

1.0 INTRODUCTION & BACKGROUND:

Mr. Trey Cook is applying for a Coastal Marshlands Permit to facilitate the construction of 223 linear feet of timber bulkhead and maintenance activities along 208 linear feet of existing rock revetment adjacent to the Moon River at 13 Hardee Drive in Savannah, Chatham County, Georgia (31.930268°, -81.082729°).

2.0 PROJECT PURPOSE:

The purpose of the proposed project is to stabilize actively eroding riverbank within the subject parcel through the construction of a new timber bulkhead and maintenance of an existing rock revetment.

3.0 PROPOSED PROJECT:

The proposed project will include the construction of 223 linear feet of timber bulkhead along the Moon River, as well as the maintenance of the existing rock revetment on the east side of the project area. The existing revetment maintenance will include stabilizing the existing material and installation of new material along 208 linear feet of bank.

3.1 Marshlands Component:

The marshlands component of the project is defined as the part of the project in an estuarine area or any structure on or over an estuarine area, including but not limited to marinas, community docks, bridges, piers and bulkheads requiring a permit under the Coastal Marshlands Protection Act. The marshlands component of the project is the 208' rip-rap revetment repair and construction of 223' new timber bulkhead, located within coastal marshlands.

The repairs to the revetment include 208' of repair to the hard armored bank. The proposed work will include stabilizing the existing material and placing material approximately 1' in depth in a band 6' below the High Tide Line. Total material below the HTL is 52.7 cubic yards of fill (0.22 CY/ft). All repairs will be completed from the upland.

Proposed Rock Revetment Maintenance = 208 LF
 $208 \text{ LF (Length)} \times 6' \text{ (Width)} \times 1' \text{ (Depth)} = 1,248 \text{ CF}$
 $1,248 \text{ CF} / 27 = 46.2 \text{ CY of Fill}$
 $46.2 \text{ CY} / 208 \text{ LF} = 0.22 \text{ CY of Fill Per LF}$

The proposed 223' of timber bulkhead will require a total back fill below the high tide line of 6.5 CY (0.03 CY/ft). The wall would be constructed from uplands, and then backfilled to stabilize the existing shoreline.

Proposed Timber Bulkhead = 223 LF
 $223 \text{ LF} \times 1.0' \times 0.79' = 176.2 \text{ CF}$
 $176.2 \text{ CF} / 27 = 6.5 \text{ CY of Fill}$
 $6.5 \text{ CY} / 223 \text{ LF} = 0.03 \text{ CY of Fill Per LF}$

All construction activities will implement best management practices (BMP) during construction to minimize secondary impacts to tidal waters.

3.2 Upland Component:

The upland component of the project is defined as all those service areas associated with marinas, community docks and commercial docks as defined in 391-2-3-.03. The proposed bank stabilization project's upland component includes access by construction equipment for construction of the bulkhead and, staging of materials, and installation of the sub surface tie back system.

Table 1. 50' CMPA Upland Component Buffer Impacts

Item	Area (FT ²)	Impact Duration
Tie-Back Piles	± 23	Permanent
Tie-Back Cables/Rods	± 920	Permanent
Equipment Work Zone (Timber Bulkhead)	± 2,462	Temporary
Equipment Work Zone (Revetment)	±1,120	Temporary
Total Temporary Impacts	±4,525	

Table 2. Existing Structures Within 50' CMPA Upland Component Buffer

Item	Area (FT ²)
Home	±1,847
Pool	±777
Fireplace	±573
Dock Walkway	±33
Manicured Lawn	±16,180
Total Existing	±19,410

3.3 Stormwater Management:

The proposed project does not include site development activities and development of a stormwater management plan is not required.

3.4 GADNR-EPD 401 Water Quality Certification (WQC): The proposed project does not include any activities during construction or facilities post construction (i.e. fueling) that require a WQC. WQC will be issued with the Nationwide Permit.

4.0 ALTERNATIVES ANALYSIS AND MINIMIZATION:

The proposed project includes installation of timber bulkhead and maintenance of an existing rip-rap revetment, and the project design limits disturbance to the minimum required to perform the maintenance activity. Constructing the bulkhead in uplands landward of CMPA line would require extensive excavation and grading of the existing uplands to install the bulkhead and would result in an increased potential for erosion into tidal waters. Driving support and sheet pilings in jurisdiction without excavation, and then carefully backfilling the small area between the bulkhead and upland results in much less disturbance during construction.

5.0 ESSENTIAL FISH HABITAT:

The proposed project includes installation of timber bulkhead and maintenance of an existing rip-rap revetment, and the project area contains essential fish habitat. However, due to the scope and minimal impacts associated with the maintenance activities, the project will not adversely affect essential fish habitat.

6.0 THREATENED AND ENDANGERED SPECIES:

Coordination with US Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) was conducted to assess potential impacts to federally protected species on the project site. The results of this consultation, the Official Species List, is attached to this document. In addition to the database query, a pedestrian survey was conducted, and no federally listed species were observed. The following provides a brief description of each species listed as threatened or endangered.

West Indian Manatee (*Trichechus manatus*)

The West Indian manatee is a large aquatic mammal whose habitat consists of warm coastal and spring fed waters. It is listed as endangered under both its state and federal status. They are large, gray aquatic mammals with bodies that taper to a flat, paddle-shaped tail. They have two forelimbs, called flippers, with three to four nails on each flipper. Their head and face are wrinkled with whiskers on the snout. During winter months these mammals are primarily confined to the coastal waters of the southern half of Florida and the spring fed rivers of Florida and Georgia. During the summer months as the water temperature rises, the manatees' range expands as far north as Virginia and it is during these months that the "manatees" may occasionally utilize the estuaries of coastal Georgia. Critical habitat for this species has been identified as large portions of coastal Florida including the St. Mary's River.

The project site does include tidal waters habitat which could support the manatee. However, the project includes maintenance of an existing rip-rap revetment and timber bulkhead on a residential property. For this reason, the proposed project will not adversely affect the West Indian Manatee.

Eastern Black Rail (*Laterallus jamaicensis ssp. Jamaicensis*)

The Eastern black rail is a small bird living in salt and freshwater marshes in portions of the United States, Central America, and South America. Males and females are similar in size and adults are generally pale to blackish-gray, with a small blackish bill and bright red eyes. Eastern black rail habitat can be tidally or non-tidally influenced, and range in salinity from salt to brackish to fresh. Tidal height and volume vary greatly between the Atlantic and Gulf coasts and therefore contribute to differences in salt marsh cover plants in the bird's habitat. Diet includes Insects, snails, seeds, etc. Loss of habitat is the main threat to this species, however where habitat is projected numbers are likely stable.

The area consists of a maintained yard and rip-rap along the edge of the river. Habitat required to support this species is present; however, the bank stabilization project will not result in any appreciable loss of habitat for this species.

Piping Plover (*Charadrius melodus*)

The piping plover is a small sand-colored, sparrow-sized shorebird that nests and feeds along coastal sand and gravel beaches in North America. It is listed as threatened for both its federal and state status. The adult has yellow-orange legs, a black band across the forehead from eye to eye, and a black ring around the neck. The piping plover forages and nests on sandy beaches on the Atlantic Coast from South Carolina to the north shore of the Gulf of St. Lawrence, on sandy shores of the Great Lakes, and on alkaline wetlands and prairie river sandbars of the Northern Great Plains. Sparse clumps of grass or herbaceous vegetation are important habitat components. They feed on invertebrates found in the sand including insects, crustaceans, and mollusks.

The project area does not contain sandy beach habitat. Due to the lack of suitable habitat, the project will have no effect on this species.

Red Knot (*Caldiris canutus rufa*)

The red knot is a state and federally listed threatened species. This bird is a medium-sized shorebird about 23-25 cm (9-10 in) long and weighing about 135 g. In breeding, plumage it is easily distinguished from all other sandpipers seen in the state with a brick red to reddish-orange head, neck, breast, and abdomen and medium gray back with some reddish color mixed in. The black bill is straight with a relatively stout base that tapers to a relative fine tip. Legs are usually dark gray to black, but can be greenish in color in some adults in nonbreeding plumage as well as in some juvenile birds. Wings are medium to dark gray on top with some white at the base of the primary and secondary feathers that forms a thin white stripe from the shoulder to the tip. The undersides of the wings are light to medium gray with darker gray tips. The reddish-orange color on the head, neck, and upper breast is replaced by gray on adults in nonbreeding plumage. The reddish-orange of the lower breast and abdomen is replaced by white with dark gray barring on the flanks. A thin white stripe can be seen above the eye of adults. This stripe is broader and more defined in juvenile birds. Feathers on the backs of juveniles have a scaly pattern due to black and white edges that contrast with the gray feathers.

In the Western Hemisphere, the red knot breeds in the mid to high arctic tundra of Alaska, Canada, and Greenland. Most breeding habitats are near coastal areas, often on islands. Nest sites are generally on dry, sunny, and slightly elevated areas of tundra, frequently on open gravel ridges or slopes. During migration this species switches to coastal beaches usually at or near the mouth of bays, estuaries, or tidal inlets. Staging sites are associated with high wave-energy coastal areas. Wintering sites are generally intertidal habitats such as beaches with significant wave action or currents. Knots can be found on any Georgia barrier beach, but Little Tybee, Wassaw, St. Catherine's, Blackbeard, Sapelo, Little St. Simons, and Cumberland Islands, as well as St. Catherine's Island Bar are the locations most often used in the winter and spring, while Wolf Island, Little Egg Island Bar, and Little St. Simons Island at the mouth of the Altamaha River support the only known late summer and fall staging site on the east coast of the U.S.

The area consists of a maintained yard and rip-rap along the edge of the river. Habitat required to support this species is not present and the project will have no effect on the red knot.

Wood Stork (*Mycteria americana*)

The wood stork was listed endangered by the USFWS on 28 February 1984 (Federal Register 49 (4):7332-7335). It is listed as endangered under both its state and federal status. Wood storks use freshwater and estuarine wetlands as feeding, nesting, and roosting sites, and annual population fluctuations are closely related to the year-to-year differences in the quality and quantity of suitable habitat. The overall decline in wood stork numbers is attributed to the loss or degradation of essential wetland habitat primarily in southern Florida. The adult is a large bird 33-45 inches tall and 58-71 inches in wingspan. Males typically weigh 5.5-7.3 lbs; females weigh 4.4-6.2 lbs. They appear all white on the ground, with blackish-gray legs and pink feet. In flight, the trailing edge of the wings is black. The head is dark brown with a bald, black face, and the thick down curved bill is dusky yellow. Juvenile birds are a duller version of the adult, generally browner on the neck, and with a paler bill. They nest colonially with up to twenty-five nests in one tree. Breeding once a year, a female lays 3-5 eggs in the typical clutch. The eggs are incubated 27-32 days by both sexes.

No forested or non-forested area suitable for wood stork nesting or roosting is present within the project area. Feeding habitat is present within the project area; however, the proposed habitat is not unique to this site and the project will not reduce overall habitat.

Eastern Indigo Snake (*Drymarchon corais couperi*)

The Eastern indigo snake is a large nonpoisonous, stout bodied snake averaging six to seven feet in length. The snake is smooth scaled and uniform glossy blue-black throughout its body except for some reddish orange or cream color suffusion on its throat, cheeks and chin. This coloration varies with some individuals having distinct coloration and others with no coloration. In the extreme southern reaches of its range (South Florida), the snake is less restricted and inhabits flatwoods, tropical hammocks, dry glades and moist bogs. In this region of its range, overwintering sites include tree stumps and other underground dens. In the northern portion of its range, including south Alabama, the indigo snake requires deep sand ridges and is often associated with the gopher tortoise. The indigo snake is dependent upon the deep burrows dug by the gopher tortoise and uses them as a refuge from the extreme hot and cold temperatures. This restricted habitat is even more isolated by the snakes' preference for the interspersed wet lowlands and cypress ponds.

Habitat required to support this species is not present within the project area and the proposed project will have no effect on the eastern indigo snake.

Green Sea Turtle (*Chelonia mydas*), Hawksbill Sea Turtle (*Eretmochelys imbricata*), Kemp's Ridley Sea Turtle (*Lepidochelys kempii*), Leatherback Sea Turtle (*Dermochelys coriacea*), Loggerhead Sea Turtle (*Caretta caretta*)

These large marine turtles inhabit the offshore waters of the Atlantic and Caribbean. During nesting periods which fall within the summer months, these species leave the water to nest on sandy beaches and primary dunes of the Atlantic and Caribbean coasts. Turtle nests are not uncommon on the barrier islands of Georgia and have been located in the past.

The area consists of a maintained yard and rip-rap along the edge of the river. Habitat required to support the sea turtle species is not present and the project will have no effect on any of the listed sea turtles.

Pondberry/Pond Spicebush (*Lindera melissifolia*)

Pondberry is state and federally listed as endangered. Shrub up to 6 feet (2 meters) tall, forming dense colonies of green or brown stems with yellowish bases. Leaves 2 - 6 inches (5 - 16 cm) long, drooping, deciduous, alternate, widest at or below the middle, with a rounded base and sharply pointed tip; both surfaces of the leaf with conspicuous netted veins and short, soft hairs; leaves smell spicy (like sassafras) when crushed. Male and female flowers on separate plants, appearing before leaves, borne in clusters of 2 - 6 flowers, each with 6 pale yellow, petal-like tepals. Fruit about ½ inch (1 - 1.2 cm) long, bright red, oval to round, on a stout stalk about ½ inch (0.9 - 1.2 cm) long with a blunt tip. The stalk persists through the winter following fruiting. Pondberry occur in shallow depression ponds within wetlands, along margins of cypress ponds, and in forested floodplain areas in the southeastern United States.

The area consists of a maintained yard and rip-rap along the edge of the river. Habitat required to support this species is not present and the project will have no effect on the pondberry.

7.0 COMMERCIAL BAIT SHRIMP, OYSTER, AND CRABBING AREAS

The proposed project is not located in a designated bait shrimp zone according to Georgia Department of Natural Resources *Commercial and Recreational Bait Shrimp Zones, Coastal Georgia* map. The project area is not listed on the *Georgia Harvester Reported Crabbing Areas* list, and the project area is not located in designated commercial or recreational oyster harvest areas.

8.0 IMPAIRED WATERS

The subject waterway is not listed on the U.S. Environmental Protection Agency 303(d) list for impaired water bodies.

9.0 SUPPLEMENTAL INFORMATION

This additional information is provided for compliance with Coastal Marshlands Protection Act of 1970 information requirements:

OCGA 12-5-286. Permits to fill, drain, etc., marshlands.

(b) Each application for such permit shall be, properly executed, filed with the department on forms as prescribed by the department, and shall include:

(1) *The name and address of the applicant-*

Mr. Trey Cook
13 Hardee Drive
Savannah, GA 31406

(2) *A plan or drawing showing the applicant's proposal and the manner or method by which such proposal shall be accomplished. Such plan shall identify the coastal marshlands affected-* Please refer to Appendix C for permit drawings produced by RLC titled Proposed Bulkhead Plan – 13 Hardee Drive dated 11/6/2023.

(3) *A plat of the area in which the proposed work will take place-* Attachment F contains a survey produced by Brewer Land Surveying titled Lot 13A, Recombination of Lots 12 & 13, Burnside View Subdivision dated September 6, 2023.

(4) *A copy of the deed or other instrument under which the applicant claims title to the property or, if the applicant is not the owner, then a copy of the deed or other instrument under which the owner claims title together with written permission from the owner to carry out the*

project on his land. In lieu of a deed or other instrument referred to in this paragraph, the committee may accept some other reasonable evidence of ownership of the property in question or other lawful authority to make use of the property; The committee will not adjudicate title disputes concerning the property which is the subject of the application; provided, however, the committee may decline to process an application when submitted documents show conflicting deeds- See property ownership documentation in Appendix E.

- (5) *A list of all adjoining landowners together with such owners' addresses, provided that if the names or addresses of adjoining landowners cannot be determined, the applicant shall file in lieu thereof a sworn affidavit that a diligent search, including, without limitation, a search of the records for the county tax assessor's office, has been made but that the applicant was not able to ascertain the names or addresses, as the case may be, of adjoining landowners-* See property ownership documentation in Appendix E.
- (6) *A letter from the local governing authority of the political subdivision in which the property is located, stating that the applicant's proposal is not in violation of any zoning law;* A request has been submitted to the Chatham County and a copy of that request is included in this package. The response from Chatham County will be provided upon receipt.
- (7) *A non-refundable application fee to be set by the board in an amount necessary to defray the administrative cost of issuing such permit. Renewal fees shall be equal to application fees, which shall not exceed \$1,000.00 for any one proposal and shall be paid to the department.* The application fee is attached.
- (8) *A description from the applicant of alternative sites and why they are not feasible and a discussion of why the permit should be granted-* See section 4.0.
- (9) *A statement from the applicant that he has made inquiry to the appropriate authorities that the proposed project is not over a landfill or hazardous waste site and that the site is otherwise suitable for the proposed project-* A review of the Hazardous Site Index for Chatham County, Georgia indicates that the subject property does not contain hazardous waste sites or landfills. A copy is attached.
- (10) *A copy of the water quality certification issued by the department if required for the proposed project-* Not applicable.
- (11) *Certification by the applicant of adherence to soil and erosion control responsibilities if required for the proposed project-* The project will conform to all building, land disturbing, and stormwater management requirements of Chatham County.
- (12) *Such additional information as is required by the committee to properly evaluate the application-* This application has been prepared with consideration for the interests of the general public of the State of Georgia as defined in OCGA 12-5-286(g):

OCGA 12-5-286. Permits to fill, drain, etc. marshlands.

(g) In passing upon the application for permit, the committee shall consider the public interest, which, for purposes of this part shall be deemed to be the following considerations:

- (1) *Whether or not unreasonably harmful obstruction to or alteration of the natural flow of navigational water within the affected area will arise as a result of the proposal-* The

proposed project will not alter natural flow of navigable waters or obstruct public navigation.

- (2) ***Whether or not unreasonably harmful or increased erosion shoaling of channels, or stagnant areas of water will be created-*** The proposed project will not increase erosion, shoaling of channels, or create stagnant areas of water.
- (3) ***Whether or not the granting of a permit and the completion of the applicant's proposal will unreasonably interfere with the conservation of fish, shrimp, oysters, crabs, clams, or other marine life, or wildlife, or other resources, including but not limited to water and oxygen supply-*** The proposed project will not interfere with the conservation of fish, shrimp, oysters, crabs, clams, or other marine life, wildlife, or other resources, nor affect water and oxygen supply.

Osborne, Cheyenne

From: Russell Parr <rparr@rlandc.com>
Sent: Monday, May 13, 2024 11:47 AM
To: Osborne, Cheyenne
Subject: RE: Response Letter - 13 Hardee Dr - Cook
Attachments: CRD_Bulkhead_exhibit.pdf

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Cheyenne:

Please see the attached exhibit with the impervious surfaces noted. I have noted the numbers below as well.

50' Upland Buffer	Area (ft2)
Pool	777.0
Home	1847.2
Fireplace	573.5
Dock Walkway	33.3
Manicured Lawn	16179.5
Total	19410.5

Thanks,
Russell

Russell Parr, Sr., PWS
PROJECT MANAGER
41 Park of Commerce Way, Suite 101
Savannah GA, 31405
O 912 443 5896 D 912 480 4405 C 912 663 7561
[Download vCard http://www.rlandc.com](http://www.rlandc.com)



From: Osborne, Cheyenne <cheyenne.osborne1@dnr.ga.gov>
Sent: Monday, May 13, 2024 9:34 AM
To: Russell Parr <rparr@rlandc.com>
Subject: RE: Response Letter - 13 Hardee Dr - Cook

No worries, thank you.

Cheyenne Osborne
Coastal Permit Coordinator
Coastal Resources Division
Office: 912-264-7218 | Mobile: 912-602-2788

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MAY 13 2024



CHATHAM COUNTY DEPARTMENT OF BUILDING SAFETY AND REGULATORY SERVICES

1117 EISENHOWER DRIVE, SAVANNAH, GA 31406
P.O. Box 8161, Savannah, GA. 31412-8161
912 201 4300 – Fax 912 201 4301

May 10, 2024

Russell Parr, Sr.
Resource and Land Consultants
Savannah, Georgia

RE: GADNR CMPA Application
Bulkhead Installation and Maintenance
13 Hardee Drive

Dear Mr. Parr,

The above referenced improvements and those identified on the attached documents do not represent a violation of the Chatham County Zoning Ordinance.

If there are questions, I can be reached at 912 201 4315.

Sincerely,

Marcus Lotson, Office of Zoning Administration
Assistant Director, Building Safety and Regulatory Services.

Attachments



MLW = -3.7' NAVD88

Proposed 223 LF Bulkhead Installation
45 Bulkhead Piles
23 Tie Back Piles
45 Tie Back Anchors

Existing Dock Walkway

50' CMPA Buffer
(~19,410 SQ. FT.)

CMPA Line

MHW = ±2.6 NAVD88

Existing Pool

Existing Home

Existing Fireplace

Proposed 208 LF
Rip-Rap Maintenance

CMPA Line

-  Project Area: ~0.9 Acre
-  Rip-Rap Maintenance
-  Timber Bulkhead Installation
-  Approximate MHW
-  Approximate MLW
-  CMPA Line
-  50' Upland Buffer

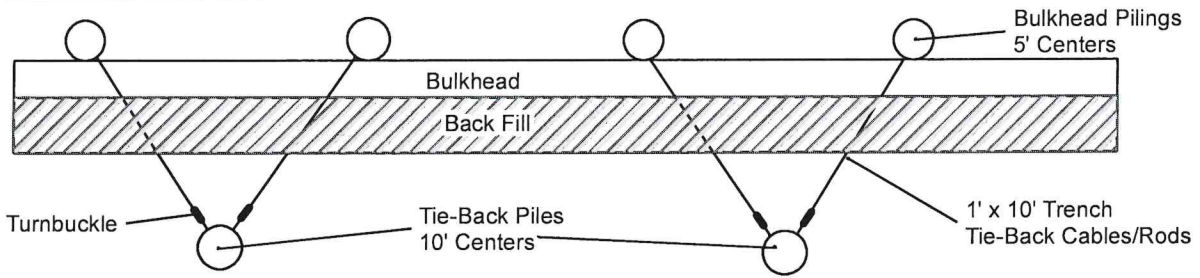
0 30 60 120 Feet

RLC Project No.:	21-385
Figure No.:	8
Prepared By:	MW
Sketch Date:	3/19/2024
Map Scale :	1 inch = 60 feet

13 Hardee Drive
Chatham County, Georgia

Bulkhead Exhibit
Prepared For: Trey Cook

RLC
**RESOURCE+LAND
CONSULTANTS**
41 Park of Commerce Way, Ste. 101
Savannah, Georgia 31405
912.423.5196 www.fairlie.com



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& REGULATORY SERVICES

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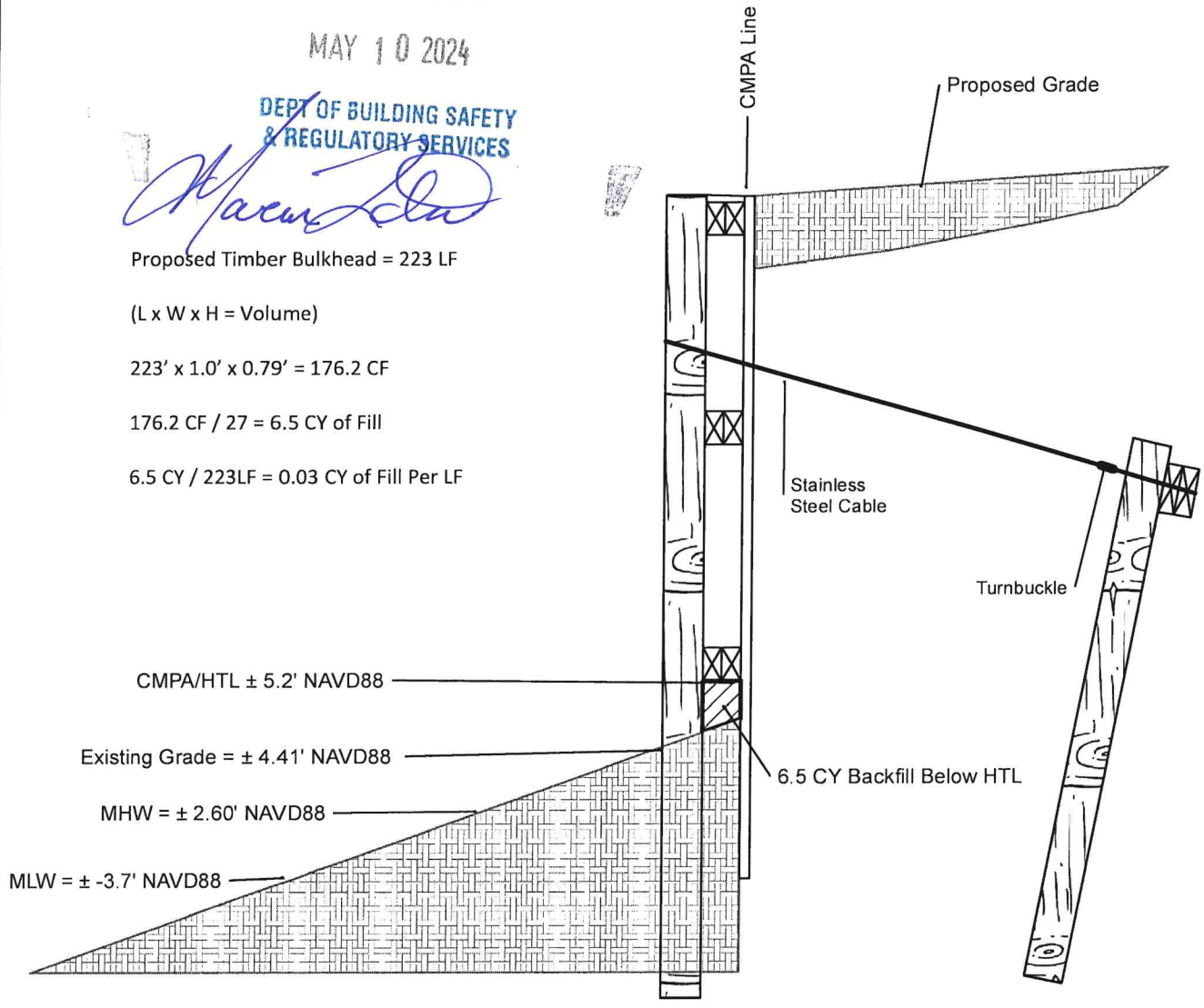
Proposed Timber Bulkhead = 223 LF

(L x W x H = Volume)

223' x 1.0' x 0.79' = 176.2 CF

176.2 CF / 27 = 6.5 CY of Fill

6.5 CY / 223LF = 0.03 CY of Fill Per LF



RLC Project No.:	21-385
Figure No.:	8
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Sketch Date:	3/19/2024
Map Scale:	NTS

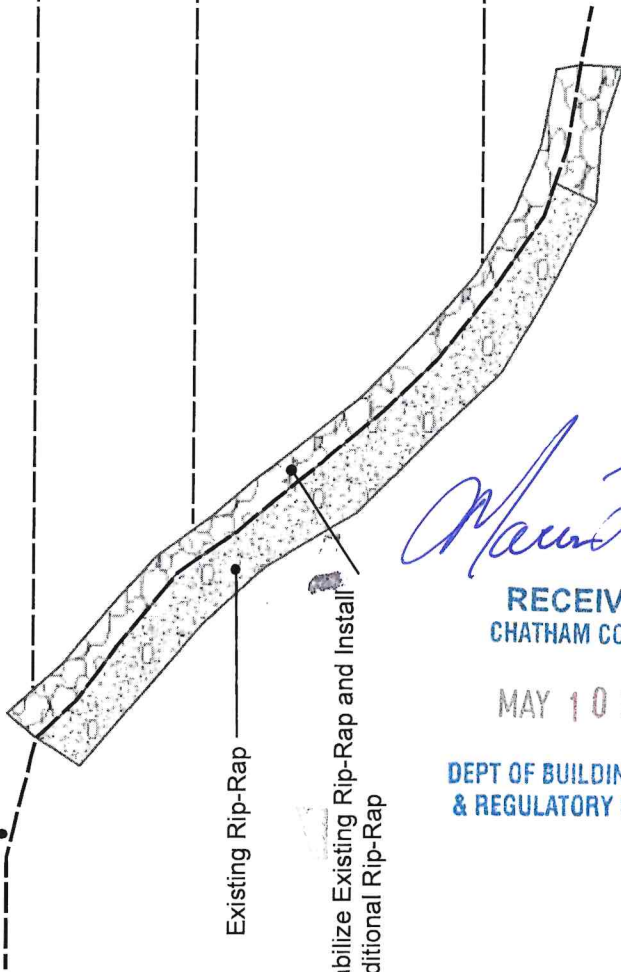
13 Hardee Drive
Chatham County, Georgia

Bulkhead Detail
Prepared For: Trey Cook

RLC
RESOURCE+LAND
CONSULTANTS
41 Park of Commerce Way, Ste. 101
Suwanee, Georgia 30465
917.443.5196 www.rlc.com



Existing Grade



CMPA/HTL 5.2' NAVD88

MHW = 2.60' (NAVD88)

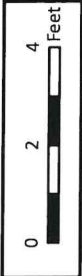
MLW = -3.7' (NAVD88)

Stabilize Existing Rip-Rap and Install
Additional Rip-Rap

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RLC Project No.:	21-385
Figure No.:	10
Prepared By:	MW
Sketch Date:	3/28/2024
Map Scale :	1 inch = 4 feet

13 Hardee Drive
Chatham County, Georgia

Rip-Rap Detail
Prepared For: Trey Cook

RLC

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