



**Proposed Containment Dike MS-204, Dredged Material Management Area
St. Johns County, Florida**

The site is located south of Cabbage Creek along the eastern bank of the Intracoastal Waterway in St. Johns County, Florida. This area was used by the Corps of Engineers for containment of vegetation and dredge disposal for some of the original Intracoastal Waterway (ICW) widening and dredging activities. The purpose of this project was to design a temporary and permanent access roadway into the



area and a new 13-foot high dike, 6,550 lineal feet in perimeter length, in the area of the old dikes (still existing in some areas) to contain additional ICW dredged material. Due to the previous uses of this site, the subsurface conditions included 20 to 30 feet of highly organic and highly compressible soils and soft clays. Effective support of the proposed dike embankment created two separate but related design and construction considerations. The first being significant consolidation which would be experienced by the peat and organic soils due to the imposed loads of the dike embankment fill. The second, the stability of the embankment slopes and foundation soils during construction. Therefore, the engineering evaluation and recommendations for the construction of the containment dike were directed toward the following areas of primary consideration:

Estimated Construction Cost: \$12.5 Million

Design Completion Date: 2006

Client: North Island Development, LLC/Fletcher Land Corporation/
Corps of Engineers

Contact: Mr. Robert Johnson

Project Responsibilities Included:

- Design of stable slopes using multiple layers of geotechnical fabric
- Design of a staged construction sequence to preclude foundation bearing failures