

Fort Howell Management Plan

Hilton Head Island Land Trust

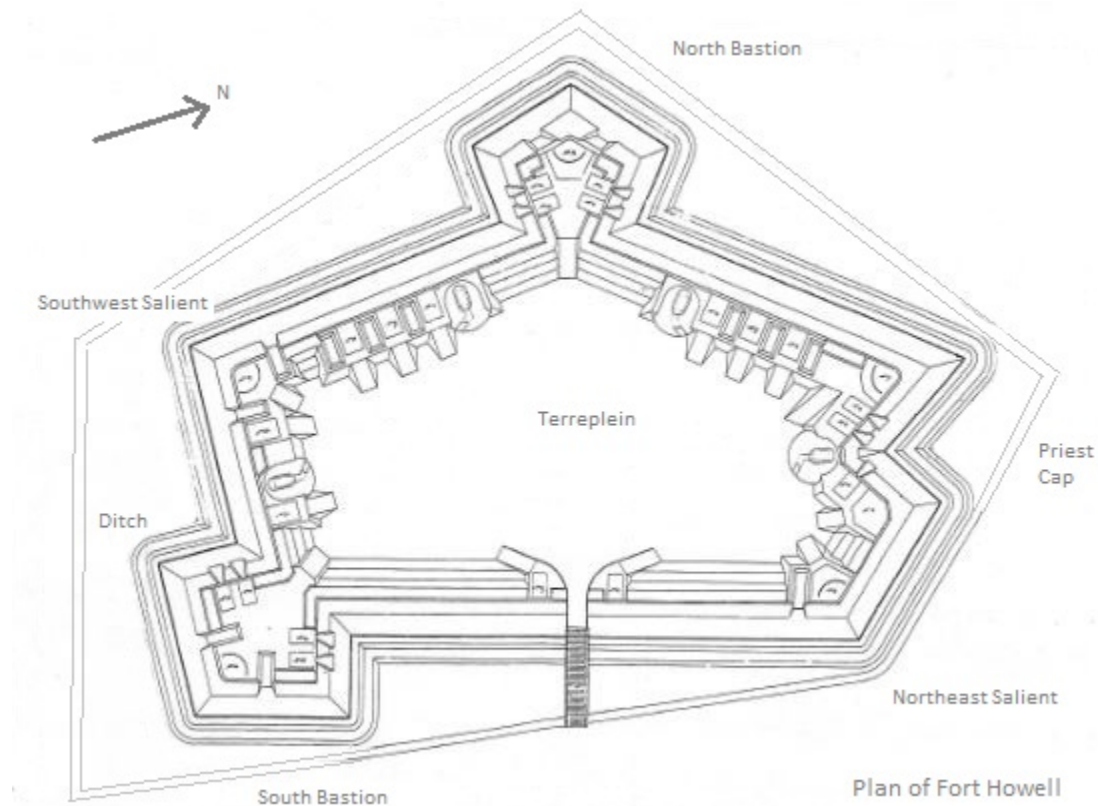
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PLAN OF FORT HOWELL



1.0 Executive Summary

The Fort Howell site, which encompasses 5.5 acres, is situated on the north end of Hilton Head Island and is bounded to the west, north and south by Palmetto Hall Plantation and to the east by Beach City Rd (S.C. 333). It is owned by the Hilton Head Island Land Trust and consists of the original civil war fortification built in 1864 by the Northern Army. It is recognized as one of the best remaining and preserved earthen forts of this era. The Fort was designed as a quadrilateral redoubt surrounded by a protective ditch or dry moat.

Today it is completely covered with vegetation consisting of oak trees, sweet gum, pine trees, blueberries, green briars, palmettoes, and various other underbrush (See Map 1 in the Appendix). The tree canopy and understory have allowed the fort to be so well preserved for these 155 years. The vegetative cover must be managed in a strategic way, especially where it exists on the earthworks and ditch.

The site has been developed by the Land Trust as an historical visitation site. To this end it has a parking lot, some interpretive signage, various paths, and an informational kiosk.

Restrictions on the property include those held by the South Carolina Battlefield Preservation Trust, Town of Hilton Head Land Use Regulations and deed restrictions.

This plan has been developed to improve and maintain the site as an historical site for the benefit of the public and to protect the natural and historical elements of the property. The underlying concept for the site is to make it hospitable to visitors so that they can interpret and visualize the site and take self-guided or guided tours while protecting and preserving the earthen structures that comprise the fort.

2.0 Background

2.1 Acquisition - Prior to 1991 Fort Howell was owned by the Greenwood Development Corporation, which subsequently developed Palmetto Hall Plantation, a gated residential community now adjacent to the fort. In 1991, Greenwood deeded 4.1 acres of land surrounding Fort Howell to the Hilton Head Island Land Trust for the purpose of passive use and preservation of the natural resources.

In a second deed, dated 1992, Greenwood Development gave the Land Trust an additional 1.4 acres under the same conditions as the 1991 deed. This additional land provided complete ownership of Fort Howell's earthworks to the Land Trust.

2.2 Historical Background - Hilton Head served as the headquarters for the Union Army's Department of the South. As action in the region diminished during 1864 the number of forces at Hilton Head was dramatically reduced as troops were shifted to other fronts. This left

troop strength at Hilton Head so low by the spring of 1864 that there was fear that the post might no longer be secure. Therefore, steps were taken to improve the defenses of Hilton Head. One area of concern was the freedman's village of Mitchelville. An entirely new work was erected south of Mitchelville, called Fort Howell. That August the newly arrived 32nd United States Colored Troops began working on the construction of the fort. There is good evidence that the fort was constructed in an area of cleared land, either a fallow cotton field or land recently logged, located at the very edge of Mitchelville. The new fort was named Fort Howell in honor of General Joshua Howell, who was killed at the Battle of Richmond.

Fort Howell is an example of a relatively permanent fortification constructed of earth. It was designed as a four-sided redoubt with two bastions and surrounding ditches. The fort provided coverage for the most likely approaches to Mitchelville along the two roads leading to the village from the southwest. At the north side of the fort was a modified priest cap, designed to provide crossfire on advancing enemy troops. The entrance to the fort was across the ditch over a wooden bridge leading to the interior. Located on the southeastern face of the fort, the entrance looked back toward Mitchelville, the side viewed as the least exposed area of the fort to enemy advancement.

Once the war ended, the remaining Union Army troops and much of the military equipment were quickly removed. Fort Howell was abandoned without ever having seen action. The disengagement left Mitchelville and its occupants on their own, allowing them to develop their own culture and way of life, with Fort Howell serving as a backdrop.

3.0 Existing Conditions

3.1 Topography and Soils - Topography in the vicinity of Fort Howell is relatively flat but has been significantly altered by the development of Palmetto Hall. Adjacent to Fort Howell today is a golf course as well as single family houses. The soils in the site area are the Wanda Series, which consist of excessively drained, rapidly permeable soils formed in thick sandy coastal plain sediments.

3.2 Vegetation- The fort is generally overgrown with trees and underbrush throughout. In the vicinity of Fort Howell oaks are the dominant type of tree, with occasional specimens of sweet gum. Pines form a sparse super canopy. The forest floor is largely covered with either oak leaves or pine needles. In a few areas the sub-canopy includes blueberries, greenbriers and palmettoes, but the predominant growth, particularly within the fort walls is a thick growth of small oaks and pines. Where the canopy has been opened, the vegetation reflects the increased sunlight, the very permeable soils and the surface is either limited to leaf litter or is characterized by broom straw, sandspurs, or other grasses.

3.3 Parking - The parking lot is a small unpaved lot with spaces for 8 automobiles and a bicycle rack that can hold 8 bikes. School or tour busses can drive into the parking lot but must back up to turn around before leaving the site. The lot is accessible directly from Beach City Road. The surface of the parking lot is comprised of fine mulch and soft sandy soil that becomes muddy and rutted after it rains. (See Photo 2 in the Appendix). The lot is too small, especially when tours are present, and needs a competent permeable base to support vehicles regardless of the weather.

A request for a grant from the Town of Hilton Head Island (TOHHI) Accommodations Tax (ATAX) was submitted and approved. Work to remedy the above problems will be addressed in 2021.

The entrance driveway and a small portion of the front of the parking lot are owned by Palmetto Hall and used by the Land Trust under an easement agreement.

3.4 Pathways – There are multiple paths on the site, created both by the Land Trust and by visitors who have walked throughout the site without direction or restraint.

3.4.1 A path leads from the Parking lot to the informational kiosk (Photos 3 and 4). This path is surfaced with some grass and bare soil that becomes soft and somewhat muddy after rain. At a narrow point along the path an optical scanner has been installed to keep count of the number of visitors.

3.4.2 From the kiosk, there is a path that leads across a “bridge” that lies directly on fill across the ditch and thence into the fort interior and up a slope to the North Bastion (Photos 5 and 7). The surface is on the original floor of the fort interior and slope leading to the top of the wall. Much of this path has been worn down to bare soil. This path has ropes along a portion to discourage visitors from leaving the path and walk along the tops of the fort walls (Photo 5).

3.4.3 Another path was constructed during the summer of 2020 using funds provided by the TOHHI under an ATAX grant. The surface consists of broken concrete and demolition materials that were laid directly on top of the existing soil, thereby avoiding any disturbance or excavation of the original surface (Photo 8). This is a perimeter path that starts from the bridge and runs partially along the outside of the ditch and then drops into the ditch at the point where there is no available property beyond the outside edge of the ditch. The path runs about halfway around the fort to a point opposite the North Bastion where it now ends. At the end of the trail, it is apparent that some visitors climb up the fort wall, wearing down a path that can be subject to erosion (Photo 10). Continuation of the path completely around the fort would eliminate the desire of visitors to climb up the walls of the fort.

3.4.4 There are additional paths that have been created by visitors who have walked across the fort where dense vegetation allows, particularly along the tops of the walls of the fort. These are all on original soils and create the potential for erosion (Photo 11).

3.5 Ditch Works - Over time the interior and exterior sides of the ditch have eroded to a natural slope (Photo 9). Beyond approximately the northeast salient the perimeter chain link fence, marking the property line with Palmetto Hall, runs at the top edge of the exterior slope of the ditch, leaving no room for the path outside of the ditch. This condition changes at approximately the southwest salient where the perimeter fence and property line drop into the ditch forcing any perimeter path into the ditch. An 8-foot solid wood fence that parallels Beach City Road crosses into the ditch near the South Bastion. Outside this fence, years ago fill was placed in a portion of the ditch for the construction of a paved public walking path and the road (Photo 12).

From the bridge northward and around to about the North Bastion, the ditch is generally clear of heavy vegetation with a scattering of light underbrush and small trees. However, past the North Bastion the vegetation is very heavy with thick underbrush and larger trees making walking very difficult to impossible.

3.6 Earthworks, Bastions and Walls - The earthen structures of the fort include the North and South Bastions, a Priest Cap at the north end of the fort and curtain walls between these structures. The walls enclose the floor of the fort, or terreplein. Almost all structures have eroded to a natural slope since abandonment about 155 years ago. A few areas of the interior of the earthen structures have been identified as having some remnants of the interior defensive structures, particularly along the ramparts between the North Bastion and the southwest salient. All the walls and the terreplein are overgrown with trees and underbrush, and there are several paths leading up to and on top of the walls.

3.7 Structures – There are a number of large and small structures that have been placed around the site over the years to aid visitors in understanding the historical context and to direct people around the site.

3.7.1 Informational Kiosk – Along the path from the parking lot to the entrance of the fort is a kiosk and four benches. The kiosk has placards that explain the history of the fort and its context. It is the focus of information and a setting for presentations about the fort and its history. There is also a display of a replica of the flag that would have flown over the fort at its time of completion.

3.7.2 Bridge - At the time of original construction, there would have been a bridge spanning the perimeter ditch for access into the fort. At some point in the past, this portion of the ditch was filled and the Land Trust subsequently constructed a replica of the bridge consisting of boards laid on the soil surface together with posts and ropes.

3.7.3 Statues – Over the past few years, several metal figures have been added to the site, along with signs to explain what each represents. The statues, created by a local artist, are painted to represent both historical figures and ordinary soldiers, and all add context to the site.

3.7.4 Fences – Surrounding the property on three sides is a chain link fence that is owned and maintained by Palmetto Hall and marks the property line of the site. The fourth side, along Beach City Road, is marked by an 8-foot green wooden fence that blocks views and reduces some noise from the road intruding into the fort (Map 1). At the south end of the property, a portion of the chain link fence was damaged by a recent hurricane and recently abandoned by Palmetto Hall. This portion of the fence was replaced by a similar fence further removed from the fort. A portion of the original fence dropped into the ditch, but the new fence has been moved out of the ditch.

Rope fences have recently been added along the pathway between the entrance to the fort and the North (Photo 5). These have been added to try to better limit access by visitors to the tops of the walls and the Bastion itself.

3.7.5 Parking Lot – The parking lot has a number of smaller structures including a bike rack that can hold eight bikes, waste containers to be used by visitors and a tall flag pole displaying both the United States and South Carolina flags. Two additional bike racks and about 19 additional parking spaces will be added under a grant awarded by the TOHHI ATAX grant program. These will better accommodate the many bike tours that stop at the fort as well as motor vehicles.

3.7.6 Other Minor Structures - Other minor structures have been added including a box that contains information about the fort that can be taken by visitors as they view the structures of the fort, a box containing a book to collect comments by visitors and a memorial bench for visitors to rest.

- 3.8 **Signage** - There are two types of signs at the site: directional and informational. There are signs directing visitors to the fort and the North Bastion and reminding visitors to not climb the walls. Informational signs exist at the parking lot, along the path from the bridge to the north bastion, at the kiosk and at the base of each statue giving both broad history and specific details about people, construction and the purpose of the fort (Photos 1, 6 and 13).

4.0 **Management Plan**

4.1 Goals - The primary goals of this plan are to protect the basic conservation and historical integrity of the site, make the site hospitable to visitors so that they can interpret and visualize the site as they take self-guided and guided tours and provide information to explain the construction and history of the fort and the relationship to Mitchelville.

To fully achieve these goals some vegetation will have to be removed or thinned out, stabilized pathways have to be established and additional informational signs added, all done with sensitivity to the earthen structures. Additional informational signs will be placed along the path around the fort explaining the various components of the fort and its relationship to the surrounding area. Well maintained access paths should be constructed for easy walking so that people can walk completely around the fort. As a conservation site, additional signage could be added to inform about such existing features as shrubs and trees, as well as wildlife.

4.2 **Threats**

4.2.1 The future structural integrity of the fort is threatened by damaged, diseased or poorly located trees that could ultimately fall. The roots could pull up the soil compromising the earthen structures.

4.2.2 There are a number of paths through and around the fort, primarily along the tops of the walls, that threaten its stability and integrity and can lead to erosion. Many of these paths should be blocked from public use or improved to withstand such use. Paths should be clearly marked and

if necessary, those not approved should be also marked by signage as not for access.

4.2.3 The Land Trust has limited funds to maintain and improve the property.

4.3 Plans by Area

4.3.1 Parking - The parking lot needs to be expanded to better accommodate cars and busses. A more solid base needs to be installed to prevent erosion of the lot itself. An application was submitted to the TOHHI for an ATAX grant and approved for additional improvements to the site. The principal request is to upgrade and improve the parking lot to better accommodate vehicles used by visitors who come to the site.

The new surface will use coarse materials such as recycled, crushed concrete to form a strong base and stabilize the surface. While the new surface would be firm, an additional grant may be sought in the future to finish the parking lot with "Plantation Mix" a finer-grained sand and stone product that will provide a smoother surface and improved appearance.

4.3.2 Pathways - The path from the parking lot to the informational kiosk, as well as from the kiosk to the entrance to the fort, should be clearly defined and stabilized to support foot traffic and occasional maintenance vehicle traffic, without causing damage to the existing soils. This would require treatment similar to the parking lot but would not have to be able to support as much or as heavy vehicle traffic. The extension of the path from the bridge to the North Bastion needs to be stabilized to avoid potential erosion where bare soil is exposed. Coarse mulch, such as bark chips, could be placed on the path to reduce or eliminate wear on the original soil surface.

The new path that extends halfway around the outside of the fort needs to be extended to completely circumnavigate the fort. The design and material should be the same as the existing path. This will require removing and thinning the dense vegetation that extends along the west wall of the fort south of the North Bastion. In addition, precautions will have to be made to avoid having foot traffic directly on the toe of the South Bastion where the perimeter wood fence is very close to the toe.

- 4.3.3 Interior of the Fort and Fort Walls – The underbrush and small trees within the walls of the fort, as well as the walls themselves, are so heavy that views of the fort interior are very limited. When vegetation is thinned or removed, it will be done in a manner to limit any disturbance to the ground cover plants and the leaf litter that protects the soils. When vegetation is thinned or removed on the earthworks, the work must be done by hand. The remaining trees and ground cover will continue to stabilize the floor and wall structures. The result will be improved visibility of the fort, which will help visitors understand the scale and construction of the fort. This will be a significant effort because it has been at least 25 years since the fort's interior and walls were last thinned of such vegetation.
- 4.3.4 Structures – There are currently no plans for additional structures on the site. However, the former fence that has been abandoned adjacent to Palmetto Hall should be removed both for appearance and to provide additional access for completion of the perimeter path around the fort if permission is obtained from the operator of the golf course.
- 4.3.5 Signage – Additional directional signs will be needed as new paths are completed, especially to advise visitors to stay on the paths and off the fort's earthen structures. Informational signs are to be added as paths are extended to explain the nature and history of the structures in view. Signs providing historical information can also be provided

to emphasize the relationship of the fort with Mitchelville. To further put the site into context a self-guided tour could be taped and made available through QR codes or other means such as NFC codes and made available through a visitor's cell phone.

- 4.3.6 General Site Enhancements – Additional structures, placed close to the kiosk, could be constructed for additional historical exhibits. These could include historical artifacts previously removed from the site during archaeological studies or other sources. These artifacts are currently in storage at various facilities in Hilton Head. Also, a mural or a scale model of the original fort would be very instructive to help visualize the site and the fort's relationship to Mitchelville and the surrounding area.

To help visitors understand the features of the fort, and as they tour the site, a video is being prepared that will be made available either through QR codes or other means by visitors using their cell phones.

- 4.3.7 Irrigation - For long term maintenance of the site, water should be available for drip-irrigation of new trees as required as well as cleaning of structures. There is water currently nearby used by Palmetto Hall for irrigation. Arrangements are being made for long term availability of water from this system. This may require a separate water meter and additional piping.

4.4 Priorities

- 4.4.1 Completion of the Perimeter Path - This will involve tracing out a route for the path and having it inspected to assure avoidance of trees forming the canopy. In addition, engineering will be needed to design a structure over the toe of the South Bastion to avoid walking directly on the earthworks. A grant will be sought for this next year (2021) for work to commence in 2022.

- 4.4.2 Parking Lot – Fund approval to improve the parking lot has been received. The current plan is included in the Appendix. Review by the TOHHI will be required as well as final engineering and bid letting. This work is planned to start early in 2021.
- 4.4.3 Path to the North Bastion – Coarse mulch should be placed on the path leading from the bridge to the North Bastion. This work could be done using any surplus funds from existing grants and done by volunteers. This work may be started as soon as 2021.
- 4.4.4 Thin or Remove Vegetation – As the perimeter path is extended around the fort, brush and understory vegetation must be removed along the route of the path. To provide better views of the fort, vegetation should be removed or thinned between the path and the fort. All work on the vegetation will follow established guidelines to protect the stability of the earthworks. This work must be done by hand and will be done by volunteers. This work on the vegetation will be done primarily during 2021.

To provide better views of the fort to visitors, and to help them see the nature and extent of the fort, low brush and saplings within the walls of the fort will be trimmed or removed. All work on the vegetation will follow established guidelines to protect the stability of the earthworks. This work must be done by hand and will be done by volunteers. This work on the vegetation will be initiated during 2021 and continue as needed.

- 4.4.5 Path from Parking Lot to Kiosk – This path should be more clearly delineated and the surface stabilized. Funds for this work will be sought in 2021 for work to commence in 2022.

5.0 Maintenance Plan

5.2 Weekly

- 5.1.1 The site should be policed weekly with all garbage and other refuse collected and removed for disposal
- 5.1.2 The paths and bridge should be examined to insure they are in good repair. Any problems should be addressed immediately to assure public safety.
- 5.1.3 Structures such as the kiosk or benches should be cleaned and swept of cobwebs.

5.2 Monthly

- 5.2.1 Landscaping services need to be conducted at least monthly to trim grass, weeds and small brush around the parking lot and along the paths.
- 5.2.2 All vegetation on the site should be inspected, dead trees noted and scheduled for removal and injured trees noted. After any major storms, vegetation should be checked for damage.
- 5.2.3 Signage should be inspected to assess conditions and any need for replacement or repair.

5.3 Semiannually

- 5.3.1 The parking lot and all paths should be examined, and any potholes or other damage noted for repair.
- 5.3.2 Dead tree limbs should be pruned back, and dead trees removed. All vegetative debris should be removed from the site.
- 5.3.3 The gate should be inspected, and any preventive maintenance completed.
- 5.3.4 The entire fence around the site should be walked to verify that the fence is intact.

5.4 Annually

The ditch, terreplein and walls should be thinned of new or growing vegetation that would lead to reduced access and visibility of the site.

6.0 References

American Battlefield Trust, A Glossary of Fortification Terms, <https://www.battlefields.org/learn/articles/glossary-fortification-terms>

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National Parks Service, 1995, Guide to Sustainable Earthworks Management, <https://www.nps.gov/tps/how-to-preserve/currents/earthworks/introduction.htm>

SC Battleground Preservation Trust, 2014, Fort Howell; Initial Site Assessment & Preservation Recommendations.

SC Department of Archives and History, 2011, National Register of Historic Places Registration Form

7.0 Glossary of Terms

Bastion: A fortification projecting outward from the curtain. Bastions were designed to prevent attackers gaining shelter from the defenders' fire.

Ditch: The deep trench dug around each earthwork. The ditch was typically in front of the fortification, but some advanced works had the ditch built behind the raised surface.

Earthwork: A field fortification constructed out of dirt. An earthwork could be a mound but typically consisted of a ditch and a parapet.

Fort: A fully enclosed earthwork.

Priest Cap: Two redans placed adjacent to one another to provide enfilading fire.

Redoubt: An isolated completely enclosed space of any form used to defend a prominent point.

Salient: The portion of a fortification jutting out toward the enemy. Can be vulnerable points because they can be attacked from multiple direction. They are nevertheless constructed to link already entrenched positions, to provide enfilading fire, or to follow the natural terrain contours.

Terreplein: The level space behind a parapet of a rampart where guns can be mounted. The floor of an earthen fort.

8.0 Appendices

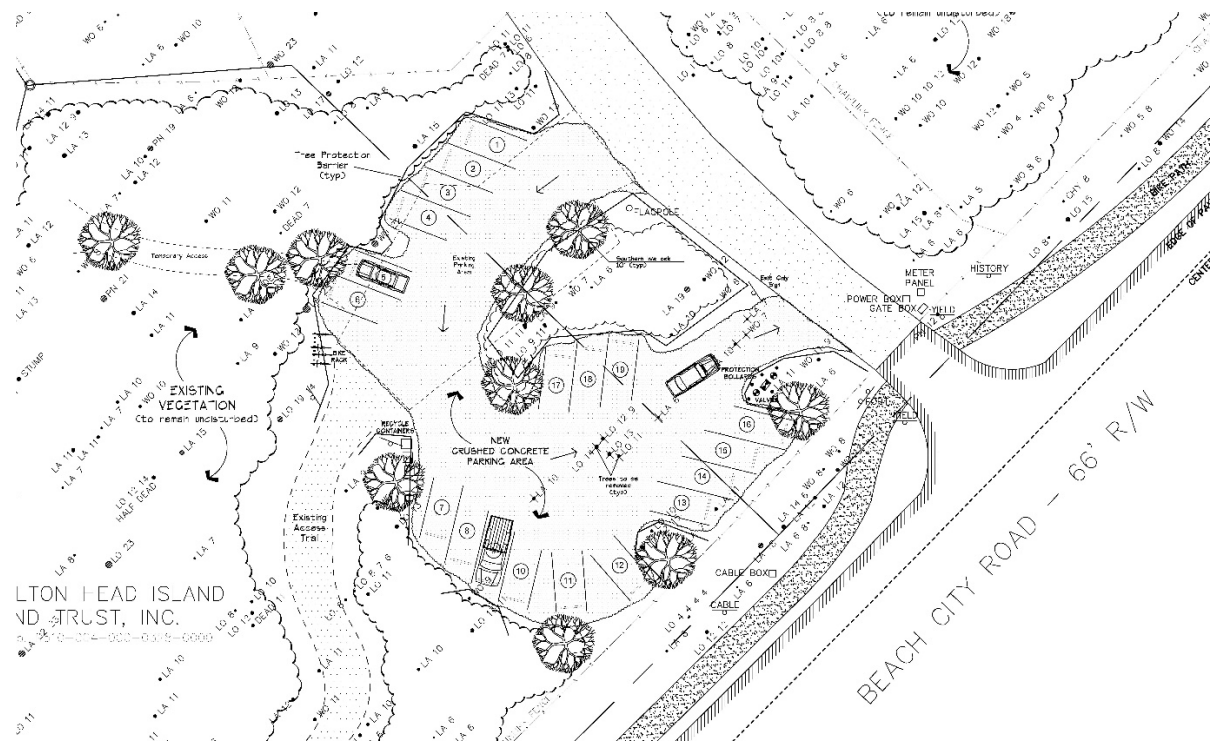
8.1 Maps

Topographic Map of Fort Howell



Map 1. The white line marks chain link fence and approximate property line with Palmetto Hall. The green line marks 8-foot-high barrier fence along Beach City Rd. The area in red is the access to the site used under an easement from Palmetto Hall. Trees and understory vegetation cover the entire site.

Proposed Parking Lot Improvements



Map 2. Proposed expansion and improvements to the parking lot.

8.2 Photographs



Photo 1. Metal sculpture at entrance to site of soldier pointing visitors toward Fort Howell.



Photo 2. Parking lot surface and start of path to Fort from the parking lot.



Photo 3. Path from parking lot to flag and kiosk.



Photo 4. Flag and information kiosk.



Photo 5. Bridge over ditch and entrance to fort.



Phot 6. Sculpture and information about the fort inside the entrance.



Photo 7. Continuation of entrance path to the North Bastion.



Photo 8. Start of new perimeter path to the right and the path over the bridge to the Fort on the left.



Photo 9. View of ditch outside the NE wall and the perimeter path to the right.



Photo 10. Current end of the perimeter path showing the new path up the wall to the North Bastion.



Photo 11. Path worn by visitors along the top of the SE wall.



Photo 12. The approach of the toe of the South Bastion to the barrier fence.



Photo 13. Sculpture of Harriet Tubman, linking Fort Howell to Mitchelville and the Underground Railroad.