

ES Staff recommends planting of the detention area with scattered cypress and red maple to mimic a natural system and further meet the intent of LDC 33-111(d) which requires all dry detention basins to be planted with wetland type plant species. ES Staff identified this opportunity to design the dry detention areas with additional native trees to mimic a natural system. The planting of additional trees, shrubs and herbaceous grasses in the dry detention areas will enhance the project, providing an aesthetic value and softening effect for adjacent users. The following Objectives and policies support ES Staff's recommendation:

Lee Plan Objective 60.5: Incorporation of Green Infrastructure into the Surface Water Management System. The long-term benefits of incorporating green infrastructure as part of the surface water management system include improved water quality, improved air quality, improved water recharge/infiltration, water storage, wildlife habitat, recreational opportunities, and visual relief within the urban environment.

ES staff recommends the following condition to ensure that the dry detention area be designed to meet the intent of and consistency with **Objective 60.5**.

Lee Plan Policy 60.5.1: The County encourages new developments to design their surface water management systems to incorporate best management practices including, but not limited to, filtration marshes, grassed swales planted with native vegetation, retention/detention lakes with enlarged littoral zones, preserved or restored wetlands and meandering flow-ways.

Lee Plan Policy 61.2.4: where feasible within future urban areas, surface water management plans are encouraged that mimic the functions of natural systems.

ES staff recommends the following condition to ensure that the dry detention area be designed to meet the intent of LDC 33-111(d) and Policy 61.2.4.

Prior to local development order approval, the landscape plan must depict:

- ***the dry detention areas planted to include herbaceous vegetation arranged in clusters and, planted in a one gallon container size, three foot on center; and,***
- ***the dry detention areas to be planted with scattered cypress (*Taxodium sp.*), red maple (*Acer rubrum*) and/or laurel oak (*Quercus laurifolia*) planted at 10 feet in height, 2-inch caliper with a 4 foot spread and 20 foot on center; and,***
- ***general tree credits can be applied as per LDC 10-418 (4) for herbaceous vegetation, and a general tree credit on a ratio of one-to-one for the planting of trees in the dry detention; and,***
- ***The required plantings must be designed to not adversely affect the functions and future maintenance of the water management facilities and meet the requirements of the South Florida Water Management District.***

The applicant proposes dry detention adjacent to the 30-foot type "F" buffer on the west side of the property for the commercial project. ES Staff recommends the use of green infrastructure and best management practices to design the dry detention area. In addition, the project is located within the Six Mile Cypress Water Basin. The Lee Comprehensive Plan considers this a "critical

area” for surface water management. ES Staff identifies an opportunity to design the dry detention areas to incorporate the type “F” buffer with additional native trees to mimic natural systems, and create a larger contiguous vegetated area. The planting of additional trees, shrubs and herbaceous grasses in the dry detention areas will enhance the project, providing an aesthetic value and softening effect for the project while creating a vegetative community to absorb nutrients and provide increased water absorption and improved water quality.

ES Staff recommends the use of green infrastructure and best management practices to design the dry detention area. ES Staff identifies an opportunity to design the dry detention areas to incorporate additional native trees to mimic natural systems, and create a larger contiguous indigenous area. The planting of additional trees, shrubs and herbaceous grasses in the dry detention areas will enhance the project, providing an aesthetic value and softening effect for the project while creating an indigenous vegetative community to absorb nutrients and provide increased water absorption and improved water quality. This is consistent with the Goals, Policies and Objectives for storm water design. The following Objectives and Policies support ES Staff’s recommendation: