

City of Tybee Island Shore Protection Act Permit – Beach Structures
March 2023

Basic Project Details

The City of Tybee Island is applying for a Shore Protection Act Permit to authorize certain existing publicly maintained dune crossover benches, pavilions, and swings and to construct seven additional publicly maintained dune crossover benches. The City also seeks authorization to include temporary placement of certain storage boxes and beach rental equipment that has heretofore been authorized by the Department of Natural Resources (“DNR”) annually under individual Letters of Permission with the respective vendors.

A Conditional Permit, SPA #169, to construct most of Tybee’s public dune crossovers dates to 1987. The primary purpose of the public dune crossover structures is to provide access to the beach, while maintaining the stability of any sand dunes it traverses. The permit did not allow for benches, pavilions, or swings.

In 2002, the conditions were clarified by including language prohibiting decks or viewing platforms.

Around 2007, the DNR gave the City verbal acknowledgement that certain public dune crossover benches, swings, and pavilions that had been constructed but not authorized could remain until such time as they were to be rebuilt or maintained, at which time the crossovers would need to be brought into compliance with SPA Permit #169.

Under SPA Permit #473, November 1, 2019, the City restored dunes which necessitated maintaining existing public dune crossovers, primarily lifting them, and extending them over the newly restored dunes.

As part of that maintenance, and in compliance with SPA #169, all existing benches on those crosswalks that were maintained were removed between January and April of 2021.

In April of 2021 residents of the City complained about the loss of the public dune crossover benches. The benches were seen by residents as a part of the quality of life on the island, providing a respite for those elderly or handicapped to enjoy proximity to the beach. The issue became quite contentious, with a groundswell of support for replacing those crosswalk benches that had been removed.

In addition, the issue of swings was also brought up by residents, who complained that the swings were not being maintained and, in fact, were being removed as they became dilapidated over time or became embedded deep within the dune field as it naturally grew seaward.

Maintaining current swings within the dune system encourages pedestrian encroachment in the dunes and creates a confusing enforcement issue. City ordinance 12.1(8) *provides that “it shall be unlawful for any person to pick, gather, remove, walk in the dunes, or otherwise disturb the vegetation present on sand dunes, including sea oats”*. Currently, if someone is

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sitting on a swing they are not enforced, but if they are standing beside a swing, they can be ticketed.

During discussion and debate at City Council meetings, several residents held conversations with a variety of senior DNR staff, as well as State Legislators, who in turn discussed the matter with senior DNR staff. City Staff has been in close communication with DNR staff throughout this time and appreciate the time and effort DNR staff have spent in working with the City. Their guidance has been crucial in helping the City propose a solution that supports the DNR's mission to balance economic development in Georgia's coastal area with preservation of natural, environmental, historic, archaeological, and recreational resources for the benefit of Georgia's present and future generations.

The public dune crossover benches, swings, and pavilions on Tybee have been in place for decades with no adverse impact on the beach or the dunes. In fact, as the dune field has grown seaward, particularly mid-Island where many of the crosswalk benches were removed, the benches and swings were either behind or in the seaward most dunes. They provide an important amenity to those residents and visitors who are elderly or handicapped or otherwise cannot stay on the beach to enjoy this valuable natural resource.

Additionally, upon the request of the DNR staff, the City wishes to include the temporary beach rental equipment locations which have been heretofore covered by individual Letters of Permission by the DNR annually to the respective vendors.

Benches

The City requests authorization for the following:

Existing public dune crossover benches:

- Chatham Avenue
- 17th Street
- 16th Street
- 15 ½ Street
- 14 ½ Street
- 12th Street
- Eastgate
- Gulick Street
- Taylor Street,

existing pavilions associated with dune crossovers, both of which are significantly landward of the most seaward dune:

- 19th Street
- North Beach,

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replacement of those dune crossover benches that were removed during maintenance:

- 13th Street
- 11th Street
- 10th Street
- 9th Street
- 8th Street
- 7th Street
- 6th Street.

In addition to the Standard Conditions of a SPA Permit, including the Standard Permit Conditions for Dune Crossovers, the City proposes the following Special Conditions to this Permit, should it be granted:

- One bench per crossover. We expect to place them on the south side of the crossovers.
- Bench no longer than 8 ft. wide to accommodate existing crossover posts. No additional posts allowed.
- Bench no closer than 100 ft. landward of landward toe of most seaward dune, determined in concert with the DNR CRD, to maintain the integrity of the seaward dunes.
- Existing benches will be brought into compliance with Permit conditions when maintenance is performed.

This means benches may be replaced during maintenance so long as they meet these criteria. In some cases, the crosswalk will be too short to accommodate the 100 ft. distance from the landward toe of the most seaward dune, and so benches will not be replaced.

Swings

The City requests authorization for certain existing public swings that are within R-1 (single-family), R-2 (multi-family), or R-T (Residential Transition) zoning districts in the City's Marshfront Neighborhood and Beach Neighborhood, and the three designated ADA crossovers as follows:

- Inlet Avenue
- Chatham Avenue
- Tybrisa (ADA)
- 13th Street
- 12th Street
- 11th Street
- 10th Street
- 8th Street
- 7th Street
- 6th Street

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- Center Street
- Eastgate (ADA)
- North Beach (ADA)

It is important to note that over the 20-plus years the swings have been in existence, the number of turtle nests on Tybee has grown, with a record number of nests this most recent season. Clearly the swings have not been detrimental to nesting sea turtle habitat.

The City requests authorization to maintain the following swings:

- Inlet Avenue –15' seaward
- Chatham Avenue – move 45' seaward
- 13th Street – south swing 140' seaward
- 12th Street – 150' seaward
- 11th Street – 100' seaward
- 10th Street – 40' seaward
- 8th Street – 30' seaward
- 7th Street – 20' seaward
- 6th Street – 40' seaward
- Center Street - 30' seaward
- Eastgate – current location, no need to move
- North Beach – south swing to be replaced
- Tybrisa Street – new swing to be built to accommodate designated ADA crossover

Existing swings will be removed, and new swings built in the approximate locations from current swings as indicated. Measurements are approximate. In all locations the new swings will be placed at least 90 ft. landward of the current ordinary high-water mark. A new swing will be built at Tybrisa.

The following sixteen (16) swings will be removed:

- 15 ½ Street – 2 swings
- 15th Street – 2 swings
- 14 ½ Street – 2 swings
- 14th Street – 3 swings
- 13th Street
- 3rd Street
- Gulick Street – 2 swings
- North Beach
- Taylor Street
- Polk Street

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Of the existing 28 swings, eighteen (18) of them or approximately 57% will be removed and twelve (12) or approximately 43% will be rebuilt, plus an additional new swing will be built at Tybrisa Street. In this way, the amenities residents value so highly will be maintained in residential areas, the designated ADA crossover will have a swing, and habitat will be protected by limiting structures on the beach.

In addition to the Standard Conditions of a SPA Permit, the City proposes the following Special Conditions to this Permit, should it be granted:

- One swing at each location, located near the crossover so the elderly and handicapped can access them.
- Standard swing design as specified in the Permit application
- Swing at or near the seaward toe of the most seaward dunes and at least 90 ft. westward of the high-water mark, determined in concert with the DNR CRD and WRD.
- Existing swings will be removed, and new swings built in compliance with these special conditions.

This means swings may be replaced during maintenance so long as they meet these criteria. In some cases, the beach may erode to the point that there is not 90 ft. available westward of the high-water mark, and so swings may not be replaced, until the beach is nourished or otherwise widened.

Pavilions

There are two existing small pavilions: one on the 19th Street crosswalk and one on the North Beach crosswalk. Both are far landward of the most seaward dune. They are covered and provide a shaded viewing area for residents and visitors alike, especially those who are elderly and handicapped. They are both in good condition.

Beach Rental Equipment

The City seeks authorization under this SPA Permit for the temporary placement of storage containers and beach rental equipment that have been authorized in the past by individual Letters of Permission to the respective vendors:

19th Street, 18th Street, 17th Street, 16th Street, 15th Street, 14th Street, Center Street, 3rd Street, and North Beach.

At each location, as approved by the City, between the seaward toe of the most seaward dune and at least 50 ft. landward of the ordinary high-water mark, temporary placement of no more than two (2) wooden storage containers that are no larger than 4 ft. x 14 ft. x 18 ft., no more than 150 chairs, and no more than 60 umbrellas.

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In addition to the Standard Conditions of a SPA Permit, the City proposes the following Special Conditions to this Permit, should it be granted:

- **Specific locations of container boxes will be determined each March by the City in concert with DNR CRD and WRD, as part of an annual inspection of all structures on the beach and sand compaction standards after annual tilling in anticipation of turtle nesting season.**
- **The City will advise the DNR CRD of the vendor who will be responsible for each site prior to placement of the container boxes.**

Description of Alternatives Considered

The City was following DNR guidelines when it removed benches and swings as it replaced crossovers during the beach and dune nourishment. Given public outcry and the clear call to maintain these public amenities, while also respecting the need to limit structures on the beach to protect turtle nesting habitat and minimize potential damages during hurricanes, a wide range of alternatives were considered and expressed at City Council meetings for both benches and swings. These include placing benches within the 6 ft width of the Standard Permit Conditions for Dune Crosswalks, placing benches on both sides of the crosswalk, placing benches immediately behind the most seaward dunes, and maintaining all existing swings. Meetings included two City Council meetings and several meetings with groups of residents. The final design has been approved by City Council and shared with residents.

Several alternative locations of the benches on the crosswalks were considered. The proposed measure of 100 ft. landward of the landward toe of the most seaward dune is based on the City's experience in constructing dunes under SPA Permits #460 and #473. Given their height and the natural slope of sand, they tend to be approximately 65 ft. in width, from toe to toe. We also inspected and measured each public crossover. The proposed 100 ft. allows for variances in the dunes and provides a distance safely away from the potential movement of the most seaward dunes.

The proposed design of the crossover benches mirrors the existing conditions except providing for one bench instead of two. The benches are designed to fit on the existing standard construction of the public crossovers, needing only to extend the crossover structural joists at the location of the bench, and to add decking as a safety measure.

Because the swings are seen as an amenity primarily for full-time residents, a compromise was reached to maintain those existing swings only within the R-1 (single family residence), R-2 (multi-family residence), and R-T (Residential Transition) zoning districts within primarily residential districts: the Marshfront Neighborhood, the Beachfront Neighborhood, and certain areas within the North Beach Maritime District at the designated ADA crossover at North Beach. Swings within commercial districts (C-1 and C-2) will be removed, except at Tybrisa which is also a designated ADA crossover.

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The City considered requesting authorization for all thirty (30) existing swings, but in discussion with DNR staff agreed that maintaining swings within residential areas and designated ADA crossovers made sense since the issue was identified most vigorously by residents as a residents' amenity.

The temporary placement of storage boxes and beach rental equipment has heretofore been permitted by the DNR individually by current vendor on an annual basis. Since the City was seeking authorization for all other structures on the beach, the DNR requested that the storage boxes and beach rental equipment placed on the beach each season, typically from March to October, also be included in this application, which the City is only too happy to accommodate.

Landfill/Hazardous Waste Statement – The sites are not over a hazardous waste site or landfill.

Public Interest Statement

No harmful, increased alteration of the dynamic dune field or submerged lands, or function of the sand-sharing system will be created by the granting of a permit and the completion of the project. Existing crossover benches have been in place for decades with no discernable impact on the dynamic dune field. New benches to be constructed, if authorized, will be no closer than 100 ft. landward of the landward toe of the most seaward dune. The two existing pavilions are each more than 200 ft landward of the seaward dune.

The granting of a permit and the completion of our proposal will not interfere with the conservation of marine life, wildlife, or other resources. It is important to note that over the past twenty years the swings have been in place, they do not seem to have interfered with nesting sea turtle habitat. In fact, this past season tied a record for turtles nesting on Tybee Island, with 33 nests identified (Source: SeaTurtle.Org). The swings will be at the seaward toe of the seaward dunes at least 90 feet landward of the mean high-water mark, so not deleterious to turtle nesting.

The granting of a permit and the completion of our proposal will not interfere with access by, and recreational use and enjoyment of public properties impacted by the project. In fact, the City's proposal will enhance the access and recreational use and enjoyment of the beach by adding simple amenities that will serve residents and visitors, especially the elderly and handicapped.

Having nourished the beach, repaired and built dunes, and maintained public crossovers, the City has improved its coastal flood resiliency dramatically over the past several years. It continues to monitor beach and dune erosion in partnership with Skidaway Institute of Oceanography, dune vegetation and dune erosion in partnership with Georgia Southern University, and is in on-going dialogue with the U.S. Army Corps of Engineers regarding future beach nourishments and potential beneficial use of dredge material from the Savannah River Channel for near-shore placement. The City is doing all it can regarding public lands.

The City recognizes that there are also private crossovers and dune paths along the entirety of the beach, as shown in this application. These private crossovers historically have not been maintained as the dune field has grown, and many are far short of the most seaward dune. The City expects these dune paths over the seaward dunes to private crossovers will over time, if not maintained, become potential weak points in the City's flood resiliency. While not public property, over time these private crossovers may adversely impact the public interest in the wake of a major storm.

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Signed Drawings of the Proposed Project - See attached.

Deed or Other Instrument of Title or Permission and Property Plat: Not applicable as the City is the Applicant

Adjoining Property Owners – See attached.

Zoning Letter from Local Government - See attached.

Certification that Project Meets Hurricane Design Standards - See attached.

Vicinity Map and Directions to the Project Site:



	Street	Condition	Length	Notes
1	Alley 3	Public Beach Access – Direct boat access – Not a velocity zone Storm water outfall in CMPA jurisdiction.	N/A	Delineates Shoreline from Marsh; Coastal Marshlands Protection Act (CMPA) jurisdiction; provides emergency beach access
2	Inlet Vehicle Swing	Storm water outfall provides drainage for Strand area (basically 14 th -18 th streets) – not a velocity zone.	N/A	Main access for DPW. Swing 60' southwest of Inlet. Need to move 15' seaward.
3	Chatham Bench Swing	Good condition.	210'	Well established dunes; rebuilt 2012. Swing 250' southwest of Chatham. Need to move 45' seaward.
4	19 th Vehicle Pavilion	Stabilized vehicular access dune built in April 2018. Repaired February 2020. Mobi-mat.	N/A	South emergency vehicle access; movie shoots, SPA permit March 30, 2018 good for 5 years. Dune built April 2018 \$160,000. No Swing.
5	18 th	Built February 2020, extended landward May 2021. No room for bench upon replacement.	150'	SPA permit March 30, 2018 good for 5 years. No room for bench upon replacement. No swing.
6	17 th Bench	April 2019 rebuilt after dune build. Extended February 2020.	130'	SPA permit March 30, 2018 good for 5 years. No room for bench upon replacement. No swing.
7	16 th Bench	Rebuilt February 2020. ADA access.	226' with 50' Mobi-Mat	SPA permit March 30, 2018 good for 5 years. No room for bench upon replacement.
8	15 ½ Bench 2 Swings	Heavily used during season. Dunes growing on both sides. Swing 20' south and 25' north of 15 ½.	190'	Rebuilt 2017. No room for bench upon replacement. Swing 20' south of 15 ½. Remove swings.
9	15 th 2 Swings	Rebuilt Jan 2021. Swing 75' south and 25' north of 15th.	205'	No room for bench. Remove swings.
10	14 ½ Bench 2 Swings	Good condition. Good dune system. Swing 40' south and 70' north of 14 ½.	230'	Well-established dunes. Rebuilt 2018. Remove swings.
11	14 th 2 Swings	Rebuilt May 2020. Swing 100' south and 30' south of 14 th .	330'	Well-established dunes. Dune build experiment. Remove swings.
12	13 th 2 Swing	Rebuilt April 2021. Bench to be added. Swing 30' south and 30' north of 13 th .	444'	Raised and extended April 2021. Move South swing seaward 140'. Move North swing 30' seaward.

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	Street	Condition	Length	Notes
13	12 th Bench Swing	Rebuilt April 202. Swing 30 'south of 12th.	520'	Rebuilt 2014. Raised and extended April 2021. Move swing 150 'seaward.
14	11 th Swing	Rebuilt March 2021. Bench to be added. Swing 40 'north of 11th.	550'	Thickest part of dune system. Rebuilt 2014. Move swing 10 0 'seaward.
15	10 th Swing	Rebuilt March 2021. Bench to be added. Swing 20 'north of 10th.	581'	Thickest part of dune system. Rebuilt 2010. Stormwater containment system landward of seaward dune. Move swing 40 ' seaward.
16	9 th	Rebuilt March 2021 Bench to be added.	577"	Thickest part of dune system.
17	8 th Swing	Rebuilt February 2021. Bench to be added. Swing 5' south of 8th.	518"	Move swing 30 ' seaward.
18	7 th Swing	Rebuilt February 2021 Bench to be added.	452'	Move swing 20 'seaward.
19	6 th Swing	Rebuilt January 2021. Bench to be added.	378'	Move swing 40 'seaward.
20	Center Swing	From Center to anchor at bend of Butler is nodal point of the beach - most narrow beach, little accretion. Dune constructed February 2020. Pedestrian crossover built March 2020. Swing 60 'south of Center.	260'	No room for bench. Move swing 30 ' seaward.
21	3 rd Vehicle Swing	Surface vehicle access. Built February 2020. ADA access. Swing 60' north of 3rd.	N/A	Vehicular access. SPA permit #473 granted 2019. No room for bench. Remove swing.
22	2 nd	Closed to vehicles December 2019. Site of dune restoration Center-Eastgate.	235'	Location of dune build experiment. No room for bench. No swing.

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March 2023

	Street	Condition	Length	Notes
23	Anchor Build	New installation to be built under SPA Permit #473.	[est.250']	New installation. Consider composite (Trex) material experiment. No bench and no swing when built.
24	Eastgate Bench Swing	Rebuilt January 2021. ADA Access Swing 100' south of Eastgate.	340' with 50' Mobi-Mat	No changes to swing – on the beach.
25	Gulick Vehicle Bench 2 Swings	Built stabilized dune February 2020. Removed old trestle bridge. Raised pedestrian crossover. Swing 100' south and 100' north of Gulick.	550'	North end emergency vehicle access. Location of dune build experiment. Rebuilt March 2018. Built stabilized dune February 2020. Remove south swing and north swing.
26	North Beach Pavilion 2 Swings	Mobi-mat. ADA Access. Swing 30' south and 165' north of North Beach.	370' with 50' Mobi-Mat	Parking lot access. Move south swing 10' seaward and remove north swing.
27	Taylor Bench Swing	Good condition and short of seaward dune. New Connector to MSC built March 2020. Swing 165' south of Taylor.	455'	Parking lot access. Remove swing.
28	Van Horne	Fair condition and far short of seaward dune.	260'	Uncertain provenance – researching to determine if public or private crossover.
29	Polk Vehicle Swing	Surface level access – not a velocity zone. Swing 40' north northeast of Polk.	N/A	DPW farthest north access – water treatment and dump. Remove swing.
30	Bay & Byers	Good condition – last public crossover, not a velocity zone.	336'	

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Summary What does this mean?

Nests: 35
In Situ: 7
Relocated: 28 (80%)
Inventoried: 30 (85.7%)
Lost: 2 (5.7%)
Unknown: 3
False Crawls: 28

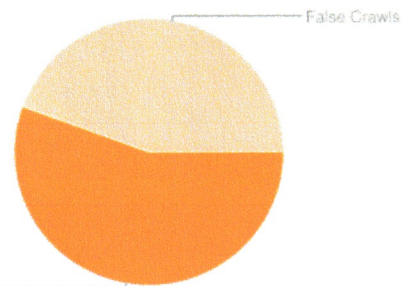
Estimated Eggs to Date: 3577
Eggs Lost: 640 (17.8%)
Hatched Eggs: 1771
Emerged Hatchlings: 1656
Mean Incubation Duration (all): 53.5 days
Mean Clutch Count: 101.4 eggs (Relocated Only)

Mean Hatch Success: 54.2%
Mean Emergence Success: 50.1%
Nest Success: 80.6%
Beach Success: 55.5%

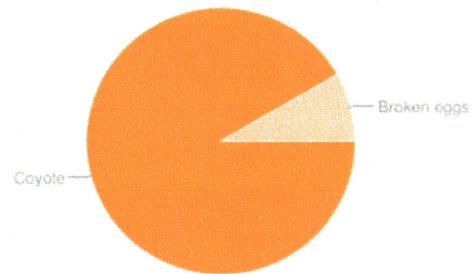
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Hover mouse over each chart for a description.

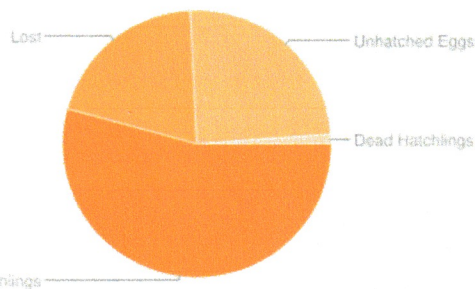
Activity



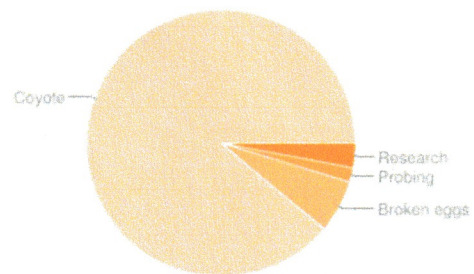
Significant Nest Losses



Egg Status

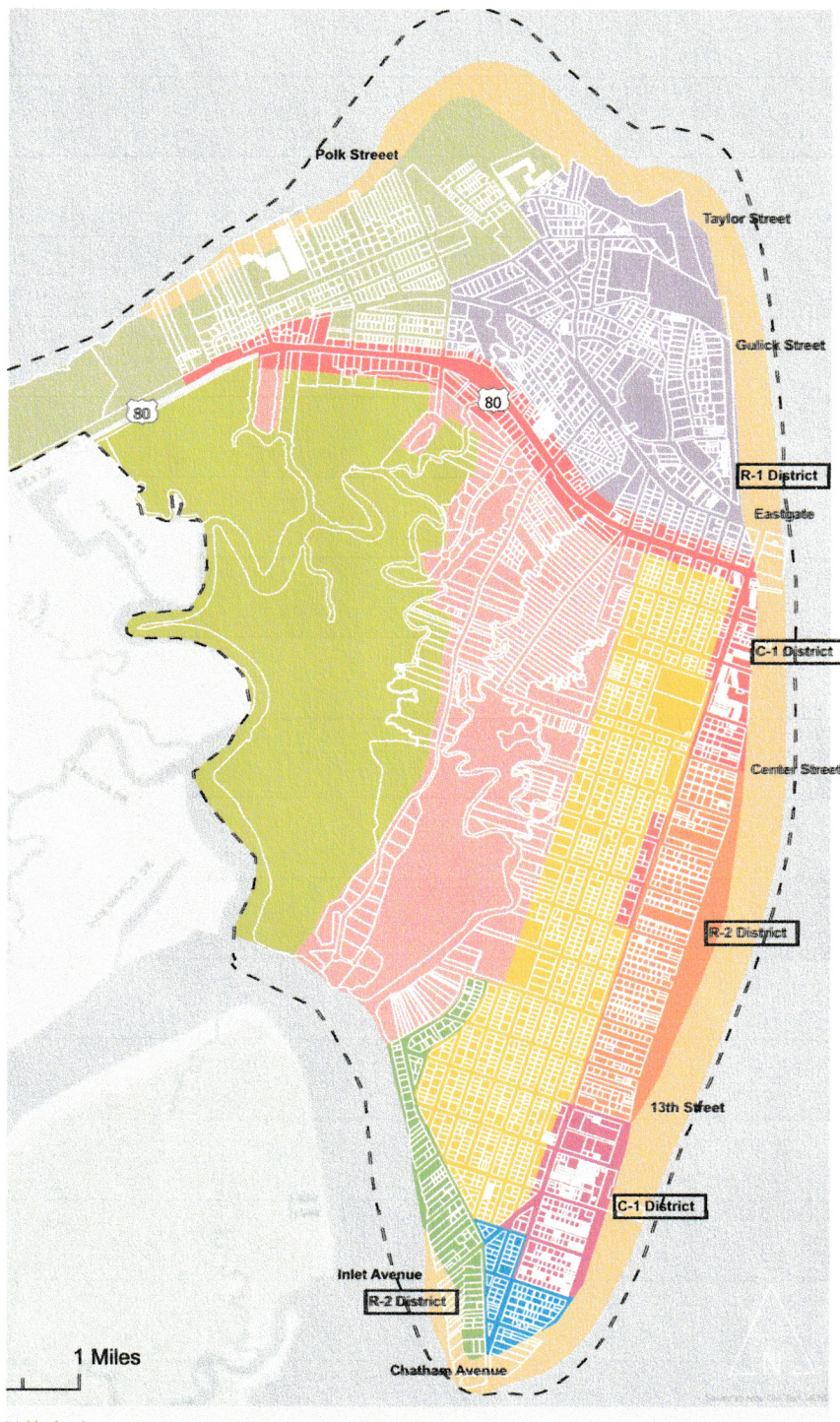


Egg Losses



Species	Nests	False Crawls
Loggerhead	33	26
Green Turtle		2
Unknown	2	

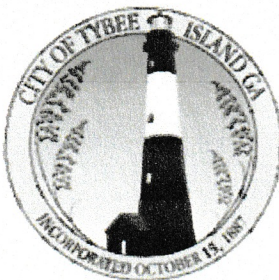
City of Tybee Island Shore Protection Act Permit – Beach Amenities



Neighborhood Zoning Map

MAYOR
Shirley Sessions

CITY COUNCIL
Barry Brown Mayor pro tem
Jay Burke
Nancy DeVetter
Michael "Spec" Hosti
Monty Parks
Brian West



CITY MANAGER
Shawn Gillen

CITY CLERK
Janet LeViner

CITY ATTORNEY
Edward M. Hughes

CITY OF TYBEE ISLAND

March 17, 2023

Mr. Josh Noble
Natural Resources, Coastal Resources Division
One Conservation Way, Suite 300
Brunswick, GA 31520

Re: SPA Permit Application to authorize crossover benches, swings, pavilions, storage boxes and beach rental equipment

Dear Mr. Noble:

The City of Tybee Island is requesting a SPA Permit to authorize certain amenities, including crossover benches, pavilions, swings, and the temporary placement of storage boxes and beach rental equipment.

This project does not violate any of the ordinances of The City of Tybee Island.

Sincerely,

George Shaw
Community Development Director

Cc: Alan Robertson
AWR Strategic Consulting, LLC

P.O. Box 2749 – 403 Butler Avenue, Tybee Island, Georgia 31328-2749
(866) 786-4573 – FAX (866) 786-5737
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MAYOR
Shirley Sessions

CITY COUNCIL
Barry Brown, Mayor Pro Tem
Jay Burke
Nancy DeVetter
Michael "Spec" Hosti
Monty Parks
Brian West



CITY MANAGER
Dr. Shawn Gillen

CLERK OF COUNCIL
Jan LeViner

CITY ATTORNEY
Edward M. Hughes

CITY OF TYBEE ISLAND

March 17, 2023

Georgia Department of Natural Resources/Coastal Resources Division
1 Conservation Way
Brunswick, GA 31520

RE: SPA Permit Application

Dear Directors and Staff:

I have reviewed the Tybee Island SPA Protection Act (SPA) permit application to maintain and rebuild crossover benches, pavilions, swings, and temporary placement of storage boxes and beach rental equipment.

Based on my observations and experience the amenities have been designed to meet applicable hurricane-resistant building standards. Additionally, I find the design to be practical and an improvement to the Tybee Island crossover system.

If you need any additional information, feel free to contact me.

Sincerely,

Pete Gulbranson, P.E.
City Engineer/Director of Infrastructure