PART III - UNIFIED LAND DEVELOPMENT CODE TITLE 40 - LAND DEVELOPMENT REGULATIONS CHAPTER 407. - GENERAL DEVELOPMENT STANDARDS ARTICLE IX. STORMWATER MANAGEMENT

ARTICLE IX. STORMWATER MANAGEMENT

... [Sections of the Stormwater Management Code that are not proposed for change are omitted from this draft] . . .

Sec. 407.92. Relationship to project design.

- (a) General. Stormwater areas shall be designed in the context of the site design for the entire subdivision or other development. Careful consideration shall be given to the layout of basins and stormwater management areas to optimize treatment, aesthetics, and groupings of trees. Basins and stormwater management systems shall be designed to blend into public greenspaces and shall resemble natural areas to the greatest extent possible.
- (b) General design criteria.
 - (1) An area equivalent to at least twenty-five (25) percent of the area of the entire basin, including the shoulders and maintenance area, shall be landscaped using native vegetation, excluding sod. In addition, a minimum of one (1) shade tree shall be planted for every thirty five (35) linear feet, or part thereof, of basin perimeter. Spacing of trees may be closer when trees are planted in groups for aesthetic effect. Certified apparently weed free sod shall be used.
 - (2) Retention/detention basins shall be of irregular shape and shall have no parallel sides, unless approved by the County Engineer, in which case additional landscaping and barriers may be required.
 - (3) When possible, the inflow and outflow locations of basins must be located on opposite ends of the basin to provide for optimal treatment. Flow paths and mixing within basins shall be maximized. For wet-detention systems, the length to width ratio shall be 2:1, which may be accomplished through the use of a diversion structure.
 - (4) Erosive velocities shall be reduced through the use of adequate controls.
 - (5) Drainage easements provided for swales that convey stormwater runoff between two (2) privately owned lots shall be designed and be of sufficient width to adequately convey runoff to the stormwater master basin. Stormwater conveyance swales must be located entirely within these easements.
- (c) Fenced basins.
 - (1) The following basin design conditions will require fencing:
 - a. Basins with a depth greater than four (4) feet, as measured from the basin bottom to the control elevation, with slopes steeper than 6H:1V.
 - b. Basins without a controlled outfall, if the design high-water elevation for the design storm is greater than four (4) feet and the side slopes are steeper than 6H:1V, except

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- where the side slopes are shallower than 6H:1V to a depth that is at least four-foot lower than the design high-water elevation.
- c. Wet detention basins with a normal pool depth six (6) feet or greater, except where the side slopes are shallower than 6H:1V to a depth that is at least four-foot lower than the permanent-pool elevation.
- d. All fences must be a minimum height of four (4) feet and have a 14-foot-wide gate that allows easy access for maintenance equipment.
- (2) Basins that require a fence-and are to be dedicated to the County for maintenance will require a minimum 12-foot maintenance <u>path</u> and vegetative strip between the fence and the basin. The landscaped area should be no less than nine (9) feet wide at its most narrow point. Maintenance strips shall have a maximum slope of 8H:1V.
- (3) Fencing will be aesthetically pleasing and meet all safety requirements as put forth by the Florida Department of Transportation's Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System. If chain-link fencing is used, an additional five-foot wide area outside the fence shall be landscaped with at least three (3) shade trees, two (2) understory trees, eight (8) large shrubs, and thirteen (13) small shrubs for every one hundred (100) feet or part thereof of fencing.
- (4) The following basin design conditions do not require fencing:
 - a. Basins with a depth less than or equal to four (4) feet, as measured from the basin bottom to the control elevation.
 - b. Basins designed to be "dry" with side slopes no steeper than 6H:1V, regardless of basin depth.
 - c. Wet detention basins with a maximum pool depth less than six (6) feet and side slopes no steeper than 6H:1V to a depth of four (4) feet below the control elevation. From this elevation to the basin bottom a maximum side slope of 2H:1V is permissible.

. . . [Sections of the Stormwater Management Code that are not proposed for change are omitted from this draft] . . .