

FORT PROCTOR  
(Fort Beauregard)  
(Beauregard's Castle)  
Lake Borgne  
Shell Beach  
St. Bernard Parish  
Louisiana

HABS LA-199  
*HABS LA-199*

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

REDUCED COPIES OF MEASURED DRAWINGS

FIELD RECORDS

HISTORIC AMERICAN BUILDINGS SURVEY  
National Park Service  
U.S. Department of the Interior  
1849 C Street NW  
Washington, DC 20240-0001

## HISTORIC AMERICAN BUILDINGS SURVEY

### FORT PROCTOR (Fort Beauregard, Beauregard's Castle)

HABS No. LA-199

- Location: Lake Borgne, St. Bernard, Louisiana. Fort Proctor is located in Lake Borgne near Shell Beach, Louisiana, where it sits in a brackish mixture of water approximately one mile north from Frank Campo's Marina, 1301 Yscloskey Hwy, St Bernard, LA 70085.
- The coordinates for Fort Proctor are 89.678177 W and 29.867399 N, and they were obtained through Google Earth in September 2012 with, it is assumed, NAD 1983. There is no restriction on the release of the locational data to the public.
- USGS Yscloskey Quadrangle, Universal Transverse Mercator  
Coordinates: 45.732615.326800
- Present Owner: St. Bernard Parish Police Jury, 5609 Delacroix Hwy, Saint Bernard, Louisiana.
- Present Use: Vacant; Site of proposed United States Army Fort.
- Significance: Fort Proctor (1856-1859) was partially constructed as part of the Third System of Defense (1816-Civil War) and although it was never completed or used as planned, it is of national significance in the history of the Gulf Coastal defensive system. Characterized as a Martello Tower, the innovative design provided all-around fire capabilities and was constructed for durability with composite brick and concrete walls, iron beams, and granite. Fort Proctor also incorporated a highly efficient embrasure design. The quality of its materials and its innovative design make it one of the finest examples of the Third System of U.S. Fortifications. Its precarious position in Lake Borgne reflects the eroding condition of the Louisiana coast.
- Project Information: This project was sponsored by the Louisiana Department of Culture, Recreation, and Tourism, Office of Cultural Development, Division of Historical Preservation. The grant was garnered and managed by Assoc. Professor Ursula Emery McClure, FAAR, AIA, LEED AP and graduate assistant, Taylor Alphonso. The documentation was undertaken by students from the Louisiana State University School of Architecture HABS documentation course. Students enrolled in ARCH 4155 – Recording Historic Structures were Annette Couvillon, Lindsey Boley, Sarah Kolac, Cody Blanchard, and Christopher Peoples. The project was completed in the spring semester of 2012. All large format photography was produced by

Sarah Kolac and processed in the LSU School of Art photography studios. The field notes, the drawings, and historical report were produced by the class.

## **PART I. Historical Information**

### A. Physical History

1. Date of erection: The construction of Fort Proctor began in ca. 1856. In the first year, the canal and levee around the site were excavated and the foundations for the tower and exterior walls were completed. In 1857, the reversed foundation arches and brick walls up to 12 feet were completed. This allowed the iron beams to be placed. This year also saw the completion of the inner and outer ditches for the exterior battery and the construction of the officer's quarters southeast of the exterior battery completed. In 1858, the walls were built to 27 feet, the piers were carried to full height and the entrance doorway and loophole openings were constructed. Although it was never completed, it was designed to provide protection to the west approach into New Orleans at Shell Beach. It was originally constructed 150 feet inland with a railroad and railroad port called Proctorville located on its northern side. After Hurricane Five (5) temporarily stopped construction efforts on September 15, 1859, and the onset of the Civil War, Confederate soldiers blew the levees protecting the fort from Lake Borgne. All construction efforts were then permanently ceased.
2. Architect: General Joseph Gilbert Totten, a chief architect/engineer of the Third System of Defense fortification, designed the fort alongside engineer General P.G.T. Beauregard. The basic design parameters for the fort were prepared by Second Lieutenant, Horatio G. Wright in 1846 under the direction of Totten. Construction changes were issued under Beauregard.
3. Original and subsequent owners, occupants, uses: Congress appropriated \$125,000 on February 28, 1855, for the purchase of a site and the erection of defenses there. The 100-acre site was purchased on March 15, 1856, from Mrs. Mary Screven, et als. by a deed recorded in Conveyance Book 6 pages 76-81 of the Clerk's office of St. Bernard Parish. The United States Army was officially first owner of the site and tower/fort, which resided there. It was never garrisoned, and sat stagnant for numerous years. It remained in possession of the U.S. War Department until 1916 and then was turned over to the Department of Interior. They auctioned off the property and tower in 1922 into private hands. From 1916 until 1978, the fort had a few private owners. The last private owner was Shell Beach Properties and they donated the site on June 5<sup>th</sup>, 1979, to the current public owner after the fort was placed on the United States Register of Historic Places in 1978. Today, the St. Bernard Parish's Police Jury holds ownership of the fort. The fort is vacant.

4. Builder, contractor, and suppliers: P.G.T. Beauregard supervised the construction of the fort with its architect J.G. Totten. Specific material suppliers are not known but only generalized in Tulane University's document, *Fort Proctor Stabilization and Master Plan*:

On page 10, it states:

Letters from Beauregard to Totten reveal that lumber and brick were obtained from sources in the immediate area. Some of the brick is thought to have been fired in Slidell while some may have been imported from Philadelphia.

Most of the lumber was obtained from local sources.

5. Original Plans and construction: Tulane University produced a document *Fort Proctor Stabilization and Master Plan*:

On page 9 – 10, it states:

The archival drawings of Fort Proctor were executed in two phases: (1) those of 1845 and 1846 and (2) the series of 1855 to 1858. The earliest drawings are maps of Proctor's Landing showing the siting of the fort, a section, an elevation, and plan; those from the 1850s are more detailed plans, sections, and details of the fort itself. Drawing No.7, for example, shows a front elevation of the fort along with masonry details of the arches. The drawing is labeled as follows:

Proctor's Landing, La. Sheets Nos. 8 & 9. Copied from drawings made under the direction of Col. J.G. Totten by H.G. Wright Lt. of Engrs, April 1846.

Alterations ordered in Department Letter of March 25th 1856, made and copied under the direction of Major G.T.

Beauregard by G. Weitzel, Lieut. U.S. Engrs., Proctorville, June 18, 1856.

Since the detailed drawings of the fort that survive are from the later Beauregard period, it is difficult to determine which design decisions were Totten's and which were Beauregard's. Certainly the basic square plan and the general disposition of elements were part of Totten's concept, as it exists on the early drawings. Since the two officers were in correspondence with each other for a time they certainly must have worked cooperatively on developing the design of the fort.

On page 12 – 13, it states:

#### First and Second Levels Exterior

The plans of Fort Proctor show the structure to be 76 feet square rising to a height of 44 feet. The brick walls are 7.5 feet thick and are pierced with gun openings, called embrasures or loopholes. Designed by General Totten, they succeed in bringing the opening size down to less than ten square feet (one-fourth the size of many European forts of the period) while maintaining a wide scope of armament movement within. The loopholes were equipped with iron shutters for security when the armament was not in use.

#### Interior

Fort Proctor's interior was planned to be luxurious by traditional fortification standards. Hardwood floors were to be used throughout; cypress paneled doors led from one room to another. Loophole openings were fitted with windows with six lights and trimmed with wooden molding. Even the artillery openings had windows fitted with four lights in each frame. The fireplaces (four on each floor) were trimmed with wooden molding. These details give the effect of simply but elegantly appointed rooms, and, except for the seven-foot thick walls, seem to defy the function of a fortification.

A decorative iron railed staircase was to have ascended to the second floor, which, with vaulted ceilings above each room, would have been spectacular. Height to width proportions of the rooms is well thought out with the kind of sensitivity seen in Palladio's villas.

The floor plan on both levels contains a central hall running from north to south from which doorways' open to the individual rooms: five on the first floor and seven on the second. The connecting staircase is centrally located in the seven and a half foot wide hallway.

## B. Historical Context

### Fort Proctor

Fort Proctor is a nineteenth-century fort ruin located on the shore of Lake Borgne just north of the mouth of Bayou Yscloskey.

The construction of the Mississippi River-Gulf Outlet Canal in 1965 cut off all land access to the site. In 1978 it was listed on the National Register of Historic Places. It is now completely surrounded by water ranging from four to six feet deep depending on the tide and marsh levels.

The fort was intended to be a part of the fortification protecting water routes towards New Orleans, Louisiana. Due to delays caused by hurricane damage, and then the outbreak of the American Civil War, the fort was never garrisoned. By the end of the war, improvements in artillery had made the fort design obsolete.

### Defending New Orleans through Fortifications

In the years following the War of 1812, Congress authorized the development of a permanent national system of forts to defend routes which could be used for invasion. Regional fortifications for the defense of the city of New Orleans were conceived as integral links of this extensive national system. The board of engineers, led by Simon Bernard recommended that a chain of forts and batteries be constructed at strategic locations around New Orleans as to block potential invasion routes to the city. For the approach up the Mississippi River, a fort (later named Fort Jackson) was proposed for opposite Fort St. Philip (the only colonial fort to be utilized in the system.) To protect the northern approaches to the city through Lake Borgne and Lake Pontchartrain, forts were projected for Rigolets Pass (Fort Pike) and Chef Menteur Pass (Fort Macomb) and Lake Borgne (Fort Proctor). To protect the western approach at Barataria Bay, Fort Livingston was proposed at Grand Terre Island. Finally, to defend the pass used by the English in 1814, a battery was proposed at Bayou Bienvenue and a tower was proposed at Bayou Dupre.

Fort Jackson was constructed between 1822 and 1832 and was a battle site in the Civil War. From April 16<sup>th</sup> to April 28<sup>th</sup>, 1862, the Confederate-controlled fort was besieged by the U.S. Navy. The fort fell to the Union and the Union went on to capture New Orleans. The fort was used by the military until after World War I and is now a National Historic Landmark and museum.

Fort Pike is located on the shores of the Rigolets. Fort Pike was the successor to Fort Petit Coquilles. Construction began in 1819 and was completed in 1827. Named after explorer and soldier General Zebulon Montgomery Pike (of Pike's Peak fame), the fortification was designed to withstand attack by land or sea. Pointed bastions flanked the land side with a curved wall facing the water. The original armament consisted of 32-pounder and 24-pounder cannons although the exact number of each type is not known. A wartime garrison numbered approximately 400 men; in peacetime it housed between one and 80 soldiers. Fort Pike served as a staging area during the Seminole Wars and the Mexican War. In 1861, the Louisiana militia captured the fort and held it until they evacuated after the fall of New Orleans. Union forces reoccupied it and used it as a base of operations for raids along the Gulf Coast and a training center for the USCT (United States Colored Troops.)

An earlier fort at the site of Fort Macomb was called Fort Chef Menteur, until the current brick fort was constructed in 1822 (renamed Fort Wood in 1827). It was finally given its name of Macomb in 1851. It was named after Major General Alexander Macomb, who served as the Commanding General of the United States Army from May 29, 1828 to June, 1841. Both Fort Pike and Fort Macomb were designed by French engineer Simon Bernard and have the same plans, design, and orientation, and serve the identical purpose of protecting Lake Pontchartrain from invasion forces. Fort Macomb's walls are forty feet

thick, and the roof is many feet deep with turf. There is a moat surrounding the fort, with a drawbridge to give entrance. Although Fort Macomb was built to defend New Orleans, it never saw battle – even through the Civil War. Union troops re-took the fort after the capture of New Orleans, but not before the Confederate soldiers destroyed the guns and burned the wooden structures.

Fort Livingston was built to defend New Orleans against forces attacking from Baratavia, south of the city. It is located on the very island used by Privateer Jean Lafitte for his headquarters prior to the Battle of New Orleans. Although a fort at that location had been planned since before the Battle of New Orleans, actual construction of the fort did not begin until 1840. Like so many other forts in the area, it never saw battle. Confederate forces occupied it for a while, and abandoned it after the fall of New Orleans. In a bit of irony, one of the officers assigned to this fort's construction was P.G.T. Beauregard, later to become a Confederate general.

Battery Bienvenue was constructed in 1815 and was continuously improved over the years. Located at the intersection of Bayou Bienvenue and Bayou Villere eventually the site was occupied by the battery, a parade, a barracks, officer quarters, a guardhouse, and a magazine. The battery was surrounded by a moat and was about 600 feet wide with its armaments pointed straight down Bayou Bienvenue. The battery was abandoned after the Civil War in 1872.

Construction began on the two story hexagonal tower at Bayou Dupre in 1827 and was completed in 1830. As it was surrounded completely by water, it was consistently exposed to storms and thusly its cannons were not mounted until 1833. It had the capacity to mount 24 guns and garrison 50 troops but rarely saw that capacity, usually manned by 3 to 4 troops. It was garrisoned briefly during the Civil War until New Orleans fell. By 1883 however, the tower was deemed useless and was sold.

It was not until the 1840s that Proctor's Landing began to garner attention as a possible invasion route. At Proctor's Landing there was Bayou Yscloskey. The bayou led inland towards the Mississippi River and besides the bayou was a shell surfaced road. New developments in naval architecture had led to more shallow draft steam vessels and as a result, new sites previously considered too shallow for invasion routes were added to the New Orleans defense system. Fort Proctor was added to the list.

The site was surveyed in 1845 by Second Lieutenant Paul O. Hebert and appropriations for the work at Proctor's landing were requested in 1847. They were not allocated, however, for almost ten years due to skepticism over the strength of the overall defense system and issues concerning ownership. Finally in 1856 it was decided that the internal systems development should be continued and 100 acres adjacent to Lake Borgne were purchased from Mary Screven, widow of Stephen R. Proctor, in the amount of \$10,000 and construction began. For three years satisfactory construction was made until halted by a hurricane. When the state seized the fort at the beginning of the Civil War, it was still unfinished.

During the Civil War Fort Proctor served as a minor lookout post and played no significant role. In January, 1865, Captain James Parker, Company C, Seventy-seventh U.S. Colored Infantry, nominally commanded the post, though no troop was garrisoned there. From 1871 to 1872, a caretaker was employed to protect the work and material from depredation. Construction never resumed following the war as a result of armament developments. The strength of rifled cannons and the affect they had on the architecture of masonry made forts such as Fort Proctor, Tower Dupre, etc. obsolete. The fort began to severely deteriorate. By 1915, much of the shoreline had eroded away and the tower stood in the middle of the marsh. The U.S. Department of the Interior auctioned off the fort and land in 1922 to a myriad of owners and since then no improvements have been made except for the riprap armor that surrounds the fort today.

### Site

The architectural significance of Fort Proctor is complimented by the historical site significance. Fort Proctor was originally located on the southern shore of Lake Borgne at the terminus of a road along Bayou Terre aux Boeufs. The road and the bayou both provided access to the city of New Orleans and thusly also potentially provided access for invasion. Even though the fort was never used for its true purpose, its origin and siting as part of the Mississippi River access and U.S. coastal fortification system make it historically significant to the military history of Louisiana and the United States. Each year numerous hurricanes batter the fort such as Hurricane Katrina. In 2005, Hurricane Katrina passed through Lake Borgne and damaged Fort Proctor and the surrounding marsh. The integrity of the fort (structural, material, and detail) is threatened by the deteriorating conditions at the site and it is this contemporary condition that mandates the urgency for this HABS documentation. Presently Fort Proctor sits in Lake Borgne separated from land and preserved from modern development. Because of coastal erosion and repeated storm actions, the marshy landscape that once surrounded the fort is gone. In 1965, the U.S. Army Corps of Engineers dug the Mississippi River Gulf Outlet, allowing for salt water from the Gulf of Mexico enter the lake, creating a brackish salt water/fresh water mixture, ultimately killing off much of the vegetation serving as marshes protecting the fort. Presently there is a rock berm (riprap armor) in place to mitigate wave action, but the future existence of the fort is clearly at peril. It is of the utmost need that this project be documented before it is completely destroyed by future storms and predicted seawater rise.

In conclusion, the significance of HABS documentation of Fort Proctor is threefold: its architectural significance to military fortifications, its historical significance to coastal fortifications, and finally, its perilous condition within the coastal eco-system of Louisiana. If the present predictions regarding coastal land loss and global climate change hold true, Fort Proctor is at risk, at a minimum, of being more severely damaged and at a maximum, completely destroyed and erased. The HABS documentation would create a permanent archive of the structure and would contribute to the legacy and record of Louisiana's coastal built environment and the United States' system of coastal defense fortifications.

## **PART II. ARCHITECTURAL INFORMATION**

## A. General Statement

1. **Architectural character:** The structure used innovative designs for the time including a concrete inner wall structure as well as rolled and built-up iron beams. (P.G.T. Beauregard was one of the first engineers to implement Totten's concept of the concrete fill wall.) The wall is 7' thick with approximately 9" of red brick on each side used for structure as well as formwork for the shell aggregate concrete poured inside. The fort is also unique for its embrasure (loophole) design. General Totten designed the opening size down to less than 10 square feet which was 1/4<sup>th</sup> the size of many European forts. The opening still maintains a wide scope of armament movement, allowing the guns to swivel laterally through 60 degrees.
2. **Condition of fabric:** The current state of the fort is that of a ruin. With walls and beams lying on the ground from continuous exposure to heavy storms and hurricanes, the fort's only stable walls are those on the ground floor. The ground within the fort is a mixture between marsh vegetation and mud. Low water tides expose the mud, where high tides completely cover all dry ground. The foundation is consistently exposed to the brackish water and oysters have nested along the corbel brick base. Surrounding the fort and mostly submerged lie the ruins of the officer's barracks and the surrounding rampart wall. On the top of the walls grow small trees and plants and many marsh animals live among the ruin.

## B. Description of Exterior

1. **Overall Dimensions:** The original drawn plans of Fort Proctor illustrate the structure to be 76' square rising to a height of 44'. The actual dimensions of each side of the structure are 68'2".
2. **Foundations:** According to Beauregard's Annual Report of 1856, the foundation for Fort Proctor consisted of a sequence of cypress piles below the battery walls and the end towers. After the piles were driven a "unique tri-level grillage" was laid. The walls rose from stepped pyramidal base and, because of their extreme thickness and tremendous weight, were buttressed at the foundations with reversed arches.
3. **Walls:** The outside of the walls is made of red brick laid in a Flemish bond pattern. The walls are approximately 7' thick with 9" of brick on each side making up 18" of the seven feet. Inside the brick is a shell aggregate concrete mixture used for both structure and protection. Along each elevation there are numerous pierced gun openings called embrasures or loopholes. The first floor loopholes were for musketry, nine on the northwest, six on the southeast and northeast, and four on the southwest (entrance.) The second level of the walls had seven loopholes on the northwest, six on the northeast, seven on the

southeast, and five on the southwest. There are also large contained openings for eight artillery pieces, two per side on the second floor.

4. Structural system, framing: The structural system for the first floor is shell aggregate concrete with bricks on both exteriors, which were used for both formwork as well as protection. To support the second floor, J.G. Totten and P.G.T. Beauregard used rolled iron beams. The beams are 18" deep and are composed of 2 "I" shaped sections joined by a 6" plate riveted to either side. It is similar to an I-beam. The beams' intended role was to provide stability to the upper floor loads; however, without ever starting construction on the second level, the beams have slowly deteriorated due to the iron being constantly exposed to the environment. Now the beams are slowly beginning to fall while rust and other elements destroy the structural integrity of the members.
5. Chimneys: Each floor was designed to have four fireplaces in the corner columns. Both the first and second floor fireplaces share a diagonal flue, which exits the building through the 7' thick corner walls.
6. Openings:
  - a. Doorways and doors: There is a large main doorway on the entrance that is located on the southwest wall. It has a granite pediment in which is carved the date 1856. No doors are present, but a granite sill step is located below water. In the blast room, two arched openings are present. Both were designed by Totten to have wood doors. None are present.
  - b. Windows and shutters: There are no windows, but openings that were used for guns, called embrasures, have granite sills and lintels. These embrasures have arched openings, which allowed for use of weaponry if ever under attack. The sills are carved to drain to the outside and also have three iron bar holes in them. These were most likely for the iron shutters proposed in the design.
7. Roof: No roof was ever constructed.

### C. Description of Interior

1. Floor Plans: The floor plan on the ground floor contains a central hall running from north to south that opens to five rooms separate rooms.
2. Stairways: The only remnants of a stairway are a few steps on the second level ascending to the third level that was to be built. The stairs are granite and were meant to have a decorative iron rail attached to them.

3. **Flooring:** There is no floor present. Silt, mud, marsh vegetation, rubble, and water cover the ground floor. When tides are high water covers all ground.
4. **Wall and ceiling finish:** Ceilings are not present. All walls have a red brick finish. There are some conditions where bricks are missing and shell aggregate concrete is visible.
5. **Openings:**
  - a. **Doorways and doors:** There is a large, main, arched, doorway with granite trim that is located in the southwest wall. It is the only entrance into the fort. The only other doorways present are those that enter the blast room (powder magazine room.) They are also arched and have granite sills that are consistently submerged. There are no doors present.
  - b. **Windows:** There are no windows, but openings that were used for guns, called embrasures, have granite sills and lintels. These embrasures have arched openings, which allowed for use of weaponry if ever under attack. The sills are carved to drain to the outside and also have three iron bar holes in them. These were most likely for the iron shutters proposed in the design.
6. **Decorative features and trim:** Maine Granite is used for the embrasure sills and lintels and also on the second floor stair treads leading to the third floor. Wood trim details were on the design drawings but were never built into the building. The base of the building is a large brick corbel, which extends out about four feet. As you walk into the front entrance, the corbel base stops as it meets a granite pediment. A soldier patterned brick archway surrounds this pediment and entrance. All arches at the embrasures and blast room doors are soldier brick.

#### D. Site

1. **Historic landscape design:** In 1856, when construction began, the site of the fort was one hundred and fifty-feet inland with levees protecting the land from Lake Borgne's waters. The fort was designed to sit in a moat with outhouses surrounding the outer terreplain wall. When Hurricane Five crossed Louisiana's coast, construction halted. After the hurricane, changes in marsh sizes were visible, though not extreme. Before construction could resume, confederate soldiers blew the levees allowing for water to move its way into the fort and its site. The site of the fort sat stagnant for 109 years. In 1965, the U.S. Army Corps of Engineers dredged the Mississippi River Gulf Outlet between the site of the fort and Shell Beach. Since then, the salt water from the Gulf of Mexico has slowly eroded away the land. Now Fort Proctor is currently 230 feet off the coast into Lake Borgne.

2. Outbuildings: No outbuildings are present, however, ruins of the foundation of the surrounding outbuildings can be found by the riprap armor surrounding the fort, which is usually covered by water during high tide.

### **PART III. SOURCES OF INFORMATION**

#### A. Architectural Drawings

Tulane University of Architecture. Fort Proctor, Stabilization and Master Plan. New Orleans, LA: Tulane University of Architecture Coalition, 1982.

Beauregard, G. T. (Gustave Toutant), Fort Jackson engineering sketches, 1841-1843, 1856. Special Collections, Hill Memorial Library,

#### B. Early Views

Photographs of Fort Proctor, 1977. Louisiana Department of Culture, Recreation, and Tourism, Office of Cultural Development, Division of Historical Preservation. Application file for National Register of Historic Places (1978).

#### C. Bibliography

Tulane University of Architecture. Fort Proctor, Stabilization and Master Plan. New Orleans, LA: Tulane University of Architecture Coalition, 1982.

Totten, Joseph Gilbert. Report of General J.G. Totten, Chief Engineer, on the subject of national defenses. New York: Arno Press, 1979.

Casey, Powell A. Encyclopedia of Forts, Posts, Named Camps, and Other Military Installations in Louisiana, 1700-1981. Baton Rouge: Claitor's Pub. Division, 1983.

Greene, Jerome A. Special History Study: The Defense of New Orleans 1718-1900. Denver, CO: United States Department of the Interior, 1982.

Robinson, William B. "North American Martello Towers." The Journal of the Society of Architectural Historians. p. 158-164. Vol. XXXIII, No. 2, May, 1974.

#### D. Likely Sources Not Yet Investigated

Original drawings from the Library of Congress Archives of Plans, Sections, Elevations & Details of Tower at Proctor's Landing La. (Drawn under direction of Col. J.G. Totten, by LT. H.G. Wright April 1846 and under the direction of Gen. G.T. Beauregard by Godfrey Weitzel Lt. U.S. Engrs.)