DAVEY Resource Group

June 14, 2024

TO: US Army Corps of Engineers
69 Darlington Avenue
Wilmington, NC 28403

NC Division of Water Resources
1617 Mail Service Center
Raleigh, NC 27699-1617

RE: Del Webb Ocean Isle Beach; Brunswick County, NC
Individual Permit Application
Action ID# SAW-2009-01063

To Whom It May Concern:

On behalf of the Pulte Group, Davey Resource Group, Inc. is submitting an Individual Permit application and associated attachments for the Del Webb Ocean Isle Beach residential development, located off Georgetown Road and Ocean Isle Beach Road in Ocean Isle Beach, NC. The purpose of this project is to create an economically viable residential community in the Ocean Isle Beach area to accommodate a 55+ demographic. Jurisdictional ditch and open water impacts are also needed for lot development. Proposed impacts are 0.466 acres of 404 wetlands, 120 LF of stream, 0.037 acre of open water pond, and 0.275 acres of non-stream waters of the US.

To mitigate proposed wetland impacts, the applicant proposes to buy into the Stone Farm Mitigation Bank for the restoration of 1 acre of non-riparian wetlands within the Lumber River Basin. Because stream impacts are below the typical mitigation threshold of 0.02 acre and are of a low quality, no stream mitigation is proposed.

If you have any questions, or would like to discuss the application, please do not hesitate to call.

Thank you for your assistance.

Sincerely,

Kim Williams
Environmental Scientist

Encl.

Phone: 910.452.0001 • Fax: 910.452.0060
3805 Wrightsville Ave., Suite 15, Wilmington, NC 28403

U.S. Army Corps of Engineers (USACE)

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT

33 CFR 325. The proponent agency is CECW-CO-R.

Form Approved - OMB No. 0710-0003 Expires: 01-08-2018

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned. System of Record Notice (SORN). The information received is entered into our permit tracking database and a SORN has been completed (SORN #A1145b) and may be accessed at the following website: http://dpcld.defense.gov/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/570115/a1145b-ce.aspx

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME	8. AUTHORIZED AGENT'S NAME AND TITLE (agent is not required)
First – **Paul** Middle - Last - **Michael**	First – **Kim** Middle - Last - **Williams**
Company – **Pulte Group Coastal Carolinas**	Company – **Davey Resource Group, Inc.**
E-mail Address – **Paul.Michael@pultegroup.com**	E-mail Address – **kim.williams@davey.com**
6. APPLICANT'S ADDRESS:	9. AGENT'S ADDRESS:
Address- **1150 62nd Avenue North**	Address- **3805 Wrightsville Avenue; Suite 15**
City – **Myrtle Beach** State - **SC** Zip - **29572** Country - **USA**	City-**Wilmington** State **NC** Zip -**28403** Country - **USA**
7. APPLICANT'S PHONE NOs. w/AREA CODE	10. AGENTS PHONE NOs. w/AREA CODE
a. Residence b. Business **770-356-6864** c. Fax	a. Residence b. Business **910-452-0001** c. Fax **910-452-0020**

STATEMENT OF AUTHORIZATION

11. I hereby authorize Davey Resource Group, Inc. to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

SEE ATTACHED
SIGNATURE OF APPLICANT DATE

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE (see instructions)
Del Webb Ocean Isle Beach

13. NAME OF WATERBODY, IF KNOWN (if applicable)	14. PROJECT STREET ADDRESS (if applicable)
Jinny's Branch	Address: **Ocean Isle Beach Rd & Georgetown Rd**
15. LOCATION OF PROJECT	
Latitude: **33.927321** °N Longitude: **-78.438106** °W	City – **Ocean Isle Beach** State- **NC** Zip-

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions)

State Tax Parcel ID **See attached** Municipality Unincorporated

Section - Township – Ocean Isle Beach Range -

17. DIRECTIONS TO THE SITE

From Wilmington, take Highway 17S into Brunswick County. Turn left onto Ocean Isle Beach Rd. Turn left onto Old Georgetown Rd. Site will be on the right (Figure 1).

18. Nature of Activity (Description of project, include all features)

The project consists of constructing a residential subdivision. (See Project Narrative).

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

The purpose of this project is to create an economically viable residential community in the Ocean Isle Beach area to cater to a 55+ demographic. The location of this project was chosen due to the lack of retirement communities in the area, the overall shortage of housing in the Ocean Isle Beach Metropolitan Statistical Area (MSA), and the relatively close proximity to the beach. Impacts to jurisdictional features are needed for site access and lot development (See Project Narrative).

USE BLOCKS 20-23 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

Impacts to jurisdictional features are needed for site access and lot development (See Project Narrative).

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards:

Type **Clean, compacted sub-grade soil materials, clean ABC aggregate, pavement etc**

Amount in Cubic Yards **TBD**

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Proposed impacts are 0.466 acres of 404 wetlands, 120 LF of stream, 0.037 acre of open water pond, and 0.275 acres of non-stream waters of the US. Of the channel impacts, 10 LF of stream and 0.003 acre of non-stream waters of the US are for riprap, which will be installed to be flush with the bottom of the channel, resulting in no permanent loss.

23. Description of Avoidance, Minimization, and Compensation (see instructions)

The applicant evaluated several off-site and on-site alternatives and determined that the preferred project is the least environmentally damaging yet practicable alternative (see project narrative). The applicant proposes to mitigate for the unavoidable wetland impacts by purchasing credits from the Stone Farm Mitigation Bank at a 2:1 ratio. Stream impacts are below the typical stream threshold required by the USACE for mitigation. Therefore, no stream mitigation is proposed.

24. Is Any Portion of the Work Already Complete? [ ] Yes [X] No IF YES, DESCRIBE THE COMPLETED WORK

25. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (if more than can be entered here, please attach a supplemental list).

a. Address- **See attached (Appendix D)**

City - State - Zip -

b. Address-

City - State - Zip -

c. Address-

City - State - Zip -

d. Address-

City - State - Zip -

e. Address-

City - State - Zip -

26. List of Other Certificates or Approvals/Denials received from other Federal, State, or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED

* Would include but is not restricted to zoning, building, and flood plain permits

27. Application is hereby made for permit or permits to authorize the work described in this application. I certify that this information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

See Attached		Kim Williams - DRG	06/13/2024
SIGNATURE OF APPLICANT	DATE	SIGNATURE OF AGENT	DATE

The Application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both.

PROJECT NARRATIVE

DEL WEBB OCEAN ISLE BEACH

BRUNSWICK COUNTY, NC

JUNE 2024

INTRODUCTION

Pulte Group proposes the development of Del Webb Ocean Isle Beach, a residential development to be located off Georgetown Road and Ocean Isle Beach Road in Ocean Isle Beach, NC. The project area is located within the Lumber River Basin and is approximately 352.5 acres in size. In order to access uplands within the site, several wetland and/or stream crossings are needed. Jurisdictional ditch and open water impacts are also needed for lot development. Proposed impacts are 0.466 acres of 404 wetlands, 120 LF of stream, 0.037 acre of open water pond, and 0.275 acres of non-stream waters of the US.

This site was previously part of a larger assemblage of parcels that was known as Ocean Isle Palms, a residential subdivision. Under a previous landowner, a portion of this subdivision was constructed, which included a network of roads, some stormwater ponds, and a few homes mostly off Ocean Isle Beach Road. Because of a slowing economy, construction of the subdivision stalled, and the land was sold. The current landowner is now selling a portion of the overall project area to the Pulte Group. Their planned development will be separate from Ocean Isle Palms.

PURPOSE AND NEED

The purpose of this project is to create an economically viable residential community in the Ocean Isle Beach area to cater to a 55+ demographic. The location of this project was chosen due to the lack of retirement communities in the area, the overall shortage of housing in the Ocean Isle Beach Metropolitan Statistical Area (MSA), and the relatively close proximity to the beach. Impacts to jurisdictional features are needed for site access and lot development.

EXISTING CONDITIONS

Habitat

The 352.5-acre project area is located southeast of the intersection of Georgetown Road and Ocean Isle Beach Road in Ocean Isle Beach, NC (Brunswick County) (Figure 1). The majority of the site is undeveloped and forested (Figure 4). A site delineation of 404 wetlands for the project area was performed by Davey Resource Group, Inc (DRG) and was approved by Mr. Gary Beecher of the U.S. Army Corps of Engineers on December 20, 2023 (Action ID# SAW-2009-01063; Appendix A). Michael Meilinger of NC Division of Water Resources verified the stream locations within the site in April of 2024.

The project area contains approximately 56.5 acres of 404 wetlands, 3.9 acres of open water ponds, 4,500 LF of stream, and 7,000 LF of non-stream jurisdictional ditches. Uplands within the site support mostly loblolly pines (*Pinus taeda*), with some young longleaf pines (*P. palustris*) in the western part of the site off of Ocean Isle Beach Road. A review of aerial photos indicates that most of the uplands within the site were timbered in the mid 2000's. These areas currently support loblolly pines that are 4" to 8" diameter at breast height (DBH). The longleaf pines within the site are also generally 4" to 8" DBH. Several channels run through the tract and eventually tie into Jinny's Branch off property. A portion of one channel in the southern part of the tract was excavated into a pond several decades ago. Wetlands are located along most of these channels throughout the site. In the northern and central parts of the site, wetlands support a canopy of loblolly pine with red bay (*Persea palustris*), wax myrtle *(Morella cerifera*), and gallberry *(Ilex glabra*) present as well. Wetland drains located farther south are at a lower landscape position and support more hardwoods such as red maple (*Acer rubrum*), sweetgum (*Liquidambar styraciflua*) and water oak (*Quercus nigra*).

Water Classifications

According to the topographic quadrangle for this area, the 404 wetlands and channels on site flow to Jinny's Branch, which runs east to Saucepan Creek and eventually the Atlantic Intracoastal Waterway (Figure 2) in the Lumber River Basin. Jinny's Branch is classified by the NC Division of Water Resources as C, Sw, and HQW. The C water classification is given to waters protected for uses such as secondary recreation, fishing, wildlife, fish consumption, aquatic life including propagation, survival and maintenance of biological integrity, and agriculture. Secondary recreation includes wading, boating, and other uses involving human body contact with water where such activities take place in an infrequent, unorganized, or incidental manner. The Swamp Waters (Sw) classification is a supplemental classification intended to recognize those waters which have low velocities and other natural characteristics which are different from adjacent streams. The High Quality Waters (HQW) classification is a supplemental classification intended to protect waters which are rated excellent based on biological and physical/chemical characteristics through monitoring or special studies, primary nursery areas designated by the Marine Fisheries Commission, and other functional nursery areas designated by the Marine Fisheries Commission. No CAMA-regulated Areas of Environmental Concern (AEC) exist within this site.

DRG staff recently evaluated wetlands and the stream at the proposed impact locations using the NC Wetland Assessment Method (NCWAM) and NC Stream Assessment Method (NCSAM) (Appendix B). One Wetland (Impact #1) was determined to be of an overall low quality. The remaining wetlands (Impacts 6 through 8) were determined to be of high quality. The stream rated low quality, mostly because it is incised and has low in-stream habitat.

Soils

According to the Brunswick County Generalized Soil Survey, uplands within the site are predominantly Leon fine sandy loam, with some Baymeade fine sand and Kureb fine sand as well (Figure 3). Wetlands are predominantly Murville mucky fine sand, with some Muckalee loam in the southern part of the tract. Leon soils are nearly level, poorly drained and are found in broad, smooth, interstream areas and in depressions. Baymeade soils are well drained and are found on low ridges and convex divides. Murville soils are nearly level, very poorly drained soils found in depressions in broad interstream areas. Muckalee loam soils are nearly level, poorly drains soils on floodplains of freshwater streams.

Federally Protected Species

Staff of DRG evaluated the project area to determine if the site provides suitable habitat to support federally listed threatened or endangered species known to occur in the region. A list of federally protected species was identified using the US Fish and Wildlife Service's Information, Planning, and Consultation (IPaC) system (Table 1; Appendix C). Species with the federal classification of Endangered (E), Threatened (T), or Officially Proposed (P) for such listing are protected under the Endangered Species Act (ESA) of 1973, as amended and the Bald and Golden Eagle Protection Act.

A search of the North Carolina Natural Heritage Program (NHP) database was also conducted to identify areas within and around the site that are already known to support federally listed species (Appendix B). According to their files, the state-listed southern oak hairstreak has been documented to occur on site. Furthermore, the American alligator, Atlantic sturgeon, several rare species and community types are known to occur within a one-mile radius of the site. Additionally, two Natural Heritage Program natural areas are located north and south of the site (see Appendix C).

Table 1. Federally listed endangered and threatened species known to occur in Brunswick County, NC

Common Name	Scientific Name	Status US	Status NC	Habitat Description	Habitat Present in Project Area?
ANIMALS					
American Alligator	*Alligator mississippiensis*	T (S/A)	T	Freshwater swamps, marshes, rivers, and lakes	Yes
Bald Eagle	*Haliaeetus leucocephalus*	BGPA	T	Nests in large trees near open water	No
Green Sea Turtle	*Chelonia mydas*	T	T	Shallow waters (except when migrating) inside reefs, bays, and inlets; open beaches are required for nesting.	No
Hawksbill sea turtle	*Eretmochelys imbricata*	E	E	Rocky areas, coral reefs, shallow coastal areas, lagoons or oceanic islands, and narrow creeks and passes	No

Common Name	Scientific Name	Status US	Status NC	Habitat Description	Habitat Present in Project Area?
Kemp's Ridley Sea Turtle	*Lepidochelys kempii*	E	E	Nearshore and inshore waters of the northern Gulf of Mexico; open beaches are required for nesting.	No
Leatherback sea turtle	*Dermochelys coriacea*	E	E	Tropical and temperate waters of the Atlantic, Pacific, and Indian Oceans	No
Loggerhead sea turtle	*Caretta caretta*	T	T	Estuarine and oceanic waters; bays, lagoons, salt marshes, creeks, ship channels, and the mouths of large rivers	No
Magnificent Rams-horn	*Planorbella magnifica*	C	E	Orton Pond and pond on Sand Hill Creek; formerly Greenfield Lake (endemic to North Carolina)	Yes
Monarch Butterfly	*Danaus plexippus*	C		East population migrates between central Mexico and Canada; requires nectar habitat including milkweed plants.	No
Northern Long-eared Bat	*Myotis septentrionalis*	T		Hibernates in caves and mines; roosts underneath bark, in cavities or in crevices of both live trees and snags. They are site generalists and can be found in a range of forested areas.	Yes
Piping plover	*Charadrius melodus*	T	T	coastal beaches, sand flats at the ends of sand spits and barrier islands	No
Red-Cockaded Woodpecker	*Picoides borealis*	E	E	Open pine woodlands and savannas with large old pines	No
Red Knot	*Calidris canutus rufa*	T		Intertidal, marine habitats, especially near coastal inlets, estuaries, and bays	No
Tri-Colored Bat	*Perimyotis subflavus*	PE		Roosts in trees, primarily among leaves. Hibernates in culverts, tree cavities, and abandoned wells.	Yes
West Indian Manatee	*Trichechus manatus*	T	E	fresh- and saltwater habitats at least 2 meters in depth	No
Wood Stork	*Mycteria americana*	T		Freshwater and estuarine wetlands for nesting, feeding and roosting.	Yes
PLANTS					
Cooley's Meadowrue	*Thalictrum cooleyi*	E	E	Moist to wet bogs and savannas with neutral soils	No
Rough-leaved Loosestrife	*Lysimachia asperulaefolia*	E	E	Ecotones between pine savannas and pocosins, on moist to seasonally saturated sands, on organic soils overlaying sand	No

Common Name	Scientific Name	Status US	Status NC	Habitat Description	Habitat Present in Project Area?
Seabeach Amaranth	*Amaranthus pumilus*	T	T	Overwash flats at accreting ends of islands and lower foredunes	No

KEY:

Status	Definition
E	Endangered: A taxon "in danger of extinction throughout all or a significant portion of its range."
T	Threatened: A taxon "likely to become endangered within the foreseeable future throughout all or a significant portion of its range."
P	Proposed for Listing
C	Candidate for Listing
T(S/A)	Threatened due to similarity of appearance - a species that is threatened due to similarity of appearance with other rare species and is listed for its protection.
BGPA	Bald and Golden Eagle Protection Act.

The sea turtles, piping plover, red knot, West Indian manatee, and seabeach amaranth are all found in either coastal or marine habitats and would not be located within the proposed project. The other species listed in the table are discussed below.

American Alligator

The American alligator lives primarily in freshwater swamps and marshes, but also in rivers, lakes, and smaller bodies of water. Most channels within the site are too small to provide suitable habitat for this species. However, the impounded pond in the southwestern corner of the site does provide suitable habitat for the alligator. No impacts to this pond are proposed. Therefore, no impacts to the species would occur from site development.

Bald Eagle

Bald eagles in the southeast typically build their nests in the zone between forests and marsh or open water. Nests are built in dominant live pines or cypress trees that provide a clear flight path. The site is located in fairly close proximity to open water (~ 1 mile from Saucepan Creek and 2 miles from the AIWW). However, most trees on site are fairly young and do not appear to contain suitable nesting habitat for this species.

Magnificent Ramshorn

The magnificent ramshorn is a large freshwater snail that is adapted to still or slow-flowing aquatic habitats such as beaver ponds or man-made mill ponds. The species is endemic to southeastern North Carolina and was historically known from only four sites in the lower Cape Fear River Basin. However, all four sites appear to be extirpated. This is largely due to a loss of

freshwater habitat from salt water intrusion and a loss of beaver ponds. Appropriate habitat for this species occurs within the impounded pond located on site. No impacts to this pond are proposed. Therefore, no impacts to the species, if present, would occur.

Monarch Butterfly

The monarch butterfly is globally distributed throughout 90 countries, islands, and island groups. It occurs in open-canopy woodlands, prairies, meadows, agricultural lands, utility rights-of-way, and urban and suburban gardens throughout North America. North American populations are well known for their long-distance migration. In eastern North America, monarchs travel north in the spring, from Mexico to Canada, over two to three successive generations, breeding along the way. They then migrate back to Mexico in the fall. Therefore, eastern North America can provide both breeding and migrating habitat. Adult monarch butterflies require a variety of blooming nectar resources, which they feed on throughout their migration and breeding seasons (spring through fall). Monarchs also need milkweed (*Asclepias spp*) for both egg laying and larval feeding within this habitat. Milkweed typically grows in meadows, prairies, edges of forests, and along roads. The site is forested and generally does not provide suitable habitat for this species.

Northern Long-Eared Bat

The northern long-eared bat (NLEB) was listed as threatened under the Endangered Species Act in 2015 (80 FR 17974) because of population declines caused by white-nose syndrome and the continued spread of the disease. The northern long-eared bat hibernates during the winter in caves and mines with constant temperatures, high humidity, and no air currents. During the winter and summer, they roost alone or in colonies underneath bark, in cavities or in crevices of both live trees and snags. They are site generalists and can be found in a range of forested areas from large contiguous forested blocks to small, wooded lots; densely vegetated stands to more open stands; and hardwood forests to mixed pine/hardwood forests. No hibernacula appear to exist within the project area. The site is forested and provides appropriate winter and summer roosting habitat. The USFWS NLEB Determination Key was completed for this project and resulted in a "May Affect, Not Likely to Adversely Affect (MANLAA)" Determination (Appendix C).

Red-Cockaded Woodpecker

The red-cockaded woodpecker (RCW) is a small bird measuring about 8 inches in length that has a white cheek patch and black and white barred back. The males have a few red feathers, called a cockade, on the side of their head. The species is generally found in open pine woodlands and savannas with large old pines for nesting and roosting habitat. Cavity trees are located in open stands with little or no hardwood midstory or overstory. Minimum age of trees needed for excavating cavities in typically 60 years with a minimum 10-inch DBH. Foraging habitat is provided in pine and pine hardwood stands 30 years old or older with foraging preference for pine trees 8-inch DBH or larger. In good, well-stocked pine habitat, sufficient foraging habitat can be provided on 75 to over 500 acres depending on habitat quality and RCW population density.

Foraging habitat should be within 0.5 miles of nesting habitat. In southeastern North Carolina (including Brunswick County), RCWs forage and nest in both upland and wetland communities.

Most of the uplands and some wetlands within the site support a canopy of loblolly or longleaf pines. However, much of the tract was timbered in the mid 2000's and currently supports trees that are between 4" and 8" DBH and are too young to provide suitable habitat for the species. Some of the interior wetlands have not been recently timbered and support larger pond pines (*P. serotina*) and loblolly pines. These areas were evaluated and no RCW cavity trees were observed.

Tri-Colored Bat

The tri-colored bat's range includes the eastern half of the United States as well as sections of Canada and Central America. During the spring, summer and fall, tricolored bats are found in forested habitats where they roost in trees, primarily among leaves. During the winter, they are found roosting in culverts, tree cavities, and abandoned water wells in the southern U.S. The site is forested and provides suitable winter and summer roosting habitat for this species. This species is proposed for listing. If the species becomes listed prior to anticipated tree clearing within the site, the applicant will coordinate with the USFWS to minimize impacts to the species.

Wood Stork

Wood storks use freshwater and estuarine wetlands for nesting, feeding and roosting. They feed in a wide variety of tidal and freshwater ecosystems: freshwater marshes, ponds, hardwood and cypress swamps, narrow tidal creeks or shallow tidal pools, and artificial wetlands such as seasonally flooded roadside and agricultural ditches, impoundments and large reservoirs. Particularly attractive feeding sites are depressions in marshes or swamps where fish become concentrated during periods of falling water levels. They nest in patches of medium to tall trees, either in standing water or on islands surrounded by expanses of open water. Appropriate nesting habitat for this species does not occur on site. However, the pond located in the southwestern part of the site may provide suitable foraging habitat for the species. No impacts to this pond are proposed.

Cooley's Meadowrue

Cooley's meadowrue inhabits sunny, moist places such as open, savanna-like forest edges and clearings, wet savannas over calcareous clays, and ecotones between wet savannas and non-riverine swamp forests. Soils are basic, sandy loams. Wetland areas within the site, including ditch banks, appear to be too densely vegetated to provide appropriate habitat for this species. Therefore, suitable habitat for this plant species does not exist on this site.

Rough-Leaved Loosestrife

Rough-leaved loosestrife generally occurs in the ecotones between pine savannas and pocosins, on moist to seasonally saturated sands. Because this plant is shade-intolerant, moist areas exposed to sunlight provide suitable habitat. Wetlands, channels and adjacent uplands within

the site appear to be too densely vegetated to provide appropriate habitat for the rough-leaved loosestrife. Therefore, suitable habitat for this plant does not exist on this site.

Cultural Resources

The NC State Historic Preservation Office HPOWEB GIS Service was reviewed to determine if there are any known historic or cultural resources on or adjacent to the project area. According to their website, no known historic or cultural resources have been documented on or adjacent to the project area.

Local Zoning and Land Use Plan

The site is located within Brunswick County's jurisdiction and is zoned Medium Density Residential (R-7500). According to the County's Unified Development Ordinance, the Medium Density Residential zoning district (as well as several other residential districts) is "established to provide for orderly suburban residential development. A limited number of commercial and civic uses are allowed, subject to the restrictions necessary to preserve and protect the residential character of the neighborhood. A special permit process for higher intensity development is also allowed, using discretion to balance issues of higher density with improved amenities. Due to the higher intensity developments contained in this district, it is intended to be applied to properties served by public sewer and water systems." Note that lot density for this site has been approved through a Planned Unit Development, which authorizes between 2.8 and 4.1 lots per acre for different pods within the site.

The Future Land Use Map (2012) for the Brunswick County CAMA Core Land Use Plan (2007) classifies the project area as 'Low-Density Residential'. According to the land use plan, this classification corresponds to the R-7500 zoning district and is for agricultural uses, single-family residences, multi-family residences in certain cases, emergency shelters, parks, and places of worship. The proposed project is in keeping with the CAMA Land Use Plan.

ALTERNATIVES ANALYSIS

The alternatives evaluated include a no-action alternative, several off-site alternatives, and several on-site site layouts, including the preferred project.

No-Action Alternative

The no-action alternative would keep the site in its current, undeveloped condition and would prohibit the applicant from expanding the planned unit development on this site. The no-action alternative is not considered feasible for several reasons. Ocean Isle Beach is experiencing rapid growth, especially from people looking to retire to the area. The site is centrally located off of Ocean Isle Beach Road and is zoned for residential development and has an approved PUD. The no-action alternative would leave hundreds of acres of valuable uplands undeveloped. The inability to develop

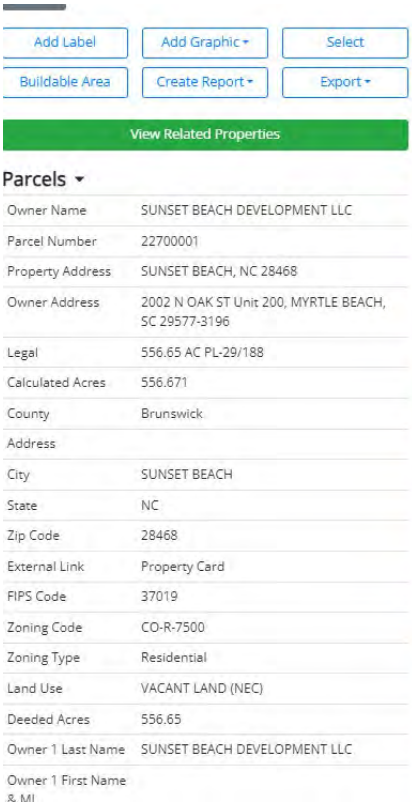
this tract of land would be a significant loss of return for the applicant and a loss of housing for the community.

Alternate Sites

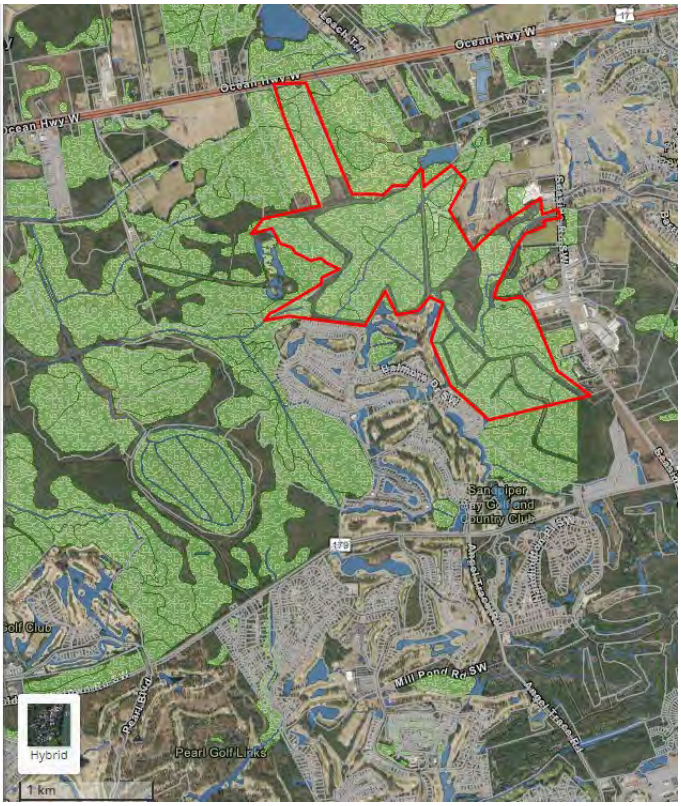
The applicant's purpose is to develop a retirement community in Ocean Isle Beach that is economically viable. Several site characteristics were required in order to create a viable project for the applicant. The site must be large enough and zoned properly to accommodate the lot density required to support a Del Webb community, which includes an amenity package, common area landscaping, and entry fees. A site in close proximity to the beach was also a requirement. Finally, the applicant wanted to find a site with minimal environmental issues. Several sites in this general vicinity were evaluated. Below is a discussion of each site that was considered before selecting the proposed site.

<u>Off-Site Alternative #1: SBD Tract:</u>

This 557-acre tract has access from Hwy 17 and Hwy 904 and is located in Sunset Beach (Parcel ID# 22700001). It is zoned R-7500. A review of the USFWS National Wetland Inventory (NWI) mapper indicates that the site is mostly wetlands (palustrine forested). Several Carolina Bays and the upper limits of Saw Pit Swamp are located within the tract. Although the size and zoning of this tract were conducive to the applicant's purpose and need, environmental impacts appeared to be too high to be viable.



Owner Name	SUNSET BEACH DEVELOPMENT LLC
Parcel Number	22700001
Property Address	SUNSET BEACH, NC 28468
Owner Address	2002 N OAK ST Unit 200, MYRTLE BEACH, SC 29577-3196
Legal	556.65 AC PL-29/188
Calculated Acres	556.671
County	Brunswick
Address	
City	SUNSET BEACH
State	NC
Zip Code	28468
External Link	Property Card
FIPS Code	37019
Zoning Code	CO-R-7500
Zoning Type	Residential
Land Use	VACANT LAND (NEC)
Deeded Acres	556.65
Owner 1 Last Name	SUNSET BEACH DEVELOPMENT LLC
Owner 1 First Name & MI	



Off-Site Alternative #2: Seaside Road Tract:

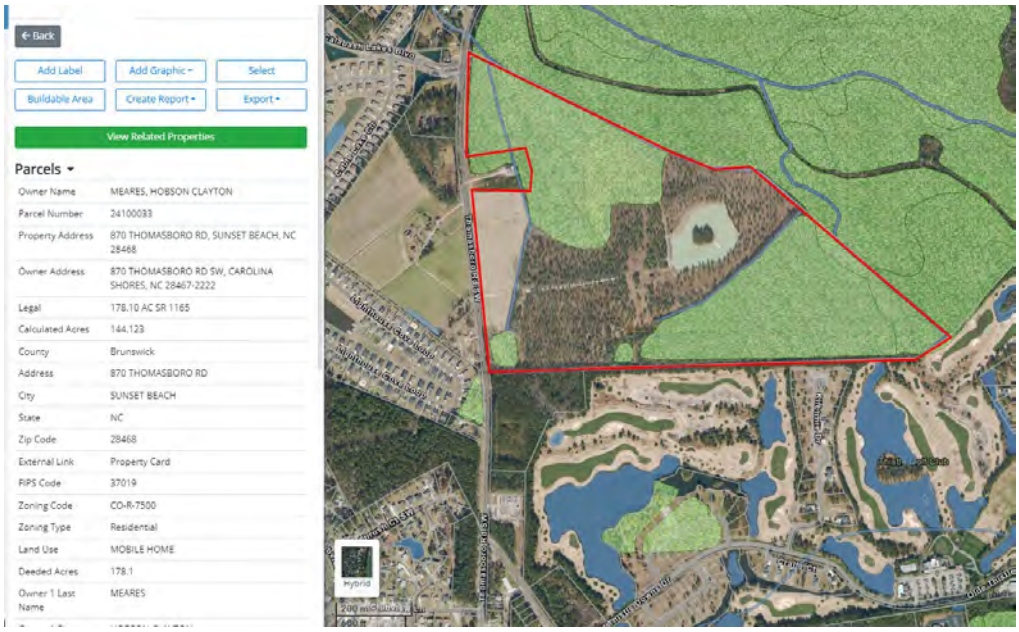
This 117-acre tract is located off Hwy 904 in Ocean Isle Beach (Parcel ID# 2270000102). It is zoned R-7500. A review of the USFWS National Wetland Inventory (NWI) mapper indicates that the site is approximately two-thirds wetlands (palustrine forested). Because of the amount of wetlands and the relatively small size of the tract, it was rejected as a suitable alternative.

Parcels

Owner Name	BLACKMAN, DIANE K & CHYKIRDA, WAYNE R
Parcel Number	2270000102
Property Address	SUNSET BEACH, NC 28468
Owner Address	PO BOX 6142, OCEAN ISLE BEACH, NC 28469-0142
Legal	117.42 ACRES PLAT 65/73 NC 904
Calculated Acres	117.382
County	Brunswick
Address	
City	SUNSET BEACH
State	NC
Zip Code	28468
External Link	Property Card
FIPS Code	37019
Zoning Code	CO-R-7500
Zoning Type	Residential
Land Use	VACANT LAND (NEC)
Deeded Acres	117.42
Owner 1 Last Name	BLACKMAN
Owner 1 First Name & MI	DIANE K
Owner 2 Last Name	CHYKIRDA
Owner 2 First Name & MI	WAYNE R
Land Square Footage	5,114,815

Off-Site Alternative #3: Meares Tract:

This tract is 178 acres and is located off Thomasboro Road SW in Ocean Isle Beach. It is also zoned R-7500. The NWI Mapper indicates that approximately half of the tract is wetlands. Similar to the tract above, the amount of wetlands and relatively small project area size rendered this site as infeasible and it was rejected from further consideration.



← Back

Add Label | Add Graphic | Select

Buildable Area | Create Report | Export

View Related Properties

Parcels

Owner Name	MEARES, HOBSON CLAYTON
Parcel Number	24100033
Property Address	870 THOMASBORO RD, SUNSET BEACH, NC 28468
Owner Address	870 THOMASBORO RD SW, CAROLINA SHORES, NC 28467-2222
Legal	178.10 AC SR 1165
Calculated Acres	144.123
County	Brunswick
Address	870 THOMASBORO RD
City	SUNSET BEACH
State	NC
Zip Code	28468
External Link	Property Card
FIPS Code	37019
Zoning Code	CO-R-7500
Zoning Type	Residential
Land Use	MOBILE HOME
Deeded Acres	178.1
Owner 1 Last Name	MEARES

Off-Site Alternative #4: Other Ocean Isle Palms Property

Other portions of the larger Ocean Isle Palms tract were evaluated for this project. However, the lot density approved through the PUD in these other areas is too low to result in a financially feasible project that also meets the amenity requirements of the applicant.

Preferred Site:

The applicant determined that the 352.5-acre project area located at the intersection of Old Georgetown Road and Ocean Isle Beach Road in Ocean Isle Beach, NC was the preferred site location. It consists of Parcel IDs 22800010; 2280000410; 2280001005 and portions of 22800003; 2290000102; 2290000705. The project area is zoned for residential development and has an approved PUD that meets the lot density requirements to make the project economically viable. Additionally, it appears to have minimal environmental issues. Once the site was chosen, several site plans were evaluated in an effort to balance lot density, site access, and environmental impacts.

On-site Alternatives

On-Site Alternative #1: Initial Plan with 741 Lots

The initial site plan considered by the applicant proposed 741 lots within the site, which would have resulted in impacts to 1,033 LF of stream, 0.741 acre of wetlands, and 0.293 acre of non-stream waters of the US (Sheet A). Although this lot density would have been more profitable for the applicant (even when including potential mitigation costs), environmental impacts were too high, and it was removed from further consideration.

On-Site Alternative #2: 725 Lots

The applicant presented a site plan during the pre-application meeting with the USACE and NCDWR that proposed impacts to 0.5 acre of wetlands, 120 LF of stream, 0.037 acre of an open water pond, and 0.275 acre of non-stream Waters of the US (Sheet B). Regulatory agencies asked if one of the proposed wetland crossings could be shifted to a narrower location and if a lot could be moved to avoid another small wetland impact. The engineer and applicant reviewed these comments and made the suggested changes, which are depicted in the preferred alternative below.

On-Site Alternative #3: Bridge Crossing(s)

One on-site alternative that was evaluated would access uplands within the site by bridging one or more of the wetland and stream crossings. In general, a piling-supported bridge is not considered to be an impact by the USACE and DWR and could provide a mechanism to reduce wetland and stream disturbance within the tract. The applicant evaluated the possibility of installing bridges at one or more of the wetland/stream crossings. The cost to install a bridge compared to a culvert crossing was very expensive. Because of their high cost, bridging was not considered economically feasible.

On-Site Alternative #4: Preferred Project

The preferred project consists of developing 725 single-family lots and an approximately 7-acre amenity area (Sheets 1 – C9). Del Webb developments cater to an active, amenity-driven community. Amenities consist of an 18,000-sf clubhouse, pool, pickleball courts, mail kiosks, and a commercial building for events. Inside the main building will be common space, kitchen, fitness, indoor pool and locker rooms. The proposed project will also consist of roadway grading and paving, the installation of water main services, and the installation of stormwater and wastewater collection systems. Roads for the project will be constructed to NCDOT standards. Water and sewer utilities will tie into the Town of Ocean Isle Beach's system. All stormwater will be collected via a storm drain piping system.

Wetlands, streams, and non-stream channels transect the site and accessing uplands within the site will require crossing wetlands and/or waters of the US in six locations (Sheets C1-C9). Culverts will be installed at the wetland/waters crossings (48" to 60" diameter) and rip rap is proposed on either end of the culverts to reduce scour. The culvert at the stream crossing (Impact #4) will be buried per USACE and NCDWR standards. Additionally, riprap at all channel crossings will be installed flush with the bottom of the channel. It is anticipated that bypass pumping will not be needed during construction. Sidewalks are also proposed as a requirement of the Town and as an added amenity to residents. Roads will utilize a narrowed section with the sidewalk immediately behind the curb when crossing a jurisdictional area to minimize impacts. Roads will have 3:1 slopes and utilities will be placed within the road right-of-way throughout most of the tract.

Additionally, a section of a non-stream jurisdictional channel and one small open water pond will also be filled for lot development (Sheets C2 & C5). A new channel will be constructed in the northeastern part of the site to allow off site water from a culvert under Old Georgetown Road to tie back to the wetlands and Waters of the US channel on site (Sheet C5).

The number of lots planned within the tract is based on the price of the tract, development costs, and the applicant's anticipated profit margin. The estimated development costs for the proposed project are consistent with similar sized projects in North Carolina. The site development and building construction costs are reflective of the current market. The size of the project is such that a reasonable return on investments can be achieved relative to the cost of the land and the cost of construction.

ENVIRONMENTAL IMPACTS

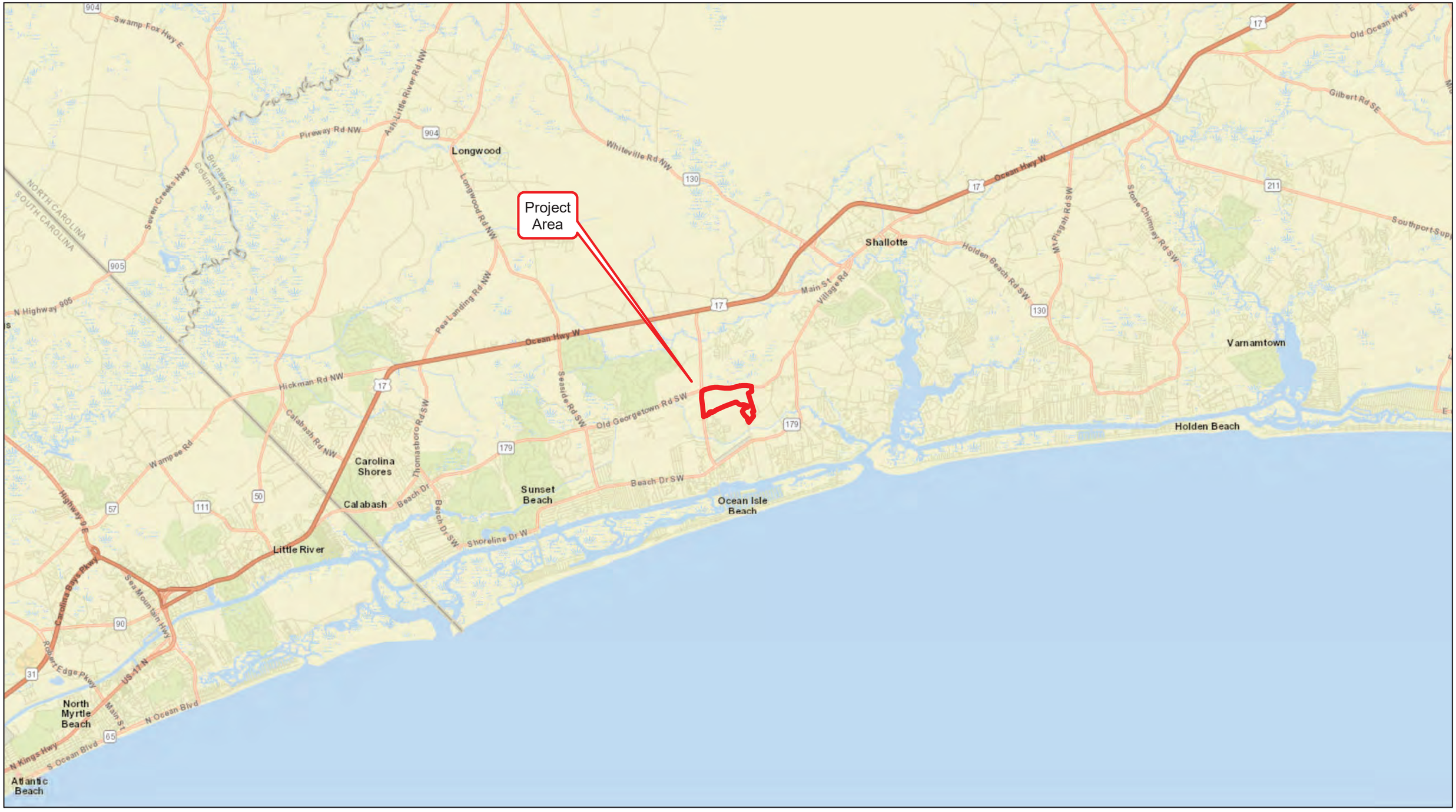
Proposed impacts are 0.466 acres of 404 wetlands, 120 LF of stream, 0.037 acre of open water pond, and 0.275 acres of non-stream waters of the US. Of the channel impacts, 10 LF of stream and 0.003 acre of non-stream Waters of the US are for riprap, which will be installed to be flush with the bottom of the channel, resulting in no permanent loss.

Secondary impacts to wetlands and water quality could occur during and after construction of the project through erosion and stormwater runoff. These potential impacts will be minimized by the development and implementation of a Stormwater Plan and a Sedimentation and Erosion Control Plan. These plans will reduce the potential for erosion or runoff into wetlands and other water bodies located off site.

MITIGATION

The applicant has attempted to minimize wetland and stream impacts as much as possible. Wetland and stream impacts are needed for road crossings to be used in order to gain access to uplands located throughout the tract. The applicant and engineer revised the site plan several times to reduce impacts. Changes made include losing several lots and revising proposed road crossings to be at narrow points along the wetlands. Rip rap, road widths, and side slopes have been minimized.

To mitigate proposed wetland impacts, the applicant proposes to buy into the Stone Farm Mitigation Bank for the restoration of 1 acre of non-riparian wetlands within the Lumber River Basin. Because stream impacts are below the typical mitigation threshold of 0.02 acre and are of a low quality, no stream mitigation is proposed.



L:\WETLANDS\2023 WETLANDS FILES\P.ENV0000712\Maps
Boundaries are approximate and not meant to be absolute.
Map Source: World Street Map

Del Webb Ocean Isle Beach
Brunswick County, NC

March 2024
P.ENV0000712

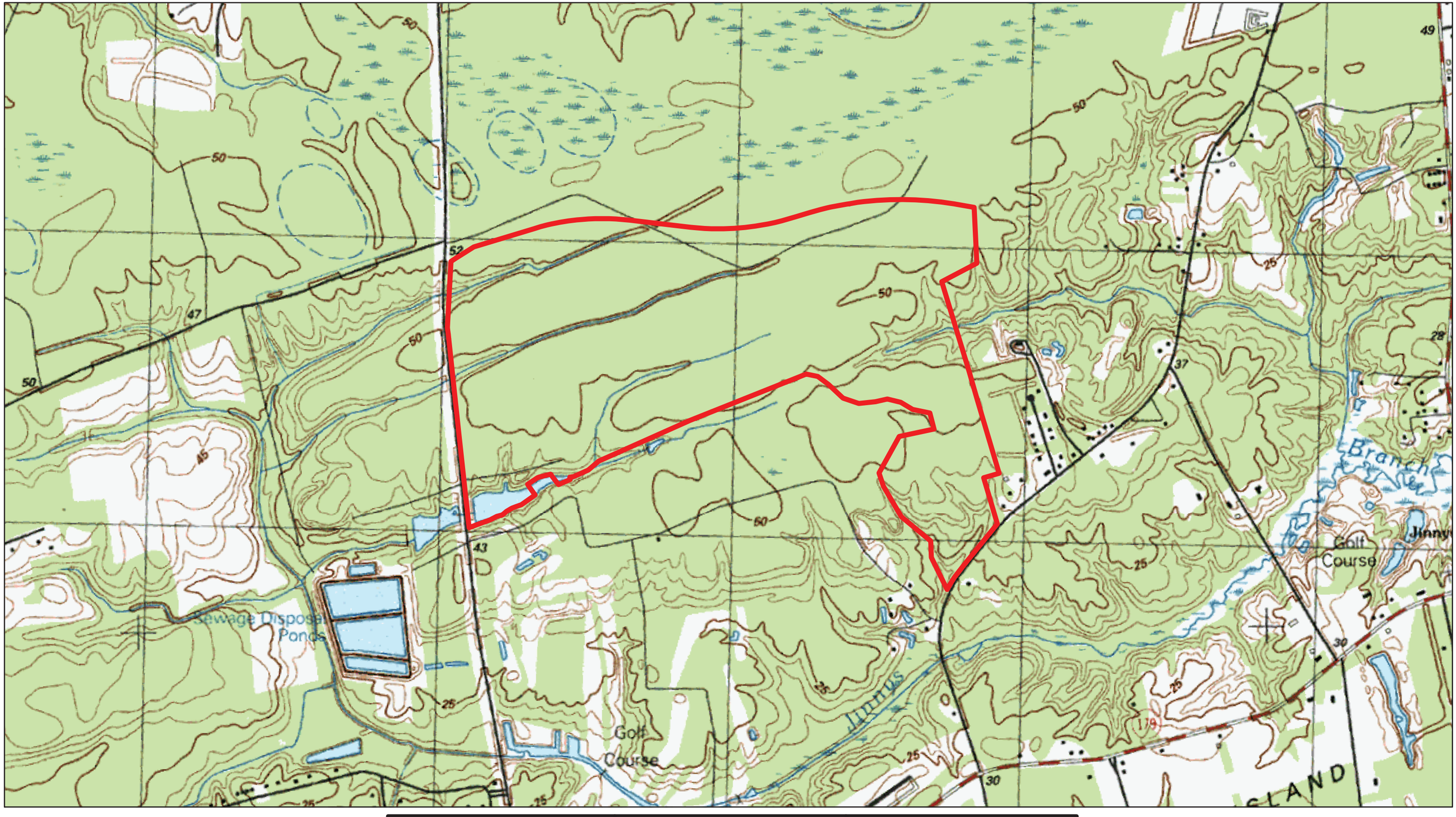
DAVEY Resource Group
3805 Wrightsville Avenue
Wilmington, NC 28403
(910) 452-0001

Figure 1.
Vicinity Map

N

0 1 2 4 Miles

Scale applies to 11X17" print.



L:\WETLANDS\2023 WETLANDS FILES\P.ENV0000712\Maps
Boundaries are approximate and not meant to be absolute.
Map Source: USGS Topographic Map; Shallotte Quad

Del Webb Ocean Isle Beach
Brunswick County, NC

March 2024
P.ENV0000712

DAVEY Resource Group
3805 Wrightsville Avenue
Wilmington, NC 28403
(910) 452-0001

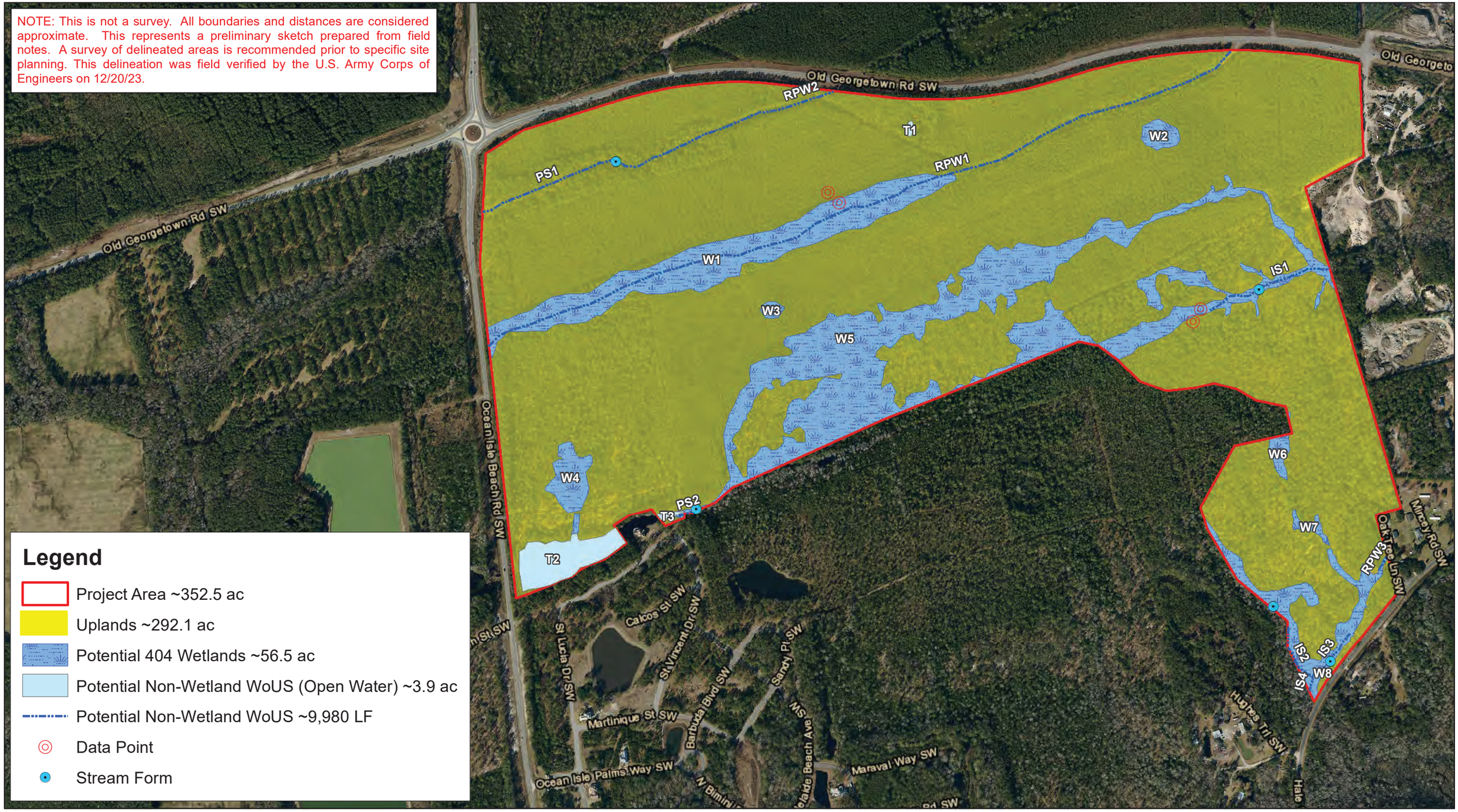
Figure 2.
Topographic Map

N

0 500 1,000 2,000 ft

Scale applies to 11X17" print.

NOTE: This is not a survey. All boundaries and distances are considered approximate. This represents a preliminary sketch prepared from field notes. A survey of delineated areas is recommended prior to specific site planning. This delineation was field verified by the U.S. Army Corps of Engineers on 12/20/23.



L:\WETLANDS\2023 WETLANDS FILES\P.ENV0000712\Maps
Boundaries are approximate and not meant to be absolute.
Map Source: 2020 NC One Map

Ocean Isle Palms North
Brunswick County, NC

Map Date: December 20, 2023
P.ENV0000712

DAVEY Resource Group
3805 Wrightsville Avenue
Wilmington, NC 28403
(910) 452-0001

Reference Sketch

N

0 300 600 1,200 ft

Scale applies to 11X17" print.

DEVELOPMENT RESOURCE GROUP, LLC
4703 OLEANDER DRIVE
MYRTLE BEACH, SC 29577
843-839-3350 | DRGPLLC.COM

SOUTH CAROLINA
DEVELOPMENT RESOURCE GROUP, LLC
No.6089
CERTIFICATE OF AUTHORIZATION

WETLAND IMPACT EXHIBIT

OCEAN ISLE BEACH

PLANS FOR PERMITTING

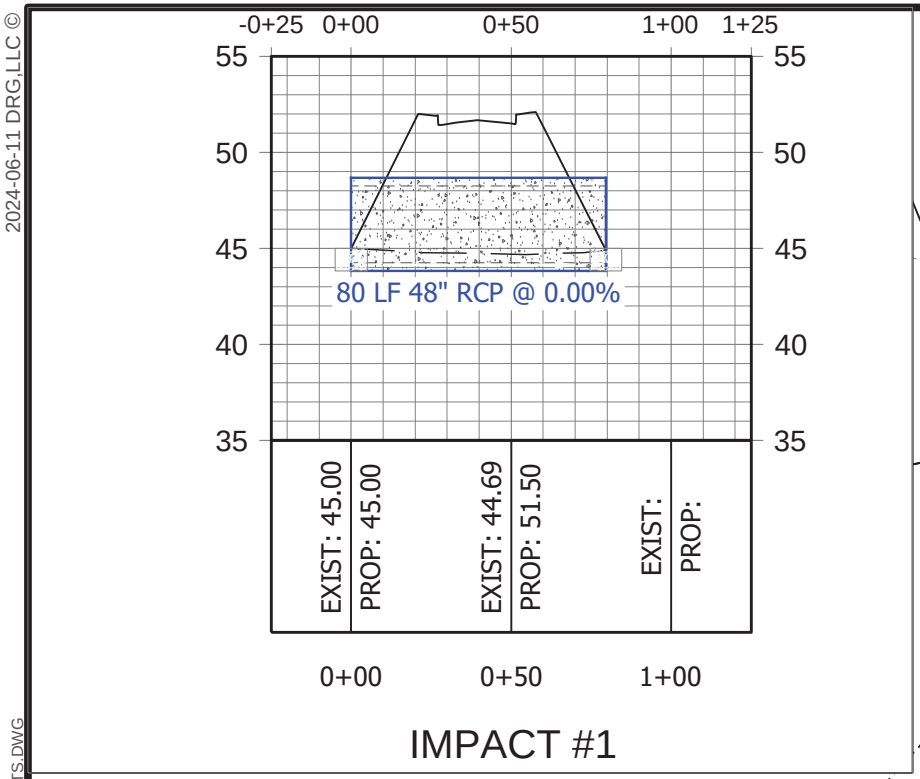
PREPARED FOR:
PULTE GROUP
1150 62 AVE N
MYRTLE BEACH, SC 29572
843-353-5104

JOB NO:	23.166
SCALE:	1" = 300'
APPROVED BY:	JCP
DATE:	4-5-2024

SHEET NUMBER:

WET

P:\23166 - PULTE - OCEAN ISLE PALMS\DESIGN\DRAWINGS\EXHIBITS\WETLAND IMPACT EXHIBITS.DWG



IMPACT #1

IMPACT #1:
WETLANDS
0.18 AC (7,345 SF)
WOUS:
0.012 AC (90 LF x 6')

END (W/ RIP RAP)
N:64497.81
E:2169004.98
INV=44.25

80 LF 48" RCP @ 0.00%

END (W/ RIP RAP)
N:64464.00
E:2168932.93
INV=44.25

48 47 46 45

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

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MYRTLE BEACH, SC 29577
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IMPACT EXHIBIT

OCEAN ISLE BEACH

JOB NO:	23.166
SCALE:	1" = 30'
DATE:	6-11-2024
EXHIBIT NUMBER:	C1

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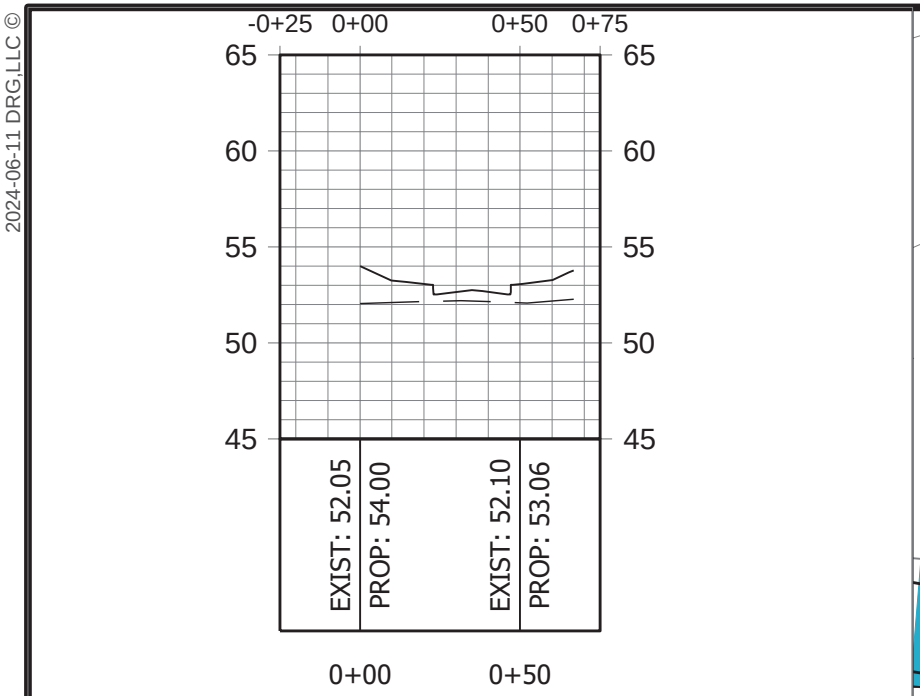
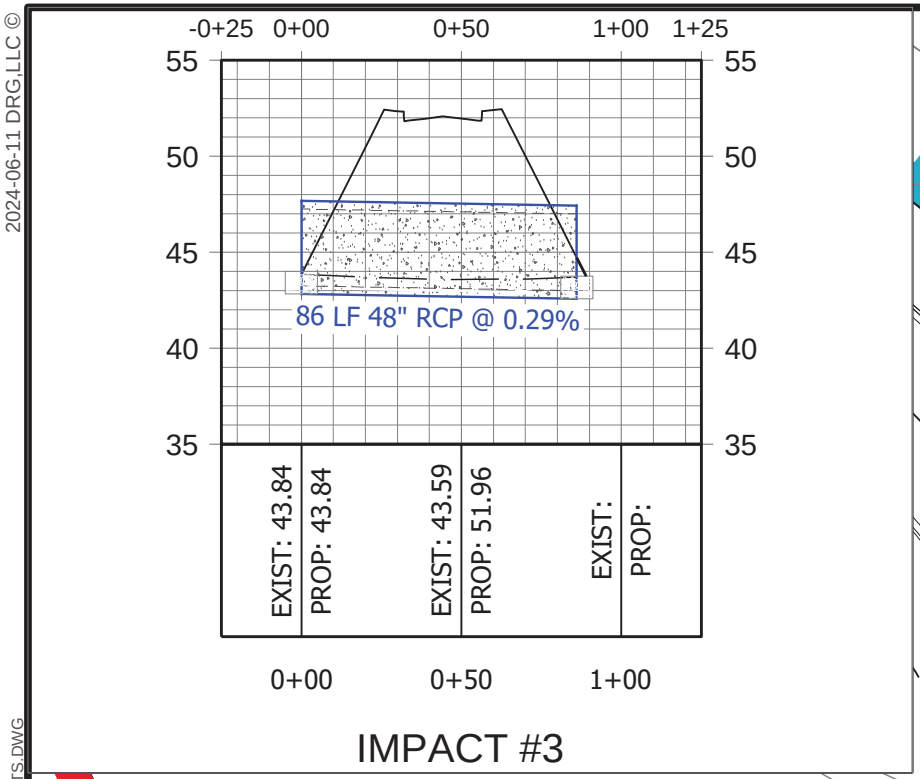


IMPACT #2

IMPACT EXHIBIT

OCEAN ISLE BEACH

JOB NO:	23.166
SCALE:	1" = 30'
DATE:	6-11-2024
EXHIBIT NUMBER:	C2



IMPACT #3:
WOUS CROSSING
95 LF / 0.013 AC
(95 LF x 6' wide)
86 LF culvert
9 LF riprap (no perm loss)

END (W/ RIP RAP)
N:65445.14
E:2169376.54
INV=43.00

END (W/ RIP RAP)
N:65411.53
E:2169297.34
INV=43.25

86 LF 48" RCP @ 0.29%

13201

48 47 46 45 44

44 45 46 47

GRAPHIC SCALE
30 0 30 60 120
(IN FEET)
1 inch = 30 ft.

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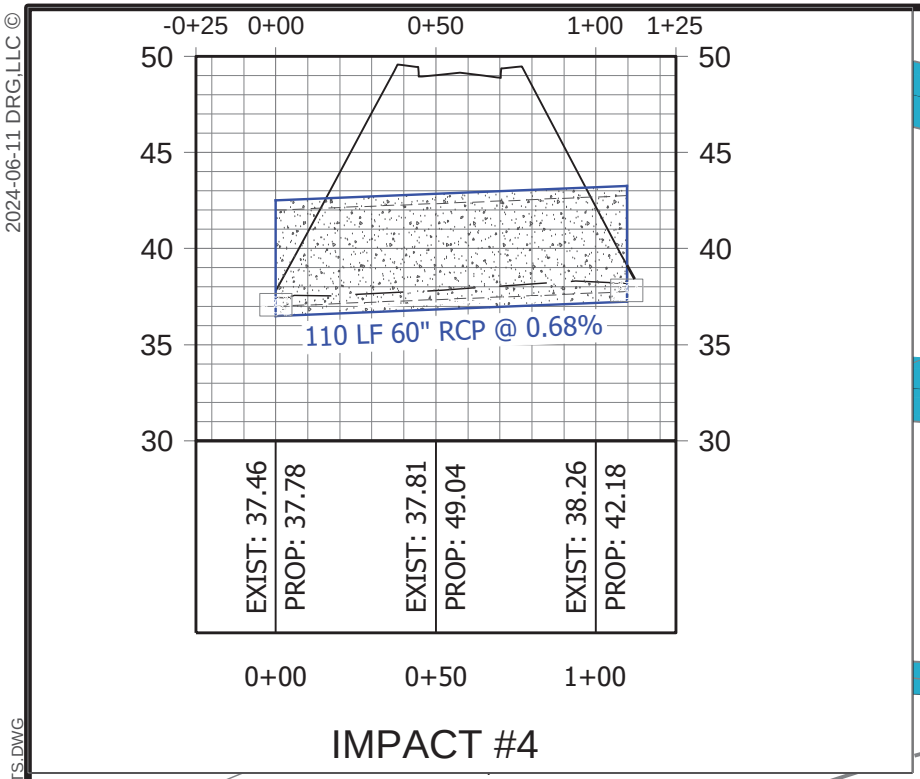
IMPACT EXHIBIT

OCEAN ISLE BEACH

JOB NO:	23.166
SCALE:	1" = 30'
DATE:	6-11-2024
EXHIBIT NUMBER:	C3



IMPACT #4:
STREAM
120 LF / 0.016 AC
(120 LF x 6')
110 LF culvert
10 LF riprap (no perm loss)

END (W/ RIP RAP)
N:65071.08
E:2168211.76
INV=37.75

END (W/ RIP RAP)
N:65038.36
E:2168107.08
INV=37.00

110 LF 60" RCP @ 0.68%

37 38 39 40 41 42

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

DEVELOPMENT RESOURCE GROUP, LLC
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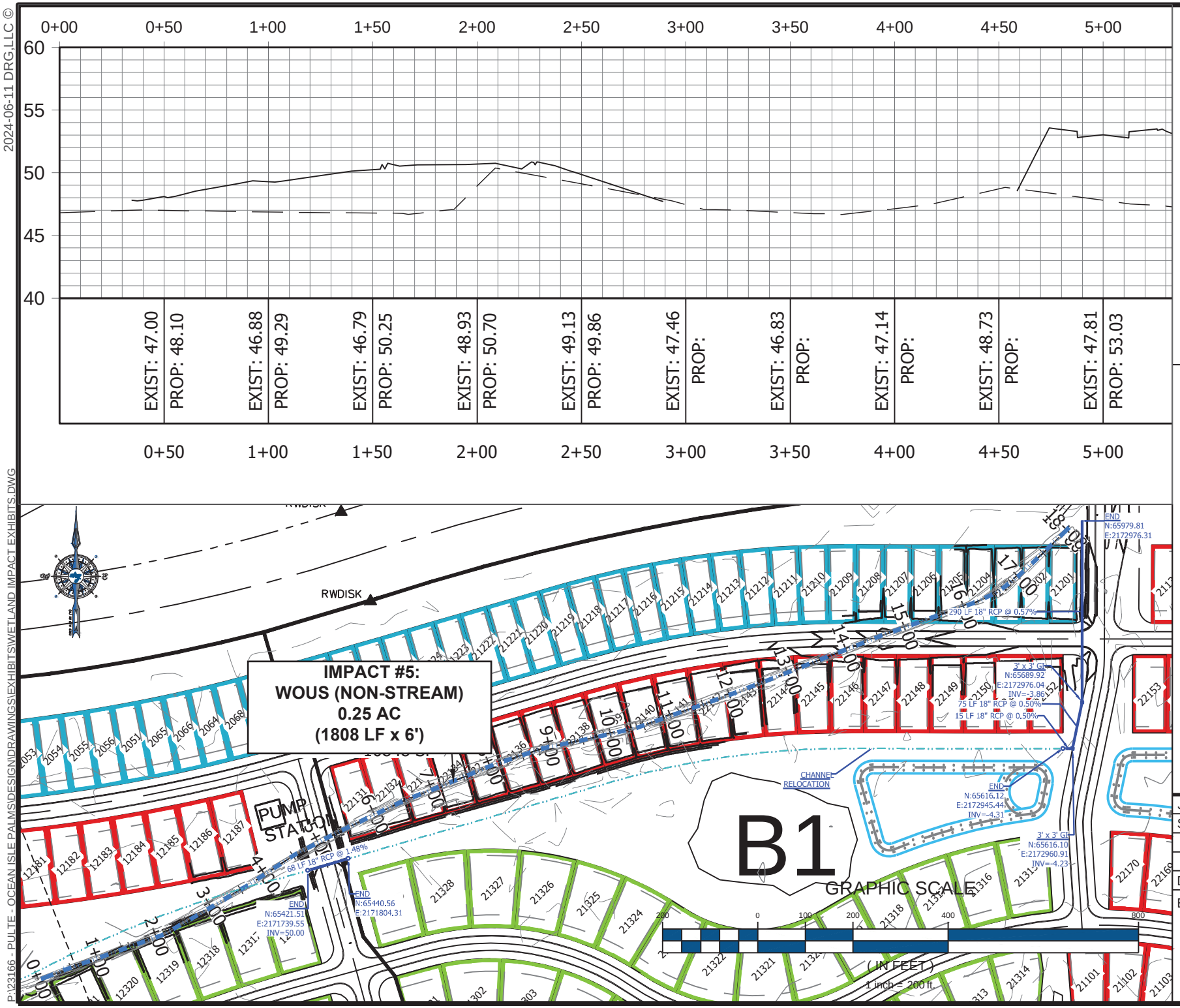
IMPACT EXHIBIT

OCEAN ISLE BEACH

JOB NO:	23.166
SCALE:	1" = 30'
DATE:	6-11-2024
EXHIBIT NUMBER:	C4



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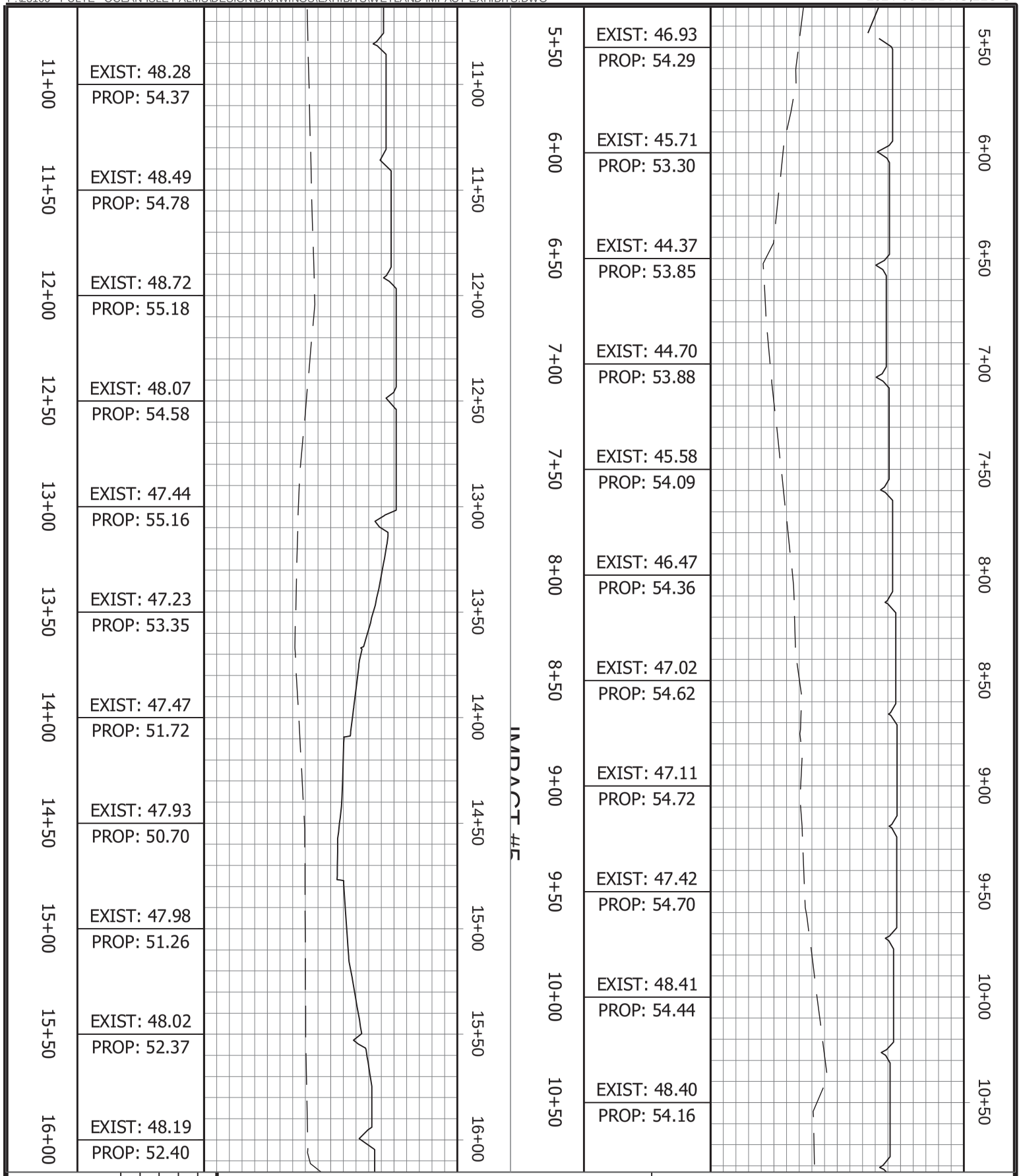
IMPACT EXHIBIT

OCEAN ISLE BEACH

JOB NO:	23.166
SCALE:	1" = 200'
DATE:	6-11-2024
EXHIBIT NUMBER:	C5



IMPACT EXHIBIT

OCEAN ISLE BEACH

C5.1

EXHIBIT NUMBER:

DATE: 6-11-2024

SCALE: 1"=60'

JOB NO: 23.166

DEVELOPMENT RESOURCE GROUP, LLC
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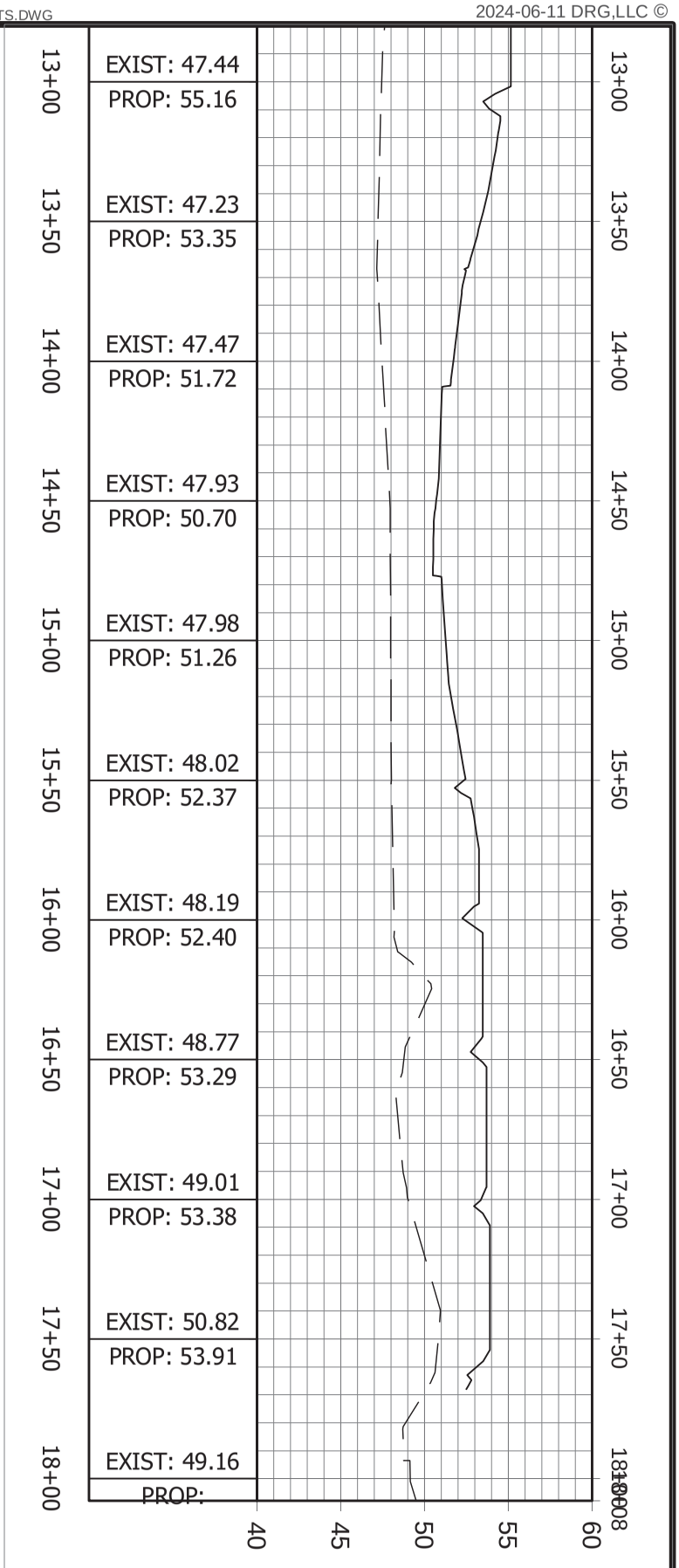

IMPACT EXHIBIT

OCEAN ISLE BEACH

DEVELOPMENT RESOURCE GROUP, LLC
4703 OLEANDER DRIVE
MYRTLE BEACH, SC 29577
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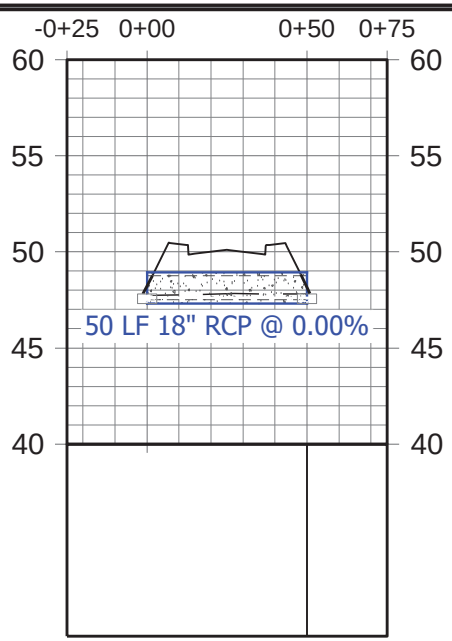
JOB NO: 23.166
SCALE: 1"=60'
DATE: 6-11-2024
EXHIBIT NUMBER:

C5.2



IMPACT #6

IMPACT #6:
WETLAND CROSSING
0.079 AC
(3,445 SF)

END (W/ RIP RAP)
N:64735.11
E:2171935.41
INV=47.50

END (W/ RIP RAP)
N:64749.09
E:2171983.42

50 LF 18" RCP @ 0.00%

49

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)

1 inch = 30 ft.

DEVELOPMENT RESOURCE GROUP, LLC
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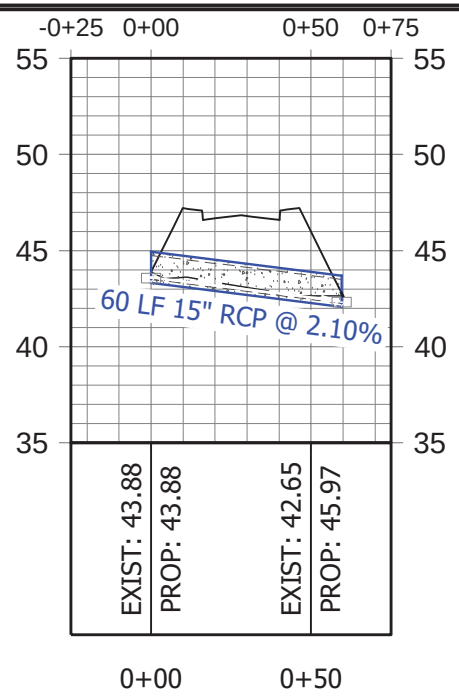
IMPACT EXHIBIT

OCEAN ISLE BEACH

JOB NO:	23.166
SCALE:	1" = 30'
DATE:	6-11-2024
EXHIBIT NUMBER:	C6



IMPACT #7

IMPACT #7:
WETLAND CROSSING
0.19 AC
(8,190 SF)

END (W/ RIP RAP)
N:64067.62
E:2172368.68
INV=42.25

60 LF 15" RCP @ 2.10%

END (W/ RIP RAP)
N:64037.27
E:2172317.41
INV=43.50

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

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MYRTLE BEACH, SC 29577
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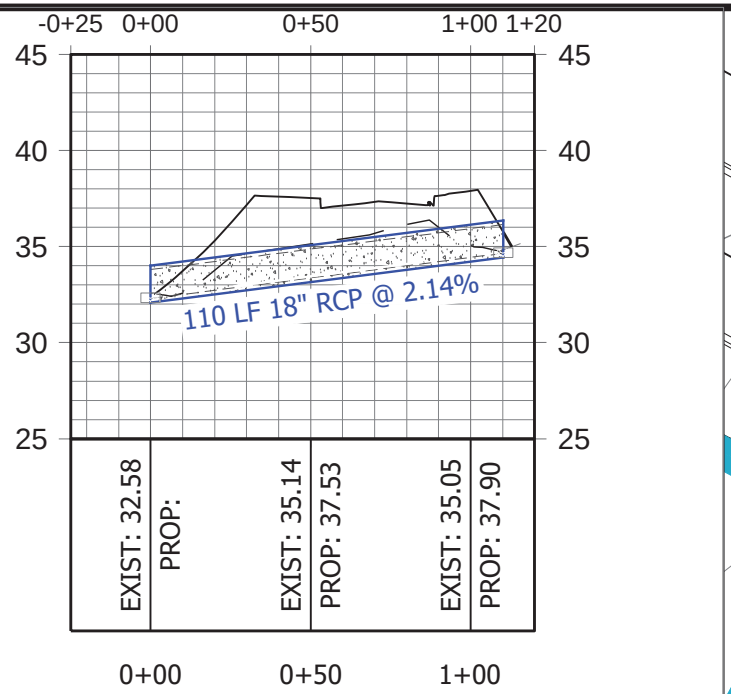
IMPACT 7 EXHIBIT

OCEAN ISLE BEACH

JOB NO:	23.166
SCALE:	1" = 30'
DATE:	6-11-2024
EXHIBIT NUMBER:	C7



IMPACT #8

IMPACT #8:
WETLAND CROSSING
0.017 AC
(735 SF)

END (W/ RIP RAP)
N: 62693.36
E: 2174000.51
INV=34.65

110 LF 18" RCP @ 2.14%

END (W/ RIP RAP)
N:62584.91
E:2173981.31
INV=32.30

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

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IMPACT 8 EXHIBIT

OCEAN ISLE BEACH

JOB NO:	23.166
SCALE:	1" = 30'
DATE:	6-11-2024
EXHIBIT NUMBER:	C8

Key:

A. Spine / Entrance Road
B. View Corridor to Amenity
C. Amenity Drop-Off
D. Amenity Building- Approx. 18,000sf
   1. Community Room
   2. Multipurpose Room
   3. Indoor Pool with opening to deck
E. Commercial Building
   1. Food Truck Plaza- Raised
   2. Removable Bollards
F. Mail Kiosk
G. Plaza adjacent to Multipurpose Room
H. Sports Courts
   1. 2 Bocce Ball
   2. 8 Pickle Ball
   3. Shade Sails/Structure
   4. Future Courts
I. Resort Pool- 6000sf
   1. Restrooms & Pool Equipment
   2. Shade sails / Cabanas
   3. Grill Area
J. Multi-Use Lawn
K. Walking Trail
L. Future Amphitheater
M. Lifestyle House
N. Natural Area / Wetlands
P. Parking- 126 cars- 27 carts

C9

Del Webb - Ocean Isle, NC

Conceptual Amenity Site

10.12.23 1"=60' LS3P