

City of Tyler, Texas  
Design Manual for the Installation of Network Nodes and Node Support Poles pursuant to  
Tex. Loc. Gov. Code, Chapter 284.

**I.**  
**Purpose**

1.1. Purpose.

- A. The City of Tyler (City) encourages the deployment of state-of-the-art small cell wireless technology within the City for the many benefits it promises the citizens of Tyler including increased connectivity and reliable networks and services.
- B. The City recognizes that the State of Texas has delegated to the City the fiduciary duty, as a trustee, to manage the public right-of-way for the health, safety, and welfare of the public.
- C. As expressly allowed by Chapter 284 of the Texas Local Government Code and pursuant to its police power authority reserved in Section 284.301, the City adopts this Wireless Services Design Manual (“Design Manual”) to meet its fiduciary duty to the citizens of the City; protect the health, safety and welfare of the public by minimizing and reducing impacts to public safety within the City's Right-of-Way; 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.
- D. The City’s Small Wireless Facility Siting Ordinance establishes standards for Network Nodes and Node Support Poles in the public Right-of-Way and 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.
- E. In addition, the City has adopted this 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 Right-of-Way.
- F. Providers shall adhere to the requirements found in the Small Wireless Facility Siting Ordinance, this Design Manual and all other applicable laws for the placement of their facilities within the City's Right-of-Way.
- G. The Small Wireless Facility Siting Ordinance shall control in the event any portion thereof conflicts with this Design Manual.

- H. This Design Manual is for siting and criteria for the installation and construction 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 Design Manual shall apply to any siting, installations, collocations in, on, over or under the public rights-of-way of Network Nodes, Node Support Poles, 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.

## **II. Definitions**

For purposes of this Design Manual the following terms shall have the same meanings 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.

*"Abandon"* and its derivatives means the facilities installed in the right-of-way (including by way of example but not limited to: poles, wires, conduit, manholes, hand holes, cuts, Network Nodes and Node Support Poles, or portion thereof) that have been left by Provider in an unused or non-functioning condition for more than 120 consecutive days unless Provider establishes, to the reasonable satisfaction of and in the sole discretion of the City, that the applicable facilities, or portion thereof, is still in active use.

*"ADA"* means the Americans with Disabilities Act as codified at 42 U.S.C. 12101 et seq.

*"Applicable codes"* means:

- A. uniform building, fire, electrical, plumbing, or mechanical codes adopted by a recognized national code organization; and
- B. local amendments to those codes to the extent not inconsistent with Chapter 284.

*"City"* means the City of Tyler, Texas and the City's officers and employees.

*"City Manager"* means City Manager of the City or their designee.

*"Collocate" and "collocation"* means the installation, mounting, maintenance, modification, operation, or replacement of Network Nodes in a public right-of-way on or adjacent to a pole.

*"Concealment" or "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. 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 hidden beneath a facade, blended with surrounding area design, painted to match the supporting area, or disguised with artificial tree branches.

*"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 City Code.

*"Design District"* means an area that is zoned, or otherwise designated by City Code, and for which the City maintains and enforces unique design and aesthetic standards on a uniform and nondiscriminatory basis.

*"Distributed Antenna System" or "DAS"* shall be included as a type of "Network Node."

*"Easement"* means and shall include any public easement or other compatible use created by dedication, or by other means, to the City for public utility purposes or any other purpose whatsoever. "Easement" shall include a private easement used for the provision of utilities.

*"Highway right-of-way"* means right-of-way adjacent to a state or federal highway.

*"Historic district"* means an area that is zoned or otherwise designated as a historic district under municipal, state, or federal law.

*"Law"* means common law or a federal, state, or local law, statute, code, rule, regulation, order, or ordinance.

*"Local"* means within the geographical boundaries of the City.

*"Location"* means the City approved and lawfully permitted location for the Network Node.

*"Macro tower"* means a guyed or self-supported pole or monopole greater than the height parameters prescribed by Chapter 284, Section 284.103 and that supports or is capable of supporting antennas.

*"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.

*"Municipally owned utility pole"* means a utility pole owned or operated by a municipally owned utility, as defined by Section 11.003, Utilities Code, and located in a public right-of-way.

*"Municipal Park"* means an area that is zoned or otherwise designated by City Code as a public park for the purpose of recreational activity.

*"Network Node"* means equipment at a fixed location that enables wireless communications between user equipment and a communications network. The term:

- A. includes:
  - 1. equipment associated with wireless communications;
  - 2. a radio transceiver, an antenna, a battery-only backup power supply, and comparable equipment, regardless of technological configuration; and
  - 3. coaxial or fiber-optic cable that is immediately adjacent to and directly associated with a particular collocation; and
- B. does not include:
  - 1. an electric generator;
  - 2. a pole; or
  - 3. a macro tower.

*"Network Provider"* means:

- A. a wireless service provider; or
- B. 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:
  - 1. Network Nodes; or
  - 2. Node Support Poles or any other structure that supports or is capable of supporting a Network Node.

*"Node Support Pole"* means a pole installed by a network provider for the primary purpose of supporting a Network Node.

*"Permit"* means a written authorization for the use of the public right-of-way or collocation on a service pole required from the City before a network provider may perform an action or initiate, continue, or complete a project over which the City has police power authority.

*"Pole"* means a service pole, municipally owned utility pole, Node Support Pole, or utility pole.

*"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.

*"Provider"* has the same meaning as "Network Provider."

*"Public Right-of-Way"* means the area on, below, or above a public roadway, highway, street, public sidewalk, alley, waterway, or utility easement in which the City 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.

*"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:

- A. a pole that supports traffic control functions;
- B. a structure for signage;
- C. a pole that supports lighting, other than a decorative pole; and
- D. a pole or similar structure owned or operated by the City and supporting only Network Nodes.

*"Small cell"* shall be included as a type of 'Network Node.'

*"Street"* means only the paved portion of the 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. A "Street" is generally part of, but smaller in width than the width of the entire right-of-way, while a 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.

*"TAS"* means Texas Accessibility Standards.

*"Traffic Signal"* means any device, whether manually, electrically, or mechanically operated by which traffic is alternately directed to stop and to proceed.

*"Underground Requirement Area"* means an area where poles, overhead wires, and associated overhead or above ground structures have been removed and buried or have been approved for burial underground pursuant to City 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.

*"User"* means a person or organization which conducts a business over facilities occupying the whole or a part of a public street or right-of-way, depending on the context.

*"Utility pole"* means a pole that provides:

- A. electric distribution with a voltage rating of not more than 34.5 kilovolts; or
- B. services of a telecommunications provider, as defined by Chapter 284, Section 51.002 Utilities Code.

*"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.

*"Wireless service provider"* means a person that provides wireless service to the public.

*"Wireless facilities"* mean "Micro Network Nodes," "Network Nodes," and "Node Support Poles" as defined in Texas Local Government Code, Chapter 284.

The definitions as used in Texas Local Government Code, Chapter 284, and Section 284.002 shall be used in this Design Manual.

### **III. Locations of Wireless Facilities and Related Ground Equipment**

#### **3.1. Prohibited or Restricted Areas for Certain Wireless facilities, except with Separate City Agreement or Subject to Concealment Conditions.**

##### **A. Municipal Parks and Residential Areas.**

1. In accordance with Chapter 284, Section 284.104(a), a Network Provider shall not install a Node Support Pole in a public right-of-way without the City's discretionary, nondiscriminatory, and written consent if the public right-of-way is in a Municipal Park or is adjacent to a street or thoroughfare that is:
  - a. not more than 50 feet wide of paved street surface, being the area measured as the shortest distance between the inside of the curb to the inside of the opposite curb, or the area measured as the shortest distance between the two parallel edges of the paved roadway for vehicular travel where there is no curb; and
  - b. adjacent to single-family residential lots or other multifamily residences or undeveloped land that is designated for residential use by zoning or deed restrictions.
2. In accordance with Chapter 284, Section 284.104(b), a Network Provider installing a Network Node in a public right-of-way described above shall comply with private deed restrictions and other private restrictions in the area that apply to those facilities.
3. Each permit application shall disclose if it is within a Municipal Park and Residential Areas as described above.

##### **B. Historic District and Design Districts.**

1. In accordance with Chapter 284, Section 284.105, a Network Provider must obtain advance written approval from the City before collocating Network Nodes or installing Node Support Poles in a Design District with Decorative Poles or in an area of the City zoned or otherwise designated as a Design District or Historic District. As a condition for

approval of Network Nodes or Node Support Poles in Design Districts with Decorative Poles or in a Historic District, the City shall require reasonable design or Concealment measures for the Network Nodes or Node Support Poles. The City requests that a Network Provider explore the feasibility of using Camouflage measures to improve the aesthetics of the Network Nodes, Node Support Poles, or related ground equipment, or any portion of the nodes, poles, or equipment, to minimize the impact to the aesthetics in Design Districts or in a Historic District.

2. Network Provider shall comply with and observe all applicable City, State, and federal historic preservation laws and requirements.
3. Each permit application shall disclose if it is within a Design District with Decorative Poles or in an area of the City zoned or otherwise designated as a Design District or Historic District.

C. Historic Landmarks.

A Network Provider is discouraged from installing a Network Node or Node Support Pole within 300 feet of a historic site or structure or Historic Landmark recognized by the City, state or federal government (*see, for example, and not limited to* §442.001(3) of the Texas Government Code, and 16 U.S.C. §470), as of the date of the submission of the permit. It is recommended that each permit application disclose if it is within 300 feet of such a structure.

D. Compliance with Undergrounding Requirements.

1. In accordance with Chapter 284, Section 284.107, a Network Provider shall comply with nondiscriminatory undergrounding requirements, including City ordinances, zoning regulations, state law, private deed restrictions, and other public or private restrictions, that prohibit installing above ground structures in a public right-of-way without first obtaining zoning or land use approval.
2. 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 area that has undergrounding requirements.

3.2. Least Preferable Locations.

A. Residential Areas and Parks.

1. A Network Provider is discouraged from installing a Network Node on an existing pole in a public right-of-way and is prohibited to do so without

written consent from the City if the public right-of-way is located in or adjacent to a street or thoroughfare that is adjacent to a municipal park or single-family residential lots or other multifamily residences or undeveloped land that is designated for residential use by zoning or deed restrictions.

2. In accordance with Chapter 284, Section 284.104 (b) a Network Provider installing a Network Node or a Node Support Pole in a public right-of-way shall comply with private deed restrictions and other private restrictions in the area that apply to those facilities.

B. Historic Districts and Design Districts.

A Network Provider is discouraged from installing a Network Node or a Node Support Pole in the public right-of-way in any area designated by the City as a Design District or in an area of the City zoned or otherwise designated as a Historic District unless such a Network Node or a new Node Support Pole is camouflaged.

3.3. Most Preferable Locations

- A. *Industrial areas* if not adjacent to a Municipal Park, Residential Area, Historic District or Design District.
- B. *Highway Rights-of-Way areas* if not adjacent to a Municipal Park, Residential Area, Historic District or Design District.
- C. *Retail and Commercial areas* if not adjacent to a Municipal Park, Residential Area, Historic District or Design District.

3.4 Designated Areas.

- A. The City Council may designate an area as a Historic District or a Design District under Chapter 284.105 at any time. See Attachment 1, Designated Areas for a list of currently designated areas.
- B. The failure to list a designated an area in this Design Manual and any attachments shall not mean that such an area is not within a defined district, if so designated by the City Council. Future areas may be designated as one of these Districts at any time. Such a designation does not require a zoning case.
- C. While not required under Chapter 284 to designate Underground Compliance Areas to prohibit above ground Wireless facilities, the City may also, from time to time, also designate Underground Compliance Areas. In these areas, a Network Provider shall neither allow nor install overhead lines connecting to Network Nodes or Node Support Poles. All overhead lines connecting to the pole where other overhead telecommunications or utility lines are or



planned to be buried below ground as part of a project shall be buried below ground.

### 3.5. Exceptions

The City by its discretionary consent and agreement may grant exception to the above prohibited locations and sizes, but only in a non-exclusive, and non-discriminatory manner, as allowed or required by Chapter 284, Sections 284.109 and 284.110.

### 3.6. Order of Preference regarding Network Node attachment to existing facilities and New Node Support Poles.

- A. *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.
- B. *Existing Utility Poles* (electric poles or telephone poles), shall be the preferred support facility for Network Nodes and related ground equipment.
- C. *Municipal Service Poles :*
  - 1. *Non-decorative street lights* with a height of more than 20 feet.
  - 2. *Traffic signal structures* when such installation will not interfere with the integrity of the facility and will not interfere with the safety of the public and in accordance with an agreement as allowed by Chapter 284, Sections 285.056 and 284.101(a)(3) and (b).
  - 3. *Street signage* shall be a low priority use for attachment of a Network Node.
  - 4. *Other municipal Service pole* use is discouraged.
- D. *New Node Support Poles* shall be the least preferred type of allowed facility for attachment of Network Nodes.
- E. *Ground Equipment.* Ground equipment should be minimal and the least intrusive.

## **IV. Guidelines on Placement**

### 4.1. Generally.

In accordance with Chapter 284, Section 284.102, a Network Provider shall construct

and maintain Network Nodes and Node Support Poles in a manner that does not:

- A. obstruct, impede, or hinder the usual travel or public safety on a public right-of-way;
- B. obstruct the legal use of a public right-of-way by other utility providers;
- C. violate nondiscriminatory applicable codes;
- D. violate or conflict with the City's Small Wireless Facility Siting Ordinance or this Design Manual.
- E. violate the federal Americans with Disabilities Act of 1990 (42 U.S.C. Section 12101 et seq.).

#### 4.2. Permitting.

- A. Prior to installation or modification of Wireless Facilities, Provider shall complete and submit to the City a Small Cell Right-of-Way Permit application. Along with standard required documents, the following items will be required for the Permit application:
  - 1. *Permit fee.* The Provider shall submit the permit fee as set forth in the Small Wireless Facility Siting Ordinance Section 3.G “Construction Permit and Right-of-Way Fees.”
  - 2. *Application documents.* The provider shall submit the required City application pursuant to the requirements set forth in the Small Wireless Facility Siting Ordinance. Application shall be submitted with and contain the following:
    - (a) The Applicant’s name, address, telephone number, and e-mail address.
    - (b) The names, addresses, telephone numbers, and e-mail addresses of all consultants, if any, acting on behalf of the Applicant with respect to the filing of the Application.
    - (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) Detailed 11"x17" drawings to scale, with calculations, showing strict conformity to the size limitations as set forth in City Code in accordance with Chapter 284.
- (e) 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. Any Concealment or Camouflage as required by the City Design Manual or by separate agreement must be detailed and shown.
- (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) An Applicant proposing Collocation on a City-owned service Pole must submit a copy of the signed agreement with the City allowing the Collocation on the City-owned Service Pole located a specific address at the time of filing the Permit Application.
- (h) A certificate that the Network Node complies with applicable regulations of the Federal Communications Commission.
- (i) Certification that the proposed Network Node will be placed into active commercial service by or for a Network Provider not later than the 60<sup>th</sup> day after the date the construction and final testing of the Network Node is completed.
- (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 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

- (l) Disclosure if the proposed installation is:
  - i. In an area as described in Section 5 (H).
  - ii. In an underground utility district or other area with undergrounding requirements.
- (m) If a Network Node is proposed to be installed on a private Utility Pole, the Applicant must submit documentation demonstrating the right to access said Utility Pole.

B. Electrical Permit.

1. Provider shall be responsible for obtaining any required electrical power service to the Micro Network Node, Network Node facilities, Node Support Poles and ground equipment. Provider's electrical supply shall be separately metered from the City and must match City voltage.
2. Provider shall provide City with the electrical permit and provide engineered drawings for conduit size, circuit size, calculations for Amp, distances running, etc.
3. The City shall not be liable to the Network Provider for any stoppages or shortages of electrical power furnished to the Micro Network Node facilities, Node Support Poles or ground equipment, including without limitation, stoppages or shortages caused by any act, omission, or requirement of the public utility serving the structure or the act or omission of any other tenant or Network Provider of the or for any other cause beyond the control of the City.
4. Network Provider shall not allow or install generators or back-up generators in the Right-of-Way in accordance with Chapter 284, 284.002(12)(B)(1 ).
5. The electrical meter shall not be mounted on City's poles or structures. The location of the electrical meter shall be pursuant to an agreement between the Network Provider and City. Provider shall use 240 voltage when connecting to any City facility infrastructure and provide a key to meter upon inspection.

equipment.

- A. Improperly Located Network Node facilities, Node Support Poles and related ground equipment shall not impede pedestrian or vehicular traffic in the Right-of- Way. If any Network Node facilities, Node Support Poles or ground equipment is installed in a location that is not in accordance with the plans approved by the City and impedes pedestrian or vehicular traffic or does not comply or otherwise renders the Right-of-Way non-compliant with applicable Laws, including the American Disabilities Act, then Network Provider shall promptly remove the Network Node facilities, Node Support Poles or ground equipment.
- B. Notice to Remove unauthorized facilities and relocate and penalty : After 30 days' notice to remove Network Node facilities, Node Support Poles or ground equipment that is located in the incorrect permitted location, if not relocated the Network Provider shall be subject to the maximum allowed penalty set forth in City's Small Wireless Facility Siting Ordinance until the Network Node facilities, Node Support Poles or ground equipment is relocated to the correct area within the permitted Location, regardless of whether or not the Network Provider's contractor, subcontractor, or vendor installed the Network Node facilities, Node Support Poles or ground equipment in strict conformity with the City's Small Wireless Facility Siting Ordinance and other applicable ordinances concerning improperly located facilities in the rights-of-way.

#### 4.4. Underground Requirement Areas.

- A. In accordance with Chapter 284, Section 284.107, a Network Provider shall, in relation to installation for which the City approved a permit application, comply with nondiscriminatory undergrounding requirements, including City 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 without first obtaining zoning or land use approval.
- B. If a location is designated by the City to transition to an Underground Requirement Area, then a Network 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 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 90 days of such designation, or as otherwise reasonably allowed by the City for the transition of other overhead facilities.

#### 4.5. Network Node facilities placement:

- A. *Right-of-Way*: Network Node facilities, Node Support Poles and related ground

equipment shall be placed, as much as possible, within two feet of the outer edge of the Right-of-Way line to minimize any obstruction, impediment, or hindrance to the usual travel or public safety on a public right-of-way.

- B. *Height above ground.* Network Node attachments to a pole shall be installed at least eight (8) feet above the ground in accordance with Chapter 284, Section 284.108, and if a Network Node attachment is projecting toward the street, for the safety and protection of the public and vehicular traffic, the attachment shall be installed no less than sixteen (16) feet above the ground.
- C. *Protrusions.* In accordance with Chapter 284, Section 284.003 (a) (1) (C), Section 284.003 (a) (2) (C) and Section 284.003 (a) (3) (B) no protrusion from the outer circumference of the existing structure or pole shall be more than two (2) feet. The pole and all attachments to the pole that are projecting, or any equipment or appurtenance mounted on the ground, shall comply with TAS, ADA, and shall not obstruct an existing or planned sidewalk or walkway.
- D. *Limit on number of Network Nodes per Site.* There shall not be more than two Network Nodes on any pole less than 36 feet in height. Poles consisting of more than one Network Node shall be concealed.
- E. *Network Node Spacing.* Network Nodes shall be spaced apart from other poles supporting Wireless Facilities by a minimum of 300 feet to minimize visual clutter and distractions to vehicular traffic; and to minimize the effect on property values and aesthetics of the area.

#### 4.6. New Node Support Poles.

- A. *New Node Support Poles Spacing.* New Node Support Poles shall be spaced apart from utility poles or Node Support Poles at the same spacing between utility poles in the immediate proximity, but no less than at a minimum 300 feet from another pole supporting Network Node to minimize the hazard of poles adjacent to road ways; minimize visual clutter and distractions to vehicular traffic; and to minimize effect on property values and aesthetics on the area.
- B. *Height of Node Support Poles or modified Utility Pole.* In accordance with Chapter 284, Section 284.103 a Node Support Pole or modified Utility Pole may not exceed the lesser of:
  - 1. 10 feet in height above the tallest existing utility pole located within 500 linear feet of the new pole in the same public right-of-way; or
  - 2. 55 feet above ground level.
- C. *Wooden poles are prohibited.* All new poles are required to be break-away

and black powder-coated. All attachments for the Network Nodes shall also match the color of the Node Support Pole. All Node Support Poles shall match the existing poles in the surrounding block or district in which the Node Support Pole is located in order to blend into the surrounding environment and be visually unobtrusive. City reserves the right to deny a certain type of pole due to its differences.

#### 4.7. Ground Equipment.

- A. *Ground Equipment near street corners and intersections:* Ground equipment should be minimal and the least intrusive. In accordance with Chapter 284.102 (1), to minimize any obstruction, impediment, or hindrance to the usual travel or public safety on a public right-of-way the maximum line of sight required to add to safe travel of vehicular and pedestrian traffic and in order to maximize that line of sight at street corners and intersections and to minimize hazards at those locations, ground equipment may not be installed within 250 feet of a street corner or a street intersection.
- B. *Ground Equipment near Municipal Parks.* For the safety of Municipal Park patrons, particularly small children, and to allow full line of sights near Municipal Park property, the Network Provider shall not install Ground Equipment in a Right-of-Way that is within a Park or within 250 feet of the boundary line of a Park, unless approved by the City in writing.
- C. *Minimize Ground equipment density:* In accordance with Chapter 284, Section 284.102 (1) 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 Network Provider proposes to install Network Node ground equipment where existing ground equipment within 300 feet already occupies a footprint of 25 sq. ft. or more.

#### 4.8. Municipal Service Poles.

- A. *In accordance with Agreement:* Installations on all Service Poles shall be in accordance with an agreement as allowed by Chapter 284, Section 285.056 and Section 284.101 (a) (3), and (b).
- B. *Required industry standard pole load analysis:* Installations on all Service Poles shall have an industry standard pole load analysis completed and submitted to the City with each permit application indicating that the Service Pole to which the Network Node is to be attached will safely support the load, in accordance with Chapter 284.108.
- C. *Height of attachments:* All attachments on all Service Poles shall be at least 8 feet above ground, in accordance with Chapter 284, Section 284.108 (a) (2)

and if a Network Node attachment is projecting toward the street, for the safety and protection of the public and vehicular traffic, the attachment shall be installed no less than sixteen (16) feet above the ground.

D. *Installations on Traffic Signals:* Installations on all Traffic signal structures must not interfere with the integrity of the facility in any way that may compromise the safety of the public and must be in accordance with an agreement as allowed by Chapter 284, Section 284.056 and Section 284.101 (a) (3), and (b). Installation of Network Node facilities on any traffic signal structures shall:

1. Be encased in a separate conduit than the traffic light electronics;
2. Have a separate electric power connection than the traffic signal structure; and
3. Have a separate access point than the traffic signal structure.

E. *Installations on Street signage:* Installations on all street signage structures must not interfere with the integrity of the facility in any way that may compromise the safety of the public. Installation of Network Node facilities on any street signage structures that has electrics shall:

1. Be encased in a separate conduit than any City signage electronics;
2. Have a separate electric power connection than the signage structure;
3. Have a separate access point than the signage structure.

## V. General Aesthetic Requirements

### 5.1. Concealment.

- A. Concealment of Network Nodes and Node Support Poles shall be required by the City in Residential Areas, Design Districts with Decorative Poles and in Historic Districts pursuant to Chapter 284.105. See examples below.
- B. The City encourages all new Node Support Poles in Historic Districts and Design Districts to substantially conform to the decorative style for said District.







- C. It is also the City's preference that all new Node Support Poles be camouflaged, except those located in an area zoned or predominantly industrial area. Provider shall submit their proposal for camouflage with the permit application. Shroud poles, as shown in the image, are encouraged.
- D. The Network Node facilities shall be concealed or enclosed as much as possible in an equipment box, cabinet, or other unit that may include ventilation openings. Unless approved by the City in writing, there shall be no external cables and wires hanging off a pole. The approved ones shall be sheathed or enclosed in a conduit, so that wires are protected and not visible or visually minimized to the extent possible, except to the extent not consistent with Chapter 284.

## 5.2. Minimize Ground Equipment Concentration.

In order to minimize negative visual impact to the surrounding area, and in accordance with Chapter 284, Section 284.102 (1) 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 Network Provider installs Network Node ground equipment where existing ground equipment within 300 feet already occupies a footprint of 25 sq. ft. or more and in order to minimize effect on property values and aesthetics on the area.

## 5.3. Allowed Colors.

Colors in Historic Districts and Design Districts must be approved by the City from a palette of approved colors. Unless otherwise provided, all colors shall be earth tones, or shall match the background of any structure that the facilities are located upon and all efforts shall be made for the colors to be inconspicuous. Colors in areas other than in Historic Districts and Design Districts shall conform to colors of other installations of telecommunication providers in the immediately adjacent areas.

**VI.**  
**Installation and Inspection**

6.1. Installation.

Provider shall, at its own cost and expense, install the Micro Network Node, Network Node facilities, Node Support Poles, and related ground equipment in a good and workmanlike manner and in strict accordance with the requirements promulgated by this 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 to the extent not inconsistent with Chapter 284, Texas Local Government Code. 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 Micro Network Nodes, Network Nodes and Node Support Poles shall be in compliance with all applicable codes and Laws.

6.2 Inspections.

The City may perform visual inspections of any Micro Network Node, Network Nodes and Node Support Poles, and related ground equipment located in the Right-of-Way as the City deems appropriate without notice. If the inspection requires physical contact with the Micro Network Node, Network Nodes and Node Support Poles or related groundequipment, the City shall provide written notice to the Provider within five 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 action necessary to remediate the emergency situation and the City shall notify Provider as soon as practically possible after remediation is complete.

**VII.**  
**Interference with Operations**

7.1. No Liability

A. The City shall not be liable to Provider for any damage caused by other Providers or for failure of Provider's Micro Network Node, Network Nodes, Node Support Poles and related ground equipment for whatever reason, including damage resulting from vehicular collisions, weather related events, or malicious attacks.

B. The City shall not be liable to Provider by reason of inconvenience, annoyance or injury to the Micro Network Node, Network Nodes, Node

Support Poles or related ground equipment or activities conducted by Provider therefrom, arising from the necessity of repairing any portion of the Right-of-Way, or from the making of any necessary alteration or improvements, in, or to, any portion of the 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 Micro Network Node, Network Nodes and Node Support Poles or related ground equipment.

## 7.2. Signal Interference with City's Communications Infrastructure Prohibited.

- A. *No interference.* In the event that Provider's Micro Network Node or Network Nodes interferes with the City's traffic signal system, public safety radio system, or other City communications infrastructure operating on a spectrum where the City is legally authorized to operate, Provider shall promptly cease operation of the Micro Network Node or Network Nodes causing said interference upon receiving notice from the City, and refrain from operating. Provider shall respond to the City's request to address the source of the interference as soon as practicable, but in no event later than twenty-four (24) hours of receiving notice.
- B. *Protocol for Responding to Event of Interference.* The protocol for responding to events of interference will require Provider to provide the City an Interference Remediation Report that includes the following items:
1. Remediation Plan. Devise a remediation plan to stop the event of interference;
  2. Time Frame for Execution. Provide the expected time frame for execution of the remediation plan; and
  3. Additional Information. Include any additional information relevant to the execution of the remediation plan.

In the event that interference with City facilities cannot be eliminated, Provider shall shut down the Micro Network Nodes or Network Nodes and remove or relocate the Micro Network Node or Network Node that is the source of the interference as soon as possible to a suitable alternative location made available by City.

- C. Following installation or modification of a Micro Network Node or Network Node, the City may require Provider to test the Micro Network Node or Network Nodes' radio frequency and other functions to confirm it does not interfere with the City's Operations.

## VIII.

## **Insurance, Indemnity, Bonding and Security Deposits**

- 8.1. Insurance, Bonding and Security Deposits: Insurance, bonding and security deposits shall be in strict accordance with the Small Wireless Facility Sitting Ordinance, and other applicable ordinances, except to the extent not consistent with Chapter 284.
- 8.2. Indemnity: Indemnity shall be in accordance with Chapter 284, Section 284.302, as provided for in Chapter 283, Section 283.057 (a) and (b) of the Texas Local Government Code.

### **IX.**

#### **Requirements for Removal, Replacement, Maintenance and Repair**

- 9.1 Removal or Relocation by Network Provider.
  - A. If the Network Provider removes or relocates a Micro Network Node, Network Node facilities, Node Support Pole or related ground equipment at its own discretion, it shall notify the City in writing not less than 10 business days prior to removal or relocation. Network Provider shall obtain all Permits required for relocation or removal of its Micro Network Node, Network Node facilities, Node Support Poles and related ground equipment prior to relocation or removal.
  - B. The City shall not issue any refunds for any amounts paid by Network Provider for Micro Network Node, Network Node facilities, Node Support Poles or related ground equipment that have been removed by a Network Provider at its own discretion.
- 9.2 Removal or Relocation Required for City Project.
  - A. In accordance with Chapter 284, Section 284.107, except as provided in existing state and federal law, a Network Provider shall relocate or adjust Micro Network Node, Network Node, Node Support Pole and related ground equipment in a public right-of-way in a timely manner and without cost to the City managing the public right-of-way.
  - B. Network Provider understands and acknowledges that the City may require Network Provider to remove or relocate its Micro Network Node, Network Node, Node Support Pole and related ground equipment, or any portion thereof from the Right-of-Way for City construction projects, as allowed by state and federal law, including the common-law.
  - C. Network Provider shall, at the City's direction, remove or relocate the same at Network Provider's sole cost and expense, except as otherwise provided in existing state and federal law, whenever the City reasonably determines that the relocation or removal is needed for any of the following purposes:

Required for the construction, completion, repair, widening, relocation, or maintenance of, or use in connection with, any City construction or maintenance project of a street or public rights-of-way to enhance the traveling public's use for travel and transportation.

D. If Network Provider fails to remove or relocate the Micro Network Node, Network Node, Node Support Pole or related ground equipment, or portion thereof as requested by the City within 90 days of the City's notice, then the City shall be entitled to remove the Micro Network Node, Network Node, Node Support Pole or related ground equipment, or portion thereof at Network Provider's sole cost and expense, without further notice to Network Provider.

E. Network Provider shall, within 30 days following issuance of invoice for the same, reimburse the City for its reasonable expenses incurred in the removal (including, without limitation, overhead and storage expenses) of the Micro Network Node, Network Node, Node Support Pole or related ground equipment, or portion thereof.

### 9.3. Removal Required By City For Safety And Imminent Danger Reasons.

A. Network Provider shall, at its sole cost and expense, promptly disconnect, remove, or relocate the applicable Micro Network Node, Network Node, Node Support Pole and related ground equipment within the time frame and in the manner required by the City if the City reasonably determines that the disconnection, removal, or relocation of any part of a Micro Network Node, Network Node, Node Support Pole and related ground equipment:

1. is necessary to protect the public health, safety, welfare, or City property;
2. the Micro Network Node, Network Node, Node Support Pole and related ground equipment, or portion thereof, is adversely affecting proper operation of streetlights or City property; or
3. Network Provider fails to obtain all applicable licenses, Permits, and certifications required by Law for its Micro Network Node, Network Node, Node Support Pole and related ground equipment, or use of any Location under applicable law in strict accordance with the City's Small Wireless Facility Siting Ordinance, and other applicable ordinances, except to the extent not consistent with Chapter 284.

B. If the City reasonably determines that there is imminent danger to the public, then the City may immediately disconnect, remove, or relocate the applicable Micro Network Node, Network Node, Node Support Pole and related ground equipment at the Network Provider's sole cost and expense in strict accordance with the City's rights-of-way management ordinance, and other

applicable ordinances, except to the extent not consistent with Chapter 284.

#### 9.4 Abandonment of Facilities.

Network Provider shall remove Micro Network Node, Network Node, Node Support Pole and related ground equipment when such facilities are abandoned regardless of whether or not it receives notice from the City. Unless the City sends notice that removal must be completed immediately to ensure public health, safety, and welfare, the removal must be completed within 60 days of the Micro Network Node, Network Node, Node Support Pole and related ground equipment being Abandoned. When Network Provider removes, or Abandons permanent structures in the Right-of-Way, the Network Provider shall notify the City in writing of such removal or Abandonment and shall state the location and description of each Micro Network Node, Network Node, Node Support Pole and related ground equipment ~~removed~~ or Abandoned. The City may require the Network Provider to complete additional remedial measures necessary for public safety and the integrity of the Right-of-Way.

## X.

### **GENERAL PROVISIONS.**

#### 10.1 As-Built Maps and Records.

- A. Provider shall maintain accurate maps and other appropriate records of its Micro Network Nodes, Network Node facilities, Node Support Poles and related ground equipment as they are actually constructed in the Rights-of-Way. Provider shall maintain a list of its Micro Network Nodes, Network Nodes and Node Support Poles and provide City an Inventory of locations within ten (10) days of installation. The Inventory of Micro Network Nodes, Network Nodes and Node Support Poles 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 Micro Network Node, Network Node and Node Support Pole installation. Network Provider will provide additional maps to the City upon request.
- B. Upon City's written request, Provider shall provide a cumulative Inventory within thirty (30) days of City's request. Concerning Micro Network Nodes, 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 Micro Network Node, Network Node and/or Node Support Pole was deactivated and the date the Micro Network Node, Network Node and/or Node Support Pole was removed from the Right-of-Way. The City may compare the Inventory to its records to identify any discrepancies.

#### 10.2. Ownership.

No part of a Micro Network Node, Network Node, Node Support Pole and related ground equipment erected or placed on the Right-of-Way by Network Provider will become, or be considered by the City as being affixed to or a part of, the Right-of-Way. All portions of the Micro Network Node, Network Node, Node Support Pole and related ground equipment constructed, modified, erected, or placed by Network Provider on the Right-of-Way will be, and remain the property of Network Provider, and may be removed by Network Provider at any time, provided the Network Provider shall notify the City prior to any work in the Right-of-Way.

### 10.3. Tree Maintenance.

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

### 10.4. Signage.

- A. Network Provider shall post its name, location identifying information, and emergency telephone number in an area on the cabinet of the Network Node facility 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 Laws or by the Utility Pole owner, Network Provider shall not post any other signage or advertising on the Micro Network Node, Network Node, and Node Support Pole, Service pole or Utility Pole.

### 10.5. Graffiti Abatement.

As soon as practical, but not later than fourteen (14) calendar days from the date Network Provider receives notice thereof, Network Provider shall, at its sole cost and expense, remove all graffiti on any of its Micro Network Nodes, Network Nodes, Node Support Poles, and related ground equipment located in the Right of Way . The foregoing shall not relieve the Network Provider from complying with any City graffiti or visual blight ordinance or regulation.

### 10.6. Restoration.

Network Provider shall repair any damage to the Right-of-Way , or any facilities located within the Right-of-Way, and the property of any third party resulting from Network Provider's removal or relocation activities (or any other of Network

Provider's activities hereunder) within 10 calendar days following the date of such removal or relocation, at Network Provider's sole cost and expense, including restoration of the Right-of-Way and such property to substantially the same condition as it was immediately before the date Network Provider was granted a Permit for the applicable Location, or did the work at such Location (even if Network Provider did not first obtain a Permit), including: restoration or replacement of any damaged trees, shrubs, or other vegetation. Such repair, restoration and replacement shall be subject to the sole, reasonable approval of the City.

10.7. Network provider's responsibility.

Network Provider shall be responsible and liable for the acts and omissions of Network Provider's employees, temporary employees, officers, directors, consultants, agents, Affiliates, subsidiaries, sub-Network Provider's and subcontractors in connection with the installations of any Micro Network Node, Network Node, Node Support Pole and related ground equipment, as if such acts or omissions were Network Provider's acts or omissions.

10.8. Reservation of Rights.

- A. The City reserves the right to install, and permit others to install, utility facilities in the Rights-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 protect public safety.
- C. The City reserves the right to locate, operate, maintain, and remove any City pole or structure located within the right-of-way in the manner that best enables the City's operations.

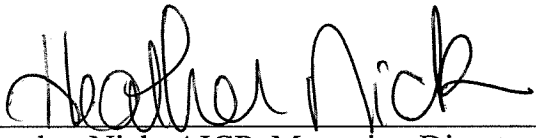
10.9. Design Manual – Updates

Placement or Modification of Micro Network Node, Network Node, Node Support Pole 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.

This Design Manual is hereby adopted and approved on this 19th day of October, 2017.

**City of Tyler, Texas**



By:   
Heather Nick, AICP, Managing Director  
of Planning and Economic Development

## **Attachment 1: Designated Areas**

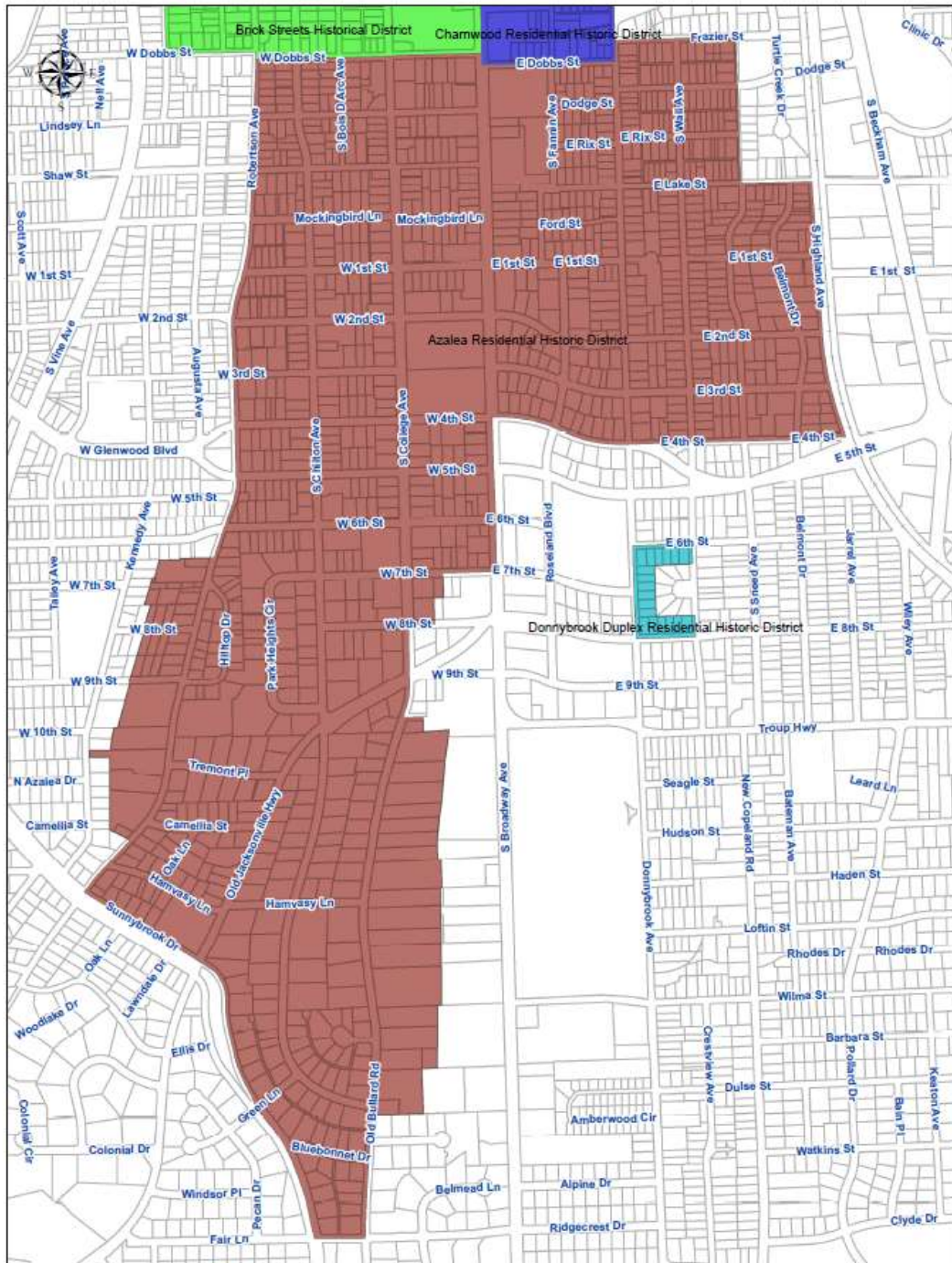
### 1. Currently designated **Historic Districts** are:

- a) Azalea Residential National Historic District as shown in Exhibit A.
- b) Brick Streets National Historic District as shown in Exhibit B.
- c) Charnwood Residential National Historic District as shown in Exhibit C.
- d) Donnybrook Duplex Residential National Historic District as shown in Exhibit D.
- e) East Ferguson Street Residential National Historic District as shown in Exhibit E.
- f) Heritage Number 1 Historic District as shown in Exhibit F.
- g) Heritage Number 2 Historic District as shown in Exhibit G.
- h) Short-Line Residential National Historic District as shown in Exhibit H.

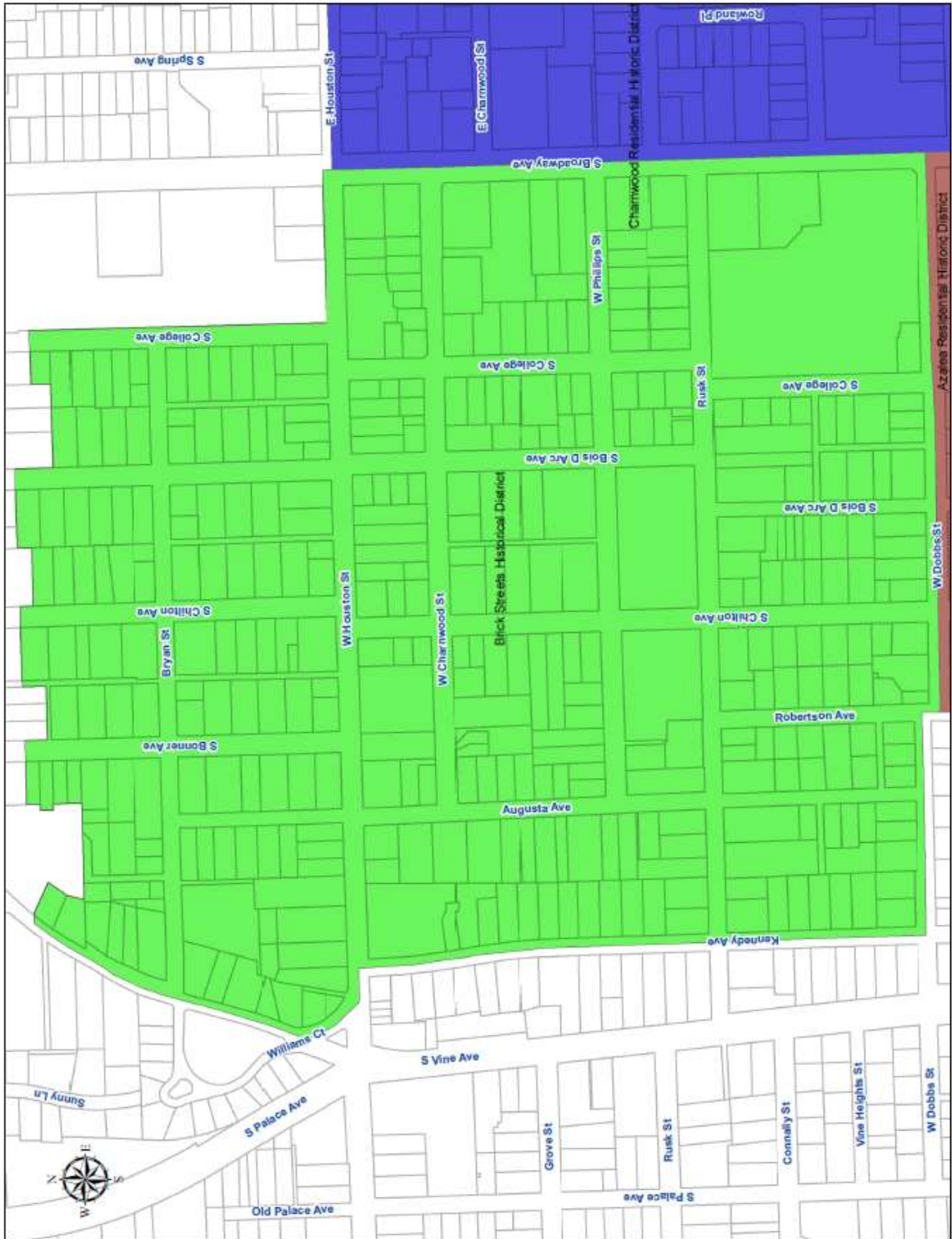
### 2. Currently designated **Design District** areas are:

- a) Brick Street Village approved under O-2014-18, as amended and as shown in Exhibit I.
- b) Downtown Planning Area approved under R-2007-32, as amended and as shown in Exhibit J.
- c) Midtown District approved under O-2012-72, as amended and as shown in Exhibit K.
- d) Texas College District approved under O-2010-105, as amended and as shown in Exhibit L.
- e) University Woods District approved under O-2010-105, as amended and as shown in Exhibit M.

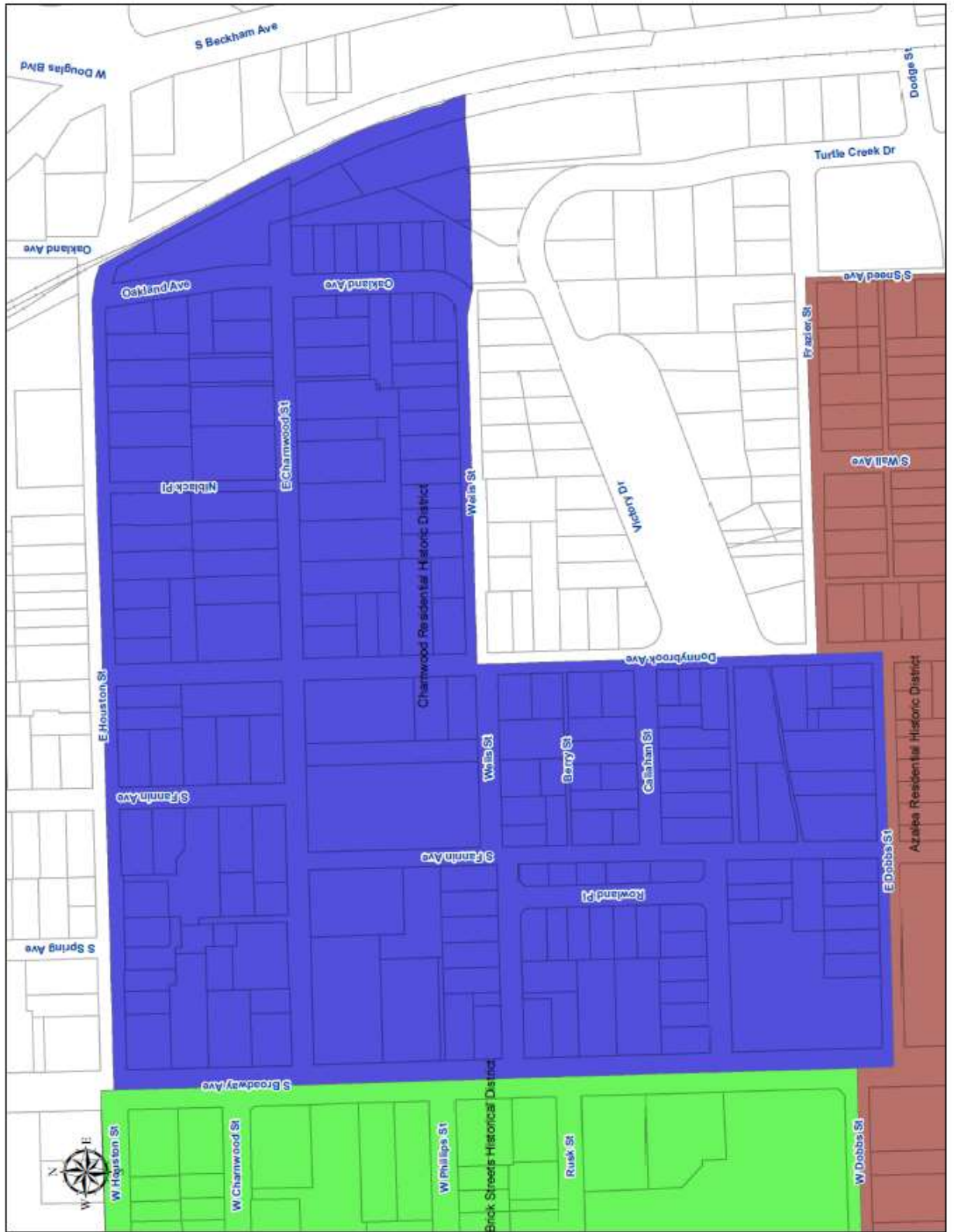
# Exhibit A



# Exhibit B



# Exhibit C



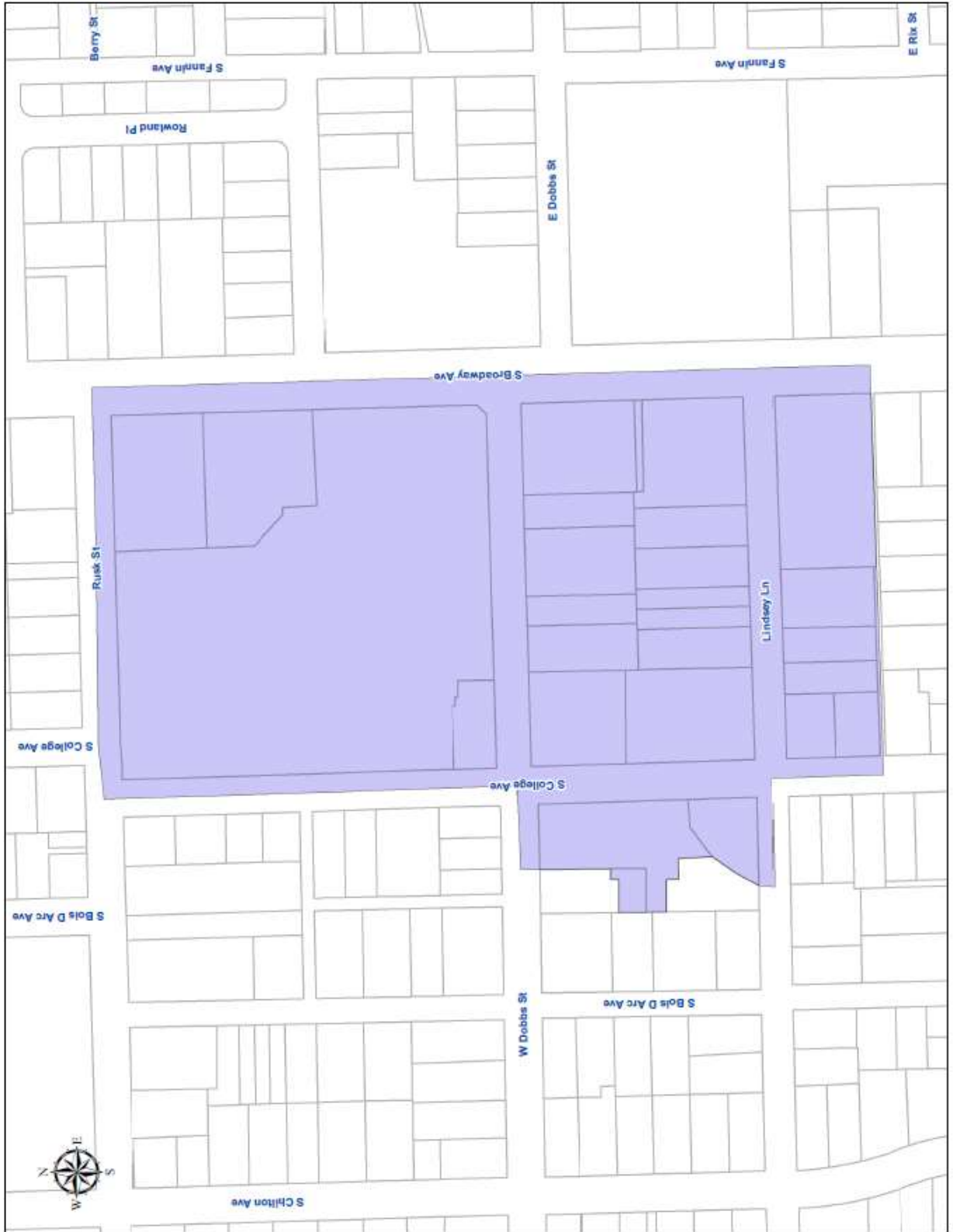
# Exhibit D



# Exhibit E



# Exhibit F

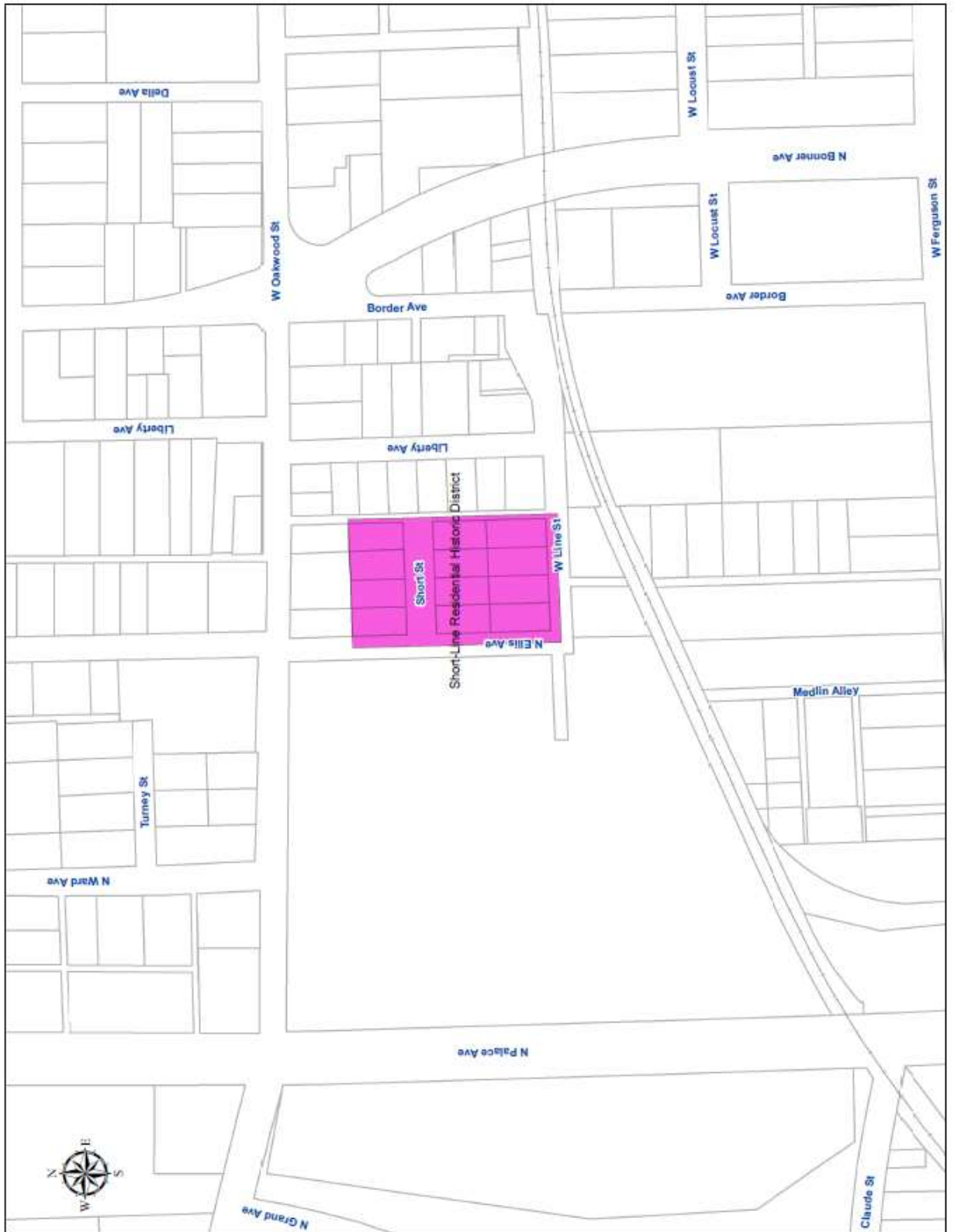




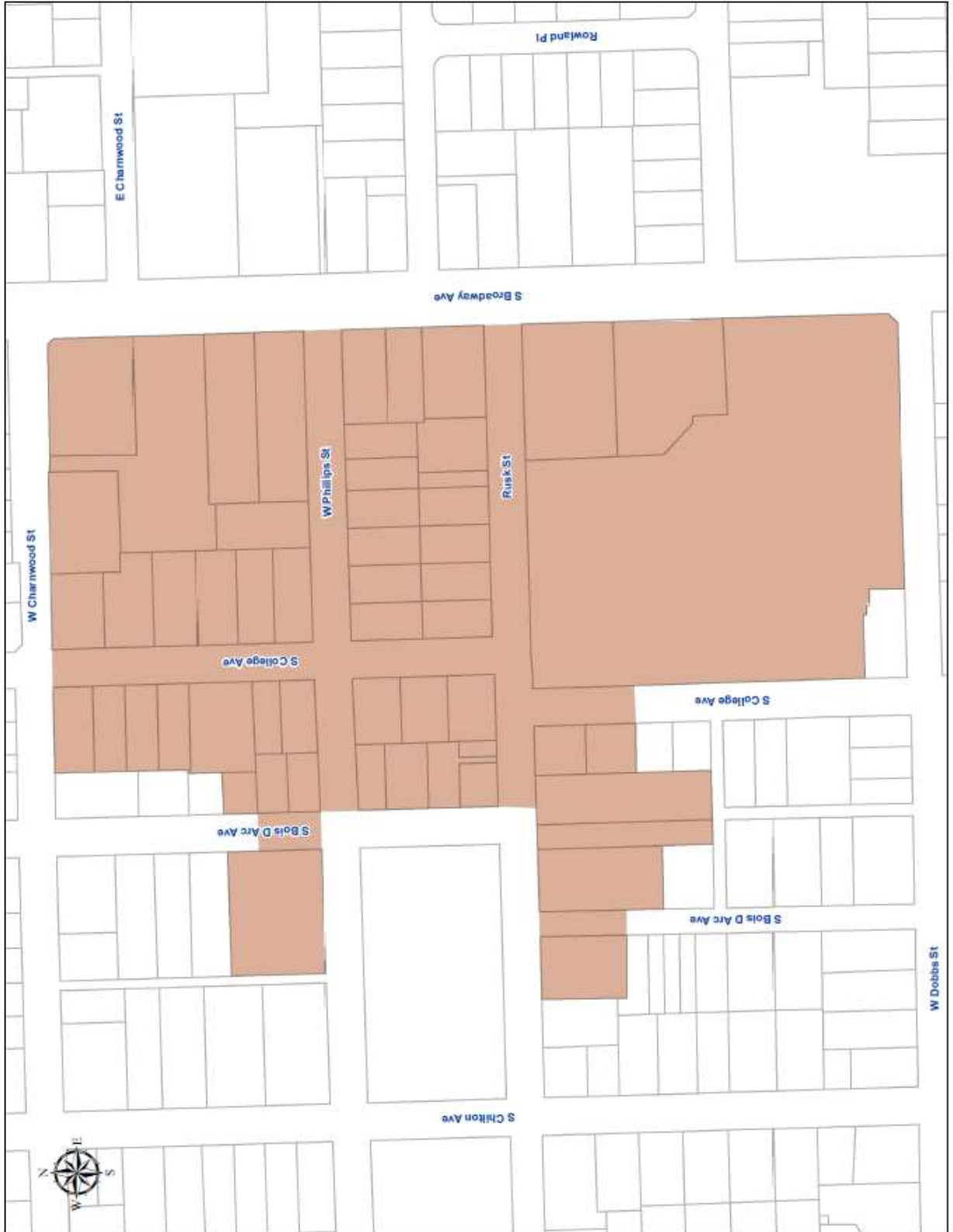
# Exhibit G



# Exhibit H



# Exhibit I



# Exhibit J

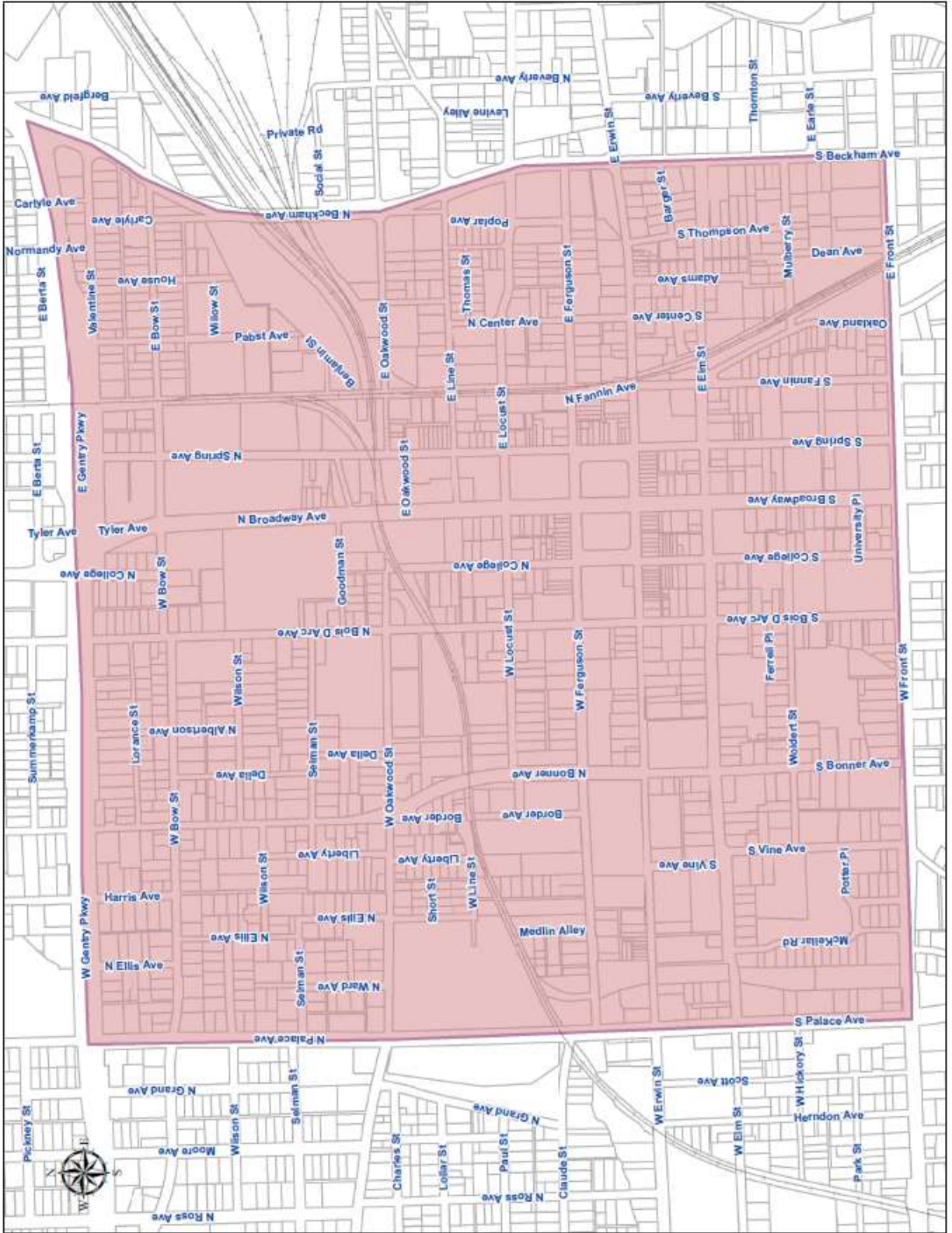


Exhibit K

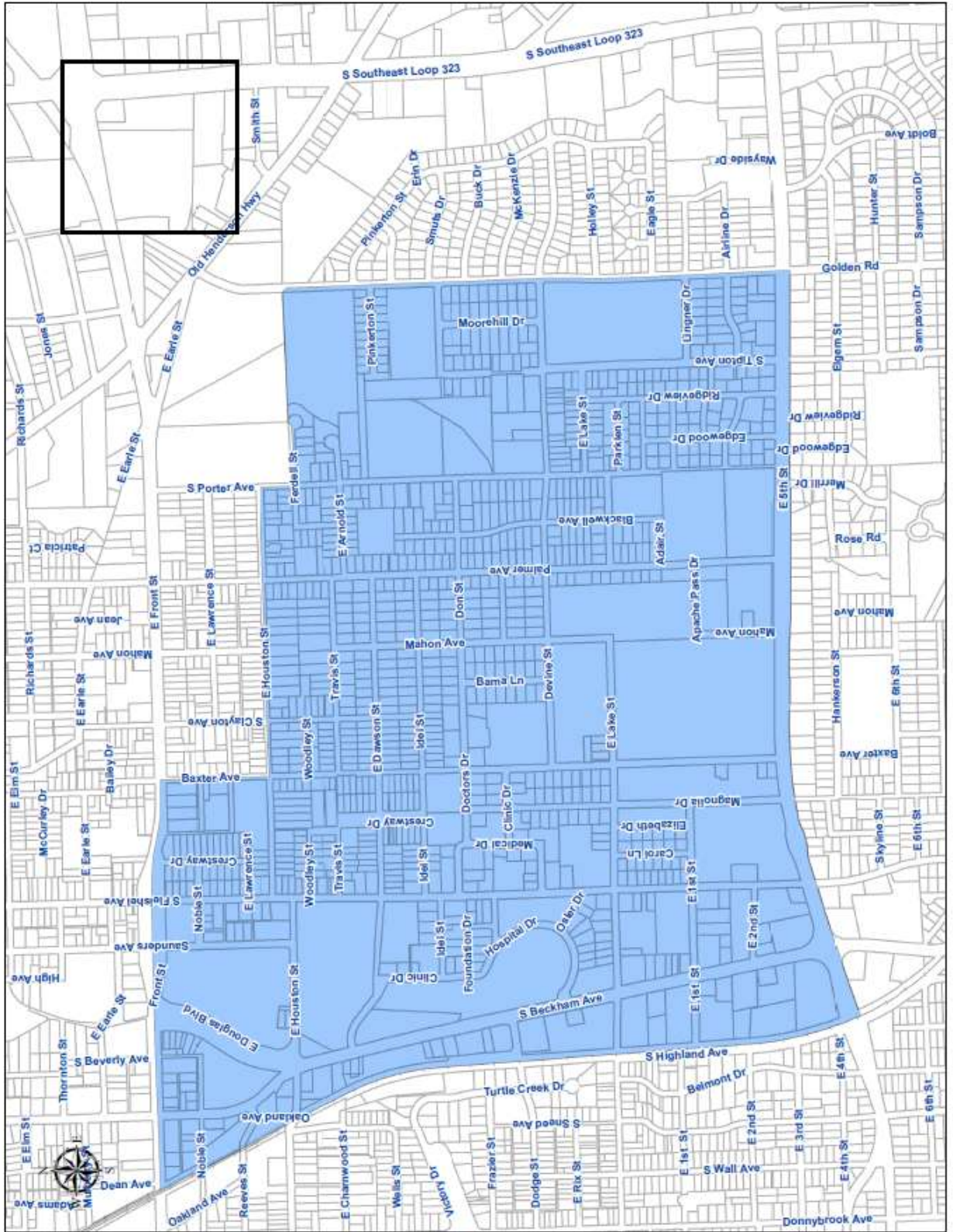
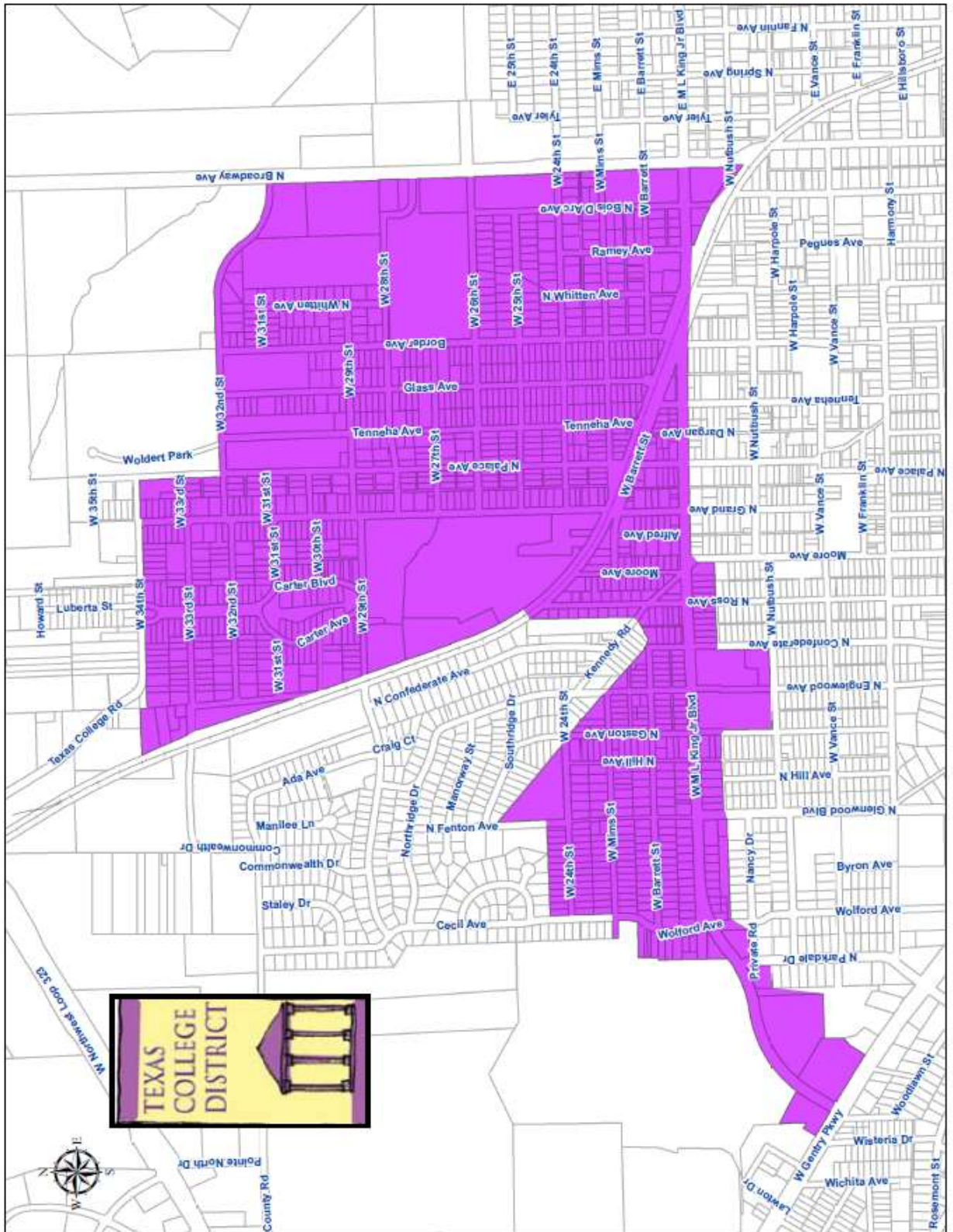


Exhibit L



# Exhibit M

