

Chapter 7: WATER TRANSPORTATION

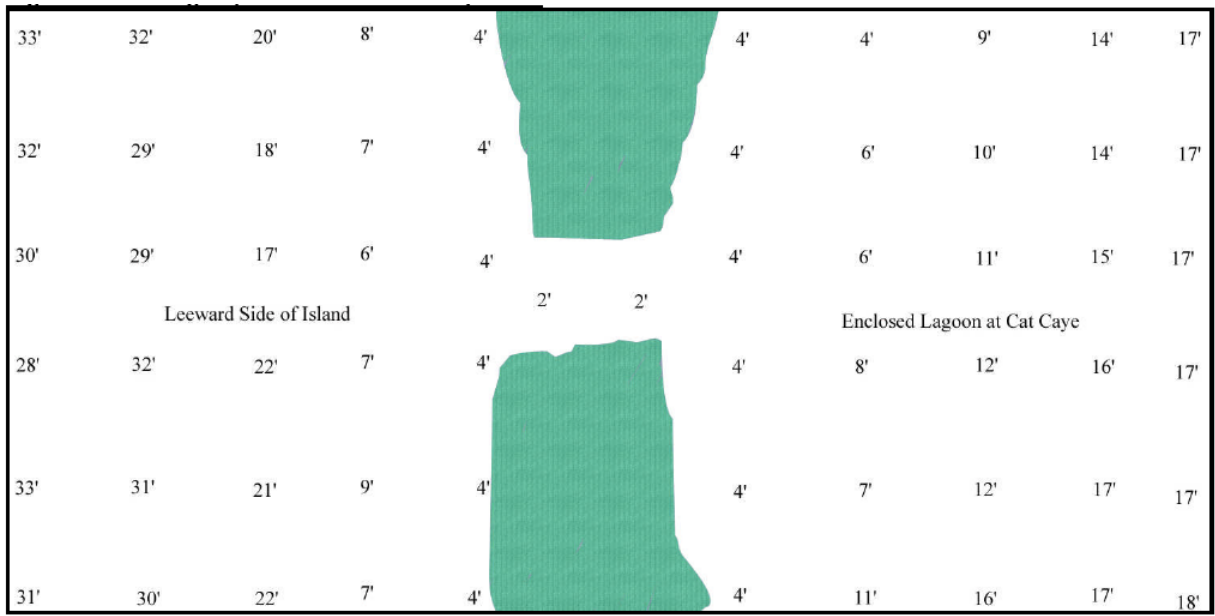
7.1 Physical Carrying Capacity of Marina

The sports fishing marina and the transient marina are the only two areas that will provide docking facility for vessels. The sports fishing marina will be able to accommodate a total of 32 vessels no larger than 50 feet in length. The transient marina will be significantly smaller and consist of floating dock accommodating a maximum of four small vessels. Hence, at full capacity a total of thirty six (36) vessels would be accommodated at the project site.

Both marina areas are natural sheltered areas. The sport fishing marina will, however, require the dredging of an access channel that is estimated to yield approximately 500 cubic yards of material. This material will be used as fill. The access channel to the transient marina will generate significantly less material, however, the spoils will be used as base fill material. The reason for the little amount of material to be obtained from the access channels is that the water depth around Cat Caye, at some thirty feet from the channel wall averages eighteen feet in depth. This depth is sufficient for vessels to access the natural marina area.

7.2 Bathymetry

Below is a survey chart showing bathymetry of the access channel area and the natural marina area to be used as the sports fishing marina.



7.3 Beach Construction

The project will have no natural beach area. This development project will be promoted as a medium to high income eco-tourism destination catering to both leisure type vacation and recreational opportunities as well as prompting nature tourism from a marine environment perspective. Have to clear vegetation for the construction of a beach area would not be in keeping the policy of what defines eco-tourism.

However, visitors and guest would still be able to enjoy basking in the sun, but from floating rafts located south of the caye.

7.4 Fuel Supply

No fuel supply will be provided for vessels that dock at the marina. However, fuel for the use of back up generator will be off loaded at the sports fishing marina. Fuel will be transported in 55 gallon drums and off loaded nearest to shore for subsequent storage in sheltered contained area equipped with oil water separator. Fuel will be primarily diesel and maximum volumes proposed to be stored shall not exceed two hundred gallons.

Gasoline will also be stored in little volumes for emergency use for fueling of service vessels.

The potential impacts associated with the transportation of fuel can be significant. However, the small amounts that will be maintained on site significantly reduce this impact. In addition, when transporting fuel, the vessels will be equipped with a spill kit including a boom to contain any accidental spills.

7.5 Marina Construction/Extraction of Material

The marina area is a natural lagoon sheltered area that will only require the deepening of the access channel. The method that will be used to extract the material will be suction dredging and dewatering of material on the caye for subsequent use as fill material. An estimated 500 cubic yards of material is to be dredged and be mainly coralline sand.

When conducting any dredging, silt curtain/sediment traps will at all times be deployed. In addition, dredging activities will be limited to times of low wave energy/calm seas.