provider shall neither allow nor install network nodes, transport facilities, or node support poles on any City property that falls outside the definition of Public Right-of-Way in Chapter 284 of the Texas Local Government Code.
- C. *Residential Properties.* For the protection of the safety, health and welfare of the City's residents, a Provider shall not install ground equipment within a ROW in the front of an abutting residential property's front building line, including any such location that is also located in the side street ROW.
- D. *Poles.* Wireless Facilities on node support poles shall be installed at least eight (8) feet above the ground. If any attachments are projecting towards the roadway side, it shall provide a minimum vertical clearance of sixteen (16) feet.
- E. *ROW.* Node support poles and ground equipment shall be placed, as much as possible, within two (2) feet of the outer edge of the ROW line. Node support poles and ground equipment or network nodes shall not impede pedestrian or vehicular traffic in the ROW. If a node support pole and ground equipment or network node is installed in a location that is not in accordance with the plans approved by the City, or impedes pedestrian or vehicular traffic, or does not comply, or otherwise renders the ROW non-compliant with applicable Laws, including the ADA, then the Provider shall remove the node support poles, ground equipment or network nodes at its own cost within ten (10) calendar days of being notified by the City.
- F. The Public Works Director, by discretionary consent and by agreement, may grant exceptions to the above prohibited locations, but only in a non-exclusive, and nondiscriminatory manner, as allowed or required by Chapter 284 of the Texas Local Government Code.

## **3.5 Fiber Connection.**

- A. Provider shall be responsible for obtaining access and connection to fiber optic lines or other backhaul solutions that may be required for its node support poles or network nodes.
- B. At locations where the fiber optic cable will cross other subsurface utilities or structures, the cable must be installed to provide a minimum of twelve (12) inches of vertical

clearance between it and the other subsurface utilities or structures, while still maintaining the other applicable minimum depth requirement. To maintain the minimum depth requirement, the cable must be installed under the existing utility. If the minimum twelve (12) inch clearance cannot be obtained between the proposed cable facility and the existing utility, the fiber optic cable must be encased in steel pipe of avoid future damage.

### **3.6 Existing Water Lines.**

No communication lines shall be placed on top of a water line but may be placed to the side of a water line at least four (4) feet from the center line of the water line. When crossing a water line, a twelve (12) inch vertical or horizontal clearance must be maintained. Poles must be at least three (3) feet from a water line.

### **3.7 Existing Sewer Lines.**

No communication lines shall be placed on top of a sewer line, but may be placed to the side of a sewer line at least four (4) feet from the center line of the sewer line. When crossing a sewer line, a twelve (12) inch vertical or horizontal clearance must be maintained. Poles must be at least three (3) feet from a sewer line.

### **3.8 Existing Storm Drainage Lines.**

No communication lines shall be placed on top of a storm drainage line, but may be placed to the side of a storm drainage line at least four (4) feet from the center line of the storm drainage line. When crossing a storm drainage line, a twelve (12) inch vertical or horizontal clearance must be maintained. Poles must be at least three (3) feet from a storm drainage line.

### **3.9 Generators.**

Provider shall not allow or install generators or back-up generators in the ROW, in accordance with Chapter 284 of the Texas Local Government Code.

### **3.10 Equipment Dimensions.**

Provider's Network Facilities shall comply with and be limited to the dimensions set forth in Chapter 284 of the Texas Local Government Code.

### **3.11 Height Limitation.**

A Provider shall ensure that the vertical height of a structure installed in a ROW does not exceed the lesser of: (i) ten (10) feet in height above the tallest existing Utility Pole located within 500 linear feet of the proposed structure in the same ROW; or (ii) fifty-five (55) feet above ground level.

### **3.12 Tree Maintenance.**

Tree maintenance shall be in strict accordance with applicable City ordinances except to the extent inconsistent with the Texas Local Government Code. The provider, its contractors, and agents shall obtain a permit from the City before trimming trees hanging over its node support poles and network nodes to prevent branches of such trees from contacting node support poles and network nodes. When directed by the City, the provider shall trim under the supervision and direction of the City's Urban Forester.

### **3.13 Signage.**

Signage shall be in strict accordance with the City's applicable ordinances, except to the extent inconsistent with Chapter 284 of the Texas Local Government Code.

- 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. Radio Frequency ground notification signs) or the City.
- B. Except as required by Laws or by the utility pole owner, Provider shall not post any other signage or advertising on the node support poles, network nodes, or utility poles.

**3.14 Overhead Lines Prohibited.**

Provider shall neither allow nor install overhead lines connecting to node support poles. All overhead lines connecting to the node support 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.

**3.15 Repair.**

Whenever the installation, placement, attachment, repair, modification, removal, operation, use, or relocation of the node support poles, transport facilities, or network nodes, 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, the Provider at its sole cost and expense, shall promptly repair and return such property to its original condition within ten (10) calendar days. If the Provider does not repair such property or perform such work as described in this paragraph, then the City shall have the option, upon fifteen (15) days' prior written notice to the 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 the Provider. The City shall then charge the Provider for the reasonable and actual costs incurred by the City. Provider shall reimburse the City for the costs.

**3.16 Graffiti Abatement.**

- A. Graffiti abatement shall be in strict accordance with the City's applicable ordinances, except to the extent inconsistent with Chapter 284 of the Texas Local Government Code.
- B. As soon as practical, but not later than fourteen (14) days from the date the Provider receives notice thereof, the Provider shall remove all graffiti on any of its node support poles and network nodes located in the ROW.

**3.17 Inventory.**

- A. Provider shall maintain a list of its network nodes and node support poles and provide the City an Inventory of locations within ten (10) days of installation. The Inventory of network nodes and node support poles shall include GIS coordinates, date of installation, City pole ID number (if applicable), address, type of pole used for installation, pole owner, and description/type of installation for each network node and node support pole installation.
- B. If issued a written request, the Provider shall provide a cumulative Inventory within thirty (30) days of the City's request. Concerning network nodes and node support poles that become inactive, the Inventory shall include the same information as active installations in addition to the date the network node and/or node support pole was deactivated and the date the network node and/or node support pole was removed from the ROW. The City may compare the Inventory to its records to identify any discrepancies.

**3.18 Reservation of Rights.**

- A. The City reserves the right to install, and permit others to install, utility facilities in the ROW. In permitting such work to be done by others, the City shall not be liable to the 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 protect public safety.
- C. The City reserves the right to locate, operate, maintain, and remove any City pole or structure located within the ROW in the manner that best enables the City's operations.

**IV. Design Requirements.**

**A. *Design requirements in historic and Design Areas.***

- 1. *Concealment measures required.* As a condition for issuance of a ROW permit for Network Facilities in Design Areas and Historic Areas, the City shall require Concealment measures for any above ground structures. Any request for installations in designated areas must be accompanied with proposed Concealment measures that are similar to an existing structure that is (i) within the area, (ii) within 1,000 feet of the proposed location, and (iii) is not a nonconforming structure. Structures shall be constructed and maintained in compliance with all City, State, and Federal historic preservation laws and requirements.
- 2. *Concealment shall comply with other City Code requirements.* Where a Network Provider is required to employ Concealment measures, the Network Provider shall comply with other City Code requirements, including coning, where applicable. Colors in designated areas must be approved by the Public Works Director from a palette of approved colors for that area. The poles shall be of a black powder coat finish. Ground cabinet and meter pedestal installations shall have either a powder coat or painted finish in oak moss RAL #6180, or any RAL color number and sample submitted to, and approved by, the Public Works Director.

**B. *Design requirements in Parks and adjacent to residential properties.***

- 1. *Concealment measures required.* As a condition for issuance of a ROW permit for Network Facilities in Parks and adjacent to residential properties, the City shall require the following Concealment measures. Pole installations shall be in a stealth type design with all Network Facility components installed within the pole. No externally mounted boxes or antennae shall be permitted on the pole. The poles shall be of a black powder coat finish. Ground cabinet and meter pedestal installations shall have either a powder coat or painted finish in oak moss RAL #6180, or any RAL color number and sample submitted to, and approved by, the Public Works Director.

**V. Administrative Hearing.**

Should a Network Provider desire to deviate from any of the standards set forth in this Design Manual, to appeal an interpretation by City staff of the City regulations applicable to structures located in the Rights-of-way, or allege a specific provisions of this Design Manual is inconsistent with State or Federal Law as applied specifically to that Network Provider, the Network Provider may request an administrative hearing before the BSC in accordance with Chapter 18 of the Code. The BSC shall act as the board of appeals for a request for a variance or appeal of administrative decision.

**VI. Unauthorized and Improperly Located Structures.**

If any structures are installed in a location that has not obtained a Permit, that impedes pedestrian or vehicular traffic, or that obstructs the legal use of a Right-of-way by utility providers, then the Network Provider shall promptly remove the structures. After thirty (30) days advance written notice to remove unauthorized or improperly located structures, the City may remove and dispose of structures that remain unauthorized or improperly located.

**VII. Design Manual- Updates**

Placement or Modification of Micro Network Node, Network Node, Node Support Pole, Transport Facility, and related ground equipment shall comply with the City's Design Manual at the time the Permit for installation or modification is approved, and as amended from time to time.



City of West University Place, Texas  
**MEMORANDUM**  
**PUBLIC WORKS DEPARTMENT**

23 MAR 2021

**Revision of Design Manual for Network Facility and Related Ground Equipment**

As of March 23, 2021, 5:00 P.M. CST, revisions to the current Design Manual for Network Facility and Related Ground Equipment for the City of West University went into effect immediately.

All applications received and those currently under review before the date and time stated above will be exempt of the new revisions to the manual.

All applications received after the date and time must meet the new requirements.

This letter confirms the revisions have been accepted and completed.

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Gerardo Barrera  
Public Works Director

*23 MAR 2021*  
DATE