

### The Seminole Tribe of Florida

#### Background

The Seminole Tribe of Florida was in need of a pavilion structure, three equine facilities and a fitness center. Hurricane force wind loads, site obstructions and an economical approach suppressed the project for several years. While other companies struggled to meet the project's complex building requirements, Signature Structures LLC presented a solution that exceeded the Seminole's goals and expectations.

#### Solution

Signature Structures LLC was contracted to design, engineer, cost estimate and manage the civil and subsurface studies for each facility. The Signature Project Management Team's constant attention to details was vital to producing, delivering and installing the materials for a project of over 83,0000 sq. ft. The result of expert project management resulted in the delivery of materials ahead of schedule. To save time and money, the pavilion structure was installed above the existing rodeo arena which eliminated the need to dismantle and reassemble the grandstands. However, the existing grandstand foundation had to be analyzed and understood prior to Signature's design of the new foundation plan. Once the final design was chosen, the structures were engineered to endure the Category 5 storms that plague the state of Florida. After the feasibility studies and cost estimating steps were complete, Signature was awarded the project that included a custom 52,800 sq. ft. pavilion system, 27,000 sq. ft equine facilities and office space, and a 4,000 sq. ft. fitness center.

#### Details

Signature's Engineering Team designed the steel frames to withstand 160 mph wind gusts that exceeded the 143mph wind load requirement. But unlike other companies, Signature engineered the 28 ounce PVC membrane with a custom roof attachment system to keep the fabric attached during hurricane force winds, a first in tension fabric structure industry. The 220' x 240' Pavilion System utilizes truss members weighing over 50 tons each. Backlit 20'x20' logos attach to the lower chord of the truss members and illuminate during night events. It was very important to the Seminole's that the roof resemble the tribal colors. As a result, Signature supplied a custom color that incorporated tribal insignia. In all, each facility was designed and fitted with logo's and details that created a true project success.

#### Customer Appreciation

We have worked with Signature Structures for over two years on a project of significant size and importance and they have exceeded our expectations in all aspects. They offered to consult and work on a project that very few companies took interest in due to the site challenges and custom nature required.

- Projects Officer, Seminole Tribe of Florida -

