Chapter 10
GENERAL REQUIREMENTS

10.1 Devices such as signal strain poles, fire hydrants (where practical), down guys, telephone load pedestals, and other items whose construction and size would cause extensive damage to a vehicle if struck are to be located according to the same horizontal clearance standards applied to utility poles. Guy wire anchors are considered to be fixed objects when they extend more than four (4) inches in height above the ground surface.

10.2 For the purpose of the UAM, frangible base poles will be accepted if in accordance with the ***AASHTO Design Specification*** ~~***Section 7,***~~ ***Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals,*** ***4th Edition, with 2002, 2003, and 2006 Interims*** ~~***1994, as revised by Interim Specifications – Bridges 1986 – 1989, 1991, 1993, 1994 and 1998***~~.

10.3 On projects where the utility or other obstruction is in conflict with the sidewalk and, in the case of utility poles, would create a conflict with requirements of the National Electrical Safety Code, the minimum criteria may be found in Chapter 5 for new construction and Chapter 9 for RRR construction. The Permittee shall ensure that a minimum thirty two (32) inch width is maintained on sidewalks in accordance with ***Sections 553.501-553.513***, ***F.S., "The Florida Americans With Disabilities Accessibility Implementation Act"***. In each case where a deviation is proposed, an exception must be requested.

10.4 Where practical, excavation will not be allowed within eight (8) feet of the edge of the pavement.

10.5 Clearances for above ground lines that are parallel to the R/W will be sixteen (16) feet minimum except where side roads connect to the State transportation system, in which case eighteen (18) feet minimum is required.

10.6 This criteria shall not be applied to a minor segment of an existing utility installation in such manner as to result in misalignment of the installation or adjustment of the entire installation.

10.7 Manholes and valve boxes shall be outside the travel way and bike lanes, to the greatest extent practical. The manhole ring, cover, and pad must support the traffic for the area where it is being constructed and shall be set flush with the finished grade.

10.8 Out of Service or Deactivated Underground Utility Facilities

Out of service or deactivated underground utility facilities will be allowed to remain in place upon execution and evaluation of a permit, except when the **FDOT** determines the utility's presence creates the conditions described in 10.8.1 through 10.8.3.

As a condition of the issuance of a permit for such facility, the Permittee shall maintain and furnish the **FDOT** upon request, survey records of the facility's location and type of material. Such underground facilities shall be shown on utility work / relocation plans required by the **FDOT**.

Deactivated underground gas line limits shall be shown on the utility plans. The limits to remain shall also be stated in the utility work schedule. For deactivation of lines see ***49 C.F.R., Part 192.727***, and the rules of the Public Service Commission.

10.8.1 Compromises safety at any time for any facility user, or during construction and maintenance operations,

10.8.2 Prevents another utility facility from locating in the area when other alternative locations are not available,

10.8.3 Creates a maintenance condition that would be disruptive to the transportation facility's use or add cost to **FDOT** improvements which are not paid for by the Utility.

10.9 Utility Appurtenances

10.9.1 Should be aesthetically acceptable and in compliance with industry standards.

10.9.2 Shall be placed so as to create minimum interference with the functional and maintenance operation of the transportation facility.

10.9.3 Must not conflict with other existing facilities.

10.9.4 Shall be located as close to the R/W limits as practical.

10.9.5 New underground utility facilities less than thirty (30) feet from the edge of pavement, excluding those considered not in traffic areas of curb and gutter sections, shall be designed to carry traffic. Those located in non-traffic areas of curb and gutter sections and those located greater than thirty (30) feet from the edge of pavement shall be designed to support the **FDOT's** maintenance equipment. The minimum wheel load underground appurtenances should be designed for is HS 20 military load. HS 20 is a three axle truck loading condition where one axle load of 24,000 pounds or two axle loads of 16,000 pounds each, spaced four (4) feet apart may be used, whichever produces the greater stress, in lieu of a single axle 32,000 pound load. This does not guarantee to the Permittee that these appurtenances will not be subject to greater loads.

Any new single utility facility above or below ground, other than power or telephone poles and their appurtenances, larger than eighty (80) cubic feet in size must be submitted to the District Maintenance Engineer or designee for approval.

10.9.6 When and where multiple conduits are pulled to construct new duct systems, access points such as manholes or hand pulls shall be limited to placement over the ducts in line, and shall minimize obstruction of the R/W

use by others. Multiple access points on a duct system may not be any closer than fifty (50) feet to minimize impact to the overall R/W infrastructure. This requirement is not intended to cause sharing of manholes between power and non-power users.

10.9.7 No concrete foundation for whatever purpose shall be allowed to be constructed more than four (4) inches above the existing grade.

10.9.8 All new or replacement installations of all types that would obstruct any portion of the sight window as described in ***FDOT Standard Index 546*** by a width of more than fifteen (15) inches, should be evaluated to minimize sight window obstruction. Non-compliance does not require submittal of an exception.

10.10 If any utility relocation is necessary to provide entrance or service within the transportation facility from adjacent property, the relocation expense should be borne by the Permittee who initiates the requirement for relocation and shall not reduce compensable rights, if any, granted by any prior permit. (This does not apply to public designated R/W, e.g., county roads, city streets, state parks.)

If a dispute arises, the relocation expense should be considered a matter between the property owner and the prior Permittee. In the case of an unresolved dispute, the final location will be determined by the **FDOT**.

10.11 All new or replaced underground facilities within the R/W shall be made electronically detectable using techniques available in the Industry. Where as-builts are required in accordance with the ***UAM*** or ***FDOT Standard Specifications 555, 556, or 557***, an as-built plan of the utility facility location including a depth tabulation (when profile plots or elevations are not provided) shall be furnished at the time of the certification of completion of the project for which a permit was given.

10.12 The contractor qualifications for removal, encapsulation, or enclosure of materials containing asbestos shall be in accordance with ***Chapter 469, F.S.***

10.13 Conventional methods of trenching or "plowing" in utility facilities are acceptable on **FDOT** R/W so long as such methods will not adversely affect pavement, base, other transportation facilities, or other permitted facilities in accordance with ***Section 557 – Vibratory Plowing, FDOT Standard Specifications*****.**

10.14 The preferred methods for crossings under pavement or other facilities are jack/bore and directional boring. Jack and bore and directional boring operations shall comply with ***FDOT Standard Specifications Section 555 for Directional Bore*** and ***Section 556 for Jack and Bore.*** The Permittee shall be responsible for the appropriateness and success of the methods and standards used.

10.15 Open cutting of existing pavement should only be used when directional bore and jack/bore are not feasible. Open cutting operations shall be in accordance with ***Standard Index No. 307, Utility Cut.*** (Other Indexes, such as ***Indexes No. 500, Removal of Organic and Plastic Material, No. 501 Geosynthetic Reinforced Soils, No. 505, Embankment***

Utilization, and ***No 506 Miscellaneous Earthwork Details***, may apply).

10.16 Underground crossing operations may begin without the **FDOT** Engineer present on site if it can be determined otherwise that proper preparations have been made. If it is required that an **FDOT** Engineer be on site at any time, the permit shall stipulate the circumstances.

10.17 The Permittee shall be responsible for damages to the State Transportation System caused by its work, and shall make immediate repairs necessary to return the transportation facility to its condition prior to any utility work.

10.18 All pipe materials and joints shall comply with the greater of either the industry standard requirement for the intended use when defined, or those required by the **FDOT** to facilitate static and dynamic loading (including construction) to avoid damage to the roadway facility. All welded joints shall be full depth welds.

10.19 All utility facilities previously placed out of service and left in place, that are returned to service other than for a temporary emergency or construction expediency, will require a new permit. The new permit shall at a minimum state the type and size of the facility, general location, and identify the limits of reactivation. No cross sections, profiles, or additional engineering support information supplied in the original permit on the existing facility will be required.

If the utility facility to be placed out of service and left in place contains voids, such as a pipe conduit and the facility's structural integrity is questionable, the **FDOT** shall require it to be filled with excavatable flowable fill as defined in ***FDOT Standard Specifications*** for ***Road and Bridge Construction, Section 121***. If the **FDOT** has no concerns regarding structural integrity of the facility, it may be left open. If the **FDOT** elects to have the facility filled, at the option of the Utility in lieu of filling it, as-built plans must be provided to the **FDOT** that show mutually agreeable information to document the location of the facility for possible future reactivation and include a certification from the Utility and prepared by a qualified licensed Florida Professional Engineer that states the facility is structurally sound and leaving it in place will not damage the roadway for the design life of the **FDOT** facility. The design life of the **FDOT** facility can be obtained from the District Design Engineer's Office.

10.20 A separate permit is required for the placement of any antennae on the exterior of any utility appurtenance within the **FDOT** R/W. This provision does not apply to the installation of antennae for remote communication or switching devices to operate or maintain a utility facility.

10.21 No new utility structure or cabinet whether located above or below ground, that contains any liquid petroleum fuel for back-up power sources, may be installed within the **FDOT** R/W. Existing fuel sources (not facilities) must be evaluated for relocation when the transportation facility is reconstructed. These provisions do not apply to utility facilities that exist or have prior property rights unless expressly prohibited in a subordination agreement.

10.22 The construction or installation of any new utility lift, pump, or power generating station is not permitted within the R/W in excess of eighty (80) cubic feet. These provisions do not apply to existing utility facilities or those that have prior property rights unless expressly

prohibited in a subordination agreement.