



ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

WILLIAM F. LANE
General Counsel

TO: The Coastal Resources Commission

FROM: Christine A. Goebel, DEQ Assistant General Counsel

DATE: January 29, 2020 (for the February 12-13, 2020 CRC Meeting)

RE: **Variance Request by Shinn Creek HOA, Inc. (CRC-VR-19-10)**

Petitioner Shinn Creek Homeowners Association, Inc. (“Petitioner” or “HOA”) owns common area property within the subdivision including a boat-ramp which empties into a dredged boat basin and channel. On November 7, 2018, Petitioner submitted an application for the maintenance dredging of the boat basin and channel to -3’ MLW, and the new dredging of the “S-Channel” area located at the waterward end of the channel to -3’ MLW with an 8’ x 460’ footprint. The S-Channel connects to the other maintained channel to the south. These waters are designated as a Primary Nursery Area (“PNA”) by the Marine Fisheries Commission, and per 15A NCAC 7H .0208(b)(1), new dredging in a PNA is prohibited. On April 22, 2019, DCM denied Petitioner’s permit application based on its incompatibility with the rules noted in the denial letter. Petitioner now seeks a variance to allow the proposed new dredging in a PNA for the “S-Channel” portion of the project (the basin and channel are “permissible” maintenance dredging, not new dredging). Petitioner also proposes mitigation measures as conditions in an attempt to offset the proposed impacts.

The following additional information is attached to this memorandum:

Attachment A: Relevant Rules
 Attachment B: Stipulated Facts
 Attachment C: Petitioner’s Positions and Staff’s Responses to Variance Criteria
 Attachment D: Petitioner’s Variance Request Materials
 Attachment E: Stipulated Exhibits including powerpoint

cc(w/enc.): Shinn Creek HOA, Inc. by Attorney I. Clark Wright, Jr., electronically
 Mary Lucasse, Special Deputy AG and CRC Counsel, electronically
 Linda Painter, New Hanover Co. CAMA LPO, electronically



RELEVANT STATUTES OR RULES**APPENDIX A****SECTION .0200 – THE ESTUARINE AND OCEAN SYSTEMS****15A NCAC 07H .0201 ESTUARINE AND OCEAN SYSTEM CATEGORIES**

Included within the estuarine and ocean system are the following AEC categories: estuarine waters, coastal wetlands, public trust areas, and estuarine and public trust shorelines. Each of the AECs is either geographically within the estuary or, because of its location and nature, may significantly affect the estuarine and ocean system.

15A NCAC 07H .0202 SIGNIFICANCE OF THE SYSTEMS APPROACH IN ESTUARIES

The management program must embrace all characteristics, processes, and features of the whole system and not characterize individually any one component of an estuary. The AECs are interdependent and ultimately require management as a unit. Any alteration, however slight, in a given component of the estuarine and ocean system may result in unforeseen consequences in what may appear as totally unrelated areas of the estuary. For example, destruction of wetlands may have harmful effects on estuarine waters which are also areas within the public trust. As a unified system, changes in one AEC category may affect the function and use within another category.

15A NCAC 07H .0203 MANAGEMENT OBJECTIVE OF THE ESTUARINE AND OCEAN SYSTEM

It is the objective of the Coastal Resources Commission to conserve and manage estuarine waters, coastal wetlands, public trust areas, and estuarine and public trust shorelines, as an interrelated group of AECs, so as to safeguard and perpetuate their biological, social, economic, and aesthetic values and to ensure that development occurring within these AECs is compatible with natural characteristics so as to minimize the likelihood of significant loss of private property and public resources. Furthermore, it is the objective of the Coastal Resources Commission to protect present common law and statutory public rights of access to the lands and waters of the coastal area.

15A NCAC 07H .0204 AECS WITHIN THE ESTUARINE AND OCEAN SYSTEM

The following regulations in this Section define each AEC within the estuarine and ocean system, describe its significance, articulate the policies regarding development, and state the standards for development within each AEC.

15A NCAC 07H .0206 ESTUARINE WATERS

(a) Description. Estuarine waters are defined in G.S. 113A-113(b)(2) to include all the waters of the Atlantic Ocean within the boundary of North Carolina and all the waters of the bays, sounds, rivers and tributaries thereto seaward of the dividing line between coastal fishing waters and inland fishing waters...

(b) Significance. Estuarine waters are the dominant component and bonding element of the entire estuarine and ocean system, integrating aquatic influences from both the land and the sea. Estuaries are among the most productive natural environments of North Carolina. They support the valuable commercial and sports fisheries of the coastal area which are comprised of estuarine dependent species such as menhaden, flounder, shrimp, crabs, and oysters. These species must spend all or some part of their life cycle within the estuarine waters to mature and reproduce. Of the 10 leading species in the commercial catch, all but one are dependent on the estuary.

This high productivity associated with the estuary results from its unique circulation patterns caused by tidal energy, fresh water flow, and shallow depth; nutrient trapping mechanisms; and protection to the many organisms. The circulation of estuarine waters transports nutrients, propels plankton, spreads seed stages of fish and shellfish, flushes wastes from animal and plant life, cleanses the system of pollutants, controls salinity, shifts sediments, and mixes the water to create a multitude of habitats. Some important features of the estuary include mud and sand flats, eel grass beds, salt marshes, submerged vegetation flats, clam and oyster beds, and important nursery areas.

Secondary benefits include the stimulation of the coastal economy from the spin off operations required to service commercial and sports fisheries, waterfowl hunting, marinas, boatyards, repairs and supplies, processing operations, and tourist related industries. In addition, there is considerable nonmonetary value associated with aesthetics, recreation, and education.

(c) Management Objective. To conserve and manage the important features of estuarine waters so as to safeguard and perpetuate their biological, social, aesthetic, and economic values; to coordinate and establish a management system capable of conserving and utilizing estuarine waters so as to maximize their benefits to man and the estuarine and ocean system.

(d) Use Standards. Suitable land/water uses shall be those consistent with the management objectives in this Rule. Highest priority of use shall be allocated to the conservation of estuarine waters and their vital components. Second priority of estuarine waters use shall be given to those types of development activities that require water access and use which cannot function elsewhere such as simple access channels; structures to prevent erosion; navigation channels; boat docks, marinas, piers, wharfs, and mooring pilings.

In every instance, the particular location, use, and design characteristics shall be in accord with the general use standards for coastal wetlands, estuarine waters, and public trust areas described in Rule .0208 of this Section.

15A NCAC 07H .0207 PUBLIC TRUST AREAS

(a) Description. Public trust areas are all waters of the Atlantic Ocean and the lands thereunder from the mean high water mark to the seaward limit of state jurisdiction; all natural bodies of water subject to measurable lunar tides and lands thereunder to the normal high water or normal water level; all navigable natural bodies of water and lands thereunder to the normal high water or normal water level as the case may be, except privately-owned lakes to which the public has no right of

access; all water in artificially created bodies of water containing public fishing resources or other public resources which are accessible to the public by navigation from bodies of water in which the public has rights of navigation; and all waters in artificially created bodies of water in which the public has acquired rights by prescription, custom, usage, dedication, or any other means. In determining whether the public has acquired rights in artificially created bodies of water, the following factors shall be considered:

- (1) the use of the body of water by the public;
- (2) the length of time the public has used the area;
- (3) the value of public resources in the body of water;
- (4) whether the public resources in the body of water are mobile to the extent that they can move into natural bodies of water;
- (5) whether the creation of the artificial body of water required permission from the state; and
- (6) the value of the body of water to the public for navigation from one public area to another public area.

(b) Significance. The public has rights in these areas, including navigation and recreation. In addition, these areas support commercial and sports fisheries, have aesthetic value, and are important resources for economic development.

(c) Management Objective. To protect public rights for navigation and recreation and to conserve and manage the public trust areas so as to safeguard and perpetuate their biological, economic and aesthetic value.

(d) Use Standards. Acceptable uses shall be those consistent with the management objectives in Paragraph (c) of this Rule. In the absence of overriding public benefit, any use which jeopardizes the capability of the waters to be used by the public for navigation or other public trust rights which the public may be found to have in these areas shall not be allowed. The development of navigational channels or drainage ditches, the use of bulkheads to prevent erosion, and the building of piers, wharfs, or marinas are examples of uses that may be acceptable within public trust areas, provided that such uses shall not be detrimental to the public trust rights and the biological and physical functions of the estuary. Projects which would directly or indirectly block or impair existing navigation channels, increase shoreline erosion, deposit spoils below normal high water, cause adverse water circulation patterns, violate water quality standards, or cause degradation of shellfish waters are considered incompatible with the management policies of public trust areas. In every instance, the particular location, use, and design characteristics shall be in accord with the general use standards for coastal wetlands, estuarine waters, and public trust areas.

15A NCAC 07H .0208 USE STANDARDS**(a) General Use Standards**

(1) Uses which are not water dependent shall not be permitted in coastal wetlands, estuarine waters, and public trust areas. Restaurants, residences, apartments, motels, hotels, trailer parks, private roads, factories, and parking lots are examples of uses that are not water dependent. Uses that are water dependent include: utility crossings, wind energy facilities, docks, wharves, boat ramps, dredging, bridges and bridge approaches, revetments, bulkheads, culverts, groins, navigational aids, mooring pilings, navigational channels, access channels and drainage ditches;

(2) Before being granted a permit, the CRC or local permitting authority shall find that the applicant has complied with the following standards:

(A) The location, design, and need for development, as well as the construction activities involved shall be consistent with the management objective of the Estuarine and Ocean System AEC (Rule .0203 of this subchapter) and shall be sited and designed to avoid significant adverse impacts upon the productivity and biologic integrity of coastal wetlands, shellfish beds, submerged aquatic vegetation as defined by the Marine Fisheries Commission, and spawning and nursery areas;

(B) Development shall comply with state and federal water and air quality

(C) Development shall not cause irreversible damage to documented archaeological or historic resources as identified by the N.C. Department of Cultural resources;

(D) Development shall not increase siltation;

(E) Development shall not create stagnant water bodies;

(F) Development shall be timed to avoid significant adverse impacts on life cycles of estuarine and ocean resources; and

(G) Development shall not jeopardize the use of the waters for navigation or for other public trust rights in public trust areas including estuarine waters.

(3) When the proposed development is in conflict with the general or specific use standards set forth in this Rule, the CRC may approve the development if the applicant can demonstrate that the activity associated with the proposed project will have public benefits as identified in the findings and goals of the Coastal Area Management Act, that the public benefits outweigh the long range adverse effects of the project, that there is no reasonable alternate site available for the project, and that all reasonable means and measures to mitigate adverse impacts of the project have been incorporated into the project design and shall be implemented at the applicant's expense. Measures taken to mitigate or minimize adverse impacts shall include actions that:

(A) minimize or avoid adverse impacts by limiting the magnitude or degree of the action;

(B) restore the affected environment; or

(C) compensate for the adverse impacts by replacing or providing substitute resources.

(4) Primary nursery areas are those areas in the estuarine and ocean system where initial post larval development of finfish and crustaceans takes place. They are usually located in the uppermost sections of a system where populations are uniformly early juvenile stages. They are designated and described by the N.C. Marine Fisheries Commission (MFC) and by the N.C. Wildlife Resources Commission (WRC);

(5) Outstanding Resource Waters are those estuarine waters and public trust areas classified by the N.C. Environmental Management Commission (EMC). In those estuarine waters and public trust areas classified as ORW by the EMC no permit required by the Coastal Area Management Act shall be approved for any project which would be inconsistent with applicable use standards adopted by the CRC, EMC, or MFC for estuarine waters, public trust areas, or coastal wetlands. For development activities not covered by specific use standards, no permit shall be issued if the activity would, based on site specific information, degrade the water quality or outstanding resource values; and

(6) Beds of submerged aquatic vegetation (SAV) are those habitats in public trust and estuarine waters vegetated with one or more species of submergent vegetation. These vegetation beds occur in both subtidal and intertidal zones and may occur in isolated patches or cover extensive areas. In either case, the bed is defined by the Marine Fisheries Commission. Any rules relating to SAVs shall not apply to non-development control activities authorized by the Aquatic Weed Control Act of 1991 (G.S. 113A-220 et seq.).

(b) Specific Use Standards

(1) Navigation channels, canals, and boat basins shall be aligned or located so as to avoid primary nursery areas, shellfish beds, beds of submerged aquatic vegetation as defined by the MFC, or areas of coastal wetlands except as otherwise allowed within this Subchapter. Navigation channels, canals and boat basins shall also comply with the following standards:

(A) Navigation channels and canals may be allowed through fringes of regularly and irregularly flooded coastal wetlands if the loss of wetlands will have no significant adverse impacts on fishery resources, water quality or adjacent wetlands, and if there is no reasonable alternative that would avoid the wetland losses;

(B) All dredged material shall be confined landward of regularly and irregularly flooded coastal wetlands and stabilized to prevent entry of sediments into the adjacent water bodies or coastal wetlands;

(C) Dredged material from maintenance of channels and canals through irregularly flooded wetlands shall be placed on non wetland areas, remnant spoil piles, or disposed of by a method having no significant, long-term wetland impacts. Under no circumstances shall dredged material

be placed on regularly flooded wetlands. New dredged material disposal areas shall not be located in the buffer area as outlined in 15A NCAC 07H .0209(d)(10);

(D) Widths of excavated canals and channels shall be the minimum required to meet the applicant's needs but not impair water circulation;

(E) Boat basin design shall maximize water exchange by having the widest possible opening and the shortest practical entrance canal. Depths of boat basins shall decrease from the waterward end inland;

(F) Any canal or boat basin shall be excavated no deeper than the depth of the connecting waters;

(G) Construction of finger canal systems are not allowed. Canals shall be either straight or meandering with no right angle corners;

(H) Canals shall be designed so as not to create an erosion hazard to adjoining property. Design may include shoreline stabilization, vegetative stabilization, or setbacks based on soil characteristics; and

(I) Maintenance excavation in canals, channels and boat basins within primary nursery areas and areas of submerged aquatic vegetation as defined by the MFC shall be avoided. However, when essential to maintain a traditional and established use, maintenance excavation may be approved if the applicant meets all of the following criteria:

(i) The applicant demonstrates and documents that a water dependent need exists for the excavation;

(ii) There exists a previously permitted channel that was constructed or maintained under permits issued by the State or Federal government. If a natural channel was in use, or if a human made channel was constructed before permitting was necessary, there shall be evidence that the channel was continuously used for a specific purpose;

(iii) Excavated material can be removed and placed in a disposal area in accordance with Part (b)(1)(B) of this Rule without impacting adjacent nursery areas and submerged aquatic vegetation as defined by the MFC; and

(iv) The original depth and width of a human made or natural channel shall not be increased to allow a new or expanded use of the channel.

This Part does not affect restrictions placed on permits issued after March 1, 1991.

STIPULATED FACTS**ATTACHMENT B**

1. Petitioner is Shinn Creek Estates Homeowners Association, Inc. (“Petitioner” or “HOA”), a North Carolina Non-Profit Corporation registered with the North Carolina Secretary of State’s Office in 1996. Shinn Creek Estates is a 36-lot residential subdivision with common-area property and common amenities owned by the HOA.
2. Petitioner acquired title to the common area property relevant to this variance request through a General Warranty Deed, dated September 14, 2000, recorded in Book 2819, Page 792 of the New Hanover County Public Registry, a copy of which is attached. The subdivision plat for the HOA is recorded at Plat Book B36, Pages 210-11 and Plat Book B38, Page 66 of the New Hanover County Registry, copies of which is attached.
3. The HOA’s common-area property (the “Site”) consists of common area land (some of which is riparian land), a gravel drive with parking area, a boat ramp, and several boat docks. The Site is adjacent to a maintained boat basin and channel that connects to Shinn Creek by the area called the “S-Channel.” Shinn Creek then connects to the federally maintained Atlantic Intracoastal Waterway (“AIWW”), near Masonboro Inlet and the south end of Wrightsville Beach. The waters of the boat basin, channel, S-Channel and Shinn Creek are classified as SA, High Quality Waters (“HQW”) by the Environmental Management Commission and are classified as a Primary Nursery Area by the Marine Fisheries Commission. These waters are not open to the harvest of shellfish.
4. Aerial and ground-level photographs of The Site are part of the power point presentation, attached. This includes the historic images from the New Hanover County website of the area for 1966, 1981 and 1989 with the Site circled. This also includes images from Google Earth taken between 1993 and 2019, including a recent aerial image depicting the proposed dredging route and the historic route used- as alleged by Petitioner. Also attached is a 1956 image with information written on it by Petitioner’s Authorized Agent.
5. Based on historic aerial photography, it appears the boat basin and access channel were initially excavated prior to 1970 and before the enactment of the Coastal Area Management Act (“CAMA”) and the State Dredge & Fill Law (“D&F”). The first time dredging was undertaken pursuant to a CAMA/D&F permit was through CAMA Major Permit No. 72-82 in 1982 by Joseph Rogers to maintain the 25’ by 30’ boat basin to -5’ MLW and to maintain the access channel to 20’ by 670’ and -5’ MLW. A 1996/97 modification request first proposed excavation of the S-Channel area, and permit files do not contain information to indicate if this modification was permitted. CAMA Major Permit No. 72-82 was transferred to Petitioner HOA in 2007 and expired in 2015. A summary of the permit history compiled by DCM Staff is found in the DCM Field Investigation Report, a copy of which is attached. No permit has been found authorizing the dredging of the S-Channel area.
6. On November 7, 2018, DCM first received Petitioner’s CAMA Major/D&F Permit Application, and it was deemed complete on November 27, 2018. Petitioner’s authorized CAMA agent is Land Management Group, Inc. Petitioner proposed the maintenance excavation of the 25’ by 30’ boat basin (to –3 MLW), the maintenance excavation of the 8’ by 623’ maintained channel

(to -3 MLW) and the (apparently) never-before-permitted dredging of the 8' by -460' (to -3' MLW) of the S-Channel area. Petitioner's Application estimated that the approximately 600 cubic yards of dredged material would be placed at a privately-owned and commonly-used Shore Acres Company spoil disposal site located approximately 0.3 miles north of the Site, and would be dredged using the bucket-to-barge method. Initially, Petitioner also proposed the development of four wooden breakwaters at the perimeter of the S-Channel (two 40' long and two 60' long), though those breakwaters were withdrawn from the Revised Application dated April 10, 2019. A copy of Petitioner's CAMA/D&F application materials, as revised, is attached.

7. As part of their application, Petitioner submitted a document entitled Historical Narrative, a series of historic aerial photos of the Site, an affidavit of Alvin D. Rogers, and an affidavit of Thomas Canady, copies of which are attached. These documents contend that among other things, the S-Channel area used to be passable by the Rogers family boat a low tide, but that this area shoaled in during the 1990's. Both affidavits reference a plat of the area recorded at Plat Book 5, Page 90 of the New Hanover County Registry, a copy of which is attached.

8. Also as part of their application, Petitioner submitted a document entitled "Water Quality Monitoring Report" dated October 2018 and prepared by Petitioner's agent, Land Management Group, Inc., a copy of which is attached. This six-page report summarizes a one-time water sampling event at eight locations between the boat basin and the AIWW looking at the dissolved oxygen ("DO") levels. In response to this variance petition, DMF staff provided a written response summarizing their concerns about this report, a copy of which is attached.

9. The proposed dredging work is proposed to take place in the Estuarine Waters, Public Trust Areas, and Estuarine Shorelines sub-category of the Coastal Shorelines Areas of Environmental Concern ("AECs"). Pursuant to N.C.G.S. 113A-118, CAMA/D&F permit authorization is required for the proposed development.

10. As part of the CAMA/D&F Major Permit process, notice of the proposed dredging project was sent to the adjacent riparian neighbors. In this case, notice was sent to the following:

- Scott & Linda Peterson of 6429 Shinnecreek Lane, received on 11/16/18.
- Bradley & Carolyn Johnson of 6451 Shinnwood Road, received on 11/20/18
- Bill & Jane Henderson of 6432 Shinnecreek Lane, received on 11/19/18

The adjacent riparian owners' properties are shown on a parcel map which is part of the powerpoint presentation, attached. Copies of the letters and the certified mail receipts are attached. DCM Staff did not receive any objections from these adjacent riparian owners, and all three have submitted letters in support of the project, attached, and noted in a fact below.

11. As part of the CAMA/D&F Major Permit process, notice of the proposed dredging project was given to the general public through on-site posting and through the December 14, 2018 publishing of notice in the Wilmington Star Newspaper. DCM Staff did not receive any objections from the public regarding this proposed dredging project.

12. As part of the CAMA /D&F Major Permit process, copies of the permit application materials and DCM's Field Investigation Report were sent to state and federal resource agencies for review and comment. Relevant comments from these agencies are described in the facts to follow.

13. On December 7, 2018, DCM's Field Representative submitted his comments to the Major Permitting staff, indicating that while the proposed dredging of the boat basin and maintenance dredging of the access channel appeared to be consistent with the CRC's rules, the proposed new dredging of the S-Channel in the PNA was inconsistent with the CRC's rules. A copy of this recommendation is attached.

14. On January 2, 2019, the Division of Marine Fisheries ("DMF") submitted its objections, dated December 14, 2019, to DCM, a copy of which are attached. DMF's objection memo was coupled with the December 19, 2019 written concurrence of DMF Director Murphey, attached. DMF objected to the proposed project, specifically to the proposed breakwaters and to the new dredging in a PNA. DMF also raised concerns about the proposed maintenance dredging of the channel leading to additional erosion and sloughing of sediment into the channel and the erosion of coastal wetlands in the area, as purportedly shown in the historic aerial photographs of the Site.

15. On January 24, 2019, the Division of Water Resources put the application on hold waiting for federal comments from NMFS and for the applicant to address DMF's comments. On January 13, 2020, DWR denied Petitioner's 401 water quality certification request through a letter, stating that the agency was required to do so in light of the CAMA permit denial. A copy of the January 13, 2020 DWR 401 denial letter is attached.

16. On January 30, 2019, the City of Wilmington commented that it objected to the breakwaters as the city code prohibited them within 35 feet of a [wetland] resource. A copy of this objection is attached. Petitioner ultimately removed the proposed breakwaters from its permit application.

17. On February 11, 2019, the Petitioner's authorized agent requested a meeting with DMC and DMF to discuss resource impact issues. A copy of this request is attached, along with DCM's reply recommending that NMFS and DWR also participate in the meeting.

18. On February 27, 2019, the Petitioner's authorized agent met with representatives of DCM, Division of Marine Fisheries ("DMF"), Division of Water Resources ("DWR"), the NC Wildlife Resources Commission ("WRC"), and the National Marine Fisheries Service ("NMFS") to discuss resource impact issues and DMF objections. At this time, the Petitioner proposed removing the breakwaters from the project, added proposed channel markers, and proposed additional oyster reef development as a mitigation measure.

19. On March 24, 2019, DCM received an email from the Army Corps of Engineers forwarding a March 11, 2019 letter from the NMFS. This letter indicated that it had not received any revised plans for this Site, and so its recommendations included 1) a recommendation that any permit not authorize the proposed breakwaters, 2) a recommendation that any permit not authorize the

proposed new dredging, and 3) a recommendation that any permit authorize maintenance dredging only between October 1 to March 31. A copy of this letter is attached.

20. On April 3, 2019, the Army Corps of Engineers sent a letter to DCM indicating the conditions that should be required if a CAMA/D&F Permit was issued. These conditions included “conditioning out” the proposed breakwaters and proposed new dredging, and suggested a dredging window for the maintenance dredging, along with a number of standard conditions. A copy of this letter is attached.

21. On April 9, 2019, DCM received a call from Petitioner’s authorized agent (LMG’s Steve Morrison) indicating that he had met separately with NMFS regarding the project and requested putting the federal permit review on hold. Mr. Morrison also indicated that he met two weeks prior with DWR staff, and with other agencies. DCM staff were not present at the meetings. He also requested additional aerial photos that DCM may have depicting the S-Channel area.

22. On April 10, 2019, DCM received revised drawings from Petitioner’s authorized agent showing the proposed addition of more oyster shell reef development, proposed the addition of channel markers, and proposed the removal of the proposed breakwaters. Copies of these revisions were sent out to representatives of the Corps, DMF, NMFS, and DWR. In an April 11, 2019 email, a NMFS representative indicated that the design changes did not warrant a change to their comments and that they “have no plans to agree to modifications at this point.” A copy of this email is attached. In an April 11, 2019 email, a DMF representative indicated that the design changes did not alleviate DMF’s concerns about new dredging in PNA habitat, that it was not DMF “policy to mitigate impacts by allowing habitat trade-offs”, and that DMF “would again object to the dredging.” A copy of this email is attached.

23. On April 17, 2019, DCM received additional aerials in an email from Petitioner’s authorized agent, a copy of which is attached, stating the agent’s belief that the images “seem to indicate potential past channel maintenance through the subject S curve within the access to the intracoastal waterway” and asking DCM to consider this information.

24. On April 22, 2019, DCM denied Petitioner’s revised CAMA/D&F Major Permit Application for the reasons set forth in the agency’s denial letter, a copy of which is attached.

25. Petitioner stipulates that its proposed activities violate 15A NCAC 07H.0206(c); 15A NCAC 07H.0208(a)(2)(A); and 15A NCAC 07H.0208(b)(1) as stated in DCM’s April 22, 2019 denial letter.

26. In anticipation of this variance request, Petitioner obtained 14 comment letters in support of Petitioner's Variance Request from members of the HOA, copies of which are attached, and include:

Brooke Bailey	6329 Shinn Creek Ln.
Jason Carroll	6408 Shinn Creek Ln.
Lamparte	6412 Shinn Creek Ln.
Brian Thomas	6416 Shinn Creek Ln.
John Anderson	6424 Shinn Creek Ln.
Gina Taylor	6425 Shinn Creek Ln.
Scott/Linda Peterson	6429 Shinn Creek Ln. (an Adjacent Riparian Owner)
Sweeny-Henderson	6432 Shinn Creek Ln. (an Adjacent Riparian Owner)
Canady	6309 Shinnwood Rd.
Kuronen	3100 Wescot Court
Dana Shumate	3102 Welcome Lane
Dennis Anderson	6324 Shinn Creek Ln.
Christine Dolan	6421 Shinn Creek Ln.
Ari & Amie Cofini	6333 Shinn Creek Ln.

In addition to these HOA members, Adjacent Riparian Owners Bradley and Carol Johnson of 6451 Shinnwood Road also provided a letter in support, a copy of which is attached.

27. In anticipation of this variance request, Petitioner obtained a six-page written review of the proposed dredging of the S-Channel by Troy Alphin, who works as research faculty at the UNCW Department of Biology and Marine Biology. A copy of this report and Mr. Alphin's three-page CV are attached. The parties stipulate that while Mr. Alphin has expertise in fields related to his review, the parties further stipulate that there has been no process to establish Mr. Alphin as an "expert" as that term of art is used in legal settings, including no opportunity for Staff to cross-examine Mr. Alphin on the contents of the review and how it came to be, and the parties encourage the Commission to consider this when reading his un-sworn report and considering the four variance criterion.

28. In anticipation of this variance request, Petitioner obtained a two-page statement from Petitioner's authorized agent, Land Management Group and signed by Steve Morrison of LMG, summarizing his/LMG's opinion regarding possible impacts from Petitioner's proposed dredging, a copy of which is attached. The parties stipulate that while Mr. Morrison has some expertise in fields related to his review, the parties further stipulate that there has been no process to establish Mr. Morrison as an "expert" as that term of art is used in legal settings, including no opportunity for Staff to cross-examine Mr. Morrison on the contents of the statement and how it came to be, and the parties encourage the Commission to consider this when reading the un-sworn statement and considering the four variance criterion.

29. In anticipation of this variance request, Ben Stephenson, a member of Petitioner's Board, signed an affidavit describing his knowledge about the Site and past efforts to seek permit approval for the proposed dredging. A copy of this affidavit is attached.

30. On December 31, 2019, Petitioner filed its Variance Request and proposed supporting materials through counsel, requesting that the Commission hear this matter at its February 2020 meeting.

31. Petitioner is represented by Clark Wright of Davis Hartman Wright PLLC. DCM Staff are represented by DEQ Assistant General Counsel Christine Goebel.

Stipulated Exhibits

1. 2000 Deed to HOA of Common Area property at 2819/792
2. Subdivision Plats at B36/210-11 and B38/66
3. DCM Field Investigation Report
4. Petitioner's CAMA/D&F Major Permit Application, original and as revised
5. Historical Narrative, historic aerial photographs and affidavits of Alvin D. Rogers and Thomas Canady with Plat 5/90 attached
6. Water Quality Monitoring Report by Petitioner's agent Land Management Group
7. DMF written concerns about LMG's Water Quality Monitoring Report
8. Adjacent Riparian Neighbor Notice and Certified Mail receipts, map of these parcels
9. Copy of on-site placard and newspaper publication request materials
10. December 7, 2018 recommendation from DCM Field Representative
11. DMF Comments, including December 14, 2018 Memo and December 19, 2018 Director's cover letter
12. January 13, 2020 401 denial letter
13. January 30, 2019 comments from the City of Wilmington
14. February 11, 2019 email from agent re: meeting and DCM response
15. March 24, 2019 email from Corps forwarding March 11, 2019 NMFS letter
16. April 3, 2019 letter from Corps with comments
17. April 11, 2019 comments on revised plan from NMFS and DMF
18. April 17, 2019 email from agent with additional aerials
19. April 22, 2019 DCM Denial Letter
20. 2019 Google Earth image with proposed dredge route and historic route noted by Petitioner
21. Series of six aerial photos from 1956-2010 with notations by Petitioner
22. 14 letters from owners of lots in Shinn Creek Estates Subdivision in support of proposed dredging plus Adj. Rip. Own. Brad Johnson
23. Opinion of Troy Alphin and Alphin CV
24. LMG 2-page statement re: water quality and variance
25. Ben Stephenson, Board Member of HOA, Affidavit
26. Powerpoint Presentation with aerial photographs of the site

PETITIONER'S and STAFFS' POSITIONS**ATTACHMENT C**

To qualify for a variance, Petitioner must show all of the following:

- I. Will Unnecessary Hardships would result from strict application of the rules, standards, or orders? If so, Petitioner must identify the unnecessary hardships.**

Petitioner's Position: Yes.

The CAMA use standards from which the Shinn Creek Estates HOA seeks a variance boil down to the PNA avoidance rules cited in the DCM denial letter: (1) 15A NCAC 07H.0206(c) (estuarine waters management objectives); (2) 15A NCAC 07H.0208(b)(a)(4) (PNA definition); 15A NCAC 07H.0208(a)(2)(A) (project shall be sited to avoid significant adverse impacts to marine resources); and (4) 15A NCAC 07H.0208(b)(1) (avoid PNAs, shellfish beds and SAVs). With regard to these various listed CAMA rules and use standards, the HOA respectfully contends that DCM's own Field Report confirms the absence of any actual impacts, and thus items (3) and (4) as listed in the permit denial letter would appear to be misplaced. However, as required for purposes of this variance request, the HOA is stipulating to violation of each of the listed CAMA rules. Having said that, nothing in such a stipulation prevents the Commission from relying on the DCM Field Report and other materials as contained in the variance request package [see, especially, expert letters/reports of Troy Alphin and Steve Morrison, as well as various materials and drawings contained in the original CAMA Permit Application, and revised Application materials] to conclude that strict application of the applicable rules causes the HOA unnecessary hardships – especially in light of the absence of any documented actual adverse impacts, with the potential for the proposed project to actually improve the marine environment.

In addition, the proposed dredging work and associated channel markers will also clearly improve boater safety and avoid loss of riparian property rights. Given the unique history of the area and the prior history of constant use by vessels of the type used and owned by the property owners within and adjacent to the common area assets owned and managed by the HOA, the Shinn Creek Estates HOA respectfully requests that the Commission answer this variance factor question in the affirmative.

Staffs' Position: Yes.

As an initial matter, Staff disagree with Petitioner's argument that a comment made by a DCM field representative in the initial phase of the permit process (field investigation report), without the benefit of other resource agency review and comments obtained through the major permit process, does not supersede the final permit decision made by the Division Director. Accordingly, the bases for denial listed in the denial letter are not "misplaced" as suggested by the Petitioner above.

Staff agree, however, that strict application of the Commission's rules disallowing new dredging in PNA habitat causes the HOA unnecessary hardships where the proposed dredging in the S-Channel to -3' MLW would allow the HOA's members to maintain long-standing pre-CAMA access to the AIWW from their permitted boat basin and channel. Following the shoaling of the historic route over time and the establishment of coastal wetlands in that area, Staff agree that the preferred route to the AIWW is now through the S-Channel to the south.

II. Do the hardships result from conditions that are peculiar to the property, such as the location, size, or topography of the property? Explain.

Petitioner's Position: Yes.

The hardships described above and in the attached variance request materials result from the unique and peculiar conditions of the HOA's common area, water dependent properties, as well as the unique and peculiar dynamic and changing conditions within the so-called "S-Turn" area where "new" dredging work is proposed [approximately 405 linear feet according to DCM's April 22, 2019 denial letter]. These real property and adjacent marine resource properties are unique and peculiar in a number of respects, including: (a) the well documented shoaling and silting in of the submerged lands of the "S-Turn" and adjacent submerged lands; (b) the long history of shallow draft 14' to 24' vessels by the HOA, its subdivision members, adjacent property owners, and predecessors in title; (c) the documented absence of any anticipated adverse impacts to any marine resources; (d) the overwhelming expressions of support from not only owners of properties within Shinn Creek, but other nearby property owners as well as a former Representative in the NC House and the current Mayor of the City of Wilmington; (e) the fact that all three adjacent riparian property owners have written letters of support for the proposed dredging work; and (f) the fact that the HOA is willing to explore the concept of conducting some post-project sampling to confirm the absence of adverse impacts and potential for improvement in water quality DO and salinity.

For these and other facts and reasons as documented in the attached Stipulated Facts and Exhibits, the Shinn Creek Estates HOA respectfully requests that the Commission answer this variance factor question in the affirmative.

Staffs' Position: Yes.

Staff agrees that hardships result from conditions peculiar to the property where this pre-CAMA and (likely) pre-PNA-designated boat basin and channel have had access to the AIWW for decades (including permitted dredging in 1982) until the shoaling over time of the historic route to the AIWW located north of the S-Channel. While shoaling over time alone is not a peculiar condition in dynamic coastal marsh and creek systems such as this, the shoaling of this S-Channel area between two maintained channels removes long-standing access to this site and is a condition peculiar to this property causing Petitioner's hardship.

III. Do the hardships result from actions taken by the petitioner? Explain.**Petitioner's Position: No.**

The HOA has not taken any action to create the hardships from which it seeks relief. To the contrary, the HOA's actions represent a consistent pattern of long term efforts to address a growing navigability problem not of its own making. In addition, the HOA and its consultants have worked hard to respond to all agency concerns re potential adverse impacts – so much so that DCM itself concluded that the HOA's revised dredging project is not anticipated to create or cause **any** adverse effects on the PNA resources of the relevant marine environment.

Not only has the HOA not in any way contributed to the hardships it now faces, but the HOA and all of the dozens and dozens of homeowners and landowners it is legally charged to serve now face the potential loss of extremely valuable riparian rights as the "S-Turn" area continues to further silt in.

For these and other facts and reasons as documented in the attached Stipulated Facts and Exhibits, the Shinn Creek Estates HOA respectfully requests that the Commission answer this variance factor question in the affirmative (sic).

Staffs' Position: No.

Staff agrees that Petitioner's hardships do not result from the HOA's actions where the HOA, after considerable pre-application consultation with DCM and other resource agencies, has proposed a modest channel to accommodate smaller (14'-24') shallow-draft vessels traditionally used by members of the HOA to navigate from their boat basin and channel to the AIWW. In addition to the boat basin and access channel having been developed pre-CAMA, they may have also been developed prior to designation as a PNA by the N.C. Marine Fisheries Commission, as most PNAs were designated in the late 1970's. Petitioners have proposed a -3' MLW depth for the entire footprint of the project and an 8' width through the channel and S-Channel. Petitioner has also proposed the placement of channel markers in order to help keep boats navigating within the proposed channel, reducing impacts to the surrounding marsh system.

IV. Is the requested variance (1) consistent with the spirit, purpose, and intent of the rules, standards, or orders, (2) will secure public safety and welfare; and (3) will preserve substantial justice? Explain.

Petitioner's Position: Yes.

As discussed above and in the attached Stipulated Facts and Exhibits supporting its requested variance, [especially in the December 7, 2018 DCM Field Report], the Shinn Creek Estates HOA respectfully contends that the proposed dredging work is not anticipated to cause any long term adverse environmental impacts, and only minor, temporary turbidity impacts during the work. Furthermore, as indicated in the expert reports/letters, the proposed work has the potential to improve water quality, improve circulation, reduce existing vessel impacts, improve boater safety, and add to area oyster resources. The HOA recognizes that the Division of Marine Resources does not support any dredging within PNA areas, or the use of positive mitigation measures to overcome such **for purposes of commenting on pending CAMA permit applications**. However, here at the variance request stage, the HOA respectfully contends that the Commission has the ability – and obligation – to take into account the documented absence of any long term adverse impacts, as well as the potential for improvements in various water quality factors, especially with regard to deliberations on the fourth variance factor.

The HOA respectfully contends that neither DCM, DMF nor this Commission will be setting any precedents relative to review of permit applications for future proposed dredging projects. This is so because of the clearly unique and peculiar set of facts and circumstances here. In fact, that is one of the important characteristics of all variance requests to the Commission. Each is unique and peculiar on the basis of its own facts and circumstances. The HOA respectfully suggests to the Commission that the facts and circumstances here are especially compelling in terms of their unique combination of documented history, documented dynamic changes in the ability of many riparian property owners to access navigable waters, the documented absence of any actual adverse impacts, the potential for water quality improvements, and the willingness of the HOA to work with the Commission to help document such after completion of the proposed dredging work.

The HOA requests that the Commission pay particular attention to the expert reports/letters, the sequence of aerial photographs, the well documented history of many decades of navigation by shallow draft vessels ranging from 14' to 24' in the form of affidavits and comment letters, and the support from current/former elected officials. The HOA believes that its requested variance from the essentially per se denial of all permits involving any dredging in PNA waters, a well-intentioned and often appropriate rule/result, does in fact meet the spirit and intent of all applicable CAMA rules and related laws based on the very unique and peculiar circumstances and facts of this case, combined with the growing hardships placed on the HOA and all of the property owners within the Shinn Creek Estates subdivision for whom the HOA is required by law to manage the common area facilities and lands that it owns and controls.

The HOA also would like to publicly thank DCM staff for working with it and its consultants over the past several years to address and resolve actual impact concerns, and to otherwise improve the parameters of the proposed project as revised.

Staffs' Position: Yes.

Staff believes the variance does meet the spirit, purpose and intent of the Commission's prohibition against new dredging in designated PNAs where there has been a long-standing boat basin and channel with access by shallow-draft vessels to the AIWW. Following the shoaling in of the historic route, members of the HOA have been navigating the S-Channel to an existing maintained channel to the south. However, the shoaling of the S-Channel has significantly limited this long-standing access. While there may be some impacts to the PNA habitat associated with dredging, the proposed modest channel to allow continued access for shallow-draft vessels, is designed to limit the impacts with a -3' MLW depth, an 8' channel width and the use of channel markers to reduce impacts to the surrounding marsh by navigating vessels. The proposed oyster shell habitat may provide some increase in nursery habitat, and the proposed dredging may offer some improvements in water quality.

Public Safety and welfare will be secured by allowing the HOA members to maintain their long-standing access to the AIWW from their boat basin and channel, while avoiding impacts to the historic route. The channel markers may help keep boaters within the channel, reducing impacts from boats navigating outside the proposed channel. Additionally, while there may be some impacts to the PNA habitat in the S-Channel from dredging, the proposed width and depth are fairly limited. DWR issued the 401 Water Quality Certification for the project as amended, and while DMF raised some concerns from the proposed dredging, their objections focused on the initially proposed breakwaters that were removed from the project design. Finally, Petitioner's proposed mitigation of the oyster shell reef development may result in increased nursery function, as noted by Mr. Alphin in his report.

The proposed project will preserve substantial justice where the dredging of the S-Channel will preserve the long-standing use of this area for navigation by small, shallow-draft vessels between the HOA's pre-CAMA boat-basin and maintained channel to the maintained channel to the south in order to access the AIWW.

ATTACHMENT D:
PETITIONERS' VARIANCE REQUEST MATERIALS
(except exhibits mutually stipulated to
and Petitioner's initial proposed facts/exhibits)

CAMA VARIANCE REQUEST FORM**DCM FORM 11****DCM FILE No.:** _____PETITIONER'S NAME: SHINN CREEK ESTATES HOMEOWNERS ASSOC.COUNTY WHERE THE DEVELOPMENT IS PROPOSED: New Hanover

Pursuant to N.C.G.S. § 113A-120.1 and 15A N.C.A.C. 07J .0700 *et seq.*, the above named Petitioner hereby applies to the Coastal Resources Commission (CRC) for a variance.

VARIANCE HEARING PROCEDURES

A variance petition will be considered by the CRC at a regularly scheduled meeting, heard in chronological order based upon the date of receipt of a complete petition. 15A N.C.A.C. 07J .0701(e). A complete variance petition, as described below, must be *received* by the Division of Coastal Management (DCM) a minimum of six (6) weeks in advance of the first day of a regularly scheduled CRC meeting to be eligible for consideration by the CRC at that meeting. 15A N.C.A.C. 07J .0701(e). The final set of stipulated facts must be agreed to at least four (4) weeks prior to the first day of a regularly scheduled meeting. 15A N.C.A.C. 07J .0701(e). The dates of CRC meetings can be found at DCM's website: www.nccoastalmanagement.net

If there are controverted facts that are significant in determining the propriety of a variance, or if the Commission determines that more facts are necessary, the facts will be determined in an administrative hearing. 15A N.C.A.C. 07J .0701(b).

VARIANCE CRITERIA

The petitioner has the burden of convincing the CRC that it meets the following criteria:

- (a) Will strict application of the applicable development rules, standards, or orders issued by the Commission cause the petitioner unnecessary hardships? Explain the hardships.
- (b) Do such hardships result from conditions peculiar to the petitioner's property such as the location, size, or topography of the property? Explain.
- (c) Do the hardships result from actions taken by the petitioner? Explain.
- (d) Will the variance requested by the petitioner (1) be consistent with the spirit, purpose, and intent of the rules, standards or orders issued by the Commission; (2) secure the public safety and welfare; and (3) preserve substantial justice? Explain.

Please make your written arguments that Petitioner meets these criteria on a separate piece of paper. The Commission notes that there are some opinions of the State Bar which indicate that non-attorneys may not represent others at quasi-judicial proceedings such as a variance hearing before the Commission. These opinions note that the practice of professionals, such as engineers, surveyors or


contractors, representing others in quasi-judicial proceedings through written or oral argument, may be considered the practice of law. Before you proceed with this variance request, you may wish to seek the advice of counsel before having a non-lawyer represent your interests through preparation of this Petition.

For this variance request to be complete, the petitioner must provide the information listed below. The undersigned petitioner verifies that this variance request is complete and includes:

- The name and location of the development as identified on the permit application;
- A copy of the permit decision for the development in question;
- A copy of the deed to the property on which the proposed development would be located;
- A complete description of the proposed development including a site plan;
- A stipulation that the proposed development is inconsistent with the rule at issue;
- Proof that notice was sent to adjacent owners and objectors*, as required by 15A N.C.A.C. 07J .0701(c)(7);
- Proof that a variance was sought from the local government per 15A N.C.A.C. 07J .0701(a), if applicable;
- Petitioner's written reasons and arguments about why the Petitioner meets the four variance criteria, listed above;
- A draft set of proposed stipulated facts and stipulated exhibits. Please make these verifiable facts free from argument. Arguments or characterizations about the facts should be included in the written responses to the four variance criteria instead of being included in the facts.
- This form completed, dated, and signed by the Petitioner or Petitioner's Attorney.

**Please contact DCM or the local permit officer for a full list of comments received on your permit application. Please note, for CAMA Major Permits, the complete permit file is kept in the DCM Morehead City Office.*

Due to the above information and pursuant to statute, the undersigned hereby requests a variance.



Signature of Petitioner or Attorney

December 30, 2019
Date

I. Clark Wright, Jr.
Printed Name of Petitioner or Attorney

icw@dhwlegal.com
Email address of Petitioner or Attorney

209 Pollock Street
Mailing Address

(252) 514-2828, Ext. 1
Telephone Number of Petitioner or Attorney

New Bern, NC 28560
City State Zip

(252) 514-9878
Fax Number of Petitioner or Attorney

DELIVERY OF THIS HEARING REQUEST

This variance petition must be **received** by the Division of Coastal Management at least six (6) weeks before the first day of the regularly scheduled Commission meeting at which it is heard. A copy of this request must also be sent to the Attorney General's Office, Environmental Division, 15A N.C.A.C. 07J .0701(e).

Contact Information for DCM:

By mail, express mail or hand delivery:

Director
Division of Coastal Management
400 Commerce Avenue
Morehead City, NC 28557

By Fax:

(252) 247-3330

By Email:

Check DCM website for the email
address of the current DCM Director
www.nccoastalmanagement.net

Contact Information for Attorney General's Office:

By mail:

Environmental Division
9001 Mail Service Center
Raleigh, NC 27699-9001

By express mail:

Environmental Division
114 W. Edenton Street
Raleigh, NC 27603

By Fax:

(919) 716-6767

SHINN CREEK ESTATES HOMEOWNERS ASSOCIATION
STATEMENT ADDRESSING THE FOUR VARIANCE REQUEST FACTORS
December 31, 2019

Introduction

Shinn Creek Estates Homeowners Association (Shinn Creek HOA, or HOA) owns riparian property adjacent to a permitted, dredged channel that for decades has provided access for area property owners and boaters to navigable waters, including the nearby Atlantic Intracoastal Waterway (AIWW). DCM previously issued various CAMA permits to prior property owners and more recently to the HOA, authorizing construction of the HOA's existing (common areas) boat ramp and docking facility, as well as for dredging of the access channel leading water ward from these riparian, water dependent facilities. Due to factors outside of the HOA's control, including sediment deposition associated with AIWW dredging, various storm events, and the recent so-called great recession, the existing westward channel no longer connects directly to the AIWW [See various historical aerial photographs, Affidavit of Ben Stephenson, comment letters of support, as well as the HOA's original and revised CAMA permit application materials]. For the past twenty years or more, the primary means of accessing navigable waters and the AIWW has been by exiting the water ward end of the HOA's maintained channel, and turning right (southward) into what is now locally known as "the S-Curve" which then connects to another existing, maintained channel that provides direct access to the AIWW and other area navigable waters. If silting conditions in and around the "S-Curve" continue to worsen, all property owners in and around the Shinn Creek Estates subdivision (a total of over 40 landowners, almost all of whom own shallow draft vessels and consistently use and enjoy their riparian rights of access to navigable waters.

In response to the continued silting in of the "S-Curve" area between the end of the HOA's maintained channel and the maintained channel paralleling AIWW, in 2017 the HOA began to invest significant time, effort and financial resources into what the HOA considered to be a maintenance dredging project. After several years of meetings, negotiations, and revisions to its proposed dredging plans, the HOA submitted its final, revised CAMA application to DCM on or about April 10, 2019. By letter dated April 22, 2019, DCM denied the HOA's revised permit application – primarily on the grounds that dredging the "S-Curve" area violated use standards requiring avoidance of dredging within PNAs, as well as objections from several resource protection agencies for the same reason.

Shinn Creek Estates HOA seeks a variance from the Commission regarding the CAMA use standards cited in the April 22, 2019 DCM denial letter for two basic reasons. First, as illustrated by the various aerial photographs included in this variance request package, this property historically has always had access to the AIWW and other area navigable waters. However, as conditions changed in the area, this access has become shallower and shallower, as well as narrower and narrower, such that today the sole means of access to navigable waters at low and mid-tides now is via the "S-Curve" [see, especially, 1998 and 2006 aerial photographs]. Second, if current increased shoaling trends continue, it is likely that all property owners within the Shinn Creek subdivision and surrounding areas will lose access to navigable waters entirely – and

certainly will lose the types of navigable vessel access that has been historically the case for over 50 years.

In response to agency comments, the HOA modified its proposed dredging such that the dredging involves zero direct impacts to SAV and shellfish resources, added channel markers to keep vessels away from nearby marine resources, dropped the originally proposed breakwaters, and added oyster shell placements to facilitate the potential for growth of new oyster resources. As stated in the “Anticipated Impacts” section of DCM’s December 7, 2018 Field Report, the proposed dredging work would involve “minor increases in turbidity . . . during the dredging event; **however, no long term adverse impacts are anticipated**” [emphasis added]. As also noted in the DCM Field Report, the HOA anticipates that dredging the “S-Curve” area as proposed, coupled with the proposed maintenance dredging, should improve water circulation in the area and reduce the current low dissolved oxygen levels below water quality standards. In this regard, the HOA is willing to invest in some cost effective post-project DO and salinity testing to add to our understanding of the potential for carefully designed dredging projects to improve overall water quality/marine resources. [See attached expert report from Troy Alphin.]

In sum, the HOA’s CAMA permit application was denied due to the PNA and HGW classifications applicable to the “S-Curve area, despite DCM’s conclusion that the proposed work would is not anticipated to cause **any** long term adverse impacts. Given the uniqueness of the topography, the obvious hardship to the HOA as manager of the subdivision’s common area, water dependent facilities that provide over 40 property owners with their sole means of access to navigable waters, and the absence of any actual, adverse impacts, the Shinn Creek Estates HOA respectfully requests that the Commission issue a variance for the proposed dredging work.

Variance Criteria

Pursuant to G.S. § 113-120.1, in order to qualify for a variance, the person or entity seeking the variance must demonstrate, to the satisfaction of the Coastal Resources Commission (CRC), each of the four variance factors:

- 1. Strict application of the applicable development rules, standards, or orders issued by the Commission will cause unnecessary hardships.**

[The Shinn Creek Estates HOA respectfully contends “Yes.”]

The CAMA use standards from which the Shinn Creek Estates HOA seeks a variance boil down to the PNA avoidance rules cited in the DCM denial letter: (1) 15A NCAC 07H.0206(c) (estuarine waters management objectives); (2) 15A NCAC 07H.0208(b)(a)(4) (PNA definition); 15A NCAC 07H.0208(a)(2)(A) (project shall be sited to avoid significant adverse impacts to marine resources); and (4) 15A NCAC 07H.0208(b)(1) (avoid PNAs, shellfish beds and SAVs). With regard to these various listed CAMA rules and use standards, the HOA respectfully contends that DCM’s own Field Report confirms the absence of any actual impacts, and thus items (3) and (4) as listed in the permit denial letter would appear to be misplaced. However, as required for purposes of this variance request, the HOA is stipulating to violation of each of the listed CAMA rules. Having said that, nothing in such a stipulation

prevents the Commission from relying on the DCM Field Report and other materials as contained in the variance request package [see, especially, expert letters/reports of Troy Alphin and Steve Morrison, as well as various materials and drawings contained in the original CAMA Permit Application, and revised Application materials] to conclude that strict application of the applicable rules causes the HOA unnecessary hardships – especially in light of the absence of any documented actual adverse impacts, with the potential for the proposed project to actually improve the marine environment.

In addition, the proposed dredging work and associated channel markers will also improve boater safety and avoid loss of riparian property rights. There is an estimated \$30 - \$40 million dollars of property values within the Shinn Creek Estates Subdivision alone, and the reduction and/or loss of reasonable riparian rights access to navigable waters could well result in the loss of 10% to 20% of these property values. Given the unique history of the area and the prior history of constant use by vessels of the type currently used and owned by the property owners within and adjacent to the common area assets owned and managed by the HOA, the Shinn Creek Estates HOA respectfully requests that the Commission answer this variance factor question in the affirmative.

2. The hardships result from conditions peculiar to the HOA’s common area property and surrounding properties, such as location, size, or topography.

[The Shinn Creek Estates HOA respectfully contends “Yes.”]

The hardships described above and in the attached variance request materials result from the unique and peculiar conditions of the HOA’s common area, water dependent properties, as well as the unique and peculiar dynamic and changing conditions within the so-called “S-Curve” area where “new” dredging work is proposed [approximately 405 linear feet according to DCM’s April 22, 2019 denial letter]. These real property and adjacent marine resource properties are unique and peculiar in a number of respects, including: (a) the well documented shoaling and silting in of the submerged lands of the “S-Curve” and adjacent submerged lands; (b) the long history of shallow draft 14’ to 24’ vessels by the HOA, its subdivision members, adjacent property owners, and predecessors in title; (c) the documented absence of any anticipated adverse impacts to any marine resources; (d) the overwhelming expressions of support from not only owners of properties within Shinn Creek, but other nearby property owners as well as a former Representative in the NC House and the current Mayor of the City of Wilmington; (e) the fact that all three adjacent riparian property owners have written letters of support for the proposed dredging work; and (f) the fact that the HOA is willing to explore the concept of conducting some post-project sampling to confirm the absence of adverse impacts and potential for improvement in water quality DO and salinity.

For these and other facts and reasons as documented in the attached Stipulated Facts and Exhibits, the Shinn Creek Estates HOA respectfully requests that the Commission answer this variance factor question in the affirmative.

3. The hardship does not result from actions taken by the HOA.

[The Shinn Creek Estates HOA respectfully contends “Yes.”]

The HOA has not taken any action to create the hardships from which it seeks relief. To the contrary, the HOA’s actions represent a consistent pattern of long term efforts to address a growing navigability problem not of its own making. In addition, the HOA and its consultants have worked hard to respond to all agency concerns re potential adverse impacts – so much so that DCM itself concluded that the HOA’s revised dredging project is not anticipated to create or cause **any** adverse effects on the PNA resources of the relevant marine environment.

Not only has the HOA not in any way contributed to the hardships it now faces, but the HOA and all of the dozens and dozens of homeowners and landowners it is legally charged to serve now face the potential loss of extremely valuable riparian rights as the “S-Curve” area continues to further silt in.

For these and other facts and reasons as documented in the attached Stipulated Facts and Exhibits, the Shinn Creek Estates HOA respectfully requests that the Commission answer this variance factor question in the affirmative.

- 4. The variance requested by the HOA (1) is consistent with the spirit, purpose, and intent of the rules, standards or orders issued by the Commission; (2) will secure the public safety and welfare; and (3) will preserve substantial justice.**

[The Shinn Creek Estates HOA respectfully contends “Yes.”]

As discussed above and in the attached Stipulated Facts and Exhibits supporting its requested variance, [especially in the December 7, 2018 DCM Field Report], the Shinn Creek Estates HOA respectfully contends that the proposed dredging work is not anticipated to cause any long term adverse environmental impacts, and only minor, temporary turbidity impacts during the work. Furthermore, as indicated in the expert reports/letters, the proposed work has the potential to improve water quality, improve circulation, reduce existing vessel impacts, improve boater safety, and add to area oyster resources. The HOA recognizes that the Division of Marine Resources does not support any dredging within PNA areas, or the use of positive mitigation measures to overcome such **for purposes of commenting on pending CAMA permit applications**. However, here at the variance request stage, the HOA respectfully contends that the Commission has the ability – and obligation – to take into account the documented absence of any long term adverse impacts, as well as the potential for improvements in various water quality factors, especially with regard to deliberations on the fourth variance factor.

The HOA respectfully contends that neither DCM, DMF nor this Commission will be setting any precedents relative to review of permit applications for future proposed dredging projects. This is so because of the clearly unique and peculiar set of facts and circumstances here. In fact, that is one of the important characteristics of all variance requests to the Commission. Each is unique and peculiar on the basis of its own facts and circumstances. The HOA respectfully suggests to the Commission that the facts and circumstances here are especially compelling in terms of their unique combination of documented history, documented dynamic changes in the ability of many riparian property owners to access navigable waters, the documented absence of any actual

adverse impacts, the potential for water quality improvements, and the willingness of the HOA to work with the Commission to help document such after completion of the proposed dredging work.

The HOA requests that the Commission pay particular attention to the expert reports/letters, the sequence of aerial photographs, the well documented history of many decades of navigation by shallow draft vessels ranging from 14' to 24' in the form of affidavits and comment letters, and the support from current/former elected officials. The HOA believes that its requested variance from the essentially per se denial of all permits involving any dredging in PNA waters, a well-intentioned and often appropriate rule/result, does in fact meet the spirit and intent of all applicable CAMA rules and related laws based on the very unique and peculiar circumstances and facts of this case, combined with the growing hardships placed on the HOA and all of the property owners within the Shinn Creek Estates subdivision for whom the HOA is required by law to manage the common area facilities and lands that it owns and controls.

The HOA also would like to publicly thank DCM staff for working with it and its consultants over the past several years to address and resolve actual impact concerns, and to otherwise improve the parameters of the proposed project as revised.

Shinn Creek Estates HOA Variance Request

December 19, 2019

Required Stipulation re Non-compliance

Pursuant to 15A NCAC 07J.0701(c)(6), and for purposes of this variance request only, Shinn Creek Estates HOA, through counsel, stipulates that the development activities described in its previously submitted application and revised application for a CAMA Permit authorizing it to conduct certain channel improvement activities do not comply with the use standards cited in DCM's April 22, 2019 denial letter.

This the 19th day of December, 2019.

A handwritten signature in black ink, appearing to read 'Clark Wright', written over a horizontal line.

Clark Wright – Attorney for Shinn Creek Estates HOA

December 19, 2019

CERTIFIED MAIL
RETURN RECEIPT REQUESTEDScott and Linda Petersen
6429 Shinn Creek Lane
Wilmington, NC 28409

RE: Variance Request by Shinn Creek Estates HOA

Dear Mr. and Mrs. Petersen,

I am writing to provide you with notice of a variance request that is being made by the Shinn Creek Estates HOA (SCEHOA). In its variance request, the SCEHOA is asking that the Coastal Resources Commission (CRC) grant a variance to allow the SCEHOA to implement its proposed channel improvement project. The proposed channel improvements would connect the existing maintained channel leading out from the Shinn Creek Estates boat ramp and docks with the nearby existing maintained channel at Inlet View, as shown on the enclosed drawing. This will allow property owners within Shinn Creek Estates, as well as many others (including you) to have access to the Intracoastal Waterway and surrounding navigable waters, as was the case prior to the shoaling in of portions of this historical waterway.

On behalf of the SCEHOA, we encourage you to support this variance request. You can do that by simply sending me an email at tbenstephenson@gmail.com, or by writing a letter to the Division of Coastal Management, 400 Commerce Avenue, Morehead City, NC 28557. You of course also can send comments that express concerns about the proposed variance request. If you do have questions or concerns, please raise those by emailing or calling me at 910-833-0199.

We believe that the proposed work, which the SCEHOA will finance, will improve boating access for all property owners in the area. The proposed work was developed after investing significant time, effort and SCEHOA financial resources. We believe the proposed channel dredging work represents the best way to restore the area's access to navigable waters, while minimizing any adverse impacts to the aquatic environment.

Should you want to attend, the SCEHOA's variance request is scheduled to be heard by the CRC on Wednesday afternoon, February 12, 2020 at The Beaufort Hotel, 2440 Lennoxville Road, Beaufort, NC 28516.

Thank you for your consideration.

Ben Stephenson
Shinn Creek Estates Board Member
6433 Shinn Creek Estates

December 19, 2019

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Bradley and Carolyn Johnson
6451 Shinnwood Rd.
Wilmington, NC 28409

RE: Variance Request by Shinn Creek Estates HOA

Dear Mr. and Mrs. Johnson,

I am writing to provide you with notice of a variance request that is being made by the Shinn Creek Estates HOA (SCEHOA). In its variance request, the SCEHOA is asking that the Coastal Resources Commission (CRC) grant a variance to allow the SCEHOA to implement its proposed channel improvement project. The proposed channel improvements would connect the existing maintained channel leading out from the Shinn Creek Estates boat ramp and docks with the nearby existing maintained channel at Inlet View, as shown on the enclosed drawing. This will allow property owners within Shinn Creek Estates, as well as many others (including you) to have access to the Intracoastal Waterway and surrounding navigable waters, as was the case prior to the shoaling in of portions of this historical waterway.

On behalf of the SCEHOA, we encourage you to support this variance request. You can do that by simply sending me an email at tbenstephenson@gmail.com, or by writing a letter to the Division of Coastal Management, 400 Commerce Avenue, Morehead City, NC 28557. You of course also can send comments that express concerns about the proposed variance request. If you do have questions or concerns, please raise those by emailing or calling me at 910-833-0199.

We believe that the proposed work, which the SCEHOA will finance, will improve boating access for all property owners in the area. The proposed work was developed after investing significant time, effort and SCEHOA financial resources. We believe the proposed channel dredging work represents the best way to restore the area's access to navigable waters, while minimizing any adverse impacts to the aquatic environment.

Should you want to attend, the SCEHOA's variance request is scheduled to be heard by the CRC on Wednesday afternoon, February 12, 2020 at The Beaufort Hotel, 2440 Lennoxville Road, Beaufort, NC 28516.

Thank you for your consideration.



Ben Stephenson
Shinn Creek Estates Board Member
6433 Shinn Creek Estates

December 19, 2019

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Bill B. and Jane Q. S. Henderson
6432 Shinn Creek Lane
Wilmington, NC 28409

RE: Variance Request by Shinn Creek Estates HOA

Dear Mr. and Mrs. Henderson,

I am writing to provide you with notice of a variance request that is being made by the Shinn Creek Estates HOA (SCEHOA). In its variance request, the SCEHOA is asking that the Coastal Resources Commission (CRC) grant a variance to allow the SCEHOA to implement its proposed channel improvement project. The proposed channel improvements would connect the existing maintained channel leading out from the Shinn Creek Estates boat ramp and docks with the nearby existing maintained channel at Inlet View, as shown on the enclosed drawing. This will allow property owners within Shinn Creek Estates, as well as many others (including you) to have access to the Intracoastal Waterway and surrounding navigable waters, as was the case prior to the shoaling in of portions of this historical waterway.

On behalf of the SCEHOA, we encourage you to support this variance request. You can do that by simply sending me an email at tbenstephenson@gmail.com, or by writing a letter to the Division of Coastal Management, 400 Commerce Avenue, Morehead City, NC 28557. You of course also can send comments that express concerns about the proposed variance request. If you do have questions or concerns, please raise those by emailing or calling me at 910-833-0199.

We believe that the proposed work, which the SCEHOA will finance, will improve boating access for all property owners in the area. The proposed work was developed after investing significant time, effort and SCEHOA financial resources. We believe the proposed channel dredging work represents the best way to restore the area's access to navigable waters, while minimizing any adverse impacts to the aquatic environment.

Should you want to attend, the SCEHOA's variance request is scheduled to be heard by the CRC on Wednesday afternoon, February 12, 2020 at The Beaufort Hotel, 2440 Lennoxville Road, Beaufort, NC 28516.

Thank you for your consideration.



Ben Stephenson
Shinn Creek Estates Board Member
6433 Shinn Creek Estates



Shinn Creek Estates
Dock and Boat Ramp

Proposed Dredge Area

Inlet View Channel to ICW

ICW

Google

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Scott + Linda Petersen
6429 Shinn Creek Ln.
Wilmington, NC 28409



9590 9402 5330 9154 7661 39

2. Article Number (Transfer from service label)

7019 1120 0000 8358 2650

PS Form 3811, July 2015 PSN 7530-02-000-9053

Domestic Return Receipt

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

- Agent
 Addressee

B. Received by (Printed Name)

Scott Petersen

C. Date of Delivery

11/30/14

D. Is delivery address different from item 1?

- If YES, enter delivery address below: Yes
 No

3. Service Type

- Adult Signature
- Adult Signature Restricted Delivery
- Certified Mail®
- Certified Mail Restricted Delivery
- Collect on Delivery
- Collect on Delivery Restricted Delivery
- Insured Mail
- Insured Mail Restricted Delivery (over \$500)
- Priority Mail Express®
- Registered Mail™
- Registered Mail Restricted Delivery
- Return Receipt for Merchandise
- Signature Confirmation™
- Signature Confirmation Restricted Delivery

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Bill and Jane Henderson
6432 Shinn Creek Ln.
Wilmington, NC 28409



9590 9402 5330 9154 7661 46

7019 1120 0000 8358 2643

PS Form 3811, July 2015 PSN 7530-02-000-9053

Domestic Return Receipt

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

- Agent
 Addressee

B. Received by (Printed Name)

Bill Henderson

C. Date of Delivery

12/28

D. Is delivery address different from item 1?

- If YES, enter delivery address below: Yes
 No

3. Service Type

- Adult Signature
- Adult Signature Restricted Delivery
- Certified Mail®
- Certified Mail Restricted Delivery
- Collect on Delivery
- Collect on Delivery Restricted Delivery
- Insured Mail
- Insured Mail Restricted Delivery (over \$500)
- Priority Mail Express®
- Registered Mail™
- Registered Mail Restricted Delivery
- Return Receipt for Merchandise
- Signature Confirmation™
- Signature Confirmation Restricted Delivery

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Bradley + Carolyn Johnson
6451 Shinnwood Rd.
Wilmington, NC 28409



9590 9402 5330 9154 7661 22

7019 1120 0000 8358 2667

PS Form 3811, July 2015 PSN 7530-02-000-9053

Domestic Return Receipt

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

- Agent
 Addressee

B. Received by (Printed Name)

B. Johnson

C. Date of Delivery

12/23

D. Is delivery address different from item 1?

- If YES, enter delivery address below: Yes
 No

3. Service Type

- Adult Signature
- Adult Signature Restricted Delivery
- Certified Mail®
- Certified Mail Restricted Delivery
- Collect on Delivery
- Collect on Delivery Restricted Delivery
- Insured Mail
- Insured Mail Restricted Delivery (over \$500)
- Priority Mail Express®
- Registered Mail™
- Registered Mail Restricted Delivery
- Return Receipt for Merchandise
- Signature Confirmation™
- Signature Confirmation Restricted Delivery

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

WILMINGTON, NC 28409

Certified Mail Fee	\$3.50
Extra Services & Fees (check box, add fee as appropriate)	\$2.80
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00
<input type="checkbox"/> Return Receipt (electronic)	\$0.00
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00
<input type="checkbox"/> Adult Signature Required	\$0.00
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00

Postage \$0.55

Total Postage and Fees \$6.85



Sent To *Scott & Linda Petersen*
 Street and Apt. No., or PO Box No. *6429 Shinn Creek Ln.*
 City, State, ZIP+4® *Wilmington, NC 28409*

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

0592 9538 8358 2650
 2019 1120 0000 6102

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only

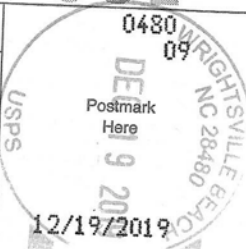
For delivery information, visit our website at www.usps.com®.

WILMINGTON, NC 28409

Certified Mail Fee	\$3.50
Extra Services & Fees (check box, add fee as appropriate)	\$2.80
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00
<input type="checkbox"/> Return Receipt (electronic)	\$0.00
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00
<input type="checkbox"/> Adult Signature Required	\$0.00
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00

Postage \$0.55

Total Postage and Fees \$6.85



Sent To *Bradley & Carolyn Johnson*
 Street and Apt. No., or PO Box No. *6451 Shipwood Rd.*
 City, State, ZIP+4® *Wilmington, NC 28409*

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

2992 9538 8358 2667
 2019 1120 0000 6102

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only

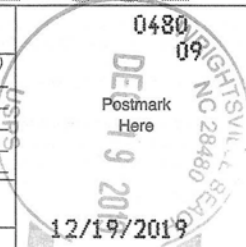
For delivery information, visit our website at www.usps.com®.

WILMINGTON, NC 28409

Certified Mail Fee	\$3.50
Extra Services & Fees (check box, add fee as appropriate)	\$2.80
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00
<input type="checkbox"/> Return Receipt (electronic)	\$0.00
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00
<input type="checkbox"/> Adult Signature Required	\$0.00
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00

Postage \$0.55

Total Postage and Fees \$6.85



Sent To *Bill and Jane Henderson*
 Street and Apt. No., or PO Box No. *6432 Shinn Creek Ln.*
 City, State, ZIP+4® *Wilmington, NC 28409*

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

6492 9538 8358 2643
 2019 1120 0000 6102

RECEIPT

SHINN CREEK ESTATES HOMEOWNERS ASSOCIATION

VARIANCE REQUEST PACKAGE

DECEMBER 31, 2019

Received by MSK for the Division of Coastal Management on
December 31, 2019 at 4:40 p.m.

DCM-MHD CITY
DEC 31 2019
RECEIVED

ATTACHMENT E:**STIPULATED EXHIBITS INCLUDING POWERPOINT**

1. 2000 Deed to HOA of Common Area property at 2819/792
2. Subdivision Plats at B36/210-11 and B38/66
3. DCM Field Investigation Report
4. Petitioner's CAMA/D&F Major Permit Application, original and as revised
5. Historical Narrative, historic aerial photographs and affidavits of Alvin D. Rogers and Thomas Canady with Plat 5/90 attached
6. Water Quality Monitoring Report by Petitioner's agent Land Management Group
7. DMF written concerns about LMG's Water Quality Monitoring Report
8. Adjacent Riparian Neighbor Notice and Certified Mail receipts, map of these parcels
9. Copy of on-site placard and newspaper publication request materials
10. December 7, 2018 recommendation from DCM Field Representative
11. DMF Comments, including December 14, 2018 Memo and December 19, 2018 Director's cover letter
12. January 13, 2020 401 denial letter
13. January 30, 2019 comments from the City of Wilmington
14. February 11, 2019 email from agent re: meeting and DCM response
15. March 24, 2019 email from Corps forwarding March 11, 2019 NMFS letter
16. April 3, 2019 letter from Corps with comments
17. April 11, 2019 comments on revised plan from NMFS and DMF
18. April 17, 2019 email from agent with additional aerials
19. April 22, 2019 DCM Denial Letter
20. 2019 Google Earth image with proposed dredge route and historic route noted by Petitioner
21. Series of six aerial photos from 1956-2010 with notations by Petitioner
22. 14 letters from owners of lots in Shinn Creek Estates Subdivision in support of proposed dredging plus Adj. Rip. Own. Brad Johnson
23. Opinion of Troy Alphin and Alphin CV
24. LMG 2-page statement re: water quality and variance
25. Ben Stephenson, Board Member of HOA, Affidavit
26. Powerpoint Presentation with aerial photographs of the site

2000 OCT 12 PM 4:23

RECORDED AND VERIFIED
MARY SUE DOTS
REGISTER OF DEEDS ✓
NEW HANOVER CO. NC

BOOK

PAGE

2819

0792

000238

Excise Tax 0.00

Recording Time, Book and Page

Tax Lot No. Parcel Identifier No. Part of R06200-004-014-000
Verified by County on the day of
by

Mail after recording to

This instrument was prepared by Daniel D. Mahn, Attorney at Law

Brief description for the Index
Common Areas - Shinn Creek Estates

NORTH CAROLINA GENERAL WARRANTY DEED

THIS DEED made this 14th day of September, 2000, by and between

GRANTOR

GRANTEE

BOYCE QUINN, INC.,
a North Carolina
Corporation

SHINN CREEK ESTATES
HOMEOWNERS ASSOCIATION, INC.,
a North Carolina Non-Profit
Corporation

6432 Shinn Creek Lane
Wilmington, NC 28403

Enter in appropriate block for each party: name, address, and, if appropriate, character of entity, e.g. corporation or partnership.

The designation Grantor and Grantee as used herein shall include said parties, their heirs, successors, and assigns, and shall include singular, plural, masculine, feminine or neuter as required by context.

WITNESSETH, that the Grantor, for a valuable consideration paid by the Grantee, the receipt of which is hereby acknowledged, has and by these presents does grant, bargain, sell and convey unto the Grantee in fee simple, all that certain lot or parcel of land situated in the City of Harnett Township, New Hanover County, North Carolina and more particularly described as follows:

Being all of that property described in Exhibit A hereto attached and incorporated herein by reference.

RETURNED TO & PREPARED
BY DANIEL D. MAHN

BOOK PAGE
2819 0793

The property hereinabove described was acquired by Grantor by instrument recorded in Book 1977 at Page 280 and Book 1977 at Page 286 of the New Hanover County Registry

A map showing the above described property is recorded in Plat Book 36 page 210 and 211, Plat Book 38, Page 66, and Plat Book 39, Page 381. TO HAVE AND TO HOLD the nforesaid lot or parcel of land and all privileges and appurtenances thereto belonging to the Grantee in fee simple.

And the Grantor covenants with the Grantee, that Grantor is seized of the premises in fee simple, has the right to convey the same in fee simple, that title is marketable and free and clear of all encumbrances, and that Grantor will warrant and defend the title against the lawful claims of all persons whomsoever except for the exceptions hereinafter stated. Title to the property hereinabove described is subject to the following exceptions:

Restrictions, zoning and land use ordinances, easements and rights of way of record.

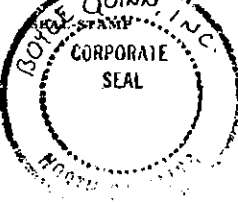
IN WITNESS WHEREOF, the Grantor has hereunto set his hand and seal, or if corporate, has caused this instrument to be signed in its corporate name by its duly authorized officers and its seal to be hereunto affixed by authority of its Board of Directors, the day and year first above written.

BOYCE QUINN, INC.
(Corporate Name)
By: Bill B. Henderson
Bill B. Henderson President

ATTEST:
Quinn Sweeney Henderson
Quinn Sweeney Henderson Secretary (Corporate Seal)

USE BLACK INK ONLY

.....(SEAL)
.....(SEAL)
.....(SEAL)
.....(SEAL)



NORTH CAROLINA, _____ County.
I, a Notary Public of the County and State aforesaid, certify that _____ Grantor, personally appeared before me this day and acknowledged the execution of the foregoing instrument. Witness my hand and official stamp or seal, this _____ day of _____
My commission expires: _____ Notary Public



NORTH CAROLINA, New Hanover County.
I, a Notary Public of the County and State aforesaid, certify that J. Quinn Sweeney Henderson, personally came before me this day and acknowledged that she is _____ Secretary of BOYCE QUINN, INC. a North Carolina corporation, and that by authority duly given and as the act of the corporation, the foregoing instrument was signed in its name by its _____ President, sealed with its corporate seal and attested by her as its _____ Secretary. Witness my hand and official stamp or seal, this 15th day of September, 2000
My commission expires: 10/16/2000 _____ Notary Public

The foregoing Certificate(s) of Daniel D. Mahn, a Notary Public

is/are certified to be correct. This instrument and this certificate are duly registered at the date and time and in the Book and Page shown on the first page hereof.

By: Mary Sue Oots REGISTER OF DEEDS FOR New Hanover COUNTY
Mary Sue Oots Deputy/Assistant - Register of Deeds

BOOK	PAGE
2819	0794

Exhibit A

Tract 1: Being all of Lot 6, SHINN CREEK ESTATES, as shown on that map recorded in Map Book 39 at Page 381 of the New Hanover County Registry, reference to which map is hereby made for a more particular description.

Tract 2: Being all of the Common Areas, Utility Easements, Drainage Easements, and Buffer Easements as shown on that map of SHINN CREEK ESTATES recorded in Map Book 36 at Pages 210 and 211, as said Common Areas and Easements are revised on that map recorded in Map Book 38 at Page 66, as the same are further revised in Map Book 39 at Page 381 of the New Hanover County Registry, reference to which maps is hereby made for a more particular description.

I, SHERWIN D. CRIBB, CERTIFY THAT THIS MAP WAS DRAWN BY ME FROM AN ACTUAL SURVEY MADE BY ME AND OTHERS UNDER MY SUPERVISION; THAT THE PRECISION OF THE SURVEY AS CALCULATED BY COMPUTER IS 1/10,000; THAT THIS MAP WAS PREPARED IN ACCORDANCE WITH GS. 47-30, AS AMENDED, WITH MY ORIGINAL SIGNATURE, REGISTRATION NUMBER AND SEAL THIS THE 22 DAY OF NOV. 1996.

SHERWIN D. CRIBB
N.C. REG. LAND SURVEYOR No. L-1099

I, SHERWIN D. CRIBB, CERTIFY THAT THIS PLAT IS OF A SURVEY THAT CREATES A SUBDIVISION OF LAND WITHIN THE AREA OF A COUNTY OR MUNICIPALITY THAT HAS AN ORDINANCE THAT REGULATES PARCELS OF LAND AND LIES WITHIN THE SUBDIVISION JURISDICTION OF NEW HANOVER COUNTY.

SHERWIN D. CRIBB
N.C. REG. LAND SURVEYOR No. L-1099

NORTH CAROLINA NEW HANOVER COUNTY

I, A NOTARY PUBLIC OF THE COUNTY AND STATE AFORESAID, CERTIFY THAT SHERWIN D. CRIBB, A REGISTERED LAND SURVEYOR, PERSONALLY APPEARED BEFORE ME THIS DAY AND ACKNOWLEDGED THE EXECUTION OF THE FOREGOING INSTRUMENT, WITNESS MY HAND AND OFFICIAL STAMP OR SEAL THIS THE 20 DAY OF NOV. 1996.

YULONDA G. WOODLELL, NOTARY PUBLIC
MY COMMISSION EXPIRES JUNE 26, 1999
Yulonda G. Woodrell
NORTH CAROLINA NEW HANOVER COUNTY

THE FOREGOING CERTIFICATE OF YULONDA G. WOODLELL, NOTARY PUBLIC OF NEW HANOVER COUNTY IS CERTIFIED TO BE CORRECT THIS THE 27 DAY OF DEC. 1996.

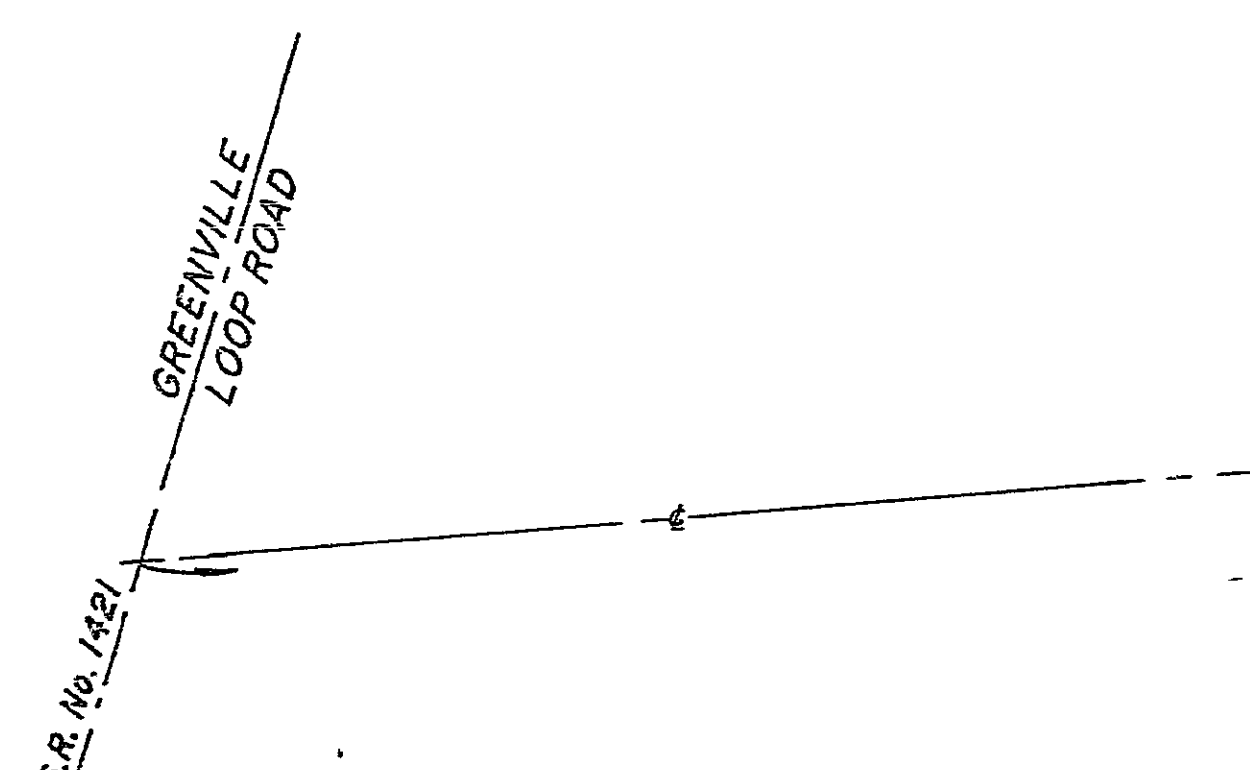
FILED FOR REGISTRATION ON THE 27 DAY OF DECEMBER 1996, AND DULY RECORDED IN MAP BOOK 36, AT PAGE 210

MARY SUE OOTS, REGISTER OF DEEDS

CERTIFICATE OF OWNERSHIP DEDICATION AND JURISDICTION

I (WE) CERTIFY THAT I AM (WE ARE) THE OWNER(S) OF THE PROPERTY SHOWN AND DESCRIBED HEREON AND THAT I (WE) HEREBY ADOPT THIS PLAN OF SUBDIVISION WITH MY (OUR) OWN FREE CONSENT AND DEDICATE ALL STREETS, ALLEYS, WALKS, PARKS CONSERVATION SPACE AND OTHER AREAS TO PUBLIC OR PRIVATE USE AS NOTED. ALL ROADS AND DRAINAGE EASEMENTS ARE DEDICATED FOR PUBLIC UTILITY PURPOSES. FURTHER, I (WE) CERTIFY THE LAND AS SHOWN HEREON IS LOCATED WITHIN THE SUBDIVISION JURISDICTION OF NEW HANOVER COUNTY, N.C.

11/20/96 Bill Boyce Henderson OWNER



A PORTION OF THE PREMISES SURVEYED IS LOCATED WITHIN A FLOOD HAZARD AREA ACCORDING TO THE FLOOD INSURANCE RATE MAP FOR NEW HANOVER COUNTY, N.C. (COMMUNITY PANEL No. 370168 0085 E, REV. 09/13/95).

CERTIFICATE OF DISCLOSURE
NEW HANOVER COUNTY FLOOD PLAIN MANAGEMENT

I (WE) HEREBY CERTIFY THAT PRIOR TO ENTERING ANY AGREEMENT OR ANY CONVEYANCE WITH A PROSPECTIVE BUYER, I (WE) SHALL PREPARE AND SIGN, AND THE BUYER OF THE SUBJECT REAL ESTATE SHALL RECEIVE AND SIGN, A STATEMENT WHICH FULLY AND ACCURATELY DISCLOSES THAT THE SUBJECT REAL ESTATE OR A PORTION OF THE SUBJECT REAL ESTATE IS LOCATED WITHIN A FLOOD HAZARD AREA AND THAT THE BUYER MUST SATISFY THE REQUIREMENTS OF THE NEW HANOVER COUNTY FLOOD PLAIN MANAGEMENT REGULATIONS PRIOR TO THE ISSUANCE OF CONSTRUCTION PERMITS.

11/20/96 Bill Boyce Henderson OWNER

CERTIFICATE OF REGISTRATION / DISCLOSURE FOR HOMEOWNER'S ASSOCIATION COVENANTS, CONDITIONS AND RESTRICTIONS BY REGISTER OF DEEDS

NORTH CAROLINA NEW HANOVER COUNTY

HOMEOwner'S ASSOCIATION COVENANTS, CONDITIONS AND RESTRICTIONS FILED FOR REGISTRATION ON THE 27 DAY OF DEC. 1996 AT 11:00 A.M. AND DULY RECORDED IN BOOK 212 AT PAGE 686

MARY SUE OOTS, REGISTER OF DEEDS

WATER AND SEWER SUITABILITY DISCLAIMER
NOTWITHSTANDING NEW HANOVER COUNTY APPROVAL OF THIS PLAT, LOTS SHOWN ON SAID PLAT MAY NOT RECEIVE HEALTH DEPARTMENT APPROVAL FOR ON SITE SEWAGE DISPOSAL SYSTEMS, NOR FOR INDIVIDUAL WATER SUPPLY SYSTEMS.

CERTIFICATE OF DISCLOSURE
NORTH CAROLINA COASTAL AREA MANAGEMENT ACT

I (WE) HEREBY CERTIFY THAT PRIOR TO ENTERING ANY AGREEMENT OR ANY CONVEYANCE WITH A PROSPECTIVE BUYER, I (WE) SHALL PREPARE AND SIGN, AND THE BUYER OF THE SUBJECT REAL ESTATE SHALL RECEIVE AND SIGN, A STATEMENT WHICH FULLY AND ACCURATELY DISCLOSES THAT THE BUYER MAY HAVE RESPONSIBILITY TO OBTAIN A DEVELOPMENT PERMIT (MINOR OR MAJOR) AND THE AGENCY TO WHICH AN APPLICATION MUST BE FILED IN ORDER TO OBTAIN SAID PERMIT PRIOR TO ANY UNDERTAKING OR ACTIVITY SUBJECT TO THE REQUIREMENTS OF THE NORTH CAROLINA COASTAL AREA MANAGEMENT ACT.

11/20/96 Bill Boyce Henderson OWNER

CERTIFICATE OF APPROVAL FOR PRIVATE DEVELOPMENTS

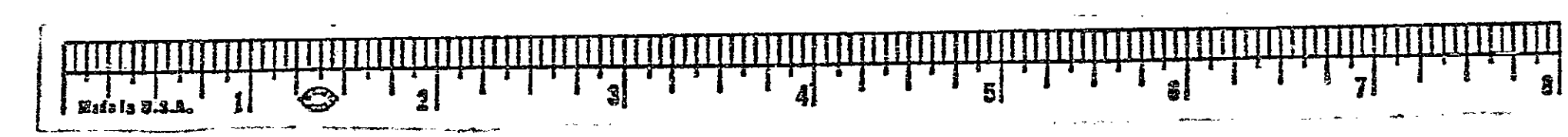
I (WE) ACKNOWLEDGE THAT NEITHER THE STATE NOR THE COUNTY SHALL BE RESPONSIBLE FOR MAINTENANCE OF ANY STREETS, PARKS, DRAINAGE, OPEN SPACE OR OTHER AREAS WHICH ARE DESIGNATED FOR PRIVATE USE. I (WE) ACKNOWLEDGE THAT PRIOR TO CONTRACTING WITH A PROSPECTIVE BUYER, I SHALL GIVE THE BUYER A WRITTEN STATEMENT WHICH DISCLOSES THE EXISTENCE AND LOCATION OF SUCH PRIVATE AREAS AND SPECIFIES THE MAINTENANCE RESPONSIBILITIES FOR SAME, WHEN APPLICABLE. THE STATEMENT SHALL DISCLOSE THAT THE STREET(S) WILL NOT BE CONSTRUCTED TO MINIMUM STANDARDS SUFFICIENT TO ALLOW THEIR INCLUSION ON THE STATE HIGHWAY SYSTEM FOR MAINTENANCE.

11/20/96 Bill Boyce Henderson OWNER

Table with 5 columns: CURVE No. 1, CURVE No. 2, CURVE No. 3, CURVE No. 4, CURVE No. 5. Each column contains curve data including radius (R), delta angle (Δ), tangent (T), and chord (CH).

- LEGEND:
□ CONCRETE MONUMENT
○ IRON PIPE

RECORDED AND VERIFIED
96 DEC 27 PM 12 47
MARY SUE OOTS
REGISTER OF DEEDS
NEW HANOVER CO. NC

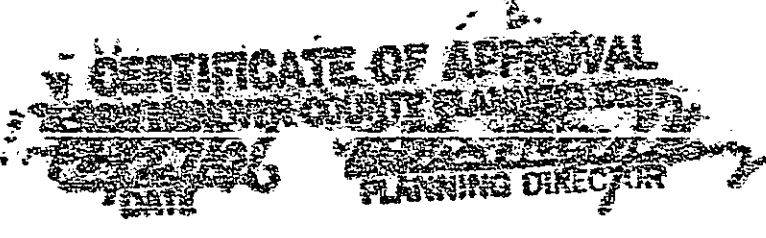
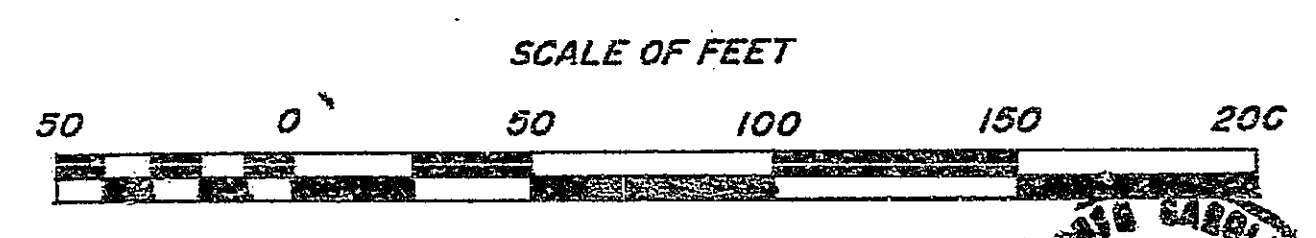


SHINN CREEK ESTATES

HARNETT TOWNSHIP NEW HANOVER COUNTY
NORTH CAROLINA

DEVELOPED BY
BOYCE QUINN, INC.
6613 COVE POINT DRIVE
WILMINGTON, N.C. 28409

SCALE: 1" = 50' NOVEMBER 20, 1996



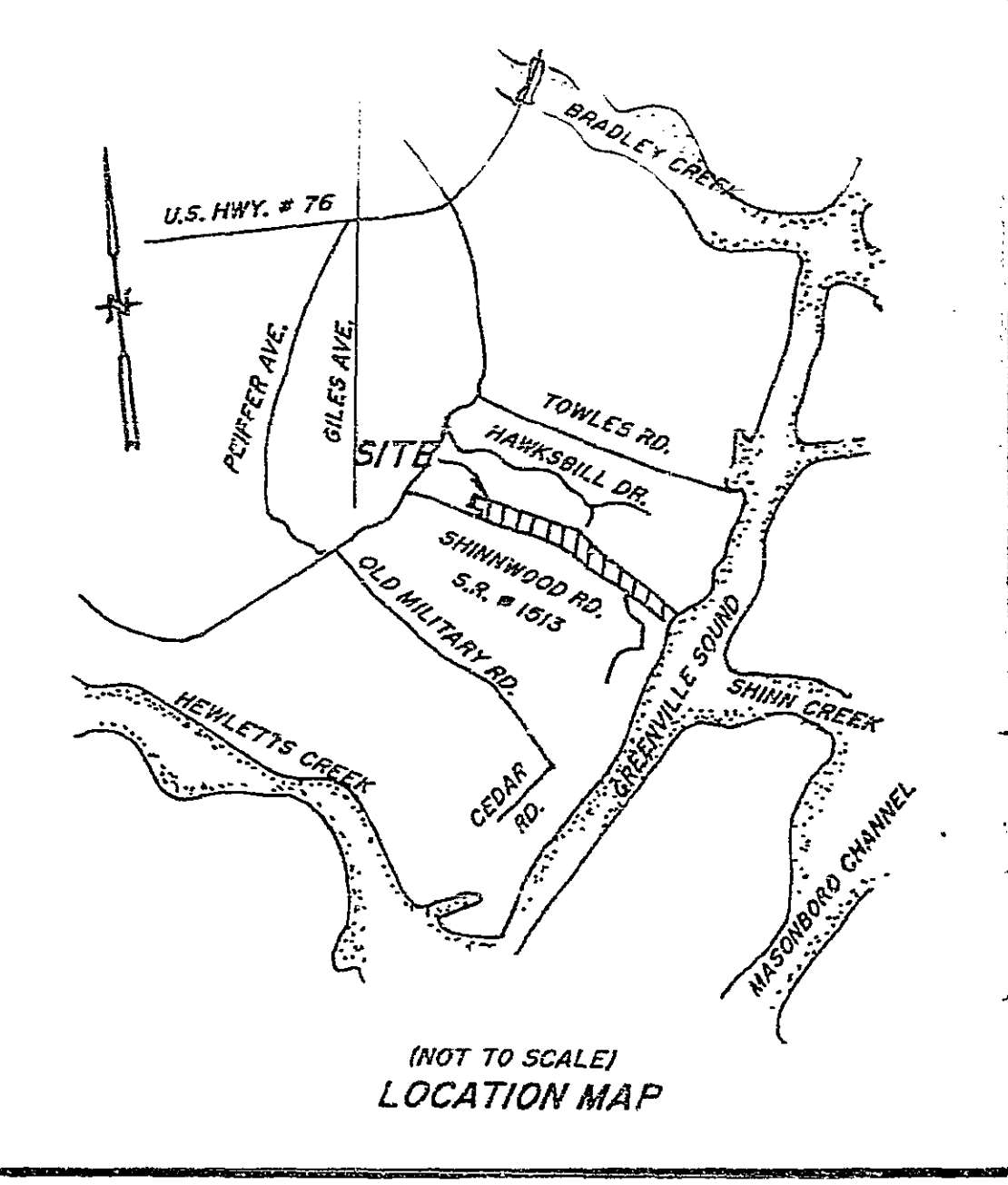
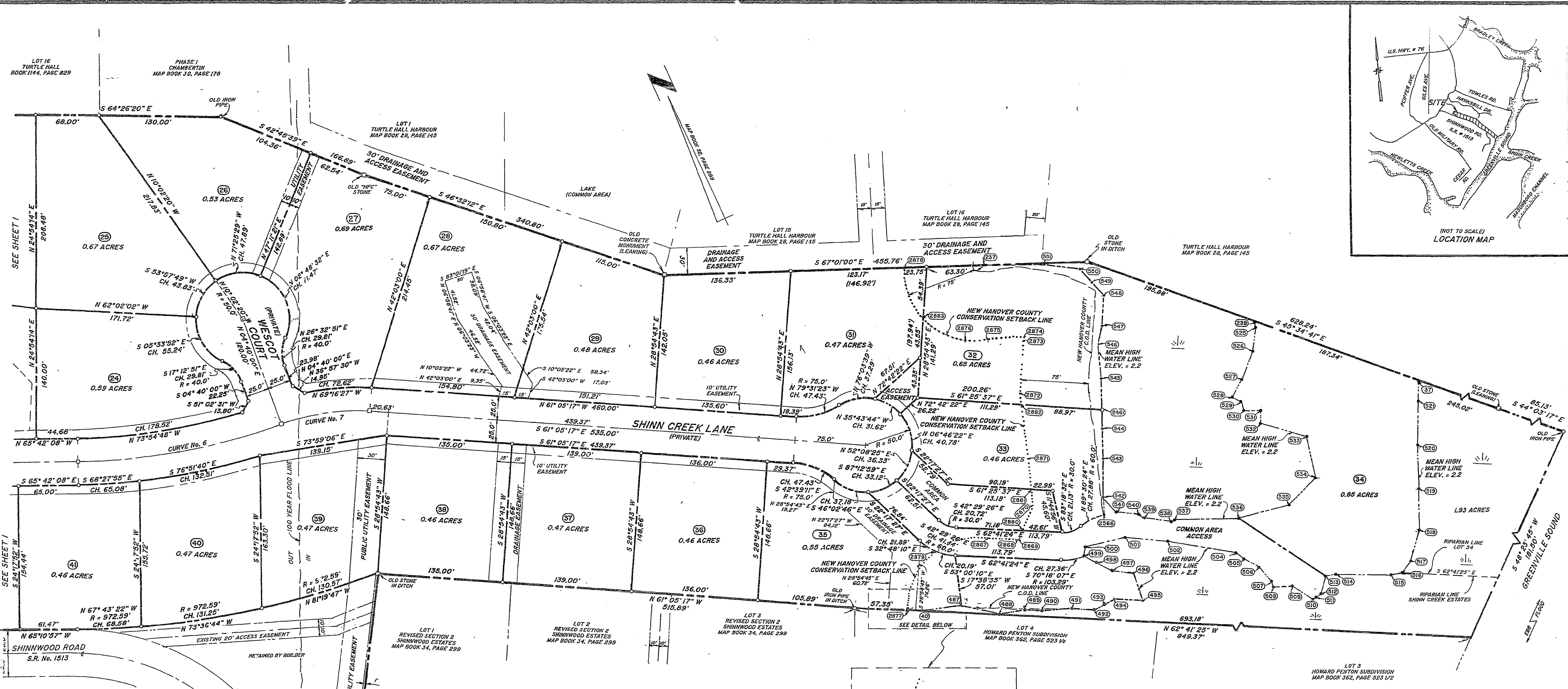
210

BOOK 36 PAGE 210 AND 210

SHERWIN D. CRIBB
N.C. REG. LAND SURVEYOR No. L-1099
1144 SHIPYARD BLVD.
WILMINGTON, N.C.



SHEET 1 OF 2



211

CURVE No. 5
 R = 650.0'
 Δ = 19° 37' 52"
 T = 112.4562'
 CH. 221.62'
 N 75° 31' 04" W

CURVE No. 7
 R = 230.0'
 Δ = 24° 14' 43"
 T = 48.4028'
 CH. 96.60'
 N 73° 12' 38" W

LEGEND:
 □ CONCRETE MONUMENT
 ○ IRON PIPE

**SCHEDULE OF CALLS
 MEAN HIGH WATER LINE
 LOT 32**

2461-545	N 24° 08' 06" E	31.21'
545-546	N 19° 54' 23" E	31.00'
546-547	N 37° 21' 03" E	20.04'
547-548	N 28° 35' 46" E	33.05'
548-549	N 17° 25' 54" W	19.26'
549-550	N 17° 46' 17" W	19.08'
550-551	N 57° 30' 41" W	39.05'
551-237	N 63° 28' 48" W	64.94'

**SCHEDULE OF CALLS
 MEAN HIGH WATER LINE
 LOT 33**

2566-542	N 25° 19' 48" E	16.26'
542-543	N 23° 19' 48" E	41.33'
543-544	N 23° 24' 23" E	32.31'
544-2461	N 24° 08' 06" E	22.60'

**SCHEDULE OF CALLS
 MEAN HIGH WATER LINE
 LOT 34**

37-239	N 43° 34' 41" W	187.34'
239-525	S 22° 27' 46" W	72.0'
525-526	S 31° 57' 11" W	26.08'
526-527	S 47° 05' 44" W	32.74'
527-528	S 33° 23' 30" W	21.64'
528-529	S 31° 23' 06" E	9.85'
529-530	S 07° 11' 15" W	10.35'
530-531	S 69° 18' 11" E	18.76'
531-532	S 26° 39' 03" W	14.49'
532-533	S 49° 37' 36" E	52.08'
533-534	S 13° 29' 29" W	45.17'
534-535	S 69° 08' 02" W	40.92'
535-536	N 79° 15' 56" W	56.29'
536-537	S 31° 13' 23" E	113.20'
537-538	S 74° 51' 52" E	11.13'
538-539	S 64° 20' 00" E	60.61'
539-540	S 77° 13' 57" E	12.03'
540-541	N 60° 31' 05" E	15.03'
541-542	N 47° 03' 52" E	38.11'
542-543	N 28° 11' 25" E	44.43'
543-544	N 23° 22' 53" E	47.12'
544-545	N 23° 18' 04" E	47.50'
545-546	N 24° 08' 06" E	32.12'

**SCHEDULE OF CALLS
 MEAN HIGH WATER LINE
 LOT 35**

499-499	S 37° 15' 04" E	14.76'
499-497	S 37° 09' 35" E	19.03'
497-496	S 56° 36' 09" E	22.16'
496-495	S 06° 37' 31" W	31.13'
495-494	N 61° 59' 41" W	30.54'
494-493	N 89° 04' 03" W	11.19'
493-492	S 87° 53' 02" W	12.29'
492-491	N 61° 16' 57" W	24.17'
491-490	N 69° 13' 33" W	32.16'
490-489	N 62° 35' 57" W	18.14'
489-488	N 70° 37' 19" W	28.04'
488-487	N 57° 33' 39" W	41.76'
487-480	N 68° 08' 12" W	39.09'
480-778	N 62° 41' 25" W	22.63'

**SCHEDULE OF CALLS
 MEAN HIGH WATER LINE
 BETWEEN
 LOT 34 AND LOT 35**

513-512	S 38° 43' 40" W	19.54'
512-511	S 37° 09' 35" E	19.03'
511-510	S 63° 50' 52" W	3.88'
510-509	N 33° 03' 22" W	27.10'
509-508	N 69° 05' 45" W	20.69'
508-507	N 06° 35' 29" E	6.53'
507-506	N 16° 33' 00" W	20.78'
506-505	N 37° 21' 20" W	18.32'
505-504	N 25° 47' 31" W	10.58'
504-503	N 55° 10' 11" W	74.08'
503-501	N 53° 25' 13" W	46.07'
502-500	N 79° 08' 59" W	43.95'
500-499	S 34° 33' 17" W	3.54'

**SCHEDULE OF CALLS
 NEW HANOVER COUNTY
 CONSERVATION SETBACK LINE**

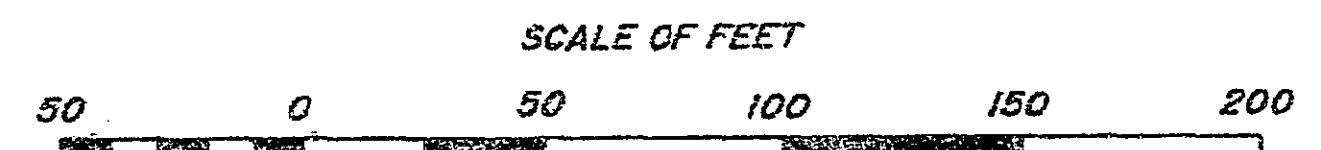
2875-2879	N 50° 59' 51" E	69.14'	R = 75'
2879-2880	S 81° 58' 44" E	CH. 50.26'	R = 75'
2880-2881	S 62° 24' 14" E	CH. 37.59'	R = 75'
2881-2882	S 65° 14' 02" E	2.32'	
2882-2883	N 47° 42' 31" E	10.76'	
2883-2884	N 47° 42' 31" E	28.70'	
2884-2885	N 18° 50' 56" E	17.73'	
2885-2886	N 18° 50' 56" E	32.15'	
2886-2887	N 17° 58' 33" E	39.39'	
2887-2888	N 17° 58' 33" E	11.97'	
2888-2889	N 17° 58' 33" E	60.07'	
2889-2890	N 60° 45' 22" W	2.61'	
2890-2891	N 73° 32' 42" W	35.59'	R = 75'
2891-2892	N 56° 41' 16" W	CH. 62.17'	R = 75'
2892-2893	N 37° 17' 48" W	CH. 49.30'	R = 75'
2893-2894	N 04° 27' 05" E	CH. 57.06'	R = 75'

SHINN CREEK ESTATES

HARNETT TOWNSHIP NEW HANOVER COUNTY
 NORTH CAROLINA

DEVELOPED BY
BOYCE QUINN, INC.
 6613 COVE POINT DRIVE
 WILMINGTON, N.C. 28409

SCALE: 1" = 50' NOVEMBER 20, 1996



Sherwin D. Cribb
 SHERWIN D. CRIBB
 N.C. REG. LAND SURVEYOR No. L-1099
 1144 SHIPYARD BLVD.
 WILMINGTON, N.C.

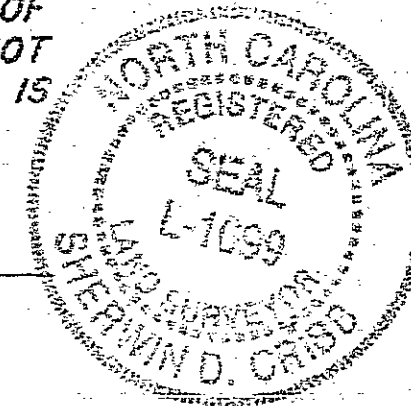
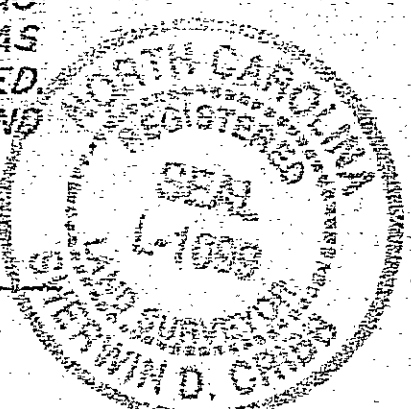


I, SHERWIN D. CRIBB, CERTIFY THAT THIS MAP WAS DRAWN BY ME FROM AN ACTUAL SURVEY MADE BY ME AND OTHERS UNDER MY SUPERVISION; THAT THE PRECISION OF THE SURVEY AS CALCULATED IN ACCORDANCE WITH G.S. 47-30 AS AMENDED, WITH MY ORIGINAL SIGNATURE, REGISTRATION NUMBER AND SEAL THIS THE 17 DAY OF JULY 1998.

Sherwin D. Crubb
SHERWIN D. CRIBB
N.C. REG. LAND SURVEYOR No. L-1099

I, SHERWIN D. CRIBB CERTIFY THAT THIS PLAT IS OF A SURVEY OF AN EXISTING PARCEL OR PARCELS OF LAND AND DOES NOT CREATE A NEW STREET OR CHANGE AN EXISTING STREET AND IS IN ACCORDANCE WITH G.S. 47-30 (1)(b).

Sherwin D. Crubb
SHERWIN D. CRIBB
N.C. REG. LAND SURVEYOR No. L-1099



NORTH CAROLINA NEW HANOVER COUNTY

FILED FOR REGISTRATION ON THE 17 DAY OF JULY AT 10:00 AM AND DULY RECORDED IN MAP BOOK 38 AT PAGE 66

Mary Sue Oots
MARY SUE OOTS
MARY SUE OOTS, REGISTER OF DEEDS

Dever Hayes
REVIEW OFFICER OF NEW HANOVER COUNTY, CERTIFY THAT THE MAP OR PLAT TO WHICH THIS CERTIFICATION IS AFFIXED MEETS ALL STATUTORY REQUIREMENTS FOR RECORDING.

Dever Hayes
REVIEW OFFICER DATE 7-17-98

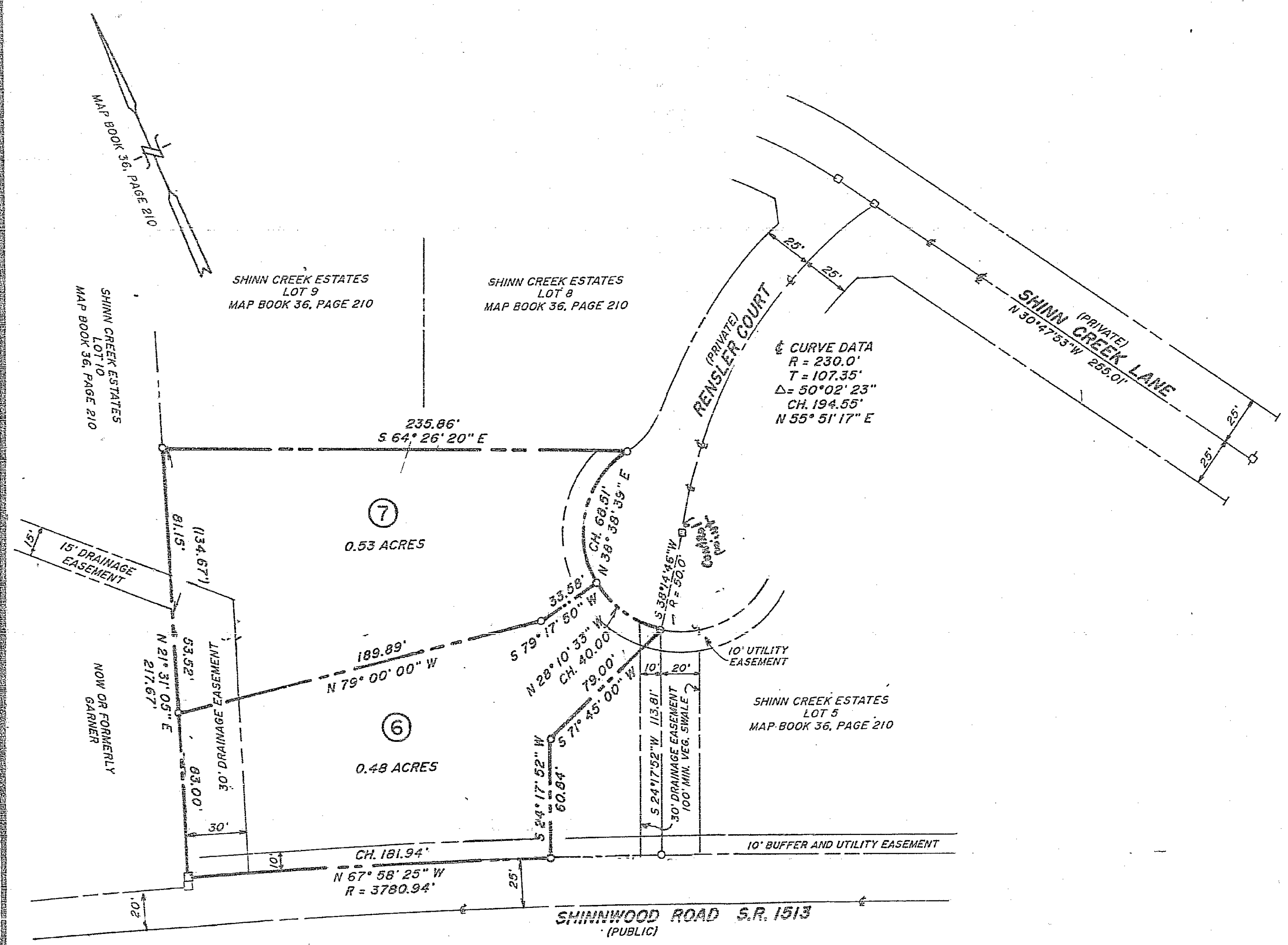
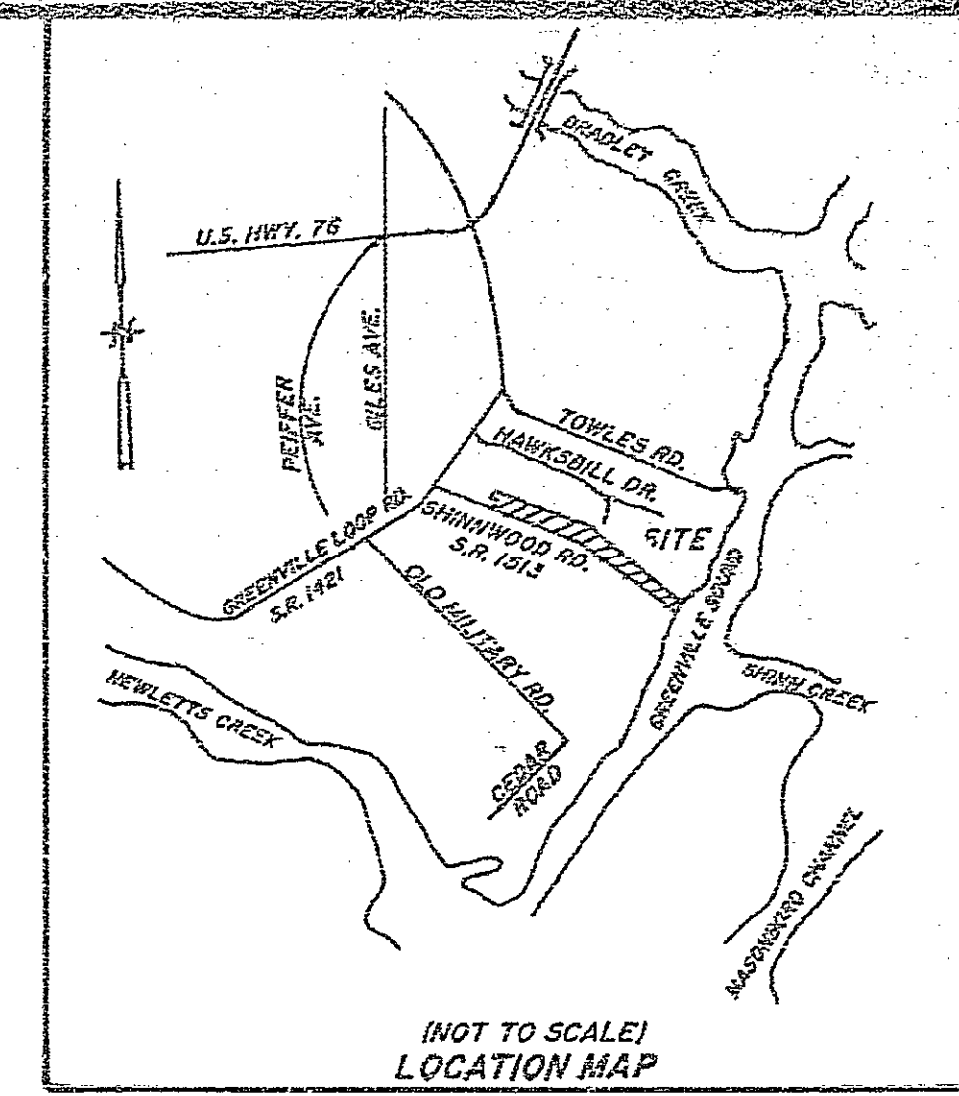
CERTIFICATE OF OWNERSHIP, DEDICATION AND JURISDICTION

I (WE) CERTIFY THAT I (WE ARE) THE OWNER(S) OF THE PROPERTY SHOWN AND DESCRIBED HEREON AND THAT I (WE) HEREBY ADOPT THIS PLAN OF SUBDIVISION WITH MY (OUR) OWN FREE CONSENT AND DEDICATE ALL STREETS, ALLEYS, WALKS, PARKS, CONSERVATION SPACE, AND OTHER AREAS TO PUBLIC OR PRIVATE USE AS NOTED. ALL ROADS AND DRAINAGE EASEMENTS ARE DEDICATED FOR PUBLIC UTILITY PURPOSES. FURTHER I, (WE) CERTIFY THE LAND AS SHOWN HEREON IS LOCATED WITHIN THE SUBDIVISION JURISDICTION OF NEW HANOVER COUNTY, N.C.

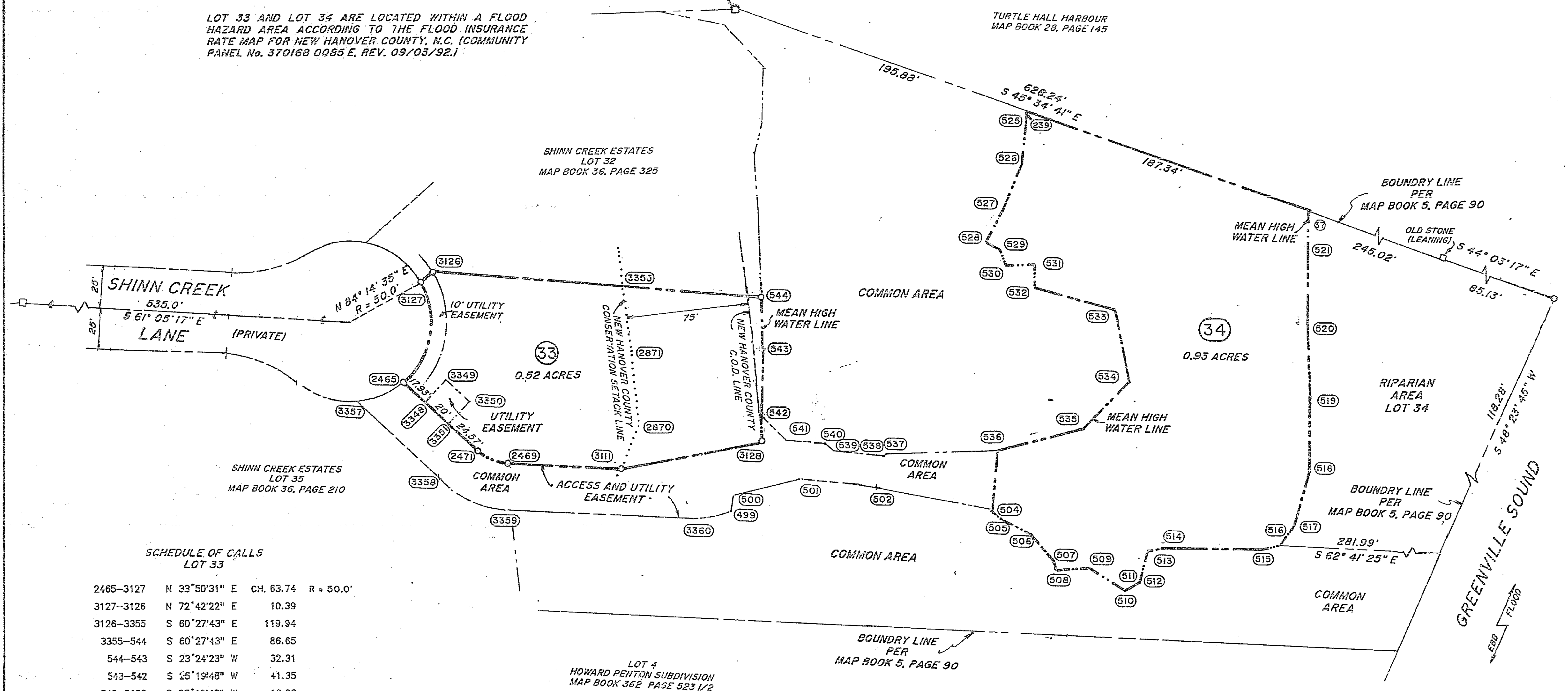
Boice Quinn, Inc.
Boice Quinn, Inc. President DATE 7-17-98
Bill B. Henderson
OWNER

'98 JUL 17 AM 10 38

RECORDED & VERIFIED
MARY SUE OOTS
REGISTER OF DEEDS
NEW HANOVER CO. NC



LOT 6 AND LOT 7 ARE NOT LOCATED WITHIN A FLOOD HAZARD AREA ACCORDING TO THE FLOOD INSURANCE RATE MAP FOR NEW HANOVER COUNTY, N.C. (COMMUNITY PANEL No. 370168 0085 E, REV. 09/03/92.)



SCHEDULE OF CALLS LOT 33

2465-3127	N 33°50'31" E	CH. 63.74	R = 50.0'
3127-3126	N 72°42'22" E	10.39	
3126-3355	S 60°27'43" E	119.94	
3355-544	S 60°27'43" E	86.65	
544-543	S 23°24'23" W	32.31	
543-542	S 45°19'48" W	41.35	
542-3128	S 25°19'48" W	16.26	
3128-3111	N 75°54'28" W	89.42	
3111-2469	N 62°41'24" W	71.18	
2469-2471	N 42°29'28" W	CH. 20.72	R = 30.0'
2471-2465	N 22°17'27" W	62.51	

SCHEDULE OF CALLS LOT 33 CONSERVATION SETBACK LINE

3111-2870	N 47°42'20" E	28.70	
2870-2871	N 18°59'56" E	49.88	
2871-3355	N 17°39'33" E	37.93	

SCHEDULE OF CALLS ACCESS AND UTILITY EASEMENT

2465-2471	S 22°17'27" E	62.51	
2471-2469	S 42°29'28" E	20.72	
2469-3111	S 62°41'24" E	71.18	
3111-3128	S 75°54'28" E	89.42	
3128-542	N 25°19'48" W	16.28	
542-541	S 20°18'28" E	21.58	
541-540	S 59°48'10" E	24.15	
540-539	S 30°08'30" E	7.25	
539-538	S 58°02'07" E	30.35	
538-537	N 85°12'58" E	3.00	
537-536	S 66°48'24" E	68.98	
536-504	S 30°00'31" W	37.83	
504-502	N 55°10'11" W	74.09	
502-501	N 59°25'13" W	48.07	
501-500	N 79°08'59" W	43.86	
500-499	S 34°33'07" W	9.64	
499-3080	N 70°18'07" W	27.36	
3080-3355	N 82°41'24" W	113.79	
3355-3358	N 42°29'28" W	CH. 41.44	R = 60.0'
3358-3357	N 22°17'27" W	78.54	
3357-2465	S 87°12'58" E	CH. 33.12	R = 50.0'

SCHEDULE OF CALLS LOT 34

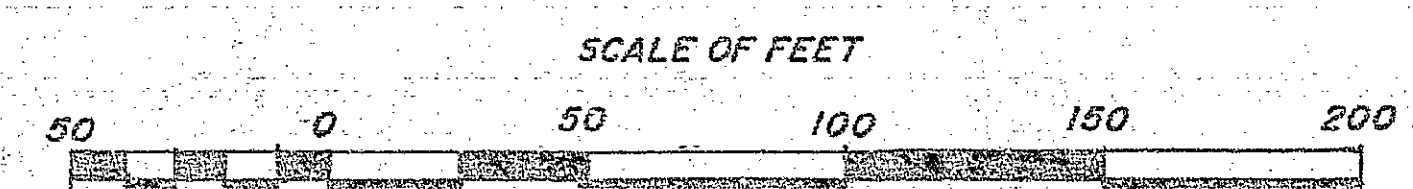
239-37	S 45°34'41" E	187.34	
37-521	S 24°31'48" W	24.10	
521-520	S 26°18'07" W	47.50	
520-519	S 23°22'59" W	47.12	
519-518	S 25°11'25" W	44.43	
518-517	S 41°03'52" W	35.11	
517-516	S 60°31'08" W	15.03	
516-515	N 77°13'57" W	12.04	
515-514	N 64°20'00" W	60.61	
514-513	N 74°51'52" W	11.13	
513-512	S 39°43'40" W	19.54	
512-511	S 78°42'05" W	6.30	
511-510	S 83°50'52" W	3.88	
510-509	N 33°03'22" W	27.10	
509-508	N 69°05'45" W	20.85	
508-507	N 6°35'29" E	6.53	
507-506	N 16°33'00" W	20.78	
506-505	N 37°21'20" W	18.52	
505-504	N 25°47'31" W	10.56	
504-538	N 30°00'31" E	37.83	
538-535	S 79°15'56" E	58.29	
535-534	N 69°08'02" E	40.92	
534-533	N 13°29'29" E	45.17	
533-532	N 49°37'38" W	52.05	
532-531	N 28°39'03" E	14.49	
531-530	N 66°18'11" W	18.78	
530-529	N 2°11'15" E	10.35	
529-528	N 37°59'06" W	9.85	
528-527	N 53°03'30" W	21.64	
527-526	N 47°05'44" E	32.74	
526-525	N 31°57'11" E	26.08	
525-239	N 22°27'46" E	7.20	

REVISION OF LOTS 6, 7, 33 AND 34 SHINN CREEK ESTATES HARNETT TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

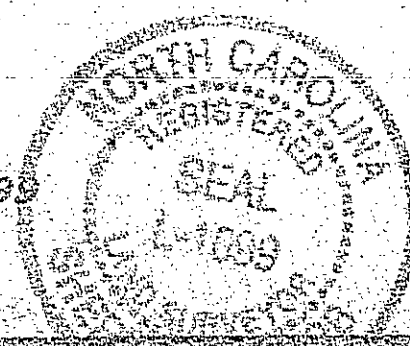
DEVELOPED BY BOYCE QUINN, INC. 6613 COVE POINT DRIVE WILMINGTON, N.C. 28409

CERTIFICATE OF APPROVAL NEW HANOVER COUNTY PLANNING DEPT. 7-17-98 DATE PLANNING DIRECTOR

SCALE: 1" = 50' MAY 20, 1998



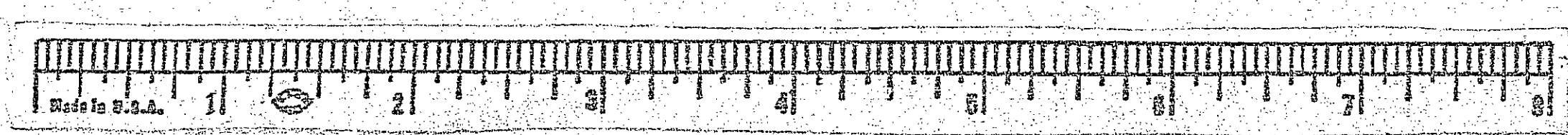
Sherwin D. Crubb
SHERWIN D. CRIBB
N.C. REG. LAND SURVEYOR No. L-1099
1144 SHIPYARD BLVD.
WILMINGTON, N.C. 28412



66

A MAP OF SHINN CREEK ESTATES IS RECORDED IN MAP BOOK 36, PAGE 210. A MAP OF REVISION OF LOTS 6, 7, 33, AND 34 SHINN CREEK ESTATES IS RECORDED IN MAP BOOK 38, PAGE 66. THIS MAP IS FOR THE PURPOSE OF:

1. CHANGING THE NAME OF LOT 6 TO LOT 7.
2. CHANGING THE NAME OF COMMON AREA POOL TO LOT 6.
3. REVISING THE DIVIDING LINE BETWEEN SAID LOTS.
4. ADDING A UTILITY EASEMENT TO LOT 33.
5. CHANGING THE COMMON AREA EAST OF LOT 34 TO RIPARIAN AREA LOT 34.



LEGEND
PROPERTY LINE
CENTER LINE
IRON PIPE

**DIVISION OF COASTAL MANAGEMENT
FIELD INVESTIGATION REPORT**

1. **APPLICANT'S NAME:** Shinn Creek Estates HOA, Inc. c/o Greg Finch (LMG)
2. **LOCATION OF PROJECT SITE:** Site is located at 6432 Shinn Creek Lane, adjacent to the Atlantic Intracoastal Waterway, in Wilmington, New Hanover County.

Photo Index – 2006: 22-7423 L-N, 22 / O, 23 **Lat:** 34°11'44.39"N **Long:** 77°49'41.53"W
3. **INVESTIGATION TYPE:** CAMA / D&F
4. **INVESTIGATIVE PROCEDURE:** **Dates of Site Visit – 12/6/2018**
Was Applicant Present – No
5. **PROCESSING PROCEDURE:** **Application Received – 11/7/2018**
Complete – 11/27/2018
Office – Wilmington
6. **SITE DESCRIPTION:**
 - (A) **Local Land Use Plan–** Wilmington/New Hanover County
Land Classification From LUP – Developed (Residential), Conservation (Open Water)
 - (B) **AEC(s) Involved:** EW, PTA, ES
 - (C) **Water Dependent:** Yes
 - (D) **Intended Use:** Private
 - (E) **Wastewater Treatment:** **Existing-** Septic
Planned- N/A
 - (F) **Type of Structures:** **Existing-** Single-family residences, driveways, private docking facilities and ramp
Planned- Excavation of channel and basin.
 - (G) **Estimated Annual Rate of Erosion:** N/A

7. **HABITAT DESCRIPTION:**

	[AREA] DREDGED	FILLED	OTHER
(A) Vegetated Wetlands (Shading)			
(B) Non-Vegetated Wetlands (Open Water)	9,000 sq.ft.		
(C) Other - Highground (Spoil Disposal)		9,000 sq. ft.	

- (D) **Total Area Disturbed:** 18,000 sq. ft. (0.41 acres)
- (E) **Primary Nursery Area:** Yes
- (F) **Water Classification:** SA;HQW **Open:** No
8. **PROJECT SUMMARY:** The applicant proposes to maintain an existing access channel and basin, excavate a new channel to the Atlantic Intracoastal Waterway (AIWW), and install new breakwaters.

9. PROJECT DESCRIPTION

The subject area is located at 6432 Shinn Creek Lane, in Wilmington, New Hanover County. To locate the properties from the Wilmington Regional Office (WiRO), take Eastwood Road and travel east towards Wrightsville Beach approximately 2.0 miles. Turn right onto Military Cut-Off Road and travel south approximately 1.3 miles until you reach Greenville Loop Road. Turn left onto Greenville Loop Road and travel approximately 0.85 miles south until you reach Shinnwood Road. Turn left onto Shinnwood Road and continue for 0.4 mile. Take a left on to Welcome Lane and then a right on to Shinn Creek Lane. The project area is located at the end of Shinn Creek Lane at the community boat ramp and docking facility.

The project area is located adjacent to a maintained community owned property at the end of Shinn Creek Lane which serves a neighborhood of 36 properties. The property is approximately 3.22 acres with an average elevation of approximately 6' above Normal High Water (NHW). Existing structures on the upland portion of the lot consists of a driveway and a raised road and culvert stabilized by riprap. There is an existing drainage channel which crosses north to south across the applicant's property. At a right angle to the east of the drainage channel is an existing 25' wide by 30' long boat basin and approximately 600' long access channel that leads from the basin to a natural "S" channel. Within the existing basin and access channel is a community boat ramp, docking facility and several private docking facilities. The natural "S" channel has limited navigation at high tide out of the access channel and empties in to a man-made canal that is maintained by Shinnwood homeowners for access to the AIWW. The upland area of the project site is vegetated primarily with upland trees and ornamental grasses and shrubs. There is a narrow section of section "404" type wetlands located on the waterward side of the property, which consists of Sea Myrtle (*Baccharis halimifolia*), and Sea Oxeye (*Borrchia frutescens*). Coastal Wetland species located adjacent to the project area include but are not limited to: Saltwort (*Salicornia sp.*), Black Needle Rush (*Juncus roemarianus*), and Smooth Cordgrass (*Spartina alterniflora*).

Based on permit history for dredge and fill and historical aerial photography, it appears the boat basin and access channel were originally excavated some time prior to 1970 before CAMA regulations came in to affect. State Permit No. 72-82 was issued on June 22, 1982 to Joseph Rogers authorizing maintenance dredging of the 25' wide by 30' long boat basin to -5' MLW. The permit also included maintenance of an access channel measuring 20' wide by 670' long and -5' MLW, a 35' long bulkhead within the basin, and two 5' wide by 10' long riprap breakwaters to stabilized either side of the "flared entrance". The approved work plan drawings show the access channel ending north of the natural "S" channel and does not include excavation of the natural "S" channel. State Permit No. 72-82 was modified on May 12, 1983 for a 20' wide by 30' long boat ramp, 6' wide by 16' long float, a 6' wide by 12' long wooden walkway, and a bulkhead. State Permit No. 72-82 was modified on June 7, 1985 for maintenance excavation of the ditch on the north side of the culvert to 8' wide by 60' long by -3' at MLW. State Permit No. 72-82 was renewed on June 23, 1987 and then again on February 19, 1992. Letter of Refinement was issued on November 17, 1993 for State Permit No. 72-82 authorizing the relocation of the dredge spoil site on the property. State Permit No. 72-82 was transferred to Boyce Quinn, Inc. on January 24, 1996 and was modified on January 2, 1997 for the relocation of the existing boat ramp, sheet pile breakwaters, and docks. State Permit No. 72-82 was renewed again on July 9, 1997. A major modification application was received by the Division of Coastal Management on June 26, 1996 with revisions submitted July 30 through August 27, 1997. The application proposed the excavation of a 30' to 40' wide by 1,390' long access channel to -6' at MLW to connect the AIWW to the head of the existing access channel. The project proposal also included excavation of the 345' long natural "S" channel that had not been previously dredged. Permit files were inconclusive in determining that a major modification was issued for this dredge project. State Permit No. 72-82 was renewed and then modified and renewed on August 12, 1999 to reconfigure a proposed pier and float and then was renewed again on May 30, 2001. A Letter of Refinement was issued for State Permit No. 72-82 on March 6, 2002 authorizing the relocation of an existing float within the basin. State Permit No. 72-82 was renewed on February 5, 2007 and transferred to Shinn Creek Estates HOA. Two requests for maintenance dredging within the basin and access channel were received by NCDQM on June 11, 2011 and June 4, 2013 but no authorization of the proposed maintenance dredging could be found in the permit file. A Letter of Refinement was issued for State Permit No. 72-82 on July 15, 2014 authorizing a 12' by 12' open wooden platform on highground, and a new 4' wide by 30' long walkway. A minor modification to State Permit No. 72-82 was issued on April 27, 2015 authorizing a new fixed access walkway, access ramp, and floating dock. State Permit No. 72-82 expired on December 31, 2015.

The City of Wilmington/New Hanover County Land Use Plan classifies the adjacent waters as *Conservation*, and the adjacent high ground portion of the project area as *Residential*. The waters of the AIWW are classified as SA by the Division of Water Resources. This area IS designated as a Primary Nursery Area (PNA) by the Division of Marine Fisheries and according to maps provided by the Shellfish Sanitation Section, the area is **CLOSED** to the harvesting of shellfish.

PROPOSED PROJECT

The applicant proposes to maintain an existing access channel and basin, excavate a new channel to the Atlantic Intracoastal Waterway (AIWW), and install new breakwaters. An initial dredge event is proposed to remove approximately 600 cy of material from an area measuring 8' wide by 1,083' long to a depth of approximately -3' at MLW. The proposed initial dredge area would include an existing 25' wide by 30' long boat basin, and an 8' wide by 1,083' long access channel, of which approximately 460' linear feet is considered new dredging of the natural "S" channel (see **Sheet 4 and 5 of 7**). Shallow bottom material would be removed mechanically by bucket-to-barge method and deposited at a privately-owned spoil disposal site identified by the applicant as Parcel ID No. R06300-002-003-000. The spoil site is located approximately 0.3 miles north of the project site and adjacent to USACE Disposal Site No. DA-0251 at the confluence of the AIWW and Shinn Creek (see **Sheet 1 of 7**). The disposal site is owned by Shore Acres Company who has approved the applicant's use of the site for this project in the enclosed letter of agreement. The application states that the material would be off loaded and placed outside the USACE Easement Boundary on the eastern portion of the island. The proposed spoil site is commonly used as a disposal site by local marine contractors. The proposed final water depth for this area would be -3' at MLW in connection to a waterbody that has an existing water depth of -3' at MLW. The applicant also proposes four (4) wooden breakwaters at the perimeter of the "S" channel; two approximately 60' long, one at 70' long, and one at 40' long and approximately 1' above MHW (see **Sheet 5 through 7 of 7**). As proposed, the breakwaters would have open spacing between the boards and provide unimpeded water and faunal movement.

10. ANTICIPATED IMPACTS

The proposed initial dredging would disturb approximately 9,000 sq. ft. of shallow bottom area and would result in the removal of approximately 600 cy of material from the existing basin and access channel system. Approximately 3,680 sq. ft. of the shallow bottom within access channel is classified as Primary Nursery Area which would be deepened from its natural depth of 0' to -1' at MLW to -3' at MLW. The disposal of the material would impact approximately 9,000 sq. ft. of highground, which would be located on an existing spoil island at the confluence of the AIWW and Shinn Creek (adjacent to USACE Disposal Site No. 0251), which is commonly used as disposal site by local marine contractors. Minor increases in turbidity should be expected during the dredging event; however, no long term adverse impacts are anticipated. The applicant claims that the project would benefit upstream water quality by removing a significant barrier to circulation associated with the shoaling at the natural "S" channel.

Submitted by: Brooks Sorgan

Date: December 7, 2018

Office: Wilmington



4/10/19

Doug Huggett
400 Commerce Avenue
Morehead City, N.C. 28557

Re: Revisions to CAMA application, Shinn Creek Estates HOA, New Hanover County

Dear Doug,

On behalf of the Shinn Creek Estates HOA, we are revising items contained within their CAMA permit application. These revisions were made in response to agency comments received during the application review process. The revised items are:

Removal of the proposed breakwaters within the "S curve" channel, eliminating potential structural wave scouring impacts.

The addition of channel markers to guide boaters through the deeper water, avoiding the adjacent shallower soft bottom habitat.

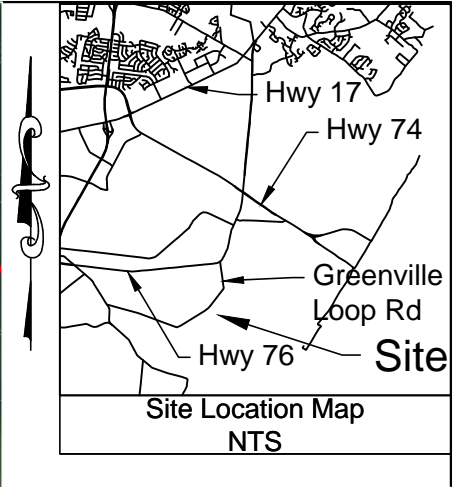
The placement of oyster shells for oyster spat attachment and growth on suitable intertidal bottom totaling 4,895 square feet. This will enhance the valuable shell bottom habitat, reduce the potential for erosion and provide for a natural transition of intertidal habitats.

I have attached an updated set of Sheets 1-7 that detail these revisions. Please contact me with any questions that you may have. Thank you for your assistance.

Sincerely,

Steve Morrison
Environmental Consultant

Encl: Sheets 1-7
Cc: Courtney Spears
Liz Hair
Curt Weychert
Fritz Rohde
Chad Coburn
Shinn Creek Estates HOA



Legend

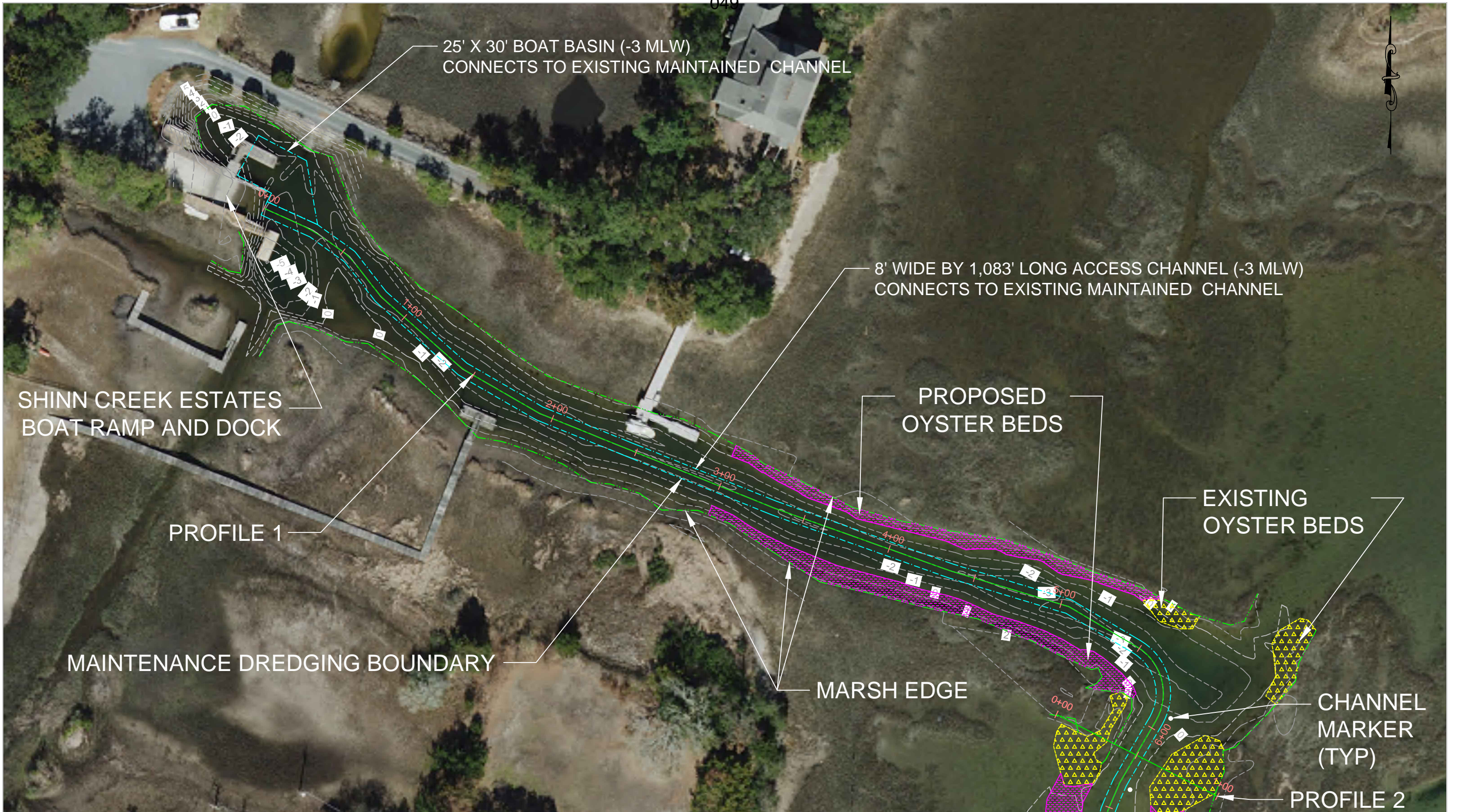
- Maintenance Dredging Boundary - - - - -
- Spoil Disposal Location —————

NOTES:

1. TAX PARCELS FROM NHC GIS.
2. 2016 AERIAL FROM NCONEMAP.
3. NOT A SURVEYED OR ENGINEERED DRAWING.
4. FOR ENVIRONMENTAL PERMITTING ONLY.



Project: Shinn Creek Estates	Date: 10/25/18	Revision Date: 4/10/19
Title: Site Location and Plan View	Scale: 1"=200'	Job Number: LMG17.342
	Drawn By: GSF	Sheet Number: 1 of 7

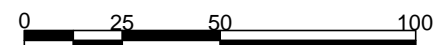


Legend

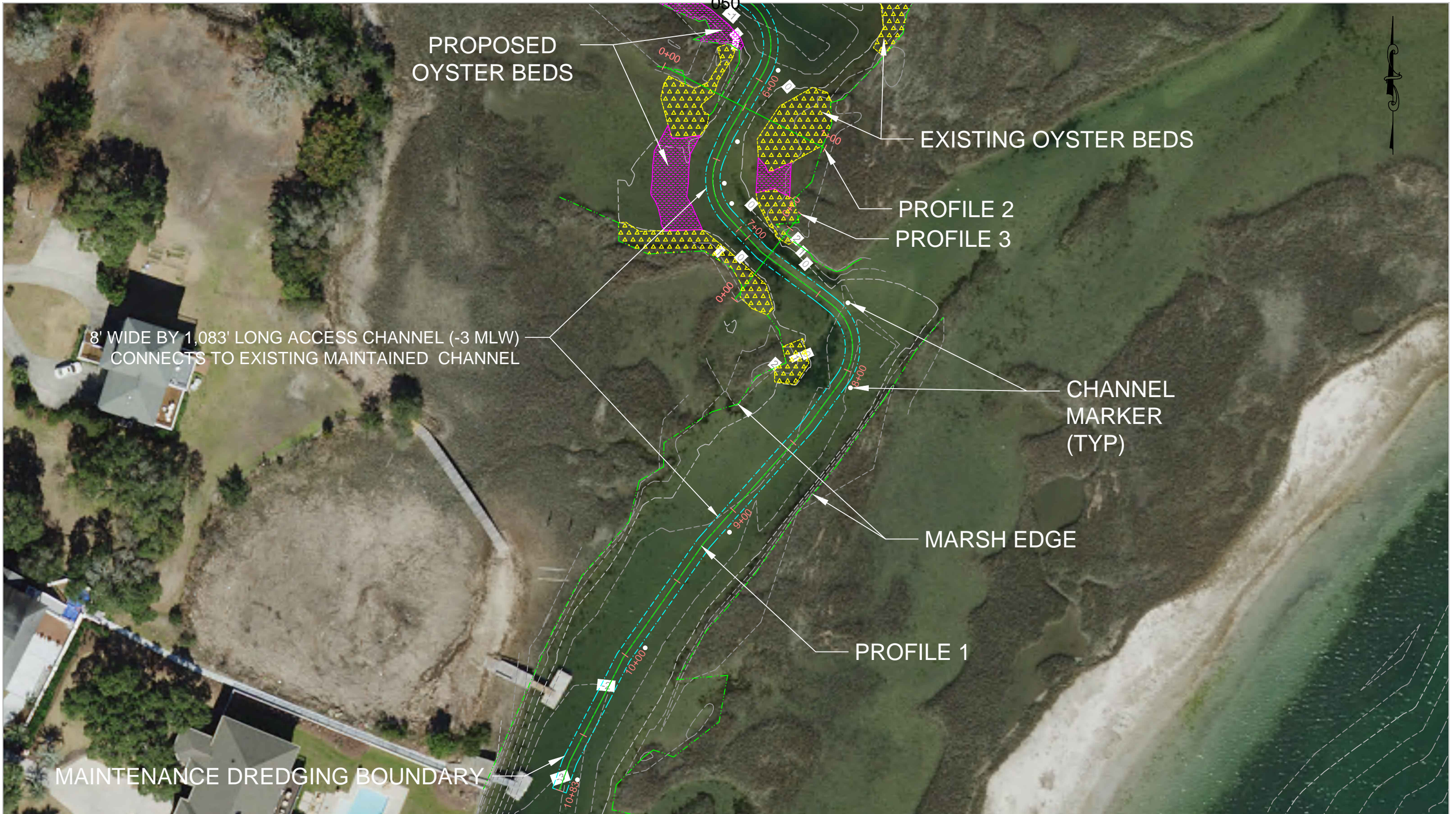
Maintenance Dredging Boundary

NOTES:

1. TAX PARCELS FROM NHC GIS.
2. 2016 AERIAL FROM NCONEMAP.
3. NOT A SURVEYED OR ENGINEERED DRAWING.
4. FOR ENVIRONMENTAL PERMITTING ONLY.
5. MLW DEPTHS PROVIDED BY PARAMOUNTE ENGINEERING. TAKEN AUGUST 2018.



Project: Shinn Creek Estates	Date: 10/25/18	Revision Date: 4/10/19
	Scale: 1"=50'	Job Number: LMG17.342
Title: Ramp and Channel Detail	Drawn By: GSF	Sheet Number: 2 of 7

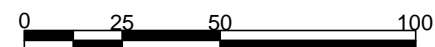


Legend

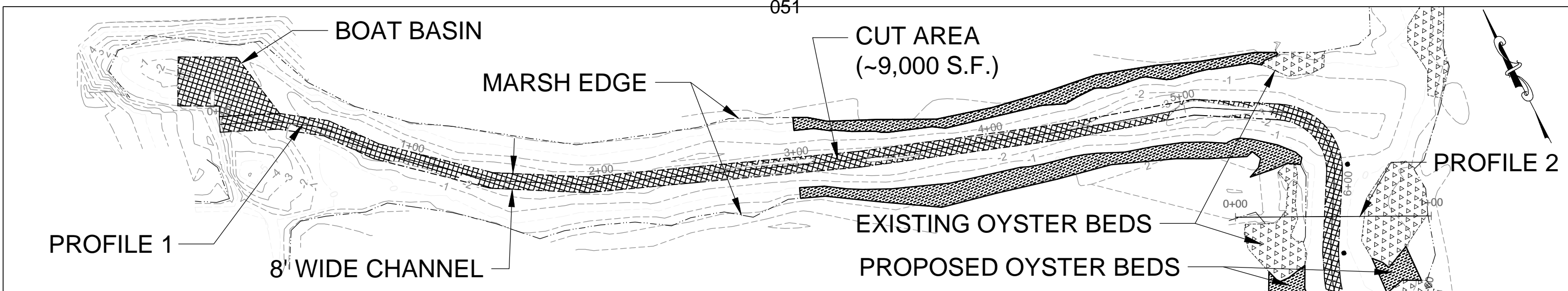
Maintenance Dredging Boundary

NOTES:

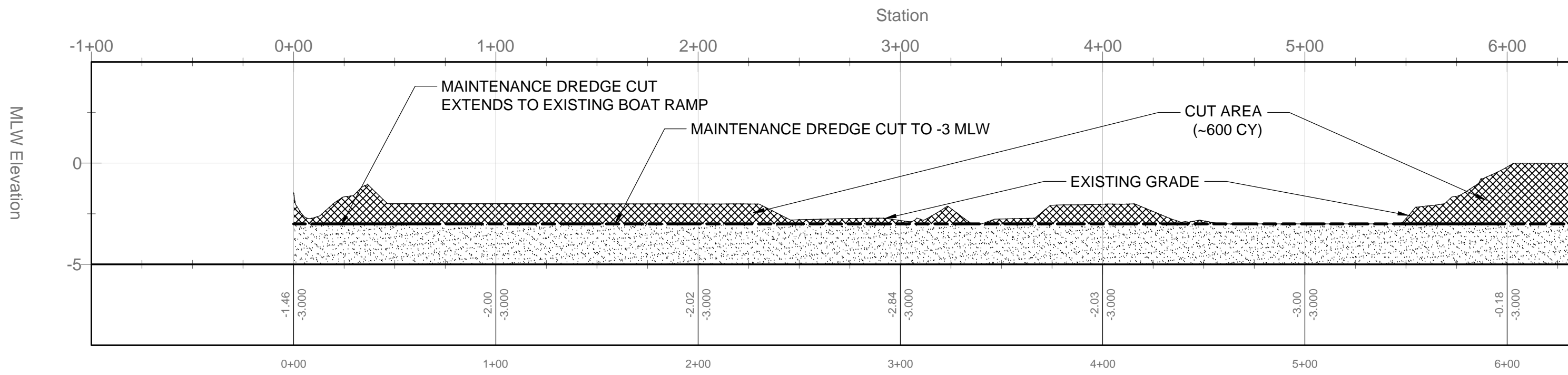
1. TAX PARCELS FROM NHC GIS.
2. 2016 AERIAL FROM NCONEMAP.
3. NOT A SURVEYED OR ENGINEERED DRAWING.
4. FOR ENVIRONMENTAL PERMITTING ONLY.
5. MLW DEPTHS PROVIDED BY PARAMOUNTE ENGINEERING. TAKEN AUGUST 2018.



Project: Shinn Creek Estates	Date: 10/25/18	Revision Date: 4/10/19
	Scale: 1"=50'	Job Number: LMG17.342
Title: S-Turn Channel Detail	Drawn By: GSF	Sheet Number: 3 of 7

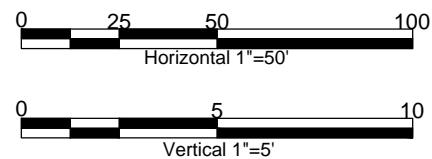


CHANNEL CENTERLINE - PROFILE 1

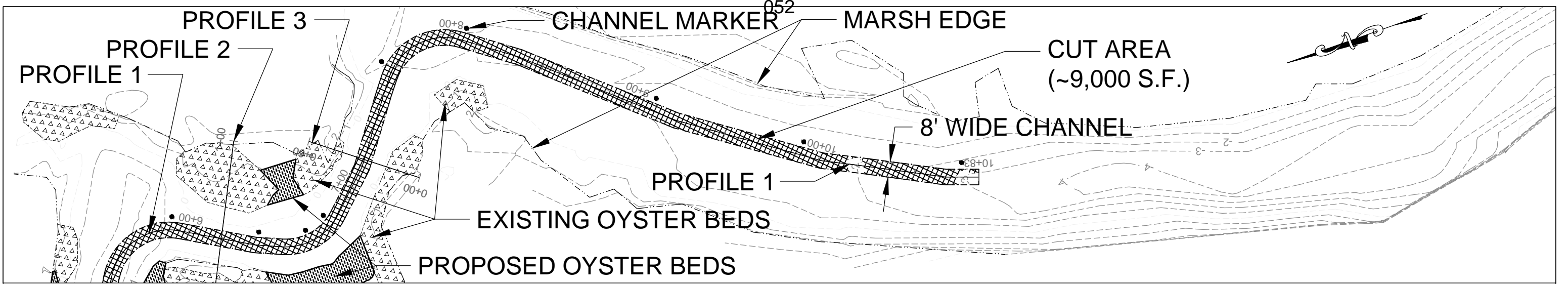


NOTES:

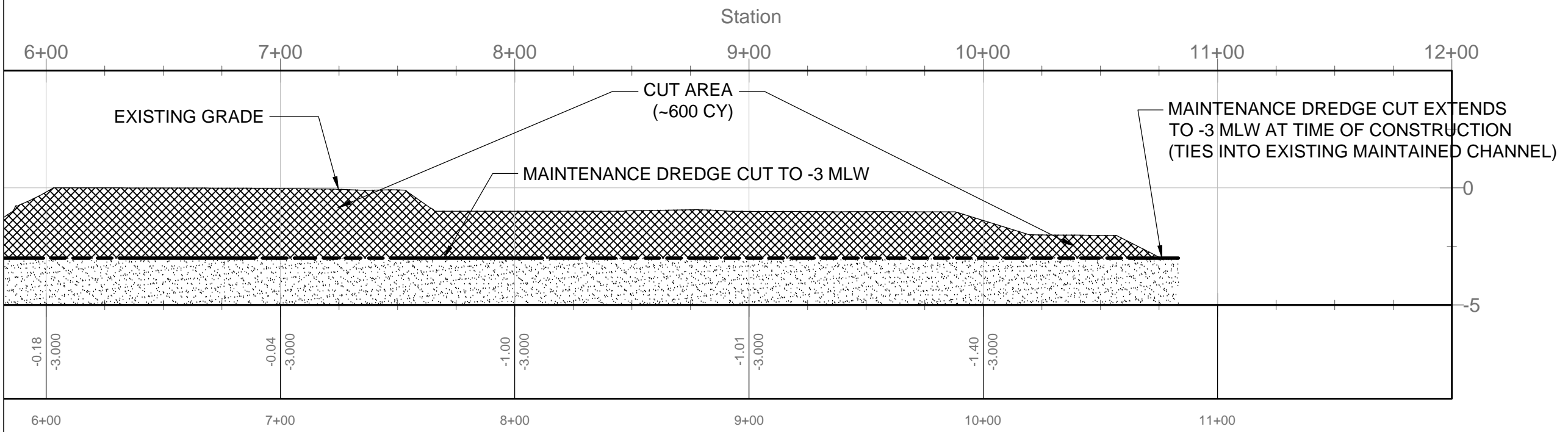
1. 2016 AERIAL FROM NCONEMAP.
2. NOT A SURVEYED OR ENGINEERED DRAWING.
3. FOR ENVIRONMENTAL PERMITTING ONLY.
4. MLW DEPTHS PROVIDED BY PARAMOUNTE ENGINEERING. TAKEN AUGUST 2018.



Project: Shinn Creek Estates	Date: 10/25/18	Revision Date: 4/10/19
Title: Profile 1 Station 0+00 to 6+00	Scale: Horizontal 1"=50' Vertical 1"=5'	Job Number: LMG17.342
	Drawn By: GSF	Sheet Number: 4 of 7

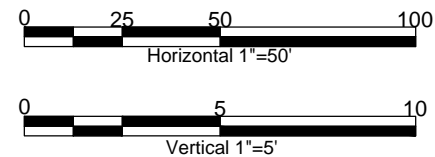


CHANNEL CENTERLINE- PROFILE 1

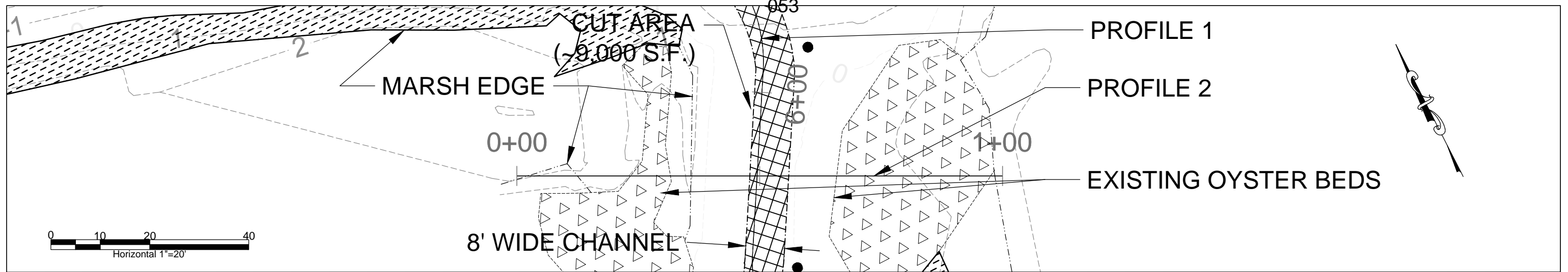


NOTES:

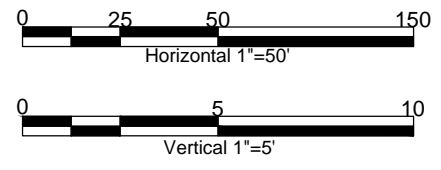
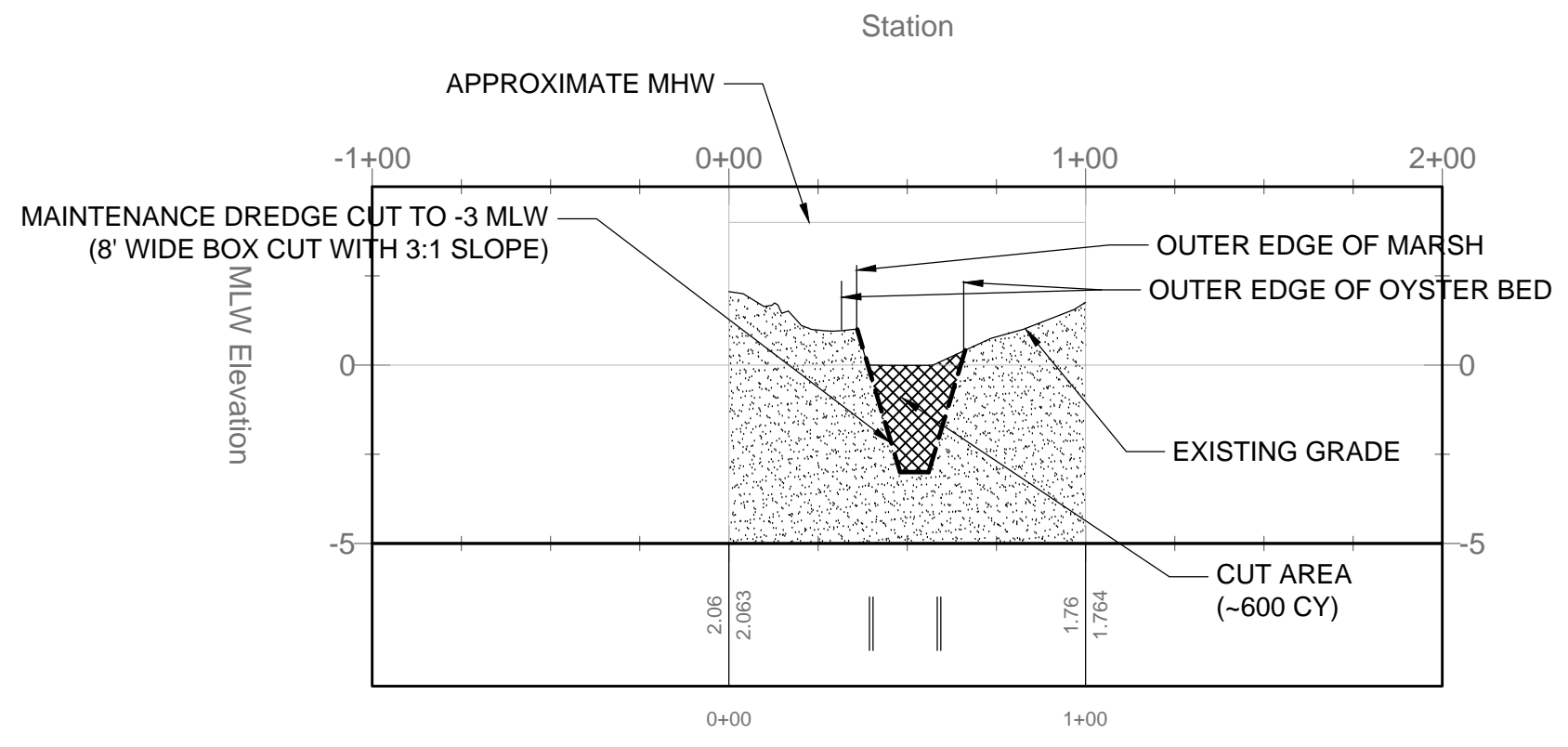
1. 2016 AERIAL FROM NCONEMAP.
2. NOT A SURVEYED OR ENGINEERED DRAWING.
3. FOR ENVIRONMENTAL PERMITTING ONLY.
4. MLW DEPTHS PROVIDED BY PARAMOUNTE ENGINEERING. TAKEN AUGUST 2018.



Project: Shinn Creek Estates	Date: 10/25/18	Revision Date: NA
Title: Profile 1 Station 6+00 to 10+83	Scale: Horizontal 1"=50' Vertical 1"=5'	Job Number: LMG17.342
	Drawn By: GSF	Sheet Number: 5 of 7

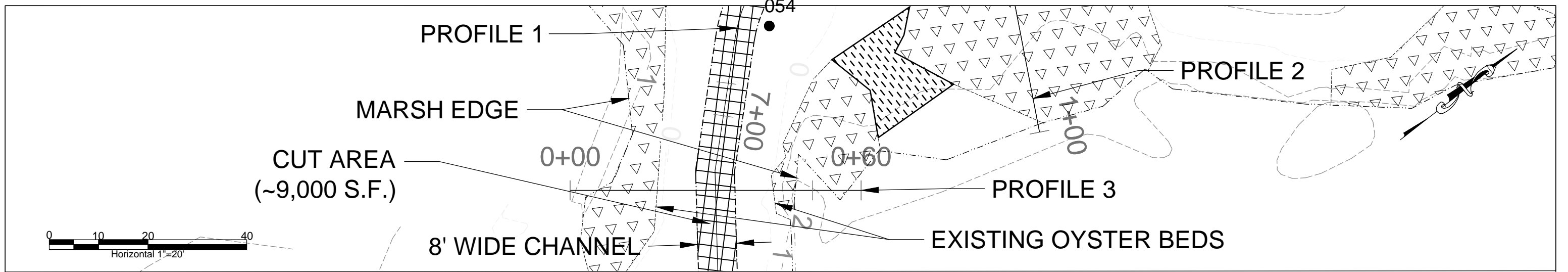


PROFILE 2



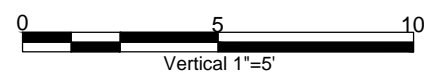
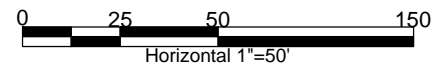
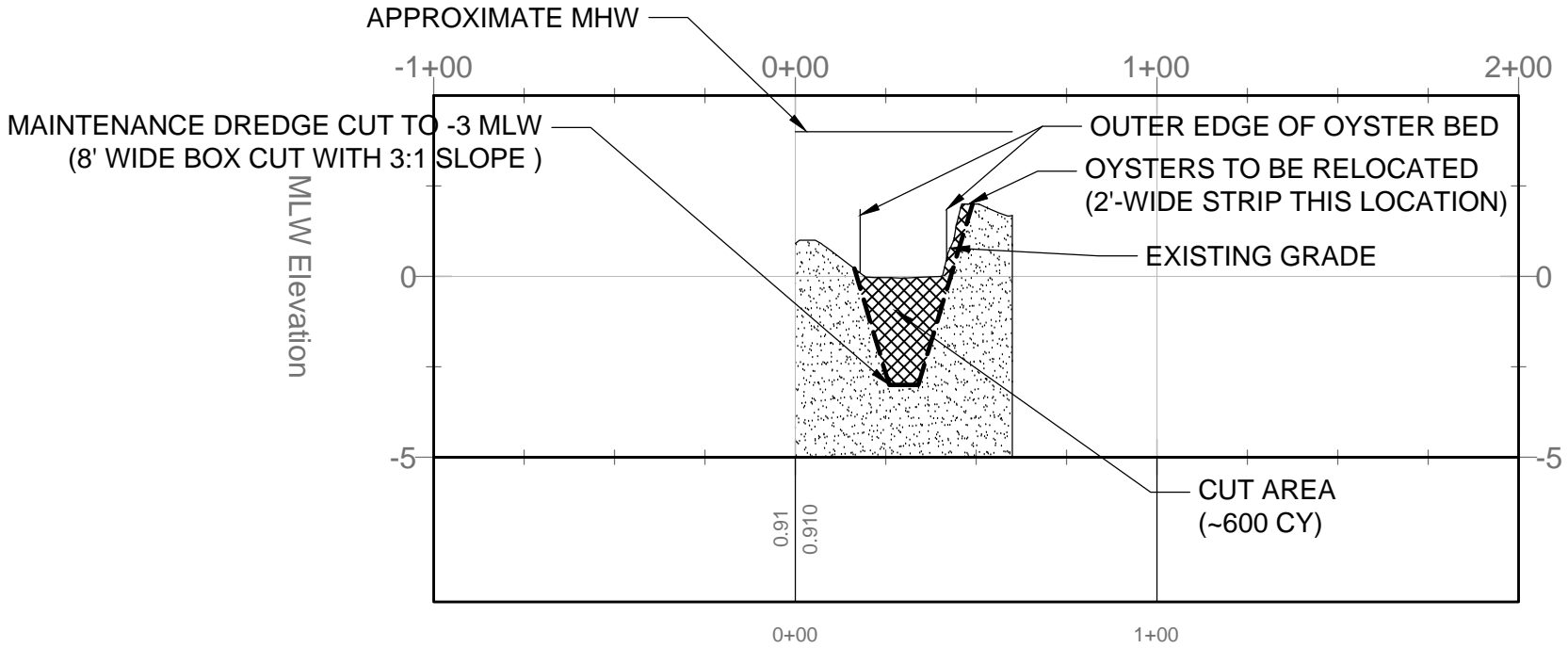
- NOTES:**
1. 2016 AERIAL FROM NCONEMAP.
 2. NOT A SURVEYED OR ENGINEERED DRAWING.
 3. FOR ENVIRONMENTAL PERMITTING ONLY.
 4. MLW DEPTHS PROVIDED BY PARAMOUNTE ENGINEERING. TAKEN AUGUST 2018.
 5. OYSTERS LOCATED WITHIN 9' OF DREDGE CHANNEL EDGE WILL BE RELOCATED.

 <small>a DAVEY company</small> 3805 Wrightsville Ave, Suite 15 Wilmington, North Carolina 28402 Telephone: 910-452-0001	Project:	Shinn Creek Estates	Date:	10/25/18	Revision Date:	4/10/19
	Title:	Profile 2	Scale:	As Noted	Job Number:	LMG18.179
		Drawn By:	GSF	Sheet Number:	6 of 7	



PROFILE 3

Station



NOTES:

1. 2016 AERIAL FROM NCONEMAP.
2. NOT A SURVEYED OR ENGINEERED DRAWING.
3. FOR ENVIRONMENTAL PERMITTING ONLY.
4. MLW DEPTHS PROVIDED BY PARAMOUNTE ENGINEERING. TAKEN AUGUST 2018.
5. OYSTERS LOCATED WITHIN 9' OF DREDGE CHANNEL EDGE WILL BE RELOCATED.



Project: Shinn Creek Estates	Date: 10/25/18	Revision Date: 4/10/19
	Scale: As Noted	Job Number: LMG18.179
Title: Profile 3	Drawn By: GSF	Sheet Number: 7 of 7



November 6th, 2018

TO: Brooks Surgan
North Carolina Department of Environmental Quality
Division of Coastal Management
127 Cardinal Drive Extension
Wilmington, NC 28405

RE: Shinn Creek Estates

Brooks,

Please find enclosed CAMA Major permit application, supporting materials, and \$400 fee check for the maintenance dredging project located at the end of Shinn Creek Lane in Wilmington, New Hanover County. Adjacent riparian landowner notifications have been sent by certified mail and return receipts will be forwarded once received.

Please let me know if you have any questions or need anything in addition to accept the application as complete.

Sincerely,

A handwritten signature in black ink that reads "Greg Finch". The signature is written in a cursive style.

Greg Finch
Land Management Group
A Davey Company

Enclosure: CAMA Major Permit Application and \$400 fee check

cc: Ben Stephenson

RECEIVED
DCM WILMINGTON, NC

NOV 07 2018

CAMA Permit Application for Major Development

For:

Shinn Creek Estates

Wilmington, New Hanover County, North Carolina

Prepared By:

Land Management Group
3805 Wrightsville Avenue
Wilmington, North Carolina

November 2018

RECEIVED
DCM WILMINGTON, NC

NOV 07 2018

Contents

1. Form DCM-MP-1	1
2. Form DCM MP-2	5
3. DCM MP-1 Section 6.0 Additional Information	7
3.1 Section 6. a. Project Narrative	7

Appendices

Appendix A-Site Location Map and Work Plats

Appendix B-Deed, Agent Authorization, Disposal Site Permission and Adjacent Riparian Owner Notifications

Appendix C-Historical Aerials and Affidavits

Appendix D-Water Quality Sampling Report



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

BRAXTON C. DAVIS
Director

November 26, 2018

Greg Finch
c/o Land Management Group Inc.
3805 Wrightsville Ave., Suite 15
Wilmington, North Carolina 28402

RE: CAMA Major Development Permit Application
Shinn Creek Lane, Wilmington, in New Hanover County

Dear Mr. Finch:

The Division of Coastal Management hereby acknowledges receipt of your application on November 11, 2018, acting as agent for Shinn Creek Estates Home Owners Association, for dredging a channel located adjacent Shinn Creek Lane, in the City of Wilmington, New Hanover County. However, your application still lacks the information necessary to complete processing. The attached checklist indicates the deficiencies of your application. If you respond within three working days from the date of this E-mail with the required additional information, processing of your application will promptly continue and will not be placed on hold. If you are not able to respond within three days, your application will not be accepted as complete for processing. Additional information may be required pending further review by the fifteen (15) review agencies. The attached checklist indicates the deficiencies of your application.

We suggest a preliminary meeting to review the application and address the deficiencies on the checklist. Please let me know when it will be most convenient for you to come in. If you have any questions concerning this matter, please call me at my Wilmington Office at (910) 796.7270.

Sincerely,

Brooks Sorgan
Field Representative

Enclosures

cc: **Debbie Wilson, DCM Wilmington**
Doug Huggett, DCM Morehead City
Courtney Spears, DCM Wilmington



CHECKLIST OF ADDITIONAL REQUIRED INFORMATION AND RECOMMENDATIONS FOR
PROCESSING APPLICATION

WORKPLAN DRAWINGS

- The application states that approximately 600cy of material will be removed initially. Indicate on the drawings where the sediment will be removed from and label with volume and surface area.

ADDITIONAL ITEMS

- Provide riparian neighbor notification certified mail receipts or signed green cards.



AGENT AUTHORIZATION FOR CAMA PERMIT APPLICATION

Name of Property Owner Requesting Permit: SHINN CREEK ESTATES H.O.A.

Mailing Address: % BEN STEPHENSON

6433 SHINN CREEK LANE, WILMINGTON, NC 28409

Phone Number: 910-833-0199

Email Address: TBENSTEPHENSON@GMAIL.COM

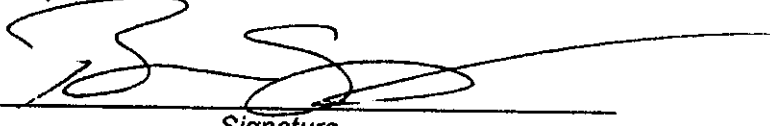
I certify that I have authorized LAND MANAGEMENT GROUP
Agent / Contractor

to act on my behalf, for the purpose of applying for and obtaining all CAMA permits
necessary for the following proposed development: ACCESS CHANNEL
DREDGING

at my property located at END OF SHINN CREEK LANE,
in NEW HANOVER County.

*I furthermore certify that I am authorized to grant, and do in fact grant permission to
Division of Coastal Management staff, the Local Permit Officer and their agents to enter
on the aforementioned lands in connection with evaluating information related to this
permit application.*

Property Owner Information:



Signature

Ben Stephenson

Print or Type Name

HOA Board Member

Title

10 / 30 / 18

Date

This certification is valid through 12 / 31 / 19

RECEIVED
DCM WILMINGTON, NC
NOV 07 2018

Re: Permission to place dredged material on Shinn Creek disposal site

1 message

Kristin Lee <kristinlee823@gmail.com>

Tue, Oct 16, 2018 at 10:38 PM

To: "Morrison, Stephen" <smorrison@lmgroup.net>

Steve,
Shore Acres Company gives you approval to use the Shinn Creek disposal island to dump approximately 600 cubic yards of spoil material to be charged at \$3.00 per cubic yard. Please keep in mind you will not be the only customer using the spoil island, so this is not an exclusive agreement. If you have any questions, please do not hesitate to contact me at 912-704-3332.

Kristin Lee
President, Shore Acres Company
407 E. Perry Street
Savannah, GA 31401

On Mon, Oct 8, 2018 at 2:11 PM Morrison, Stephen <smorrison@lmgroup.net> wrote:

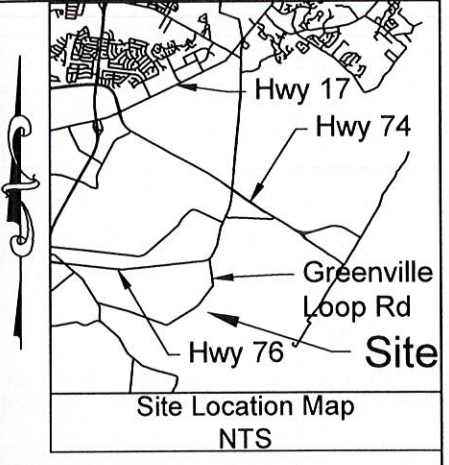
Kristin,

Thank you for discussing the potential use of your dredge material disposal site of the Shinn Creek Island. We are working with the Shinn Creek Estates HOA in preparing their CAMA permitting application directly across the AIWW from the disposal site. Their dredging project would generate approximately 600 cubic yards of material to be handled by a bucket-to-barge operation. I would estimate that the permit would take at least three months to be approved as we anticipate turning in the application this week. No dredger has been contracted at this point, but it is likely the HOA would be talking with Adam Knierim or Tommy Watters for their possible services as we discussed. We understand that the charge for disposal on you property is \$3.00/cubic yard. As part of our CAMA application materials, we would like to ask for your written permission to use this site. An emailed response would be sufficient. Thanks again for your time today and I look forward to receiving your permission.

Steve Morrison | Environmental Consultant
Direct: 452-0001 x 1903 | Fax: 910.452.0060 | Mobile: 910.471.0502
Email: smorrison@lmgroup.net | Website: www.lmgroup.net
Land Management Group | Environmental Consultants
3805 Wrightsville Avenue | Suite 15 | Wilmington, N.C. 28403

RECEIVED
DCM WILMINGTON, NC

NOV 07 2018



Legend

Maintenance Dredging Boundary	
Spoil Disposal Location	

- NOTES:**
1. TAX PARCELS FROM NHC GIS.
 2. 2016 AERIAL FROM NCONEMAP.
 3. NOT A SURVEYED OR ENGINEERED DRAWING.
 4. FOR ENVIRONMENTAL PERMITTING ONLY.

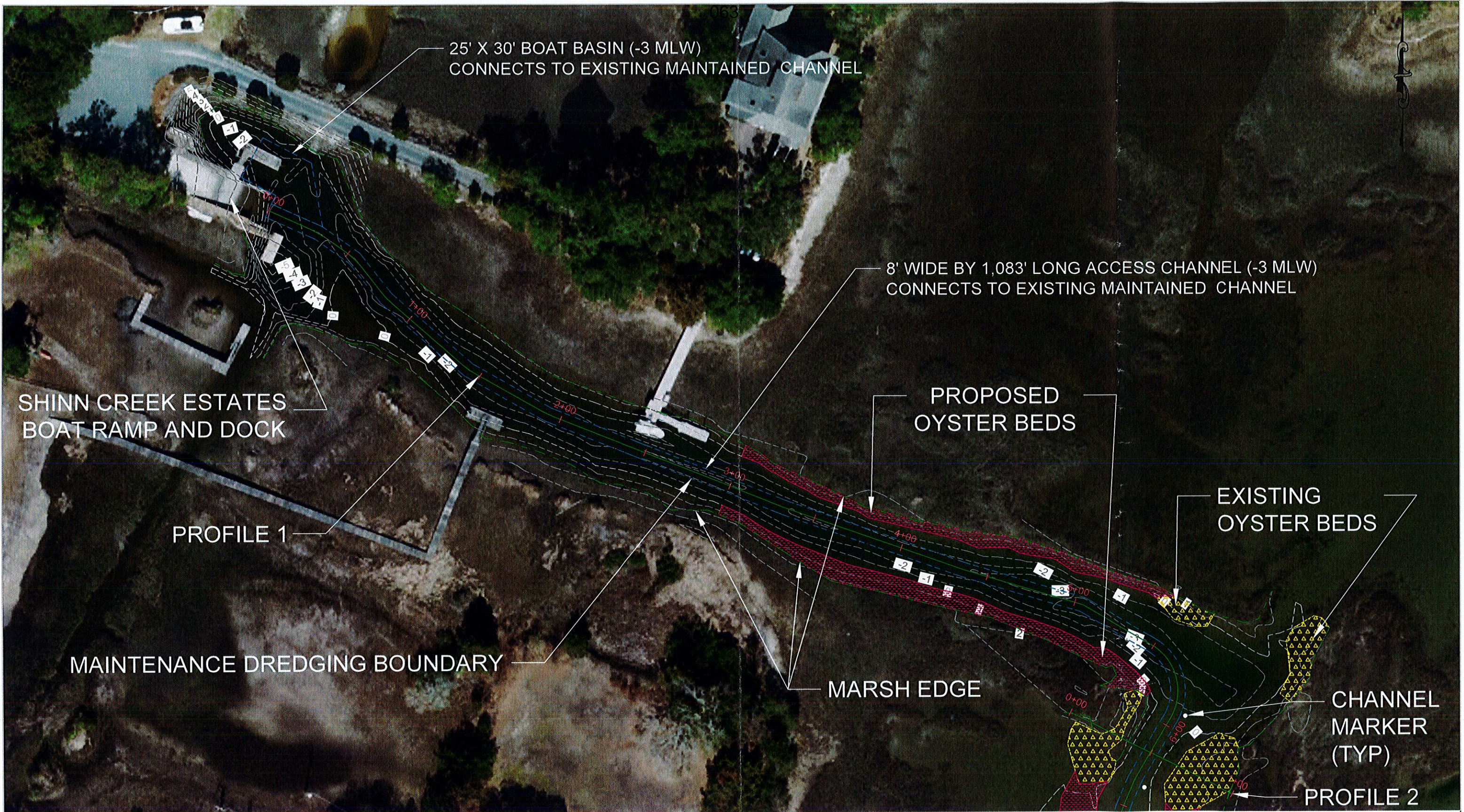
RECEIVED
APR 10 2019

DCM WILMINGTON, NC

0 100 200 400

LMG
LAND MANAGEMENT GROUP
a DAVEY company
3805 Wrightsville Ave, Suite 15
Wilmington, North Carolina 28402
Telephone: 910-452-0001

Project: Shinn Creek Estates	Date: 10/25/18	Revision Date: 4/10/19
	Scale: 1"=200'	Job Number: LMG17.342
Title: Site Location and Plan View	Drawn By: GSF	Sheet Number: 1 of 7



Legend
 Maintenance Dredging Boundary - - - - -

- NOTES:**
1. TAX PARCELS FROM NHC GIS.
 2. 2016 AERIAL FROM NCONEMAP.
 3. NOT A SURVEYED OR ENGINEERED DRAWING.
 4. FOR ENVIRONMENTAL PERMITTING ONLY.
 5. MLW DEPTHS PROVIDED BY PARAMOUNTE ENGINEERING. TAKEN AUGUST 2018.

RECEIVED

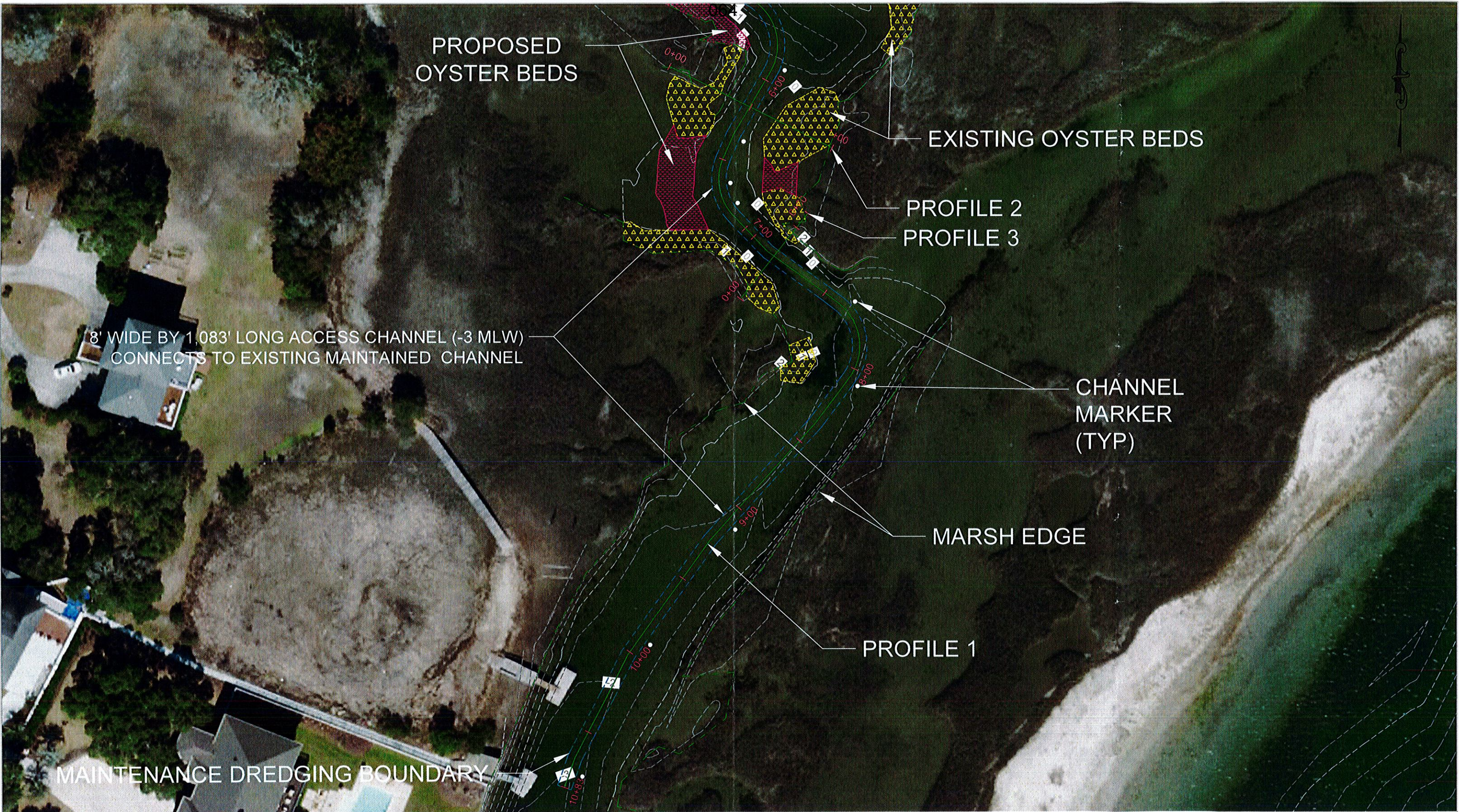
APR 10 2019

0 25 50 100
 FCM W. MINGLON, NC

LMG
 LAND MANAGEMENT GROUP

a DAVEY company
 3805 Wrightsville Ave, Suite 15
 Wilmington, North Carolina 28402
 Telephone: 910-452-0001

Project: Shinn Creek Estates	Date: 10/25/18	Revision Date: 4/10/19
Title: Ramp and Channel Detail	Scale: 1"=50'	Job Number: LMG17.342
	Drawn By: GSF	Sheet Number: 2 of 7



PROPOSED OYSTER BEDS

EXISTING OYSTER BEDS

PROFILE 2
PROFILE 3

8' WIDE BY 1,083' LONG ACCESS CHANNEL (-3 MLW)
CONNECTS TO EXISTING MAINTAINED CHANNEL

CHANNEL MARKER (TYP)

MARSH EDGE

PROFILE 1

MAINTENANCE DREDGING BOUNDARY

Legend

Maintenance Dredging Boundary

NOTES:

1. TAX PARCELS FROM NHC GIS.
2. 2016 AERIAL FROM NCONEMAP.
3. NOT A SURVEYED OR ENGINEERED DRAWING.
4. FOR ENVIRONMENTAL PERMITTING ONLY.
5. MLW DEPTHS PROVIDED BY PARAMOUNTE ENGINEERING. TAKEN AUGUST 2018.

RECEIVED

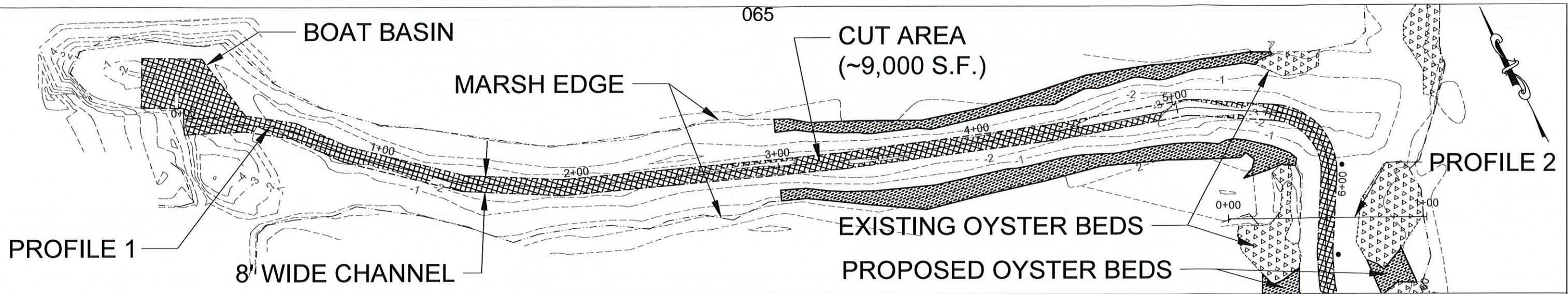
APR 10 2019

DCM WILMINGTON, NC

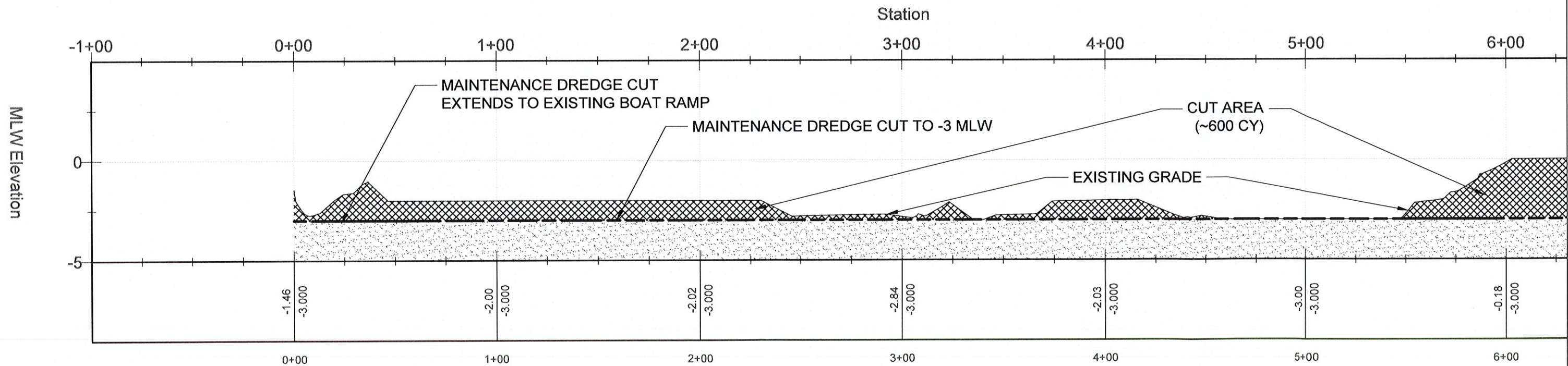


LMG
LAND MANAGEMENT GROUP
a DAVEY company
3805 Wrightsville Ave, Suite 15
Wilmington, North Carolina 28402
Telephone: 910-452-0001

Project: Shinn Creek Estates	Date: 10/25/18	Revision Date: 4/10/19
Title: S-Turn Channel Detail	Scale: 1"=50'	Job Number: LMG17.342
	Drawn By: GSF	Sheet Number: 3 of 7



CHANNEL CENTERLINE - PROFILE 1



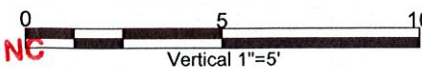
NOTES:

1. 2016 AERIAL FROM NCONEMAP.
2. NOT A SURVEYED OR ENGINEERED DRAWING.
3. FOR ENVIRONMENTAL PERMITTING ONLY.
4. MLW DEPTHS PROVIDED BY PARAMOUNTE ENGINEERING. TAKEN AUGUST 2018.

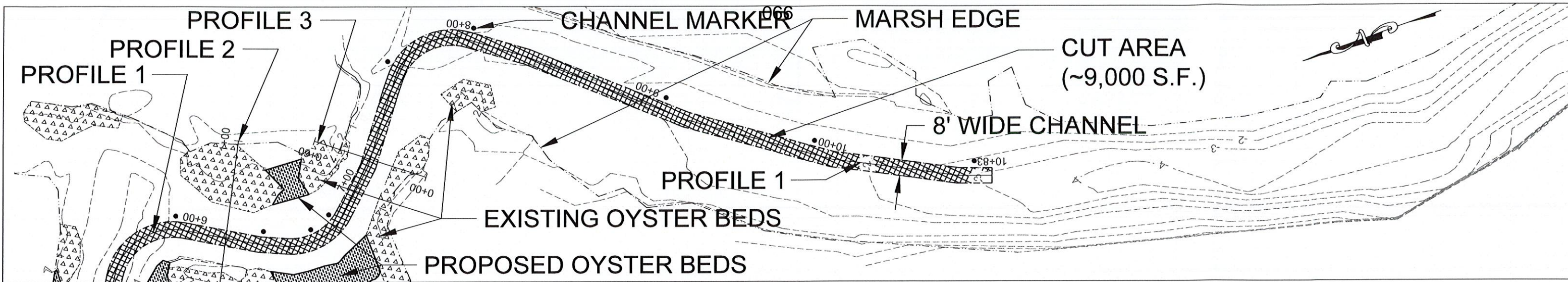
RECEIVED

APR 10 2019

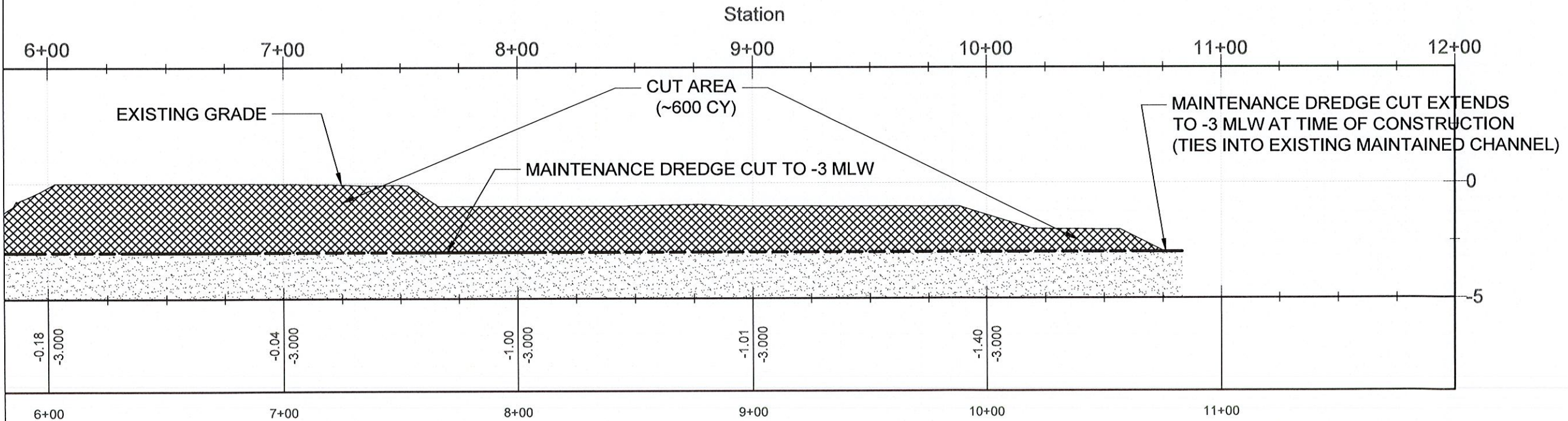
DCM WILMINGTON, NC



Project: Shinn Creek Estates	Date: 10/25/18	Revision Date: 4/10/19
Title: Profile 1 Station 0+00 to 6+00	Scale: Horizontal 1"=50' Vertical 1"=5'	Job Number: LMG17.342
	Drawn By: GSF	Sheet Number: 4 of 7



CHANNEL CENTERLINE- PROFILE 1



- NOTES:
1. 2016 AERIAL FROM NCONEMAP.
 2. NOT A SURVEYED OR ENGINEERED DRAWING.
 3. FOR ENVIRONMENTAL PERMITTING ONLY.
 4. MLW DEPTHS PROVIDED BY PARAMOUNTE ENGINEERING. TAKEN AUGUST 2018.

RECEIVED

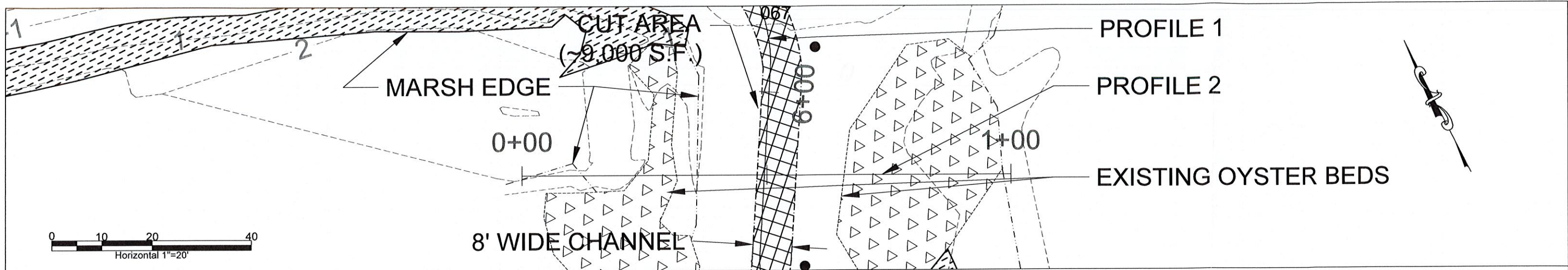
APR 10 2019

DCM WILMINGTON, NC

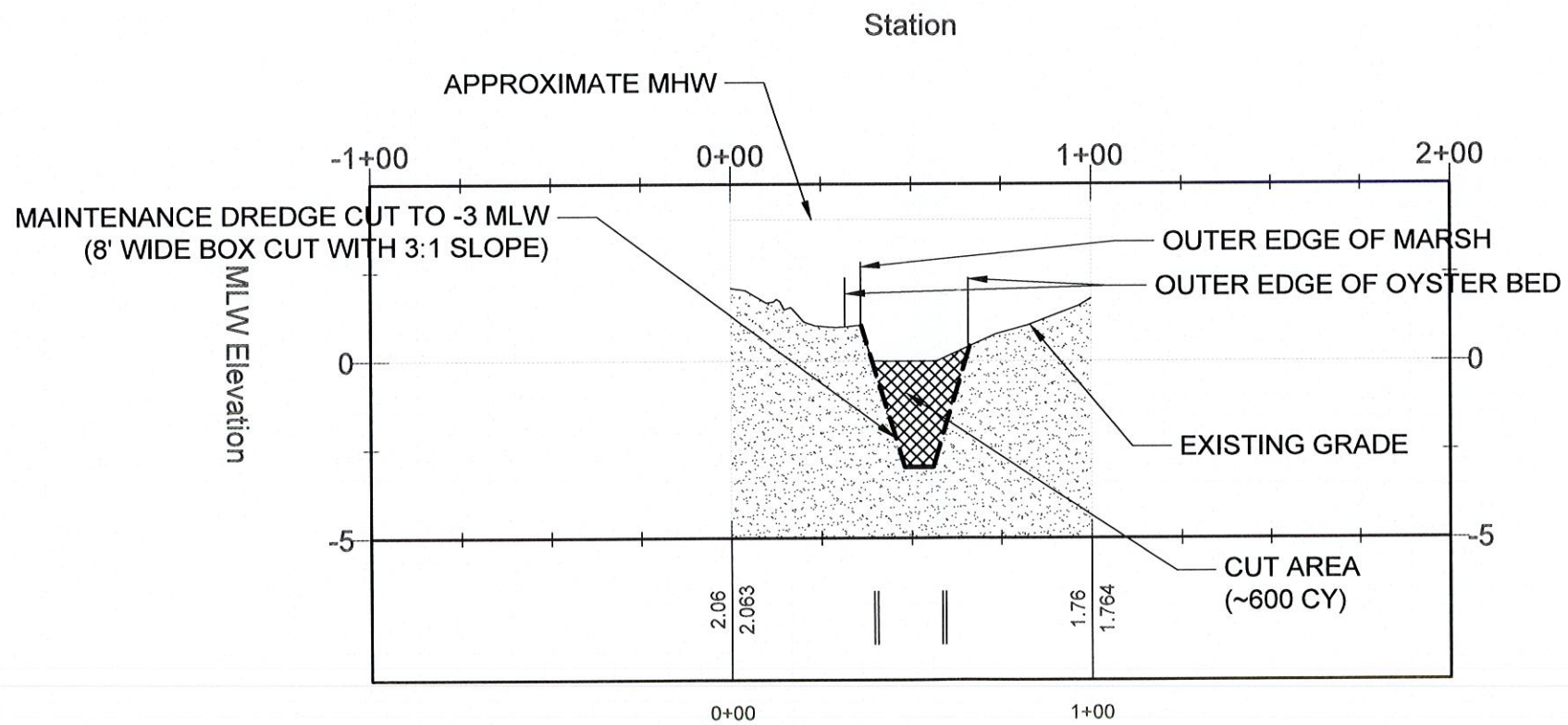
Horizontal 1"=50'

Vertical 1"=5'

<p>LMG LAND MANAGEMENT GROUP a DAVEY company 3805 Wrightsville Ave, Suite 15 Wilmington, North Carolina 28402 Telephone: 910-452-0001</p>	Project: Shinn Creek Estates	Date: 10/25/18	Revision Date: NA
	Title: Profile 1 Station 6+00 to 10+83	Scale: Horizontal 1"=50' Vertical 1"=5'	Job Number: LMG17.342
	Drawn By: GSF	Sheet Number: 5 of 7	



PROFILE 2



NOTES:

1. 2016 AERIAL FROM NCONEMAP.
2. NOT A SURVEYED OR ENGINEERED DRAWING.
3. FOR ENVIRONMENTAL PERMITTING ONLY.
4. MLW DEPTHS PROVIDED BY PARAMOUNTE ENGINEERING. TAKEN AUGUST 2018.
5. OYSTERS LOCATED WITHIN 9' OF DREDGE CHANNEL EDGE WILL BE RELOCATED.

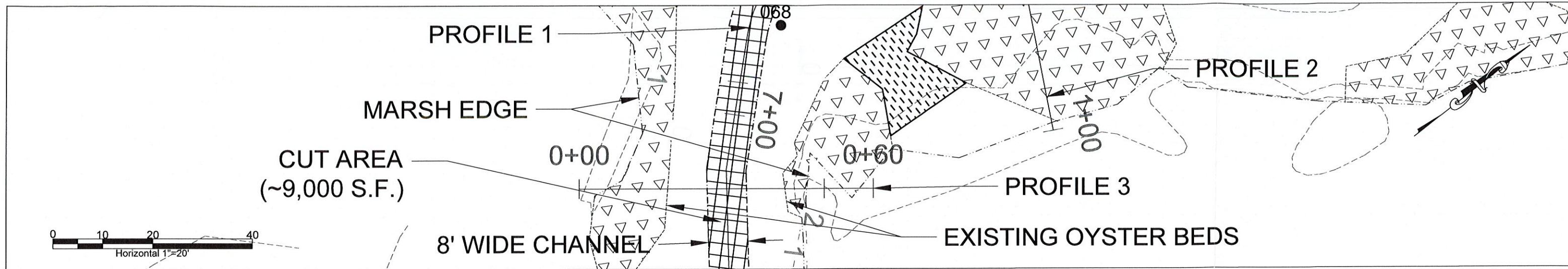
RECEIVED

APR 10 2019

DCM WILMINGTON, NC

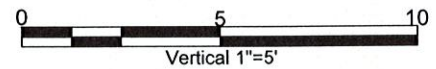
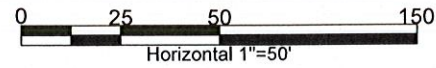
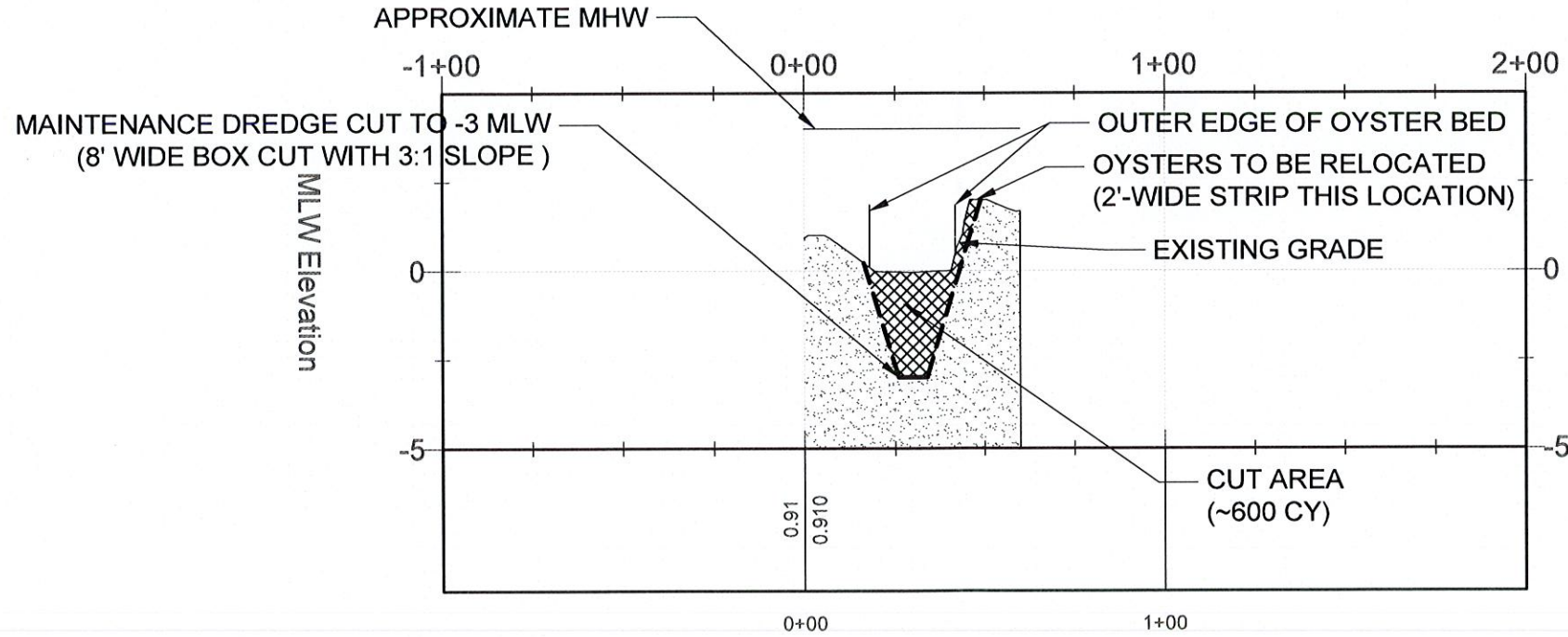


Project: Shinn Creek Estates	Date: 10/25/18	Revision Date: 4/10/19
	Scale: As Noted	Job Number: LMG18.179
Title: Profile 2	Drawn By: GSF	Sheet Number: 6 of 7



PROFILE 3

Station



NOTES:

1. 2016 AERIAL FROM NCONEMAP.
2. NOT A SURVEYED OR ENGINEERED DRAWING.
3. FOR ENVIRONMENTAL PERMITTING ONLY.
4. MLW DEPTHS PROVIDED BY PARAMOUNTE ENGINEERING. TAKEN AUGUST 2018.
5. OYSTERS LOCATED WITHIN 9' OF DREDGE CHANNEL EDGE WILL BE RELOCATED.

RECEIVED
APR 10 2019
DCM WILMINGTON, NC

LMG
 LAND MANAGEMENT GROUP
 a **DAVEY** company
 3805 Wrightsville Ave, Suite 15
 Wilmington, North Carolina 28402
 Telephone: 910-452-0001

Project: Shinn Creek Estates	Date: 10/25/18	Revision Date: 4/10/19
	Scale: As Noted	Job Number: LMG18.179
Title: Profile 3	Drawn By: GSF	Sheet Number: 7 of 7

Historical Narrative

The original permit for dredging purposes was first obtained in 1982 by Mr. Joseph M. Rogers the Property owner for a 670' straight channel at 3' depth mean low water. Dredge maintenance has been performed on our main straight channel since this time period with the most recent maintenance being performed in 2014.

Additional dredging/permitting was not needed past the permitted channel by Mr. Rogers since the channel led to deeper waters which then led to the AICW. (Reference Affidavits from Alvin Rodgers – son of Joseph Rogers and Thomas Canady – lifelong resident). These waters were referred to as the 'Old Main Channel' for Shinn Creek and were used by recreational boats as well as commercial. There were no depth issues at low tide for recreational boats historically.

In the mid '90's the Property was purchased from Mr. Rogers by Bill Henderson to be developed as Shinn Creek Estates.

Two major hurricanes occurred in the mid to late '90's that greatly impacted the access channel from Shinn Creek Estates to the AICW (Hurricanes Fran ('96) and Floyd (99)). In addition, regular dredging that was taking place on each side of Shinn Creek Estates water access likely contributed to additional silting (Turtle Creek, Inlet View and AICW).

Shinn Creek Estates is a neighborhood consisting of 36 homes. The Shinn Creek dock is a day dock that includes a boat ramp and 3 boat slips. There are approximately 7 boaters in the neighborhood who use the dock/ramp and access waterway. The average boat size is 19'.

RECEIVED
DCM WILMINGTON, NC

NOV 07 2018



CHANNEL FROM HOA
BOAT RAMP TO
OLD MAIN CHANNEL

OLD MAIN CHANNEL
OPEN WATER

F

L

BI

003

AF

2

093



October 25, 1978

Rogers Home

Shinn Creek Channel

Inlet View Channel





ALVIN D. ROGERS AFFIDAVIT

1. My name is Alvin Rogers. I am the son of the late Joseph M. Rogers and Lucille H. Rogers and am a life-long resident of Wilmington NC.
2. I grew up on the property ("Property") that is now Shinn Creek Estates. My parents bought the Property when I was 10. The Property was on the "Old Main Channel" ("Channel") that runs along the western edge of Greenville Sound. A primary reason my parents bought the Property was because our family loved to fish and go clamming in the Channel, Greenville Sound, Shinn Creek, the Atlantic Intracoastal Waterway (AICW), and Masonboro Inlet. My father had a 20' long recreational boat that we used to go fishing and to enjoy the area. We would drag a 50 ft shrimp net from the boat. Boaters and fishermen often fished and clammed the area.
3. I moved to the Property with my parents when they purchased it in the mid-1960's. See the deeds at DB 781, Page 781; DB 824, Page 772; and DB 1754, Page 627, which describe the Property as being shown on a 1953 map recorded at MB 5, Page 90, which is attached as **Exhibit A**. The map shows that the Property is on the "Old Main Channel", which was a navigable natural channel that ran along the western edge of the Greenville Sound and marsh. The Channel was deep enough for low tide access by recreational boats and some commercial clamming vessels.
4. The map also shows an historical drainage ditch that leads from the upland portions of the Property to the navigable Channel, and to the marsh of Greenville Sound just east of the Channel. My father in the 1960s dredged the ditch, which created (a) a boat basin where his 20' recreational boat could be launched, and (b) a canal leading from the basin to the Channel. This dredged basin and canal was deep and wide was enough to allow our family boat at low tide to gain access to the Channel and beyond. My father obtained permits in the 1980's to maintain the basin and canal.
5. To get to the Channel, we would ride our boat from the launch area on up the canal, which led directly to the Channel. Once at the end of the canal, we would turn right onto the Channel toward the south. The Channel there was sufficiently deep at low tide, which allowed us to go directly from there to the AICW.
6. Today, the south part of the Channel is what is called the "S-curve". The Channel continues southward from the S-curve, on past the properties located on the southernmost section of the Channel, including the Rullman property at the end of Shinnwood Road. This part of the Channel began to shoal by the 1990's, so that it was passable only during higher tides. The Shinn Point developer has dredged the portion of the Channel south of the S-curve.
7. At mid to high tide, we could turn left from the end of the canal onto the Channel, heading towards the north. Over time, this part of the Channel shoaled in and is now virtually impassable.

Alvin D. Rogers

Alvin D. Rogers

STATE OF NORTH CAROLINA
COUNTY OF BRUNSWICK

Sworn and subscribed before me, this
the 14th day of June, 2017

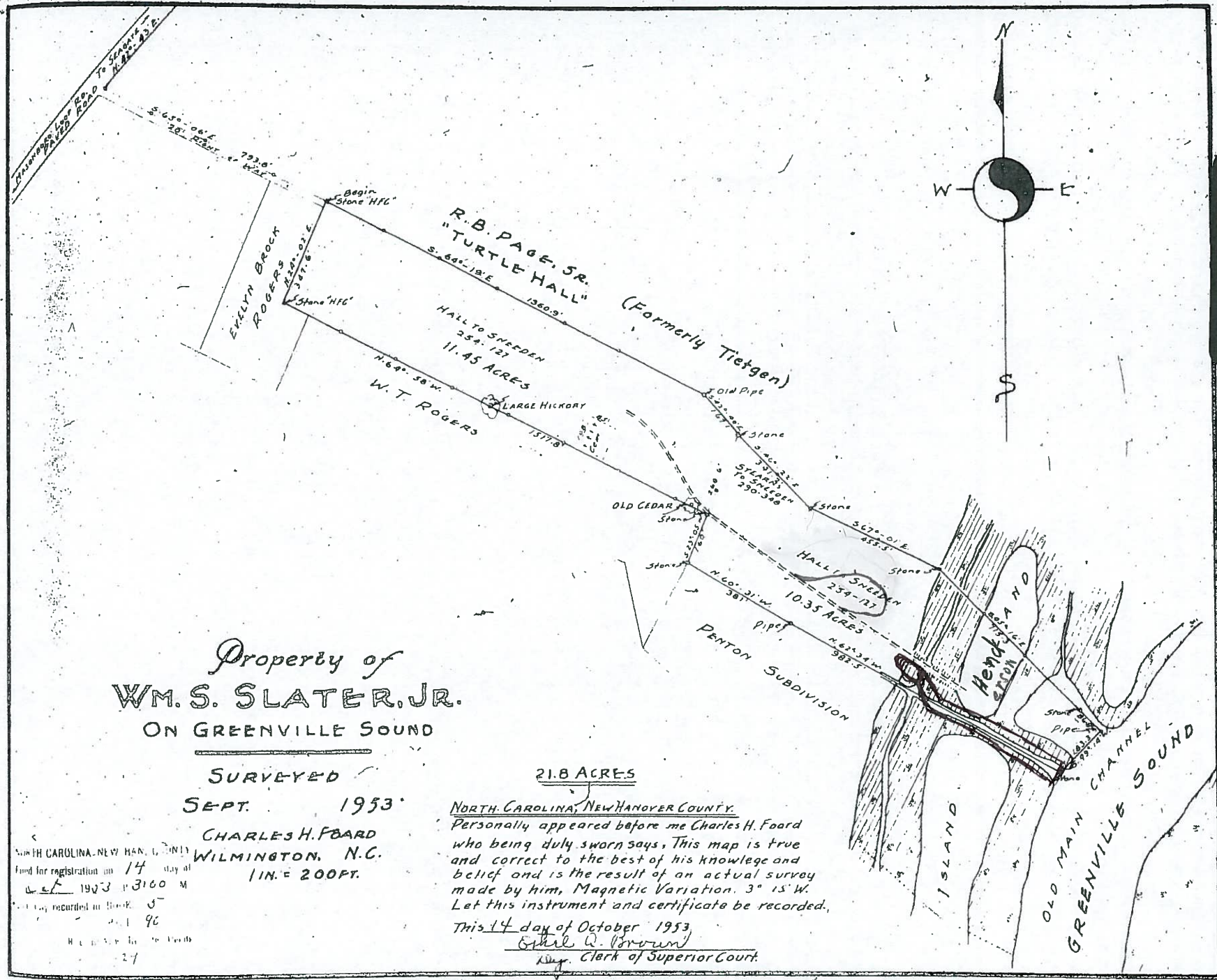
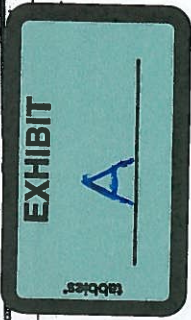
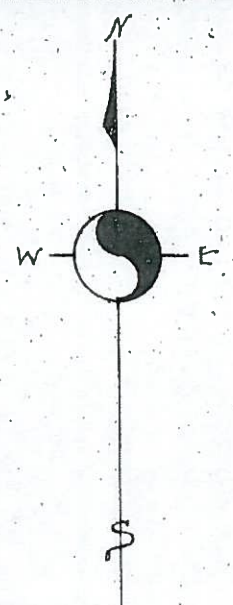
Signed: Kathryn B. Ansley

Printed Name: KATHRYN B. ANSLEY

Notary Public

My commission expires: 5-22-2020





Property of
WM. S. SLATER, JR.
 ON GREENVILLE SOUND

SURVEYED
SEPT. 1953

CHARLES H. FOARD
WILMINGTON, N.C.
 1 IN. = 200 FT.

21.8 ACRES

NORTH CAROLINA, NEW HANOVER COUNTY.
 Personally appeared before me Charles H. Foard
 who being duly sworn says, This map is true
 and correct to the best of his knowledge and
 belief and is the result of an actual survey
 made by him, Magnetic Variation, 3° 15' W.
 Let this instrument and certificate be recorded.
 This 14 day of October 1953
Estel W. Brown
 Clerk of Superior Court.

NORTH CAROLINA - NEW HANOVER COUNTY
 Filed for registration on 14 day of
 Oct 1953 13160 M
 Recorded in Book 5
 Page 96
 H. C. ...
 27

THOMAS CANADY AFFIDAVIT

1. My name is Thomas ("Tom") Canady. Born in Wilmington NC, I am a Baptist Minister and am now 73 years old. Since 1845, my Canady family ancestors have owned property in the Shinn Creek area located between Greenville Loop Road and the waters of Greenville Sound, which are just west of Masonboro Inlet and the Atlantic Intracoastal Waterway ("AICW"). I was reared in that area, and now reside there at 6309 Shinnwood Road. The property owned by my ancestors included the residential development named Shinn Creek Estates (the "Property").

2. The Property extends to the "Old Main Channel" ("Channel"), which runs along the western edge of Greenville Sound. A 1953 plat recorded at Map Book 5, Page 90 and attached as **Exhibit A** shows the Property area and the Channel. As shown on the map, the Channel was a navigable natural channel that ran along the western edge of the Greenville Sound and marsh. The Channel was deep enough for low tide access by smaller private boats. One could navigate the Channel at low tide in a recreational boat and from there get to Greenville Sound, Shinn Creek, the Atlantic Intracoastal Waterway (AICW), and Masonboro Inlet.

3. Long before residential subdivisions were formed and developed the area during the latter decades of 20th Century, the waters at the edge of the Property were fished and clammed primarily by area residents. Some sold their catches to nearby crab houses that did a lot of business selling crabs and other seafood obtained from those waters and elsewhere. Area residents went down a number of access roads leading from Greenville Loop Road to the water's edge. From there, they would access their boats and then navigate to the Channel. They could then boat there and fish and clam in Shinn Creek, Greenville Sound and adjacent waters. Recreational boaters and fisherman from elsewhere would also enter the area waters from the AICW by way of the Channel.

4. The Channel can be reached from the end of a canal. Once at the Channel, one could turn southward to the right, or turn left to the north. I understand that the first part of the Channel where one turns right to the south is today called the "S-curve". The Channel continues southward from the S-curve, on past the properties located on the southernmost section of the Channel, including the Rullman property at the end of Shinnwood Road. This part of the Channel began to shoal by the 1990's, so that it was passable only during higher tides. The Shinn Point developer has dredged the portion of the Channel south of the S-curve.

P. Thomas Canady
Thomas Canady

STATE OF NORTH CAROLINA
COUNTY OF New Hanover

Sworn and subscribed before me, this
the 3rd day of July, 2017.

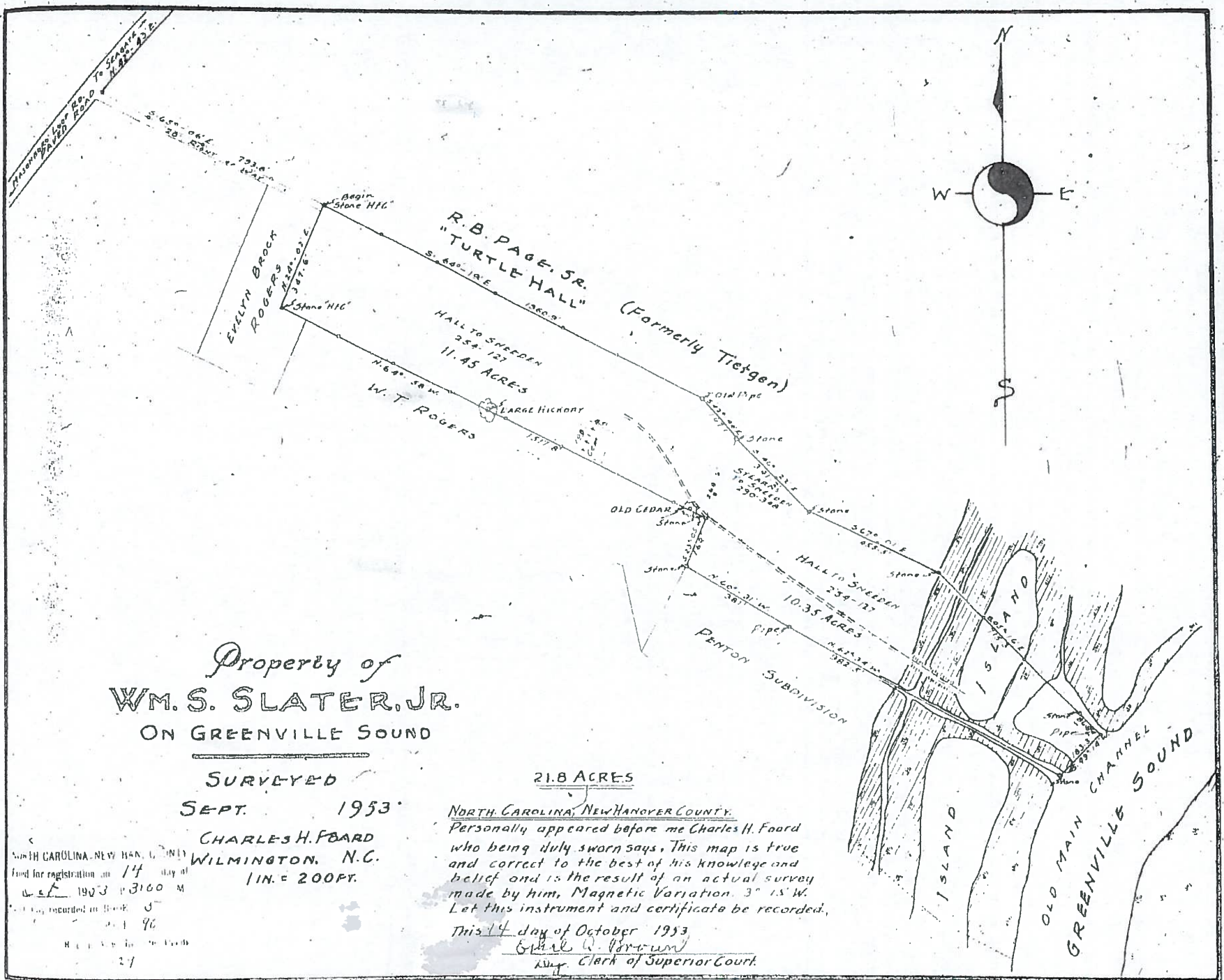
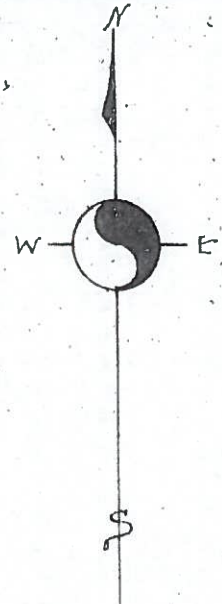
Signed: Dianne T. Kincer

Printed Name: DIANNE T. Kincer

Notary Public

My commission expires: 5/2/2022





Property of
WM. S. SLATER, JR.
 ON GREENVILLE SOUND

SURVEYED
SEPT. 1953

CHARLES H. FOARD
WILMINGTON, N.C.
 1 IN. = 200 FT.

21.8 ACRES

NORTH CAROLINA, NEW HANOVER COUNTY.
 Personally appeared before me Charles H. Foard
 who being duly sworn says, This map is true
 and correct to the best of his knowledge and
 belief and is the result of an actual survey
 made by him, Magnetic Variation, 3° 15' W.
 Let this instrument and certificate be recorded.
 This 14 day of October 1953
 Charles H. Foard
 Clerk of Superior Court

NORTH CAROLINA - NEW HANOVER COUNTY
 Filed for registration on 14 day of
 OCT 1953 3:16 PM
 Recorded in Book J
 Page 96
 Return to the Clerk
 27



Water Quality Monitoring Report

For:

Shinn Creek Estates

Wilmington, New Hanover County, North Carolina

Prepared By:

Land Management Group
3805 Wrightsville Avenue
Wilmington, North Carolina

October 2018

Contents

1. Introduction	1
2. Sampling Stations.....	1
3. Methodology.....	1
4. Results.....	2
4.1 Water Temperature	2
4.2 Salinity.....	2
4.3 Specific Conductivity	4
4.4 Dissolved Oxygen	4
4.5 Rainfall	6
5. Summary	6

Tables

Table 1. Water Quality Sampling Results	3
---	---

Figures

Figure 1. Location of Sampling Stations.....	2
Figure 2. Temperature (°C) by Station	3
Figure 3. Salinity (ppt) by Station.....	4
Figure 4. Dissolved Oxygen (mg/L) by Station ID	5
Figure 5. Temperature and Dissolved Oxygen (mg/L) by Station ID (excluding reference)	5
Figure 6. Dissolved Oxygen (mg/L) and Salinity (ppt) by Station ID (excluding reference)	5
Figure 7. 30-Day Antecedent Rainfall	6

1. Introduction

Land Management Group has contracted with Shinn Creek Estates Homeowners Association (HOA) to obtain surface water samples as part of an assessment of dissolved oxygen (DO) levels within a navigation channel extending from the Shinn Creek Estates neighborhood boat ramp to the Atlantic Intracoastal Waterway (AIWW). Data collected during this sampling period will be utilized to develop a better understanding of DO levels within the channel relative to existing physical conditions and tidal exchange.

The Shinn Creek Estates water quality assessment incorporates eight (8) discrete sampling locations located on a gradient from the open water of the AIWW to the head of the small boat canal. This report summarizes the DO data obtained during the one-time sampling event.

2. Sampling Stations

The Shinn Creek Estates project is located immediately west of the AIWW and within a small navigation channel connecting the boat ramp of the Shinn Creek Estates neighborhood to the AIWW. The waterbody is an unnamed tributary of the AIWW located within the Lower Cape Fear River Basin (Hydrologic Unit Code 03030005). Water flow is principally directed by semidiurnal tides in the area, with the mean tidal range of approximately 4.48 ft at Masonboro Inlet (NOAA). The water depth in the footprint of the proposed project ranges from 0 ft MLW to -5.0 ft MLW. Physiochemical parameters (including salinity and dissolved oxygen) are affected by freshwater inflow, temperature, Biological Oxygen Demand (BOD), tides, and wind forces. The channel is classified as SA Waters that are directly contiguous with High Quality Water (HQW) of the AIWW.

Surface water samples were collected at a total of eight stations. Seven of the stations were located along a gradient from upstream to downstream along the access channel to the Shinn Creek Estates neighborhood boat ramp (beginning upstream of a 42" culvert (SC1) immediately north-northeast of the ramp) and extending south and east to the AIWW (SC7). An additional, reference station was sampled in the adjacent Shinn Point boat channel (next to that boat ramp) located just to the south of the project area. This channel exhibits similar configuration and geometry with the exception that it is regularly maintained via periodic dredging. All station locations are depicted in Figure 1 below.

3. Methodology

Surface water quality samples were collected during the late afternoon of August 14, 2018 (coinciding with low tide).

Physiochemical water quality measurements (including water temperature, dissolved oxygen, salinity, and specific conductivity) were collected in situ at each station using a YSI Model 85 multiparameter water quality probe. The YSI 85 was field calibrated directly prior to sampling.

Table 1 provides Station ID nomenclature for each sampling point. Replicate sample readings (identified with "a" and "b" tags) were collected for all but two locations (SC4 and SC5). In locations of sufficient water depths to warrant a surface sample and bottom sample, two replicate readings were collected at the surface ("a" and "b") and two replicate readings ("c" and "d") were collected near the bottom of the water column.

Meteorological conditions (including, air temperature, wind speed and wind direction) were recorded in situ. Daily antecedent precipitation data was downloaded from the KILM weather station using the North Carolina State Climate Office database (NC CRONOS).



Figure 1. Location of Sampling Stations

4. Results

4.1 Water Temperature

Water temperatures on the date of the sampling ranged from 28.96°C to 32.28°C (\bar{X} = 29.85°C). Temperature data were narrowly distributed with no observed pattern or correlation between sites (Table 1) (Figure 2).

4.2 Salinity

Given its proximity to Masonboro Inlet, the sampling area consists of waters generally characterized as euhaline (i.e. marine/oceanic waters) near the AIWW to polyhaline (i.e. estuarine waters) in the upper reaches of the channel. Temporal and spatial variation in salinity levels can occur as a result of freshwater inflows from up-gradient sources (particularly after larger precipitation events). At the time of sampling, salinity values ranged between 26.46 ppt and 32.01 ppt (\bar{X} = 29.85 ppt) (Table 1). As was expected, a strong spatial correlation was observed between stations with salinity lowest at the up-gradient station and highest at the AIWW station (R^2 = 0.8925) (Figure 3).

Table 1. Water Quality Sampling Results

Station	Date	Time	Temp (°C)	DO Saturation (%)	DO (mg/L)	Specific Conductivity mS/cm	Conductivity mS/cm	Salinity (ppt)
SC1a	8/14/2018	16:52	31.71	53.2	3.38	41.55	46.88	26.46
SC1b	8/14/2018	16:53	31.73	50.0	3.18	41.93	47.32	26.73
SC2a	8/14/2018	16:45	31.86	72.7	4.59	42.52	48.09	27.14
SC2b	8/14/2018	16:45	31.88	71.9	4.54	42.52	48.11	27.14
SC2c	8/14/2018	16:47	31.69	74.4	4.65	46.26	52.17	29.83
SC2d	8/14/2018	16:48	31.70	73.7	4.60	46.25	52.17	29.82
SC3a	8/14/2018	16:11	32.15	90.4	5.61	46.04	52.33	29.66
SC3b	8/14/2018	16:11	32.15	89.5	5.55	46.13	52.43	29.72
SC4	8/14/2018	16:15	32.28	100.1	6.20	46.07	52.48	29.68
SC5	8/14/2018	16:19	31.79	104.0	6.44	48.07	54.30	31.14
SC6a	8/14/2018	16:25	31.59	107.5	6.67	48.25	54.32	31.27
SC6b	8/14/2018	16:26	31.6	106.0	6.58	48.23	54.32	31.27
SC7a	8/14/2018	16:29	29.94	111.5	7.08	49.04	53.67	31.91
SC7b	8/14/2018	16:30	29.91	109.4	6.96	48.90	53.48	31.80
SC7c	8/14/2018	16:31	28.97	111.8	7.21	49.14	52.87	32.01
SC7d	8/14/2018	16:32	28.96	110.8	7.15	49.13	52.84	32.00
SWRa	8/14/2018	17:08	30.04	105.5	6.73	47.46	52.02	30.75
SWRb	8/14/2018	17:08	30.02	106.1	6.76	47.78	52.36	30.99
SWRc	8/14/2018	17:10	29.84	101.7	6.49	48.30	52.77	31.37
SWRd	8/14/2018	17:10	29.9	99.9	6.37	48.31	52.82	31.37

* Values shaded gray indicate stations exhibiting DO levels below 5.0 mg/L.

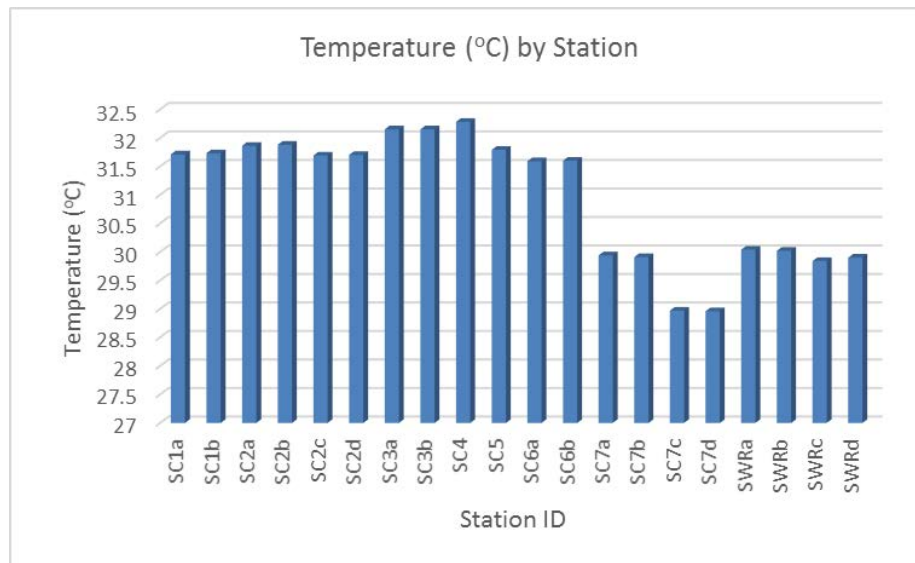


Figure 2. Temperature (°C) by Station

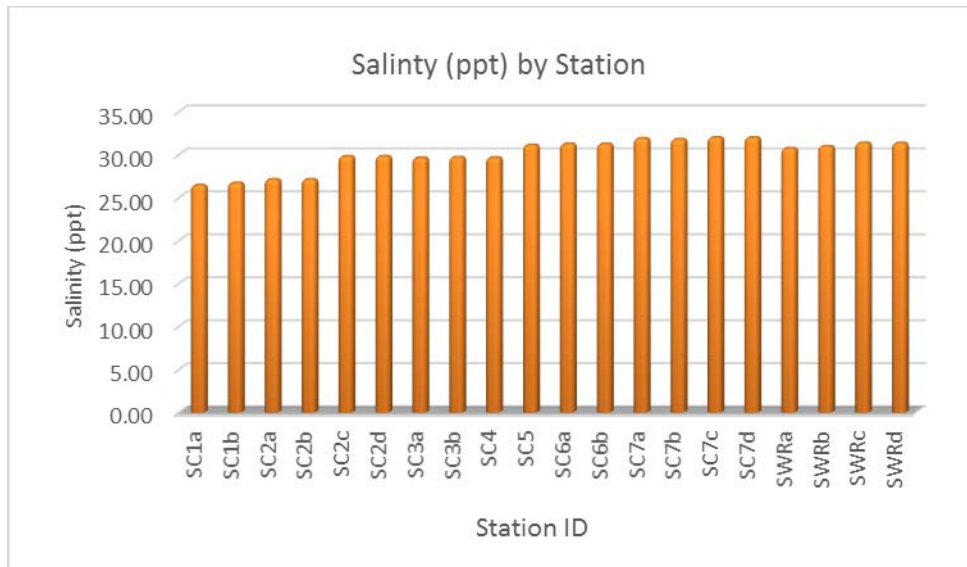


Figure 3. Salinity (ppt) by Station

4.3 Specific Conductivity

Conductivity is a measurement of the dissolved ionic compounds, and as such, increases with increasing salinity. Uncharacteristic elevations in conductivity measurements can often reflect point source pollution, such as industrial or municipal wastewater. Results from the August 2018 sampling event yielded conductivity measurements characteristic of coastal systems and displaying similar spatial correlation between sites as that of salinity.

4.4 Dissolved Oxygen

The dissolved oxygen (DO) levels during the August 2018 sampling ranged from 3.18 mg/L to 7.21 mg/L (Table 1). The North Carolina Water Quality Standard for surface waters is not less than a daily average of 5.0 mg/l with a minimum instantaneous value of not less than 4.0 mg/l. DO levels less than 5.0 mg/L were observed at three of the eight stations. Dissolved oxygen concentrations are influenced by both temperature and salinity (solubility of oxygen decreases with increases in temperature and salinity). The purpose of this monitoring event was to identify any spatial patterns in DO concentrations rather than temporal or seasonal differences. A strong correlation was observed between stations with the highest DO levels occurring within the AIWW and the lowest levels occurring at the up-gradient sites ($R^2 = 0.9307$). Note that the reference sample (SWR) (located within a nearby channel of similar configuration) exhibited relatively high DO at the time of sampling. The location of this sampling station is of similar distance from the AIWW as SC3 but exhibits significantly higher DO. Additional charts (Figure 4, Figure 5 and Figure 6) below graphically display DO concentrations, temperature, and salinity by station (excluding the reference station).

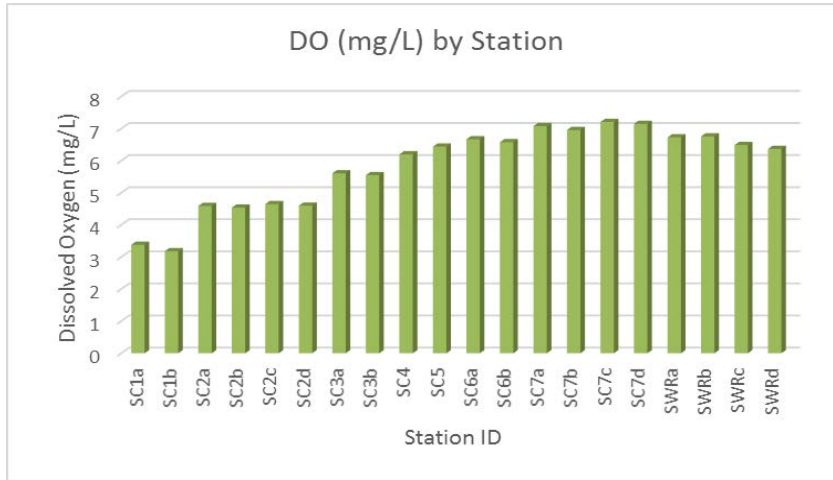


Figure 4. Dissolved Oxygen (mg/L) by Station ID

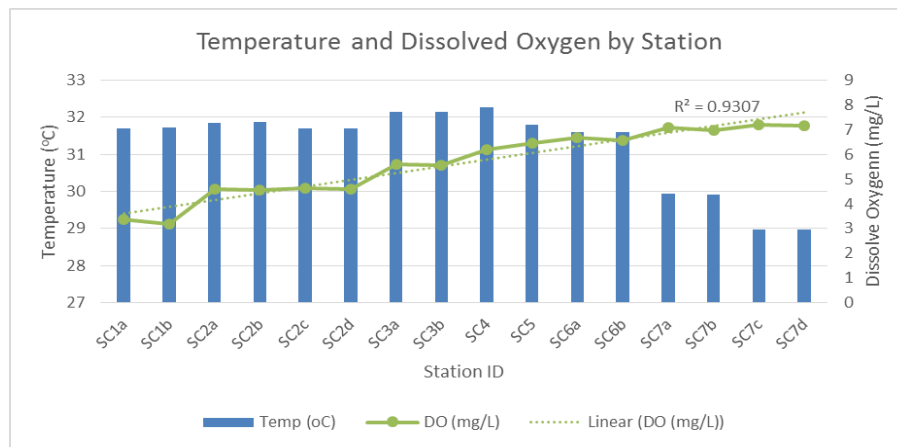


Figure 5. Temperature and Dissolved Oxygen (mg/L) by Station ID (excluding reference)

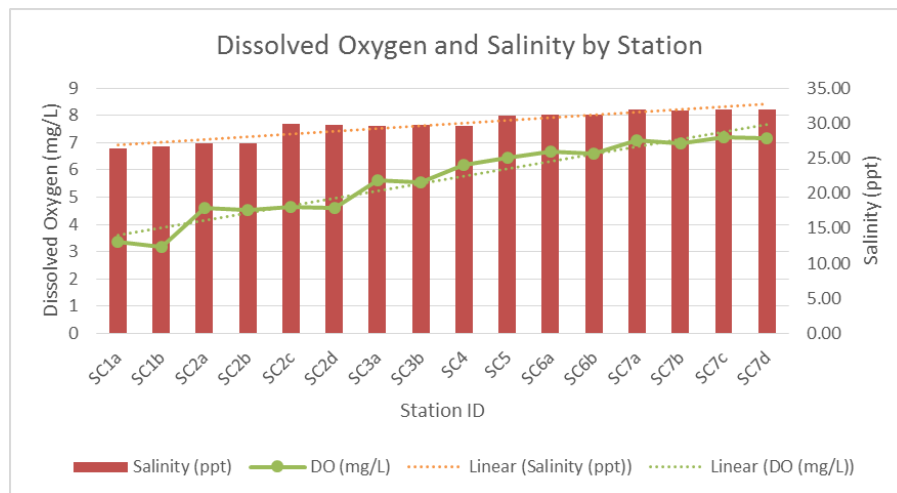


Figure 6. Dissolved Oxygen (mg/L) and Salinity (ppt) by Station ID (excluding reference)

4.5 Rainfall

Rainfall and associated freshwater inflow can influence water quality data. As a result, daily precipitation data was downloaded from the NC CRONOS website for the New Hanover County Airport Weather Station (KILM). Precipitation for the 30-day antecedent period is graphically depicted below (Figure 7). A 0.5-inch rain event occurred the day before sampling. In the seven days prior to sampling, approximately 0.75 inches of rain were reported at the KILM station.

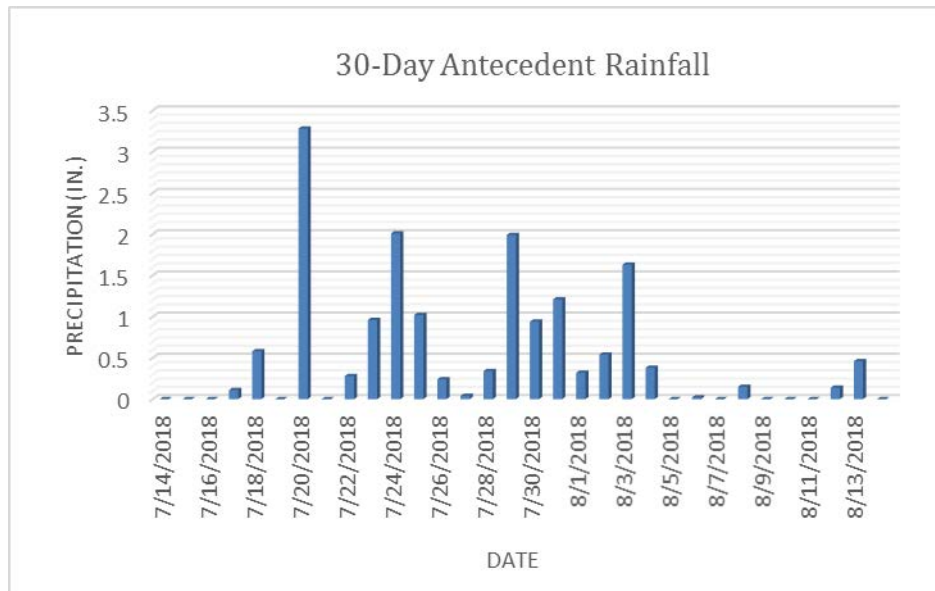


Figure 7. 30-Day Antecedent Rainfall

5. Summary

This report summarizes the quantitative results obtained during the August 14 sampling of waters within a small boat canal leading to/from the Shinn Creek Estates neighborhood boat ramp. While limited in scope, the assessment can provide insight on spatial correlation of certain water quality parameters (particularly dissolved oxygen concentrations). In controlling for temperature and temporal variability, spatial correlations (if present) can be more readily identified. Based upon observed data, there was a strong correlation between station and dissolved oxygen as evidenced by low DO levels in the upper reaches of the canal and relatively high DO levels in stations located closer to the waterway. As anticipated, salinity exhibited the same pattern as freshwater inflows up-gradient contribute to lower salinity levels. Such a pattern, however, further highlights the strong correlation of DO levels relative to station location given that solubility of oxygen decreases with increases in salinity. As a result, the correlation can be attributed to physical mixing and aeration of surface waters resulting from tidal exchange. The upper reaches of the channel are more restricted thus limiting the tidal prism and extent of tidal exchange at upstream sites. As a result, DO levels likely remain suppressed particularly during summer months. Increasing the tidal prism and the extent of tidal exchange would likely result in a corresponding benefit to DO levels within the upper reaches of the channel.

Christy,

While the NCDMF received the Water Quality Monitoring Report from the applicant during the permit review process, there were some important caveats as to its role in making a permit recommendation. The Report captured the temperature, dissolved oxygen, salinity, and specific conductivity (a proxy for salinity) only during an afternoon on a single day through various points in and near the proposed project area. The problem with a simple snapshot into the water chemistry on a single day is that it is not monitoring the water as much as collecting a single observation. This Report does not offer a scientifically defensible understanding as to what the water quality is in that area, and can offer no insight as to whether the site characteristics have any influence on the water quality.

Furthermore, the Report showed that there were only two sampling stations that had a dissolved oxygen of 3.38 and 3.18 mg l⁻¹. Fish are typically more sensitive to hypoxic conditions than other aquatic organisms, generally requiring ≥ 2 mg l⁻¹ (Gray et al. 2002). Benthic invertebrates can be more tolerant of low oxygen (Diaz and Rosenberg 1995). Among invertebrates, mortality often follows exposure to 0.5-1.0 mg l⁻¹ dissolved oxygen for five days (Sagasti et al. 2001).

Another notable point is that the observations were taken during a time when dissolved oxygen would be expected to be at its lowest; when water temperatures are highest and at a low tide. The relationship between water temperature and gas solubility is inversely related, meaning that as the temperature increases, the solubility of a gas decreases. The summer months are also characterized as having a higher biochemical oxygen demand (BOD). This means that low dissolved oxygen can be caused by increased algal production which is then consumed by microbial decomposition which reduces the dissolved oxygen in the water and may not be exclusively attributed to the lack of flushing in the project area.

Six (6) of 20 stations sampled had dissolved oxygen levels less than 5mg/L; while those levels are low, they are not likely to cause concern for mortality events in the area. In other words, the conditions reported are considered normal for a natural shallow marsh creek in the summer at low tide. Channels shift and change over time and organisms dependent on the marsh are adapted to this. The area is functioning as a productive primary nursery area. Moreover, these patterns of low dissolved oxygen occurring in the shallow tidal creeks in New Hanover county are not uncommon to natural systems. Seasonal dissolved oxygen is often lower in the summer months due to increased primary production which increases organic suspended solids ultimately increasing the BOD and reducing oxygen concentrations often less than 3 mg l⁻¹ (MacPherson et al. 2007).

The NCDMF did not use the results of this Report when making a resource determination that influenced a permit recommendation.

Gray, J. S., R. S. Wu, and Y. Y. Or. 2002. Effects of hypoxia and organic enrichment on the coastal marine environment. *Marine Ecology Progress Series* 238:249-279.

MacPherson, T.A., Cahoon, L.B. & Mallin, M.A. 2007. Water column oxygen demand and sediment oxygen flux: patterns of oxygen depletion in tidal creeks. *Hydrobiologia* 586, 235–248.

Sagasti, A. S., L. C. Schaffner, and J. E. Duffy. 2001. Effects of periodic hypoxia on mortality, feeding and predation in an estuarine epifaunal community. *Journal of Experimental Marine Biology and Ecology* 258:257-283.

Sherrin Creek

December 7, 2018

Courtney Spears
North Carolina Department of Environmental Quality
Division of Coastal Management
127 Cardinal Drive Extension
Wilmington, NC 28405

Courtney,

See enclosed certified mail delivery receipts for the Bradley Creek Point Road CAMA Major permit application.

Please let me know if you have questions or need anything in addition to process this CAMA Major Permit.

Sincerely,

Elizabeth Freedland
Land Management Group

Enclosures: As stated



089

10/8/18

Scott and Linda Petersen
6429 Shinn Creek Lane
Wilmington, N.C. 28409

Re: Adjacent riparian landowner notification

Dear Scott and Linda Petersen.

The Shinn Creek Estates HOA is applying for a CAMA Major Permit to authorize maintenance dredging for restoring and maintaining boating access to the Atlantic Intracoastal Waterway from the existing community boat ramp. As required, we are notifying you as an adjacent riparian landowner with a copy of the application materials. You will have 30 days in which to send any written comments to the Division of Coastal Management at 127 Cardinal Drive Extension, Wilmington, N.C. 28405-3845.

Comments will be considered by the NC Department of Coastal Management in reaching a final decision on the application. No comment within 30 days of your receipt of this notice will be considered as no objection. If you have any questions on this project, please call me at 910-452-0001, or e-mail me at smorrison@lmgroup.net Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "SM", with a long horizontal flourish extending to the right.

Steve Morrison
Environmental Consultant

Encl: Shinn Creek Estates HOA CAMA application materials
Cc: Ben Stephenson



090

10/8/18

Bradley and Carolyn Johnson
6451 Shinnwood Road
Wilmington, N.C. 28409

Re: Adjacent riparian landowner notification

Dear Bradley and Carolyn Johnson.

The Shinn Creek Estates HOA is applying for a CAMA Major Permit to authorize maintenance dredging for restoring and maintaining boating access to the Atlantic Intracoastal Waterway from the existing community boat ramp. As required, we are notifying you as an adjacent riparian landowner with a copy of the application materials. You will have 30 days in which to send any written comments to the Division of Coastal Management at 127 Cardinal Drive Extension, Wilmington, N.C. 28405-3845.

Comments will be considered by the NC Department of Coastal Management in reaching a final decision on the application. No comment within 30 days of your receipt of this notice will be considered as no objection. If you have any questions on this project, please call me at 910-452-0001, or e-mail me at smorrison@lmgroup.net Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Morrison", written over a horizontal line.

Steve Morrison
Environmental Consultant

Encl: Shinn Creek Estates HOA CAMA application materials
Cc: Ben Stephenson

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

RECEIVED
DCM WILMINGTON, NC

NOV 07 2018



091

10/8/18

Bill and Jane Henderson
6432 Shinn Creek Lane
Wilmington, N.C. 28409

Re: Adjacent riparian landowner notification

Dear Bill and Jane Henderson,

The Shinn Creek Estates HOA is applying for a CAMA Major Permit to authorize maintenance dredging for restoring and maintaining boating access to the Atlantic Intracoastal Waterway from the existing community boat ramp. As required, we are notifying you as an adjacent riparian landowner with a copy of the application materials. You will have 30 days in which to send any written comments to the Division of Coastal Management at 127 Cardinal Drive Extension, Wilmington, N.C. 28405-3845.

Comments will be considered by the NC Department of Coastal Management in reaching a final decision on the application. No comment within 30 days of your receipt of this notice will be considered as no objection. If you have any questions on this project, please call me at 910-452-0001, or e-mail me at smorrison@lmgroup.net Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Morrison", with a long horizontal line extending to the right.

Steve Morrison
Environmental Consultant

Encl: Shinn Creek Estates HOA CAMA application materials
Cc: Ben Stephenson



December 7, 2018

Courtney Spears
North Carolina Department
Division of Coastal Management
127 Cardinal Drive Extension
Wilmington, NC 28403

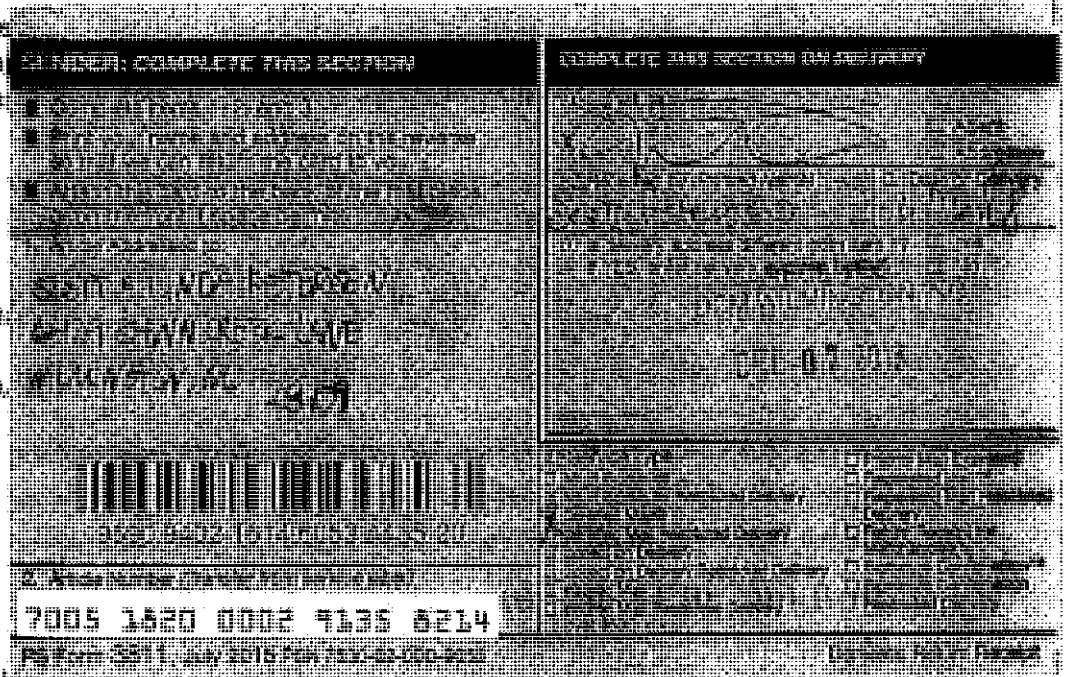
Courtney,

See enclosed certified mail

Please let me know if you

Sincerely,

Elizabeth Freedland
Land Management Group



Enclosures: As stated



DCM WILMINGTON, NC

DEC 07 2018

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY																	
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	095 A. Signature <input checked="" type="checkbox"/> <i>[Signature]</i>																	
1. Article Addressed to: HOWARD, MARY C REV TRUST ETAL 6612 SPRING GARDEN DRIVE WILMINGTON, NC 28403	B. Received by (Printed Name) J. HOWARD	C. Date of Delivery 10/27/18																
	D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No RECEIVED DCM WILMINGTON, NC DEC 07 2018																	
2. Article Number (Transfer from service label) 7005 1820 0002 9135 8146	3. Service Type <table border="0"> <tr> <td><input type="checkbox"/> Adult Signature</td> <td><input type="checkbox"/> Priority Mail Express®</td> </tr> <tr> <td><input type="checkbox"/> Adult Signature Restricted Delivery</td> <td><input type="checkbox"/> Registered Mail™</td> </tr> <tr> <td><input checked="" type="checkbox"/> Certified Mail®</td> <td><input type="checkbox"/> Registered Mail Restricted Delivery</td> </tr> <tr> <td><input type="checkbox"/> Certified Mail Restricted Delivery</td> <td><input type="checkbox"/> Return Receipt for Merchandise</td> </tr> <tr> <td><input type="checkbox"/> Collect on Delivery</td> <td><input type="checkbox"/> Signature Confirmation™</td> </tr> <tr> <td><input type="checkbox"/> Collect on Delivery Restricted Delivery</td> <td><input type="checkbox"/> Signature Confirmation Restricted Delivery</td> </tr> <tr> <td><input type="checkbox"/> Insured Mail</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)</td> <td></td> </tr> </table>		<input type="checkbox"/> Adult Signature	<input type="checkbox"/> Priority Mail Express®	<input type="checkbox"/> Adult Signature Restricted Delivery	<input type="checkbox"/> Registered Mail™	<input checked="" type="checkbox"/> Certified Mail®	<input type="checkbox"/> Registered Mail Restricted Delivery	<input type="checkbox"/> Certified Mail Restricted Delivery	<input type="checkbox"/> Return Receipt for Merchandise	<input type="checkbox"/> Collect on Delivery	<input type="checkbox"/> Signature Confirmation™	<input type="checkbox"/> Collect on Delivery Restricted Delivery	<input type="checkbox"/> Signature Confirmation Restricted Delivery	<input type="checkbox"/> Insured Mail		<input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)	
	<input type="checkbox"/> Adult Signature	<input type="checkbox"/> Priority Mail Express®																
<input type="checkbox"/> Adult Signature Restricted Delivery	<input type="checkbox"/> Registered Mail™																	
<input checked="" type="checkbox"/> Certified Mail®	<input type="checkbox"/> Registered Mail Restricted Delivery																	
<input type="checkbox"/> Certified Mail Restricted Delivery	<input type="checkbox"/> Return Receipt for Merchandise																	
<input type="checkbox"/> Collect on Delivery	<input type="checkbox"/> Signature Confirmation™																	
<input type="checkbox"/> Collect on Delivery Restricted Delivery	<input type="checkbox"/> Signature Confirmation Restricted Delivery																	
<input type="checkbox"/> Insured Mail																		
<input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)																		
PS Form 3811, April 2015 PSN 7530-02-000-9053 Domestic Return Receipt																		

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY																	
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	A. Signature <input checked="" type="checkbox"/> <i>[Signature]</i>																	
1. Article Addressed to: JOSEPH C & NANCY K HEARNE 411 BRADLEY CREEK POINT ROAD WILMINGTON, NC 28403	B. Received by (Printed Name) JO & HEARNE	C. Date of Delivery 10/27/18																
	D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No RECEIVED DCM WILMINGTON, NC DEC 07 2018																	
2. Article Number (Transfer from service label) 7005 1820 0002 9135 8153	3. Service Type <table border="0"> <tr> <td><input type="checkbox"/> Adult Signature</td> <td><input type="checkbox"/> Priority Mail Express®</td> </tr> <tr> <td><input type="checkbox"/> Adult Signature Restricted Delivery</td> <td><input type="checkbox"/> Registered Mail™</td> </tr> <tr> <td><input checked="" type="checkbox"/> Certified Mail®</td> <td><input type="checkbox"/> Registered Mail Restricted Delivery</td> </tr> <tr> <td><input type="checkbox"/> Certified Mail Restricted Delivery</td> <td><input type="checkbox"/> Return Receipt for Merchandise</td> </tr> <tr> <td><input type="checkbox"/> Collect on Delivery</td> <td><input type="checkbox"/> Signature Confirmation™</td> </tr> <tr> <td><input type="checkbox"/> Collect on Delivery Restricted Delivery</td> <td><input type="checkbox"/> Signature Confirmation Restricted Delivery</td> </tr> <tr> <td><input type="checkbox"/> Insured Mail</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)</td> <td></td> </tr> </table>		<input type="checkbox"/> Adult Signature	<input type="checkbox"/> Priority Mail Express®	<input type="checkbox"/> Adult Signature Restricted Delivery	<input type="checkbox"/> Registered Mail™	<input checked="" type="checkbox"/> Certified Mail®	<input type="checkbox"/> Registered Mail Restricted Delivery	<input type="checkbox"/> Certified Mail Restricted Delivery	<input type="checkbox"/> Return Receipt for Merchandise	<input type="checkbox"/> Collect on Delivery	<input type="checkbox"/> Signature Confirmation™	<input type="checkbox"/> Collect on Delivery Restricted Delivery	<input type="checkbox"/> Signature Confirmation Restricted Delivery	<input type="checkbox"/> Insured Mail		<input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)	
	<input type="checkbox"/> Adult Signature	<input type="checkbox"/> Priority Mail Express®																
<input type="checkbox"/> Adult Signature Restricted Delivery	<input type="checkbox"/> Registered Mail™																	
<input checked="" type="checkbox"/> Certified Mail®	<input type="checkbox"/> Registered Mail Restricted Delivery																	
<input type="checkbox"/> Certified Mail Restricted Delivery	<input type="checkbox"/> Return Receipt for Merchandise																	
<input type="checkbox"/> Collect on Delivery	<input type="checkbox"/> Signature Confirmation™																	
<input type="checkbox"/> Collect on Delivery Restricted Delivery	<input type="checkbox"/> Signature Confirmation Restricted Delivery																	
<input type="checkbox"/> Insured Mail																		
<input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)																		
PS Form 3811, April 2015 PSN 7530-02-000-9053 Domestic Return Receipt																		

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY																	
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	A. Signature <input checked="" type="checkbox"/> <i>[Signature]</i>																	
1. Article Addressed to: FARRIS JOHN J JR. 409 BRADLEY CREEK POINT ROAD WILMINGTON, NC 28403	B. Received by (Printed Name) J. FARRIS	C. Date of Delivery 10/27/18																
	D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No RECEIVED DCM WILMINGTON, NC DEC 07 2018																	
2. Article Number (Transfer from service label) 7005 1820 0002 9135 8139	3. Service Type <table border="0"> <tr> <td><input type="checkbox"/> Adult Signature</td> <td><input type="checkbox"/> Priority Mail Express®</td> </tr> <tr> <td><input type="checkbox"/> Adult Signature Restricted Delivery</td> <td><input type="checkbox"/> Registered Mail™</td> </tr> <tr> <td><input checked="" type="checkbox"/> Certified Mail®</td> <td><input type="checkbox"/> Registered Mail Restricted Delivery</td> </tr> <tr> <td><input type="checkbox"/> Certified Mail Restricted Delivery</td> <td><input type="checkbox"/> Return Receipt for Merchandise</td> </tr> <tr> <td><input type="checkbox"/> Collect on Delivery</td> <td><input type="checkbox"/> Signature Confirmation™</td> </tr> <tr> <td><input type="checkbox"/> Collect on Delivery Restricted Delivery</td> <td><input type="checkbox"/> Signature Confirmation Restricted Delivery</td> </tr> <tr> <td><input type="checkbox"/> Insured Mail</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)</td> <td></td> </tr> </table>		<input type="checkbox"/> Adult Signature	<input type="checkbox"/> Priority Mail Express®	<input type="checkbox"/> Adult Signature Restricted Delivery	<input type="checkbox"/> Registered Mail™	<input checked="" type="checkbox"/> Certified Mail®	<input type="checkbox"/> Registered Mail Restricted Delivery	<input type="checkbox"/> Certified Mail Restricted Delivery	<input type="checkbox"/> Return Receipt for Merchandise	<input type="checkbox"/> Collect on Delivery	<input type="checkbox"/> Signature Confirmation™	<input type="checkbox"/> Collect on Delivery Restricted Delivery	<input type="checkbox"/> Signature Confirmation Restricted Delivery	<input type="checkbox"/> Insured Mail		<input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)	
	<input type="checkbox"/> Adult Signature	<input type="checkbox"/> Priority Mail Express®																
<input type="checkbox"/> Adult Signature Restricted Delivery	<input type="checkbox"/> Registered Mail™																	
<input checked="" type="checkbox"/> Certified Mail®	<input type="checkbox"/> Registered Mail Restricted Delivery																	
<input type="checkbox"/> Certified Mail Restricted Delivery	<input type="checkbox"/> Return Receipt for Merchandise																	
<input type="checkbox"/> Collect on Delivery	<input type="checkbox"/> Signature Confirmation™																	
<input type="checkbox"/> Collect on Delivery Restricted Delivery	<input type="checkbox"/> Signature Confirmation Restricted Delivery																	
<input type="checkbox"/> Insured Mail																		
<input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)																		
PS Form 3811, April 2015 PSN 7530-02-000-9053 Domestic Return Receipt																		

delivered 11/1/18

Track Another Package +

Tracking Number: 70051820000291358221

Remove X

Your item was delivered to an individual at the address at 3:35 pm on November 19, 2018 in WILMINGTON, NC 28409.

Delivered

November 19, 2018 at 3:35 pm
Delivered, Left with Individual
WILMINGTON, NC 28409

Get Updates 

Feedback

Text & Email Updates 

Tracking History 

Product Information 

See Less 

Can't find what you're looking for?

Go to our FAQs section to find answers to your tracking questions.

FAQs (<https://www.usps.com/faqs/uspstracking-faqs.htm>)

RECEIVED
DCM WILMINGTON, NC

DEC 07 2018



Adj. Rip. Own.

095

TURTLE HALL

Adj. Rip. Own.

BOATRAM SHINN CREEK ESTATES

Adj. Rip. Own.

SHINN POINT

Star-News

STARNEWSONLINE.COM

1003 South 17th Street • Wilmington, NC 28401 • Classified ph: 910-343-2323 • Legal ads ph: 910-343-2342

Order:		Pubs:	1,15	Rate:	L9
Phone:	(910)796-7226	Class:	0001	Charges:	\$ 0.00
Account:	H9981093	Start	12/14/2018	List Price:	\$ 153.85
Name:	Simpson, Shaun	Stop	12/14/2018	Pay-	\$ 0.00
Caller:		Inser-	2	Balance:	\$ 153.85
Taken By:	17	Columns:	1	Lines:	58
Schedule:	12/14 1x, 12/14 1x, , ,			Taken On:	12:00:00 AM

NOTICE OF FILING OF
APPLICATION FOR CAMA MAJOR
DEVELOPMENT PERMIT

The Department of Environmental Quality hereby gives public notice as required by NCGS 113A-119(b) that the following applications were submitted for development permits in *New Hanover County*, Areas of Environmental Concern as designated under the CAMA: *On November 20 2018, Rodney Long proposed to expand an existing docking facility at 10 Skimmer Rd., adjacent to Banks Channel, Figure 8 Island, in Wilmington; and on November 27, 2018, Shinn Creek Estates HOA, proposed to maintain an access channel and basin, excavate a new channel, and install breakwaters at the end of Shinn Creek Ln., adjacent to the AIWW, in Wilmington.* Copies of these applications can be examined or copied at the office of *Brooks Sorgan, N.C. Dept. of Environmental Quality, Division of Coastal Management, 127 Cardinal Drive Ext., Wilmington, NC 28405, (910-796-7270)* during normal business hours. Comments mailed to *Braxton C. Davis, Director, Division of Coastal Management, 400 Commerce Avenue, Morehead City, NC 28557-3421, prior to January 4, 2019* will be considered in making the permit decision. Later comments will be accepted and considered up to the time of permit decision. Project modification may occur based on review and comment by the public and state and federal agencies. Notice of the permit decision in these matters will be provided upon written request.

RECEIVED

DEC 18 2018

DCM WILMINGTON, NC

Attention: _____ Fax: _____

This is a final proof. If any information is incorrect, please contact your sales representative prior to the deadline of the first insertion. Otherwise your order is accepted as having been approved.

NOTICE

CAMA PERMIT APPLIED FOR

PROJECT: To maintain an access channel & basin,
and to excavate a new channel and install
breakwaters at 6432 Shinn Creek Ln., adjacent
to the AIWW, in Wilmington, New Hanover Co.

COMMENTS ACCEPTED THROUGH January 4, 2019

APPLICANT:

Ben Stephenson
6433 Shinn Creek Lane
Wilmington, NC 28409



FOR MORE DETAILS CONTACT
 THE LOCAL PERMIT OFFICER BELOW:
NC Div. of Coastal Management
127 Cardinal Dr. Extension
Wilmington, NC 28405
Brooks Surgan, Field Representative
910-796-7270

Agent: ED Flynn (910) 256-3062



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

BRAXTON C. DAVIS
Director

December 7, 2018

Land Management Group, Inc.
c/o Greg Finch
3805 Wrightsville Beach Ave., Suite 15
Wilmington, NC 28403

Dear Mr. Finch:

The Division of Coastal Management hereby acknowledges that on November 27, 2018 we received your completed application, acting as agent for Shinn Creek Estates HOA, whereby you are requesting State approval for development located adjacent to 6432 Shinn Creek Lane, adjacent to the AIWW, in Wilmington, New Hanover County. The projected deadline for making a decision on your permit application is February 10, 2019 (with the exception of receiving green cards). An additional 75-day review period is provided by law when such time is necessary to complete the review. If you have not been notified of a final action by the initial deadline stated above, you should consider the review period extended. Under those circumstances, this letter will serve as your notice of an extended review. However, an additional letter will be provided on or about the 75th day.

If this agency does not render a permit decision within 70 days from November 27, 2018 you may request a meeting with the Director of the Division of Coastal Management and permit staff to discuss the status of your project. Such a meeting will be held within five working days from the receipt of your written request and shall include the property owner, developer, and project designer/consultant.

NCGS 113A-119(b) requires that Notice of an application be posted at the location of the proposed development. Enclosed you will find a "Notice of Permit Filing" postcard which must be posted at the property of your proposed development. You should post this notice at a conspicuous point along your property where it can be observed from a public road. Some examples would be: Nailing the notice card to a telephone pole or tree along the road right-of-way fronting your property; or at a point along the road right-of-way where a private road would lead one into your property. Failure to post this notice could result in an incomplete application.

An on-site inspection will be made, and if additional information is required, you will be contacted by the appropriate State or Federal agency. Please contact me if you have any questions and notify me in writing if you wish to receive a copy of my field report and/or comments from reviewing agencies.

Sincerely,

Brooks Sorgan
Field Representative

cc: Courtney Spears, DCM-WIL
Doug Huggett, DCM-MHC
Christine Bouffard, LPO

Liz Hair, USACE
Ben Stephenson, Agent (Shinn Creek Estates HOA)
Kathryn Thurston, City of Wilmington





NORTH CAROLINA
Environmental Quality

099

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

BRAXTON DAVIS
Director, Division of Coastal Management

December 11, 2018

Advertising@starnewsonline.com

2 Pages

Star News

Legal Advertisement Section

Post Office Box 840

Wilmington, North Carolina 28402

Re: Major Public Notice Combo in New Hanover County:

- Rodney Long
- Shinn Creek Estates HOA
-

Hello Angie: Please publish the attached Notice in the **Friday, December 14, 2018** issue.

The State Office of Budget & Management requires an original Affidavit of Publication prior to payment for newspaper advertising.

Please send the original affidavit and invoice for payment to Shaun Simpson at the NC Division of Coastal Management, 127 Cardinal Drive Extension, Wilmington, NC 28405, 910-796-7226. Paying by credit card to the attention of Jarimy Springer, (Ref: **Customer No.70100342**).

Please email a copy of the credit card receipt to me.

Thank you for your assistance in this matter. If you should have any questions, please contact me at our Wilmington office.

Sincerely,

Shaun K. Simpson
Permitting Support & Customer Assistance

cc: MHC files
Courtney Spears - WiRO
Liz Hair - USACE

100
NOTICE OF FILING OF
APPLICATION FOR CAMA MAJOR
DEVELOPMENT PERMIT

The Department of Environmental Quality hereby gives public notice as required by NCGS 113A-119(b) that the following applications were submitted for development permits in **New Hanover County**, Areas of Environmental Concern as designated under the CAMA: **On November 20 2018, Rodney Long proposed to expand an existing docking facility at 10 Skimmer Rd., adjacent to Banks Channel, Figure 8 Island, in Wilmington; and on November 27, 2018, Shinn Creek Estates HOA, proposed to maintain an access channel and basin, excavate a new channel, and install breakwaters at 6432 Shinn Creek Ln., adjacent to the AIWW, in Wilmington.** Copies of these applications can be examined or copied at the office of **Brooks Sorgan**, N.C. Dept. of Environmental Quality, Division of Coastal Management, 127 Cardinal Drive Ext., Wilmington, NC 28405, **(910-796-7270)** during normal business hours.

Comments mailed to Braxton C. Davis, Director, Division of Coastal Management, 400 Commerce Avenue, Morehead City, NC 28557-3421, prior to **January 4, 2019** will be considered in making the permit decision. Later comments will be accepted and considered up to the time of permit decision. Project modification may occur based on review and comment by the public and state and federal agencies. Notice of the permit decision in these matters will be provided upon written request.

It is the staff's recommendation that the proposed initial dredge event and the maintenance excavation of the previously excavated basin and access channel appears to be **CONSISTENT** with 15A NCAC 07H.0208(b)(1)(A-H). The proposed new dredging of the natural "S" channel appears to be **INCONSISTENT** with 15A NCAC 07H.0208 (b)(I)(iv). The project fails to comply with the following rule which states:

- (I) Maintenance excavation in canals, channels and boat basins within primary nursery areas and areas of submerged aquatic vegetation as defined by the MFC shall be avoided. However, when essential to maintain a traditional and established use, maintenance excavation may be approved if the applicant meets all the following criteria:**
 - (iv) The original depth and width of a human-made or natural channel shall not be increased to allow a new or expanded use of the channel.**

It is the opinion of this office that the area for the proposed excavation is partially located within an existing channel and basin that has been historically used for docking and navigational purposes. However, the proposed excavation within the natural "S" channel would constitute new dredging within a PNA. This office recommends a denial of the proposed work, unless the project is modified to exclude new excavation of a natural PNA area.



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

BRAXTON DAVIS
Director, Division of Coastal
Management

December 11, 2018

MEMORANDUM:

FROM: Courtney Spears, Assistant Major Permits Coordinator
NCDEQ - Division of Coastal Management
127 Cardinal Drive Ext., Wilmington, NC 28405
Fax: 910-395-3964 (Courier 04-16-33)
courtney.spears@ncdenr.gov

SUBJECT: CAMA / Dredge & Fill Application Review

Applicant: Shinn Creek Estates, HOA

Project Location: 6432 Shinn Creek Ln., adjacent to the AIWW, in Wilmington, New Hanover Co.

Proposed Project: maintenance of an existing access channel and basin, and excavation of a new channel, and installation of breakwaters

Please indicate below your agency's position or viewpoint on the proposed project and **return this form to Courtney Spears** at the address above by **January 4, 2019**. If you have any questions regarding the proposed project, contact Brooks Sorgan at (910) 796-7270 when appropriate, in-depth comments with supporting data is requested.

- REPLY:**
- This agency has no objection to the project as proposed.
Additional comments may be attached
 - This agency has no comment on the proposed project.
 - This agency approves of the project only if the recommended changes are incorporated. See attached.
 - This agency objects to the project for reasons described in the attached comments.

PRINT NAME CURTIS WEICKERT

AGENCY NC DIVISION OF MARINE FISHERIES

SIGNATURE  

DATE 12-19-18

RECEIVED

JAN 02 2019

MP SECTION WIRO



ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

STEPHEN W. MURPHEY
Director

MEMORANDUM:

TO: Courtney Spears, DCM Assistant Major Permit Coordinator

FROM: Curt Weychert, DMF Fisheries Resource Specialist

CW *AD*

THROUGH: Anne Deaton, DMF Habitat Assessment Coordinator

SUBJECT: Shinn Creek Estates, HOA

DATE: December 14, 2018

A North Carolina Division of Marine Fisheries (DMF) Fisheries Resource Specialist has reviewed the CAMA Major Permit application for proposed actions that impact fish and fish habitats. The applicant is proposing to perform maintenance dredging of a basin and canal, perform new dredging of an access channel, and install breakwaters in order to maintain navigable waters. The project is located along Shinn Creek adjacent to the Atlantic Intracoastal Waterway (AIWW) at the end of Shinn Creek Lane, Wilmington. The waters of this project are classified as SA; High Quality Waters (HQW), designated as a Primary Nursery Area (PNA) by the Division of Marine Fisheries, and closed to the harvest of shellfish by the Shellfish Sanitation Section. The applicant is proposing to maintain an existing channel and basin to a depth of -3 feet at mean low water (MLW) and perform new dredging in an area referred to as the "S-Turn".

PNAs are estuarine waters where initial post-larval development occurs. Species within this area are early post-larval to juvenile and include finfish, crabs, and shrimp. To protect such sensitive areas, Coastal Resources Commission rules prohibit most new dredging in PNA. Shallow soft bottom is an important foraging habitat for juvenile and adult fish and invertebrates, and aids in storing and cycling of sediment, nutrients, and toxins between the bottom and water column. Soft bottom habitat is used to some extent by most native coastal fish species in North Carolina. The habitat is particularly productive and, by providing refuge from predators, is an important nursery area. Species dependent on shallow soft bottom include clams, crabs, flounder, spot, Atlantic croaker, sea mullet, and rays (Deaton et al. 2010). Many benthic predators are highly associated with the shallow soft bottom habitat, including flounders, weakfish, red drum, sturgeon and coastal sharks, although almost all fish will forage on microalgae, infauna, or epifauna on the soft bottom.

The resuspension of sediment can create an increase in turbidity that larvae, juveniles, and especially filter feeding species, can be acutely susceptible. An increase in suspended

Nothing Compares

sediments can result in clogged gill surfaces and mortality, and can cover oysters, SAV, and other sessile fauna and flora. Elevated water temperatures reduce dissolved oxygen (DO) concentrations, making the potential for a DO crash from increased turbidity a major concern, even if sediment booms are utilized.

The applicant is also proposing to install four (4) wooden breakwaters along the perimeter of the "S" channel. The areas of the "S" channel where the breakwaters are being proposed currently contain a significant presence of shellfish habitat bridging soft bottom and fringing marsh. Shell bottom is an extremely productive self-building three-dimensional habitat that can be impacted long term through dredging and filling, pollution and other contaminants. This vital estuarine habitat is very limited in North Carolina, and restoration and conservation of shellfish habitat is at the forefront. Installing breakwaters, while attempting to minimize dredge footprint, will impede pathways for water, nutrients, and fauna. Additionally, vertical hardening structures when exposed to continual wake experience scour which has the potential destabilizing sediment and eroding the marsh over time. Because the final dredge depth of -3 ft. MLW, living shorelines with small footprints could be utilized. Living shorelines protect shorelines, reduce erosion while offering a more natural transition of intertidal habitats.

When the initial permit was issued (1982), permit conditions restricted the dredge width in the hydraulic-dredged channel to 8' wide because of concerns for sloughing. Currently, average width of the channel is ~40' from marsh to marsh. The DMF would argue that based on the 1981 imagery (one year before authorized dredging) and the current width of the maintained channel will result in similar outcomes. Increasing boat traffic and wakes, specifically at low tides will only further erosion and sloughing of the sediment along the channel.

Coastal wetlands are considered among the most productive ecosystems in the world (NCDEQ 2015). Coastal wetlands are a productive detritus-based system that trap nutrients, toxins and sediment, aid in shoreline erosion control, dissipate wave and storm action, provides a barrier to flood damage, and provide nursery functions and support fish production. Recent research indicates that even narrow fringes of wetlands are essential factors for fish utilization and erosion control. An estimated 95% of commercial finfish and shellfish species in the US are wetland dependent. Species common to coastal wetlands include sheepshead, red drum, flounder, spot, Atlantic croaker, menhaden, oysters and penaeid shrimp; with a myriad of prey species as well. Wetlands can enhance foraging functions of adjacent habitats, which is why primary (PNA) and secondary (SNA) nursery habitats are closely linked with coastal wetlands. In addition, these wetlands are important to waterfowl feeding and nesting activities.

Attached aeriels demonstrate the progression of the project site. Since the initial creation of the basin and access channel, the surrounding coastal wetlands have eroded to present conditions. The initial and continued maintenance dredging of the "S" channel would continue the same pattern of habitat loss. The applicant states that in addition to improving flow and water quality this project would increase the use of the existing boat ramp. It should be noted that there are public boat ramps, Trails End and Wrightsville

RECEIVED

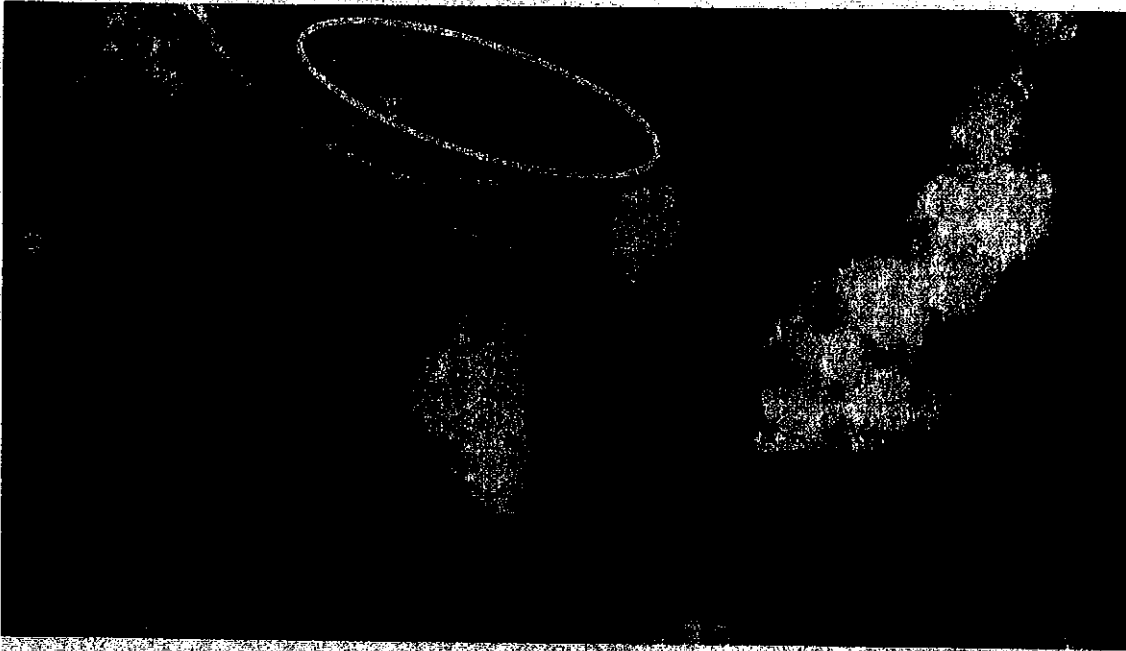
 Nothing Compares 

State of North Carolina | Division of Marine Fisheries
3441 Arendell Street | P.O. Box 769 | Morehead City, North Carolina 28557
252-726-7021

JAN 02 2019

MP SECTION WIRO

Beach located three (3) and two (2) miles away, respectively. This office does not agree that the dredging of the "S" channel will improve water quality through increased flushing. It is the position of the DMF that this new dredging proposed in the "S" channel would remove productive primary nursery habitat, lead to the continued alteration of the habitat, and reduce the function of the remaining habitat not directly affected by the project. The DMF objects to this project as proposed due to the significant adverse impact to habitat and resources that will result from this project.



1966 Aerial Photography with project site indicated in yellow



1981 Aerial Photography with project site indicated in yellow

 Nothing Compares 

State of North Carolina | Division of Marine Fisheries
3441 Arendell Street | P.O. Box 769 | Morehead City, North Carolina 28557
252-726-7021



1998 Aerial Photography with project site indicated in yellow

Contact Curt Weychert at (252) 808-8050 or Curt.Weychert@ncdenr.gov with further questions or concerns.

RECEIVED

JAN 02 2019

MP SECTION WIRO

Nothing Compares

State of North Carolina | Division of Marine Fisheries
3441 Arendell Street | P.O. Box 769 | Morehead City, North Carolina 28557
252-726-7021



ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

STEPHEN W. MURPHEY
Director

December 19, 2018

Courtney Spears, Assistant Major Permits Coordinator
NC DEQ Division of Coastal Management
127 Cardinal Dr. Ext.
Wilmington, NC 28405

Re: Shinn Creek Estates, HOA, New Hanover County

Dear Ms. Spears:

After discussions with staff, I concur with their recommendation to deny this permit application for new dredging in a MFC designated Primary Nursery Area and install four breakwaters along the channel immediately adjacent to oyster and wetland habitat. The proposed site is a narrow meandering channel, with ideal nursery habitat characteristics. Staff also has concerns that if dredged, there would be additional habitat loss along the marsh edge due to boat wake generated erosion, as has occurred in the adjacent dredged channel, and the breakwaters could exacerbate erosion. Maintaining nursery habitat for juvenile fish is critical to maintaining sustainable fisheries. The division therefore objects to the proposed dredging and suggests a less damaging alternative to the breakwaters.

I request that you keep Curt Weychert informed on the final status of the proposed project. Thank you for the opportunity to comment on this application.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephen W. Murphey".

Stephen W. Murphey, Director
NC Division of Marine Fisheries

Cc: Braxton Davis, DCM Director
Dee Lupton, DMF Deputy Director
Anne Deaton, DMF Habitat Protection Manager
Curt Weychert, DMF Marine Biologist

RECEIVED

JAN 02 2019

Nothing Compares

MP SECTION WIRO

ROY COOPER

Governor

MICHAEL S. REGAN

Secretary

LINDA CULPEPPER

Director



NORTH CAROLINA
Environmental Quality

January 13, 2020

DWR # 20181699
New Hanover County

CERTIFIED MAIL: 7013 3020 0000 7632 0185
RETURN RECEIPT REQUESTED

Shinn Creek Estates HOA
ATTN: Ben Stephenson
6433 Shinn Creek Lane
Wilmington, NC 28409

Subject: DENIAL of 401 Water Quality Certification Application
Shinn Creek Estates

Dear Mr. Stephenson,

On December 11, 2018, the Division of Water Resources (Division) received your CAMA Major application, requesting a 401 Individual Water Quality Certification from the Division for the subject project. On April 22, 2019 the NC Division of Coastal Management denied your request for the CAMA Major Permit. Therefore, the Division cannot certify that the subject project will comply with Sections 301, 302, 303, 306, and 307 of the federal Clean Water Act.

In accordance with 15A NCAC 02H .0507(e), your application for a 401 Individual Water Quality Certification is hereby denied. Once you have addressed all of the items listed in the request for additional information, you may reapply to the Division, including a complete application package and the appropriate fee.

The Division's decision can be contested as provided in Chapter 150B of the North Carolina General Statutes by filing a Petition for a Contested Case Hearing (Petition) with the North Carolina Office of Administrative Hearings (OAH) within sixty (60) calendar days. Requirements for filing a Petition are set forth in Chapter 150B of the North Carolina General Statutes and Title 26 of the North Carolina Administrative Code. Additional information regarding requirements for filing a Petition and Petition forms may be accessed at <http://www.ncoah.com/> or by calling the OAH Clerk's Office at (919) 431-3000. One (1) copy of the Petition must also be served to the North Carolina Department of Environmental Quality:

William F. Lane, General Counsel
Department of Environmental Quality
1601 Mail Service Center
Raleigh, NC 27699-1601



North Carolina Department of Environmental Quality | Division of Water Resources
512 North Salisbury Street | 1617 Mail Service Center | Raleigh, North Carolina 27699-1617
919.707.9000

Please be aware that you have no authorization under Section 401 of the Clean Water Act for this activity and any work done within waters of the State or riparian buffers may be a violation of North Carolina General Statutes and Administrative Code.

Please contact Paul Wojoski at 919-707-3631 or Paul.Wojoski@ncdenr.gov if you have any questions or concerns.

Sincerely,



Linda Culpepper, Director
Division of Water Resources

cc: Rachel Capito, USACE Wilmington Regulatory Field Office (via email)
Todd Bowers, EPA (via email)
Gregg Bodnar, NC DCM
Robb Mairs, DWR WiRO
DWR 401 & Buffer Permitting Unit

Filename: 20181699ShinnCreekEstates(New Hanover)_401_Denial



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

BRAXTON DAVIS
Director, Division of Coastal
Management

December 11, 2018

MEMORANDUM:

FROM: Courtney Spears, Assistant Major Permits Coordinator
NCDEQ - Division of Coastal Management
127 Cardinal Drive Ext., Wilmington, NC 28405
Fax: 910-395-3964 (Courier 04-16-33)
courtney.spears@ncdenr.gov

SUBJECT: CAMA / Dredge & Fill Application Review

Applicant: Shinn Creek Estates, HOA

Project Location: 6432 Shinn Creek Ln., adjacent to the AIWW, in Wilmington, New Hanover Co.

Proposed Project: maintenance of an existing access channel and basin, and excavation of a new channel, and installation of breakwaters

Please indicate below your agency's position or viewpoint on the proposed project and **return this form to Courtney Spears** at the address above by **January 4, 2019**. If you have any questions regarding the proposed project, contact Brooks Sorgan at (910) 796-7270 when appropriate, in-depth comments with supporting data is requested.

- REPLY:**
- This agency has no objection to the project as proposed.
Additional comments may be attached
 - This agency has no comment on the proposed project.
 - This agency approves of the project only if the recommended changes are incorporated. See attached.
 - This agency objects to the project for reasons described in the attached comments.

PRINT NAME Kathryn Thurston

AGENCY City of Wilmington

SIGNATURE [Handwritten Signature]

DATE 1-30-19

RECEIVED
JAN 30 2019

* Breakwaters not permitted within 35' of resource per City Code Section 18-341(e). Proposed breakwaters must be removed from plans for City approval.

Spears, Courtney

From: Huggett, Doug
Sent: Monday, February 11, 2019 3:59 PM
To: Morrison, Stephen
Cc: Spears, Courtney
Subject: RE: [External] meeting

Steve

I have talked this over some with Curt, and he suggests we also try and loop NMFS into the conversation, and possibly DWR as well. Would that be acceptable to you?

Thanks

Doug

From: Morrison, Stephen [mailto:smorrison@lmggroup.net]
Sent: Monday, February 11, 2019 12:39 PM
To: Huggett, Doug <doug.huggett@ncdenr.gov>
Cc: Finch, Gregory <gfinch@lmggroup.net>
Subject: [External] meeting

CAUTION: External email. Do not click links or open attachments unless you verify. Send all suspicious email as an attachment to report.spam@nc.gov

Doug,

Hope all is well.

We would like to set up a meeting with you and Curt Weychert of DMF to discuss some potential ideas for the Shinn Creek Estates HOA project currently under review. I believe that with our discussion we can best respond to DMF concerns. Please let me know your availability either here in Wilmington or Morehead City. Thanks.

Steve Morrison | Environmental Consultant

Direct: 452-0001 x 1903 | Fax: 910.452.0060 | Mobile: 910.471.0502

Email: smorrison@lmggroup.net | Website: www.lmggroup.net

Land Management Group | Environmental Consultants

3805 Wrightsville Avenue | Suite 15 | Wilmington, N.C. 28403



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
283 13th Avenue South
St. Petersburg, Florida 33701-6505
<http://sero.nmfs.noaa.gov>

March 11, 2019

F/SER47:TC/pw

(Sent via Electronic Mail)

Colonel Robert J. Clark, Commander
U.S. Army Corps of Engineers Wilmington District
69 Darlington Avenue
Wilmington, North Carolina 28403-1398

Attention: Sarah Hair

Dear Colonel Clark:

NOAA's National Marine Fisheries Service (NMFS) reviewed the public notice for Action ID: SAW-2014-01431 dated February 12, 2019. Ben Stephenson, Shinn Creek Estates HOA, proposes maintenance dredging within waters of an existing access channel and basin, new dredging to create a new access channel, and installation of two breakwaters. The proposed work would be adjacent to the Atlantic Intracoastal Waterway (AIWW) and associated with an existing private docking facility in New Hanover County. The Wilmington District's initial determination is the proposed project may affect adversely 0.21 acres of essential fish habitat (EFH) or associated fisheries managed by the South Atlantic Fishery Management Council (SAFMC), the Mid-Atlantic Fishery Management Council (MAFMC), or NMFS. As the nation's federal trustee for the conservation and management of marine, estuarine, and diadromous fishery resources, the NMFS provides the following comments and recommendations pursuant to the authorities of the Fish and Wildlife Coordination Act and the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act).

The applicant proposes to excavate an existing/new access channel and basin adjacent to the AIWW. The initial dredging event would remove approximately 600 cubic yards of material from an area measuring eight feet by 1,085 feet within the existing channel between the AIWW and the boat basin. Approximately 460 feet of this channel, identified in the application as the "S-Curve" or "S-Channel," would be new dredging. The proposed final water depth for the channel would be -3 feet MLW. Existing water depths within the area of the proposed dredging range from 0.0 to -1.5 feet MLW. Dredging would be done using the bucket-to-barge method and deposited at an upland disposal site approximately 0.3 miles south of the project site and adjacent to USACE Disposal Site No. DA-251, which is at the confluence of the AIWW and Shinn Creek. The applicant also proposes to install four new wooden breakwaters adjacent to the newly excavated channel in the S-Curve. The lengths of the breakwaters range from 40 feet to 70 feet and would extend approximately one foot above MHW. The applicant notes the boat basin and access channel were excavated prior to 1970 and the State of North Carolina issued a permit in 1982 for maintenance dredging of the boat basin and access channel; this permit did not include the S-Curve.

The dredging and installing of breakwaters would disturb approximately 0.21 acres of shallow bottom habitat adjacent to oyster aggregations and bars. The SAFMC identifies shallow sub-tidal bottom in estuarine waters as EFH for penaeid shrimp and estuarine-dependent species of the snapper-grouper complex. The MAFMC designates tidal creeks and the estuarine waters as EFH for summer flounder and

RECEIVED

MAR 26 2019

MP SECTION WIRO



bluefish. The State of North Carolina designates the project site a Primary Nursery Area (PNA). The SAFMC designates PNAs and oysters as HAPCs for estuarine species, such as gray snapper and gag grouper, in the snapper-grouper complex. HAPCs are subsets of EFH that are rare, particularly susceptible to human-induced degradation, especially important ecologically, or located in an environmentally stressed area. Other species of commercial or recreational importance found in the project area include red drum, Atlantic croaker, spot, Atlantic menhaden, bay anchovy, striped mullet, weakfish, Eastern oyster, and blue crab. A number of these species serve as prey for fish that are managed by SAFMC (e.g., king mackerel, Spanish mackerel, and cobia) or for highly migratory fish managed by NMFS (e.g., billfishes and sharks). The SAFMC provides additional information on EFH and federally managed species in Volume IV of the *Fishery Ecosystem Plan of the South Atlantic Region*¹ and the *Users Guide to Essential Fish Habitat Designations by the South Atlantic Fishery Management Council*². Detailed information about the EFH requirements of species managed by MAFMC are included in separate amendments to individual fishery management plans and in technical reports prepared by the NMFS Northeast Fishery Science Center³.

After issuance of the public notice, the applicant met with resources agencies to discuss environmental concerns. Discussions focused on diminished productivity caused by the dredging, especially the new dredging within the PNA and by installing the breakwaters; sedimentation of oyster habitat caused by the dredging; and adverse effects to salt marsh habitat that may result from the breakwaters affecting water flow and sediment transport. While the applicant indicated during the meeting a willingness to remove the breakwaters from plans, the NMFS has not received notification from the Wilmington District that this removal has occurred.

EFH Conservation Recommendations

Section 305(b)(4)(A) of the Magnuson-Stevens Act requires the NMFS to provide EFH Conservation Recommendations for any federal action or permit which may result in adverse impacts to EFH. Therefore, the NMFS recommends the following to ensure the conservation of EFH and associated fishery resources:

- The permit should not authorize the proposed breakwaters.
- The permit should not authorize the proposed new dredging.
- The permit should restrict maintenance dredging to the period of October 1 to March 31 to protect juvenile shrimp and finfish using the shallow bottom habitat.

Section 305(b)(4)(B) of the Magnuson-Stevens Act and its implementing regulations at 50 CFR 600.920(k), requires the Wilmington District to provide a written response to the EFH recommendations within 30 days of receipt. If it is not possible to provide a substantive response within 30 days, in accordance with the “findings” between the NMFS and the Wilmington District, an interim response should be provided. A detail response must then be provided prior to final approval of the action. The detailed response must include a description of measures proposed by the Wilmington District to avoid, mitigate, or offset the adverse impacts of the activity. If the Wilmington District’s response is inconsistent with the EFH conservation recommendations, the District must provide a substantive discussion justifying the reasons for not following the recommendations. The detailed response should be received by the NMFS at least ten days prior to final approval of the action.

¹ Available at <http://safmc.net/fishery-ecosystem-plan-ii-introduction/>

² Available at <http://safmc.net/download/SAFMCEFHUsersGuideFinalRevAug17.pdf>

³ Available at <https://www.nefsc.noaa.gov/nefsc/habitat/efh/>

Thank you for the opportunity to provide these comments. Related questions or comments should be directed to the attention of Ms. Twyla Cheatwood at our Beaufort Field Office, 101 Pivers Island Road, Beaufort, North Carolina 28516-9722, or at (252) 728-8758

Sincerely,



/ for

Virginia M. Fay
Assistant Regional Administrator
Habitat Conservation Division

cc: COE, Sarah.E.Hair@usace.army.mil
USFWS, Pete_Benjamin@fws.gov
NCDCM, Doug.Huggett@ncdenr.gov
NCDMF, Shane.Staples@ncdenr.gov
EPA, Bowers.Todd@epa.gov
SAFMC, Roger.Pugliese@safmc.net
F/SER4, David.Dale@noaa.gov
F/SER47, Twyla.Cheatwood@noaa.gov

RECEIVED

MAR 26 2019



**DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
69 DARLINGTON AVENUE
WILMINGTON, NORTH CAROLINA 28403-1343**

April 3, 2019

Regulatory Division

Action ID No. SAW-2014-01431

Mr. Doug Huggett
Division of Coastal Management
North Carolina Department of Environmental Quality
400 Commerce Avenue
Morehead City, North Carolina 28557-3421

Dear Mr. Huggett:

Reference the application of Shinn Creek Estates, HOA, Mr. Ben Stephenson, to conduct dredging maintenance dredging within waters of an existing access channel and basin, new dredging to create a new access channel, and installation of two breakwaters in waters adjacent to the AIWW, associated with an existing private docking facility located at 6432 Shinn Creek Lane, in Wilmington, New Hanover County, North Carolina. Wilmington, New Hanover County, North Carolina.

Specifically, the proposed project consists of excavating an existing/new access channel and basin adjacent to the AIWW. An initial dredge event is proposed to remove approximately 600 cy of material from an area measuring 8' wide by 1,085' long located within the existing channel between the AIWW and the boat basin (see Sheet 4 of 6). Approximately 460' of this channel (identified in the application as the 'S-Curve' or 'S-Channel') is considered new dredging. The proposed final water depth for the channel would be -3' at MLW in connection to a waterbody that has a water depth of -3' at MLW. Existing water depths within the project area range from 0' to -1.5' at MLW. The applicant also proposes to install 4 new wooden breakwaters adjacent to the newly excavated channel (identified in the application as the 'S-Curve' or 'S-Channel'). The proposed breakwaters would be 60' long, one ~~would be~~ and the final would be 40' long.

**RECEIVED
DCM WILMINGTON, NC**

JUL 02 2019

The Federal agencies have completed review of the proposal as presented by the application and your field investigation report. We recommend that the following conditions be included in the modification to the State authorization:

[REDACTED]

[REDACTED]

[REDACTED]

4. In order to further protect the endangered West Indian Manatee, *Trichechus manatus*, the applicant must implement the U.S. Fish and Wildlife Service's Manatee Guidelines, and strictly adhere to all requirements therein. The guidelines can be found at http://www.fws.gov/nc-es/mammal/manatee_guidelines.pdf.

5. The permittee must install and maintain, at his expense, any signal lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, on authorized facilities. For further information, the permittee should contact the U.S. Coast Guard Marine Safety Office at (910) 772-2191.

6. All work authorized by this permit must be performed in strict compliance with the submitted plans, which are a part of this permit. Any modification to these plans must be approved by the US Army Corps of Engineers (USACE) prior to implementation.

7. Except as specified in the plans attached to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, in such a manner as to impair normal flows and circulation patterns within waters or wetlands or to reduce the reach of waters or wetlands.

8. Except as authorized by this permit or any USACE approved modification to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, within waters or wetlands. This permit does not authorize temporary placement or double handling of excavated or fill material within waters or wetlands outside the permitted area. This prohibition applies to all borrow and fill activities connected with this project.

-3-

9. All mechanized equipment will be regularly inspected and maintained to prevent contamination of waters and wetlands from fuels, lubricants, hydraulic fluids, or other toxic materials. In the event of a spill of petroleum products or any other hazardous waste, the permittee shall immediately report it to the N.C. Division of Water Resources at (919) 733-5083, Ext. 526 or (800) 662-7956 and provisions of the North Carolina Oil Pollution and Hazardous Substances Control Act will be followed.

10. Unless otherwise authorized by this permit, all fill material placed in waters or wetlands shall be generated from an upland source and will be clean and free of any pollutants except in trace quantities. Metal products, organic materials (including debris from land clearing activities), or unsightly debris will not be used.

11. If the permittee discovers any previously unknown historic or archeological remains while accomplishing the authorized work, he will immediately notify the Wilmington District Engineer who will initiate the required coordination procedures.

12. The permittee shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project, and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this permit. A copy of this permit, including all conditions, shall be available at the project site during construction and maintenance of this project.

13. The permittee shall employ all sedimentation and erosion control measures necessary to prevent an increase in sedimentation or turbidity within waters and wetlands outside the permit area. This shall include, but is not limited to, the immediate installation of silt fencing or similar appropriate devices around all areas subject to soil disturbance or the movement of earthen fill, and the immediate stabilization of all disturbed areas. Additionally, the project must remain in full compliance with all aspects of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statutes Chapter 113A Article 4).

14. The activity will be conducted in such a manner as to prevent a significant increase in turbidity outside the area of construction or construction-related discharge. Increases such that the turbidity in the waterbody is 50 NTU's or less in all rivers not designated as trout waters by the North Carolina Division of Environmental Management (NCDEM), 25 NTU's or less in all saltwater classes and in all lakes and reservoirs, and 10 NTU's or less in trout waters, are not considered significant.

15. The permittee, upon receipt of a notice of revocation of this permit or expiration before completion of the work will, without expense to the United States and in such time and manner as the Secretary of the Army or his authorized representative shall direct, restore the water or wetland to its pre-project condition.

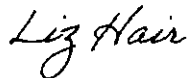
RECEIVED
DCM WILMINGTON, NC
JUL 2 2019

-4-

16. Violations of these conditions or violations of Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act must be reported in writing to the Wilmington District U.S. Army Corps of Engineers within 24 hours of the permittee's discovery of the violation.

Questions or comments may be addressed to Ms. Liz Hair Wilmington Field Office, Regulatory Division, telephone (910) 251-4049 or email at sarah.e.hair@usace.army.mil.

Sincerely,



Liz Hair, Project Manager
Wilmington Regulatory Field Office

Electronic copy furnished:

Mr. Todd Allen Bowers
US EPA Region 4 Life Scientist-Water Protection Division

Ms. Courtney Spears/Ms. Debbie Wilson
North Carolina Department of Environmental Quality- Division of Coastal Management

Ms. Karen Higgins/Mr. Chad Coburn
North Carolina Department of Environmental Quality-Division of Water Resources

Mr. Pete Benjamin/Mr. John Ellis
U.S. Fish and Wildlife Service-Fish and Wildlife Enhancement

Dr. Pace Wilber/Mr. Fritz Rohde/Ms. Twyla Cheatwood
National Marine Fisheries Service-Habitat Conservation Division

Spears, Courtney

From: Twyla Cheatwood - NOAA Federal <twyla.cheatwood@noaa.gov>
Sent: Thursday, April 11, 2019 8:55 AM
To: Spears, Courtney
Subject: Re: FW: [External] draft Corps conditions for Shinn Creek Estates

Thanks Courtney. These are our exact EFH CR's. I see no reason for us to officially change them and I have no plans to agree to modifications at this point. Cheers! lol

On Thu, Apr 11, 2019 at 8:43 AM Spears, Courtney <courtney.spears@ncdenr.gov> wrote:

Courtney Spears
Assistant Major Permits Coordinator
Division of Coastal Management
Department of Environmental Quality

910 796 7426 office
courtney.spears@ncdenr.gov

127 Cardinal Drive Ext.
Wilmington, NC 28405

Email correspondence to and from this address is subject to the North Carolina Public Records Law and may be disclosed to third parties.

-----Original Message-----

From: Hair, Sarah E CIV CESAW CESAD (US) <Sarah.E.Hair@usace.army.mil>
Sent: Wednesday, April 03, 2019 11:39 AM
To: Huggett, Doug <doug.huggett@ncdenr.gov>
Cc: Spears, Courtney <courtney.spears@ncdenr.gov>; Coburn, Chad <chad.coburn@ncdenr.gov>
Subject: [External] draft Corps conditions for Shinn Creek Estates

CAUTION: External email. Do not click links or open attachments unless you verify. Send all suspicious email as an attachment to report.spam@nc.gov<<mailto:report.spam@nc.gov>>

All,

Attached is a Word version of the Corps conditions/recommendations for the following project:

Corps AID: SAW-2014-01431

Project Name: Shinn Creek Estates, HOA dredge
County: New Hanover

120

Signed version will go out later today. Please note the first 3 conditions restrict the dredging to the basin and existing access channel and include a moratorium. These are the result of EFH consultation with NMFS.

Please let me know if you have any questions.

Thanks!

Liz Hair
Regulatory Project Manager
Wilmington District
US Army Corps of Engineers
69 Darlington Avenue
Wilmington, NC 28403
Sarah.e.hair@usace.army.mil
910-251-4049

--
Twyla H Cheatwood
Fishery Biologist
Southeast Region, Habitat Conservation Division
NOAA Fisheries
Beaufort, NC 28516
Office: (252) 728-8758
Twyla.cheatwood@noaa.gov



Web www.nmfs.noaa.gov
Facebook www.facebook.com/usnoaafisheriesgov
Twitter www.twitter.com/noaafisheries
YouTube www.youtube.com/usnoaafisheriesgov

Alternative Route

est. distance > 1,000'

- higher existing elevations
- much greater material removal
- larger impacts to shellfish/PNA resources

Proposed Route

est. distance < 400'

- lower existing elevations
- less material removal
- impacts to marsh/oysters avoided
- oyster resources to be enhanced

North

AIWW



Spears, Courtney

From: Weychert, Curtis R
Sent: Thursday, April 11, 2019 9:24 AM
To: Spears, Courtney; Dunn, Maria T.
Subject: RE: [External] Shinn Creek Estates HOA application

Courtney, thanks for sending this out. I reviewed the new plans yesterday when Greg Finch sent these out. I will echo my comments from the meeting we had with the applicant and contractors on 2-27-19. Although the updated plans have addressed ways to stabilize the channel in a more ecologically preferred method than vertical breakwaters, there is still a concern with performing new dredging in designated PNA habitat. DMF is a strong supporter of oyster habitat creation, however, it is not our policy to mitigate impacts by allowing habitat trade-offs.

DMF will maintain the same concerns about new dredging in PNA and would again object to the dredging. Please let me know if you have any additional questions.

Respectfully,
 Curt Weychert

-----Original Message-----

From: Spears, Courtney
Sent: Thursday, April 11, 2019 8:55 AM
To: Weychert, Curtis R <curt.weychert@ncdenr.gov>; Dunn, Maria T. <maria.dunn@ncwildlife.org>
Subject: FW: [External] Shinn Creek Estates HOA application

Hi,

Please see the attached revision and let me know if you have comments.

Thank you,
 Courtney Spears
 Assistant Major Permits Coordinator
 Division of Coastal Management
 Department of Environmental Quality

910 796 7426 office
 courtney.spears@ncdenr.gov

127 Cardinal Drive Ext.
 Wilmington, NC 28405

Email correspondence to and from this address is subject to the North Carolina Public Records Law and may be disclosed to third parties.

-----Original Message-----

From: Finch, Greg <gfinch@imgroup.net>
Sent: Wednesday, April 10, 2019 4:34 PM

To: Huggett, Doug <doug.huggett@ncdenr.gov>; Spears, Courtney ¹²³<courtney.spears@ncdenr.gov>; Liz Hair <sarah.e.hair@usace.army.mil>; Weychert, Curtis R <curt.weychert@ncdenr.gov>; Coburn, Chad <chad.coburn@ncdenr.gov>; fritz.rohde@noaa.gov
Cc: Ben Stephenson <tbenstephenson@gmail.com>; Morrison, Stephen <smorrison@imgroup.net>
Subject: [External] Shinn Creek Estates HOA application

CAUTION: External email. Do not click links or open attachments unless you verify. Send all suspicious email as an attachment to report.spam@nc.gov<mailto:report.spam@nc.gov>

Doug, All:

Please see attached cover letter and figures that describe and show the proposed changes for the Subject project. Figures will print to scale at 11x17. Let us know if you have any questions.

Thanks,

Greg Finch | CAMA Section Manager
Direct: 910-452-0001 x 1928 | Cell: 910-470-4734
Email: gfinch@imgroup.net
Land Management Group | Environmental Consultants
3805 Wrightsville Avenue, Suite 15 | Wilmington, NC 28403 | www.imgroup.net

--

Spears, Courtney

From: Morrison, Stephen <smorrison@lmggroup.net>
Sent: Wednesday, April 17, 2019 1:39 PM
To: Huggett, Doug
Cc: Spears, Courtney; Hair, Sarah E CIV CESAW CESAD (US); Weychert, Curtis R; fritz.rohde@noaa.gov; Coburn, Chad; Ben Stephenson
Subject: [External] Shinn Creek Estates HOA
Attachments: 1989 aerial.pdf; 2006 aerial.pdf

Doug,

I have attached two aerials. A 1989 from DCM flight records and a 2006 from Google Earth that was submitted with our application materials. These seem to indicate potential past channel maintenance through the subject S curve within the access to the intracoastal waterway. Please take this into consideration in addition to our 4/10/19 project revisions in response to agency comments. Thank you.

Steve Morrison | Environmental Consultant

Direct: 452-0001 x 1903 | Fax: 910.452.0060 | Mobile: 910.471.0502

Email: smorrison@lmggroup.net | Website: www.lmggroup.net

Land Management Group | Environmental Consultants

3805 Wrightsville Avenue | Suite 15 | Wilmington, N.C. 28403

RECEIVED

125
APR 17 2019

1989

MP SECTION WIRO

e Docs



2006 Aerial

126

RECEIVED
Legend
Sweeney Quinn
APR 17 2019

SECTION WIRG

Google Earth

Image U.S. Geological Survey

200 ft







NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

BRAXTON C. DAVIS
Director

April 22, 2019

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

Shinn Creek Estates HOA
c/o Ben Stephenson
6433 Shinn Creek Lane
Wilmington, NC 28409

Dear Mr. Stephenson:

This letter is in response to the application for a Major Permit under the Coastal Area Management Act (CAMA) and the State Dredge and Fill Law, in which authorization was requested to excavate a channel from a community boat ramp to the Atlantic Intracoastal Water Way (AIWW) adjacent to the AIWW and Masonboro Sound, at the terminus of Shinn Creek Lane, in Wilmington, New Hanover County. Processing of the application, which was received as complete by the Division of Coastal Management's Wilmington Office on November 27, 2018 is now complete. Based on the state's review, the Division of Coastal Management (DCM) has made the following findings:

- 1) The subject property is located adjacent to the AIWW and Masonboro Sound and is located within a Primary Nursery Area (PNA), as designated by the North Carolina Marine Fisheries Commission. 15A NCAC 07H. 0208(a)(4) of the Rules of the Coastal Resources Commission further define PNA's as *"Primary nursery areas are those areas in the estuarine and ocean system where initial post larval development of finfish and crustaceans takes place. They are usually located in the uppermost sections of a system where populations are uniformly early juvenile stages. They are designated and described by the N.C. Marine Fisheries Commission (MFC) and by the N.C. Wildlife Resources Commission (WRC);"*
- 2) The proposed project would involve development within Public Trust and Estuarine Waters Areas of Environmental Concern (AEC).
- 3) The applicant proposes to perform maintenance dredging of an existing 25' by 30' boat basin to a depth of -3' at mean low water (MLW) and maintenance dredging of an existing access channel measuring approximately 600' in length by 8' in width to a depth of -3' at MLW. The applicant also proposes to perform new dredging in an area referred to as the "S-Curve" measuring approximately 405' in length and 8' in width to a depth of -3' at MLW. The applicant also proposes to perform maintenance dredging within the channel running parallel



Shinn Creek Estates HOA
 c/o Ben Stephenson
 April 22, 2019
 Page 2 of 4

to Inlet View Drive measuring approximately 80' in length by 8' in width to a depth of -3' at MLW. The total proposed length of the access channel is 1085'.

- 4) In the original submittal dated received in DCM's Wilmington office on November 7, 2018, vertical breakwaters measuring approximately 230' in length were proposed along the "S-curve" bank area. In a revised submittal dated April 10, 2019, the breakwaters were removed from the project proposal, and several areas of proposed oyster shell placement were added to the banks of the access channel.
- 5) The existing community boat ramp and associated dredging were authorized under CAMA Major Permit No. 72-82. Permit No. 72-82 was originally issued on June 22, 1982 for maintenance dredging of a 25' by 30' boat basin and a 670' by 20' access channel to a depth of -5' at MLW. The permitted access channel was not authorized to connect to the AIWW. Permit No. 72-82 has undergone several modifications, refinements, and renewals. A Major Modification to Permit No. 72-82 for dredging in a similar alignment to the current proposal was denied on June 20, 2000. Permit No. 72-82 expired on December 31, 2015.
- 6) No permit history for maintenance excavation within the "S-Curve" area was provided by the applicant, nor was any such evidence located by DCM Staff.
- 7) The southernmost portion of the proposed dredge footprint, measuring approximately 80' in length by 8' in width to a depth of -3' at MLW, falls within a previously dredged and maintained channel adjacent to Inlet View Drive. According to aerial photography this area was originally excavated sometime in the 1970s (prior to the enactment of CAMA) and has since been maintained through various CAMA General Permits.
- 8) The application indicates the existing water depths in the maintained access channel areas range from -2' to -3' at MLW. The application also indicates that the existing water depths within the "S-Curve" range from 0' to -1' at MLW.
- 9) The NC Division of Coastal Management has determined that the proposed project consists of new dredging in a PNA measuring approximately 405' in length and 8' in width. Approximately 3,240 square feet of undredged Primary Nursery Area habitat would be excavated as a result of the proposed project.
- 10) During the course of the joint state and Federal review of the application, the N.C. Division of Marine Fisheries (DMF) indicated that, "DMF objects to this project as proposed due to the significant adverse impact to habitat and resources that will result from this project." Further, after reviewing the April 10, 2019 revised submittal, DMF provided additional comments that stated "Although the updated plans have addressed ways to stabilize the channel in a more ecologically preferred method than vertical breakwaters, there is still a concern with performing new dredging in designated PNA habitat. DMF is a strong supporter of oyster habitat creation, however, it is not our policy to mitigate impacts by allowing



Shinn Creek Estates HOA
 c/o Ben Stephenson
 April 22, 2019
 Page 3 of 4

habitat trade-offs. DMF will maintain the same concerns about new dredging in PNA and would again object to the dredging." The National Marine Fisheries Service and the U.S. Army Corps of Engineers also recommended that the new dredging within the PNA not be allowed.

- 11) The City of Wilmington objected to the vertical breakwaters stating, "Breakwaters not permitted within 35' of resource per City Code Section 18-341(e). Proposed breakwaters must be removed from plans for City approval."
- 12) As of the date of this letter, the NC Division of Water Resources is still reviewing the proposed project to determine if the project complies with State water quality standards.
- 13) Based upon the above referenced findings, the Division of Coastal Management has determined that the proposed project to perform new dredging for the construction of an access channel are inconsistent with the following rules of the Coastal Resources Commission:
 - a) 15A NCAC 07H .0206 (c) (Management Objectives for Estuarine Waters), which states *"To conserve and manage the important features of estuarine waters so as to safeguard and perpetuate their biological, social, aesthetic, and economic values; to coordinate and establish a management system capable of conserving and utilizing estuarine waters so as to maximize their benefits to man and the estuarine and ocean system."*
 - b) 15A NCAC 07H .0208(a)(2)(A), which states that *"before being granted a permit, a determination shall be made that the applicant has complied with the following standards:*
 - (A) *The location, design, and need for development, as well as the construction activities involved shall be consistent with the management objective of the Estuarine and Ocean System AEC (Rule .0203 of this subchapter) and shall be sited and designed to avoid significant adverse impacts upon the productivity and biologic integrity of coastal wetlands, shellfish beds, submerged aquatic vegetation as defined by the Marine Fisheries Commission, and spawning and nursery areas."*
 - c) 15A NCAC 07H .0208(b)(1) (Specific Use Standards), which states in part, *"Navigation channels, canals, and boat basins shall be aligned or located so as to avoid primary nursery areas, shellfish beds, beds of submerged aquatic vegetation as defined by the MFC"*.



Shinn Creek Estates HOA
c/o Ben Stephenson
April 22, 2019
Page 4 of 4

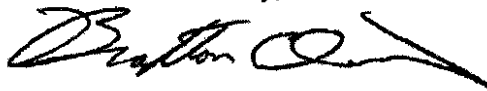
Given the preceding findings, it is necessary that your request for issuance of a CAMA Major Permit under the Coastal Area Management Act and State Dredge and Fill Law be denied. This denial is made pursuant to N.C.G.S. 113A-120(a)(8) which requires denial for projects inconsistent with the state guidelines for Areas of Environmental Concern or local land use plans, and N.C.G.S. 113-229, which requires that a permit be denied for cases where a proposed development will lead to a significant adverse impact to fisheries resources.

If you wish to appeal this denial, you are entitled to a contested case hearing. The hearing will involve appearing before an Administrative Law Judge who listens to evidence and arguments of both parties before making a final decision on the appeal. Your request for a hearing must be in the form of a written petition, complying with the requirements of §150B of the General Statutes of North Carolina, and must be filed with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, NC 27699-6714, within twenty (20) days from the date of this denial letter. A copy of this petition should be filed with this office.

Another response to a permit denial available to you is to petition the Coastal Resources Commission for a variance to undertake a project that is prohibited by the Rules of the Coastal Resources Commission. Applying for a variance requires that you first acknowledge and recognize that the Division of Coastal Management applied the Rules of the Coastal Resources Commission properly in processing and issuing this denial. You may then request an exception to the Commission's Rules based on hardships to you resulting from unusual conditions of the property. To apply for a variance, you must file a petition for a variance with the Director of the Division of Coastal Management and the State Attorney General's Office on a standard form, which must be accompanied by additional information on the nature of the project and the reasons for requesting a variance. The variance request may be filed at any time, but must be filed a minimum of six weeks before a scheduled Commission meeting for the variance request to be eligible to be heard at that meeting. The standard variance forms may be obtained by contacting a member of my staff, or by visiting the Division's web page at: <https://deq.nc.gov/about/divisions/coastal-management/coastal-management-permits/variances-appeals>.

Members of my staff are available to assist you should you desire to modify your proposal in the future. If you have any questions concerning this matter, please contact Ms. Courtney Spears at (910) 796-7426.

Sincerely,



Braxton C. Davis

cc: U.S. Army Corps of Engineers, Wilmington, NC
OCRM/NOAA, Silver Spring, MD





Google 2020

Alternative Route
est. distance > 1,000'

Proposed Route
est. distance < 400'

North

AIWW

Google



1956



1966

5-81

USDA

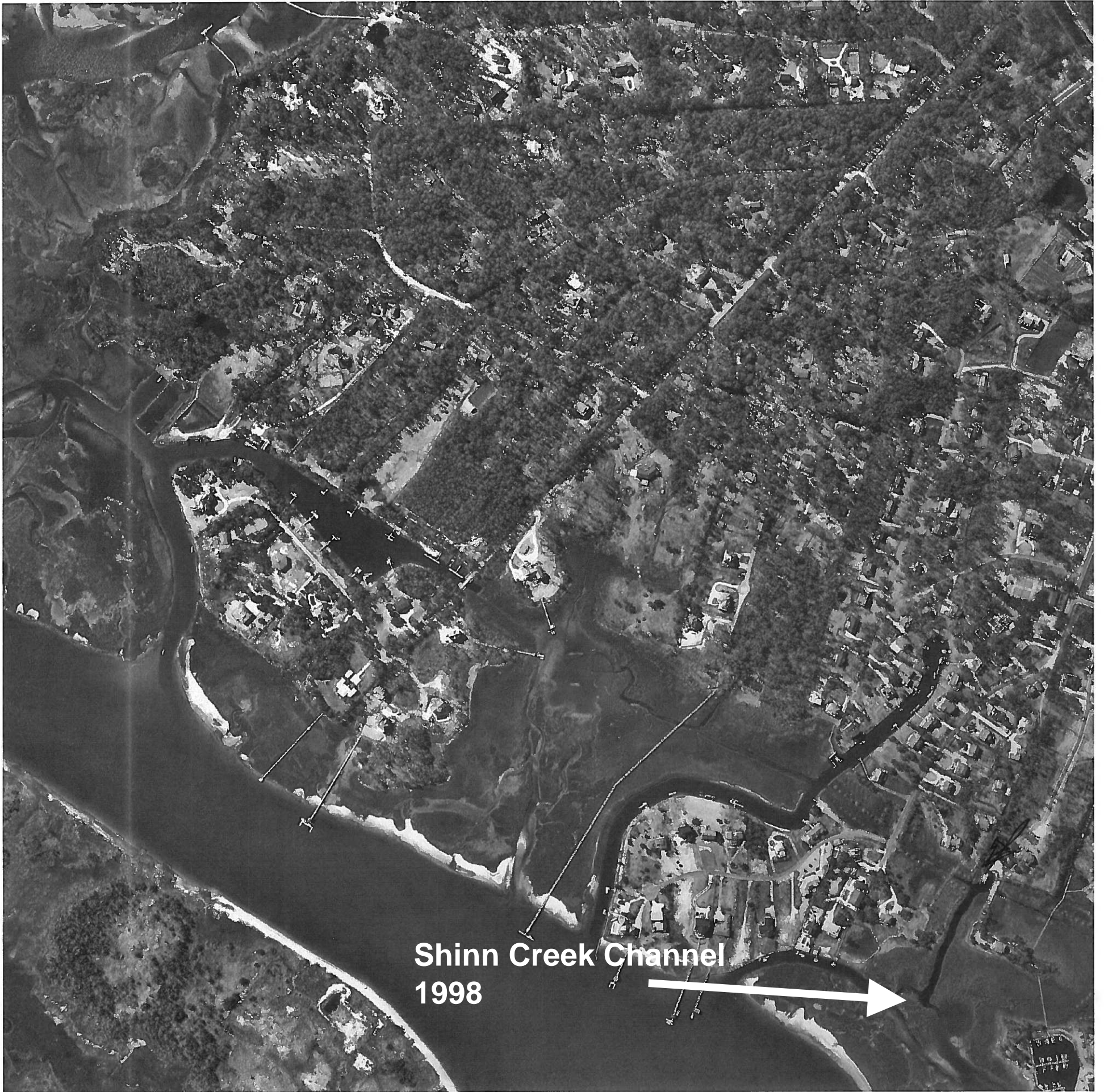
40

712

479-

Shinn Creek Channel
1981





Shinn Creek Channel
1998

1998
8661



Shinn Creek Channel
2006


2006



2010

To whom this may concern:

I have lived in Shincreek Estates for approximately 5 years. One of the main reasons I bought there is the water access. Our family over the years has spent many hours at the boat ramp. We meet friends and neighbors there as well. We enjoy exploring and watching the surrounding wildlife in the waters and the marsh. The concern now is that I cannot get my boat, paddleboards, kayaks from the docks to the ICW now very safely and predictably. There is only a small window of opportunity to negotiate my boat and kayaks in the waters now that go from the ICW to the boat ramp. The water is much too tidal and this lifestyle we have grown to love and enjoy has rapidly decreased. Allowing a variance for a dredge permit in this area would not only help the local community to enjoy what we have already had for years, but also allow us all to maintain and appreciate the local aquatic wildlife and surrounding areas. My family, the local community, and I appreciate your time in considering this variance. Thank you.



8-26-2019
-Dana B. Shumate, DDS

August 28, 2019

North Carolina Dept. of Environmental Natural Resources
Coastal Resource Commission
400 Commerce Avenue
Morehead City, NC 28557

Dear Members of the North Carolina Coastal Resource Commission,

As a Shinn Creek Estates resident, we are writing you to voice our overwhelming support for the variance requested by our HOA.

We purchased our home over 10 years ago for two reasons: it's water views and most importantly for it's water access. Unfortunately, over the years our access to the water has continually diminished and now is restricted to access only at high tide.

The City of Wilmington prides itself on being a water friendly community with water access and beaches for all to enjoy. As residents our request is to restore our water access so that we can once again enjoy the fishing and boating that this city and community are known for.

Our HOA has worked diligently to put together a non-impact plan that restores our water access. We encourage you to vote in favor of the variance.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott Petersen", with a long horizontal line extending to the right across the page.

Scott Petersen

A handwritten signature in black ink, appearing to read "Linda Petersen", written in a cursive style.

Linda Petersen

Shinn Creek Estates Resident @
6429 Shinn Creek Lane

Brooke and Cathy Bailey

6329 Shinn Creek Lane
Wilmington, NC 28409
(910) 793-2145 (h)
(910) 352-6050 (c)
bandcbailey@aol.com

September 15, 2019

NC Coastal Resources Commission

Chairwoman Renee Cahoon and Commission Members:

We are writing to you in support of our neighborhood's request for a Variance to allow additional dredging to connect to the Intracoastal Waterway. We purchased a home in Shinn Creek Estates in early 1998 and were the third homeowner in this small development of just 39 lots. We are surrounded by a number of communities that do have full time access to the Intracoastal Waterway (ICWW). One of our primary reasons for becoming a part of this community was to enjoy the adjacent waters and marshes. We fully expected to have access to the ICWW during most tides. Our neighbors all bought here with the belief that we would have access for boating, kayaking, paddle boarding, etc.

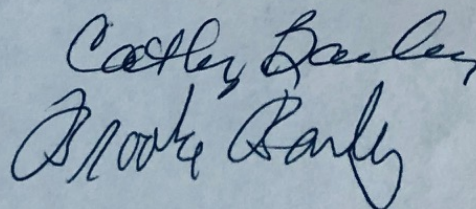
At the time we moved in, there were two ways in and out of our dredged canal—one to the north and one to the south. Unfortunately, over time, these two paths have silted in as we have not been permitted to keep them dredged. As new homeowners in 1998, we always believed that our neighborhood would be granted permission to keep open one of the two ways in and out of our dredged canal. It never made sense to us that we should be allowed to dredge our canal but not be allowed to connect up to the ICWW.

We were part of an effort a number of years ago to try and gain approval to extend our canal to meet the dredged canal in front of Shinn Point. There have been a number of such efforts, including water quality studies completed by UNCW. None of these efforts have been successful, but it still seems to us that it is a reasonable request to allow us to connect our canal to one that is dredged.

We certainly appreciate you taking another look at our request. We do not believe that approving our request will be detrimental to the designated Primary Nursing Area.

Thanks again for your consideration.

Sincerely,


Cathy Bailey
Brooke Bailey



McAnderson's Inc.
Culture of Honor
We believe in you®
1508 Military Cutoff, Suite 202
Wilmington, North Carolina 28403
(910) 799-7548
Fax: (910) 799-3603

September 17, 2019

To Whom It May Concern:

As a resident of the Shinn Creek, water access for my boat is very important to me. Over the years, access has been harder and harder. We have an S turn issue as well.

We are surrounded by permitted channels and the Intracoastal Waterway, causing dredged deposits to aggravate our channel.

Thank you for allowing us to dredge to correct these problems, I am,

Very Truly Yours,

A handwritten signature in black ink that reads "Dennis W. Anderson".

Dennis W. Anderson

September 17, 2019

North Carolina Department of Environmental and Natural Resources
Coastal Resource Commission
400 Commerce Ave
Morehead City, NC 28557

Chairman Renee Cahoon and members of the Commission,

I am writing to voice my strong support for the variance request by the Shinn Creek HOA. As an officer of a small biotech company located in the area (Southport, NC) with staff that lives in Wilmington and surrounding areas, I must recruit seasoned scientific employees to keep my business growing and in compliance with stringent regulations. I have recently recruited senior level scientists from as far as Michigan, Utah and California successfully all heavily influenced by the quality of lifestyle that the Wilmington area is known for. This includes access to waterways and all the other amenities of the Cape Fear/coastal region. Without these perks to offer, I would not be able to recruit or retain such highly specialized talent and keep my business growing. I myself was employed in Raleigh, North Carolina which presents access to metropolitan amenities and better job security due to the strong business concentration when I decided to relocate my family and take this position based on the lifestyle of living in Shinn Creek and Wilmington. My current Head of R&D took the same decision from the Washington DC area. The strongest draw to this area is lifestyle, if we do not support and enhance this attribute, we will not attract more businesses and I will see talent leave for career opportunities to RTP, Charlotte or other national and regional biotech hubs.

Again, Wilmington's biggest assets are the amazing bodies of water and all the wildlife, recreation and relaxation that come from enjoying them. Restricting carefully considered access to these assets will not only affect tourism, it will hurt the economy and industry that financially support and patronize all the preservation programs to protect these assets.

Regards,



Christine Dolan
Chief Operating Officer
Cygnus Technologies, LLC
christine@cygnustechnologies.com
office: +1-910-454-9442 x124
cell: +1 732-595-6749

Steffen & Elizabeth Kuronen

3100 Wescot Ct.
Wilmington , NC 28457
steffenkuronen@gmail.com

September 17, 2019

To whom it may concern

We are writing this letter to show our strong support for the maintenance dredging request as put forth by the Shinn Creek Estates HOA. We have recently moved to the neighborhood and have expectations of reasonable access to the navigable waters of the ICW from the end of the street. It's one of the main reasons for our family to purchase our new home in this part of Wilmington.

In talking with many our new neighbors, it seems that access to the ICW has always been possible, but it's now becoming quite difficult to launch even the smallest of watercraft and will soon not be possible if not addressed.

Please consider our neighborhood request and we hope that you find it reasonable.

Sincerely,

Steffen & Elizabeth Kuronen

Dear CAMA-

09/18/19

I appreciate your consideration for granting our neighborhood-Shinn Creek Estates-a variance exception to accessing the intercoastal waterway.

My family and I consider ourselves environmental conservationists and respect your charter in protecting our precious waterways. We are active boaters, surfers, and fisherman and love our clean ocean. We chose to move to Shinn Creek Estates, roughly 1 year ago, specifically because of the neighborhoods access to the creek leading to the waterway. Subsequently, we are so disappointed to see this disputed small stretch of shifted sand bar remains as an obstacle to our usage.

Put yourself in our shoes: if you lived in a neighborhood that originally built a boat ramp with permitted access with a clear path through a short creek leading to the ICW, It is reasonable for you to think that you would have the right for the maintenance dredging of that area in perpetuity..

We certainly hope to appeal to your sense of fairness in favorably granting this variance approval. We respect your mission to preserve and protect, but our continuous access is far from an egregious example of environmental abuse. We just want the same access we have historically had.

Some government bodies have recently experienced negative publicity over misusing their regulatory authority, due to their extremist inflexibility. We certainly hope this unreasonable influence has not crept into your agency. We hope that bureaucratic overreach does not stifle the reasonable request of law abiding, environmentally conscious tax payers.

Sincerely,

Peter Lamporte

6412 Shinn Creek Lane
Wilmington, NC 28409

September 23, 2019

NC Coastal Resource Commission
RE: Shinn Creek Dredge Project

Dear CRC,

I am reaching out to you today in hopes of conveying the frustration as a home owner and boater living in our neighborhood. Since purchasing our lot in Shinn Creek 15 years ago, it has continually gotten harder and harder to enjoy the most important amenity in our neighborhood - access to the Intracoastal Waterway. In more recent years, our channel has filled in and our boat use has been restricted to only during very high tides due to the fact our section of the channel is no longer allowed to be dredged. Many of us purchased in this neighborhood because of the water access and now after many year in has become increasing difficult to enjoy because of the restricted use of a section of our channel.

Our channel is broken down into 3 sections: the initial part of our channel, the S turn and the latter part of our channel. The latter part of our channel is still allowed to be dredged and allows use to the neighboring homeowners that are closer to the intracoastal, but not our homeowners in our initial section of the channel in Shinn Creek. As the other channels around us are continued to be dredged, it creates more difficulty with silt in our S-Turn so that many of the boaters in our neighborhood cannot use our channel during mid-low tides. It has gotten to the point that we have to schedule our outings 2-3 hours or go out and stay 9-10 hours when the tide returns. This is frankly hard to plan during daylight hours and unsafe. Over time, the use of our boat ramp and 3 slips will be of no use at all for boaters living in our neighborhood because we will not be able to travel through the entire channel.

The channels in our area have been dredged for many years and I assumed that our Shinn Creek Channel would be allowed to continue being dredged as well. It doesn't make sense to allow only partial dredging of a channel, blocking use/access to the intracoastal. Please consider our plea for the approval of our dredge project at Shinn Creek. Neighborhoods on both sides have this access and I feel we should be able to continue the use of our channel as it was initially intended and developed for our wonderful neighborhood.

Thank you and God Bless,

Gina and David Taylor
6425 Shinn Creek Ln.
Wilmington, NC 28409

September 25, 2019

NC Coastal Resources Commission,

I am writing this letter as a native of Wilmington, NC growing up here from 1980 onward, with my parents and my wife's parents still living here. After college, we went off out of state to live our lives, get married, start our own family, and we've just moved back into Shinn Creek Estates in August of 2018.

We love this part of town and neighborhood, and a major reason for that is the access to the IC waterway, Masonboro Island, and the water in general – it's our playground especially with 4 and 6 year olds. The access to the IC from Shinn Creek has diminished over time, now making it tidal and the S-turn forming over decades whereas before it was a straight shot access to the IC without it being tidal. We are really hoping something can be done to remedy this issue.

All the neighborhoods around us are dredged and do not rely on tidal access: Shinnwood, Turtle Hall, Towles Rd, Shandy, Old Military. The fact that Shinn Creek Estates is tidal and cannot be dredged due to the S-turn being protected causes concern with little children on the boats. If there is any kind of emergency and we cannot get back to land that causes concern with little kids. This summer we actually had a kid get stung by jellyfish and had to rush home immediately. Luckily it was not low tide.

The area in our S-turn that is protected is surrounded by two access points that are permitted for dredging. Our neighborhood is at a disadvantage from the others in not being able to make the most of where we live due to our tidal access. We also feel that since it used to be accessible and through no fault of ours, now it's tidal and protected, it is a fair to ask for the same access as surrounding areas. We live directly across the IC from Masonboro Island and the sound end of Wrightsville Beach, we hope to have access to those areas that mean so much to our family.

Please consider this request and make this change to the water access for our neighborhood by allowing dredging in that small portion between two dredged areas.

Sincerely,

Ari and Amie Cofini

Jason Carroll

To: Director of Coastal Management
Wilmington, NC

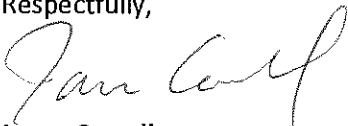
Dear Director,

I am writing this correspondence as an interested homeowner in the Shinn Creek Estates neighborhood in reference to the variance being sought to allow for dredging the waterway that leads to the water access to our community. Our family moved into Shinn Creek Estates in 2013 and it is a great community with many wonderful neighbors. My wife and I have two daughters (now 9 and 10) and have enjoyed the water access since we have resided there. We have spent many hours watching our children play, fish, net, etc. down by the docks. We have also used the water for boat and kayak access to the ocean and Intracoastal Waterway.

We are in full support of the proposed dredging initiative. The variance we are seeking will help the surrounding canals and water areas to bring natural flowing water and living species throughout the waterway(s). In the 6 years that we have resided in the community it is evident that the constriction of the "S-Turn" is prohibiting a natural flow to our waterway. This may be counter-intuitive but we have witnessed several boaters unintentionally prop dredging the area as they attempt to navigate through the tricky turn. We also feel that what makes this hard to understand is the permissible dredging that occurs in several of our neighboring water access points and communities. Our concern is that not dredging the Shinn Creek Estates waterway will have longer term negative issues for water areas that depend on our waterway to include several species and living things. Not dredging the S-Turn will continue to diminish the quality of the water that will likely "sit" in the affected water areas and canals.

Thank you for your attention to this matter and we are in hopes that this situation will allow for a positive outcome.

Respectfully,



Jason Carroll
6408 Shinn Creek Lane
Wilmington, NC 28409

Letter for Shinn Creek Variance Request

October 11, 2019

To: NC Coastal Resources Commission

My name is Brian Thomas and I built a home in Shinn Creek back in 2012. My reason for wanting to live in this community was its access to the Intracoastal Waterway and its proximity to the inlet being right out front. Immediate waterway and ocean access was the main reason for moving to Shinn Creek. As with every community around us, Turtle Hall with a marina right beside us, Inlet View and Shinn Point on the other side of us, both with much larger impacts to the coastal area and lifelong dredging permits always made me feel safe moving here knowing we would have full permitting for our minimal impact space as compared to others. The other piece that made me feel certain as to our access and apparent dredging ability was the permits at Inlet View to dredge everything coming into our access, and our permit to dredge our small boat basin and canal going out. Then over the years this little area in between two permitted channels becomes shallower and shallower and we aren't allowed to maintain our historic access. It just doesn't make any sense to me.

On a side note, imagine taking your toddlers and new born out on the boat and a thunderstorm comes up and you can't get back home because of low tide and the area that's not dredged you can't get through. Then you anchor your boat in this area, tear it up with an anchor, swim or walk your family in and tear up the marsh sides more all while it's lightning and thundering while your kids are crying.

We just want the historic access this area has always enjoyed restored. Thanks for your time and I hope for your logical and realistic thinking finally on this matter.

Respectfully,

Brian W Thomas

6416 Shinn Creek Lane

December 22, 2019


Letter of Support For Dredging Project

This is a place I know well. I currently live on part of the property that my parents purchased in the early 1960s. I grew up spending countless days exploring and enjoying the mudflats and salt marsh environment of the Greenville Sound area. As a young boy, I was fascinated by the appearance of a large dragline excavator in the marsh. I watched as it dug and expanded ditches and canals through the marshlands out to the edge of the sound. The spoil mounds are still visible today. Over the years I came to appreciate the importance of the nutrient-rich tidal flats, marsh, and waters of the area to provide nursery habitats for numerous species of marine organisms. Tidal marsh birds are commonly seen in the area. As an adult, I still spend a great deal of time exploring and enjoying this area. On low tide, I often explore the mudflats on foot. At high tide, I use a canoe or a kayak to explore the area in and around the ICW. I also own a small boat that I use to get to Masonboro Island. I use the same route used by my father back in the 1960s which is also the subject of this proposal.

I was quite concerned when the Shinn Creek Estates HOA and the owners of the Inlet View canal area began to perform regular dredging projects several years ago. I have monitored the health of the sound over the years after the completion of the projects. I have not observed any negative impacts. The marsh continues to expand along with healthy oyster beds which also have expanded over the years. Wildlife continues to flourish in the surrounding area. Even the estuary-dependent terrapin population seems to be healthy. They are a common sight when I venture out in my canoe. The current proposed project would deepen the existing connection between the canal that leads from the Shinn Creek Estates boat ramp to the canal at Inlet View that connects directly with the ICW. I do not believe that this would have any negative impacts. If I did have concerns, I would definitely make my concerns known immediately. The boat traffic is low and consists of relatively small boats carrying families out to enjoy boating on our great coastal waters.

I do not see any concerns with the relatively small project in an area that experiences a large tidal level change each day. Because of the close proximity of Masenboro inlet, four and five foot tides are common. The sound and marshlands are dry on low tide and are quickly under water twice each day. Water enters from two sides. There is a connection from the ICW on the north end of the sound area. Water also flows from the ICW through the Inlet View canal and continues into the canal next to Shinn Creek Estates. Sediment from the dredging project will be quickly removed from the water and will not linger in the water for an extended period of time. Based on my decades of experience living in the area, I believe that Coastal Resources Commission should grant the Variance required for this dredging project.

Regards,


Bradley S. Johnson
6451 Shinnwood Rd
Wilmington, NC 28409
(910) 392-0049

JOHN H. ANDERSON, JR.
6424 SHINN CREEK LANE
WILMINGTON, NORTH CAROLINA 28409

December 26, 2019

Dear Coastal Resources Commission:

My name is John Anderson, and I live at 6424 Shinn Creek Lane. I have lived in Shinn Creek Estates since 2013. One of the primary attributes that drew our family to this wonderful neighborhood was the water access, and the beauty of living in a waterfront boating community. As a lifelong boater, I use the boat ramp and channel to access the ICW from our neighborhood on a weekly basis year-round. Having this boat access is one of our neighborhood's features that enhances property values and makes our community unique. However, even in the 6 years that I have lived here, there has been a considerable change in the navigable channel through what is known as "the S-turn." Storms have caused the S-turn to fill in significantly. It has gotten to the point that I can no longer navigate the channel at low tide whatsoever, which cuts off my access to the property from the east using the riparian rights associated with the HOA. Without some solution, over time the S-turn will fill in completely, leaving us with no access at all by water.

Our HOA's permit request to dredge a relatively small footprint within the area known as the S-turn is our only way to preserve the water access associated with our neighborhood. Riparian access that has always existed for our waterfront community. Without dredging in this small area, the channel from our neighborhood to the ICW will eventually close off completely. The historical channel will disappear, and we will be cut off from navigable waters. From there, property values drop and our desirable neighborhood will lose one of the valuable features that makes it so unique – being able to live and boat on the waters of our coastal community.

We are conscious of the fact that our permit proposal will have some (limited) impact on nursery areas that the CRC is tasked with protecting. We too want to protect our coastal watersheds, for without them, we would lose the beautiful estuaries that make life at the coast so rewarding. We will work tirelessly to make sure that our dredging is done in the most responsible, environmentally conscience manner to minimize adverse impacts to this area. As a property owner and boater, I respectfully request that the CRC grant our HOA a variance to allow dredging of the S-turn so we can maintain a navigable channel to our very unique waterfront community. Thank you for your consideration.

Very truly yours,


John H. Anderson, Jr.

SWEENEY – HENDERSON
6432 SHINN CREEK LANE WILMINGTON, NC 28409-2153

December 28th, 2019

To: Coastal Resources Commission
Division of Coastal Management
400 Commerce Ave.
Morehead City, NC 28557

Re: Variance Request
Shinn Creek Estates HOA

Dear Commission Members,

We are writing in favor of the variance request by Shinn Creek Estates HOA for the dredging.

We purchased our property at Shinn Creek in 1997. The previous owner kept the area 'dredged' by pulling a box spring weighted with cinder blocks around through all the channels. It is still in the front yard buried under probably 3' of sand.

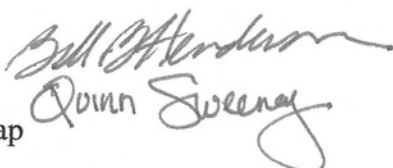
We have lived on the water at Shinn Creek for 21 years. In the late 1990's we renewed the CAMA permit to dredge the "A" portion of the channel. In the 20+ years we have been here, we have seen significant increases in the sedimentation. Initially the "S" curve always kept about 24" of water in it at low tide. You could always get a small boat out, except for special lunar events. (My '98 whaler draws 9"; with the motor drawing about 18". The downstream section of the dredging request ("B") parallel to the ICWW was always 30" deep at low tide. The 'lake' in front of our house had about 6' or water at mid/hightide and was large enough to give sailing lessons making several tacks in a sunfish.

With the water being deeper in front of our house, at the "S" and parallel to the ICWW downstream there was a wonderful water flow. This made a great flushing action for the vibrant aquatic nursery area. It always had water, allowing the smallest of animals to live in the wet grasses through all tide cycles. This fact was attested to by the birds' daily smorgasbord. Now we rarely have large bird feedings. The 'thru area' flushing action is gone and with it the ability to eat shellfish from our front yard. The area has been closed for the past 2 years to shell fishing. Not what I would call a healthy primary nursery!

The Shinn basin has a permit for our section "A" and downstream. It does not make sense to have a non-dredged portion between two permitted dredge areas. This exacerbates the shoaling, limits fishes' ability to use the area as a nursery and changes the historical use of the basin and channels. Boating is important to Wilmington's character and to the Shinn Creek area. Historically the water levels have always been maintained by dredging or another method. By justly granting this request for variance the dredging will not only help the water flow and wildlife habitat, but will also keep Shinn's historic boating community alive.

Please grant their request for a variance. Thank you

Sincerely,
Bill Henderson
Quinn Sweeney
Enclosure: area map



Bill Henderson
Quinn Sweeney



SAMUEL H. MACRAE
MACRAE LAW FIRM, PLLC
ATTORNEY AT LAW
307 N. 5TH STREET
WILMINGTON, NORTH CAROLINA 28401

SAMUEL H. MACRAE
SAMUELM@MACRAELAWFIRM.COM

TELEPHONE: (910) 254-4754
FAX: (910) 343-0776

December 31, 2019

North Carolina Coastal Resources Commission

Dear Ladies and Gentlemen:

My wife, Nicki and I have lived in Shinn Creek Estates since April of 2000. We decided to move to Shinn Creek Estates for the purpose of having access to the water. Having spent my entire life in eastern North Carolina, I greatly enjoy fishing, clamming, and other activities on the coastal waters of North Carolina. My son, who was born in 2000, became an avid outdoorsman and I was so happy to have the water access to the Intracoastal Waterway so that he could develop his skills. Such access has brought our family much happiness and enjoyment. However, over the years said access has declined as the channels have filled in with silt, especially in light of the multiple storms approaching Wilmington.

At this point, the access has been limited to mid to high tide. We currently have a dredge permit that takes our channel out of the boat basin. However, the small "S turn" connection between our channel and Inlet View is slowly becoming impassable.

My understanding is this "S turn" channel to the south was not an area of concern when the lots in Shinn Creek Estates were sold under the guise of "water access". I am also aware there used to be an old channel to the north that has long since filled in. You can go that route, but only at high tide.

As a result of the progression of limited access, it has had a substantial impact on our enjoyment of the neighborhood as well as potentially our property values.

We are not asking to have a brand new channel dug through existing marshlands. We are simply requesting the opportunity to make the "S turn" passable the majority if not all the time as was promised when we bought the property. I understand the "S turn" was designated as a primary nursery area, but this was never told to me when I bought the property.

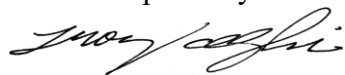
I would kindly ask that the Commission allow for the variance to dredge the "S turn". It is my understanding that prior to the filling in of the channel, there was a long history of prior use and custom. Thank you for your consideration.

Very truly yours,

Sam and Nicki MacRae

Review of the Shinn Creek proposed dredge project

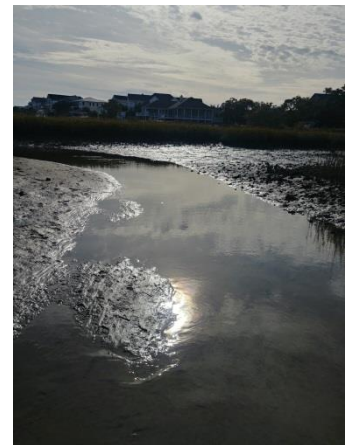
Prepared for
Ben Stephenson
Shinn Creek Estates Homeowners Association

Prepared by

Troy Alphin



General site review

This review is based on the documentation provided as part of the dredge permit request submitted to CAMA as well as diagrams of the proposed dredge activity, site images and direct observations based on a site visit. The site in question is a relatively small channel that connects the community boat ramp for Shinn Creek Estates to the Atlantic Intracoastal Waterway (ICWW) via a maintained channel. The Shinn Creek Estates boat basin receives input from a culvert that drains marsh channels north of the boat basin. Clearly the channel between the boat ramp and the adjacent maintained channel (note image below) is impassable even to small vessels around low tide. The portion of the channel between the boat basin and the area indicated as the “S-turn” in the photo below has relatively soft surface sediments 6”-10” thick in the area of the channel indicated for dredging. In some spots these sediments appeared dark suggesting hypoxic or anoxic conditions. The portion of the channel indicated as the “S-turn” is shallower than the rest of the channel being exposed at low tide (note image to the right). This area has more compacted sediments that seem to be dominated by fine sands and less organic material. The portion of the channel indicated as the “S-turn” seems to be the natural path of the tidal waters, though the elevation of this area is higher than either the area indicated as the maintained channel or the channel accessing the boat basin.





The channel from the boat basin to the start of the “S-turn” is bordered on both sides by marsh grass, dominated by *Spartina alterniflora* (note proposed name change to *Sporobolus alterniflorus*). Oysters are largely absent from this portion of the site. Oyster resources are clearly evident along portions of the “S-turn” on both sides of the channel. These oyster reefs are relatively small forming patches and fringing reefs 1-2m wide and several meters long. Peak density of oysters on these reefs ranges from a few hundred to nearly a thousand per meter sq., though highly patchy with very few oysters on the out edges of the reefs. In addition to the oysters there are also several patches of the hard clams along the lower edges of the oyster reefs especially along the area where the “S-turn” meets the maintained channel as indicated in the figure 3 of the application documentation. In addition to oysters and hard clams, a number of other species were noted, including razor clams (*Tagelus* sp.), cross bar venus (*Venus* sp.), 2 specimens of horse conch (*Trilofusus* sp.), and a number of moon snails (*Neverita duplicate*). All of these specimens were outside of the proposed dredge area along the sandflats adjacent to the maintained channel.

Historically the channel from the boat basin to the maintained channel was more or less straight but through time conditions have changed and now the channel forms an “S-turn”. The original path of the channel (as shown in historic photos) is now covered by marsh grass and some amount of oyster resource.

After walking much of the channel from the boat ramp to the area of the maintained channel it is clear that without maintenance the channel will only be passable to small vessels around high tide. It is also clear that there is a qualitative difference between the benthic environments near the maintained channel and the channel that provides access to the Shinn Creek Estates boat basin. The channel accessing the boat ramp seems to be dominated by less consolidated sediments and more fine organic material in the channel leading to the boat basin. Without more detailed examinations (sediment studies, assessment of flow and biological assessment) it is difficult to provide specifics, however it is clear that the area near the maintained channel has more signs of benthic bivalve populations (as indicated by oyster reefs, hard clams and other species noted).

Following settlement, most benthic infaunal organisms tend to remain within a given area moving very little during their lifetimes. This makes them good indicators of general conditions within a given area. Dredging and excavation activities in shallow estuarine systems impact the benthic community in multiple ways; 1) direct impact from removal, 2) burial of organisms immediately adjacent to the dredge activity (due to sediment rejection or loss), 3) impacts related to resuspension of material, during the active dredging process, and 4) burial due to deposition of spoil material. In estuarine systems responses to and rates of recovery from dredge activities vary based on a number of factors including background levels of disturbance, timing of dredge activity, and scale of dredge activity. In many cases the time to recovery is based on the background disturbance regime of the area and the life history characteristics of the dominant organisms and the scale of sediment removal. In general, recovery of benthic organisms in dredge sites is through recruitment of larvae supplied from adjacent habitats and/or immigration of adults or sub-adults from adjacent undisturbed habitats. One of the key factors in limiting impacts to the benthic community is keeping that area of disturbance small.

After making a site visit, reviewing the proposed plans, and the water quality report, there are several important features that bear noting. First, as noted previously, the portion of the channel leading directly to the boat basin seems qualitatively different from the rest of the general area. Without further investigation it is difficult to pinpoint the specific issue but this could be due to reduced flow and exchange with the waterway during periods of low tide. There may also be periods of declining water quality and sagging dissolved oxygen, at least during portions of the year as noted in the water quality report. Secondly, the historical path of the channel is inaccessible due to the accumulation of sediments and the subsequent development of marsh habitat complexes. The reestablishment of the historic boat channel would be problematic at best, as this would require the removal of portions of the salt marsh and the associated biota. Due to sediment accumulation and the establishment of marsh plant communities, this area has a

higher elevation than the currently utilized channel and may require the removal of more sediment, creating greater disturbance to the overall area. Thirdly, the proposed enhancement of the target area with the addition of living shorelines (oyster reefs) could enhance the ecosystem services of the area and provide additional settlement habitat for oysters and other bivalves as well as habitat for juvenile nekton. This addition could increase the overall nursery function of this small channel. Finally, the areas outside the proposed dredge area contain natural communities that could act as source populations to colonize newly established living shoreline habitats. I believe that if the foot print of the dredge activity is small, potential impacts to the surrounding area can be reduced. The addition of oyster reefs along portions of the shoreline in conjunction with the increased tidal exchange could greatly improve the ecosystem function of this small channel. Increased tidal exchange may be the key to enhancing the ecosystem services of this small channel. The connection of the channel accessing the boat basin to the adjacent waterway throughout the tidal cycle will increase tidal exchange and should improve water quality by reducing the potential for D.O. sags, assuming other factors remain consistent. As currently proposed the dredging of the channel connecting the boat basin at Shinn Creek Estates to the maintained channel via the “S-turn” would create less disturbance to the surrounding habits than dredging through the historic path of the channel, would avoid the actual direct impact to marsh habitat and provide additional tidal exchange to support the ecosystem function of this small estuarine channel. Some amount of monitoring of the affected area and the adjacent habitats could help determine the extent of ecosystem improvements.

Useful literature

Below are a few articles related to impacts of disturbance on dredging activities, recovery periods, and community responses. This list is intended to provide a primer for further evaluation and is in no way an exhaustive list.

- Bolkovic, D.M.. 2010. Response of tidal creek fish communities to dredging and coastal development pressures in a shallow-water estuary. *Estuaries and Coasts*. Published online Aug 2010. DOI 10.1007/s12237-010-9334-x.
- Johnston, S.A.. 1981. Estuarine dredge and fill activities: a review of impacts. *Environmental Management*. Vol5(5) pp427-440.
- Jones, A.R.. 1986. The Effects of dredging and spoil disposal on macrobenthos, Hawesbury Estuary, N.S.W.. *Mar. Pol. Bull.* Vol 17(1) p17-20.
- Newell, R.C., L.J. Seiderer, and D.R. Hitchcock. 1998. The impact of dredging works in coastal waters: a review of the sensitivity to disturbance and subsequent recovery of biological resources on the sea bed. *Oceanography and Marine Biology: an Annual Review*. 36 pp127-178.
- van Dolah, R.F., C.R. Calder and D.M. Knott. 1984. Effects of dredging and open-water disposal on benthic macroinvertebrates in a South Carolina estuary. *Estuaries*. Vol. 7 (1) pp28-37.
- Whomersley, P., M. Huxham, M. Schratzberger, J. Augley, and D. Ridland. 2010. Response of

- ntertidal macrofauna to multiple disturbance types and intensities- An experimental approach. *Marine Environmental Research*. 69. Pp. 297-308.
- Wilber, D.H. and D.G. Clarke. 2001. Biological effects of suspended sediments: A review of suspended sediment impacts on fish and shellfish with relation to dredging activities in estuaries. *North American J. of Fish. Mang.* 21. Pp 855-875.

Troy Alphin

(a) Professional Preparation:

M.S., 1998 University of North Carolina at Wilmington (Marine Biology)

B.S., 1992 University of North Carolina at Wilmington (Marine Biology)

(b) Appointments:

2005-present: Research faculty, Department of Biology and Marine Biology, University of North Carolina Wilmington.

2002 appointed adjunct faculty, Department of Biological Sciences, University of North Carolina Wilmington.

1998: Senior Research Associate, Center for Marine Science, University of North Carolina Wilmington.

1993-1998: Research Associate, Department of Biological Sciences, University of North Carolina Wilmington.

1991-1993: Research Assistant, Department of Biological Sciences, University of North Carolina Wilmington.

(c) Select Publications and products:

Rutledge, K.M., **T. Alphin** and M.H. Posey. 2018. Fish utilization of created vs. natural oyster reefs (*Crassostrea virginica*). Estuaries and Coasts. <https://doi.org/10.1007/s12237-018-0433-4>

Hanke, M.H., M.H. Posey and **T. Alphin**. 2017. The influence of habitat characteristics on intertidal oyster *Crassostrea virginica* populations. Marine Ecology Progress Series **571**: 121-138.

Hanke, M.H., J.M. Hargrove, **T. Alphin**, and M. Posey. 2015. Oyster Utilization and host variation of the oyster pea crab (*Zaops ostreum*). Journal of Shellfish Research **34** (2)p. 281-287.

Harwell, H., M. Posey and **T. Alphin**. 2011. Landscape aspects of oyster reefs: effects of fragmentation on habitat utilization Journal of Experimental Marine Biology and Ecology. Submitted to Journal of Experimental Marine Biology and Ecology 409: 30-41.

Carnegie, R., N.A. Stokes, C. Audemard, M. Bishop, A.E. Wilbur, **T.D. Alphin**, M.H. Posey, C.H. Peterson and E.M. Burreson. 2008. Strong seasonality of *Bonamia* sp. Infection and induced *Crassostrea ariakensis* mortality in Bogue and Masonboro Sounds, North Carolina, USA. Journal of Invertebrate Pathology. 98: 335-343.

Hackney, C.T., Avery, G.B. Leonard, L.A., Posey M., and **Alphin T.** 2007. Biological, chemical, and physical characteristics of tidal freshwater swamp forests of the lower Cape Fear River/Estuary, North Carolina, Pages 183-221. In: Conner, W.H., T.W. Doyle, and K.W. Krauss, eds. Ecology of Tidal Freshwater Forested Wetlands in the Southeastern United States; Springer, Dordrecht, The Netherlands

Croft, A. L., L.A. Leonard, **T.D. Alphin**, L.C. Cahoon, and M.H. Posey. 2006. The effects of thin layer sand renourishment on tidal marsh processes: Masonboro Island, North Carolina. Estuaries and Coasts 29 (5) p. 737-750.

Posey, M.H., **T.D. Alphin** and L. B. Cahoon. 2006. Benthic community responses to nutrient enrichment and predator exclusion: influence of background nutrient concentrations and interactive effects. J. Exp. Mar. Biol. Ecol. 330: 105-118.

Nelson, K.A., L.A. Leonard, M.H. Posey, **T.D. Alphin**, and M.A. Mallin. 2004. Transplanted

- Oyster (*Crassostrea virginica*) beds as self-sustaining mechanisms for water quality improvement in small tidal creeks. *J. of Exp. Mar. Bio. and Ecology*. 298 (2004) 347-368.
- Cressman, K., M.H. Posey, M.A. Mallin, **T.D. Alphin**, and L.P. Leonard. 2003. Effects of oyster reefs on water quality in a tidal creek estuary. *Journal Shellfish Research*. Vol. 22(3) 753-762.
- Posey, M. and **T. Alphin**. 2002. Resilience and stability in an offshore benthic community: response to sediment borrow activities and hurricane disturbance. *Journal of Coastal Research* 18: 685-697.
- Alphin, T.** and M. Posey. 2000. Long-term trends in vegetation dominance and infaunal community composition in created marshes. *Wetland Restoration and Management*. 8 (5): 317-325.
- Posey, Martin H., **T. Alphin**, H. Harwell, and B. Allen. 2005. Importance of low salinity areas for juvenile blue crab, *Callinectes sapidus*(Rathbun), in river dominated estuaries of Southeastern United States. *J. of Exp. Mar. Bio. and Ecology*. 319:81-100.
- Hyland, J.L., W.L. Balthis, M.H. Posey, C.T. Hackney and **T.D. Alphin**. 2005. The soft-bottom Macrobenthos of North Carolina estuaries. *Estuaries*. 27 (3) p. 501-514.
- Burkholder, JoAnn, D. Eggleston, H. Glasgow, C. Brownie, R. Reed, G. Janowitz, M. Posey, G. Melia, C. Kinder, R. Corbett, D. Toms, **T. Alphin**, N. Deamer, and J. Springer. 2004. Comparative impacts of major hurricane seasons on the Neuse River and western Pamlico Sound ecosystems. *Proceeding for the National Academy of Sciences*. Vol 101:25 p.9292-9296.
- Posey, M.H., **T.D. Alphin**, D.L. Meyer and J.M. Johnson. 2003. Benthic communities of common reed *Phragmites australis* and marsh cordgrass *Spartina alterniflora* marshes in Chesapeake Bay, USA. *Marine Ecology Progress Series*. 261: 51-61.
- Mallin M, M. Posey, M. McIver, D.C. Parsons, S.H. Ensign and **T.D. Alphin**. 2002. Impacts and recovery from multiple hurricanes in a piedmont-coastal plain river system. *BioScience* 59: 999-1014.
- (d) Synergistic Activities:
Data tools: Design and maintain that NC shellfish Aquaculture Siting tool. This is a GIS based decision support tool providing public access to data on site characteristics for locating aquaculture operations. <http://uncw.edu/benthic/sitingtool/index.html>
 Designed and maintain the North Carolina Oyster spat monitoring Program. This is a citizen scientist based project with more than 200 volunteers since its establishment in 2007. All data collected is made available via a data visualization tool www.ncoystermonitoring.org
- (e) Curriculum development: Development of BIO 480 Field Studies in Belize this course complements with EVS 431, Designed and implemented Research Methods (BIO 484), focused on development of critical thinking skills through critique peer-reviewed literature and independent projects. Designed and implemented a special topics course on Benthic Ecology (BIO485), Designed and implemented an applied Learning lab (BIOL495) Student learn though hands on experience working in an active research lab.
- (f) State and Regional Service: member of the Oyster Steering cmt (2015-present), Executive cmt Cape Fear River Assemble (2017-2022), Shellfish Advisory cmt for the NCDMF (since 1998). BOD for East Coast Shellfish Research Institute, Strategic Habitat Development committee for NCFMC (2017-2020).
- (g) Collaborators & Other Affiliations (last 48 months): Susanne Bricker (NOAA), Jessie Jarvis (UNCW), Joal Ferrera (Longline inc.), Chuck Weirich(NCSU), David Cerina(CCC), Susanne

Brander(Univ Oregon), Elizabeth Darrow(UNCW), Brooks Avery(UNCW), Lawrence Cahoon (UNCW), Courtney Hackney(UNF), Jeffrey Hyland(EPA), Ray Grizzle(UNH), Patricia Kelley (UNCW), Tom Lankford(UNCW), Lynn Leonard(UNCW), Mark Luckenbach(VIMS), Michael Mallin(UNCW), David Meyer(NOAA), Martin Posey(UNCW), Richard Satterlie(UNCW)

(h) Student research advisees in the last 5 years: Ed Arb- Evaluating of critical habitats related to early juvenile blue crab distribution, Madison Lytle- evaluating of predation halos among natural, created and aquaculture structures, Alexis Marti- Long-term evaluating of benthic community trends in a river dominated estuary, Jacob Torok- Evaluation of position impacts on oyster performance among intensive aquaculture operations, Conor Murphy- Assessing habitat utilization of recreated marshes, Mary Grace Lemon-Assessment of particle removal by oysters, Marc Hanke;(Associate Advisor) Finfish utilization of oyster reef structure, Keith Walls- Geospatial techniques in marine science; application of a suitability model, James Hargrove- optimum biomass of shellfish aquaculture operations, Elliot Weston- ecosystem function of restored saltmarshes, Anne L. Markwith- Ecology of *Ostrea equestris* in North Carolina, Edward Wilgis- Impact of seeding created oyster reefs on reef development, Chuck Wilson- Structural characteristics of deep water oyster reefs in the Neuse River, Steve Artabane- Distance from channel as a modifier of oyster reef utilization.



12/30/19

Ben Stephenson
Shinn Creek Estates HOA
6433 Shinn Creek Lane
Wilmington, N.C. 28409

Re: LMG project work for CAMA permitting

Dear Ben,

As requested, I am summarizing the LMG efforts to obtain CAMA permitting for the proposed dredging project for the Shinn Creek HOA. As you know, we have been actively involved in this process since 2017. The primary challenge has been to develop a minimally impactful project that will enable the continued usability of the community's boat ramp facility and preserve historic boating access to the AIWW. The current open water access is limited to the upper stages of the tide cycle and is continuing to be diminished through sediment accumulation in the S-curve, which is the current non-vegetated connector between the prior-permitted/dredged Shinn Creek linear boat ramp channel and the permitted/dredged channel serving Inlet View. The formerly-permitted Shinn Creek dredging footprint had once led to the old run of the "Main Channel". Due to natural causes, the flow way had silted in at its eastern connection with the Main Channel and coastal wetlands now have become established across this connection. The remaining primary tidal connection is through the S-curve to the south connecting to the Inlet View channel and the AIWW.

In order to minimize impacts to resources (tidal marsh and oyster beds) we put together a plan to dredge through the S-curve bottle neck. After receiving input from the review agencies, we narrowed the bottom dredging width to 8'. The proposed breakwater structures on either side of the S-curve channel were also eliminated. The proposed depth for the project is -3' mean low water, which is the minimum usable depth for the community's small boat owners. The project's minimized plan avoids any impact to adjacent tidal marsh and oyster beds. In addition, the applicant is proposing to place an oyster shell substrate in open flats between existing oyster beds to provide for natural oyster spat attachment and an enhancement of the overall benthic habitat.

Another potential benefit of the proposed project is the enhancement of the upstream levels of dissolved oxygen (DO). The baseline water quality sampling and report produced by LMG clearly demonstrated the existing DO gradient from the open waters of the AIWW up to the boat ramp site with upstream locations not meeting the 5.0 mg/l state water quality standard.

It is anticipated that increased tidal flushing volumes resulting from the project will enhance the levels of DO in these upstream locations and the larger connecting marsh habitat.

In summary, it is our opinion that the minimized proposed dredging project will have minimal adverse environmental impacts and is the best solution in allowing boat owners reliable access to the AIWW and the preservation of this historic usage.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Morrison", with a long horizontal flourish extending to the right.

Steve Morrison
Environmental Consultant

STATE OF NORTH CAROLINA

COUNTY OF NEW HANOVER

AFFIDAVIT

BEN STEPHENSON, being first duly sworn, deposes and says:

1. I am over eighteen (18) years of age, and I am not suffering from any physical or mental disability which in any way impairs my ability to recall or state the facts set forth in this Affidavit.

2. Unless expressly indicated otherwise, the facts stated in this Affidavit are based on my own personal knowledge and experience; as to any facts stated on information and belief, such are stated based on information that I believe to be true and accurate.

3. I live at 6433 Shinn Creek Lane in Wilmington, North Carolina. Our home directly overlooks and is adjacent to the Shinn Creek Estates dock, boat ramp, and parking area. These facilities are owned and managed by the Shinn Creek Estates Homeowners Association for the benefit of all of the 37 home and land owners that make up the Shinn Creek Estates subdivision. These facilities provide the only access to navigable waters for all 37 owners.

4. Our family moved to Shinn Creek Estates in October of 2011. Our primary reason for moving to this location was the water access offered to all Shinn Creek Estates residents and the beautiful surroundings of the marsh and Intracoastal Waterway (ICW).

5. I have been an avid boater my entire life. We have owned two boats while living at Shinn Creek Estates, a 20' Carolina Skiff which we later traded in for a 24' Grady White bay boat. Both boats are similar to what most other boaters in the neighborhood launch from our boat ramp and are designed for shallow water access (Carolina Skiff – 8" draft, Grady White – 14" draft). Boats in Shinn Creek Estates range from 14'-24' with almost all being skiffs or modified hulls to best navigate shallower depths. Currently we have 21 boaters in Shinn Creek Estates who access our channel, with a majority of these being frequent users. There are also 3 other properties outside of Shinn Creek Estates who access this same channel, all of whom are boaters.

6. A majority of boaters using our water access have young children and are pleasure boaters who head to Masonboro Island and the surrounding area to enjoy some good wholesome fun. We also have some families who enjoy recreational inshore fishing. From April-October on any decent weather weekend or even weekday, you'll find boaters accessing our boat ramp and channel to the ICW. During prime season, in the summer and on weekends, we typically have anywhere from 3-10 boaters daily using our boat ramp and channel.

7. Unfortunately, we are dealing with a growing water access problem. In between Shinn Creek's dredged channel and the Inlet Views dredged channel is a curving shallow water passage, which we commonly refer to as the "S-turn" due to its shape. The S-turn began to take shape in the 1980's (due to a sand bar which formed at the end of Shinn Creek's straight channel). This area became much more difficult to navigate starting in the mid to late 1990's as a result of various hurricanes and other storms, and from sediment and silt buildup caused by the channel dredging work in the surrounding channels and the ICW. I personally have observed this occurring.

8. Shinn Creek's historic route was easily accessible by boats at low tide for many decades. It's why the original dredge permit issued for our channel by CAMA in 1982 stopped at this point because it was deeper water that didn't need any further dredge maintenance. Today we are experiencing an ever-growing water access crisis that affects not only our ability to boat but also the property values of all homes accessing this channel. Each year the depths in the S-turn are becoming shallower, more and more boaters are finding themselves either stuck in the shallow waters or unable to go out or come back to a safe harbor. We have also had numerous cases where families have been forced to ride out pop up summer storms because they could not get back to our docks because of the S-turn issue. We need help.

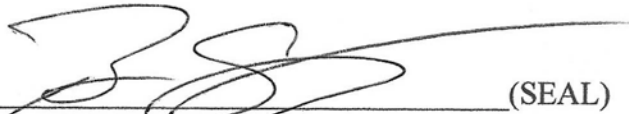
9. As you will see from some of the aerial photographs we have collected and included in our variance request package, at low tide the only possible route for access to the ICW and other navigable waters is through the S-turn area.

10. I personally have been looking into solutions on this matter for the past several years as a member of Shinn Creek Estates HOA Board. Our goal has always been to just re-establish our water access back to the ICW as was historically the case while minimizing the environmental impact. I have met multiple times with individuals representing CAMA, NC Division of Marine Fisheries, NC Department of Environmental Quality and The US Army Corps of Engineers regarding this project. The HOA retained the services of the Land Management Group to make sure that we were doing things the right way.

11. After several meetings and after receiving input from both the regulatory agencies and Land Management, we submitted a CAMA permit application seeking permission to dredge the S-turn area to allow all of us to regain basic access to the ICW and other navigable waters. After receiving valuable input from the agencies listed above, we revised our application to

further minimize any potential environmental impacts. While we understand why the Division of Coastal Management denied our revised CAMA permit application, we strongly believe that we have a unique situation here that is causing real hardships that are not of our making, and where we can accomplish this dredging in a way that allows these roughly 40 property owners to regain water access while being good stewards of the coastal waters and habitat we love so dearly.

This the 31st day of December, 2019.


BEN STEPHENSON (SEAL)

New Hanover COUNTY, NORTH CAROLINA

Sworn to (or affirmed) and subscribed before me this the 31 day of December, 2019.

Pamela L. Haven
Notary Public

My Commission Expires: 9/18/2024



NOTARY SEAL



Variance Request for: **Shinn Creek Estates HOA**

Project Location:

AIWW

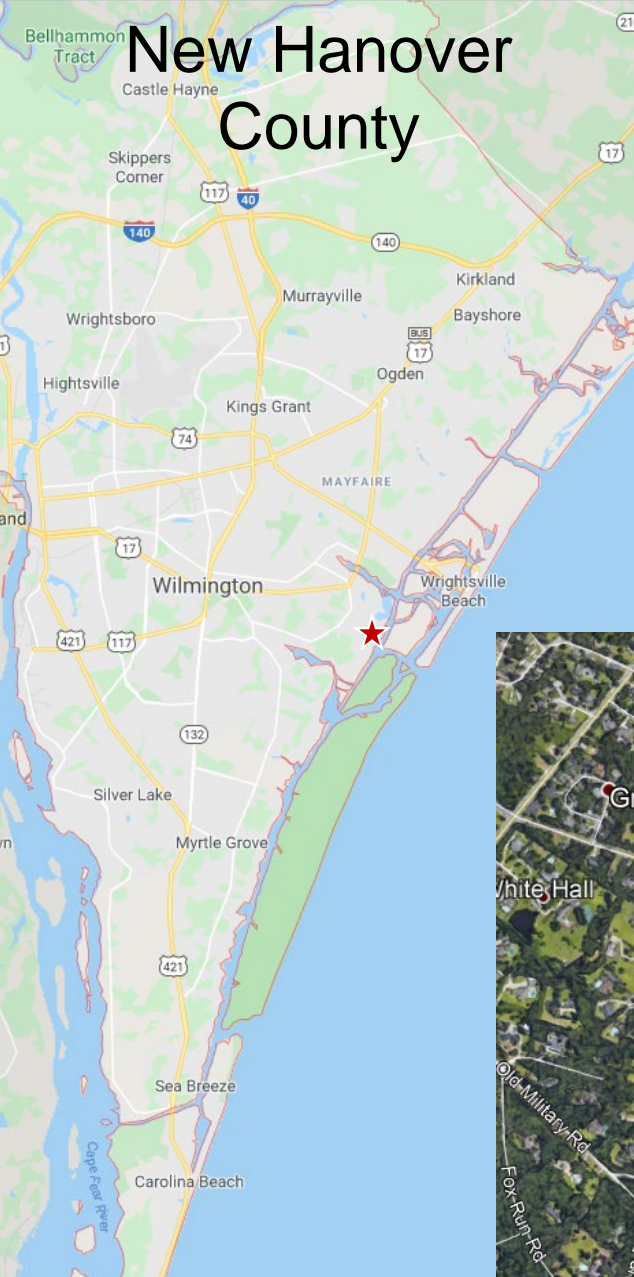
End of Shinn Creek Lane

Wilmington,

New Hanover County, NC

February 12, 2020





170
Photos Courtesy of Google Maps and Google Earth - September 2019

★ = End of Shinn Creek Lane

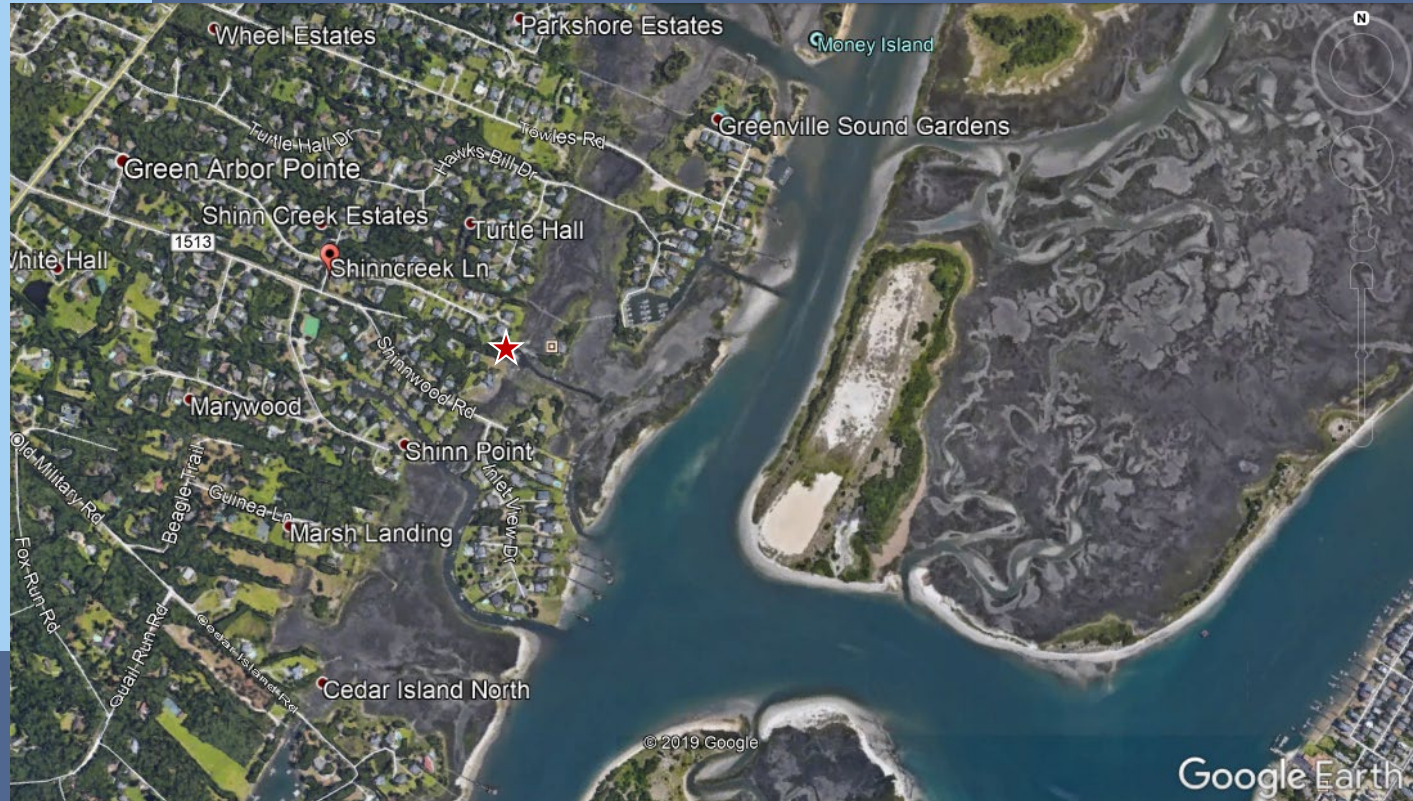


Photo Courtesy of Google Earth₁₇₁
September 2019



S-Channel
Area



Google 2020

Alternative Route
est. distance > 1,000'

Proposed Route
est. distance < 400'

North

AIWW

Google

S-Channel Area



Legend

- Maintenance Dredging Boundary - - - - -
- Spoil Disposal Location ▭

NOTES:

1. TAX PARCELS FROM NHC GIS.
2. 2016 AERIAL FROM NCONEMAP.
3. NOT A SURVEYED OR ENGINEERED DRAWING.
4. FOR ENVIRONMENTAL PERMITTING ONLY.

RECEIVED

APR 10 2019

DCM WILMINGTON, NC



LMG
LAND MANAGEMENT GROUP
A DAVEY COMPANY
3805 Wrightville Ave, Suite 15
Wilmington, North Carolina 28402
Telephone: 910-452-0001

Project:	Shinn Creek Estates	Date:	10/25/18	Revision Date:	4/10/19
Title:	Site Location and Plan View	Scale:	1"=200'	Job Number:	LMG17.342
Drawn By:	GSF	Sheet Number:	1 of 7		



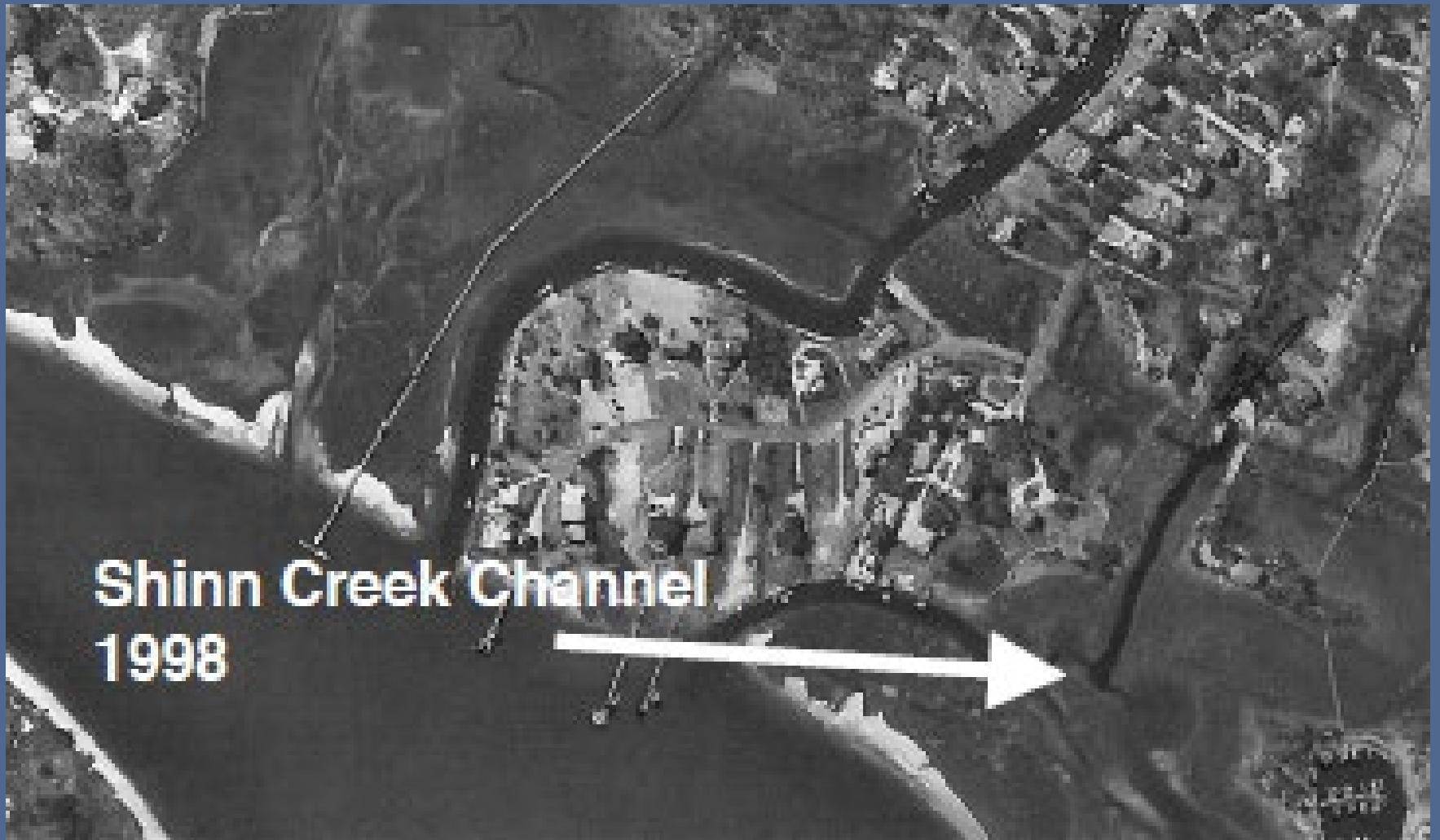


1966 Aerial Photography with project site indicated in yellow



1981 Aerial Photography with project site indicated in yellow





Shinn Creek Channel
1998



Shinn Creek Channel
2006

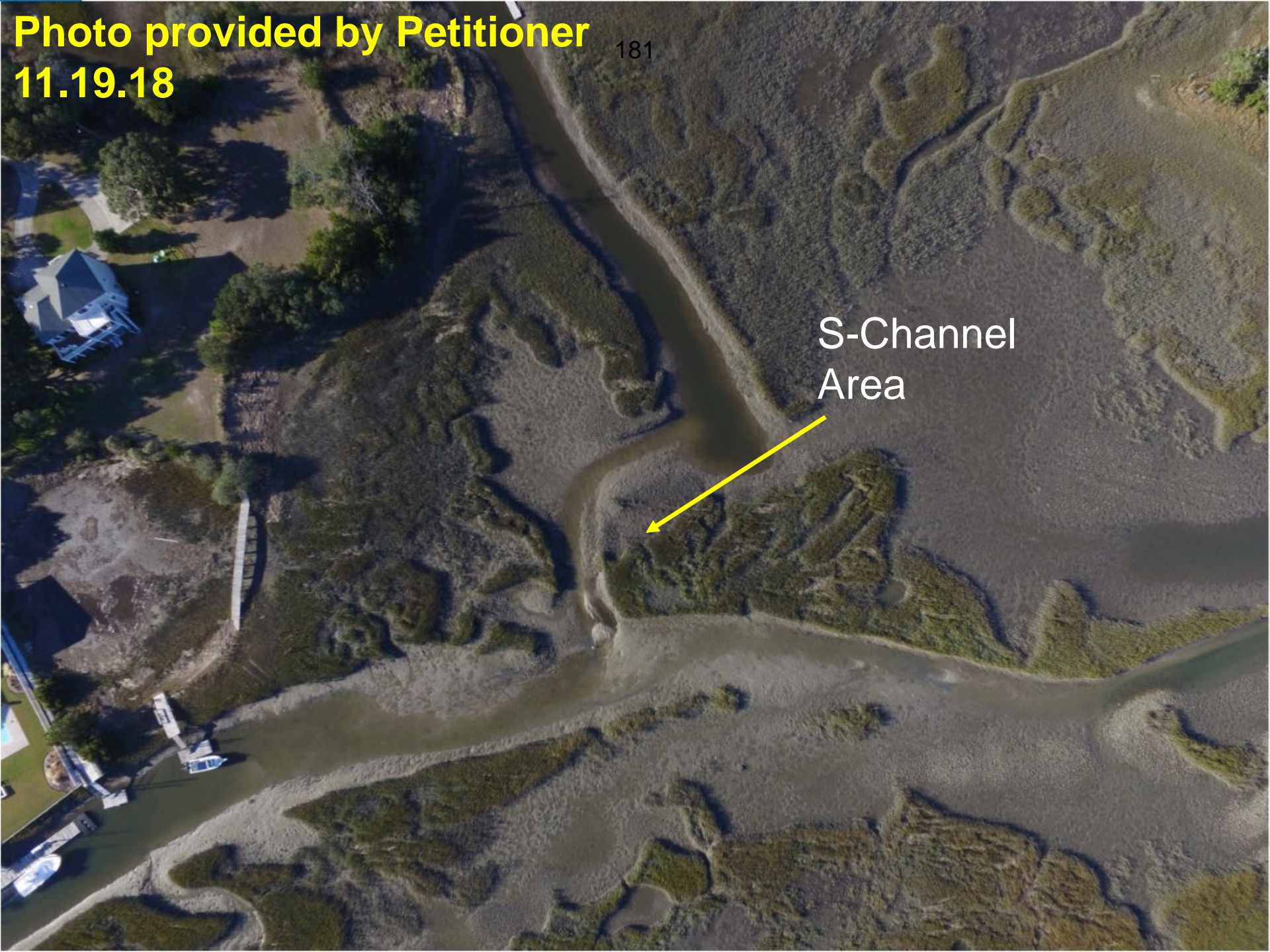


Shinn Creek Channel
2010

Photo provided by Petitioner
11.19.18

181

S-Channel
Area



February 12, 2020– Petition for Variance

DCM
Division of
Coastal Management



VARIANCE CRITERIA

15A NCAC 07J.0703(f)

To grant a variance, the Commission must affirmatively find each of the four factors listed in G.S. 113A-120.1(a).

- (1) that unnecessary hardships would result from strict application of the development rules, standards, or orders issued by the Commission;**
- (2) that such hardships result from conditions peculiar to the petitioner's property such as location, size, or topography;**
- (3) that such hardships did not result from actions taken by the petitioner; and**
- (4) that the requested variance is consistent with the spirit, purpose and intent of the Commission's rules, standards or orders; will secure the public safety and welfare; and will preserve substantial justice.**