Additionally, greater amounts of sensitive species that were identified in the uplands of the Loncala and would be impacted include the American black bear, gopher tortoise and gopher frog. Approximately 3 active juvenile, 4 subadult, 18 active adult, 27 inactive adult, and 6 inactive subadult gopher tortoise burrows, along with 3 gopher frog location would be impacted. With the implementation of mitigation measures, Alternative 4 would not have an effect on these species. Locations of sensitive features are depicted on the Loncala Tract Figure 4.2: Sensitive Features Location Map.

The cultural resources investigation of this property led to the identification of one cultural resource site recommended as potentially eligible for NRHP inclusion under Criterion D. Additionally, the NRHP status of another cultural resource is listed as unknown as this site was unable to be fully tested due to the site extending outside of the project limits. The investigated portion of the site was determined to lack significant data potential and thus no further archaeological work was recommended within the project area. The cultural resource consultant recommended that until this site could be fully defined and evaluated, the overall NRHP eligibility status should remain as unknown. For the one site considered to be potentially eligible, avoidance or further testing was recommended. If avoidance was not possible, the cultural resource consultant recommended Phase II testing be conducted prior to any ground disturbing activities in order to better evaluate the NRHP eligibility status of this site.

3.5 Alternative 5

Alternative 5 involves mining of only upland locations on the proposed project site. Mining would be accomplished via the dragline method as previously described.

The northern boundary of the Alternative 5 site is located approximately 3.73 miles southeast from the nearest boundary of the Okefenokee Swamp National Wildlife Refuge, providing a substantial buffer of protection for this sensitive resource. Alternative 5 is comprised of suitable reserves of heavy mineral sands containing the target minerals suitable for mining. Mining only the upland areas would not yield the quantity of minerals or average 2% concentration that would allow the applicant to meet the requirements of its contracts with customers to supply the amount of heavy mineral sands required. The location of Alternative 5 is within the reasonable 50-mile proximity to the port of Jacksonville. Public services and facilities required to support the mine and protect public health, safety and the environment are available should Alternative 5 be implemented. Alternative 5 does contain direct rail access which links to the port of Jacksonville. As a result, the cost of handling/transportation is reduced. The implementation of Alternative 5 would have a reduced beneficial economic impact on the adjacent community because the smaller mining area would employ less people and reduce the life of the mine.

Implementation of Alternative 5 would not change the amount of permanent impacts to wetlands and streams since those facilities will still need to be constructed. Impacts would be limited to secondary temporary impacts.

The Alternative 5 site provides habitat for the federal candidate, state listed threatened gopher tortoise and federal candidate, state listed rare gopher frog. Gopher tortoise and gopher frog will be relocated. There would be a reduction in the number of burrows impacted if Alternative 5 was implemented. The projects smaller footprint in the wetlands would result in a reduction in the impact on gopher tortoise and gopher frog species.

A cultural resource survey identified a total of 16 archaeological locations within the extent of the permit area. These included 7 isolated finds and 9 archaeological sites. Of these sites, 5 are the remains of early-to-middle-twentieth century domestic assemblages. None of the sites were recommended as eligible for NRHP inclusion and isolated finds are, by their nature, ineligible for NRHP