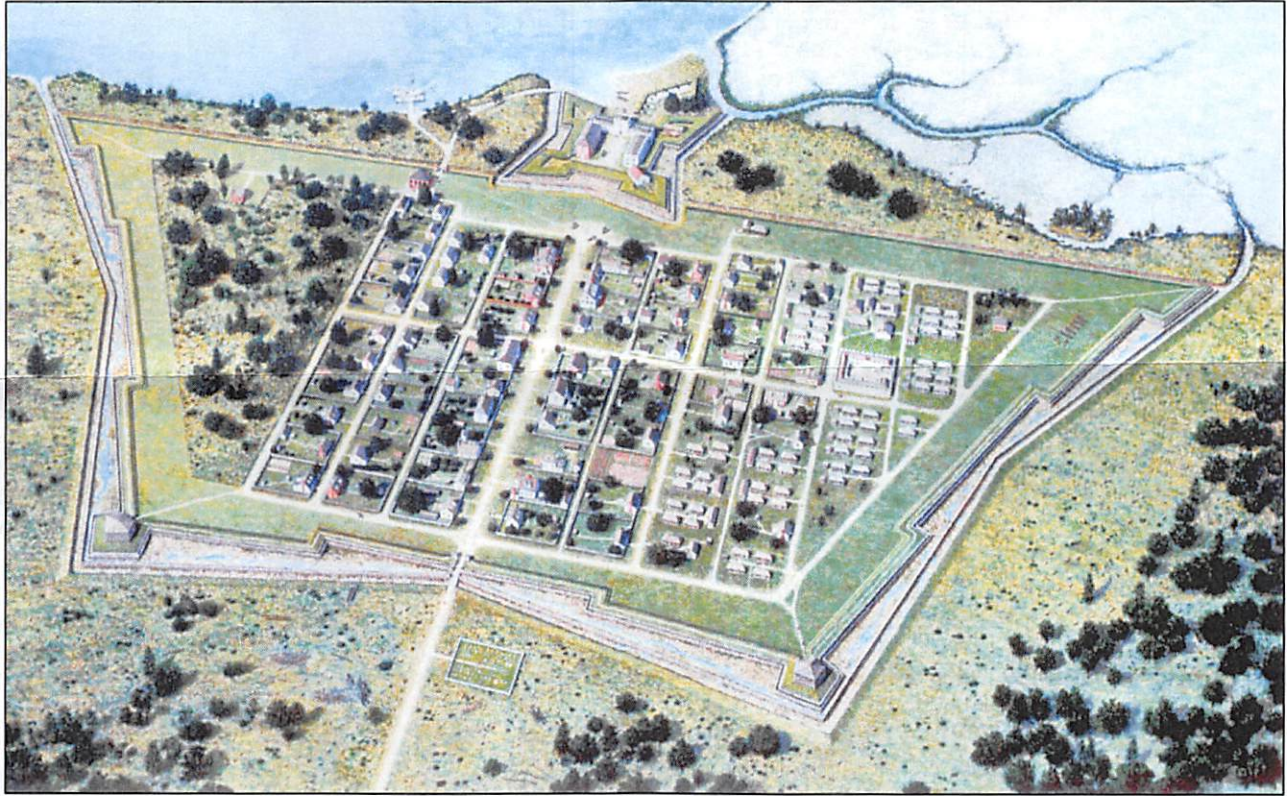




What is an Earthwork? Forts and Fortifications



Oglethorpe's Fort Frederica

On February 18 1736, the first settlers of General James Oglethorpe's fortified town of Frederica arrived. Frederica was to serve as Britain's southernmost bulwark against the Spanish located at what is now St. Augustine, Florida. The original plan for the fort was drawn in 1736 by Swiss engineer Samuel Auspourger and the first structures built were the fort's walls and interior buildings (such as the Kings Magazine). The fort walls consisted of earthen ramparts covered with sod, and a

~~under-saliente constructed within the post. Formed by the removal~~

Classical Design

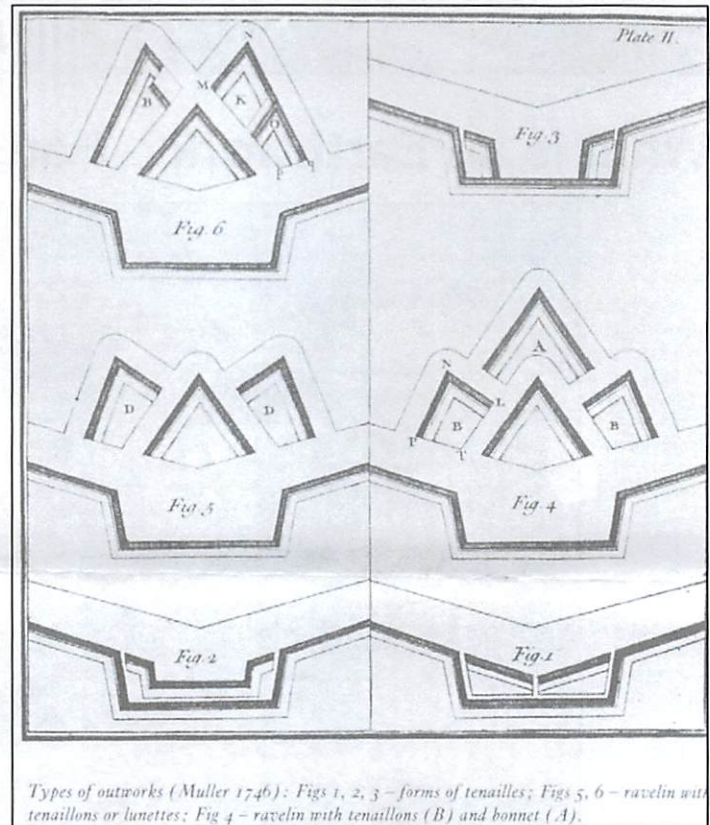
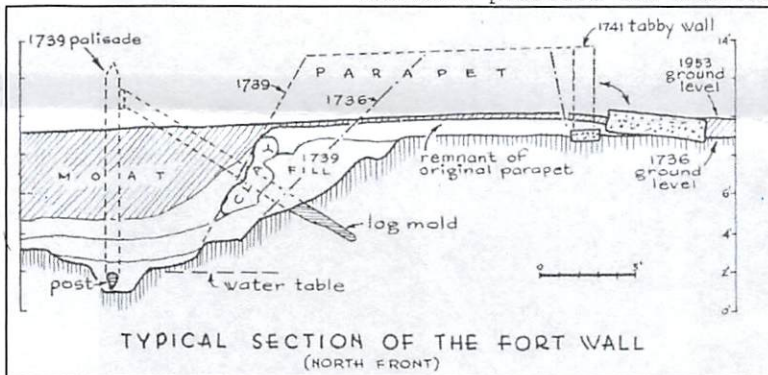
The elements of fortification are based on creating differences in elevation (ditches and walls) to the advantage of the defender and detriment of the attacker. From these two features a whole series of defensive works are employed. Typical 18th century design begins with a square enclosure (although other geometric shapes were used) of earth, stone, brick or logs. At each corner is placed an angular projection call a bastion. Bastions allow defenders to maximize their firepower and eliminate 'dead ground.'

Beyond the fort wall existed ditches and outer works. Meant to befuddle attackers and deflect artillery the



A Look at Forts in the Age of Vauban

During the eighteenth century (1700's) forts, fortifications and siege warfare were considered an art form. Military engineers took great pride in the development and design of forts and conversely in their ability to destroy them. The chief engineer to the French court, Sébastien le Prestre de Vauban (1633 - 1707), improved the classic design of forts during the Age of Enlightenment. He and his counterparts like Dutchman Menno van Coehoorn developed 'systems' which became standard practice for military



Types of outworks (Muller 1746): Figs 1, 2, 3 - forms of tenailles; Figs 5, 6 - ravelin with tenailles or lunettes; Fig 4 - ravelin with tenailles (B) and bonnet (A).

Oglethorpe's Plans for Defense

Oglethorpe chose the location for Fort Frederica based on several criteria. First the location sits on a bend in the Frederica River, giving it the advantage when facing enemy ships that would be forced to slow their vessels and make a hard turn exposing themselves to a galling fire from the forts batteries. Secondly, the site was an old Indian field and was largely cleared, as it had been the location of a Guale village prior to its abandonment.

The placement of Fort Frederica placed

The town itself was fortified in a similar manner to the fort, with a large earthen rampart, wooden palisade, and moat. The present height of the earthworks is misleading as archaeological evidence interprets taller embankments nearly five feet high when standing in the rear ditch. Blockhouses were placed in each bastion capable of housing up to 100 men.

Unlike today, the area outside the town walls would have been kept clear of vegetation, for up to 150 yards.

Fort Frederica in Battle

Fort Frederica would see its only action in June 1742, when a Spanish flotilla of 36 ships set sail towards St. Simons Island. After the British victory at the Bloody Marsh, Spanish Governor Manuel de Montiano sent a squad consisting of a large galley and two half galleys up Frederica river to test the forts defense and to see if they could force a passing of the fort. This small fleet

Oglethorpe's Plans for Defense

Unfortunately for Fort Frederica, much of its original defenses are gone; reconstructed earthworks and restored buildings recreate the scene for our visitors. In some places throughout America there can be found original forts and defensive works with some protected as historic sites. And yet these are still under siege through the ravages of time and visitor

What can you do to protect these historic resources? Stay on designated paths and avoid "social" trails through earthworks. Ward off the temptation to climb fort walls and earthworks. For added safety stay away from sharp drop-offs and closed areas within and around forts. All this helps to minimize the effects of erosion and keep these resources