

Chapter 4

Roadway Safety

The following are changes, additions or deletions to the January 2012, Topic #625-000-007, Plans Preparation Manual (PPM), for use on Turnpike projects only:

4.2.1 Canal Hazards

Add the following paragraphs

Design Consultants shall request the Florida Turnpike Enterprise (FTE) 2009 Canal Protection Program Update to review and apply criteria on FTE projects.

Florida's Turnpike Enterprise defines a water body as a natural or manmade feature, such as a pond, lake, ditch or canal that has a depth of water of 3 feet or more for an extended period of time (24 hours or more), as measured from the seasonal high water level or control elevation, to the water feature's bottom elevation. All water bodies within Turnpike right of way, as well as canals that run along and may fall slightly outside of Turnpike right of way shall be evaluated for protection.

All water bodies within Turnpike right of way shall be protected.

4.3.1 Warrants

Add the following paragraph

Light pole foundations are not considered a hazard if built in accordance to Standard Index 17500, though the roadway slope may cause a portion of the foundations to protrude more than 4" in height.

4.3.2 Barrier Selection

Add the following paragraph

Though not detailed in the current Design Standards High Tension Cable Barrier, per Developmental Specification 540 is an acceptable barrier on the Turnpike System.

4.3.5 Placement

Add the following sections

The following criteria apply to the installation of high tension cable barrier and are supplement to Developmental Specification 540 High Tension Cable Barrier System (Rev 11-29-10).

1. The maximum slope a high tension cable barrier shall be placed on is 1V:6H, with preferred slope of 1V:10H.

2. High tension cable barrier cannot be placed between the front slope break point and 8' from the break point or median center when the approach slope is 1:6 or flatter; or 10' from the break point if the front slope is steeper than 1:6
3. Post spacing shall be installed such that the dynamic deflection is no more than a maximum of 8 feet.
4. Design drawings and calculations required by Developmental Specification 540 to be furnished to the Engineer shall also be submitted through FTE's shop drawing review process.
5. Design drawings and calculations for post foundations as described in Developmental Specification 540-1 (f) are required regardless of soil compaction. The design should be based on the soils described in Developmental Specification 540-1 (e), unless otherwise detailed in the plans.
6. A 16' clear area shall be provided between the barrier and any hazard.
7. Maintenance access points must be placed at a minimum of every half mile unless approved by the Turnpike Design Engineer.

Table 4.3.1

Add the following

Barrier Type	Offset (ft.)
High Tension Cable Barrier	8.0

4.4.2 Selection

Revise Sentence

The second sentence is revised in this section to the following:

Where deflection space is adequate, either a double face guardrail, high tension cable barrier, or single face guardrail on each side may be used.

4.4.4 Median Barrier Grading Requirements

Add the following paragraph

The most desirable median slope is one that is relatively flat with slopes at 1:10 or less in lieu of the standard 1:6 median typical section slopes. The slopes ahead and in front of guardrail installation are particularly critical on the older/narrow medians of 40 feet or less in width (see AASHTO Roadside Design Guide). In most cases, regrading will require the median ditch profile to be realigned horizontally and vertically. Therefore, drainage and earthwork in these areas need special attention in developing the typical sections and drainage profiles.