

## Preserving a Sensitive Environment

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### The Legends At Parris Island



Parris Island, South Carolina

In 1996, the Parris Island Marine Corps Recruit Depot, Community Services Division, began developing a plan to rebuild the base's 1947 Fred Findley-designed golf course. More than half a century of routine play, maintenance and natural processes had caused the typical problems found on older golf courses.

The problems consisted of an outdated irrigation system with a limited water source, soil compaction, shade and root encroachment from maturing trees, poor drainage, etc. These conditions were counterproductive to providing the three elements most critical to a successful golf course: playability, aesthetics and maintainability. However, simply improving these conditions and updating the golf course features and infrastructure could not be accomplished without addressing the environmental and historically significant conditions surrounding the site.

Located on the southern most tip of Parris Island in southeastern South Carolina, the site is bordered by salt marsh wetlands and deepwater creeks on the southern, eastern and western boundaries. Freshwater wetlands are located throughout the interior of the site. The average elevation across the site is seven feet above mean sea level. Additionally, Parris Island has one of the largest concentrations of Live Oaks per acre in the state of South Carolina. The location and condition of these majestic trees played a major role in the golf course reconstruction.

Historically, the site reaches back to the sixteenth century with the French occupation of Charlesfort. Later, the Spanish city of Santa Elena was established there and served as the capital of Spanish Florida until English raids in 1587 forced the Spaniards to evacuate to St. Augustine. Santa Elena is home to the oldest known European pottery kiln discovered in the United States. Three existing holes, the practice range, and the existing clubhouse were all located within the Santa Elena archaeology site.

A policy of avoidance was adopted after evaluating all of the sensitive environmental and archaeological resources. The task then became to route 18 holes of golf and a practice facility that:

- avoided all known archaeology and environmental impacts
- provided a continuous flow to the golf course
- utilized as many existing golf corridors as possible.

The final routing plan utilized 12 of the existing 18 golf hole corridors however, few of the original tee and greens sites were used. Utilization of the existing cleared areas provided minimal impact to the surrounding wooded environment. Due to spatial constraints, the practice range was located within the Santa Elena site and approved utilizing a preservation in place method. This would require the careful placement of fill material to create a buffer zone to house the subsurface infrastructure required on a golf course. Upon the acceptance of the routing plan, the issues of playability, aesthetics and maintainability were again in the forefront.

All green, tee and bunker complexes were rebuilt utilizing the most current construction techniques in the industry. A new automatic irrigation system was installed, requiring an archaeological dig by the State Historical Preservation Society for the trench line that supplies the practice facility. New hybrid Bermuda grasses were planted on the primary playing surfaces, while native Spartina grasses and waste areas were incorporated to reduce the total acreage of maintained areas and blend the golf course into the surrounding low-country environment.

Paramount to the success of the golf course was drainage improvements. Because of the low-lying nature of the site and proximity to tidal wetlands, small rain events would inundate the golf course for extended periods of time. To counter this, 11 lakes were strategically located throughout the golf course in conjunction with a sophisticated storm water conveyance system. The dredged lakes would provide the fill required to achieve positive drainage on the golf course while providing detention basins to slow storm water discharges from the site. All surface run-off is directed back to the lakes, which through the use of equalizer piping provides a large primary irrigation water source.



**SUMMARY**– Based on a thorough understanding of the conditions surrounding the project site, through consultation and coordination with various professionals and agencies, this project has preserved significant cultural, historical and environmental resources for future generations. The increase in play at The Legends at Parris Island is testament to the success of the reconstruction project and meeting the demands of the initial program for the project.