

**QUESTION 15 – SOILS**

See State Comprehensive Plan (Chapter 187, F.S.)

GOAL ( 9); POLICIES ( 6),( 9)  
GOAL (16); POLICIES ( 6)

**A.**

- 1. Provide a description of each of the soils indicated on Map E utilizing the following format:**

Table 15-1, Soil Descriptions and Interpretation, provides a description of the soils identified in Map E, General Soils Classification, as occurring in The Commons project area. These descriptions were prepared based on information in Soil Survey of Broward County, Florida, Eastern Part (U.S. Department of Agriculture, Soil Conservation Service 1984) and field verified.

Table 15-1 Soil Descriptions and Interpretations					
Soil Name and Map Symbol	Brief Soil Description	Seasonal High Water Table Depth Duration	Permeability Rate (in/hour)	Degree & Kind of Limitation for Proposed Uses	Degree & Kind of Limitation for Pond Embankment
Dania Muck (Da)	Nearly level, very poorly drained organic soil underlain by limestone at a depth of 14 to 20 inches	Water stands at the surface for 2 to 6 months of the year, and less than 10 inches for the rest of the year.	6.0 - 20	Severe	Severe
Hallandale fine Sand (Ha)	Nearly level, very poorly drained organic soil underlain by limestone at a depth of 7 to 20 inches	No information provided in soil survey	6.0 - 20	Severe	Severe
Plantation Muck (Pm)	Nearly level, very poorly drained soil that has muck surface layer over sandy mineral material	Water table is at 10 inches or less for 2 – 6 months per year, and at a depth of less than 20 inches or less for the rest of the year	6.0 - 20	Severe	Severe

- 2. Describe the potential for subsidence and any unique geologic features (such as sand dunes, bluffs, sinkholes, springs, steepheads, etc.) on the site. Discuss what aspects of the site plan will be used to compensate for or take advantage of these features.**

The Commons project area is largely composed of muck and sands. Soil limitations for development are severe due to wetness and ponding. Appropriate construction measures will be used to avoid subsidence and other soil related problems. The Commons will require fill which can be obtained from on-site lake construction.

- B. Where a soil presents a limitation to the type of use proposed in the development, state how the limitation will be overcome. Specify construction methods that would be used for building, road and parking lot foundations, and for lake or canal bank stabilization as relevant.**

The Commons project area is largely composed of fine sand underlain by limestone at a depth of 7-20 inches. Soil limitation for development is severe. The limitation will be overcome by applying accepted engineering methods in South Florida, including proper site planning and adding appropriate amounts of fill material. Methods and approaches for specific areas are dependent upon location and land use and will be defined in the detailed engineering design.

- C. What steps will be taken during site preparation and construction to prevent or control wind and water soil erosion? Include a description of proposed plans for clearing and grading as related to erosion control.**

All local, state and federal regulations that are designed to prevent soil erosion and sedimentation will be followed. Construction will proceed in an orderly fashion, with erosion-control measures implemented before and immediately after earthwork on each site, as most appropriate.

During construction temporary dikes will control erosion by hay bales, siltation curtains, and other standard means to assure that discharge from the property during construction will not increase the turbidity levels in the receiving water by more than 29 NTUs. Both wind and water erosion will be controlled by mulching, seeding or sodding, and planting vegetation in cleared areas around buildings as soon as practical. Permanent drainage facilities will be built to keep up with site development and will be closely monitored during the development phase.

At full development erosion will be controlled by maintenance of ground cover (natural and landscaped) and by stormwater management system with adequately sized and properly located ponds.

**D. To what degree and in what location(s) will the development site be altered by fill material? If known, specify the source location and composition of the fill. Also identify the disposal location for any overburden or spoil.**

The level of site planning done for the DRI Application for Development Approval (ADA) does not address the fill areas in detail. In general, for economic reasons attempts are made to cut and fill within project boundaries. During the project permitting under local, regional and state agencies, detailed engineering plans will be prepared addressing final site topography and the plans will identify cross sections and quantities of any fill material to be placed in wetlands. It is anticipated that all fill requirements can be met with on-site lake construction. Disposal locations for overburden and spoil will be determined at time of construction.