Skidaway Institute of Oceanography

Introduction

The University of Georgia's Skidaway Institute of Oceanography is an internationally renowned marine science research facility located on a 700-acre campus at the northern end of Skidaway Island. The island falls between the Skidaway and Wilmington rivers approximately 16 miles southeast of Savannah, Georgia. The Institute works in collaboration with oceanographers throughout the world to study the oceans. The Institute campus edges the Skidaway River, which provides access to a diverse range of estuarine and coastal habitats. Scientists have at their disposal a fleet of sea vessels suitable for oceanographic work and research in estuarine and continental-shelf waters throughout the southeastern Atlantic and Gulf coasts. The Institute also features state-of-the-art salt- and freshwater research facilities and laboratories, and interdisciplinary and internationally recognized faculty that are enjoyed by visiting scientists and students alike.⁶⁹⁵ Approximately fifteen faculty members and 100 technicians, students, and support personnel are involved in the work being conducted in the laboratories and the saltwater and freshwater experimental facilities. The Institute's mission entails furthering the understanding of marine and environmental sciences; conducting leading-edge research on marine and coastal systems; and training tomorrow's scientists. Research being conducted at the Institute ranges in scale from regional environmental issues to global processes and phenomena.⁶⁹⁶ MAREX is a program of public outreach. Its mission is to develop the public's understanding and appreciation of the numerous coastal marine environments in the state of Georgia and to foster respect for the beauty and complexity of these environments. The Institute's outreach efforts focus around the University of Georgia Marine Education Center and Aquarium, also located on the island, which is open to the public.

The Skidaway Institute of Oceanography was established in 1967 by the Georgia General Assembly as a place to conduct research in all fields of oceanography and marine science, based on a proposal presented in 1966 by the Georgia Science and Technology Commission that recognized Skidaway Island for ". . . its close proximity to an important metropolitan center, its sheltered location on natural deep water channels, its convenient access to the open sea, its strong aesthetic appeal, and its virtually virgin state."⁶⁹⁷ The Institute occupies the site of the historic Modena Plantation, a property developed by the Roebling family during the mid-1930s through the mid-1960s. Robert C. Roebling and family and



Figure 588. Emblem of the Skidaway Institute of Oceanography.

^{695.} University of Georgia, "Skidaway Institute of Oceanography."

http://www.skio.uga.edu/?p=aboutus/aboutus, accessed May 10, 2016. 696. Ibid.

^{697.} Barlament, "Skidaway Institute of Oceanography."

the Union Camp Corporation donated the land to the endeavor. The Roeblings are descended from noted engineer John A. Roebling, recognized for the design of the Brooklyn Bridge.

The Institute opened in 1968 under the auspices of the Ocean Sciences Center of the Atlantic following adaptive reuse of the Modena Plantation buildings for office and research use. In 1971, however, the Ocean Sciences Center was dissolved, and the facility transferred to the University of Georgia System.⁶⁹⁸ In 2013, the Skidaway Institute of Oceanography became part of the University of Georgia.⁶⁹⁹

The former Modena Plantation occupied by the Skidaway Institute of Oceanography constitutes a historic landscape that appears eligible for listing in the National Register of Historic Places for its significance at the state level in the areas of Agriculture and Architecture. It is anticipated that the Institute property may also be eligible in the future in the area of Science, once the campus reaches the 50-year age consideration for listing in the National Register. Surviving physical evidence of the Modena Plantation includes patterns of organization, road networks, buildings and structures, and views and viewsheds that convey important heritage values, and retains integrity for the period of significance that extends from 1936 through 1966.

The narrative that follows traces the history of the property and its development and use, and suggests the historic contexts that relate to its use as a University of Georgia research facility. The historical background information is followed by an inventory and assessment of the building, landscape, and archaeological features associated with the property. To facilitate the organization of cultural resource identification and evaluation, the campus is divided into a series of character areas. For each character area, the primary historic resources and their character-defining features are described and their significance assessed according to the categorization system developed for purposes of this study. The inventory and assessment is followed by assessment of the National Register eligibility of the property, and the identification of any individually eligible resources and historic districts associated with the property.

^{698.} Barlament.

^{699.} University of Georgia, "Skidaway Institute of Oceanography."

Campus Historic Context

Historical Background



Figure 589. Aerial view of docks, grounds, and R/V Savannah, UGA Skidaway Oceanographic Institute. (Source: Skidaway Oceanographic Institute)

The Skidaway Institute of Oceanography is located at the northwest end of Skidaway Island and includes only a small portion of the island's land area. The history of the Institute's property is associated with the broader history of Skidaway Island as a whole.

Like many of Georgia's barrier islands, Skidaway is known to have long served as a settlement site for American Indian groups; the first documented occupation is thought to have occurred approximately 5,000 years ago. Evidence of pre-European Contact survives today in the form of large shell midden rings located in the middle and at the southern end of the island.⁷⁰⁰ Additionally, the island's name may be derived a combination of the words "skeedowa," "skeadoway," or "skidowa," all American Indian terms, the meaning of which has not been determined. It is also possible that the English named the island based on the sailing term "Sheet Away," which means releasing a sheet attached to a sail. Some have suggested that the island is named after Skedway on the Chatham River in England.⁷⁰¹

The English first settled the area in the 1730s. Gen. James Oglethorpe, founder of the Colony of Georgia, landed on a bluff of the Savannah River in 1733 with authorization from King George III of England to secure the area against the Spanish. Toward this end, Oglethorpe constructed a small fortification on the northern end of island, later adding a second fort at its southern end. In 1736, the evangelist John Wesley, known as the "father of Methodism," proselytized on the

^{700.} Richard J. Lenz, *The Longsteet Highroad Guide to the Georgia Coast and Okefenokee*. (Athens, Georgia: Longstreet Press, Inc. 2002).

^{701.} Georgia Public Broadcasting, "Skidaway Island State Park," *Sites to Behold: The History of Georgia's State Parks*", accessed November 13, 2018, http://www.gpb.org/sitestobehold/skidaway-island.

island during the Great Awakening, a period of religious evangelicalism and revitalization that swept through the colonies. The settlement was abandoned by 1740.⁷⁰²

In 1753, the Colonial Georgia government granted John Milledge property on the island, which he named "Modena." The name may have referred to the Italian seat of silk culture, an industry imagined for early Georgia. John Milledge, Jr. (1757–1818), his son, would become a U.S. Representative, Governor of Georgia, U.S. Senator, and a founder of the University of Georgia.⁷⁰³ John Milledge III sold Modena in 1843.

During the Revolutionary War, the island witnessed a small skirmish between Patriots and a party of British Marines. Between the Revolutionary and Civil wars, the island became increasingly populous and prosperous. At the height of the antebellum era, the island boasted some 2,000 inhabitants, and featured plantations where indigo, cattle, and hogs were raised. During the Civil War, the 4th Georgia Battery created earthen batteries on the island, at least one of which survives on the Institute property. The Union blockade that began in 1862, however, drove inhabitants from the island. At the conclusion of the war, Skidaway was abandoned and the plantations fell into ruin. Former slaves remained and lived as freed persons on the island.⁷⁰⁴

The Freedman's Bureau and the Order of St. Benedict moved to the island to assist residents in their transition to freedom. The Benedictines purchased 713 acres on the island, created a monastery, and attempted to create a school for the freed slaves in conjunction with the Freedman's Bureau. Their attempt was not successful, and after a calamitous tidal wave, the Benedictines moved to Savanah, where they opened a successful military school in 1902.⁷⁰⁵ The 700-acre parcel changed hands several times, and was eventually purchased by the Union Camp Corporation, which owned a significant portion of the island after World War II. This parcel of land became known as the "Priest Parcel."

During the early twentieth century, coastal barrier islands became attractive to wealthy investors seeking to establish hunting preserves. It was for this purpose that Modena at the northern end of Skidaway Island was purchased by Ralph Heywood Isham, collector of rare manuscripts, in 1927. Isham regularly invited his wealthy friends to visit for hunting events. One couple—Robert and Dickie Roebling—who were Isham's neighbors in New Jersey, decided that they wanted to own the property after coming for a hunting party one weekend. They subsequently bought Modena, and in 1936 moved their five children to the property on their schooner *Black Douglas*. The Roeblings anchored the schooner off what is now the Institute's north pier, living on the boat for several years.⁷⁰⁶

^{702.} Lenz, 2002.

^{703. &}quot;Modena," Georgia Historical Society, June 16, 2014,

https://georgiahistory.com/ghmi_marker_updated/modena/. 704. Lenz, 2002.

^{705. &}quot;History and Mission," The Benedictine Military School, https://www.thebc400.com/about-us/mission-and-history, accessed November 13, 2018.

^{706.} Rip Roebling family, "Gibson Cattle Company," http://www.gibsoncattle.com/about.html, accessed November 13, 2018.



Figure 590. Dickie and Robert Roebling, 1936. (Source: Skidaway Oceanographic Institute)

Robert Roebling's great grandfather was John A. Roebling, designer and builder of the Brooklyn Bridge, while his great uncle was Washington Roebling, who served with distinction in the Civil War, including at Little Round Top during the Battle of Gettysburg. His cousin, Washington Roebling II, went down with the *Titanic*, while his uncle, John A. Roebling II, and John's son, Donald, spent years and their personal fortunes successfully inventing amphibious tanks for the U.S. Marine Corps.⁷⁰⁷ The idea of living on a boat with five children without electricity, running water, or a house/hotel nearby probably seemed like a minor inconvenience while he and Dickie set about restoring Modena plantation.

The Roeblings bought Modena with a plan to restore the plantation to working order. While the farm had planted crops, the real emphasis at Modena was on the production of swine and cattle of pure breed stock. The Roeblings built a wide variety of farm-related structures across their land, including tenant houses, bath houses, barns and sheds of all types, cattle watering and feeding stations, windmills, and a variety of residential properties. They also created an extensive infrastructure of roads, docks, and a firehouse with engines, water tower, and various maintenance and repair shops for the infrastructure and associated vehicles and boats.⁷⁰⁸

^{707.} Roebling Museum, "Our Story," accessed Novmeber 13, 2018, http://roeblingmuseum.org/ourstory/.

^{708.} Jones and Fellers Architects and Engineers, *Inventory of Facilities, Modena Plantation, Skidaway Island,* Prepared for the Ocean Science Center of the Atlantic Commission, Savanah, Georgia, 1967.



Figure 591. The Black Douglas, 1938, at what is now the North Pier, Skidaway Oceanographic Institute. (Source: Skidaway Oceanographic Institute)

The threat of war in the late 1930s led the Roeblings to move from the *Black Douglas* to live on the property. They built a power plant in 1940 to address the need for electricity. The Roeblings first occupied the gymnasium building they had built soon after acquiring the property. They sold the *Black Douglas* in 1941 to the U.S. Fish and Wildlife Service, which planned to use the boat as a fur/seal research vessel in Alaska. On the journey to Alaska, the boat was commandeered in San Diego after the Japanese attack on Pearl Harbor, and used by the Navy for picket duty along the Washington state coast. The Navy removed the ship's Douglas fir masts to create a patrol vessel. After the war, the ship continued on to Alaska to fulfill her research duties. Later, she was assigned to the Scripps Institute of Oceanography and the Southwest Fisheries in San Diego, after which she was sold to a Caribbean treasure hunter. The Flint School acquired the schooner and restored her for use as a floating school ship until 1982. At that time she was acquired by foreign interest, rebuilt, and renamed the *Aquarius*.⁷⁰⁹

^{709.} Carol Megathlin, "Modena Plantation," Skidaway Institute of Oceanography, University of Georgia, accessed November 14, 2018 https://www.skio.uga.edu/about/modena_plantation/.



Figure 592. The gymnasium, which became the Roebling House, later became the first administrative building for the Skidaway Institute. (Source: Skidaway Oceanographic Institute)

After World War II, the Roeblings continued their work on the plantation. One of the most significant buildings constructed by the Roeblings is the Cattle Show Barn (UGA Building 750). The round structure, built circa 1947, was designed by Robert Roebling and constructed primarily of concrete. The circular shape was for ". . . greater efficiency in showing slow moving cattle."⁷¹⁰ Roebling bought, bred, raised, and sold prize cattle, and at one time, owned one of the most famous and sought-after Black Angus bulls in the county named "Blackcapmere". He also held one of the U.S. foundation herds of Red Angus cattle.⁷¹¹ In 1950, the Roeblings' oldest daughter, Ellin, was married in the Cattle Show Barn and the wedding was covered by both *Town and County* and *Stars and Stripes* magazines. *Stars and Stripes* covered the wedding, as the groom, Donald Watkins, had served under Gen. George C. Patton during World War II.⁷¹²



Figure 593. Cattle Show Barn under construction. (Source: Skidaway Oceanographic Institute)

^{710.} Megathlin.

^{711.} Gibson Cattle 2016

^{712.} Megathlin.



Figure 594. Ellin Roebling Watkins and Donald Watkins dancing on the show floor of the Cattle Show Barn at Modena. Note the Modena Planation Compass Rose embedded in the barn floor. (Source: Skidaway Oceanographic Institute)



Figure 595. Bob Roebling and his prize Black Angus bull, Blackcapmere. (Source: Skidaway Oceanographic Institute)

Mr. John Carpenter, who began working for the Roeblings in 1951, recalled Mr. Roebling's famous Black Angus auctions:

Cattle shows—that was the main thing of the barn. He had very expensive cattle ... he'd have a show and he'd have a bid. We had the barn fixed! We had built up corrals outside ... fellows came from downtown, [he] had that place set up, beer, all kind of stuff, topnotch stuff. When Mr. Roebling did something, he did it first class. Everything all dressed up, all kind of bunting and everything -- beautiful. And they'd bring the cattle in and they'd walk 'em round and they had people sitting around [in] bleachers up top [and bidding]⁷¹³

^{713.} Megathlin.

Skidaway was not connected to the mainland by a bridge, so all the cattle and bidders had to be brought over to the island by boat. The inconvenience did not stop Roebling from organizing auctions, or bidders from attending and purchasing cattle.

As Robert and Dickie grew older, they began to explore the possibility of donating Modena to the University of Georgia for use by the School of Agriculture. However, in 1964, after the Georgia State Legislature formed the Georgia Science Technology Commission with an Oceanographic Task Force, and proposed to the governor that an oceanographic center be established by the state on the coast, the University persuaded the Roeblings to donate their property for this purpose.

The state envisioned establishing a research Institute designed to provide facilities and offer courses in marine science and engineering. At the same time, the U.S. Environmental Science Services Agency decided to establish an east coast facility. Wishing to attract the federal facility to Georgia, the State's General Assembly, with the advice of the Oceanographic Task Force, established the Ocean Science Center of the Atlantic Commission (OSCA) in 1967.⁷¹⁴ The center was ultimately established in Miami, but the idea of a marine institute stayed with the General Assembly and in 1968 the Institute at Skidaway was created with the Roeblings' and Union Camp's gifts. The University of Georgia Oceanographic Institute originated with the Skidaway Institute, a part of a larger umbrella organization, the Ocean Science Center of the Atlantic (OSCA). The Skidaway Institute was created in 1968 as a result of the Roeblings gift of the 790-acre Modena plantation, combined with the gift of the 635-acre "Priest Tract" by the Union Camp Corporation to the State of Georgia.⁷¹⁵ With passage of a \$3.6 million bond issue, Chatham County voters approved plans to build a road and a bridge from the mainland to the island.⁷¹⁶.

Many of the Roeblings' employees stayed on after the sale of the property, and the Institute occupied Modena's many buildings. The main offices were located in the Roebling house/gymnasium. The Skidaway Institute of Oceanography continues to use many Roebling buildings and structures, including two deepwater docks, the machine shop and its equipment, many of the residences, and the Roebling House. The Cattle Show barn has also been rehabilitated as lab and storage space.⁷¹⁷

The Ocean Science Center of the Atlantic formally opened on Monday, July 1, 1968. The center's first new building—the Dorothy Roebling Laboratory and Administrative Building—was completed by 1970. On October 7 of that year, President Richard M. Nixon, First Lady Pat Nixon, their daughter, Julie, and son-in-law, David Eisenhower, came to Skidaway to dedicate the new building and

^{714.} Ibid.

^{715.} Megathlin; Elizabeth Cooksey, "Skidaway on My Mind: Looking Back at the Beginnings of the Skidaway Institute of Oceanography," Skidaway Scenes, July 2003.

^{716.} Ibid.

^{717.} Ibid.

the campus. Nixon was invited by Republican gubernatorial candidate Hal Suit. Democratic Governor Lester Maddox attended the event.⁷¹⁸ A film clip indicates:

... sailors in dress white uniforms stand on the deck of a boat next to Robert Roebling, owner of the boat and the man who donated Skidaway Island to the state [sic]. Nixon walks down the ramp to the boat. Onboard the "Royal Eagle," Nixon sits with Roebling and waves to a crowd of people. Later, on Skidaway Island, people clap while patriotic music plays in the background. Nixon walks down a path with his wife, his daughter Julie and his son-in-law David Eisenhower, grandson of president Dwight D. Eisenhower. The crowd continues to cheer for Nixon...

... Nixon speaks about the United States' involvement in the Vietnam War. He states his goal to end the war "in a way that serves the peace, that builds the peace, that discourages aggression and that's what we're doing in Vietnam and we're going to accomplish it." He disagrees with the idea that the country's best young men have gone to Canada to avoid the draft; rather, he asserts that those serving in Vietnam represent the nation's finest. Finally, the audience and dignitaries on the podium stand and clap. Nixon, standing with his wife and Governor Maddox, waves at the crowd.⁷¹⁹

In 1971, the Ocean Science Center was abolished by Georgia Governor Jimmy Carter, and the Skidaway Institute of Oceanography was created as an autonomous entity by the Georgia Board of Regents as part of the University of Georgia.⁷²⁰ Skidaway Oceanographic Institute continued to expand, acquiring new buildings and research vessels, eventually becoming internationally known for its oceanography research and programs. In 2013, Skidaway Oceanographic Institute became the University of Georgia Skidaway Institute of Oceanography.⁷²¹

Chronology of Development and Use

One of the earliest primary sources to illustrate the physical composition of Skidaway Island is a military engineering map dated 1864. The map indicates the landscape surrounding Savannah, Georgia, in considerable detail, including Skidaway Island. The map was prepared using period surveys and documents to show the disposition of Confederate defenses in December, 1864, on behalf of the army of Major General William T. Sherman during the Union Army's invasion of Georgia.⁷²²

- 719. Ibid.
- 720. Cooksey, 2003.
- 721. University of Georgia, "Skidaway Institute of Oceanography."

^{718.} Civil Rights Digital Library, "President Nixon speaking about the Vietnam War while in town to dedicate the Ocean Science Center of the Atlantic on Skidaway Island, October 7, 1970." Index/Catalog Description. http://crdl.usg.edu/export/html/ugabma/wsbn/crdl_ugabma_wsbn_61050.html, accessed April 2018..

Major George B. Davis et al., The Official Atlas of the Civil War, Plate LXX-2, Map of Savanah Georgia and Vicinity, December 21, 1864 (New York: Gramercy Books, 1983).

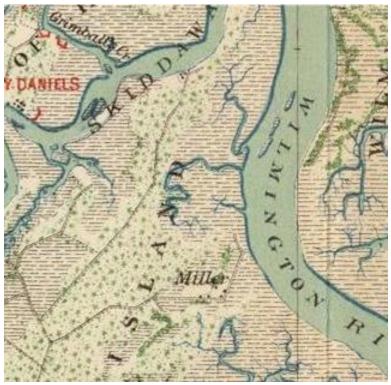


Figure 596. Map of the north portion of Skidaway Island in 1864. Note the road that appears to lead to a group of buildings and probable landing at the site of today's Institute. The island is depicted as woodland and marsh except for a small area to the southwest of the buildings. (Source: Davis, et al)

The map shows a road on the island, the location of which appears to approximate that of the existing entrance road in the vicinity of the Institute. The road leads to a small group of buildings along shoreline of the river where the Institute is now centered. The map shows occupation of the property at least to the Civil War era and the current dock location was probably in active use at that time. The map indicates that the island was wooded except in the centered vicinity of the buildings. Little else is currently available.

Modena Plantation

Robert and Dorothy Roebling purchased Modena Plantation in the mid-1930s. Prior to its purchase, the property was used as a hunting preserve and owned by the Roeblings' Princeton, New Jersey, neighbor, Ralph Isham. It is not known which buildings were present on the site at the time of the purchase, but it is likely that the north pier, one or more buildings, and patterns of fields, marsh, and woodland were present at the time.

By the spring of 1936, the Roeblings were living aboard their three-masted schooner, the *Black Douglas*, tied at the north pier. Over the next few years, the Roeblings began restoring Modena Plantation to a working farm with barns, outbuildings, and farm dwellings, all powered by generators on the ship. In 1940, the white stucco powerhouse/pump building, today a wing of the Mechanical Shop, was built to take over the electricity generation task of the ship. The island ran on 110-volt DC current augmented by large banks of batteries for periods when the plant was shut down. In 1941, the Roeblings moved into the building known today as the Roebling Conference Center, which had been constructed as

a gymnasium but was converted to a residence after the family moved from the boat.

During the 1940s, the University System of Georgia helped the Roeblings rehabilitate the property as a working farm. The University first provided guidance in raising Hampshire hogs and Aberdeen Angus cattle, and the farm became concerned with the improvement of breeding stock.

In 1948, Robert Roebling built a new house on the east side of the island for his mother, Mrs. Arthur O'Brien, which they later occupied themselves. Also that year, Roebling completed construction of a large seven-sided steel and concrete production and show barn to house his cattle operation. The barn today accommodates laboratory and storage needs, and was converted for this use as part of the development of the Skidaway Institute of Oceanography.⁷²³

An inventory of the property prepared in 1967 as part of the transfer of Modena Plantation to the state provides useful information regarding the features developed during Roebling ownership. The inventory lists 68 buildings and structures present on the plantation at the time. These include twelve dwellings, three barns, two chicken houses, sixteen sheds, and seven storage buildings.⁷²⁴ Today, it appears that only fifteen of these buildings and structures remain.

The site plan accompanying the inventory, reproduced here, suggests that the road network existing today in the vicinity of the remaining historic buildings reflects the pattern used during the period of the plantation's agricultural use with changes and simplification. Aerial photographs are also available from the mid-1960s that depict the agricultural character of the landscape.

Together, the site plan and the aerial photographs show the overall vegetative cover and patterns of land use. The heart of the plantation where buildings are located, near the docks, is wooded, and the woods extend along the east side of the property. To the southwest of the building area are open fields divided by fencing into separate rectangular-shaped pastures. This pattern is similar to that indicated in the 1864 map of the plantation.

The entrance road for the plantation bisected the open pastures from the south and is likely the alignment shown in the 1864 map. Today's entrance drive appears to have been shifted to the east of this early road. No evidence of the former pastures appears to remain. Most of the former pasture land has since grown up in woodland.

 ^{723.} University of Georgia, "Roebling History, Skidaway Institute of Oceanography" available at http://www.skio.uga.edu/?p=aboutus/aboutus, accessed May 10, 2016.
 724. Jones and Fellers.

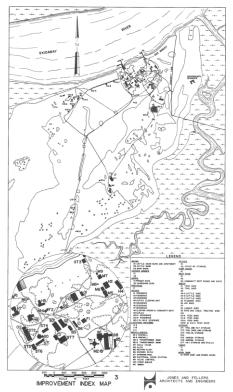


Figure 597. Plan of Modena Plantation from the 1967 inventory. (Source: University of Georgia Archives)



Figure 598. Aerial photograph of Modena Plantation, 1965. (Source: University of Georgia Archives)

One of the features of the plantation that was nearly lost was a collection of modest residences located southwest of the Roebling House along the river. During the Roebling period, the residences were used to house workers who journeyed to the island for the week and returned home for the weekends. Four duplex residences survived the property's transition to the Institute but remained unused and fell into disrepair. Recently, one of the duplexes was rehabilitated and adapted to house interpretive exhibits on the island's natural and cultural history. A boardwalk extends through the saltmarsh to the river nearby and is used for educational purposes.

A timeline illustrating site history and development is provided in Appendix C.



Figure 599. Context map illustrating the location of the Skidaway Institute of Oceanography within the state of Georgia. (Source: Wiss, Janney, Elstner Associates, Inc., 2016)

Overview Description of the Skidaway Institute of Oceanography

The Skidaway Institute of Oceanography is located on a 700-acre property near the north end of Skidaway Island. The 8-mile-long island sits a few miles southeast of the city of Savannah, Georgia. Skidaway Island, which is home to more than 8,000 people, is one of the most affluent communities in the country, and features waterfront estates and other expensive properties, gated communities, and golf courses. The island is broader in its central portion; most residents live in the central part of the island. The Wassaw National Wildlife Refuge encompasses a broad expanse of saltmarsh on the southeast side of Skidaway Island facing the Atlantic Ocean. The northern portion of the island is narrow and composed of a central corridor of upland edged by saltmarshes to the east and west. The Wilmington River borders the northern portion of the island on the north and east, while the Skidaway River borders the island on the west. The Skidaway Institute property extends between the two rivers and includes the central corridor of upland and bands of saltmarsh on the east and west.

The campus is accessed by McWharton Drive, a four-mile-long scenic road that arises from Spur 204 East (Diamond Causeway), the road that includes the bridge to Skidaway Island. The Skidaway Institute main campus is located at the northwest end of the property along the Skidaway River. The campus includes three deep-water dock facilities. The main campus includes approximately forty buildings, most of which are associated with the Institute. Other buildings are associated with the University of Georgia Marine Extension Service and include the UGA Marine Education Center and Aquarium. The Skidaway Institute occupies the core area of the historic Modena Plantation that includes fifteen buildings and structures that survive from the period of Roebling ownership, as well as landscape features such as road alignments and plantings.



Figure 600. The Skidaway Institute property. (Source: University of Georgia)

The main campus is organized around a loop road--Ocean Science Circle—which provides access to parking areas and the primary research and educational buildings. The buildings and landscape to the northeast of the loop road continue to reflect the heritage of the Modena Plantation, particularly the mature canopy trees. Historic buildings have been repurposed for residential and maintenance uses. Several new buildings have also been introduced in this area.

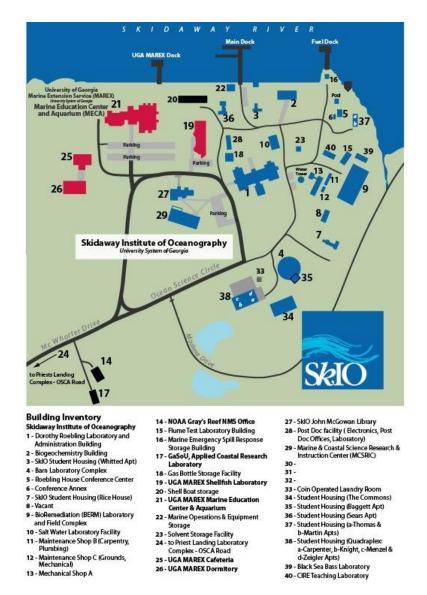


Figure 601. Plan of the Skidaway Institute's main campus. (Source: University of Georgia)

To the southwest of the loop road, there are several large newer buildings. The landscape is more open, and there are fewer trees.

The Marine Extension Service (MAREX) facilities are located at the southwest end of the main campus. They include the UGA Marine Education Center and Aquarium, which conducts outreach, education, and research to enhance coastal environmental, social, and economic sustainability. MAREX features modern indoor facilities, including a teaching aquarium, touch tanks, science labs, classrooms, and a natural history museum. Outdoor facilities include archaeological exhibits, saltmarsh boardwalk, interpretive trail, learning garden, and an historic cabin used for interpretive exhibits.⁷²⁵

^{725.} University of Georgia, "Marine Extension Service," accessed June 10, 2016, http://marex.uga.edu/education_facilities/.

Identification of Skidaway Institute of Oceanography Character Areas

To facilitate the organization of cultural resource identification and evaluation, the Skidaway Institute campus has been divided into character areas. Character areas are land bays or geographic areas that share similar physical traits or characteristics, a similar period of physical development, or are otherwise unified by land use, topography, vegetative character, design, or historic associations. The character areas used to describe campus resources include:

- A. Modena Plantation Core
- B. MAREX and Institute Campus

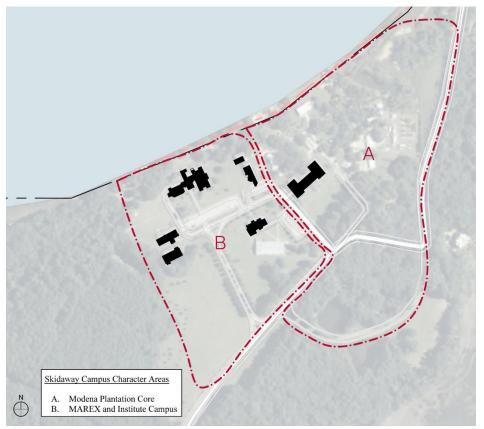
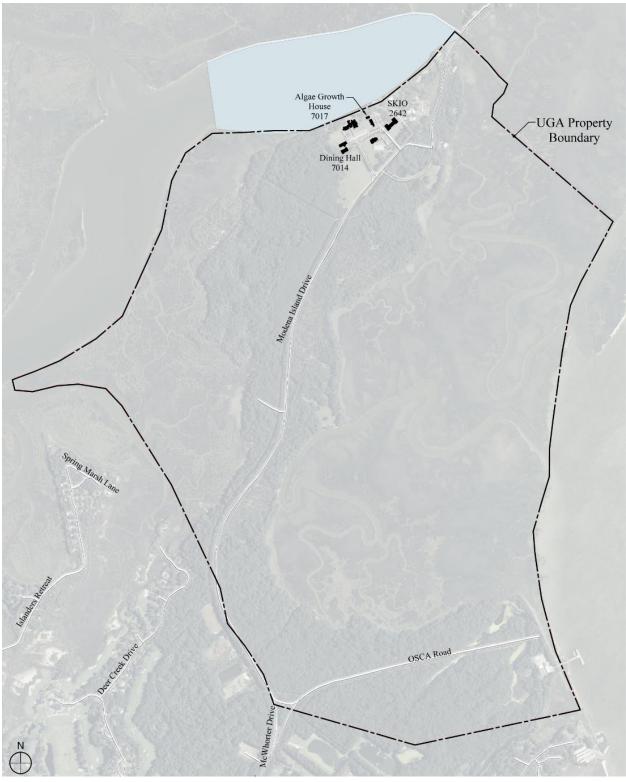


Figure 602. Character areas associated with the main campus of the Skidaway Institute of Oceanography. (Source: Wiss, Janney, Elstner Associates, Inc., 2016)

Only the principal areas of the Institute's main campus have been addressed in this assessment. The identification of additional landscape character areas should be made for other portions of the 700-acre property, which most likely retains landscape features from the property's agricultural periods.

Identification and Evaluation of Historic Resources by Character Area

The pages that follow identify, describe, and assess the building, landscape, and archaeological resources associated with the main campus of the Skidaway Institute of Oceanography by character area. An overview description of the character area introduces each section. The introduction is followed by brief



descriptions of historic landscape, building, and archaeological resources, and a general assessment of their historical integrity.

Figure 603. Resources of the Skidaway Institute of Oceanography. (Source: Wiss, Janney, Elstner Associates, Inc., 2016)

Modena Plantation Core Character Area

The Modena Plantation Core character area includes the historic plantation's central living and work places. Historically, this area appears to have been landscaped with deciduous canopy trees. To the southwest, where the MAREX and Institute Campus character area is located, the landscape was more open and remains so today.

The Modena Plantation Core character area includes the location of the plantation's historic buildings. As documented in the 1967 inventory, there were 68 buildings and structures on the plantation at the time of its transfer to the state of Georgia. Fifty-seven of these that were located within this area, including barns, sheds, chicken houses, windmills, residences, and other structures, have been removed. Only fifteen historic plantation buildings and structures survive today. A variety of newer structures, including laboratories, residences, and service buildings, have been built among the historic buildings since 1967. The nine new buildings include the Roebling Laboratory, the Institute's first large building, and several smaller laboratory, residential, and support structures.

Building Resources



Figure 604. Principal facade of the Roebling Lab.

Roebling Lab – UGA 7500 (1968, Category 4). The Dorothy Roebling Laboratory and Administration Building was constructed in 1968, one of the first new structures added to accommodate the needs of the Institute. 726

The Roebling Lab is located to the northeast of Ocean Science Circle and west of the water tower, in an open area that was shown undeveloped in 1967. It is a large, long, one-story building composed of four parts. Two gable end wings are connected by a long central portion, and a rear wing has been added to the east

^{726.} The Roebling Lab is indicated as #1 on the Institute's building inventory plan.

side of the building. Entrances are located at both ends of the building as well as in the central section, which faces west toward the river.

The Roebling Lab is constructed of variegated red brick. Stucco is installed above the building's windows, isolating the brickwork into a series of vertical panels. The roof slopes slightly. Metal flashing has been installed along the roofline and the eaves have been covered with vinyl. The architectural design is undistinguished but representative of the mid-1960s.



Figure 607. Principal facade of mechanical shop W-1.

Mechanical Shop W-1 – UGA 7501 (1940/pre-1967/post-1967/2005, Category 2). Mechanical Shop W-1 is located to the northeast of the Laboratory Barn, east of the Roebling Lab, and adjacent to the water tank.⁷²⁷

Mechanical Shop W-1 is composed of several structures joined together and expanded over time. The main portion of the building consists of two side-by-side gable roof sheds with vertical sheet metal siding. Vinyl siding has been installed in the gable ends. The west shed is long and narrow in plan, while the east shed is shorter and located at the west shed's north end. The east shed does not appear on the 1967 survey and is presumed to have been constructed after that date.⁷²⁸

Each shed has a number of modern garage doors, person doors, and windows. A second floor level has been added to each of these structures. The new addition features horizontal wood siding, gable roof, and modern double-hung replacement windows. The construction dates of the one-story sheds are uncertain. The second-story additions were reportedly constructed in 2005. Although somewhat altered, the buildings generally retain integrity and are assessed as Category 2.



Figure 605 Mechanical Shop W-1.



Figure 606. Mechanical Shop W-1



Figure 608. Mechanical Shop W-1.



Figure 609. Mechanical Shop W-1.

^{727.} The Mechanical Shop is shown as #13 on the Institute's building inventory plan, and W1 on the 1967 inventory site plan.

^{728.} Jones and Fellers, 29.

Powerhouse – UGA 7501 (1940, Category 2). To the northwest of these structures is a one-story masonry building that was constructed in 1940 to serve as the Roebling's powerhouse and pump building.⁷²⁹ The masonry walls of the Powerhouse are finished with stucco, with brick belt coursing, and brick quoins at the window. The building is square in plan, has a symmetrical hipped roof, and features a raised clerestory with wood awning windows and vinyl siding. The roofing is asphalt shingle. The Powerhouse retains its original wood windows, which are an important character-defining feature. It is connected to the main Mechanical Shop structure by an entrance/corridor/hyphen clad with vinyl siding. The building retains a high degree of historic integrity.



Figure 610. Laboratory Barn (Cattle Show Barn).

Laboratory Barn (Cattle Show Barn) – *UGA 7502 (1948, Category 2).* The Laboratory Barn was built in 1948 by Robert Roebling as a show barn for his cattle breeding operation and converted to laboratory and storage use by the Institute after 1968.⁷³⁰

The Laboratory Barn is round in plan with concrete block exterior walls and a concrete roof deck supported on the interior by steel truss framing. A short angled roof with asphalt shingles is located at the top of the exterior walls below the eave of the main roof. The main roof is constructed in three tiers. The Baggett Apartment (UGA 7505), discussed below, is attached to the southeast side of the barn.

The 1967 inventory states that the barn's exterior walls were brick.⁷³¹ It appears from photographs, however, that at least the upper portion of the building's exterior walls was originally open sided and protected by the low angled roof. It also appears that the concrete block exterior was added after 1968 to fully



Figure 611. Floor tile inside the Laboratory Barn.

^{729.} University of Georgia, "Roebling History, Skidaway Institute of Oceanography."

^{730.} The Laboratory Barn is shown as #4 on the Institute's building inventory plan, where it is identified as the Barn Laboratory Complex, and B1 on the 1967 inventory site plan, where it is identified as the Cattle Show Barn.

^{731.} Jones and Fellers, 4.



enclose the structure. Archival photographs also indicate that the spaces between the three roof tiers were originally open and have since been closed.

Figure 612. The Show Barn in 1968. (Source: Skidaway Oceanographic Institute)



Figure 613. Skidaway Cattle Barn/Laboratory. (Source: Skidaway Oceanographic Institute)

The Cattle Show barn has recently been rehabilitated as laboratory and storage space for use by the Skidaway Institute of Oceanography Alterations made to the barn for such use have significantly diminished integrity in the past.



Figure 614. Life Sciences Building.

Life Sciences Building – UGA 7503 (1971, Category 4). The Life Sciences Building is located along the Skidaway River shoreline between the Main Dock and Fuel Dock.⁷³² Constructed in 1971, the Life Sciences Building is a single-story brick structure with five bays defined by projecting brick pilasters. The metal and glass entrance is located in the center bay, facing inland from the river. The building has a flat roof with copper fascia on the front and rear.



Figure 615. Baggett Apartment.

Baggett Apartment – UGA 7505 (1948, Category 2). The Baggett Apartment is a wing on the southeast side of the Laboratory Barn.⁷³³ The Baggett Apartment is two-story structure with a gable roof and has an attached terra cotta silo on its

^{732.} The Life Sciences Building is shown as #2 on the Institute's building inventory plan, where it is referred to as the Biogeochemical Building.

^{733.} The Baggett Apartment is shown as #35 on the Institute's building inventory plan, and B1 on the 1967 inventory site plan.

northeast side and a one-story addition on its southeast side. The first floor level of the wing housed a corn crib and mixing room and has terra cotta tile integrated with brick quoins. The second floor level is a two-bedroom apartment. The 1967 inventory states that the building was finished with asbestos siding.⁷³⁴ A one-story addition has been added to the wing. Both the apartment and addition are currently covered with vinyl siding. The apartment's windows all appear to have been replaced with modern casement and double-hung windows.

The Baggett Apartment is in good condition and retains integrity, although diminished to some extent by the replacement windows and vinyl siding. It is assessed as Category 2.

Roebling Conference Center – UGA 7506 (circa 1930s/1941, Category 2). The Roebling Conference Center was constructed by the Roeblings as a gymnasium after their purchase of the property in the mid-1930s and was converted into their residence in $1941.^{735}$ It continued to serve as their residence until they moved into a house constructed for Roebling's mother near the saltmarsh and river.⁷³⁶

The residence features an open two-story-high living area on the northeast side. The two-story portion has a gable roof and vertical plywood and batten siding. The eaves have a wide overhang and are Craftsman Style in appearance with wooden brackets. A single-story shed addition is located along the southwest side of the building where four bedrooms are located. The entrances on each gable end have double wood and glass doors. The upper level of the living area has a continuous band of six-light clearstory windows on all four sides.⁷³⁷

The former residence is currently used as a meeting space and conference center. The building is in good condition and retains integrity. It is assessed as Category 2.

^{734.} Jones and Fellers, 4.

^{735.} The Roebling Conference Center is shown as #5 on the Institute's building inventory plan, and H2 on the 1967 inventory site plan.

^{736. &}quot;Roebling History, Skidaway Institute of Oceanography."

^{737.} Jones and Fellers, 9.



Figure 616. Marine OPS Storage Building.

Marine OPS Storage Building – UGA 7518 (date undetermined, circa 1975, Category 4). The Marine OPS Storage Building is similar in construction to Maintenance Shops B and 5B, which are believed to have been constructed in 1975.⁷³⁸

The Marine OPS Storage Building is constructed with concrete unit masonry walls and features a shallow gable roof. It serves as a garage and storage shed. There are two roll-up garage doors on the front facade, and two person doors. A shed addition is on the right of the front facade.⁷³⁹

Maintenance Shop 5B – UGA 7525 (1975, Category 4). Maintenance Shop 5B appears to have been constructed in 1975.⁷⁴⁰ The shop is a single-story, five-bay storage building with exposed roof rafter tails, two plywood double doors, two fiberglass garage doors, and two plywood entryways along the front facade. The roofing and siding are corrugated metal. There is a shed extension at the rear, with open-air bays at the right facade for mechanical storage.⁷⁴¹



Figure 617. Maintenance Shop 5B.

738. Marine OPS Storage Building is shown as #22 on the Institute's building inventory plan. The UGA building list records a date of 1955 for this building, which is incorrect as the building was not present in 1967 according to the inventory site plan.

^{739.} FindIt survey.

^{740.} Maintenance Shop 5B is shown as #11 on the Institute's building inventory plan.

^{741.} FindIt survey.



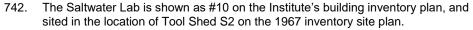
Figure 618. Saltwater Lab.

Saltwater Lab – UGA 7526 (date undetermined, Category 4). The Saltwater Lab is a one-story rectangular building with two, long, side-by-side gabled metal roofs.⁷⁴² The building has corrugated fiberglass siding and four entrance doors along the front facade. There are no windows in this laboratory structure.

The Saltwater Lab was built after 1967, based on review of the inventory, but its date of construction has not been determined for this assessment. It is possible, but does not seem likely, that the building incorporates an earlier (tool shed S2) since the existing building is wider than the earlier structure.

Hodgson house– UGA 7527 (1940, Category 1). Based on the name used to refer to this residence, the house is assumed to have been ordered from Hodgson, shipped to the island and assembled.⁷⁴³ It is reported that the house was attached to an earlier structure, which would probably have served as the building's living room.⁷⁴⁴ The University of Georgia building list cites a date of 1940 for the building.

The Hodgson house has a rectangular living room, noted above, with a side dining area and long, rear T-shaped wing with kitchen, den, and three small bedrooms.⁷⁴⁵ The building has horizontal wood siding that has been covered with vinyl siding, double-hung replacement windows, three brick chimneys that relate to a fireplace, kitchen stove, and wood stove, and metal roofing.



^{743.} The residence is shown as #36 on the Institute's building inventory plan, and H7 on the 1967 inventory site plan.

- 744. Findlt survey.
- 745. Jones and Fellers, 12.



Figure 619. Hodgson house.



Figure 620. Hodgson House.

Although further investigation is needed to understand the history of this structure more fully, it retains integrity and conveys its historic associations, and is assessed as Category 1.



Figure 621. Martin/Thomas duplex.

Martin/Thomas Duplex – UGA 7528 (1952, Category 2). The Martin/Thomas is located east of the Roebling Conference Center (former Roebling House).⁷⁴⁶ The apartment on the northwest side of the building is known as Thomas, and the apartment on the southeast is known as Martin. It is used today for guest housing.

This duplex residence is a single-story building. The 1967 inventory indicates that the building had four bedrooms and no kitchen facilities. It appears from the change in roof form and windows shown on the plan in the 1967 inventory that



Figure 622. Martin/Thomas duplex.

^{746.} The Martin/Thomas duplex is shown as #37 on the Institute's building inventory plan, and H4 on the 1967 inventory site plan.

the rooms on both ends may be additions. The plan shows an interior window between the two rooms in each apartment and larger windows in the two end rooms; the larger windows have since been covered and replaced.⁷⁴⁷

The central gable roof has triangular vents in the end gables, while the apparent additions have lower hipped roofs. The roofing is asphalt shingles. Vertical vinyl siding covers the foundation area (probably a crawlspace), while the building's exterior walls are clad with horizontal vinyl siding. The original siding was asbestos shingles, which have been either removed or covered. The front entrance is reached by a flight of brick stairs and has a small gable porch roof. Entrances are located on each end of the building as well, with wood decks and steps. The building has two sizes of double-hung replacement windows.

The building has good integrity, although integrity of materials is somewhat diminished by the introduction of vinyl siding and replacement windows, and is in good condition. It is assessed as Category 2.



Figure 623. Rice House.

Rice House – UGA 7530 (1955, Category 2). The Rice House, located to the northeast of the Laboratory Barn, is a single-story, ranch-style residence with a long hipped roof with asphalt shingles.⁷⁴⁸ Brick steps lead to the building's entrance and a brick chimney projects from the roof. The residence includes a living room, dining area, two bedrooms, and an office. An integrated carport is located at the west end. The entrance includes a recessed screen porch, and another screened porch projects from the rear on the north side. The building's original asbestos siding (noted in the 1967 inventory) has been covered or replaced with vinyl siding, and its original windows may have been replaced.⁷⁴⁹

The Rice House is in continuing residential use and is in good condition. The house has good integrity, although the vinyl siding and possible window replacement serve to diminish integrity of materials. It is assessed as Category 2.

749. Jones and Fellers, 9.

^{747.} Jones and Fellers, 10.

^{748.} The Rice House is shown as #7 on the Institute's building inventory plan, and H1 on the 1967 inventory site plan.



Figure 624. Gas bottle storage.

Gas bottle storage – *UGA* 7531 (*date undetermined, by* 1967, *Category* 4). The gas bottle storage building is a small, rectangular wood-framed structure with board and batten siding and a gable metal roof.⁷⁵⁰ It is set on a concrete slab. The building includes a porch overhang on its northeast side supported by four round wood posts. Although the date of construction of the building is not currently known, it appears to predate the establishment of the Skidaway Institute of Oceanography in 1967. The gas bottle storage building possesses a good degree of integrity.



Figure 625. Gas bottle storage.



Figure 626. Whitted Residence.

Whitted Residence – UGA 7533 (circa 1940, Category 1). The Whitted Residence is a small, one-story wood-framed building with a floor plan in the

^{750.} The gas bottle storage building is shown as #18 on the Institute's building inventory plan, and ST5 on the 1967 inventory site plan, where it is listed as garden storage.⁷⁵⁰



Figure 627. Whitted Residence.

shape of a T. 751 The building includes a living room, dining room/kitchen, and three bedrooms. 752

The Whitted Residence is a prefabricated structure manufactured by the E. F. Hodgson Company of Dover, Massachusetts as identified by a metal label attached to an inside top framing member. The E. F. Hodgson Company is known as America's first organized prefabricated house manufacturer. The company was established in 1892 and was active through the 1930s and 1940s.⁷⁵³

Unlike competitors such as Sears, Hodgson houses were shipped to buyers with the walls as fully assembled panels, including windows and doors. The panels were installed onsite using a system of connectors and metal pins, which are visible on the interior of the Whitted Residence. In contrast, Sears houses were shipped as components with many numbered pieces that were then assembled onsite, as a normal house would be constructed.

The Whitted Residence has a high degree of historic integrity. The building retains its horizontal wood siding and wood double-hung windows and corrugated metal roof, and conveys its historic associations. It is assessed as Category 1.



Figure 628. Conference Annex M6.

Conference Annex M6 (covered patio) – UGA 7534 (circa 1940, Category 2). Conference Annex M6 is a brick open-air pavilion, rectangular in shape, which measures approximately 24 by 14 feet in plan and is located southwest of the Roebling House.⁷⁵⁴ The annex is connected to the house through terracing and

Figure 629. Conference Annex M6.

- 751. The Whitted Residence is shown as #3 on the Institute's building inventory plan, and H5 on the 1967 inventory site plan.
- 752. Jones and Fellers, 11.
- 753. "History," Hodgson Houses, accessed June 14, 2016, http://hodgsonhouses.net/history.
- 754. Conference Annex M6 shown as #5 on the Institute's building inventory plan, and M6 on the 1967 inventory site plan, where it is identified as the covered patio.

garden features; it appears to have been created as a caprice or folly for social gatherings.

The interior of the pavilion features a brick floor, wood joist ceiling, and wood lintels over the windows. Wood joists project out over the windows on the exterior of the building. On the southeast side of the pavilion is a tall, brick chimney that may relate to a previous building or use. The 1967 inventory states that the annex roof is heavy timber with brick over.⁷⁵⁵

Conference Annex M6 is currently used as an outdoor gathering space for the Conference Center and Roebling House. The structure retains integrity and is in good condition. It is assessed as Category 2.



Figure 631. Post-doc Facility.

Post-doc facility – *UGA 7535 (date undetermined, circa 1955, Category 4).* The Post-doc Facility is located northwest of the Roebling Lab and northeast of the Shellfish Lab.⁷⁵⁶

The facility is a long, one-story rectangular structure with a gable roof and wide overhang across the front. The rear has small shed additions. The exterior of the building has vinyl siding and contemporary doors and windows. It is possible, but seems unlikely, that this structure is set on the concrete slab of the former tool shed and includes its wood-framed structure. However, the building as it exists today was not present in 1967, and its date of construction is not documented in archival materials reviewed for this study.

Chemical Storage Building – UGA 7536 (circa 1940, Category 2). The Chemical Storage Building originally served as the Modena Plantation fire house.⁷⁵⁷ It is located northwest of the water tower and former Powerhouse. The building was probably constructed in the late 1930s or early to mid-1940s.



Figure 630. Conference Annex M6.



Figure 632. Post-doc Facility.

^{755.} Jones and Fellers, 16.

^{756.} The post-doc facility is shown as #28 on the Institute's building inventory plan, and sited on the location of the Tool Shed and Storage Building, ST2, on the 1967 inventory site plan.

^{757.} The chemical storage building is shown as #23 on the Institute's building inventory plan, and F1 on the 1967 inventory site plan.



Figure 633. Chemical Storage Building.

The Chemical Storage Building is a single-story, two-bay brick structure with a hipped roof clad with standing seam metal. Each bay has original paired three-panel hinged wood doors with three-over-two fixed lights. The rear facade is similar to the front, with the doors creating a through passage.⁷⁵⁸ The hipped roof has pronounced diagonal corners and eaves that are higher above the doors than above the side walls. The door openings are spanned by concrete lintels. Three stepped, concrete-capped brick buttresses brace the side walls along with a wider stuccoed masonry wall at the base. A concrete trough extends through the sides of the building and into the lawn for water drainage.

The building retains a high degree of integrity and is in good condition. It is assessed as Category 2.



Figure 636. Fuel Oil Storage.

Fuel Oil Storage (Marine Emergency Spill Response Storage Building) – UGA 7537 (circa 1940, Category 2). The Fuel Oil Storage Building is located adjacent



Figure 634. Chemical Storage Building.



Figure 635. Chemical Storage Building.

to the Fuel Dock along the Skidaway River.⁷⁵⁹ Today it is used for marine emergency spill response storage.

The Fuel Oil Storage Building is a single-story, masonry building with a gable roof that faces the river. The building's foundation is stuccoed concrete block. The upper masonry walls are finished with stucco but have brick top and bottom bands and brick quoins at the gable end facing the river. Two pairs of wood and glass doors, located in the gable end, open onto a wood deck. The 1967 inventory notes that the building once housed two fuel oil tanks.⁷⁶⁰

Like the Chemical Storage Building, the Fuel Oil Storage Building was constructed during the Modena Plantation period circa 1940, and retains a high degree of integrity and is in good condition. It is assessed as Category 2.



Figure 637. Maintenance Shop B.

Maintenance Shop B – *UGA 7538 (1975, Category 4).* Maintenance Shop B is similar in form and materials to adjacent Maintenance Shop 5B, and was probably constructed at the same time.⁷⁶¹

^{759.} The fuel oil storage building is shown as #16 on the Institute's building inventory plan, and ST3 on the 1967 inventory site plan.

^{760.} Jones and Fellers, 25.

^{761.} Maintenance Shop B is shown as #12 on the Institute's building inventory plan. It is located on the site of an open structure shown on the 1967 inventory identified as the Plumbing Shed.



Figure 638. Laundry shed.

Laundry shed – (*date undetermined, by 1967, Category 4*). Two small wooden shed structures are located to the southwest of the Laboratory Barn.⁷⁶²

The smaller of the two structures is square in plan with vertical board siding, a modern metal door, and a hip roof with asphalt shingles and small dormer roof vents. This structure appears to be currently used as a coin-operated laundry room. Its construction date has not been identified.

The second structure, immediately to its west, is an open shed constructed of wood framing with a shallow-pitched gable roof oriented north-south and drive-through below for wagons or trucks. It is indicated as a scale house in the 1967 inventory.⁷⁶³ The open shed has horizontal wood siding on its upper half, vertical board siding and open fencing below, and metal roofing. The shed retains a high degree of integrity.

The Commons – UGA 7521 (2006, Category 5)

The Quadraplex – UGA 7532 (1999, Category 5)



Figure 639. Laundry Shed.

^{762.} The buildings are shown as #33 on the Institute's building inventory plan, and M3, Scale House, on the 1967 inventory.

^{763.} Jones and Fellers, 15.



Figure 640. Syrup Boiler.

Syrup Boiler – (date undetermined, Category 2). The Syrup Boiler is a small open pavilion located in the lawn area northwest of the Roebling Lab.⁷⁶⁴ The structure is hexagonal in shape with six round posts set on concrete bases. The open-air pavilion has a corrugated metal roof, a gravel floor, and a brick fireplace and chimney that presumably were used to process syrup. Its date of origin is not documented in archival material reviewed for this study. The structure retains integrity and is in good condition. It is assessed as Category 2.

Landscape Resources

Network of plantation-era roads and paths (by 1940s, Category 2). Within the character area is a network of narrow paved roads that generally follow the alignments of earlier unpaved roads and paths present during, and possibly prior to, the Roebling period. The site plan included in the 1967 inventory of the property shows the network of roads that existed at the time. The plantation road network appears to have been relatively informal and adapted to meet needs using the most convenient means possible. As an agricultural work area, there appear not to have been any formally designed components on the property other than the Roebling House precinct, which included garden areas. Since transfer of the property to the Skidaway Institute, the road system has been regularized and paved. However, but the overall patterns associated with the plantation survive today. The network of roads is assessed as Category 2.

^{764.} Jones and Fellers, 17. The syrup boiler appears as M10 on the 1967 inventory.



Figure 641. Mature trees and lawn.

Mature trees and lawn (by 1940s, Category 2). Throughout the Modena Plantation Core character area is a landscape of open lawn shaded by large deciduous canopy trees. Many of the trees are mature live oaks and palms that likely date to the Roebling period or earlier. The character of the area—open but shaded—is consistent with the landscape as it appears in a 1965 aerial photograph, as well as in period photographs taken during the 1940s through the mid-1960s. The landscape character of mature trees and lawn contribute to the historic setting of the property, are in good condition, and are well maintained. They are assessed as Category 2.



Figure 642. Roebling House precinct gardens.



Figure 643. Roebling House precinct gardens.



Figure 644. Roebling House precinct gardens.

Roebling House precinct gardens (by 1940s, Category 2). The Roebling House (UGA 7502) and nearby covered patio (UGA 7534) are set within a designed landscape of brick walks, terraces, and walls edged by lawn and garden beds. The covered patio is an outdoor brick structure that is part of the house precinct garden design.

One of the components of the garden is a vegetated terrace edged by brick walls that edges the Roebling House. On the northwest end of the house, the terrace extends outward. Brick steps lead to a lower, small lawn panel. On the northeast side of the lawn area, two brick seats are built into the wall. At the northwest end is a small brick-walled and concrete swimming pool. On the southwest side, a brick walk and terrace connects to the covered patio.

The Roebling House precinct gardens survive from the plantation period. They continue to be enjoyed today and provide an inviting setting for conference use



Figure 645. Roebling House Garden in 1968. (Source: Skidaway Oceanographic Institute)

of the house. The gardens are in good condition and well maintained. They are assessed as Category 2.

Main and Fuel Docks (Freight Dock, Hurricane Dock/North Dock) (by 1967, Category 2). The existing Main Dock and Fuel Dock are located similarly to docks present during the plantation period, and may be the same structures that were present when the property was acquired by the state of Georgia.

The Fuel Dock is where the Roeblings had their North Dock and moored the *Black Douglas*. These dock locations were probably in use during the antebellum period as suggested in the 1864 map reproduced earlier in this section. The location is known for its access to deep water, allowing ships to be moored close to land in a protected area. The docks assessed as Category 2.

MAREX and Institute Campus Character Area

The University of Georgia Marine Extension Service (MAREX) character area includes a complex of educational, research, and support buildings that have been constructed since establishment of the Skidaway Institute of Oceanography to provide public outreach and educational programming to students and residents of Georgia. The MAREX and Institute Campus character area includes four MAREX buildings and two Skidaway Institute buildings, all of which are not old enough to be considered historic for the purposes of this assessment. The six buildings are sited in proximity to Ocean Science Circle, a loop road that is the end of McWhorter Drive and the modern focus of the main campus.

The portion of the property identified as the MAREX and Institute Campus character area is currently primarily open lawn with canopy trees lining McWhorter Drive, Ocean Science Circle, and adjacent parking areas. Historically, this area was pasture used by the Roeblings for their cattle operation. The configuration of fence lines and trees is suggested by the site plan in the 1967 property inventory. A few remnant trees that were present along those fence lines, as shown in the inventory, appear to remain. A small number of Modena Plantation's agricultural support buildings and structures were also located in this area and are depicted in the 1967 plan. A few of these buildings and structures remain. However, the character of the landscape today reflects that of a modern office campus, with institutional buildings, lawn, parking, and some trees, rather than the property's agricultural heritage.

Building Resources

With the two exceptions listed below, the buildings within the MAREX and Institute Campus character area are large institutional buildings constructed after the founding of the Skidaway Institute and are do not currently meet the criteria for assessment as historic resources.



Figure 646. Marine Education Center and Aquarium.

Marine Education Center and Aquarium – UGA 7012 (1972, Category 4). The Marine Education Center and Aquarium is located prominently along Ocean Science Circle and the Skidaway River.⁷⁶⁵ The Marine Education Center and Aquarium is an educational resource and visitor destination with exhibits displaying marine animals typical of the habitats found along the Georgia coast. Sixteen exhibit tanks house live animals that represent numerous species of fish, turtles, and invertebrates. The Aquarium is equipped to provide engaging, experiential learning in the natural coastal environment. Student groups learn in the field, on the water, and in a variety of science labs and multipurpose classrooms.

The Aquarium was constructed in 1972, and has a later office wing addition. The building is one story in height and has brick exterior walls and a standing seam metal roof. The Aquarium is associated with a dock used for educational ships.

^{765.} The Marine Education Center and Aquarium is shown as #21 on the Institute's building inventory plan.



Figure 647. UGA MAREX Dormitory.

UGA MAREX Dormitory – UGA 7013 (1975, Category 4). The UGA MAREX Dormitory is located south of the Aquarium and Ocean Science Circle. The building is a two-story concrete structure with a brick veneer.⁷⁶⁶ The principal mass is rectangular, but there is a projecting stairwell on the front facade. The building has seven dormitory rooms on each level. Each bay has a single door flanked by two square plate glass windows. The roof has large overhanging eaves. A wraparound second-story balcony extends around the entire building. Near the building is a barbecue grilling station and outdoor seating area.⁷⁶⁷



Figure 648. UGA MAREX Cafeteria.

UGA MAREX Cafeteria – UGA 7014 (1975, Category 4). The UGA MAREX Cafeteria is located south of the Aquarium and adjacent to the UGA MAREX

^{766.} The UGA MAREX Dormitory is shown as #26 on the Institute's building inventory plan.

^{767.} Findlt survey.

Dormitory.⁷⁶⁸ Built in 1975, the cafeteria is a single-story brick structure with several projecting wings. The shallowly pitched roof extends as large overhanging eaves, and vertical wood structures project over fixed window bays. The doors and window sash are aluminum. Near the building are open recreation and dining areas.⁷⁶⁹



Figure 649. Shellfish Laboratory.

Shellfish Laboratory – UGA 7015 (1975, Category 4). The Shellfish Laboratory is located northeast of the Aquarium, adjacent to the Modena Plantation Core character area.⁷⁷⁰ The Shellfish Laboratory is a two-story brick building with a recessed front facade with extended, columnar corners, and curved corners. Aluminum sheeting forms an eave for the recessed facade. There is dovetailed brick detailing at the first-story recessed entryway. The windows are framed with aluminum trim.⁷⁷¹

⁷⁶⁸ The UGA MAREX Cafeteria is shown as #25 on the Institute's building inventory plan.

^{769.} FindIt survey.

^{770.} The Shellfish Laboratory is shown as #25 on the Institute's building inventory plan.

^{771.} FindIt survey.



Figure 650. Livestock watering trough.

Livestock watering trough – *UGA 7514 (circa 1940, Category 2).* The livestock watering trough is one of three similar structures identified as L1-A, L1-B, and L1-C on the 1967 inventory site plan. The three structures were located in the open pastures south of the plantation core area in the vicinity of today's entrance road and lawn approaching the Institute's main campus.

The trough has a round brick base with a roof and metal tank above. The 1967 inventory states that the watering troughs had 1,200-gallon storage tanks (pictured on top) and were connected by piping to each other and a pump house. Each trough was supplied from its storage tank by a float that operated when the amount of water in the trough reached a certain level.⁷⁷² The structure has good integrity, and is in good condition. It is assessed as Category 2.

^{772.} Jones and Fellers, 14.



Figure 651. Georgia Southern Lab.

Georgia Southern Lab – *UGA 7517 (date undetermined, Category 5).* The Georgia Southern Lab is shown as #17 on the Institute's Building Inventory plan and does not appear on the 1967 inventory site plan. The building is located in the woods southeast of the entrance drive on the approach to the main campus. The lab is a metal Butler building with a gable roof. The double-door entry and windows to the right are set in the gable end, protected beneath a porch with a flat roof supported by four columns. There are three windows along the side at rear.⁷⁷³

John McGowan Library – UGA 7510 (by 1967, Category 4). The McGowan Library is located southeast of the Shellfish Laboratory within the perimeter of Ocean Science Circle.⁷⁷⁴ The 6,100 square foot facility contains holdings of 4,000 book volumes and 17,000 serial volumes, the largest marine sciences library collection in Georgia.⁷⁷⁵

Marine and Coastal Science Research and Instruction Center – UGA 7512 (2009, *Category 5*). The Marine and Coastal Science Research and Instruction Center is shown as #29 on the Institute's Building Inventory plan and is located just south of the McGowan Library within the perimeter of Ocean Science Circle.

The Marine and Coastal Science Research and Instruction Center is a recently constructed building, completed in 2009 to allow the Skidaway Institute to expand its research in the development of new technologies associated with ocean observation systems; discovering the diversity of species and their interactions in the marine environment; and the assessment of factors affecting the environmental health and integrity of Georgia's coastal zone.

The facility includes private office space, work centers, two chemistry laboratories, three general labs, biology lab, flow cytometry lab, special lab,

^{773.} Findlt survey.

^{774.} The John McGowan Library is shown as #27 on the Institute's building inventory plan.

^{775.} Skidaway Institute of Oceanography

clean room, mechanical room, and multi-use space for instruction, collaboration, and informational seminars. The building is seeking LEED Gold certification for sustainable design. The building is clad in a combination of framed cement fiber board panels and lap siding that is reportedly resistant to hurricanes, hail, insects, decay, and wildfires. Due to tidal conditions, deep foundations and piers elevate the finish floor level approximately six feet.⁷⁷⁶



Figure 652. Skidaway Interpretive Cabin.

Skidaway Interpretive Cabin – UGA 7022 (late 1930s, Category 2). The Residential Duplex Cabin is one of four similar structures identified as H10-A, H10-B, H10-C, and H10-D on the 1967 inventory site plan. It was part of a group of residences and sheds used during the Roebling period to house workers who would go home for the weekends.

The four duplex residences (H10-A through H10-D) that survived the plantation's transition to the Institute fell into disrepair after 1967. One of the duplexes has been rehabilitated and adapted for use as an interpretive exhibit area where information is presented inside about the island's natural and cultural history. The cabin rehabilitation effort has been honored with preservation and architectural awards from the Historic Savannah Foundation and the Savannah Chapter of the American Institute of Architects.⁷⁷⁷

The cabin possesses a high degree of integrity, and is in good condition. It is assessed as Category 2.

Landscape Resources

Campus roads and parking (date undetermined, Category 5)

Campus walks and site features (date undetermined, Category 5)

^{776.} Choate Construction website, available at http://www.choateco.com/portfolioitems/skidaway-Institute-of-oceanography/#!prettyPhoto, accessed June 15, 2016.
777. Skidaway Institute of Oceanography.

Campus lawn and trees (date undetermined, Category 5)

Learning Garden and outdoor exhibits, trails, boardwalks, and viewing platform (date undetermined, Category 5)

Signage (date undetermined, Category 5)

Site furnishings (date undetermined, Category 5)

Known and Potential Archaeological Resources

Due to a relatively large amount of archaeological survey work done on the Skidaway Institute property, many archaeological sites have been identified, representing several thousand years of activity on the island. Many of these sites are in an excellent state, and warrant preservation or study.

The archaeological investigations conducted on Skidaway Island have been well documented over the past century. Queries to GNAHRGIS show that roughly 50 prehistoric and historic archaeological sites have been documented on the Skidaway Institute of Oceanography property, with approximately one-quarter of the overall 1,665.5-acre property have been subjected to archaeological survey.

Skidaway Island was first archaeologically investigated by C.B. Moore in the late nineteenth-century. However, during the early 1800s island was known to contain a large amount of paleontological remains. Systematic archaeological survey did not begin in earnest until the early 1970s when proposed development of residential subdivisions and recreational features such as golf courses necessitated the first cultural resource investigations. Most of the archaeological sites have been discovered within the last 40 years; many more sites are likely to be discovered.

Based on the archaeological sites identified on the island, the earliest documented occupation occurred approximately 5,000 years ago during the Late Archaic period. Late Archaic sites found within the Coastal Plain reflect a change in the environment due the stabilization of sea levels, providing abundant marine life to sustain their estuarine diet. Another major development of the Late Archaic period was the development of ceramics, which were generally plain wares tempered with fibers such a Spanish moss or Palmetto.

Three sites on the Skidaway Institute property have a Late Archaic component present. Multi-component sites 9CH119, 9CH125, and 9CH826 all contain artifacts from the St. Simons phase of the Late Archaic period between approximately 2500 and 1100 BC. A feature exhibited at many of the coastal sites is the distinctive shell midden, found in ring-shape inland, and linear along the estuaries and coast. Within the Skidaway Island property, four sites listed in GNAHRGIS are described as "Prehistoric Indian Shell Midden" with unknown cultural affinity (9CH128, 9CH129, 9CH336, and 9CH374). Little is known about these sites and the potential for future research has yet to be ascertained.

All three phases of the Woodland period are well documented within the Skidaway Island property. Two sites within the property have been identified as general Woodland sites (9CH797 and 9CH798). During the Early Woodland period, ceramic technology evolved in both the construction of the vessel and vessel size and shape, along with a decrease in the use of fiber tempering. The

Refuge series pottery, named for a site in the Savannah National Wildlife Refuge, is indicative of Early Woodland ceramics found in the Coastal Plain. Fourteen multi-component sites within the property contain evidence of Refuge pottery (9CH71, 9CH73, 9CH127, 9CH375, 9CH826, 9CH836, CH839, 9CH840, 9CH843, 9CH845, 9CH846, 9CH848, 9CH854, and 9CH855).

Pottery identified with the Middle Woodland period in the Coastal Plain exhibits, among other styles, a check stamp pattern associated with the Deptford culture, with a time period spanning from approximately 400 BC to AD 500. Eighteen sites within the property have been identified as containing Middle Woodland artifacts (9CH71/120/727, 9CH72, 9CH73, 9CH119, 9CH127, 9CH375, 9CH826, 9CH827, 9CH836, 9CH839, 9CH840, 9CH843, 9CH845, 9CH846, 9CH848, 9CH849, 9CH854, and 9CH855). In additions to the distinctive pottery, lithic artifacts include small, stemmed projectile points that were used with the bow and arrow. Populations began to group together in small tribes subsisting on marine resources along with wild plants and game.

The Late Woodland period sees a shift in ceramic construction, with the addition of grog or burnt clay as a tempering agent and a change in decoration from the check-stamped to cord marked. Artifacts from the Late Woodland Wilmington/St. Catherine's Phase (AD 500-1100) have been found on 13 sites within the Skidaway Island property (9CH119, 9CH126, 9CH127, 9CH375, 9CH826, 9CH827, 9CH836, 9CH839, 9CH840, 9CH842, 9CH843, 9CH845, and 9CH847).

The Mississippi period on Skidaway Island focuses on societal reorganization into hierarchical chiefdoms and a stronger reliance on maize agriculture. The Mississippi period throughout the Southeast marks the peak of societal and political complexity, only to be cut short by the introduction of the Europeans. Mississippian pottery of the Coastal Plain is included as Savannah and Irene phase ceramics. During the Savannah Phase (AD 1150–1300), the tempering of ceramics shifts from grog to sand while the decoration is still predominately cord marked. Toward the end of the Savannah phase complicated stamping and burnishing appear as decorative styles. Eight sites with Savannah components are found within the Skidaway property (9CH119, 9CH125, 9CH210, 9CH71/120/727, 9CH826, 9CH845, 9CH848, and 9CH851).

The Irene Phase (AD 1300–1600) is considered the final prehistoric occupation prior to European encounter. This phase includes a shift to grit-tempered pottery and the traditional cord marking is abandoned for complicated stamped, incised, and burnished wares. Fifteen sites within the Skidaway property have Irene components present (9CH119, 9CH125, 9CH127, 9CH375, 9CH71/120/727, 9CH73, 9CH74, 9CH826, 9CH841, 9CH842, 9CH844, 9CH845, 9CH848, 9CH851, and 9CH855).

Many sites documented on Skidaway Island date from Colonial times to recent history. Four sites have evidence of eighteenth century use (9CH119, 9CH126, 9CH797, and 9CH846), while many more (9CH74, 9CH83, 9CH85, 9CH86, 9CH87, 9CH121, 9CH122, 9CH123, 9CH124, 9CH126, 9CH130, 9CH375, 9CH727, 9CH827, 9CH845, 9CH846, 9CH848, 9CH849, 9CH850, 9CH852, and 9CH853) have evidence of nineteenth and twentieth century occupation. These archaeological sites have the material record of the development of the United States and Georgia through the Colonial period into the twentieth century.

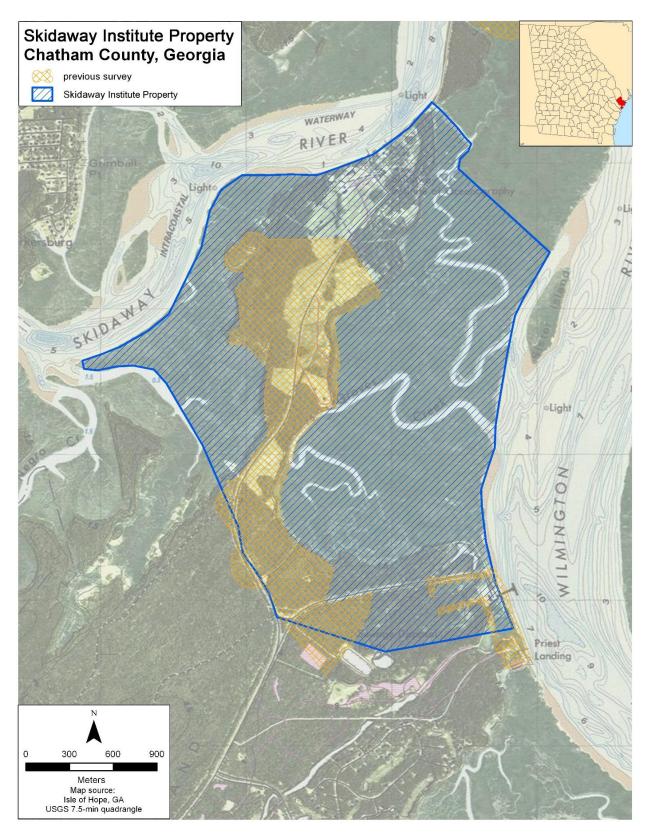


Figure 653. Skidaway Institute property and area of previous archaeological survey. (Source: USGS)

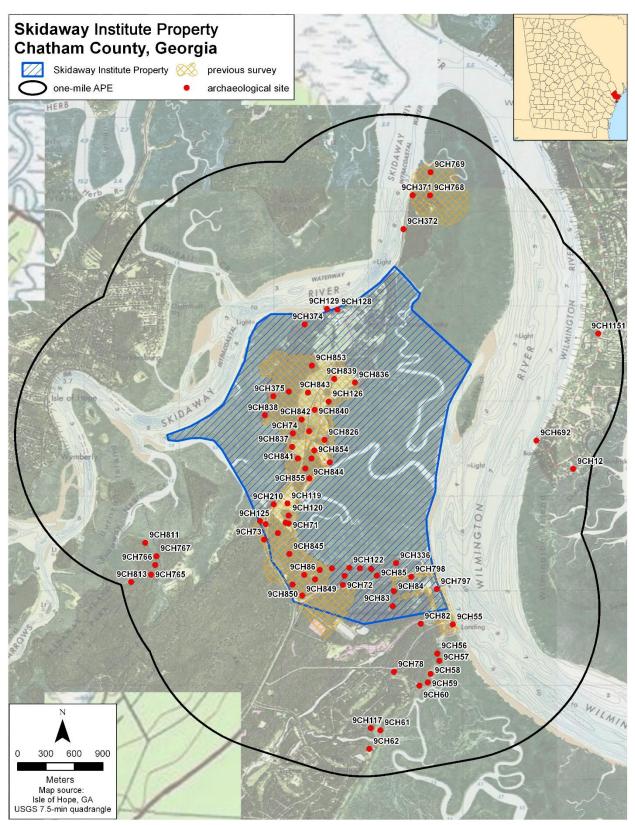


Figure 654. Skidaway Institute property and area of previous archaeological survey, previously identified archaeological sites, and area of potential effects (APE). (Source: USGS)

Summary Assessments

National Register-Eligible Properties Places

Skidaway Oceanographic Institute

In accordance with the National and Georgia Registers of Historic Places, the University of Georgia's Skidaway Institute of Oceanography appears significant at the state level as a historic district under Criteria A, C, and D in the areas of Agriculture and Architecture for its history as a twentieth century plantation. The property may also be eligible for listing in the National Register of Historic Places in the area of Science for its association with the Skidaway Institute of Oceanography and the world-recognized scientific work that has been conducted there since the late 1960s once the property reaches the 50-year age consideration. Scientific research at the Skidaway Institute would be tied to broader national historic contexts associated with marine and oceanographic institutes at universities and colleges and to scientific education.

The property's agricultural significance is associated with the cattle breeding operations and construction of related features, such as the show barn, established by Robert and Dorothy Roebling during the 1930s and 1940s. Architectural significance is associated with several notable individual buildings on the property—the Laboratory Barn, Roebling House, Whitted Residence, and Hodgson house—as well as the collection of buildings that survive from the plantation period as a whole. Numerous physical resources of the campus survive from the period of significance to convey the historic associations of the historic district. The patterns of spatial organization, land uses, vegetation, views and vistas associated with the campus also survive from the historic period of significance and help to convey the significance of the historic district.

Overall, the property retains integrity of location, setting, feeling, and association. The overall composition and layout of the grounds, and the scale and materials of the buildings are consistent with the historic plantation. Contemporary additions within the suggested boundaries, including new research facilities, residences, and maintenance sheds, convey a similar character, scale, and mass as most of the historic features of the campus and do not diminish the overall integrity of the property. The modern institutional buildings and landscape features of the MAREX and Institute Campus character area do not reflect the character of the plantation landscape and are not part of the proposed historic district. A number of buildings from the period of significance have been removed. Several of the historic district's remaining contributing buildings have been altered in order to be adapted to ongoing use. Integrity of design and workmanship of some buildings is thus diminished.

The National Register period of significance for the property extends from the period of Roebling ownership in 1936 to 1967, when the property was transferred to the state of Georgia for establishment of the Skidaway Institute of Oceanography

Skidaway Institute of Oceanography appears eligible for listing in the National and Georgia Registers as a historic district with a period of significance that extends between 1936 and 1967. The period of significance could be extended to an earlier date with additional research into the history of the site prior to the Roebling ownership. The Modena Plantation property appears to have been occupied from before the Civil War, and features may survive to convey integrity for the earlier period, either aboveground or as archaeological resources.

The Modena Plantation Core character area comprises the suggested boundary of the historic district, though several isolated remnant structures are located outside of the character area and should be considered for inclusion within the historic district. The features that appear individually eligible for listing in the National Register of Historic Places, and those that are likely to contribute to a historic district, are indicated below.

Resources potentially eligible for individual listing in the National Register of Historic Places

The following buildings may be individually eligible for listing:

- Whitted Residence UGA 7533 (circa 1940)
- Hodgson house UGA 7527 (1955)

Note that individually eligible resources may also represented contributing resources with a historic district.

Resources potentially contributing to a National Register-eligible district

- Mechanical Shop W-1 UGA 7501 (1940; pre-1967; post 1967; 2005)
- Roebling Conference Center UGA 7506 (circa 1930s; 1941)
- Roebling House precinct gardens (by 1940s)
- Conference Annex M6 UGA 7534 (circa 1940)
- Laboratory Barn UGA 7502 (1948)
- Baggett apartment UGA 7505 (1948)
- Rice House UGA 7530 (1955)
- Martin/Thomas Duplex UGA 7528 (1952)
- Chemical storage UGA 7536 (circa 1940)
- Fuel oil storage UGA 7537 (circa 1940)
- Whitted Residence UGA 7533 (circa 1940)
- Hodgson house UGA 7527 (1955)
- Syrup Boiler (by 1967)
- Main and Fuel Docks (Freight Dock, Hurricane Dock/North Dock) (by 1967)
- Skidaway Interpretive Cabin UGA 7022 (late 1930s)
- Livestock Watering Trough UGA 7514 (by 1967)
- Landscape Resources: Network of plantation-era roads and paths, mature trees and lawn