City of Houston

Design Manual

Chapter 16 MISCELLANEOUS

Houston Public Works

Chapter 16

MISCELLANEOUS

16.01 CHAPTER INCLUDES

- A. Criteria for miscellaneous facilities within the public right of way including:
 - 1. Tree protection
 - 2. Residential subdivision markers
 - 3. Sky bridges
 - 4. Wireless Facility, Ground Equipment, and/or Licensee Pole

16.02 REFERENCES

- A. Refer to list of references in Chapter 1, General Requirements
- B. City of Houston Code of Ordinances
- C. American Standard for Nursery Stock (ANSI Z60.1).

16.03 DEFINITIONS

- A. Drip line Imaginary circle drawn around a tree, extending to the tree's branching limit.
- B. Entrance marker Ornamental gate(s), column(s), or other ornamental works of wood, iron, masonry, earth or other materials denoting the entrance to aplatted and recorded single family residential subdivision.
- C. Esplanade Unpaved area between two paved roadway sections.
- D. Parkway Area lying between the street curb or edge of roadway paving and the adjacent property line.
- E. Protected Tree Corridor tree, designated tree, green corridor tree or parkway tree as defined by Chapter 33 of the City of Houston Code of Ordinances.
- F. Street Right-of-Way Entire width between the boundary lines of every way which is held by the city, county, state or otherwise by the public in fee or dedication when any part thereof is open to the use of the public for purposes of vehicular travel.

G. Tree-any evergreen or deciduous tree which at the time of planting has a caliper equal to or greater than 1 1/2 inches as measured six inches above the root collar, which is not less than six feet in height as measured from the root collar, and which meets the Standard for Nursery Stock Specifications.

16.04 TREE PROTECTION

A. Tree Protection Requirements

Tree protection requirement is designed to protect trees in a time of any construction activity, including, without limitation, construction or repair of buildings or other structures, installation or repair of utilities, or installation or repair of streets or sidewalks within the drip line circle area of any protected tree that is not to be removed, without complying with the applicable provisions.

- 1. Trees to be preserved must be clearly tagged in the field with ribbon.
- 2. Protection barrier shall be composed of wood, wire, snow fence and braces of similar non injurious material.
- 3. Tree wells shall be made of a durable material and set a minimum of four feet from any tree they are designed to protect.
- 4. Retaining walls of a durable material, i.e., stone, or treated lumber, are to be constructed around each tree immediately after the grade is lowered. A retaining wall must be at least four feet from the tree it is designed to preserve.
- 5. Any under story clearing within six feet of existing tree trunks should be done by hand.
- 6. No building materials are to be stacked or stockpiled within the drip line or within six feet of any tree to be preserved, whichever is greater.
- 7. Topsoil shall not be stockpiled within the drip line or within six feet of any tree to be preserved, whichever is greater.
- 8. Selective thinning of dead or dying vegetation, tree stumps and other undesired growth is required in buffer areas. Supplemental vegetation shall comply with the landscape buffer requirements.
- 9. Tree boarding should be used if work is required with in construction fencing.
- 10. Where possible, utility lines shall be tunneled beneath tree roots in order to protect feeder roots, rather than trenched or open cut.

B. Tree Root Barriers

- 1. Tree root barriers will be used for planting of new trees, to prevent the uncontrollable spread of tree roots, following root pruning, to protect land and hardscapes from root damage.
- 2. It can be designed for surround or linear application depends on the hardscape to be protected, distance from surrounding trees, the aggressiveness of the tree, rooting depth of the tree(s).
- 3. Holes for the tree should be excavated two feet greater in width than the diameter of the soil ball.
- 4. The size of root barriers should be three times the diameter of the root ball.

16.05 RESIDENTIAL SUBDIVISION MARKERS

A. General Considerations/Restrictions

- 1. Subdivision markers may display the name of the subdivision or neighborhood but shall not contain any commercial advertising, announcement, or other signage.
- 2. An electronic sign or marker is not allowed.
- 3. Subdivision markers may not be located on, extend on to, nor:
 - a. Intrude upon any portion of a roadway.
 - b. Intrude upon any portion of a sidewalk or pedestrian pathway in the public right of way.
 - c. Create any hazardous condition or obstruction for vehicular or pedestrian travel upon a public street.
 - d. Be located within five (5) feet of underground storm, sanitary sewer, water lines and all appurtenances.
 - e. Be located within 25 feet of a fire hydrant.
 - f. Restrict or block driver's visibility or sight line of traffic, pedestrians, bikeway travelers, or other public user within the right of way.
 - g. Be located within the visibility triangle.

B. Locations

- 1. Subdivision markers may be located at the main entrance to a subdivision and at secondary entrances.
- 2. The subdivision marker must be within the boundaries of the subdivision or single family residential development they identify.
- 3. Locations where multiple subdivisions interface will be reviewed on a first come, first serve basis for purposes of establishing allowable subdivision markerlocations.
- 4. The City Engineer's approval will be required for installation of more than two markers to identify a single subdivision.
- 5. The following are minimum allowable entrance marker location guidelines:
 - a. 50 feet from the median nose for mid-block median openings,
 - b. 75 feet from the median nose for intersection openings,
 - c. 100 feet from the median nose of median for left turn lanes.
 - d. Seven (7) feet from the inside median curb (this dimension may be reduced if community has entered into maintenance or Adopt-an-Esplanade agreement with Houston Parks and Recreation Department and does not create a hazardous condition),
 - e. Within right-of-way adjacent to property line.

C. Size

- 1. Maximum height above the ground surface shall not be greater than six (6) feet.
- 2. Height shall be limited to not obstruct sight lines of vehicular and pedestrian traffic.
- 3. Maximum horizontal width shall not exceed eight (8) feet.
- 4. Maximum display area shall not exceed 36 square feet.
- 5. Width shall be limited to not obstruct sight lines of vehicular and pedestrian traffic.
- 6. Variances to the size requirements for a proposed subdivision marker must be granted by the City Engineer.

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D. Materials

- 1. Materials for base structure shall be permanent, durable, and weather resistant.
- 2. Marker shall provide pleasing aesthetic elements, clarity, and professional design appearance.
- 3. Marker letters and/or other elements should be of non-corrosive and non-staining materials, and coated properly to prevent staining and discoloration.
- 4. Material selections should be capable of clean-up from graffiti mark ups.

E. Utilities

- 1. Marker shall be of size and location to not impede or restrict the City's ability to maintain, repair, or replace the existing utility line(s).
- 2. Existing utilities shall be field located prior to the construction of the entrance marker. It is recommended that existing utilities shall be field located prior to preparation of the measured drawings for the entrance marker and its location.

F. Plan Reviews/Permits

- 1. Drawings shall be submitted to the office of City Engineer for review and approval.
- 2. Drawings shall show existing surface and buried facilities within the right of way or easements in plan view.
- 3. If entrance marker design includes landscaping, the growth characteristics of the plants shall be submitted with the drawings.
- 4. Subdivision markers are considered encroachments in the public right-of-way and shall meet the encroachment requirements set out for subdivision markers in Chapter 41 of the City of Houston Code of Ordinances.
- 5. A construction permit will be required prior to construction of a subdivision marker within the public right of way or public easement. The construction permit will be obtained by the applicant from the Houston Permitting Center, Traffic/Paving Permits Section, upon submittal of approved plans and appropriate encroachment permit.

16.06 SKYBRIDGES

A. General Requirements

- 1. A skybridge, as defined in this Chapter, permits pedestrian and other access between two adjacent structures (not necessarily under the same property ownership) via an elevated structure or bridge within the public right of way.
- 2. Skybridges may be open air or conditioned space depending upon the specific location and application.
- 3. Skybridges shall not interfere with the operation of the public right of way across which it traverses and is subject to following height restrictions:
 - a. The bottom of the lowest portion of the skybridge over the public right of way must be a minimum of 18.5 feet above the roadway surface.
 - b. Clearances less than 18.5 feet require review a variance and approval of the City Engineer.
- 4. Skybridges proposed to traverse an intersection of two public street rights of way requires approval of the City Engineer.
- 5. Skybridges are considered encroachments in the public right-of-way and shall meet the encroachment requirements set out in Chapter 41 of the City of Houston Code of Ordinances including all administrative, permitting and fees.

16.07 WIRELESS SERVICE FACILITIES

- A. Definitions as follows are a partial list of those defined in Local Government Code 284 Deployment of Network Nodes in Public Right-of-Way and are repeated here for clarity:
 - 1. "Design District" means an area that is zoned, or otherwise designated by municipal code, and for which the city maintains and enforces unique design and aesthetic standards on a uniform and nondiscriminatory basis.
 - 2. "Historic District" means an area that is zoned or otherwise designated as a historic district under municipal, state, or federal law.
 - 3. "Network Provider" means a) a wireless 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.
- B. Wireless Service Facilities shall comply with Local Government Code 284 Deployment of Network Nodes in Public Right-of-Way and City Ordinance Chapter 40, Article XXI Facilities in the Public Right-of-Way.
- C. A Network Provider shall comply with the design and aesthetic standards of a Historic or

Design District and explore the feasibility of using certain camouflage measures to improve the aesthetics of the new network nodes, new node support poles, or related ground equipment, or any portion of the nodes, poles, or equipment, to minimize the impact to the aesthetics in a historic district or on a design district's decorative poles.

- D. Prior to submitting drawings to the City of Houston, the Network Provider shall coordinate with the Historic or Design District. Submit the evidence of coordination with the design drawings to the Houston Permitting Center located at 2nd floor of 1002 Washington Ave, Houston TX 77002.
- E. Wireless Service Facilities and related equipment shall be placed in accordance with the following requirements:
 - 1. Within 2 feet of the right-of-way line
 - 2. Not within 10 feet of a driveway.
 - 3. Not within 50 feet (measure from the right-of-way line) of a local street intersection and 100 feet (measure from the right-of-way line) of a major street intersection.
 - 4. Not within any sidewalk area or within 3 feet of the centerline of a sidewalk which is less than 5 feet in width.
 - 5. If unable to place within 2 feet of right-of-way line, then Wireless Service Facilities shall be placed no closer than 2 feet of the back of curb of any roadway.
 - 6. Poles shall be installed along arterials or residential collectors.
 - 7. For any public right-of-way that is not more than 50 feet wide:
 - (a) No new node support pole shall be installed on either side of the right-of-way that border a street that is next to a municipal park.
 - (b) No new node support pole shall be installed on either side of the right-of-way that border a street that is next to residential areas (single-family, multifamily, town home, duplex, apartment, or any other residential configuration) or undeveloped land that is platted for residential use.
 - 8. Pole(s) can be installed at the side of commercial areas across the street from residential areas (single-family, multi-family, town home, duplex, apartment, or any other residential configuration), when the public street right-of-way is more than 50 feet wide.
 - 9. Pole(s) can be installed in residential areas (single-family, multi-family, town home, duplex, apartment, or any other residential configuration) but must be installed at the lot line when the public street right-of-way is more than 50 feet and both sides of the

street are residential.

- 10. No pole(s) are to be installed in front of the front door or entry way of any single-family, multi-family, town home, duplex, apartment, or any other residential configuration, either on the same side of the street or directly across from the structure's door or entry way.
- 11. Proposed equipment (i.e. power supply and cabinets) associated with the Wireless Service Facilities can be placed in line with existing poles if the proposed node is colocated on the existing pole. The edge of the equipment shall not be any closer to the curb than the associated pole.
- 12. Sidewalk, public utilities and other public infrastructure can be relocated if the proposed pole(s) or equipment installation cannot meet required clearances.
- 13. The use of City infrastructure is prohibited without the approval of the City Engineer and the City Bridge Engineer/Traffic Engineer or the Director of the operations unit responsible for its maintenance. The standard approval is dependent on the type of City infrastructure.

END OF CHAPTER