



UTILITIES AND UTILITY CROSSINGS

GENERAL

- A. The Developer/Owner shall be responsible for coordinating the installation of franchise utility lines and water, wastewater, and storm drain lines relative to street development.
- B. Design and installation of water, wastewater and storm drainage facilities shall conform to the current design criteria and related regulations for those facilities.
- C. All utilities shall be designed and installed in a manner that minimizes utilities under streets and curbs. All utilities crossing streets shall be near perpendicular to the street. Utilities located parallel to the street shall remain outside of the limits of the street section unless crossing perpendicular to the street. Utilities shall ensure that parallel utilities do not cross into the limits of the street around curves, corners or cul-de-sacs unless otherwise approved by the Public Works Department.
- D. All non-metallic buried facilities placed within public right-of-way either parallel to or crossing the roadway, shall have an approved identification wrap of detectable tape or wire in order that the facility can be located by metal locators or other suitable devices.
- E. All underground electrical lines within public right-of-way either parallel to or crossing the roadway shall include 3-inch minimum width underground detectable warning tape with red background and black letter stating, "CAUTION BURIED ELECTRIC LINE BELOW". This tape shall be detectable, durable, highly visible, resistant to elements, and meeting or exceeding all industry standards.
- F. All work within public right-of-way shall meet the requirements of these standards, Ordinance 2012-11, and all other applicable city ordinances, unless otherwise modified herein. All applicable permits shall be obtained by the Utility for any work taking place within public right-of-way.
- G. ~~Utilities shall be required to meet the Insurance, Performance Bond, and Maintenance Guarantee requirements outlined in Section 2.8 of these specifications.~~
- H. No new excavations or bores shall be allowed after 1:00pm on Fridays or on weekends.

Changes and Reasons for Change:

- 1. Added Part A
 - a. Reason: Clarifying Developer/Owner responsibilities for utility coordination
- 2. Added Part B
 - a. Reason: Clarifying that there are other documents that govern the design of these facilities.
- 3. Added Part C



- a. Reason: Added these requirements to minimize utilities under streets and curbs to reduce pavement cuts which disrupt traffic and reduce the quality of the street. This addresses a city identified historical deficiency.
4. Added Part D
 - a. Reason: Detectable tape is a common practice and allows utilities to be located by detector if needed. This addresses a city identified historical deficiency.
5. Added Part E
 - a. Reason: This detectable warning tape is common practice. This requirement will improve safety for those excavating and reduce power outages due to cut lines. This addresses a city identified historical deficiency.
6. Added Part F
 - a. Reason: This is a reiteration that all work within ROW shall meet these standards and applicable ordinances to ensure that utility owners follow these standards. This addresses a city identified historical deficiency.
7. Added Part G
 - a. Reason: This clarifies that utility owners are also required to meet the bonding and insurance requirements of section 2.8. This addresses a city identified historical deficiency.
8. Added Part H
 - a. Reason: This is a new requirement to address a city observed historical deficiency. With new excavations and bores, there is a chance that underground city utilities will be damaged. This requires city staff to mobilize for emergency repairs. This requirement is added to reduce the chance that city staff will have to mobilize Friday evening or on weekends.

FRANCHISED UTILITY LINES

- A. All franchised utility lines, which are underground, shall be installed in an encasement pipe under streets. The encasement pipe shall be installed by either the Developer/Owner or the utility before the subgrade is completed.
 - a. *Encasement Length* - The encasement length shall extend a minimum of six (6) feet beyond the back of curb or edge of pavement if no curb is present.
 - b. *Encasement Depth* - The minimum depth of cover for encasement pipe shall be thirty-six (36) inches measured from the top of the encasement pipe to the top of the subgrade or forty-eight (48) inches measured from the top of encasement pipe to the top of pavement, whichever provides the greatest depth.

Changes and Reasons for Change:

1. Added Section 7.2
 - a. Reason: Encasement pipe for utilities under the street was confirmed to be desirable by the city. This standardizes the use of encasement pipe throughout the city and standardizes the required depth to reduce conflicts with the street and street components like underground storm sewer.

7.3 WATER, WASTEWATER, AND STORM DRAIN LINES

- A. Water, wastewater, and storm drain lines shall be installed before the subgrade is complete.