NC COASTAL RESOURCES COMMISSION February 11-12, 2009 **Crystal Coast Civic Center** Morehead City, NC

The State Government Ethics Act (Chapter 138A of the General Statutes) and Executive Order No. 1 mandates that the Chair (1) remind members of their duty to avoid conflicts of interest or appearances of conflict, and (2) inquire as to whether any member knows of any known conflict of interest or appearance of conflict with respect to matters before the Commission. If any member knows of a conflict of interest or appearance of conflict, please so state when requested by the Chairman.

Wednesday, February 11th

1:00 COMMISSION CALL TO ORDER (Quads 3 & 4)

Roll Call •

PRESENTATIONS

- Terminal Groins Background; Use in Florida •
- South Carolina Hardened Structure Policy & Use of Terminal Groins
- Geomorphology of NC's Northern Inlets; Sediment Budgets; Sea Level Rise
- Geomorphology of NC's Southern Inlets
- Regulatory History of Hardened Structures Ban
- Panel Discussion

5:00 PUBLIC HEARINGS

- 15A NCAC 7H .0308(a)(2) Temporary Erosion Control Structures
- 15A NCAC 7H .1100 General Permit for the Construction of Bulkheads and the Placement of Riprap for Shoreline Protection in Estuarine and Public Trust Waters and Ocean Hazard Areas
- 15A NCAC 7H .1200 General Permit for the Construction of Piers: Docks: and Boat Houses in Estuarine and Public Trust • Waters and Ocean Hazard Areas
- 6:00 Executive Committee Meeting (Quads 3 & 4) Bob Emory, Chair Thursday, February 12th 8:30 **COMMISSION CALL TO ORDER** Bob Emory, Chair Roll Call • Approval of November 19-20, 2008 Meeting Minutes • Executive Secretary's Report Jim Gregson • Chairman's Comments **Bob Emory** • **CRAC** Report Dara Royal **ACTION ITEMS Bob Emory** Maureen Will Town of Emerald Isle Land Use Plan Amendment (CRC-09-02) • Town of Manteo Land Use Plan Amendment (CRC-09-03) Charlan Owens • 9:30 VARIANCES Young - (CRC-VR-08-01) New Hanover Co., 30' buffer Ward Zimmerman • NC DOT (CRC-VR-08-55) Dare Co., Sand compatibility Ward Zimmerman • NC Seafood Industrial Park Authority (CRC-VR-08-56) Dare Co., Pier 1/4 rule Christine Goebel • Rouse - (CRC-VR-08-57) Onslow Co., Pier 1/4 rule Jill Weese •

Dr. Robert Dean, P.E. University of Florida Dr. Paul Gayes, Director Center for Marine and Wetland Studies, Coastal Carolina University Dr. Stanley Riggs East Carolina University Dr. William Cleary University of NC - Wilmington Steve Benton.

CRC Science Panel on **Coastal Hazards**

Bob Emory, Chair

- Bald Head Island Ltd. LLC (CRC-VR-09-01) Brunswick Co., 30' buffer
- Town of Oak Island (CRC-VR-09-02) 30' Buffer and oceanfront setback

12:00 PUBLIC INPUT AND COMMENT

12:15 LUNCH

1:30 PRESENTATIONS

- CRC & CRAC Needs Assessment
- NC Coastal Reserve Research (*CRC-09-04*)
- CRC Science Panel Inlet Hazard Area Recommendations
- Proposed Development Policies for Revised Inlet Hazard Areas (CRC-09-05)
- Teleconferencing and Other Meeting Technologies (*CRC-09-06*)
- Summary of BIMP Public Meetings (CRC-09-07)
- Review and Progress on CRC Priorities (CRC-09-08)

OLD/NEW BUSINESS

• Future Agenda Items

5:00 ADJOURNMENT

NEXT MEETING:

April 29-30, 2009 Sea Trail Resort & Convention Center Sunset Beach, NC



Whitney Jenkins Dr. John Fear Dr. Margery Overton, Chair CRC Science Panel Dr. Jeff Warren Josh Shepherd Steve Underwood Mike Lopazanski

Bob Emory

Ward Zimmerman Christine Goebel

NC COASTAL RESOURCES COMMISSION (CRC) November 19-20, 2008 Crystal Coast Civic Center Morehead City, NC

Present CRC Members

Bob Emory, Chairman Joan Weld, Vice-Chair

James Leutze (present 11/20) Chuck Bissette Charles Elam David Webster Jerry Old Bill Peele (arrived 3:25 11/19) Wayland Sermons (arrived 3:35 11/19) Ed Mitchell Bob Wilson (present 11/20) Lee Wynns Veronica Carter

Present Coastal Resources Advisory Council Members (CRAC)

Dara Royal, Chair Penny Tysinger, Co-Chair

Bob Shupe Tim Tabak Gary McGee Dave Weaver Christine Mele Bill Morrison Lester Simpson Joe Beck Webb Fuller J. Michael Moore Frank Rush Rhett White Bert Banks Judy Hills Eddy Davis Gary Greene Spencer Rogers Joe Lassiter Lee Padrick Michelle Duval (for Anne Deaton) Al Hodge Phil Harris Travis Marshall

Present Attorney General's Office Members

Jennie Hauser Christine Goebel Amanda Little Ward Zimmerman

CALL TO ORDER/ROLL CALL

Chairman Emory called the meeting to order and reminded Commissioners of the need to state any conflicts due to Executive Order Number One and also the State Government Ethics Act.

Angela Willis called the roll and each Commissioner in attendance reported no conflicts. Melvin Shepard and Renee Cahoon were absent. Based upon this roll call, Chairman Emory declared a quorum.

VARIANCE REQUEST

Town of Ocean Isle Beach Variance Request (CRC-VR-08-51) was withdrawn.

Egland (CRC-VR-08-48) N. Topsail Beach, Oceanfront Setback

Amanda Little of the Attorney General's Office represented Staff. Ms. Little stated the Petitioner applied for a CAMA minor permit to construct a single-family dwelling with a footprint of 1,656 square feet at 1090 New River Inlet Road in North Topsail Beach, Onslow County. Currently there is no development at this location. Most of the proposed development is seaward of the applicable ocean erosion setback. Petitioner applied for this variance seeking relief from strict application of 15A NCAC 07H .0306(a) and .0309(b).

Ms. Little reviewed the stipulated facts of this variance request. Ms. Little noted there is a sixty foot setback on the survey provided by Petitioner and this is improper as the setback at this location is ninety feet from the first line of stable, natural vegetation. She further stated that Staff and Petitioners do not agree on any of the four criteria which must be met in order to grant the variance.

Leland Egland, Petitioner, represented himself. Mr. Egland reviewed the stipulated facts which he contends supports the granting of this variance. Mr. Egland stated that the proposed residence would be ten feet farther away from the CAMA line than the lot directly adjacent. He further stated there were several surveys done initially. At first it was done at ninety feet and then for sixty feet as instructed. Everyone had agreed upon sixty feet, everyone permitted sixty feet and then construction began.

Joan Weld made a motion to support Staff's position that strict application of the applicable development rules, standards, or orders issued by the Commission do not cause the Petitioner unnecessary hardships. David Webster seconded the motion. The motion passed with seven votes (Wynns, Sermons, Old, Peele, Weld, Webster, Carter) and three opposed (Elam, Bissette, Mitchell).

Joan Weld made a motion to support Staff's position that hardships do not result from conditions peculiar to Petitioner's property. David Webster seconded the motion. The motion passed with six votes (Wynns, Sermons, Peele, Weld, Webster, Carter) and four opposed (Elam, Bissette, Old, Mitchell). Joan Weld made a motion to support Staff's position that hardships result from actions taken by the Petitioner. David Webster seconded the motion. The motion passed with six votes (Wynns, Sermons, Peele, Weld, Webster, Carter) and four opposed (Elam, Bissette, Old, Mitchell).

Joan Weld made a motion to support Staff's position that the variance will not be consistent with the spirit, purpose or intent of the rules, standards or orders issued by the Commission; will not secure the public safety and welfare; and will not preserve substantial justice. David Webster seconded the motion. The motion passed with six votes (Wynns, Sermons, Peele, Weld, Webster, Carter) and four opposed (Elam, Bissette, Old, Mitchell).

The variance was denied.

<u>Bogue Watch, LLC – (CRC-VR 08-52) Carteret County, New Dredging in PNA</u> Christine Goebel of the Attorney General's Office represented Staff. Ms. Goebel introduced Mack Paul and Charlotte Mitchell, counsel for Petitioners. Ms. Goebel stated that this property is adjacent to Bogue Sound and Sanders Creek and is located on the south side of NC 24 in the Newport area of Carteret County. The proposed development is inconsistent with the Commission's specific use standards for estuarine shorelines which require that navigation channels avoid areas that are designated as primary nursery areas by the Marine Fisheries Commission. Petitioner seeks a variance primarily from CRC rule 15A NCAC 07H .0208(b)(1) in order to dredge a navigation channel.

Ms. Goebel reviewed the stipulated facts for this variance request and stated that the Petitioner is proposing a 287-lot subdivision on 195 acres and a CAMA Major permit was issued for the infrastructure for the subdivision. In 2007, the Petitioner requested a Major modification to add a nine slip upland basin community docking facility. During review, DCM determined the dredging from the endpoint of the channel to the proposed basin would be new dredging and not maintenance dredging. Ms. Goebel further stated that Staff and Petitioners agree on all four variance criteria.

Mack Paul of K&L Gates represented Petitioner. Mr. Paul stated that Petitioners do agree with Staff on the four criteria. He further stated the designation of PNA to this portion of Sanders Creek and the erosion that occurred has caused the need for this variance in triggering the rule for new channels.

Wayland Sermons made a motion to support Staff's position that strict application of the applicable development rules, standards or orders issued by the Commission cause the Petitioner unnecessary hardships. Jerry Old seconded the motion. The motion passed unanimously (Elam, Wynns, Sermons, Bissette, Old, Peele, Weld, Webster, Mitchell, Carter).

Wayland Sermons made a motion to support Staff's position that hardships result from conditions which are peculiar to the property. Jerry Old seconded the motion. The motion passed unanimously (Elam, Wynns, Sermons, Bissette, Old, Peele, Weld, Webster, Mitchell, Carter).

Wayland Sermons made a motion to support Staff's position that hardships do not result from actions taken by the Petitioner. David Webster seconded the motion. The motion passed unanimously (Elam, Wynns, Sermons, Bissette, Old, Peele, Weld, Webster, Mitchell, Carter).

Chuck Bissette made a motion to support Staff's position that the variance will be consistent with the spirit, purpose and intent of the rules, standards or orders issued by the Commission; secure public safety and welfare; and preserve substantial justice. Wayland Sermons seconded the motion. The motion passed unanimously (Elam, Wynns, Sermons, Bissette, Old, Peele, Weld, Webster, Mitchell, Carter).

The variance was granted.

MINUTES

Charles Elam made a motion to approve the minutes of the September 2008 CRC meeting. Jerry Old seconded the motion. The motion passed unanimously (Weld, Leutze, Bissette, Elam, Webster, Old, Peele, Sermons, Mitchell, Wilson, Wynns, Carter).

Bill Peele made a motion to approve the minutes of the October 9, 2008 CRC conference call. Jerry Old seconded the motion. The motion passed unanimously (Weld, Leutze, Bissette, Elam, Webster, Old, Peele, Sermons, Mitchell, Wilson, Wynns, Carter).

EXECUTIVE SECRETARY'S REPORT

Jim Gregson, DCM Director, read the Ethics Commission's findings of conflict into the record for Veronica Carter, Ed Mitchell, and David Webster.

Dr. David Webster's letter dated May 19, 2008 from Perry Newsome, Executive Director of the State Ethics Commission states, "I did not find an actual conflict of interest, however I did find the potential for a conflict of interest. Dr. Webster is an Associate Dean in the College of Arts and Sciences at UNC Wilmington and will fill the roll of a marine ecology representative on the Commission. In addition he is a board member of the NC Coastal Land Trust and provides environmental consulting in the area of monitoring endangered species. In light of these interests, Dr. Webster should exercise appropriate caution should any of these entities come before the Commission for official action or otherwise seek to conduct business with the Commission. This will include recusing himself to the extent that these interests would influence or reasonably appear to influence his actions."

James E. Mitchell, Jr.'s letter dated September 22, 2008 from Perry Newsome, Executive Director of the State Ethics Commission states, "I did not find an actual conflict of interest, however I did find the potential for a conflict of interest. Mr. Mitchell fills the roll of a coastal land development representative on the Commission. He is the president of River Dunes Corporation, a real estate development company, and he owns real estate located on the coast. As such, he has the potential for a conflict of interest. In light of this interest, Mr. Mitchell should exercise appropriate caution should his properties or its surrounding areas come before the Commission for official action. This would include recusing himself to the extent that this interest could influence or reasonably appear to influence his actions." Veronica Carter's letter dated September 22, 2008 from Perry Newsome, Executive Director of the State Ethics Commission states, "I did not find an actual conflict of interest, however I did find the potential for a conflict of interest. Ms. Carter fills the roll of an at-large member on the Commission. She owns real estate located on the coast. As such, she has the potential for a conflict of interest. In addition, she is on the board of directors of the NC Coastal Federation, a non-profit organization focused on protecting and restoring North Carolina's coast. In light of these interests, Ms. Carter should exercise appropriate caution should her properties or the Federation come before the Commission for official action. This would include recusing herself to the extent that these interests would influence or could reasonably appear to influence her actions."

Jim Gregson gave the following report.

Sandbags

At the last CRC meeting I informed you that 21 letters had been mailed to property owners requesting removal of sandbag structures that have exceeded their time limits. Nearly all of these individuals have refused delivery of the certified letter sent by DCM. We are working with the property owners' legal counsel to overcome this obstacle in the enforcement process. We do expect the majority of them will submit variance requests.

CELCP

The NC Coastal and Estuarine Land Conservation Program (CELCP) successfully closed its first deal on August 29th. The Division secured a \$3,000,000 CELCP grant that was matched with state funds to purchase 6,449 acres of land along the Chowan River in Gates County. The land is being added to the state's gamelands, and will be managed by the NC Wildlife Resources Commission. The Division submitted another CELCP application in July to support the purchase of approximately 270 acres on Eagles Island in the Cape Fear River, and will find out the result of that application in the coming months.

Coastal Reserve Grants

- The Clean Water Management Trust Fund has awarded DCM \$304,000 for phase 2 of a multi-year hydrologic restoration project at the Emily and Richardson Preyer Buckridge Coastal Reserve site. The funds will be used to purchase and install water control structures to prevent saltwater intrusion into a priority conservation area.
- The National Heritage Trust Fund Board awarded DCM \$85,000 toward the purchase of 16 acres in Kitty Hawk Woods. DCM has an application submitted with the US Fish and Wildlife Service Coastal Wetlands Grant Program for \$285,500 for the balance of the purchase. We should hear something by December.
- DCM has also received a grant from the Division of Water Resources in the amount of \$89,904 for debris removal and estuarine habitat restoration on the Permuda Island Coastal Reserve.

Coastal Training Program Update

On September 23 the Coastal Training Program hosted a Septic System workshop for realtors at Oriental town hall. Twenty-one realtors attended the training and received four continuing education credits.

2009 CRC Meeting Schedule

February 11-13: Morehead City, Crystal Coast Civic Center April 29-May 1: Sunset Beach, Sea Trail June 24-26: Greenville, City Hotel and Bistro August 26-28: Raleigh, Clarion State Capital Hotel October 28-30: Atlantic Beach, Sheraton Atlantic Beach

Staff News

Jonathan Howell has accepted the position of assistant major permits coordinator in the major permits unit at the Morehead City Office. Jonathan will begin his new job on Dec. 1st.

CHAIRMAN'S COMMENTS

Chairman Emory stated that there is a presentation today regarding the budget constraints. This presentation will show the challenges we are facing and how it will affect how we operate. We will also hear some recommendations from Scott Geis and Dr. Kalo that will lay some major priorities for us to work on for the next few years.

CRAC REPORT

Dara Royal gave the CRAC report. The CRC took the following actions:

The CRAC unanimously recommends that the CRC approve the Town of Carolina Beach's land use plan amendment. The CRC voted unanimously to approve the Town of Carolina Beach's land use plan amendment (Elam, Wynns, Sermons, Wilson, Bissette, Old, Weld, Webster, Mitchell, Carter, Leutze, Peele).

The CRAC unanimously recommends that the Town of Pine Knoll Shores land use plane be certified by the CRC. The CRC votes unanimously to certify the Town of Pine Knoll Shores land use plan (Elam, Wynns, Sermons, Wilson, Bissette, Old, Peele, Weld, Webster, Mitchell, Carter, Leutze).

ACTION ITEMS

Adopt 15A NCAC 07H .1401, .1402, .1404, .1405 GP for Construction of Groins in Estuarine & Public Trust Waters

Charles Elam made a motion to adopt 15A NCAC 07H .1401, .1402, .1404, and .1405. Bob Wilson seconded the motion. The motion passed unanimously (Elam, Wynns, Sermons, Wilson, Bissette, Old, Peele, Weld, Webster, Mitchell, Carter, Leutze).

Adopt 15A NCAC 07H .2101, .2102, .2104, .2105 GP for Marsh Enhancement Breakwaters

Joan Weld made a motion to adopt 15A NCAC 07H .2101, .2102, .2104, and .2105. Wayland Sermons seconded the motion. The motion passed unanimously (Elam, Wynns, Sermons, Wilson, Bissette, Old, Peele, Weld, Webster, Mitchell, Carter, Leutze).

Adopt 15A NCAC 07H .2401, .2402, .2404, .2405 GP for Placement of Riprap for Wetland Protection

Bill Peele made a motion to adopt 15A NCAC 07H .2401, .2402, .2404, and .2405. Ed Mitchell seconded the motion. The motion passed unanimously (Elam, Wynns, Sermons, Wilson, Bissette, Old, Peele, Weld, Webster, Mitchell, Carter, Leutze).

Adopt 15A NCAC 07J .0701, .0703 Variance Petitions

Wayland Sermons made a motion to adopt 15A NCAC 07J .0701. Joan Weld seconded the motion. The motion passed unanimously (Elam, Wynns, Sermons, Wilson, Bissette, Old, Peele, Weld, Webster, Mitchell, Carter, Leutze).

Wayland Sermons made a motion to adopt 15A NCAC 07J .0703. Jerry Old seconded the motion. The motion passed unanimously (Elam, Wynns, Sermons, Wilson, Bissette, Old, Peele, Weld, Webster, Mitchell, Carter, Leutze).

Adopt 15A NCAC 07M .0301, .0302, .0303, .0306, .0307 Shorefront Access Policies

Jerry Old made a motion to adopt 15A NCAC 07M .0301, .0302, .0303, .0306, and .0307. Joan Weld seconded the motion. The motion passed unanimously (Elam, Wynns, Sermons, Wilson, Bissette, Old, Peele, Weld, Webster, Mitchell, Carter, Leutze).

PRESENTATIONS

Joan Weld, Chair of the CRAC Nominating Committee, reported that pursuant to CAMA the CRC is responsible for 12 appointments to the CRAC. Initial two year terms for six members expired in December 2007 and reappointments should have been done at that time. The nominating committee is leaving it to the Commission as to when to begin these new terms. All of the members whose terms have expired have expressed their interest in being reappointed except for the local health director who has asked to be replaced. Joan Weld, Chuck Bissette and Dara Royal made up the nominating committee and are recommending reappointments and replacements. The committee solicited nominations from local governments and received nominations for seven individuals, four of whom are incumbents. The committee used several criteria in its decision making including the current priorities of the CRC and CRAC, qualifications of the nominees, attendance and participation over the past two years, and geographic representation. The committee recommends the following: William Gardner, Jr. (Town of Edenton - Coastal Cities) reappoint for a four year term; J. Michael Moore (Town of Surf City – Coastal Cities) reappoint for a four year term; Frank Rush (Town of Emerald Isle – Coastal Cities) reappoint for a four year term; Rhett White (Town of Columbia - Coastal Cities) reappoint four year term; Jerry Parks (Elizabeth City – Local Health Director) appoint for a new two year term; and Tracy Skrabal (City of Wilmington – Marine Science and Technology) appointment for a new two year term. The nominating committee recommends beginning these terms December 2007.

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Joan Weld made a motion to accept the recommendations of the nominating committee. Charles Elam seconded the motion. The motion passed unanimously (Elam, Wynns, Sermons, Bissette, Old, Peele, Weld, Webster, Mitchell, Carter).

CRC/CRAC Meetings – Financial Constraints for 2009 Arthur Stadiem

Arthur Stadiem stated the budget problems have been all over the news and these are not just State problems, they are National as well. I will address the effects on Coastal Management's budget based on the constraints. Mr. Stadiem introduced Melissa Sebastian the accounts payable technician who helped get the figures together. The funding reductions were shown for state appropriated funds and receipts which total around \$310,000.00. Salaries, increases in legal expenses, and motorfleet expenses were shown.

The cost for CRC/CRAC meetings for the first two meetings in this fiscal year was discussed. The meeting in Raleigh had a total cost of about \$18,700. The meeting at Sunset Beach was a little under \$15,000. If you average the two together is it about \$16,800, there are six meetings scheduled for this fiscal year, so the total cost would be about \$100,000 for all of the meetings this year. We have proposed one, two and three-day meetings and found that the cost in Morehead City is less because our headquarters staff will not have to travel. The total cost of a one-day meeting in Morehead City is about \$8,000. If the meeting were held in another location, you could add \$1,000-1,500 to this amount based on our estimations. The two-day meeting held in Morehead City would cost about \$13,000. If it were held somewhere else you would add about \$2,000-\$2,500. The three-day meeting held in Morehead City would cost around \$20,500. If the meeting were held somewhere else you would increase this amount by \$3,000-\$4,000. (The CRC Executive Committee will meet by conference call to discuss the meeting format for future meetings to include a Wednesday/Thursday format, beginning earlier on Wednesday, meeting concurrently with CRAC, and Teleconferencing).

Overview of the Rachel Carson National Estuarine Research Reserve Paula Gillikin

Paula Gillikin showed a map of the ten sites of the Coastal Reserve including the four North Carolina National Estuarine Research Reserve sites. The Rachel Carson site is located in Beaufort across from the waterfront. It is approximately 2,600 acres and consists of five small islands. The average water depth around the Reserve is between three and six feet, however there are a couple of deep sloughs that are up to 20 feet deep on the south side of the Reserve.

There is evidence that Native Americans used Middle Marsh for shellfishing. The waters around the entire site have been used for centuries for commercial and recreational fishing as early as 1806. Shellfishing has been a traditional activity around the Reserve, however currently there is no shellfishing in the Reserve except for Middle Marsh because of the waste water outfall from the Town of Beaufort in Taylor's Creek. In 1915, drastic changes began happening to the property when the Army Corps of Engineers started dredging Taylor's Creek and disposing of the spoil material onto the island. In the 1940's another drastic change took place. A local physician put horses on the island to graze. These horses were contained for many years and then were released and became feral. Some of these horses remain today. Efforts to protect the property from development began in 1977 when a businessman had interest in putting condos onto Carrot Island. Shortly thereafter, the Nature Conservancy purchased approximately 400 acres of land on Carrot Island. The rest of the island was owned by the Episcopal Church in Beaufort, the Town and private owners. In 1985, the site was acquired as part of the N.C. National Estuarine Research Reserve. In 1989, Middle Marsh was added.

The sand and mud flats are habitat for worms and clams. The eel grass is a primary habitat for bay scallops and a nursery area for fish. Dredge material areas are used by nesting birds. The shrub thicket and maritime forest support a number of mammals and birds. There are dunes and sandy beaches only on Bird Shoal and this habitat supports the nesting wilsons plovers and the nesting piping plover. There have been over 200 species of birds documented on the Reserve throughout the year. This is a result of its close proximity to the Atlantic migratory flyaway. This year we have witnessed three white tailed deer and the crystal skipper butterfly.

Rachel Carson visited the U.S. Bureau of Fisheries in Beaufort in the 1940's. She was a writer, scientist and ecologist and the first woman employed by the U.S. Bureau of Fisheries. She spent a lot of time on Piver's Island and the Reserve.

The feral horses are a management problem as they are not a native species. There are currently 38 horses and the population is stable due to the immunocontraceptives administered to them. There is a strong, favorable public sentiment associated with these horses. Some other management challenges the Reserve faces include marine debris (over 3,000 pounds has been removed this year alone), dogs off of the leash (there is no enforcement power) especially during bird nesting season, beached vessels, and dredge spoil deposition.

There are a lot of stewardship and management activities happening on the Reserve. We have started a habitat improvement pilot study on Carrot Island with the North Carolina Aquarium. We are also working with the USGS and NCSU cooperative research unit on monitoring the American oystercatcher. We are collaborating with NOAA on a marine debris project to look at the sources and the affects larger objects are having on the marsh. We are undergoing a biological inventory to update our Natural Heritage program records. These projects are primarily administered by the research sector. There are a number of activities that occur on the Reserve. Seasonally we offer free public field trips, we offer summer camp opportunities to youth of various ages, we have a volunteer Christmas bird count in December, we work with the Wildlife Resources Commission to mark off bird nesting areas, and providing public access to the boardwalks.

Ocean Policy Study Committee Draft Recommendations (CRC 08-50) Scott Geis

Scott Geis stated the OPSC is charged with the task of looking at emerging issues. The big question we ask when dealing with these emerging issues is, "Are we prepared for the future in terms of a regulatory perspective?" The OPSC has been meeting since May 2008 and has come up with a list of issues and list of recommendations.

The issues that have been identified are sand resource management which includes inlet management, legal rights to sand resources, methods for acquiring sand in state and federal waters, and practices that may result in a loss of sand to the beach communities. We have also

talked about alternative energy, ocean outfalls, mariculture and comprehensive ocean management.

Recommendations have been developed by the OPSC. The first is to develop a comprehensive plan that protects beaches and inlets (enforce what is going on with the BIMP and add approval for the BIMP practices, but also add a mapping component to it). We need to identify compatible sources. The belief by the Committee is that there are significant sources around the Capes which could be large sources for future nourishment efforts. Another recommendation is to establish priority for allocating limited sand resources. A system of legal rights needs to be established (currently it is first come, first served). The next recommendation was the management of ebb and flood tide delta sand sources (restrictions should be placed on the volume of sand removed). The next recommendation deals with activities that could result in a loss of sand to the system. Currently, there are Statutes in place that say that sand that is dredged from the inlets needs to be placed on the beaches. The Army Corps of Engineers can remove sand from the system. Another recommendation was to require a disclosure of natural hazards for real property. Another recommendation was to add a sea level rise component to CAMA land use plans. We have rules in place in 7H .0208 which references dredging around high bottom areas. We should expand this rule to encompass all hard bottom areas. Hard bottom communities provide habitat for reef-associated fishes and the sand around this area is responsible for the primary nutrition of these organisms. We need a worst-case scenario for state-level planning (for multiple storm events, sea level rise, or catastrophic event). A planning document for these events should be put into place.

Ocean based alternative energy could result in visual impairments, user-conflicts, leasing practice structure problems, location and limitations of the technology, and an increased need for these new technologies as we use up our fossil fuels. The recommendations include reviewing existing rules on alternative energy facilities. The CRC, the EMC, and the Utilities Commission should clarify their respective roles for the rules to be put into place for alternative energy projects in state waters.

Ocean outfalls and alternative waste water management were discussed as a result of the drought. Some of the issues were how to deal with the pollution of the coastal waters, increased populations at the beaches, and the need for fresh water. The OPSC supports the recommendations of the CHPP that there should be no new or expanded ocean outfalls and that existing outfalls should be decommissioned. They support increased examination of the potential for alternative waste water treatment practices.

Ocean based mariculture was the next topic. The issues associated with this are that they have been labeled as point sources for pollution, there are concerns about what to do if you have a fish pen in the ocean with non-endemic species and they escape, there is significant maintenance for ocean cages, and the location of these facilities. The Committee recommends that the State conduct a technical assessment of the feasibility of aquaculture facilities.

The last issue is comprehensive ocean management (ocean-zoning). There are sand resources, but the area has commercial, political, and benthic concerns as well as how to protect the sand sources. We will have to look at existing data and what might come in the future and then we can put maps together with an analysis of the conflicts that will be involved as well as how we

might want to preserve these areas. The Committee recommends that we map our ocean resources.

These draft recommendations will be presented at three upcoming public meetings.

BIMP Update Steve Underwood

Steve Underwood handed out the schedule for the BIMP public meetings. There will be another round of public meetings prior to the April 2009 date when the BIMP is to be completed. The information provided at the meetings will include an overview of the regional concept of the BIMP, discuss what we already know about each region, and some socio-economic information will be provided.

Review of Comprehensive Beach Management Subcommittee Recommendations (CRC 08-54) Steve Underwood

Steve Underwood stated that at the May 2008 CRC meeting, a list of recommendations was developed for discussion. DCM Staff was asked to provide an update on the progress. The first recommendation was a resolution to the General Assembly supporting additional funding to accelerate the development of the BIMP, request additional resources and personnel to act as a liaison with local governments and to serve on the project delivery team. Due to the downturn of the economy, it may be wise to delay a resolution to the General Assembly. The second recommendation was for a statement or letter to the General Assembly supporting a stable and dedicated source of funding for beach nourishments. The CRAC discussed this. Dara Royal stated in September 2008, a subcommittee (Royal, Simmons, Rush, Morrison, Weaver) was appointed to begin working on this issue and gathering information. One conference call has taken place since September and the direction we decided to take was to expand this beyond beach nourishment and try to capture a project fund "North Carolina Coastal Shorelines and Waterways Project Fund". We would seek to include beach nourishment as one of the expenditures from this fund, but also inlet stabilization projects, inlet relocation, estuarine shoreline stabilization projects, living shoreline projects, waterway navigation dredging, public access to waters, and strategic removal of structures from erosive conditions. Information has been provided to CRC members showing sales tax, prepared meals tax, room occupancy tax, and land transfer tax which are all sources of funding that have been used on a local level and the kind of funds that could be generated. A summary of justification statements from previous legislation that has been introduced in the General Assembly (much of which has died in committee) was provided as an idea of what has been talked about and what some legislators have supported and the reasons for supporting it. We hope to bring a resolution to be sent to the General Assembly in February with supporting documentation and suggestions as we continue to gather more information. Steve Underwood continued with the third recommendation which was the creation of a committee to develop a beach and education plan. There has been no progress to date on this item. The fourth recommendation was a coastal hazard disclosure. This was also a recommendation from the OPSC. We have put the sandbag locations on the DCM website. The fifth recommendation was to condition certain CAMA permits to preclude the use of sandbags. We need to have further discussion on this item. The sixth recommendation was the consideration of amendments to the sandbag rule. The new draft rules will have public hearings in February. The seventh recommendation was consideration of alternative sandbag

structure design. There has been informal discussion on the use of geotextile bags. An Attorney General's opinion has not been received regarding the use of these sandbags. The eighth recommendation was a letter to the Governor endorsing the North Carolina involvement in the Southeastern Alliance. DENR is working on a signing ceremony for all of the Governors of the Alliance prior to the end of the year. The ninth recommendation was a presentation to the CRC on innovative funding strategies for beach nourishment projects. Peter Revella gave a presentation at the July 2008 CRC meeting and CRAC Chair Royal gave an update and provided information today. The tenth recommendation was the consideration of beach management/oceanfront development strategies consistent with the CRC's current authority. The CRC adopted the setback rules at the September 2008 meeting. Draft management strategies are about to go out to the public for their input for the BIMP in December.

OCS Update (CRC 08-46) Mike Lopazanski

Mike Lopazanski stated OCS stands for Outer Continental Shelf and gave an update to the CRC on what has been going on with the moratoriums. There has been renewed interest in OCS areas of the east and west coast which began in 2005. Hurricane Katrina caused an interruption in oil and gas supplies that caused a sharp rise in gasoline prices in the nation. However, the interest in opening up more areas to energy production started a little before this and manifested itself into the Energy Policy Act of 2005. While there are no calls for drilling, there were provision in the Energy Policy Act for conducting an inventory of oil and gas reserves in the outer continental shelf areas of the United States. It is important to note that under the Energy Policy Act, MMS (Minerals Management Service) received authorization to lease the OCS area for alternative energy producing activities. Between 2005 and now there have been quite a few attempts at legislation which all had varying schemes for royalty sharing as well as options for states to participate in energy exploration and production. The one thing they all had in common was dealing with the moratoriums and lifting them to varying degrees. The moratoriums emerged from a large spill off of the coast of Santa Barbara in 1969 where the blowout of an oil well released approximately three million gallons of oil. Over the next several years oil and gas drilling began to appear as local ballot issues in California communities and often resulted in local ordinances that prevented the location of on-shore support facilities in these communities. The first federal ban came in 1982 with a Congressional moratorium on pre-leasing activities in California waters. This pre-leasing ban was later extended to the North Atlantic in 1983. In 1990, amid concerns for preserving the ocean and coastal environments, the first President Bush signed an Executive Order that banned all leasing activities covered by the Legislative bans until the year 2000. In 1990 the Outer Banks Protection Act passed which specifically prevented drilling off of the North Carolina coast. This Act was later repealed as it resulted in a breach of contract lawsuit between Mobile and the federal government. After being repealed, President Clinton extended the presidential moratorium on leasing activities until 2012. With the expiration of existing leases on the east coast, it resulted in a defacto ban on any oil and gas activities off of the east coast. These bans came under increased scrutiny in the summer of 2008 as gas prices reached four dollars per gallon and there were calls for increasing domestic production. President Bush in July 2008 decided to repeal the presidential ban and lifted the Executive Order and at the same time directed the MMS to begin a new five-year lease program that would include areas that were formerly under the moratorium. This left the congressional ban in place. The congressional ban needed to be reauthorized each year. There was a lot of commotion in Congress with trying to create proposals that maintained some sort of ban, but

none of them made it out of legislation and the congressional bad was allowed to expire on September 30, 2008. It is important to note that the lapse in both the congressional ban and the lifting of the presidential moratorium doesn't do anything about an existing moratorium in the Gulf of Mexico that resulted from the Gulf of Mexico Energy Security Act which prevents leasing and drilling activities within 100 miles of the Florida coast in the eastern Gulf of Mexico until 2022.

The MMS and the Department of Interior oversee all of this. They administer the sand, gravel and energy resources in the nation's OCS area through various leasing programs. Under the Outer Continental Shelf Lands Act, MMS develops lease programs, administers lease sales and lease terms, review plans of exploration, and oversee production of oil and gas in the nation's outer continental shelf. The Energy Policy Act now gives MMS authority to develop leasing programs for alternative energy sources such as wind energy and wave energy. The five-year lease program consists of a schedule of oil and gas lease sales indicating the size, timing, location, and proposed leasing activity that the Department of Interior determines will best meet the nation's energy needs during the five-year period following approval of the plan. Leases are generally for terms of five to ten years. MMS determines fair market value for these leases. Each lease sale is subject to federal consistency review by the affected state. The process for lease program development begins with a request for information from MMS all the way through a draft program and draft environmental documents. It is a complicated process which requires posting notices and collecting comments from the public. As a result of the comment periods and the likelihood of extended comment periods, it takes MMS approximately one and a half to two and a half years to finalize a lease program for a particular area. The current five-year lease program runs from July 2007 until June 30, 2012. Since it was developed under the existing moratoriums, it doesn't include areas under those bans (including North Carolina). The state provided comments during program development and cited concerns regarding fisheries impacts and potential impacts to tourism. It has been posted in the federal registry that there is almost 3 million acres that will be offered for leasing off the coast of Virginia. This is concern to the Governor since it is located only about twenty-five miles north of the North Carolina and Virginia border. Governor Easley objected to the inclusion of it since it included an area that was under an existing ban at the time and also that North Carolina could bare direct adverse impacts without receiving any commensurate benefit of this activity occurring just north of our border. MMS has started the process to move forward with the lease sale by publishing a notice of intent and requests for information in the federal register on November 13, 2008. This is the first comment period involved in the actual lease sale. The comment period ends on December 29. We are able to submit comments; however the state will have to establish a clear nexus between the activity and impacts on our coast in order to participate in commenting on the lease sale.

The new lease program is being developed that could take effect in 2010. This will give the new administration a head start should a decision be made to expand energy production activities in the areas formerly under the moratoria. MMS cites as rationale for this the recent hurricane activities as an example of how the nation relies too heavily on a limited area for a majority of its energy production and we need to spread out our production activities. The initial comment period for this new lease program has closed and North Carolina did provide comments reiterating concerns for fisheries impact and possible impacts on tourism. This expanded drilling did not address the nation's continued dependency on fossil fuels. MMS has received 180,000 comments on this new program. MMS has said that out of the comments received; a little over

fifty percent were in favor of expanding energy production to the formerly banned areas. MMS will use the comments to develop a draft program which they expect to release by January 2009 and have expectation of a proposed program and environmental impact statement available by March 2010. The program could go into effect in 2012 when the current plan expires unless the Administration chooses to implement it in 2010, in which case it would supersede the existing program and any pending lease sales would be rolled into the new lease program. The State has the ability to comment on these projects under several authorities including the Federal Outer Continental Shelf Lands Act, the Coastal Area Management Act, and the Administrative Rules of the Coastal Resources Commission. The OCS Lands Act outlines provisions under which the Governor comments on the plan of exploration (POE), CAMA provides the authority for making consistency determinations, and the CRC rules in 7M .0400 outline the information needs and issues of importance in making the consistency determination. CAMA land use plans cannot be used to block oil and gas activities or OCS proposals. The policies in the land use plans are a useful tool in siting the support facilities.

The focus of attention off of the North Carolina coast is the Manteo unit or lease block. This is approximately forty miles off shore. There are about twenty-one lease blocks in the Manteo unit. A lease block is about nine square miles. In the past Mobil and Chevron have both held lease blocks in this area.

Agency Comments on Marsh Mowing Rules 7H .0205 Coastal Wetlands (CRC 08-49) Tancred Miller

Tancred Miller stated that this rule went to public hearing in September and no comments were received. The comment period closed at the end of September and about two days prior to that, DCM received a flood of comments from research agencies and others challenging and objecting to this rule on the grounds that the CRC doesn't have the authority to adopt these rules, that the staff does not have the expertise to write these rules and administer them in the field, questioned whether there was a need to regulate coastal wetlands, and to say there are already agencies that manage these types of activities. DCM staff discussed the comments and invited stakeholders to come to a meeting on October 31. DCM staff spoke to the stakeholders to explain staff's intent. There were four primary changes which are outlined in CRC 08-49. The first clarifies that state and federal agencies are exempt from this regulation. The second came from Cape Hatteras Electric Coop who pointed out that utilities are not covered in this rule. There is a need to maintain easements. DCM has clarified this in the rule by exempting utility companies from these requirements. Thirdly, DCM staff did not think that burning the marsh is a viable means to alter the marsh and has not been the problem. Fourth, DCM staff removed the provisions for pesticide application and use. This is already regulated by another agency.

Wayland Sermons made a motion to accept staff changes and send 15A NCAC 07H .0205 to public hearing. Veronica Carter seconded the motion. The motion passed unanimously (Elam, Wynns, Sermons, Wilson, Bissette, Old, Peele, Weld, Webster, Mitchell, Carter, Leutze).

Science Panel Update on Inlet Hazard Areas Discussion Spencer Rogers

Spencer Rogers stated the Science Panel has been looking at better ways to define setbacks in the inlet hazard areas. We do not have a definitive answer on whether we can come up with something better or not. The Science Panel has met three times on this issue and have spent a fair amount of time looking at the Bald Head Inlet Hazard Area. What you will be presented with today is similar to the zone that was proposed to begin with, but is justified on better grounds. The Panel has been looking at a number of ways that we may be able to define setbacks. We are in agreement that what has been opposed in the past is not a very effective method and that there are methods out there that will be better. We have more meetings planned, we will be talking about sediment criteria in December and have another meeting scheduled to look at inlet setbacks prior to the February meeting.

Inlet Hazard Areas Policy Progress Report & Bald Head Island Boundary Recommendation (CRC 08-48) Jeff Warren

Dr. Leutze recused himself from participation in this vote.

Jeff Warren stated there were three major issues to deal with regarding the inlets. The first one was the Bald Head Issue. In September 2007 the Science Panel made recommendations for the twelve developed inlets along our coast. A brief methodology was described that was used to find the new boundaries. Bald Head Island was included in these recommendations, but after further discussion the Science Panel realized that the geologic and geomorphologic data would take more time. When the methodologies that were used in the other eleven inlets were applied to Bald Head, we found that the methodologies were not strict enough for the Bald Head area. In July 2008, DCM Staff made a recommendation to redraw the box.

The other two issues were broader issues applying to all of the inlet hazard areas. The first issue was how the setback is measured and what the reference point is. On the oceanfront we use the vegetation. The problem is when you get closer to inlets, especially the inlets that are oscillatory in nature, the dynamics of the vegetation line can change in years instead of decades. The second major issue that was applied to all of the proposed twelve inlet hazard areas was the erosion rate and how it is measured. The current erosion rate was updated from 1998 data in 2004. It was never used as you approach the inlet because of the oscillatory nature of the inlet and the fact that it can change. The CRC's current rules say that the adjacent ocean erodible rate will be applied in the inlet. The inlet hazard areas in most cases have gone a mile or more in an oceanward direction. The rule takes the ocean erodible rate and extrapolates through the inlet hazard area. This has been a source of a lot of discussion on how to address this. It is complicated.

Today's focus will be on the Bald Head Island area. The Cape Fear River is the largest tidal delta on the coast. There is a lot of water volume going through here and a lot of dredging going on to maintain depths for the state port. The morphology of the island is not like a typical barrier island. DCM staff looked at the methods that were used in the other inlet hazard areas and applied them on the fringes. We quickly transitioned into a method that used 60 times the erosion rate (the maximum setback factor at the time). After the last meeting when rules were

adopted for the maximum setback factor to be 90, Staff feel we should use this rate and amend staff's recommendation (an illustration was shown reflecting the change).

David Webster made a motion to accept Staff's recommendation of the Bald Head Island inlet hazard area and for Staff to bring back the number of lots that are developed and undeveloped currently and the implications of enforcing this line. Jerry Old seconded the motion. The motion passed unanimously (Elam, Wynns, Sermons, Wilson, Bissette, Old, Peele, Weld, Webster, Mitchell, Carter).

Amendments to 15A NCAC 07B .0901 CAMA Land Use Plan Amendments and 07B .0801 Public Hearing and Local Adoption Requirements (CRC 08-47) John Thayer

John Thayer stated that a land use plan amendment had to be denied at the last meeting as a result of technicalities of notice and disclosure. Staff has returned with rule language changes to clarify and strengthen the linkage between the amendment section (.0900) of the 7B guidelines and .0800. Staff has discussed these changes with the CRAC.

Wayland Sermons made a motion to send the changes to the 7B land use plan guidelines to public hearing. Joan Weld seconded the motion. The motion passed unanimously (Elam, Wynns, Sermons, Wilson, Bissette, Old, Peele, Weld, Webster, Mitchell, Carter, Leutze).

Approval of Town of Holly Ridge Implementation and Enforcement Plan (CRC 08-52) Ed Brooks

Ed Brooks stated he is the minor permit program coordinator. Mr. Brooks stated that prominent in the Coastal Area Management Act is the implementation of the state/local cooperative role in the regulation of development along our coast. This cooperative state/local initiative is manifested in three of our Division's programs (land use plan, ocean and estuarine access program, and implementation and enforcement program). This program sets up the framework to allow local governments to have the authority to issue minor permits within their jurisdictional boundaries. Currently we have 39 local governments who participate in this program, 41 local government offices, and 120 local permit officers. Minor permits constitute approximately 30% of the number of CAMA permits that are issued annually. There are two programs here today. The Town of Holly Ridge is a new program. The other is an amended plan.

In July the Town of Holly Ridge, as required by CRC rules, submitted to the CRC a letter of intent to adopt an implementation and enforcement plan. The Town has completed the requirements of the public hearing, adopted the plan locally, and made their intention to adopt this plan. Staff recommends approval of this plan.

Charles Elam made a motion to approve the Town of Holly Ridge Implementation and Enforcement Plan. Bob Wilson seconded the motion. The motion passed unanimously (Elam, Wynns, Sermons, Wilson, Bissette, Old, Peele, Weld, Webster, Mitchell, Carter, Leutze). The Town of Cape Carteret operated a minor permit program from 1978-1993 at which time, the local government asked to be relieved of this responsibility. Since that time, Carteret County has been issuing permits within this jurisdictional area. In the latter part of 2007, the Town came to the Division and inquired into their ability to reinstate the program. This is allowed in the CRC rules. Because of the age of the Town's ordinance, we felt it needed to be updated and come before the Commission for approval. Staff recommends approval of this plan.

Charles Elam made a motion to approve the Town of Holly Ridge Implementation and Enforcement Plan. Jerry Old seconded the motion. The motion passed unanimously (Elam, Wynns, Sermons, Wilson, Bissette, Old, Peele, Weld, Webster, Mitchell, Carter, Leutze).

CHPP Annual Report Approval (CRC 08-51) Scott Geis

Scott Geis stated the 2007-2008 annual report has been provided to the Commission. Approval of the CHPP is a statutory requirement. The three commissions involved in CHPP approval are the EMC, MFC and CRC. A couple of highlights in regards to DCM are CRC rule revisions strengthening the maximum enforcement after successfully seeking legislation to raise maximum penalties to \$1,000 for minor development violations and to \$10,000 for major development violations. DCM's Clean Marina program hosted two workshops in December introducing marine operators to the program. DCM is moving forward with the creation of compliance education coordinator positions. DWQ basin-wide planners are reviewing CAMA land use plan permits. DCM recently completed a methodology for digitizing the estuarine shoreline and has begun setting up contracts with Universities to get digitizing efforts underway. Progress continues to be made in implementing DCM's Coastal Zone Management Act Section 309 five-year program enhancement strategy for 2006-2010, specifically delineating the estuarine shoreline along with shoreline type and shoreline structures. The NERR coastal training program conducted three on-site waste water treatment and disposal systems workshops.

Jerry Old made a motion to approve the CHPP annual report. Joan Weld seconded the motion. The motion passed unanimously (Elam, Wynns, Sermons, Wilson, Bissette, Old, Peele, Weld, Webster, Mitchell, Carter, Leutze).

PUBLIC COMMENT AND INPUT

Dennison Breese, Coastal Coanda Research, stated he is from Atlantic Beach. Mr. Breese stated he would like to request a future meeting with the Commission to outline his fifteen years of research on the causes of beach erosion. His background is nuclear submarines, ocean engineering, salvage diving, commercial diving and deep research diving. What we have learned is that water control is the most essential part of beach erosion. If we can control a zone and can establish a zone of water control along our beach between the high water line and the low water line, we can essentially stop or reduce the cost and necessity of maintaining our beaches. We are running out of sand, we are running out of water, and we are running out of money. We believe that if we work with Mother Nature we can control the sand with water; it is impossible to control water with sand. Right now we have a number of lines on our shoreline to protect us. First is a shoreline that is a private property line. Then we have a three mile offshore limit that is a state line. Then there is a twelve mile line for the federal law. Now we need a water control line which is a very narrow line along our beach that we will stop adding water into it. It is easy to take water out although it is very expensive, but we can manage to stop putting water in there and prevent the rising water level within the beach itself because that is the cause of the erosion. Storm waves are not the cause of erosion, they can contribute to it, but they are not the cause. The cause is water within the beach. An example on Bogue Bank is we are currently using about twenty-five million gallons of water per day that we are removing from deep aquifers underneath the island. We are running out of that. We are using twenty-five million gallons a day and it is being dumped into the surface water. We are not recycling at this point, we do not have storm sewers, we have septic tanks but do not have proper sewage systems. The water is going into the beach and there are methods available to remove the water but it is far more cost effective to prevent if from getting there in the first place. We can collect the water on the sides of structures, create storm drains and remove the water from the critical 200-300 wide path along the beachfront and that will absolutely control beach erosion in most cases. We are taking the water from deep aguifers and throwing it onto the beach. During the tide change, the water will remove the sand on an outgoing tide. I would like to see us establish a lifeline, a band where we control the water that gets into the beach. It is very narrow and is very inexpensive. We are interrupting a natural cycle of water. We are taking water from deep aquifers and dumping it onto the surface and cannot be recharged. There is a layer of marl between the upper and lower aquifers that cannot be penetrated so our water has to come from deep inland and it is an unknown recharge rate. We know for a fact that we are getting salt water into the wells. We can change this if we modify our use of potable water. I would like to thank Stan Riggs for teaching us to look underground. (written comments provided)

OLD/NEW BUSINESS

Jim Leutze requested a presentation on terminal groins to hear both sides of the issue. DCM could give a regulatory history of hardened structures in North Carolina.

Wayland Sermons requested a summary of the strategic plan done at the January 2008 meeting. He also requested that Robin Smith be invited to give a legislative update.

Chairman Emory stated that inlet hazard areas will be discussed again and we do not know how many variances we may have. He also asked Lee Wynns to ascend to the Chairmanship of the I&S Committee and attend the Executive Committee meetings in that role. The Executive Committee will discuss the possibility of beginning the meeting on Wednesday at 1:00 for February's meeting.

With no further business, the CRC adjourned.

Respectfully submitted,

- Ceupon

James H. Gregson, Executive Secretary

Qua

Angela Willie, Recording Secretary

- Bald Head Island Ltd. LLC (CRC-VR-09-01) Brunswick Co., 30' buffer
- Town of Oak Island (CRC-VR-09-02) 30' Buffer and oceanfront setback

12:00 PUBLIC INPUT AND COMMENT

12:15 LUNCH

1:30 PRESENTATIONS

- CRC & CRAC Needs Assessment
- NC Coastal Reserve Research (*CRC-09-04*)
- CRC Science Panel Inlet Hazard Area Recommendations
- Proposed Development Policies for Revised Inlet Hazard Areas (CRC-09-05)
- Teleconferencing and Other Meeting Technologies (*CRC-09-06*)
- Summary of BIMP Public Meetings (CRC-09-07)
- Review and Progress on CRC Priorities (CRC-09-08)

OLD/NEW BUSINESS

• Future Agenda Items

5:00 ADJOURNMENT

NEXT MEETING:

April 29-30, 2009 Sea Trail Resort & Convention Center Sunset Beach, NC



Whitney Jenkins Dr. John Fear Dr. Margery Overton, Chair CRC Science Panel Dr. Jeff Warren Josh Shepherd Steve Underwood Mike Lopazanski

Bob Emory

Ward Zimmerman Christine Goebel



North Carolina Department of Environment and Natural Resources

Beverly Eaves Perdue Governor

Division of Coastal Management James H. Gregson Director

Dee Freeman Secretary

CRC 09-02

MEMORANDUM

To:	Coastal Resources Commission and Coastal Resources Advisory Council
From:	Maureen Meehan Will, DCM Morehead City District Planner
Date:	January 26, 2009 (February 11-12, 2009 CRC Meeting)
Subject:	Amendment of the Town of Emerald Isle Advanced Core Land Use Plan

The Town of Emerald Isle is requesting Coastal Resource Commission (CRC) certification of six Future Land Use Plan Map amendments, including non-policy related text and charts, to the current CRC Certified Land Use Plan as amended through January 26, 2007.

Overview

As part of the implementation of the town's LUP, the town adopted a unified development ordinance and revised their zoning map. The Emerald Isle Board of Commissioners held a duly advertised public hearing for all of the amendments outlined above and voted unanimously, by resolution, to adopt the map amendments on December 9, 2008. After completing the development of the ordinance and zoning map it was apparent that changes to the FLUM were necessary. The public had the opportunity to provide written comments on the LUP up to fifteen business days prior to the CRAC meeting which the amendments are being considered for certification (January 21, 2009). <u>DCM did not receive any comments</u>. Officials from the Town will be available at both the CRAC and CRC meetings to answer any questions.

The adopted changes and proposed amendments to the LUP are outlined below: (see attached memo from the town and attachments for each map amendment)

Amendment 1:

Revise existing parcels from Mixed Residential (3.5 dwelling units – 8 dwelling units) to Single/Dual Residential (3.5 dwelling units – 5.8 dwelling units). The property is located on the north side of Coast Guard Road and known as the Bell Cove Estates and Bell Cove Village Subdivisions. This amendment will affect two parcels that have been subdivided for lower density residential uses.

Amendment 2:

Revise existing parcel from Mixed Residential (3.5 dwelling units - 8 dwelling units) to Commercial Corridor (commercial uses only). The property is located at 8604 Reed Drive. This amendment will change the development potential of the parcel from residential to commercial.



Amendment 3:

Rename and expand the existing from Marine Commercial Area to Marina Village Area. This property consists of two parcels and approximate 4 acres of land and is located at the terminus of Old Ferry Road. Text changes are included with this amendment and attached to this memo. This amendment does not change the nature of the type of development that is permitted it only changes the name and expands the amount of land within the classification.

Amendment 4:

Revise an existing 1.25 acre parcel from Commercial Corridor (commercial uses only) to Single/Dual Residential (3.5 dwelling units – 5.8 dwelling units). The property is located on Emerald Drive and is the current location of Bogue Banks Water Corporation. This amendment affects one parcel of land that will change the nature of potential development to residential.

Amendment 5:

Revise existing 6 acre area from Mixed Residential (3.5 dwelling units – 8 dwelling units) to Single/Dual Residential (3.5 dwelling units – 5.8 dwelling units). This property is located on the north side of Emerald Drive and includes property designated for McLean Park. The amendment changes the residential character of the subject lots and will no longer allow multi-family structures with more than two dwelling units.

Amendment 6:

Revise existing 1 acre area from Single/Dual Residential (3.5 dwelling units -5.8 dwelling units) to Mixed Residential (3.5 dwelling units -8 dwelling units). The parcels are located at 2421 and 2414 Emerald Drive. This amendment will allow residential development with three or more units per structure that meet the overall density thresholds.

DCM Staff Recommendation

DCM Staff has determined that the Town of Emerald Isle has met the substantive requirements outlined within the 2002 Land Use Plan Guidelines and that there are no conflicts evident with either state or federal law or the State's Coastal Management Program.

DCM staff recommends that the CRAC forward the Town of Emerald Isle Advanced Core Land Use Plan Amendments (attached here) to the CRC for certification.

Attachments

Attachment 1 – Future Land Use Map Amendment #1

Attachment 2 – Future Land Use Map Amendment #2

Attachment 3A – Marina Village Text Amendment

Attachment 3B – Future Land Use Map Amendment #3

Attachment 4 – Future Land Use Map Amendment #4

Attachment 5 – Future Land Use Map Amendment #5

Attachment 6 – Future Land Use Map Amendment #6

Attachment 7 – Land Use Plan/Zoning Consistency Matrix

Attachment 8 – LUP Policy/Management Topic Analysis

Attachment 9 – Carrying Capacity Analysis

Attachment 10 – Resolutions of Adoption of Amendments

Memo from the Town of Emerald Isle Requesting the Amendments

Town of Emerald Isle CAMA Land Use Plan Update **Future Land Use Map**

Legend



Proposed "Single/Dual Family Residential Area"



Bell Cove Estates and Bell Cove Village

Attachment 2

Town of Emerald Isle CAMA Land Use Plan Update **Future Land Use Map**

Proposed "Commercial Corridor Area"

Legend





Bluewater Tract

Attachment 3A

The Plan would be amended in the following manner. Please note that text which is being added in shown in an underlined format and text which is being deleted is shown in a strikethrough format.

Page 84 would be amended to read as follows:

Emerald Isle's Future Land Use Map, which follows, uses a land classification system to show desired future uses and land use patterns. This classification system has seven categories of land use and development. These seven categories include the following:

Conservation Main Business Area Emerald Drive Business Corridor Village East – Town Center Village West Marine Commercial-Marina Village Eastern Commercial Area

Living Areas

Single/Dual-Family Mixed Residential

Page 85 would be amended to read as follows:

Emerald Isle Main Business Area

The Main Business Area includes three related areas: The business and mixed use area, called Village-East Town Center, which is centered along Bogue Inlet Drive, the commercial area, called Village-West, which is centered in the Islander Drive area, and the Emerald Drive Business Corridor, which connects the two "Villages" and the <u>Marina Village Marine Commercial</u> Area. The Main Business Area is planned to encourage the provision of quality retail activities and business services to meet the needs of permanent residents and visitors. It will encourage owners to redevelop properties where appropriate and to ensure that new and redeveloped commercial properties are consistent with the Town's goal of maintaining a small-town, family atmosphere, while protecting and enhancing its natural environment.

Page 89 would be amended to add the following:

-Marina Village Marine Commercial

The planned <u>Marina Village</u> Marine Commercial Area is located at the northern terminus of Old Ferry Road at the existing Island Harbor Marina. The objective of this land use category is to provide residents and visitors with goods and services related to boating, water sports and similar activities. Examples of appropriate land uses in this area are marina, boat/marine repair facilities and providers of other goods and services for these types of uses.

The Town encourages uses in the <u>Marina Village</u> Marine Commercial Area that meet the following guidelines:

- provide marine and boating related services that serve the needs of residents and visitors;
- are consistent with state and federal guidelines for such facilities; and
- allows for supporting businesses and residential land uses.

Amend Table 23, Page 92 to read as follows:

Table 23
Comparison of Land Allocated to Future Residential Land Use and Projected Land
Nooda

	Needs	
Future Land Use Category	Total Acres	Vacant acres
	allocated	
Single/Dual Family Residential	1,919 <u>1,940</u>	<u>181 202</u>
Mixed residential	258 <u>226</u>	76 <u>55</u>
Commercial corridor	77 <u>76</u>	11
Village East and Village West	84	9
Marine Commercial Marina	2 14	NA
Village		
Convenience commercial	5	2
Conservation	320	NA

Town of Emerald Isle CAMA Land Use Plan Update **Future Land Use Map**

Legend





Island Harbor Marina Tract

Town of Emerald Isle CAMA Land Use Plan Update **Future Land Use Map**

Legend



Proposed "Single/Dual Family Residential



Bogue Banks Water Corporation

Attachment 7

LAND USE PLAN/ZONING CONSISTENCY

1. The 11.75 and 5.79 acre tracts known as the Bell Cove Estates and Bell Cove Village Subdivisions consists of one zoning district: Residential-2 (R-2)

Residential-2 (R-2) - Generally Consistent Residential Multi-Family (RMF) – Conditionally Consistent Mobile Home-1 (MH-1) - Inconsistent Business (B) - Inconsistent Camp (C) – Inconsistent Government (G) – Generally Consistent Village East (VE) – Inconsistent Village West (VW) - Inconsistent Marina Village (MV) - Inconsistent

2. The parcel at 8604 Reed Drive consists of one zoning district: Business (B)

Residential-2 (R-2) - Inconsistent Residential Multi-Family (RMF) – Inconsistent Mobile Home-1 (MH-1) - Inconsistent Business (B) – Generally Consistent Camp (C) – Inconsistent Government (G) – Generally Consistent Village East (VE) – Inconsistent Village West (VW) - Inconsistent Marina Village (MV) - Inconsistent

3. The 14 tract located at the northern terminus of Old Ferry Road and encompassing Island Harbor Marina consists of two zoning district: Marina Village (MV) and Mobile Home-1 (MH-1)

Residential-2 (R-2) – Conditionally Consistent Residential Multi-Family (RMF) – Conditionally Consistent Mobile Home-1 (MH-1) – Generally Consistent Business (B) – Conditionally Consistent Camp (C) – Inconsistent Government (G) – Generally Consistent Village East (VE) – Inconsistent Village West (VW) - Inconsistent Marina Village (MV) – Generally Consistent 4. The1.25 acre parcel located on the north side of Emerald Drive at 7412 Emerald Drive consists of one zoning district: Residential-2 (R-2)

Residential-2 (R-2) – Generally Consistent Residential Multi-Family (RMF) – Inconsistent Mobile Home-1 (MH-1) – Inconsistent Business (B) – Inconsistent Camp (C) – Inconsistent Government (G) – Generally Consistent Village East (VE) – Inconsistent Village West (VW) - Inconsistent Marina Village (MV) – Inconsistent

5. The area containing approximately 6 acres located on the north side of Emerald Drive and includes the Chapel by the Sea property and the proposed McLean Park and consists of two zoning districts; Residential-1 (R-2) and Government (G)

Residential-2 (R-2) – Generally Consistent Residential Multi-Family (RMF) – Inconsistent Mobile Home-1 (MH-1) – Inconsistent Business (B) – Inconsistent Camp (C) – Inconsistent Government (G) – Generally Consistent Village East (VE) – Inconsistent Village West (VW) - Inconsistent Marina Village (MV) – Inconsistent

6. The parcels located at 2412 and 2414 Emerald Drive consists of one zoning district; Residential Multi-Family (RMF)

Residential-2 (R-2) – Generally Consistent Residential Multi-Family (RMF) – Generally Consistent Mobile Home-1 (MH-1) – Inconsistent Business (B) – Inconsistent Camp (C) – Inconsistent Government (G) – Generally Consistent Village East (VE) – Inconsistent Village West (VW) - Inconsistent Marina Village (MV) – Inconsistent

Attachment 8

Proposed Land Use Plan Amendment/Management Topic Comparison

Amendment/Management Topic	Public Access	Land Use Compatibility	Infrastructure Carrying Capacity	Natural Hazard Area	Water Quality	Local Concerns (maintaining small Town atmosphere)
Amendment 1 – FLUM amendment from Mixed Residential to Single/Dual Family Residential	<i>Positive</i> The development of the tract for residential purposes will provide for public access to Bogue Sound.	Neutral	Neutral	Neutral	Neutral	<i>Positive</i> The development of this tract for one and two-family dwellings is consistent with the Town's goal of maintaining and preserving the small Town atmosphere.
Amendment 2 – FLUM amendment from Single/Dual Family Residential to Commercial Corridor	Neutral	Neutral	Neutral	Neutral	Neutral	Neural
Amendment 3 – FLUM amendment from Marine Commercial and Mixed Residential to Marina Village	<i>Positive</i> The continued operation of Island Harbor Marina will provide access to Bogue Sound.	Neutral	Neutral	Neural	<i>Positive</i> Redevelopment activities will have to comply with the Town's stormwater regulations	<i>Positive</i> Preservation of the marina is consistent with the Town's goal of maintaining and preserving the small Town atmosphere.

Attachment 8 (continued)

Proposed Land Use Plan Amendment/Management Topic Comparison

Amendment/Management Topic	Public Access	Land Use Compatibility	Infrastructure Carrying Capacity	Natural Hazard Area	Water Quality	Local Concerns (maintaining small Town atmosphere)
Amendment 4 – FLUM amendment from Mixed Residential to Single/Dual Family Residential	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral
Amendment 5 – FLUM amendment from Mixed Residential to Single/Dual Family Residential	<i>Positive</i> The development of the tract for residential and public use will provide for public access to Bogue Sound.	Neutral	Neutral	Neutral	Neutral	<i>Positive</i> The development of the tract for residential and public use will provide for public access to Bogue Sound.
Amendment 6 – FLUM amendment from Single/Dual Family Residential to Mixed Residential	Neutral	Neutral	Neutral	Neural	Neutral	Neutral

Attachment 9

Current Conditions/Current Plan Projections	Amendment 1	Amendment 2
APPROXIMATE LEVEL OF INTENSITY	Property currently contains 17.5 acres and	Property currently contains approximately
AND DENSITY ¹	based on the Town's maximum allowable	8,200 square feet and is vacant. The property
	density for multi-family development	could be developed for one single-family
	approximately 120 units could be constructed	dwelling. The building height limit is 40 feet.
	with the balance of property for roads, open	The Town's Dunes and Vegetation Protection
	space and wastewater treatment. The building	Ordinance will require each lot to maintain 35%
	height limit is 40 feet.	of its area in a natural state.
WATER/WASTEWATER	Current Plan Projections Water = 43,200 gpd	Current Plan Projections: Residential Water =
INFRASTRUCTURE ²³⁴	Current Plan Projections Wastewater = 19,440	360 gpd
	gpd	Current Plan Projections: Residential
		Wastewater = 162 gpd
TRANSPORTATION	Residents and visitors would have to utilize	Residents of the lot would utilize Reed Drive
	Coast Guard Road for access. Multi-family	for ingress and egress to the property.
	development typically has high number of trips	
	per day.	

¹Land use types and densities are based on assumptions by Town Planning Staff ² Residential and commercial water usage assumptions based on type of land use from data supplied by Bogue Banks Water Corporation and 3 bedrooms per multi, single and twofamily unit

³ Residential wastewater assumption is equivalent to 45% of water usage ⁴ Commercial wastewater assumption is equivalent to 100% of water usage

Attachment 9 (continued)

Projected Conditions after Amendments	Amendment 1	Amendment 2
APPROXIMATE LEVEL OF INTENSITY	Property will be developed for residential use	Property currently contains approximately
AND DENSITY	according to two approved subdivisions which	8,200 square feet and is vacant. The property
	contain a total of 21 lots. Assuming that the	could be developed for limited commercial use.
	each home is developed for a duplex structure	The building height limit is 50 feet. The
	the total maximum number of dwelling units	Town's Dunes and Vegetation Protection
	would be 42. The Town's Dunes and	Ordinance will require each lot to maintain 15%
	Vegetation Protection Ordinance will require	of its area in a natural state and this area can be
	each lot to maintain 35% of its area in a natural	utilized for on-site wastewater treatment.
	state. Building height limit is 40 feet.	
WATER/WASTEWATER	Residential Water = $15,120$ gpd	Commercial Water = 150 gpd
INFRASTRUCTURE ⁵⁶⁷	Residential Wastewater = $6,804$ gpd	Commercial Wastewater = 150 gpd
TRANSPORTATION	Residents and visitors would have to utilize	Workers and visitors to the lot would utilize
	Coast Guard Road for access. Single and Dual	Reed Drive for ingress and egress to the
	Family development typically has a fewer	property.
	number of trips per day.	

 ⁵ Residential and commercial water usage assumptions based on type of land use from data supplied Bogue Banks Water Corporation
⁶ Residential wastewater assumption is equivalent to 45% of water usage
⁷ Commercial wastewater assumption is equivalent to 100% of water usage

Attachment 9 (continued)

Current Conditions/Current Plan Projections	Amendment 3	Amendment 4
APPROXIMATE LEVEL OF INTENSITY	Property currently contains approximately 14	Property currently contains approximately 1.25
AND DENSITY ⁸	acres and is operated as a commercial marina	acres and is the location of the offices and
	with 150 boat slips, marina retail space and	warehouse for a public service utility (Bogue
	leased lots for manufactured homes. It is	Banks Water Corporation). The building height
	estimated that 95% of property is open	limit is 40 feet. The Town's Dunes and
	space/parking. The building height limits are	Vegetation Protection Ordinance requires each
	40 and 50 feet. Redevelopment as Commercial	lot to maintain 35% of its area in a natural state.
	and Mixed Residential will be limited to	
	building heights of 50 and 40 feet, respectively.	
	A maximum density of 8 units per acre. A	
	projected residential density of 8 units per acre	
	was used for this analysis.	
WATER/WASTEWATER	Current Conditions: Commercial Water = 1,644	Current Conditions: Commercial Water = 500
INFRASTRUCTURE ⁹¹⁰¹¹	gpd	gpd
	Commercial Wastewater = $1,644$ gpd	Commercial Wastewater = 500 gpd
	Current Plan Projections: Residential Water =	Current Plan Projections: Commercial Water =
	28,880 gpd	1,000 gpd
	Residential Wastewater = 12,960 gpd	Commercial Wastewater = 1,000 gpd
TRANSPORTATION	Marina visitors use existing Old Ferry Road	Workers and visitors to the property have direct
	which provides direct access to NC Highway 58	access to NC Highway 58 (Emerald Drive).
	(Emerald Drive). Mixed Residential	
	development would also utilize existing Old	
	Ferry Road.	

 ⁸ Commercial redevelopment land use types and densities are based on assumptions by Town Planning Staff
⁹ Residential and commercial water usage assumptions based on type of land use from data supplied by Bogue Banks Water Corporation
¹⁰ Residential wastewater assumption is equivalent to 45% of water usage
¹¹ Commercial wastewater assumption is equivalent to 100% of water usage
Attachment 9 (continued)

Projected Conditions after Amendments	Amendment 3	Amendment 4
APPROXIMATE LEVEL OF INTENSITY	Property currently contains approximately 14	Property currently contains approximately 1.25
AND DENSITY	acres and is operated as a commercial marina	acres and if redeveloped, could support a
	with 150 boat slips, marina retail space and	maximum 4 single/dual family structures. The
	leased lots for manufactured homes.	building height limit is 40 feet. The Town's
	Redevelopment Marina Village zoning would	Dunes and Vegetation Protection Ordinance
	limit development to marine commercial and	requires each lot to maintain 35% of its area in a
	single or multi-family development. Building	natural state.
	height limit is 50 feet.	
WATER/WASTEWATER	Current Conditions: Commercial Water = 1,644	Residential Water = $2,880$ gpd
INFRASTRUCTURE ¹²¹³¹⁴	gpd	Residential Wastewater = $1,296$ gpd
	Commercial Wastewater = 1,644 gpd	
	Current Plan Projections: Residential Water =	
	28,880 gpd	
	Residential Wastewater = 12,960 gpd	
TRANSPORTATION	Marina visitors use existing Old Ferry Road	Residents and visitors to the property would
	which provides direct access to NC Highway 58	have access to NC Highway 58 (Emerald
	(Emerald Drive). Redevelopment of the	Drive).
	property for mixed use would likely result in an	
	increase traffic over current levels.	

 ¹² Residential and commercial water usage assumptions based on type of land use from data supplied Bogue Banks Water Corporation
 ¹³ Residential wastewater assumption is equivalent to 45% of water usage
 ¹⁴ Commercial wastewater assumption is equivalent to 100% of water usage

Attachment 9 (continued)

Current Conditions/Current Plan Projections	Amendment 4	Amendment 5
APPROXIMATE LEVEL OF INTENSITY	Property currently contains approximately 6	Properties currently contain approximately 1
AND DENSITY ¹⁵	acres and is undeveloped except for an existing	acre with one parcel developed as a single-
	church and parsonage. Development for Mixed	family residence and the second is vacant. The
	Residential will be limited to a building height	building height limit is 40 feet. The Town's
	of 40 feet. A maximum density of 8 units per	Dunes and Vegetation Protection Ordinance
	acre. A projected residential density of 8 units	requires each lot to maintain 35% of its area in a
	per acre was used for this analysis.	natural state.
WATER/WASTEWATER	Current Conditions: Commercial and	Current Conditions: Residential Water = 360
INFRASTRUCTURE ¹⁶¹⁷¹⁸	Residential Water = 720 gpd	gpd
	Commercial and Residential Wastewater = 324	Commercial Wastewater = 162 gpd
	gpd	Current Plan Projections: Residential Water =
	Current Plan Projections: Residential Water =	720 gpd
	17,280 gpd	Residential Wastewater = 324 gpd
	Residential Wastewater = $7,776$ gpd	
TRANSPORTATION	Church patrons have direct access to NC	Residents and visitors to the properties have
	Highway 58 (Emerald Drive). Mixed	direct access to NC Highway 58 (Emerald
	Residential development would have direct	Drive).
	access to Emerald Drive.	

 ¹⁵ Commercial redevelopment land use types and densities are based on assumptions by Town Planning Staff
 ¹⁶ Residential and commercial water usage assumptions based on type of land use from data supplied by Bogue Banks Water Corporation
 ¹⁷ Residential wastewater assumption is equivalent to 45% of water usage
 ¹⁸ Commercial wastewater assumption is equivalent to 100% of water usage

Attachment 9 (continued)

Projected Conditions after Amendments	Amendment 4	Amendment 5
APPROXIMATE LEVEL OF INTENSITY	Property currently contains approximately 6	Property currently contains approximately 1
AND DENSITY	acres and is undeveloped except for an existing	acre. Redevelopment for Mixed Residential
	church and parsonage. Development for	will be limited to a building height of 40 feet.
	Single/Dual Family Residential will be limited	A maximum density of 8 units per acre. A
	to a building height of 40 feet and a maximum	projected residential density of 8 units per acre
	density of 6 units per acre. A projected	was used for this analysis.
	residential density of 6 units per acre was used	
	for this analysis.	
WATER/WASTEWATER	Current Conditions: Commercial Water = 720	Residential Water = $2,880$ gpd
INFRASTRUCTURE ¹⁹²⁰²¹	gpd	Residential Wastewater = 1,296 gpd
	Commercial Wastewater = 334 gpd	
	Current Plan Projections: Residential Water =	
	12,960 gpd	
	Residential Wastewater = 5,832 gpd	
TRANSPORTATION	Church patrons have direct access to NC	Residents and visitors to the property would
	Highway 58 (Emerald Drive). Single/Dual	have access to NC Highway 58 (Emerald
	Family Residential development would have	Drive).
	direct access to Emerald Drive.	

 ¹⁹ Residential and commercial water usage assumptions based on type of land use from data supplied Bogue Banks Water Corporation
 ²⁰ Residential wastewater assumption is equivalent to 45% of water usage
 ²¹ Commercial wastewater assumption is equivalent to 100% of water usage

Attachment 10

The Plan would be amended in the following manner. Please note that text which is being added in shown in an underlined format and text which is being deleted is shown in a strikethrough format.

Page 84 would be amended to read as follows:

Emerald Isle's Future Land Use Map, which follows, uses a land classification system to show desired future uses and land use patterns. This classification system has seven categories of land use and development. These seven categories include the following:

Conservation Main Business Area Emerald Drive Business Corridor Village East – Town Center Village West Marine Commercial-Marina Village Eastern Commercial Area

Living Areas

Single/Dual-Family Mixed Residential

Page 85 would be amended to read as follows:

Emerald Isle Main Business Area

The Main Business Area includes three related areas: The business and mixed use area, called Village-East Town Center, which is centered along Bogue Inlet Drive, the commercial area, called Village-West, which is centered in the Islander Drive area, and the Emerald Drive Business Corridor, which connects the two "Villages" and the <u>Marina Village Marine Commercial</u> Area. The Main Business Area is planned to encourage the provision of quality retail activities and business services to meet the needs of permanent residents and visitors. It will encourage owners to redevelop properties where appropriate and to ensure that new and redeveloped commercial properties are consistent with the Town's goal of maintaining a small-town, family atmosphere, while protecting and enhancing its natural environment.

Page 89 would be amended to add the following:

-Marina Village Marine Commercial

The planned <u>Marina Village</u> Marine Commercial Area is located at the northern terminus of Old Ferry Road at the existing Island Harbor Marina. The objective of this land use category is to provide residents and visitors with goods and services related to boating, water sports and similar activities. Examples of appropriate land uses in this area are marina, boat/marine repair facilities and providers of other goods and services for these types of uses.

The Town encourages uses in the <u>Marina Village</u> Marine Commercial Area that meet the following guidelines:

- provide marine and boating related services that serve the needs of residents and visitors;
- are consistent with state and federal guidelines for such facilities; and
- allows for supporting businesses and residential land uses.

Amend Table 23, Page 92 to read as follows:

Table 23
Comparison of Land Allocated to Future Residential Land Use and Projected Land
Nooda

Needs		
Future Land Use Category	Total Acres	Vacant acres
	allocated	
Single/Dual Family Residential	1,919 <u>1,949</u>	<u>181 211</u>
Mixed residential	258 <u>217</u>	76 <u>46</u>
Commercial corridor	77 <u>76</u>	11
Village East and Village West	84	9
Marine Commercial Marina	2 14	NA
Village		
Convenience commercial	5	2
Conservation	320	NA

Town of Emerald Isle

Department of Planning and Inspections Kevin B. Reed, AICP, Director kreed@emeraldisle-nc.org



7500 Emerald Drive Emerald Isle, NC 28594 *Voice* 252-354-3338 *Fax* 252-354-5387

- DATE: January 8, 2009
- TO: Maureen Meehan-Will, District Planner, North Carolina Division of Coastal Management
- FROM: Kevin B. Reed, AICP, CFM, CZO, Director of Planning & Inspections

SUBJECT: Proposed Amendments to the Town of Emerald Isle's 2004 CAMA Land Use Plan (LUP) and Future Land Use Map (FLUM)

As you know, the Town of Emerald Isle recently completed its work on several amendments to its 2004 CAMA Land Use Plan. The primary reason for these amendments is the fact that the Town adopted a new Unified Development Ordinance (UDO) and revised Official Zoning Map on September 9, 2008. The UDO and associated Zoning Map changes have made it necessary to make several adjustments to the Town's Land Use Plan including the Future Land Use Map (FLUM). The amendments to the LUP and FLUM were reviewed by the Town's Planning Board at its October 27, 2008 meeting. After review of the amendments, the Planning Board voted unanimously to recommend to the Board of Commissioners that the amendments be approved. The Board of Commissioners conducted a duly advertised public hearing on the proposed amendments at is December 9, 2008 meeting. Following the public hearing, the Board of Commissioners approved the amendments and adopted the required resolutions.

It is the goal of the Town for these amendments considered by the Coastal Resources Commission (CRC) for certification at its February 2009 meeting. The purpose of this memorandum is to present the proposed LUP text and FLUM changes to you, along with accompanying information, so they may be considered by the CRC in February 2009. The amendments are as follows:

Amendment 1

Revise the Future Land Use Map in order to show the 11.75 acre tract and the 5.79 acre tract located on the north side of Coast Guard Road, and known as the Bell Code Estates and Bell Cove Village Subdivisions respectively, as Single/Dual Family Residential rather than its current designation as Mixed Residential. These two tracts have been subdivided into individual building lots for one and two-family dwellings. In addition, the Board of Commissioners rezoned these properties to Residential-2 (R-2) as part of the UDO adoption process. The

proposed amendment would make the Future Land Use Map designation consistent with local zoning.

Amendment 2

Revise the Future Land Use Map in order to show a parcel located at 8604 Reed Drive as Commercial Corridor rather than its current designation as Mixed Residential. This parcel was rezoned by the Board of Commissioners at the request of the property owner from Residential-2 (R-2) to Business (B). The proposed amendment would make the Future Land Use Map consistent with local zoning.

Amendment 3

Revise the Future Land Use Map in order to expand the boundaries of the Marine Commercial Area located at the northern terminus of Old Ferry Road. In addition, the FLUM would be changed to reflect the 14 acre parcel (which is divided into a Tract A and a Tract B) as Marina Village rather than its current designation as Marine Commercial and Mixed Residential. The owners of the property had requested that Parcel A be rezoned from Business (B) and Mobile Home-1 (MH-1) to Marina Village (MV). This rezoning was approved by the Board of Commissioners at its November 12, 2008 meeting. In addition, the Marine Commercial Area will be renamed as the Marina Village Area. Marina Village (MV) is a new mixed use zoning district that was created with the adoption of the UDO. The MV District is intended to help protect and foster marina and related marine commercial land uses. Also Part 3, "Land Use Plan- Goals, Policies and Future Land Use Map" of the Plan would be amended to reflect the name change from Marine Commercial to Marina Village. Thee specific text amendments to the Plan are shown on Attachment 3A. The proposed amendment would make the Future Land Use Map designation consistent with local zoning.

Amendment 4

Revise the Future Land Use Map in order to show the 1.25 acre parcel located on the north side of Emerald Drive, and the current location of Bogue Banks Water Corporation (BBWC), Single/Dual Family Residential rather than its current designation as Commercial Corridor. The zoning of the property was changed to Residential-2 (R-2) at the request of BBWC when the Town adopted its new UDO and Official Zoning Map. The proposed amendment would make the Future Land Use Map designation consistent with local zoning.

Amendment 5

Revise the Future Land Use Map in order to show an approximately 6 acre area located on the north side of Emerald Drive as Single-Dual Family Residential rather than its current designation as Mixed Residential. The area also contains the Chapel by the Sea Church and land owned by the Town and designated as the location for McLean Park. The Board of Commissioners rezoned these properties to Residential-2 (R-2) and Government (G) as part of the UDO adoption process. The proposed amendment would make the Future Land Use Map designation consistent with local zoning.

Amendment 6

Revise the Future Land Use Map in order to show an approximately 1 acre area, located at 2412 and 2414 Emerald Drive, as Mixed Residential rather than its current designation as Single/Dual

Family Residential. The zoning of the property was changed to Residential-2 (R-2) at the request of the property owner when the Town adopted its new UDO and Official Zoning Map. The proposed amendment would make the Future Land Use Map designation consistent with local zoning.

The Town believes there is sufficient infrastructure capacity to adequately accommodate the potential development associated with the proposed amendments. In addition to the foregoing information you will find attached the following pieces of information:

- 1. Attachment 1 Future Land Use Map amendment Bell Cove Estates/Bell Cove Village
- 2. Attachment 2 Future Land Use Map amendment Bluewater Tract
- 3. Attachment 3A Text amendments to LUP
- 4. Attachment 3B Future Land Use Map amendment Island Harbor Marina
- 5. Attachment 4 Future Land Use Map amendment Bogue Banks Water Corporation
- 6. Attachment 5 Future Land Use Map amendment Chapel by the Sea/McLean Park
- 7. Attachment 6 Future Land Use Map amendment 2412/2414 Emerald Drive
- 8. Attachment 7 Land Use Plan/Zoning Consistency
- 9. Attachment 8 LUP Amendment/Management Topic Comparison
- 10. Attachment 9 Description of Current Available Public Facilities and Proposed Land Use Amendments
- 11. Miscellaneous attachments including: Resolutions #1-6 adopted by the Board of Commissioners for the LUP and FLUM Amendments; Copy of Public Hearing Notice; and, Affidavit of Publication for Public Hearing

The Town looks forward to it continued work with you on these amendments to its 2004 CAMA Land Use Plan and Future Land Use Map. Please feel free to contact me if you have any questions or need additional information.

KBR

Attachments

Town of Emerald Isle

Mayor Arthur B. Schools, Jr.

Mayor Pro-Tem Floyd Messer, Jr.

Board of Commissioners Nita Hedreen Tom Hoover, Jr. John Wootten Maripat Wright



Visit our web site at www.emeraldisle-nc.org !

Town Manager Frank A. Rush, Jr. frush@emeraldisle-nc.org

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Voice 252-354-3424 Fax 252-354-5068

RESOLUTION AMENDING THE TOWN'S 2004 CAMA LAND USE PLAN – #1 - BELL COVE ESTATES / BELL COVE VILLAGE

WHEREAS, the Town of Emerald Isle desires to amend its 2004 CAMA Land Use Plan, specifically the Future Land Use Map, in order to project the future land use of certain properties as Single/Dual Family Residential rather than Mixed-Residential, and

WHEREAS, the Town conducted a public hearing on the proposed amendment at a meeting of the Board of Commissioners held on December 9, 2008, and

WHEREAS, the Town has sufficient facility capacity to handle the proposed development of the property for residential purposes, and

WHEREAS, the amendment to the Future Land Use Map has been evaluated for its consistency with other existing policies and no internal inconsistencies exist; and

WHEREAS, the amendment is consistent with the six management topics outlined in the Town's Plan, and

WHEREAS, the amendment is consistent with the federally approved North Carolina Coastal Management Program and the rules of the Coastal Resources Commission, and

WHEREAS, the amendment does not violate any state or federal laws,

NOW, THEREFORE, BE IT RESOLVED by the Emerald Isle Board of Commissioners that

- 1. The Town's Future Land Use Map be hereby amended to project certain properties in Bell Cove Estates and Bell Cove Village, as depicted on the attached map, as Single/Dual Family Residential rather than Mixed-Residential, and
- The North Carolina Coastal Resources Commission is hereby asked to certify the aforesaid amendment.

Adopted this the <u>que</u> day of <u>December</u>, 2008, by a vote of

Commissioner(s) Hechaen, Hoover messer, Woother, Wright-voting for,

Commissioner(s) ______ voting against, and

Commissioner(s) ______absent.

Arthur B. Schools, Jr., Mayor

ATTEST:

1001

Rhonda Ferebee, Town Clerk

Town of Emerald Isle

Mayor Arthur B. Schools, Jr.

Mayor Pro-Tem Floyd Messer, Jr.

Board of Commissioners Nita Hedreen Tom Hoover, Jr. John Wootten Maripat Wright



Visit our web site at www.emeraldisle-nc.org !

Town Manager Frank A. Rush, Jr. frush@emeraldisle-nc.org

Mailing Address Town of Emerald Isle 7500 Emerald Drive Emerald Isle, NC 28594

Voice 252-354-3424 Fax 252-354-5068

RESOLUTION AMENDING THE TOWN'S 2004 CAMA LAND USE PLAN – #2 – REED DRIVE (BLUEWATER TRACT)

WHEREAS, the Town of Emerald Isle desires to amend its 2004 CAMA Land Use Plan, specifically the Future Land Use Map, in order to project the future land use of certain properties as Commercial Corridor rather than Mixed-Residential, and

WHEREAS, the Town conducted a public hearing on the proposed amendment at a meeting of the Board of Commissioners held on December 9, 2008, and

WHEREAS, the Town has sufficient facility capacity to handle the proposed development of the property for commercial purposes, and

WHEREAS, the amendment to the Future Land Use Map has been evaluated for its consistency with other existing policies and no internal inconsistencies exist; and

WHEREAS, the amendment is consistent with the six management topics outlined in the Town's Plan, and

WHEREAS, the amendment is consistent with the federally approved North Carolina Coastal Management Program and the rules of the Coastal Resources Commission, and

WHEREAS, the amendment does not violate any state or federal laws,

NOW, THEREFORE, BE IT RESOLVED by the Emerald Isle Board of Commissioners that

- 1. The Town's Future Land Use Map be hereby amended to project certain property on Reed Drive (Bluewater Tract), as depicted on the attached map, as Commercial Corridor rather than Mixed-Residential, and
- 2. The North Carolina Coastal Resources Commission is hereby asked to certify the aforesaid amendment.

Adopted this the da	y of December	, 2008, by a vote of
Commissioner(s) Hedraco,	Hoover, messer	Woothen Wright voting for,

Commissioner(s) ______ voting against, and

Commissioner(s) ______absent.

Arthur B. Schools, Jr., Mayor

ATTEST:

00

Rhonda Ferebee, Town Clerk

Town of Emerald Isle

Mayor Arthur B. Schools, Jr.

Mayor Pro-Tem Floyd Messer, Jr.

Board of Commissioners Nita Hedreen Tom Hoover, Jr. John Wootten Maripat Wright



Town Manager Frank A. Rush, Jr. frush@emeraldisle-nc.org

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Visit our web site at www.emeraldisle-nc.org !

RESOLUTION AMENDING THE TOWN'S 2004 CAMA LAND USE PLAN – #3A – MARINA VILLAGE TEXT AND #3B – MARINA VILLAGE MAP

WHEREAS, the Town of Emerald Isle desires to amend its 2004 CAMA Land Use Plan, specifically Part 3 of the Plan including the Future Land Use Map, in order to project the future land use of certain properties as Marina Village rather than Marine Commercial and Mixed-Residential, and

WHEREAS, the Town also desires to amend text in the 2004 CAMA Land Use Plan regarding Marina Village, and

WHEREAS, the Town conducted a public hearing on the proposed amendment at a meeting of the Board of Commissioners held on December 9, 2008, and

WHEREAS, the Town has sufficient facility capacity to handle the proposed development of the property for commercial and residential purposes, and

WHEREAS, the amendment to the Future Land Use Map has been evaluated for its consistency with other existing policies and no internal inconsistencies exist; and

WHEREAS, the amendment is consistent with the six management topics outlined in the Town's Plan, and

WHEREAS, the amendment is consistent with the federally approved North Carolina Coastal Management Program and the rules of the Coastal Resources Commission, and

WHEREAS, the amendment does not violate any state or federal laws,

NOW, THEREFORE, BE IT RESOLVED by the Emerald Isle Board of Commissioners that

- 1. The Town's Future Land Use Map be hereby amended to project certain properties at Island Harbor Marina, as depicted on the attached map, as Marina Village rather than Marine Commercial and Mixed-Residential, and
- 2. Text regarding Marina Village in the Town's 2004 CAMA Land Use Plan be hereby amended, and
- The North Carolina Coastal Resources Commission is hereby asked to certify the aforesaid amendment.

Adopted this the	que	day of	December	, 2008, by	a vote of
------------------	-----	--------	----------	------------	-----------

Commissioner(s) Hedran, Hoover, Masser, Woother, Wright voting for,

Commissioner(s) ______ voting against, and

Commissioner(s) ______absent.

choo

Arthur B. Schools, Jr., Mayor

ATTEST: Rhonda Ferebee, Town Clerk

Town of Emerald Isle

Mayor Arthur B. Schools, Jr.

Mayor Pro-Tem Floyd Messer, Jr.

Board of Commissioners Nita Hedreen Tom Hoover, Jr. John Wootten Maripat Wright



Town Manager Frank A. Rush, Jr. frush@emeraldisle-nc.org

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Voice 252-354-3424 Fax 252-354-5068

RESOLUTION AMENDING THE TOWN'S 2004 CAMA LAND USE PLAN – #4 – BOGUE BANKS WATER CORPORATION

WHEREAS, the Town of Emerald Isle desires to amend its 2004 CAMA Land Use Plan, specifically the Future Land Use Map, in order to project the future land use of certain properties as Single/Dual Family Residential rather than Commercial Corridor, and

WHEREAS, the Town conducted a public hearing on the proposed amendment at a meeting of the Board of Commissioners held on December 9, 2008, and

WHEREAS, the Town has sufficient facility capacity to handle the proposed development of the property for residential purposes, and

WHEREAS, the amendment to the Future Land Use Map has been evaluated for its consistency with other existing policies and no internal inconsistencies exist; and

WHEREAS, the amendment is consistent with the six management topics outlined in the Town's Plan, and

WHEREAS, the amendment is consistent with the federally approved North Carolina Coastal Management Program and the rules of the Coastal Resources Commission, and

WHEREAS, the amendment does not violate any state or federal laws,

NOW, THEREFORE, BE IT RESOLVED by the Emerald Isle Board of Commissioners that

- 1. The Town's Future Land Use Map be hereby amended to project certain property owned by Bogue Banks Water Corporation, as depicted on the attached map, as Single/Dual Family Residential rather than Commercial Corridor, and
- The North Carolina Coastal Resources Commission is hereby asked to certify the aforesaid amendment.

Adopted this the <u>day</u> day of <u>December</u> , 2008, by a vote of
Commissioner(s) Hedraen, Hoover, Masser, Wootten, Wightroting for,
Commissioner(s) voting against, and

Commissioner(s) _

absent.

Arthur B. Schools, Jr., Mayor

ATTEST:

000-

Rhonda Ferebee, Town Clerk

Town of Emerald Isle

Mayor Arthur B. Schools, Jr.

Mayor Pro-Tem Floyd Messer, Jr.

Board of Commissioners Nita Hedreen Tom Hoover, Jr. John Wootten Maripat Wright



Town Manager Frank A. Rush, Jr. frush@emeraldisle-nc.org

Mailing Address Town of Emerald Isle 7500 Emerald Drive Emerald Isle, NC 28594

Voice 252-354-3424 Fax 252-354-5068

RESOLUTION AMENDING THE TOWN'S 2004 CAMA LAND USE PLAN – #5 – CHAPEL BY THE SEA / MCLEAN PARK

WHEREAS, the Town of Emerald Isle desires to amend its 2004 CAMA Land Use Plan, specifically the Future Land Use Map, in order to project the future land use of certain properties as Single/Dual Family Residential rather than Mixed Residential, and

WHEREAS, the Town conducted a public hearing on the proposed amendment at a meeting of the Board of Commissioners held on December 9, 2008, and

WHEREAS, the Town has sufficient facility capacity to handle the proposed development of the property for residential purposes, and

WHEREAS, the amendment to the Future Land Use Map has been evaluated for its consistency with other existing policies and no internal inconsistencies exist; and

WHEREAS, the amendment is consistent with the six management topics outlined in the Town's Plan, and

WHEREAS, the amendment is consistent with the federally approved North Carolina Coastal Management Program and the rules of the Coastal Resources Commission, and

WHEREAS, the amendment does not violate any state or federal laws,

NOW, THEREFORE, BE IT RESOLVED by the Emerald Isle Board of Commissioners that

- 1. The Town's Future Land Use Map be hereby amended to project certain properties known as Chapel By The Sea and McLean Park, as depicted on the attached map, as Single/Dual Family Residential rather than Mixed Residential, and
- 2. The North Carolina Coastal Resources Commission is hereby asked to certify the aforesaid amendment.

Adopted this the <u>quan</u> day of <u>December</u> , 2008, by a vote of
Commissioner(s) Hedraen, Hoover, Messer, Woother, Wrightvoting for,
Commissioner(s) voting against, and

Commissioner(s) ____

absent.

Arthur B. Schools, Jr., Mayor

ATTEST:

000 Rhonda Ferebee, Town Clerk

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Town of Emerald Isle

Mayor Arthur B. Schools, Jr.

Mayor Pro-Tem Floyd Messer, Jr.

Board of Commissioners Nita Hedreen Tom Hoover, Jr. John Wootten Maripat Wright



Town Manager Frank A. Rush, Jr. frush@emeraldisle-nc.org

Mailing Address Town of Emerald Isle 7500 Emerald Drive Emerald Isle, NC 28594

Voice 252-354-3424 Fax 252-354-5068

and

RESOLUTION AMENDING THE TOWN'S 2004 CAMA LAND USE PLAN – #6 – 2412, 2414 EMERALD DRIVE

WHEREAS, the Town of Emerald Isle desires to amend its 2004 CAMA Land Use Plan, specifically the Future Land Use Map, in order to project the future land use of certain properties as Mixed Residential rather than Single/Dual Family Residential, and

WHEREAS, the Town conducted a public hearing on the proposed amendment at a meeting of the Board of Commissioners held on December 9, 2008, and

WHEREAS, the Town has sufficient facility capacity to handle the proposed development of the property for residential purposes, and

WHEREAS, the amendment to the Future Land Use Map has been evaluated for its consistency with other existing policies and no internal inconsistencies exist; and

WHEREAS, the amendment is consistent with the six management topics outlined in the Town's Plan, and

WHEREAS, the amendment is consistent with the federally approved North Carolina Coastal Management Program and the rules of the Coastal Resources Commission, and

WHEREAS, the amendment does not violate any state or federal laws,

NOW, THEREFORE, BE IT RESOLVED by the Emerald Isle Board of Commissioners that

- 1. The Town's Future Land Use Map be hereby amended to project certain properties at 2412 and 2414 Emerald Drive, as depicted on the attached map, as Mixed Residential rather than Single/Dual Family Residential, and
- The North Carolina Coastal Resources Commission is hereby asked to certify the aforesaid amendment.

Adopted this the <u>Que</u> day of <u>December</u> , 2008, by a vote of	
Commissioner(s) Madraan, Hoover, Messer, Woothen, Wightoting for,	
Commissioner(s) voting agains	st

Commissioner(s) _

absent.

Arthur B. Schools, Jr., Mayor

ATTEST:

0000

Rhonda Ferebee, Town Clerk



North Carolina Department of Environment and Natural Resources Division of Coastal Management

Division of Coastal Managem

Beverly Eaves Perdue, Governor

James H. Gregson, Director

Dee Freeman, Secretary

MEMORANDUM

CRC-09-03

To: The Coastal Resources Commission and Coastal Resources Advisory Council
From: Charlan Owens, AICP, DCM Elizabeth City District Planner
Date: January 29, 2009
Subject: Text Amendment to the Town of Manteo 2007 Core Land Use Plan (LUP) – (February CRC Meeting)

The Town of Manteo requests a Land Use Plan (LUP) amendment to modify a policy statement concerning the required setback along US 64/264).

The Board of Commissioners adopted the amendment at their December 3, 2008 meeting. No objections were voiced at the public hearing and no written objections were submitted to DCM.

The Town of Manteo 2007 LUP was certified by the CRC on July 27, 2007. A digital version of the certified LUP is available on the DCM website at:

http://www.nccoastalmanagement.net/Planning/under_review.htm

OVERVIEW

The Town desires to amend a Land Use Compatibility (LUC) policy as follows:

LUC Policy 11: The Town should continue to require new development and redevelopment on Virginia Dare Road (US64/264) in the County Services and Tourist Oriented Area to be set back 50 feet to accommodate the Voyages Corridor Buffer and sidewalk.

(<u>Underline</u> text is to be added, strikethrough text is to be deleted)

LUC Policy 11 can be found on Page 118 of 192 on the .pdf version of the certified LUP and Page 101 of the printed version.

The LUP amendment has been submitted to ensure consistency with recent changes to the Town's *Zoning Code*. The Board of Commissioners amended the *Zoning Code* on September 3, 2008 to change setbacks along US Hwy 64/264 from 50 feet to 15 feet within the B-2 zoning district. The B-2 zoning district includes properties abutting the highway along the downtown core. At that meeting, it was agreed that a public hearing would be scheduled to amend the LUP to reflect the setback change.

Rather than using a roadway, the "County Services and Tourist Oriented Areas" Future Land Use Map designation has been referenced in the amended policy. A 50 foot setback will be maintained within the designation, which includes certain properties on or near the intersection of N. Virginia Dare Trail and US64/264 at the Town's southern limits, outside the downtown core. The 50 foot setback will accommodate the Voyages Corridor Buffer, a 50 foot wide planting buffer/multi-use path/bikeway, and sidewalk.

The "County Services and Tourist Oriented Areas" designation can be found on Pages 142 and 143 on the .pdf version of the certified LUP and Pages 125 and 126 of the printed version.

DCM STAFF RECOMMENDATION: DCM staff has determined that The Town of Manteo has met the substantive requirements outlined in the 2002 Land Use Plan Guidelines and that there are no conflicts evident within either state or federal law or the State's Coastal Management Program.

DCM staff recommends that the CRAC forward the Town of Manteo Land Use Plan amendment to the CRC for certification approval.

If you have any questions please do not hesitate to contact me (Charlan Owens) at 252-264-3901.



STATE OF NORTH CAROLINA DEPARTMENT OF JUSTICE

ROY COOPER ATTORNEY GENERAL

P.O. BOX 629 RALEIGH, NC 27602 REPLY TO: WARD ZIMMERMAN ENVIRONMENTAL DIVISION TEL: (919) 716-6600 FAX: (919) 716-6767 wzimmerman@ncdoj.gov

MEMORANDUM

TO:	Coastal Resources Commission
FROM:	Ward Zimmerman, Assistant Attorney General
DATE:	January 28, 2009 (for the February 11-13, 2009 CRC Meeting)
RE:	Variance Request # 08-01 by John Young

Petitioner proposes to construct a driveway extension linking an existing dirt drive with an existing garage. The New Hanover County Local Permit Officer denied Petitioner's application based on the proposed development's inconsistency with the Coastal Resources Commission's (CRC) 30-foot buffer rule in 15A NCAC 7H.0209(d)(10) and inconsistency with the Local Land Use Plan, as prescribed in N.C.G.S § 113A-120(a)(8). Petitioner seeks a variance from the 30-foot buffer rule for coastal shorelines.

The following additional information is attached to this memorandum:

Attachment A: Relevant Rules Attachment B: Stipulated Facts Attachment C: Petitioner's Position and Staff's Response to Criteria Attachment D: Petitioner's Variance Request and Other Exhibits

cc: John Young, Petitioner
 New Hanover County CAMA LPO
 DCM Staff
 Jennie Hauser, Special Deputy Attorney General

ATTACHMENT A (Relevant Rules)

15A NCAC 7H.0209

(d) Use Standards.

- (10) Within the Coastal Shorelines category (estuarine and public trust shoreline AECs), new development shall be located a distance of 30 feet landward of the normal water level or normal high water level, with the exception of the following:
 - (A) Water-dependent uses as described in Rule 07H .0208(a)(1) of this Section;
 - (B) Pile-supported signs (in accordance with local regulations);
 - (C) Post- or pile-supported fences;
 - (D) Elevated, slatted, wooden boardwalks exclusively for pedestrian use and six feet in width or less. The boardwalk may be greater than six feet in width if it is to serve a public use or need;
 - (E) Crab Shedders, if uncovered with elevated trays and no associated impervious surfaces except those necessary to protect the pump;
 - (F) Decks/Observation Decks limited to slatted, wooden, elevated and unroofed decks that shall not singularly or collectively exceed 200 square feet;
 - (G) Grading, excavation and landscaping with no wetland fill except when required by a permitted shoreline stabilization project. Projects shall not increase stormwater runoff to adjacent estuarine and public trust waters;
 - (H) Development over existing impervious surfaces, provided that the existing impervious surface is not increased and the applicant designs the project to comply with the intent of the rules to the maximum extent feasible;
 - (I) Where application of the buffer requirement would preclude placement of a residential structure with a footprint of 1,200 square feet or less on lots, parcels and tracts platted prior to June 1, 1999, development may be permitted within the buffer as required in Subparagraph (d)(10) of this Rule, providing the following criteria are met:
 - (i) Development shall minimize the impacts to the buffer and reduce runoff by limiting land disturbance to only so much as is necessary to construct and provide access to the residence and to allow installation or connection of utilities such as water and sewer; and
 - (ii) The residential structure development shall be located a distance landward of the normal high water or normal water level equal to 20 percent of the greatest depth of the lot. Existing structures that encroach into the applicable buffer area may be replaced or repaired consistent with the criteria set out in Rules .0201 and .0211 in Subchapter 07J of this Chapter; and
 - (J) Where application of the buffer requirement set out in 15A NCAC 07H .0209(d)(10) would preclude placement of a residential structure on an undeveloped lot platted prior to June 1, 1999 that are 5,000 square feet or less that

does not require an on-site septic system, or on an undeveloped lot that is 7,500 square feet or less that requires an on-site septic system, development may be permitted within the buffer if all the following criteria are met:

- (i) The lot on which the proposed residential structure is to be located, is located between:
 - (I) Two existing waterfront residential structures, both of which are within 100 feet of the center of the lot and at least one of which encroaches into the buffer; or
 - (II) An existing waterfront residential structure that encroaches into the buffer and a road, canal, or other open body of water, both of which are within 100 feet of the center of the lot;
- Development of the lot shall minimize the impacts to the buffer and reduce runoff by limiting land disturbance to only so much as is necessary to construct and provide access to the residence and to allow installation or connection of utilities;
- (iii) Placement of the residential structure and pervious decking may be aligned no further into the buffer than the existing residential structures and existing pervious decking on adjoining lots;
- (iv) The first one and one-half inches of rainfall from all impervious surfaces on the lot shall be collected and contained on-site in accordance with the design standards for stormwater management for coastal counties as specified in 15A NCAC 02H .1005. The stormwater management system shall be designed by an individual who meets applicable State occupational licensing requirements for the type of system proposed and approved during the permit application process. If the residential structure encroaches into the buffer, then no other impervious surfaces will be allowed within the buffer; and
- (v) The lots must not be adjacent to waters designated as approved or conditionally approved shellfish waters by the Shellfish Sanitation Section of the Division of Environmental Health of the Department of Environment and Natural Resources.

ATTACHMENT B (Stipulated Facts)

1. Petitioner is John Young.

- 2. Mr. Young and his wife, Fran Young, own the property located at 6700 River Road, Wilmington, North Carolina 28412. The area of the entire lot is roughly 2.99 acres and the west side of the property is adjacent to the Cape Fear River.
- 3. The project is located within the Estuarine Shoreline category of the Coastal Shorelines Area of Environmental Concern (AEC). The man-made pond on the property is connected to the Cape Fear River by a tidal culvert.
- 4. Petitioner requested a Coastal Area Management Act (CAMA) minor permit from the New Hanover County Minor Permit Program to construct a driveway extension linking an existing dirt driveway with an existing garage.
- 5. The proposed driveway extension is within the 75-foot AEC and portions of the driveway are within the 30-foot buffer requirement of 15A NCAC 7H .0209(d)(10).
- 6. The existing driveway is the only ingress and egress to the existing property.
- 7. As part of the permitting process, notice was given and comments were sought from riparian owners and the general public. Three responses were received from adjacent property owners.
 - a. Adjacent property owners Richard Wilkins, Judith Wilson, and Alton Insco responded to the notifications and had no objection to the proposed driveway. See attached.
- 8. On February 1, 2008, the New Hanover County Local Permit Officer denied Petitioner's application based on the proposed development's inconsistency with the Coastal Resources Commission's (CRC) 30-foot buffer rule in 15A NCAC 7H.0209(d)(10) and inconsistency with the Local Land Use Plan, as prescribed in N.C.G.S § 113A-120(a)(8).
- 9. Petitioner submitted this variance petition on February 6, 2008, to the Division of Coastal Management (DCM). In a letter to the Attorney General's Office dated September 13, 2008, Petitioner enclosed five (5) attachments, including: a physical survey, three photographs of the property, an aerial photograph, proposed stipulations, and a "Summary of Petitioner." See attached.
- 10. On 9/17/08, Petitioner was issued a separate CAMA General Permit No. 39769 to construct a bulkhead along the property's shoreline adjacent to the Cape Fear River. The petitioner asserts that the area landward of the perimeter bulkhead will be backfilled, sloped and graded away from the river and stabilized with vegetation (i.e. lawn grass). The Petitioner further contends that this will create a vegetated swale area of

approximately 10,000 square feet to collect and infiltrate any stormwater run-off from the proposed driveway connection.

- 11. Petitioner asserts that the proposed driveway extension will be sloped to drain toward the grassed area between the proposed bulkhead project area and the Cape Fear River.
- 12. The existing driveway has been driven upon and in continuous use long enough to create compacted soil conditions that no longer provide the "infiltration benefits" associated with the estuarine buffer.

ATTACHMENT C (Petitioner's Position and Staff's Response to Criteria)

I. Will strict application of the applicable development rules, standards, or orders issued by the Commission cause the petitioner unnecessary hardships? If so, the petitioner must identify the hardships.

Petitioners' Position: Yes.

Petitioner maintains that strict application of the buffer rule will cause hardship, stating that the buffer rule does not allow him to extend the driveway between the existing dirt driveway and the existing garage. Furthermore, the part of the driveway that is located in the 30' buffer would be of minimal impact on water quality.

Staff's Position: Yes.

Staff agrees that strict application of the rules would create unnecessary hardship. Petitioner requests a driveway extension linking the existing gravel driveway with an existing garage. The gravel driveway is the sole ingress and egress to the Petitioner's property, and the travelway across the pond dam and through the grassed yard is the only way to access the existing garage.

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

Petitioners' Position: Yes.

Petitioner asserts that the lot is unique because the existing driveway is the only ingress and egress to the existing garage and house. This driveway rests on an area of 43-feet in width between a man-made pond and a spillway to the Cape Fear River.

Staff's Position: Yes.

Staff agrees that hardships result from conditions peculiar to the property. As stated above, this lot contains an existing house and garage that can only be accessed by traveling across the narrow dam (43 ft. wide) of a man-made pond within the 30-foot buffer.

III. Do the hardships result from the actions taken by the Petitioner? Explain.

Petitioners' Position: No.

Petitioner argues that the pre-existing lot configuration is the cause of his hardships.

Staff's Position: No.

Staff agrees that the hardships are not the result of Petitioner's actions.

IV. 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.

Petitioners' Position: Yes.

Petitioner feels that the proposed driveway extension design will have a minimal impact on water quality. Petitioner feels that this impact is less than others, such as major development along the river not far from the subject property, and feels that strict application of the rules will result in a substantial reduction of benefits from the property with a negligible, if any, environmental impact.

Staff's Position: Yes.

The buffer rule is designed to protect water quality by creating a vegetative buffer between a water body and any impervious surfaces which would lead to stormwater runoff into adjacent estuarine and public trust waters. The staff recognizes that the existing site conditions prevent the Petitioner from accessing his property in a manner consistant with the buffer requirements of 15A NCAC 07H .0209(d)(10). Petitioner asserts that his newly constructed bulkhead and sloped backfill create a vegetated swale area of approximately 10,000 square feet to store and infiltrate any stormwater run-off from the proposed driveway extension and improvements. Staff is not satisfied that sloping and overland flow will be adequate to direct stormwater run-off from the narrow dam area to the vegetated swale area. However, if the Petitioner includes some method of conveyance (eg. curbing, drop-inlet piping, etc.) in his project design, then these best management practices should reduce stormwater run-off to the adjacent waters. With the above implementation, the Petitioner's project secures the public safety and welfare by the protection of the public resource, as well as, preserves substantial justice for the petitioner who is trying to deal with circumstances and conditions beyond his control, thus providing a resolution which is consistent with the spirit, purpose, and intent of the rules, standards or orders issued by the Commission.

ATTACHMENT D (Petitioner's Variance Request and Other Exhibits)

DCM FORM 11 (revised 6/26/06)

Petitioner supplies the following information:

Your Name John Young Address 4700 River Red Wilmington, $N \in \mathbb{Z}^{5412}$ Telephone 510-275-0272 Fax and/or Email $_{1}=_{1}$ 710-753-8042 / MDHAZ Cytheo. 007

Name of Your Attorney (if applicable) Address Telephone Fax and/or Email

FEB

Morehead City DCM

Have you received a decision from the Division of Coastal Management (DCM) or a Local Permit Officer denying your application for a CAMA permit?



(You are not entitled to request a variance until your permit application has been denied.)



(You may proceed with a request for a variance.)

What did you seek a permit to do? Extend drive why

What Coastal Resources Commission rule(s) prohibit this type of development?

Can you redesign your proposed development to comply with this rule? <u>and</u> If your answer is no, explain why you cannot redesign to comply with the rule.

No Space

Can you obtain a permit for a portion of what you wish to do? _____ If so, please state what the permit would allow.

State with specificity what you are NOT allowed to do as a result of the denial of your permit application. It will be assumed that you can make full use of your property, except for the uses that are prohibited as a result of the denial of your permit application.

Extend drive To roduce sand intrusion

RESPOND TO THE FOUR STATUTORY VARIANCE CRITERIA:

I. Identify the hardship(s) you will experience if you are not granted a variance and explain why you contend that the application of this rule to your property constitutes an unnecessary hardship. [The North Carolina Court of Appeals has ruled that this factor depends upon the unique nature of the property rather than the personal situation of the landowner. It has also ruled that financial impact alone is not sufficient to establish unnecessary hardship, although it is a factor to be considered. The most important consideration is whether you can make reasonable use of your property if the variance is not granted. [Williams v. NCDENR, DCM, and CRC, 144 N.C. App. 479, 548 S.E.2d 793 (2001).]

The simply Trying To reduce The Amount of dist in my strage

II. Describe the conditions that are peculiar to your property (such as location, size, and topography), and cause your hardship.

All Structures Are wear water

III. Explain why your hardship does not result from actions that you have taken. Word, I did build the Strast

IV. Explain why the granting of the variance you seek will be consistent with the spirit, purpose, and intent of the CRC's rules, standards, or orders; preserve substantial justice; and secure public safety.

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Please attach copies of the following:

Permit Application and Denial documents Site Drawing with Survey and Topographical Information Any letters filed with DCM or the LPO commenting on or objecting to your project



Provide a numbered list of all true facts that you are relying upon in your explanation as to why you meet the four criteria for a variance. Please list the variance criterion, ex. **UNCENDED City DCM** hardship, and then list the relevant facts under each criterion. [The DCM attorney will also propose facts and will attempt to verify your proposed facts. Together you will arrive at a set of facts that both parties agree upon. Those facts <u>will be the only facts that the Commission will</u> consider in determining whether to grant your variance request.]

Attach all documents you wish the Commission to consider in ruling upon your variance request. [The DCM attorney will also propose documents and discuss with you whether he or she agrees with the documents you propose. Together you will arrive at a set of documents that both parties agree upon. Those documents <u>will be the only documents that the Commission will consider in</u> determining whether to grant your variance request.]

Pursuant to N.C.G.S. 113A-120.1 and 15A NCAC 7J .0700, the undersigned hereby requests a variance.

Signature:

Date: 2/4/08

This variance request must be filed with the Director, Division of Coastal Management, and the Attorney General's Office, Environmental Division, at the addresses shown on the attached Certificate of Service form.

CERTIFICATE OF SERVICE

I hereby certify that this Variance Request has been served on the State agencies named below by United States Mail or by personal delivery to the following:

Original served on: I

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

copy:

Attorney General's Office Environmental Division 9001 Mail Service Center Raleigh, NC 27699-9001

20

This the _____ day of _____

Signature of Petitioner or Attorney



Intracoastal Engineering PLLC

September 20, 2008

A WARRAN C

NCDENR Division of Coastal Management 127 Cardinal Drive Extension Wilmington, NC 28405

Attn: Dr. Steven H. Everhart

Re: Young Residence PN 100-06

Dear Mr. Everhart,

In Response to your October 20, 2008 Additional information request to Mr. John Young we offer the following:

- 1. The "Lake" boarders have been located and labeled Normal High Water by Patrick C. Bristow Land Surveying PC.
- 2. The Normal High Water Line has been located at the River and Lake. This line has been offset to establish the 30' Buffer and 75' AEC.
- 3. All areas proposed to be filled with Gravel and/or Concrete have been shown and labeled appropriately.
- 4. Surveyed and proposed impervious areas have been calculated and listed in a table on Sheet C-1.
- 5. Using the NCDENR Division of Water Quality definition of impervious area on the date this project was submitted, we have found the addition of only 562.74 sf. of additional impervious area to the site. 561 sf. Outside of the 30' buffer, but within the 75' AEC and 1.74 sf. within the 30' buffer. (There is a historical grassed vehicle access and parking area that is considered impervious). All areas are tabulated on Sheet C-1.
- 6. A note and flow arrows are provided on the plan specifying for the runoff to be directed to the grassed area between the drive and bulkhead area.

Please review for approval and contact us with any questions, comments or additional information needed.

Sincerely, Intracoastal Engineering PLLC

here G.

Charles D. Cazier, P.E.

**** \$ \$ \$ \$ \$

MOV 7 4 2004

CLEVING AND STON NC


TO:	Christine Anne Goebel Assistant Attorney General
FROM:	John and Fran Young
DATE:	September 13, 2008
RE:	Variance Request #08-002 by John and Fran Young

Petitioners propose to install a driveway extension at 6700 River Road, Wilmington, NC. Local permit officer for New Hanover County denied petitioner's application because it is inconsistent with the CRC's 30-foot buffer rule. Whereas the majority of the proposed driveway is within the 30-foot buffer area, the Petitioner is hereby requesting a variance to the 30-foot rule in order to extend the existing driveway to connect with the existing garage apron.

The following additional information is attached:

Attachment 1 - Sheet No. 1 with attached physical survey.

Attachment 2 - Sheet No. 2 with three attached photos.

Attachment 3 – Sheet No. 3 which is a copy of an aerial photo.

Attachment 4 - Sheet No. 4 which is relevant stipulations.

Attachment 5 – Summary of Petitioner

/fy attachments (5)

VR#08-002







6700 River Ad John & Fran young

Brit- @ (29×55) - (30×8) - 1/2 (15×16) = 1310 (35×34) - 1/2 (35×14) - 1/2 (30×8) = 790 1190

CARAGE + APRON (NOT A) Within 75 850

House	1780
Fish house	800
Well house	16
WAIM WAY	96
Extension	1500
T . T.A 1	6252

Note: closest corner of Carase To MHT if 48' Total property Square Fuetage is 131, 115 = PONd Square FOOTAS- 110'x 447' 4917#

Existing Drive each rut 4' x 800 + \$ 300 = 6700

Plan' Gover area with 4" of concrete

Total property sq ft = 131, 115 ~ pond=49,130 ~ Uplands = 81,985 Existing Impervious = 6700+6252=

12,952 sg.Ft.

12952 × 100 = 15,8%

RECEIVED JAN 1 5 2008 2,952+1190 = 14142 × 100 = 17.2% impervious





HEEFALLE

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sheet 2 photo oring Totions North 25 Graper Ty GARASC drive a River. Apron (Lon 100 4 co 100 × 130 spilling lin SWAL Aret betwarn 6.Twee Then 77 Desð 1 N 1 1 30×8 200 Ð LHW of and a ,12 Deek 5×6 X I Was " detriving WAI 81' f 3 ŧ 3. 1.4 A. S. 433 ŧ · per del 72.21 S VI BE LE R 19.4 , S ĺ Scrie 6700 Kiver $+\tilde{y}^{\dagger}$ ₭τ. (um/1.05) = Qa conserved A @ AT X Y SMAIL House 1 3 Vice



http://www.default.nhcgov.com/servlet/com.esri.esrimap.Esrimap?ServiceName=overview&... 4/1/2008



Ann S. Hines Chief Zoning Enforcement Official NEW HANOVER COUNTY INSPECTION SERVICES

230 Government Center Drive, Suite 110 WILMINGTON, NORTH CAROLINA 28403 TELEPHONE (910) 798-7118

FAX: (910) 798-7060

6 2008

Morehead City DCM

February 1, 2008

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. John Young 6700 River Road Wilmington, NC 28412

RE: DENIAL OF CAMA MINOR DEVELOPMENT PERMIT APPLICATION NUMBER- 08-002 PROJECT ADDRESS- 6700 River Road

Dear Mr. Young:

After reviewing your application in conjunction with the development standards required by the Coastal Area Management Act (CAMA) and our locally adopted Land Use Plan and Ordinances, it is my determination that no permit may be granted for the project which you have proposed.

This decision is based on my findings that your request violates NCGS 113A-120(a) (8) which requires that all applications be denied which are inconsistent with CAMA guidelines. Based on your application, 08-002, proposing to extend a private drive comprised of 4 inches of concrete within the 75 foot Area of Environmental Concern and 30 foot buffer, is inconsistent with 15A NCAC 7H.0209 (d) (10) Use Standards, which states that: "within the Coastal Shorelines category (estuarine and public trust shoreline AECs) new development shall be located a distance of 30 feet landward of the normal water level or normal high water level". Inconsistent with 15A NCAC 7H .0209(a) Coastal Shorelines, which states that: "The Coastal Shorelines category includes estuarine shorelines and public trust shorelines. Estuarine shorelines AEC are those non-ocean shorelines extending from the normal high water level or normal water level along the estuarine waters, estuaries, sounds, bays, fresh and brackish waters, and public trust areas as set forth in an agreement adopted by the Wildlife Resources Commission and the Departments of Environment and Natural Resources [described in Rule .0206(a) of this Section] for a distance of 75 feet landward". II have concluded that your request also violates NCGS 113A-120(a) (8), which requires that all applications be denied which are inconsistent with our Local Land Use Plan. On page 11 of the Land Use Plan, you will find that Policy 1.1 states to: "Make every effort to prevent further deterioration of estuarine water quality and loss of public trust uses in the creeks and sounds and improve water guality in all surface water bodies so that each water body meets its use designation as determined by the Divisions of Water Quality, Marine Fisheries, Health, and E.P.A.". On page 22 of the Land Use plan, you will find that Policy 3.16 states to: "prohibit incompatible development in ocean erodible areas, inlet hazard areas, high hazard flood areas, and coastal and federally regulated wetlands and required buffers to protect public safety, reduce the risk of property damage, and provide for the long-term protection and management of these environmentally significant resources due to their natural role in the integrity of the coastal region."

Mr. John Young

Should you wish to appeal my decision to the Coastal Resource Commission or request a variance from that group, I have provided the proper form and other information you may require. The Division of Coastal Management in Raleigh must receive appeal notices within twenty (20) days of the date of this letter in order to be considered.

If you need additional information, please contact me at 910-798-7342.

Sincerely,

Colleen P Murtaugh, LPO V New Hanover County 230 Government Center Drive, Suite 110 Wilmington, NC 28403

cc: Robb Mairs, DCM Ann S Hines, NHC Chief Zoning Enforcement Official

Ple per req	ATHE CONTRACTOR STREET PRODUCTION OF DECIDENT AND A STREET AND A STREE
PH	GENERAL INFORMATION
	LAND OWNER FEB 6 2008
	Name Tala É Europa
	Name <u>John & Fran young</u> Morehead City DCM Address <u>6700 River Rol</u>
PH	City Wilming Tow State de Zip 284/2 Phone 790-3341
	AUTHORIZED AGENT
Ify	Nате
	Address
	City State Zip Phone
	LOCATION OF PROJECT: (Address, street name and/or directions to site. If not oceanfront, what is the name of
Ifγ	the adjacent waterbody?) 6700 River Rd / Cape Fear River
₩	SIZE OF LOT/PARCEL:square feetsquare feetacres PROPOSED USE: Residential (Single-family Multi-family) Commerical/Industrial Other
NC Ha	TOTAL ENCLOSED FLOOR AREA OF A BUILDING IN THE OCEAN HAZARD AREA OF ENVI- RONMENTAL CONCERN (AEC): square feet (includes all floors and roof-covered decks)
, kr	 (1) within 75 feet of Normal High Water for the Estuarine Shoreline AEC (2) within 575 feet of Normal High Water for the Estuarine Shoreline AEC, adjacent to Outstanding Resource Waters (3) within 30 feet of the Public Trust Shoreline AEC
	(Contact your Local Permit Officer if you are not sure which AEC applies to your property.) STATE STORMWATER MANAGEMENT PERMIT: Is the project located in an area subject to a State Stormwater Management Permit issued by the N.C. Division of Water Quality? YESNO
L R	If yes, list the total built-upon area/impervious surface allowed for your lot or parcel square feet.

THER PERMITS MAY BE REQUIRED: The activity you are planning may require permits other than the CAMA minor velopment permit. As a service we have compiled a list of the kinds of permits that might be required. We suggest you check over the list th your LPO to determine if any of these apply to your project: Zoning, Drinking Water Well, Septic Tank (or other sanitary waste atment system), Building, Electrical, Plumbing, Heating and Air Conditioning, Insulation and Energy Conservation, FIA Certification, nd Dune, Sediment Control, Subdivision Approval, Mobile Home Park Approval, Highway, Connection, and others.

APPLICATION:

08-002

LOCALITY

NAG

FATEMENT OF OWNERSHIP:

the undersigned, an applicant for a CAMA minor development permit, being either the owner of property in an AEC or a tron authorized to act as an agent for purposes of applying for a CAMA minor development permit, certify that the person and as landowner on this application has a significant interest in the real property described therein. This interest can be write the context of the termine of termine of the termine of termin

×	_an owne	r or	record t	itle. I	Title is	vested in	John	ŗ	Finn	you.	<u>~</u> 5,	see Deed	Book .	3	9.9	. 8
ıge	124	in t	he <u>110</u>	tat	HAN	<u></u>	_ County	Reg	istry of De	eds.	ŧ					

____an owner by virtue of inheritance. Applicant is an heir to the estate of ______;
obate was in ______County.

____if other interest, such as written contract or lease, explain below or use a separate sheet and attach to this application.

IOTIFICATION OF ADJACENT PROPERTY OWNERS:

Howhermore certify that the following persons are owners of properties adjoining this property. I affirm that I have given "SUAL NOTICE to each of them concerning my intent to develop this property and to apply for a CAMA permit. (Name) (Address)

1) Judith Wilrow	6632 River Ad W. JaningTon, DC. 28412
2) AITON INTER	6640 River Del Historing Tod, NE 28 412
3) _ Rick Wilkins	1708 River Red Willmang Tex, NL 28412

OR DEVELOPERS IN OCEAN HAZARD AND ESTUARINE HAZARD AREAS:

acknowledge that the land owner is aware that the proposed development is planned for an area which may be susceptible to osion and/or flooding. I acknowledge that the local permit officer has explained to me the particular hazard problems associed with this lot. This explanation was accompanied by recommendations concerning stabilization and floodproofing techiques.

ERMISSION TO ENTER ON LAND:

(- 1977),

⁽³⁾hermore certify that I am authorized to grant and do in fact grant permission to the local permit officer and his agents to ter on the aforementioned lands in connection with evaluating information related to this permit application.

his application includes: general information (this form), a site drawing as described on the back of this application, the wnership statement, the AEC hazard notice where necessary, a check for \$100.00 made payable to the locality, and any inforiation as may be provided orally by the applicant. The details of the application as described by these sources are incorporated ithout reference in any permit which may be issued. Deviation from these details will constitute a violation of any permit. Any erson developing in an AEC without permit is subject to civil, criminal and administrative action.

This the 2 1 day of <u>December</u>. 20 <u>07</u>

Landowner or person authorized to act as his agent for purpose of filing a CAMA permit application.

ADJACENT RIPARIAN PROPERTY OWNER STATEMENT FOR CAMA MINOR PERMITS

I hereby certify that I own property adjacent to John & Fran Jours 's

(Name of Property Owner)

property located at 6700 River Ad Wilming Town Ne 28412

Address, Lot, Block, Road, etc.)

on <u>Cape For River</u>, in <u>New Hawover courty</u>, N.C. (Waterbody) (Town and/or County)

He has described to me as shown in the attached application and project drawing(s), the development he is proposing at that location, and, I have no objections to his proposal.

(APPLICATION AND DRAWING OF PROPOSED DEVELOPMENT ATTACHED)

Signature

Print or Type Name

910 794 1616 Telephone Number

<u>PGC 30, 2007</u> Date

RECEIVED JAN 0 7 2008

ADJACENT RIPARIAN PROPERTY OWNER STATEMENT FOR CAMA MINOR PERMITS

I hereby certify that I own property adjacent to John & From young 's

(Name of Property Owner)

property located at 6700 River Rd W. In sympace 28412.

1

Address, Lot, Block, Road, etc.)

, in <u>New Massey</u> (Town and/or County) N.C. on Cape (Waterbody)

He has described to me as shown in the attached application and project drawing(s), the development he is proposing at that location, and, I have no objections to his proposal.

(APPLICATION AND DRAWING OF PROPOSED DEVELOPMENT ATTACHED)

<u>Judith P. Wilson</u> Print or Type Name <u>(910)</u> 791-6799 Telephone Number

1/6/08 Date

RECEIV _____ JAN 0 7 2008

ADJACENT RIPARIAN PROPERTY OWNER STATEMENT FOR CAMA MINOR PERMITS

I hereby certify that I own property adjacent to John E Fran young 's

(Name of Property Owner)

property located at 1.700 River Rd Wilming Tan, we 28412.

Address, Lot, Block, Road, etc.)

on <u>Conceptor River</u>, in <u>Now Havorer</u>, N.C. . (Waterbody) (Town and/or County)

He has described to me as shown in the attached application and project drawing(s), the development he is proposing at that location, and, I have no objections to his proposal.

(APPLICATION AND DRAWING OF PROPOSED DEVELOPMENT ATTACHED)

Signature

910 (7912938 Telephone Number

RECEIVED 10 0 2008



STATE OF NORTH CAROLINA DEPARTMENT OF JUSTICE

Roy Cooper Attorney General P.O. Box 629 Raleigh, NC 27602 REPLY TO: WARD ZIMMERMAN ENVIRONMENTAL DIVISION TEL: (919) 716-6600 FAX: (919) 716-6767 wzimmerman@ucdoj.gov

MEMORANDUM

то:	Coastal Resources Commission
FROM:	Ward Zimmerman, Assistant Attorney General
DATE:	January 28, 2009 (for the February 11-13, 2009 CRC Meeting)
RE:	Variance Request # 08-55 by NCDOT

Petitioner proposes a beach habitat restoration on NC 12 in Dare County, North Carolina. The proposed project would place approximately 200,000 cubic yards of sand on the beach face at the "Rodanthe S-Curves." Petitioner's application was denied based on the proposed development's inconsistency with the Coastal Resources Commission's (CRC) shore-perpendicular topographic and bathymetric surveying of the recipient beach, as prescribed in 15A NCAC 7H.0312(1)(c), and sediment sampling requirements, as prescribed in 15A NCAC 7H.0312(1)(d). Petitioner seeks a variance from these requirements.

The following additional information is attached to this memorandum:

Attachment A: Relevant Rules Attachment B: Stipulated Facts Attachment C: Petitioner's Position and Staff's Response to Criteria Attachment D: Petitioner's Variance Request and Other Exhibits

 cc: Scott T. Slusser, Assistant Attorney General, Transportation Section Dare County CAMA LPO DCM Staff Jennie Hauser, Special Deputy Attorney General

ATTACHMENT A (Relevant Rules)

15A NCAC 7H.0312 TECHNICAL STANDARDS FOR BEACH FILL PROJECTS

Emplacement of sediment along the oceanfront shoreline shall be referred to in this Rule as beach fill. Beach fill projects including beach nourishment, dredged material disposal, habitat restoration, storm protection, and erosion control may be permitted under the following conditions:

(1) The applicant shall characterize the recipient beach according to the following methodology:

- (c) Shore-perpendicular topographic and bathymetric surveying of the recipient beach shall be conducted to determine the beach profile. Topographic and bathymetric surveying shall occur along a minimum of five (5) shore-perpendicular transects evenly spaced throughout the entire project area. Each transect shall extend from the frontal dune crest seaward to a depth of 20 feet (6.1 meters) or to the shoreperpendicular distance 2,400 feet (732 meters) seaward of mean low water, whichever is in a more landward position. Transect spacing shall not exceed 5,000 feet (1,524 meters) in the shore-parallel direction. Elevation data for all transects shall be referenced to the North American Vertical Datum on 1988 (NAVD 88) and the North American Datum of 1983 (NAD 83);
- (d) No less than 13 sediment samples shall be taken along each beach profile transect. At least one (1) sample shall be taken from each of the following morphodynamic zones where present: frontal dune, frontal dune toe, mid berm, mean high water (MHW), mid tide (MT), mean low water (MLW), trough, bar crest and at even depth increments from 6 feet (1.8 meters) to 20 feet (6.1 meters) or to a shore-perpendicular distance 2,400 feet (732 meters) seaward of mean low water, whichever is in a more landward position. The total number of samples taken landward of MLW shall equal the total number of samples taken seaward of MLW;

ATTACHMENT B (Stipulated Facts)

- 1. The North Carolina Department of Transportation (hereinafter "Petitioner" or "NCDOT") controls and maintains NC Highway 12, also known as Virginia Dare Trail, which runs along the oceanfront on the Outer Banks in Dare County.
- 2. NC 12 is a primary route in Dare County and an important highway evacuation route in the event of an impending major storm or hurricane.
- 3. Historically, there has been a wide stretch of beach located between the eastern edge of NC 12 and the Atlantic Ocean near a portion of NC 12 known as the "Rodanthe S-Curves." Over time, storms and natural beach erosion has decreased the size and significance of the beach area to where it no longer protect segments of Highway 12 from over wash, flooding, and deposition of sand during storm events.
- 4. The "Rodanthe S-Curves" segment of NC 12 most affected by beach erosion measures approximately 1500 linear feet. The beach at the affected location, is relatively flat between Highway 12 and the Atlantic Ocean (hereinafter the "project area").
- 5. The project area is within the Ocean Hazard Area of Environmental Concern as designated by the Coastal Resources Commission. The project area is susceptible to frequent erosion during storm events. During storm events, the surf washes over, floods, and deposits sand on the NC 12 at the project area.
- 6. On January 12, 2007, the Petitioner obtained a Special Use Permit from the US Fish and Wildlife Service (USFWS) to place the sandbags. Under a CAMA General Permit issued on March 15, 2007, the Petitioner placed sandbags along a 900-foot section of the project area in order to protect the highway from erosion.
- 7. The USFWS Special Use Permit was required due to the project area also being on the Pea Island National Wildlife Refuge.
- 8. As a condition of the USFWS Special Use Permit, the USFWS requires the Petitioner to perform a beach habitat restoration project at the project area. The beach habitat restoration project is the basis of this variance request.
- 9. The Petitioner controls and maintains a 100-foot right-of-way for Highway 12 within the project area.
- 10. On August 25, 2008, the NC Department of Transportation applied to the Division of Coastal Management for a CAMA Major Permit for placement of approximately 200,000 cubic yards of sand (beach habitat restoration) on the beach face at the project area as allowed under Rule 15A NCAC 7H Section .0308 and 15A NCAC 7H Section .0312.
- 11. The beach habitat restoration will be performed at the same location where approximately

900 feet of sand bags were placed under the CAMA general permit granted to Petitioner on March 15, 2007.

......

- 12. Pursuant to its Major Permit request, Petitioner transected the project area (6) six times at equal intervals. Due to the project area being only 1,500 linear feet long, each transect was approximately 250 feet apart.
- 13. Petitioner took sediment samples at the mean low water line (MLW), mid tide (MT), mean high water line (MHW) and dune toe at each transect.
- 14. Petitioner took a total of twenty-four (24) sediment samples at the project area. Each sediment sample was tested for sand grain size, calcium carbonate and heavy minerals and was found to be consistent with Rule 15A NCAC 7H Section .0312. There was general consistency among these various sediment samples.
- 15. Petitioner did not obtain the minimum number of sediment samples from the project area as required by 15A NCAC 07H.0312.
- 16. Due to the relatively flat slope of the beach at the project area, a strict application of the sediment sampling would require Petitioner to perform sampling to a depth of 20 feet seaward of the mean low water line (MLW), which is approximately 1,500-2,000 linear feet seaward.
- 17. The borrow area where 200,000 cubic yards of sand will be acquired for the beach habitat restoration project is located approximately 12 miles from the project area.
- 18. Petitioner obtained the minimum number of sediment samples as required by 15A NCAC 07H.0312 at the borrow area.
- 19. Each sediment sample at the borrow area was tested for sand grain size, calcium carbonate, and heavy minerals.
- 20. The sediment samples from the borrow area and the sediment samples from the project area are consistent in terms of sand grain size, calcium carbonate, and heavy minerals.
- 21. On August 25, 2008, the Petitioner requested an Individual Permit from the US Army Corps of Engineers for the beach habitat restoration project. Approval of the Individual Permit is still pending.
- 22. On August 25, 2008, the Petitioner requested a 401 Individual Certification from the Division of Water Quality for the beach habitat restoration project. Approval of the 401 certificate is still pending.
- 23. On August 25, 2008, the Petitioner requested a Special Use Permit from the USFWS for the beach habitat restoration project. The USFWS had concurred with the beach habitat restoration project as evidenced by their letter dated October 1, 2008.

- 24. Without the variance, NCDOT would violate the USFWS Special Use Permit which allowed the placement of the sandbags on NC 12.
- 25. Should the variance be granted, the current proposed borrow site will be excavated under the supervision of the USFWS refuge staff in order to provide foraging habitat for shore birds. In addition, in order to prevent potential impacts to protected shorebirds and nesting sea turtles, NCDOT will conduct the proposed work outside of applicable moratoriums and under the supervision of the USFWS managing biologist and direction from the WRC.
- 26. Pursuant to the USFWS Special Use Permit, Petitioner has agreed to a monitoring program that involves pre and post sandbag installation monitoring of physical and biological elements of the beach face within the project area.
- 27. On October 20, 2008, the Division of Coastal Management denied a CAMA Major Permit for the beach habitat restoration project. The permit was denied because the Petitioner failed to collect the minimum number of sediment samples at the recipient beach.

<u>ATTACHMENT C</u> (Petitioner's Position and Staff's Response to Criteria)

1. Will strict application of the applicable development rules, standards, or orders issued by the Commission cause the petitioner unnecessary hardships? If so, the petitioner must identify the hardships.

Petitioners' Position: Yes.

Pursuant to 15A. N.C.A.C. 7M.202(c), the replenishment of sand on ocean beaches can provide storm protection and a viable alternative to allowing the ocean shoreline to migrate landward threatening to degrade public beaches and cause the loss of public facilities and private property. Experience in North Carolina and other states has shown that beach restoration projects can present a feasible alternative to the loss or massive relocation of oceanfront development.

A 900 foot section of NC 12 known as the "Rodanthe S-curves" has been severely affected by beach erosion. On January 12, 2007, NCDOT received a special use permit from the U.S. Fish and Wildlife Service (USFWS) to place sandbags along 900 feet of NC 12 to prevent further erosion to the roadway structure. On March 15, 2007, NCDOT received a general CAMA permit for the placement of the sandbags. As a condition of the USFWS special use permit, NCDOT was directed to restore beach habitat on a 1500 foot section of beach located adjacent to the sandbags. A copy of the USFWS Special Use Permit is attached as Exhibit 7. A copy of the general CAMA permit is attached as Exhibit 6.

Hardship would be created by putting NCDOT in a position of not being able to comply with the USFWS Special Use Permit that was issued for the sandbag placement. The sandbags were placed to prevent further damage to NC 12 during storm events. NCDOT is now proposing to perform the beach habitat restoration by adding approximately 200,000 cubic yards of sand excavated from an area 12 miles from the recipient beach. The borrow area, which was recommended by USFWS, is located on the Pea Island Refuge and includes state owned property where the Old Coast Guard Station is located.

NCDOT did collect the required minimum sediment samples from the borrow area and did collect four sediment samples from each of the six (6) transects of the recipient beach. The four sediment samples came from the mean low water (MLW), mid toe (MT), mean high water (MHW) and dune toe. Further sediment samples in this area would have required sampling to be done to a depth of 20 feet below MLW, which is approximately 1,500-2,000 feet offshore. Any additional sediment sampling would have been costly and extremely extensive considering the relatively small area (1,500 ft.) that will receive the beach nourishment. The sediment sampling taken by NCDOT does not show any great inconsistencies between the samples or any evidence that further sampling would yield different results.

If NC 12 is not adequately protected, the public will suffer an unnecessary hardship as the result of a potentially unsafe road and periodic road closings. NCDOT thus proposes to conduct the beach habitat restoration in order to protect the structural integrity of NC 12.

Staff's Position: Yes.

Staff contends that this is a prime example of an instance where strict application of the rules would create unnecessary hardship. NC 12 is a primary route for the northern outer banks and serves as the primary evacuation route during major storms and hurricanes for those towns south of the project area. The sandbags installed at the project site were intended for short-term protection for the road and the road right of way until such time as they become unnecessary due to road relocation or the beach being renourished. In this particular case, the recipient beach appears to be adequately characterized with the number and degree of sampling performed without meeting the specific number required by the rules. Staff contends that any additional sampling does appear to be an unnecessary hardship.

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

Petitioners' Position: Yes.

The Petitioner's property is NC Highway 12 and associated right-of-way, a primary route in Dare County and an important highway evacuation route in the event of an impending major storm or hurricane. NC 12 runs north and south, parallel and immediately adjacent to the Atlantic Ocean. The structural failure of the affected portion of NC 12 results from the location and topography of the right-of-way, which makes this portion of NC 12 especially susceptible to erosion during storm events due to its proximity to the ocean.

Staff's Position: Yes.

Staff agrees with Petitioner that the hardships do result from conditions that are peculiar to the property in question. This section of the beach has been severely affected by beach erosion for some time. This section of NC 12 has been designated as one of the six "hot spots" by the Outer Banks Task Force. In addition, this area of NC 12 is somewhat lower than the property located on each side, contributing to conditions susceptible to flooding and erosion forces.

III. Do the hardships result from the actions taken by the Petitioner? Explain.

Petitioners' Position: No.

No action of NCDOT has led to the structural failure of the road or erosion control measures. The hardships result from the natural erosion of the shoreline on this portion of NC 12, an action beyond NCDOT's control.

Staff's Position: No.

Staff concurs with Petitioner that hardships did not result from actions taken by

Petitioner. The hardship results from this major coastal highway being located along the oceanfront of the Outer Banks in an area where there is significant erosion.

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.

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Petitioners' Position: Yes.

NCDOT is attempting to protect the structural integrity of NC 12 with placement of sandbags adjacent to the roadway. As a condition of the sandbag placement, NCDOT is pursuing the beach habitat restoration project. The beach habitat restoration project will restore lost beach habitat for shorebirds, turtles and other wildlife. The beach habitat restoration is consistent with the spirit, purpose, and intent of the rules. NCDOT believes that the variance being sought is the minimum required to maintain an effective erosion control measure which will adequately protect this portion of NC 12.

The variance will secure the public safety and welfare, as it will better ensure that NC 12 remains structurally sound and an available route for Dare County traffic for everyday use, and more importantly, for use by emergency vehicles and as an evacuation route in the event of an impending major storm or hurricane.

The variance will also preserve substantial justice. Because NCDOT has not contributed to the erosion of NC 12, NCDOT should be allowed to provide the beach habitat restoration as condition of the sandbag placement which has been an effective erosion control measure. Without the variance, NCDOT could be forced to remove the sandbags located on NC 12 which will be increasingly threatened by erosion, which may result in periodic closings and in the loss of NC 12 as an evacuation route, all of which would harm the public. Further, the beach habitat restoration is not expected to have any adverse impact to coastal resources.

The proposed mining site is located behind the Oregon Inlet rock groin area and the Old Coast Guard Station. The mining site is only 12 miles from the recipient beach. The current proposed mining site will be excavated in a way that will provide pools that will improve foraging habitat for shore birds, and NCDOT will follow the direction of the USFWS refuge staff during the excavation process. In order to prevent potential impacts to protected shorebirds and nesting sea turtles, NCDOT will conduct the proposed work outside of applicable moratoriums and under the supervision of the USFWS managing biologist and direction from the WRC.

Pursuant to the USFWS special use permit, NCDOT agreed to a monitoring program that involves pre and post sandbag installation monitoring of physical and biological elements of the beach face within the project area. This monitoring is done four times each year and will continue until the sandbags are no longer needed and removed.

The USFWS service has concurred with the beach habitat restoration project as evidenced by their letter dated October 1, 2008 and attached as Exhibit 5.

Staff's Position: Yes.

Staff contends that this variance request is consistent with the spirit, purpose and intent of the rules and is intended to secure the public safety and welfare. Staff believes that the intent of the CRC's rules for beach nourishment, dredge-material disposal, habitat restoration, storm protection, and erosion control is to ensure that the material used in these projects results in minimal environmental impacts to the receiving beach as well as the borrow areas. A template of methodologies was established to ensure that this occurs, but in no means suggests that deviation from such standards, on a case by case basis, would meet the intent of the rules. Staff believes that the sampling done in this case addresses those concerns for potential impact.

Staff believes that approving this variance does secure the public safety and welfare in that it ensures that the major thoroughfare of the northern Outer Banks is maintained and protected. Staff also believes that the beach habitat protection, under the supervision of the U.S. Fish and Wildlife Resources and the N.C. Wildlife Resources Commission, would not only minimize potential environmental impacts but enhance the quality of the beach for both the public's use and its resources.

Staff contents that the project will preserve substantial justice by protecting the road with a beach restoration project, balancing all aspects of the public's need. By doing so, it provides safe passage for the public at all times, as well as enhances the public's use and its resources.

ATTACHMENT D (Petitioner's Variance Request and Other Exhibits)





STATE OF NORTH CAROLINA DEPARTMENT OF JUSTICE

Morehead City DCM

REPLY TO: Scott T. Slusser Transportation Section

October 24, 2008

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

Attorney General's Office Environmental Division 9001 Mail Service Center Raleigh, NC 27699-9001

ROY COOPER

ATTORNEY GENERAL

Re: CAMA Variance Request- NC-12 "Rodanthe S-Curves"

Dear Sir or Madam:

Please find enclosed NCDOT's CAMA Variance Request for a proposed beach habitat restoration on NC-12 in Dare County, North Carolina. We understand that the deadline for our submission to be included in the November 19, 2008 meeting of the Coastal Resources Commission has passed, however, if possible we would respectfully request that this matter be included in the November meeting. Thank you for your time and attention to this matter. Should you have any questions, or need any additional information, please do not hesitate to contact me at (919) 715-8147. Thanking you very much for your time and consideration in this matter, I am

Verv truiv vours Scott T. Slusser

Scott T. Slusser Assistant Attorney General

Enclosure

MAILING ADDRESS: DEPARTMENT OF TRANSPORTATION ATTORNEY GENERAL'S OFFICE 1505 MAIL SERVICE CENTER RALEIGH, NC 27699-1505
 TELEPHONE:
 919-733-3316

 FACSIMILE:
 919-733-9329

LOCATION: TRANSPORTATION BUILDING 1 SOUTH WILMINGTON STREET RALEIGH, NC 27601 DCM FORM 11 (revised 6/26/06)

CAMA VARIANCE REQUEST

DCM FILE N0.



Petitioner supplies the following information:

N.C. Department of Transportation Your Name 1 South Wilmington Street, Raleigh, NC 27601 Address Telephone (919) 733-3316 (919) 733-9329 Fax and/or Email Scott T. Slusser, Assistant Attorney General Name of Your Attorney (if applicable) 1 South Wilmington Street, Raleigh, NC 27601 Address Telephone (919) 733-3316 Fax and/or Email (919) 733-9329, SSlusser@ncdoj.gov

Have you received a decision from the Division of Coastal Management (DCM) or a Local Permit Officer denying your application for a CAMA permit?

- no (You are not entitled to request a variance until your permit application has been denied.)
- X yes (You may proceed with a request for a variance.)

What did you seek a permit to do?

NCDOT is proposing a beach habitat restoration project. The proposed project would place approximately 200,000 cubic yards of sand on the beach face at the "Rodanthe S-Curves" on NC-12.

What Coastal Resources Commission rule(s) prohibit this type of development?

Although this beach fill project is not specifically prohibited, the technical standards under 15A NCAC 07H.0312(1)(d) prohibit the development, as requested, due to a less than minimum number of sediment samples at the recipient beach.

Can you redesign your proposed development to comply with this rule? <u>No.</u> If your answer is no, explain why you cannot redesign to comply with the rule.

The proposed recipient beach is 1500 feet long and was transected six (6) times at approximately 250 feet intervals. The sand samples that were taken show similar test results as would be expected from samples taken in close proximately to one another. Further sampling of the recipient beach would be costly and not likely to lead to differing results.

Can you obtain a permit for a portion of what you wish to do? <u>No.</u> If so, please state what the permit would allow.

State with specificity what you are NOT allowed to do as a result of the denial of your permit application. It will be assumed that you can make full use of your property, except for the uses that are prohibited as a result of the denial of your permit application.

NCDOT would not be allowed to conduct a beach habitat restoration project as directed by the USFWS Special Use Permit #2006-014. The beach habitat restoration project will help protect an area of NC-12 that is subject to frequent storm erosion which inhibits the safety of the motoring public. Denial of the permit for the beach habitat restoration would result in a failure of NCDOT to comply with the USFWS Special Use Permit and would require NCDOT to remove the sandbags in that have been put in place to project NC-12 as permitted.

RESPOND TO THE FOUR STATUTORY VARIANCE CRITERIA:

1. Identify the hardship(s) you will experience if you are not granted a variance and explain why you contend that the application of this rule to your property constitutes an unnecessary hardship. [The North Carolina Court of Appeals has ruled that this factor depends upon the unique nature of the property rather than the personal situation of the landowner. It has also ruled that financial impact alone is not sufficient to establish unnecessary hardship, although it is a factor to be considered. The most important consideration is whether you can make reasonable use of your property if the variance is not granted. [*Williams v. NCDENR, DCM, and CRC*, 144 N.C. App. 479, 548 S.E.2d 793 (2001).]

Pursuant to 15A. N.C.A.C. 7M.202(c), the replenishment of sand on ocean beaches can provide storm protection and a viable alternative to allowing the ocean shoreline to migrate landward threatening to degrade public beaches and cause the loss of public facilities and private property. Experience in North Carolina and other states has shown that beach restoration projects can present a feasible alternative to the loss or massive relocation of oceanfront development.

A 900 foot section of NC 12 known as the "Rodanthe S-curves" has been severely affected by beach erosion. On January 12, 2007, NCDOT received a special use permit from the U.S. Fish and Wildlife Service (USFWS) to place sandbags along 900 feet of NC-12 to prevent further erosion to the roadway structure. On March 15, 2007, NCDOT received a general CAMA permit for the placement of the sandbags. As a condition of the USFWS special use permit, NCDOT was directed to restore beach habitat on a 1500 foot section of beach located adjacent to the sandbags. A copy of the USFWS Special Use Permit is attached as Exhibit 7. A copy of the general CAMA permit is attached as Exhibit 6.

Hardship would be created by putting NCDOT in a position of not being able to comply with the USFWS Special Use Permit that was issued for the sandbag placement. The sandbags were placed to prevent further damage to NC-12 during storm events. NCDOT is now proposing to perform the beach habitat restoration by adding approximately 200,000 cubic yards of sand excavated from an area 12 miles from the recipient beach. The borrow area, which was recommended by USFWS, is located on the Pea Island Refuge and includes state owned property where the Old Coast Guard Station is located.

NCDOT did collect the required minimum sediment samples from the borrow area and did collect four sediment samples from each of the six (6) transects of the recipient beach. The four sediment samples came from the mean low water (MLW), mid toe (MT), mean high water (MHW) and dune toe. Further sediment samples in this area would have required sampling to be done to a depth of 20 feet below MLW, which is approximately 1500-2000 feet offshore. Any additional sediment sampling would have been costly and extremely extensive considering the relatively small area (1500 ft.) that will receive the beach nourishment. The sediment sampling taken by NCDOT does not show any great inconsistencies between the samples or any evidence that further sampling would yield different results.

If NC 12 is not adequately protected, the public will suffer an unnecessary hardship as the result of a potentially unsafe road and periodic road closings. NCDOT thus proposes to conduct the beach habitat restoration in order to protect the structural integrity of NC 12.

II. Describe the conditions that are peculiar to your property (such as location, size, and topography), and cause your hardship.

The Petitioner's property is NC Highway 12 and associated right-of-way, a primary route in Dare County and an important highway evacuation route in the event of an impending major storm or hurricane. NC 12 runs north and south, parallel and immediately adjacent to the Atlantic Ocean. The structural failure of the affected portion of NC 12 results from the location and topography of the right-of-way, which makes this portion of NC 12 especially susceptible to erosion during storm events due to its proximity to the ocean.

III. Explain why your hardship does not result from actions that you have taken.

No action of NCDOT has led to the structural failure of the road or erosion control measures. The hardships result from the natural erosion of the shoreline on this portion of NC 12, an action beyond NCDOT's control.

IV. Explain why the granting of the variance you seek will be consistent with the spirit, purpose, and intent of the CRC's rules, standards, or orders; preserve substantial justice; and secure public safety.

NCDOT is attempting to protect the structural integrity of NC-12 with placement of sandbags adjacent to the roadway. As a condition of the sandbag placement, NCDOT is pursuing the beach habitat restoration project. The beach habitat restoration project will restore lost beach habitat for shorebirds, turtles and other wildlife. The beach habitat restoration is consistent with the spirit, purpose, and intent of the rules. NCDOT believes that the variance being sought is the minimum required to maintain an effective erosion control measure which will adequately protect this portion of NC 12.

The variance will secure the public safety and welfare, as it will better ensure that NC 12 remains structurally sound and an available route for Dare County traffic for everyday use, and more importantly, for use by emergency vehicles and as an evacuation route in the event of an impending major storm or hurricane.

The variance will also preserve substantial justice. Because NCDOT has not contributed to the erosion of NC 12, NCDOT should be allowed to provide the beach habitat restoration as condition of the sandbag placement which has been an effective erosion control measure. Without the variance, NCDOT could be forced to remove the sandbags located on NC 12 which will be increasingly threatened by erosion, which may result in periodic closings and in the loss of NC 12 as an evacuation route, all of which would harm the public. Further, the beach habitat restoration is not expected to have any adverse impact to coastal resources.

The proposed mining site is located behind the Oregon Inlet rock groin area and the Old Coast Guard Station. The mining site is only 12 miles from the recipient beach. The current proposed mining site will be excavated in a way that will provide pools that will improve foraging habitat for shore birds, and NCDOT will follow the direction of the USFWS refuge staff during the excavation process. In order to prevent potential impacts to protected shorebirds and nesting sea turtles, NCDOT will conduct the proposed work outside of applicable moratoriums and under the supervision of the USFWS managing biologist and direction from the WRC.

Pursuant to the USFWS special use permit, NCDOT agreed to a monitoring program that involves pre and post sandbag installation monitoring of physical and biological elements of the beach face within the project area. This monitoring is done four times each year and will continue until the sandbags are no longer needed and removed.

The USFWS service has concurred with the beach habitat restoration project as evidenced by their letter dated October 1, 2008 and attached as Exhibit 5.

Please attach copies of the following:

Permit Application and Denial documents

Site Drawing with Survey and Topographical Information

Any letters filed with DCM or the LPO'commenting on or objecting to your project Provide a numbered list of all true facts that you are relying upon in your explanation as to why you meet the four criteria for a variance. Please list the variance criterion, ex. unnecessary hardship, and then list the relevant facts under each criterion. [The DCM attorney will also propose facts and will attempt to verify your proposed facts. Together you will arrive at a set of facts that both parties agree upon. Those facts <u>will be the only facts that the Commission will</u> <u>consider in determining whether to grant your variance request.</u>] Attach all documents you wish the Commission to consider in ruling upon your variance request. [The DCM attorney will also propose documents and discuss with you whether he or she agrees with the documents you propose. Together you will arrive at a set of documents that both parties agree upon. Those documents will be the only documents that the Commission will consider in determining whether to grant your variance request.]

Pursuant to N.C.G.S. 113A-120.1 and 15A NCAC 7J .0700, the undersigned hereby requests a variance.

Date: 10/24/08

Signature: Scott T- Susz

Scott T. Slusser, Assistant Attorney General 1 South Wilmington Street Raleigh, NC 27601 (919) 733-3316 phone (919) 733-9329 fax SSlusser@ncdoj.gov

This variance request must be filed with the Director, Division of Coastal Management, and the Attorney General's Office, Environmental Division, at the addresses shown on the attached Certificate of Service form.

CERTIFICATE OF SERVICE

I hereby certify that this Variance Request has been served on the State agencies named below by United States Mail or by personal delivery to the following:

Original served on: Director Division of Coastal Management 400 Commerce Avenue Morehead City, NC 28557

copy:

Attorney General's Office Environmental Division 9001 Mail Service Center Raleigh, NC 27699-9001

This the <u>24</u>ⁿ day of <u>October</u>, 2008.

Start I. Sum

Signature of Petitioner or Attorney

EXHIBIT INDEX

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EXHIBIT 1	PERMIT APPLICATION
EXHIBIT 2	DENIAL LETTER
EXHIBIT 3	USACOE INDIVIDUAL PERMIT REQUEST FOR BEACH HABITAT RESTORATION
EXHIBIT 4	DIVISION OF WATER QUALITY 401 INDIVIDUAL CERTIFICATION REQUEST FOR BEACH HABITAT RESTORATION
EXHIBIT 5	USFWS SPECIAL USE PERMIT AND CONCURRENCE LETTER FOR BEACH HABITAT RESTORATION
EXHIBIT 6	CAMA GENERAL PREMIT FOR SANDBAG PLACEMENT
EXHIBIT 7	USFWS SPECIAL USE PERMIT FOR SANDBAG PLACEMENT
EXHIBIT 8	PROPOSED FACTS

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PERMIT APPLICATION


STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY GOVERNOR LYNDO TIPPETT SECRETARY

August 25, 2008

Jim Hoadley Division of Coastal Management 367 U.S. 17 South Elizabeth City, NC 27909

Dear Mr. Hoadley,

NCDOT is requesting the issuance of a CAMA Major Permit for the placement of approximately 200,000 cubic yards of sand on the beach face at the Pea Island Refuge S-Curves location. This sand placement is being pursued in an effort to restore beach habitat as directed by the USFWS Special Use Permit # 2006-014 issued 12/11/2006. This permit was issued for the installation of 900 ft. of sandbags adjacent to NC 12 to increase protection from the roadway washing out during storm events. Along with the beach restoration habitat commitment, NCDOT also agreed to a monitoring program that involves pre and post sandbag installation monitoring of physical and biological elements of the beach face within the project area. This monitoring is done 4 times each year and will continue until the sandbags are no longer needed and removed.

The area of the Beach Habitat Restoration begins at the southern tip of the refuge property and continues north for a distance of 1500 ft., which includes the 900 ft. location of the sandbags. The beach profile was surveyed to establish a proposed cross-section with mean high and low water marks, showing the existing and proposed beach face. Based on the amount of available material and the existing profile it was determined that the beach restoration would extend from an approximate elevation of 5.5 ft. and extend seaward for a distance of approximately 85 ft., raising the beach face by 1 to 5 ft. Natural wave process will taper the slope below the mean low water line carrying material beyond the 85 ft. point to an assumed additional distance of 30 to 40 ft. This profile is depicted on the provided permit drawings at three different cross sections. At the north and southern ends of the 1500 ft, habitat restoration area the elevated beach face will be tapered to match the existing dune and trucking the material onto the beach face. The sand will then be pushed to the proposed profile by bulldozers and frontend loaders. The location of the dune breach will be established through coordination with CAMA and the USFWS biologist. A location will be established based on minimal impact to vegetated dunes.

The sand source for the beach habitat restoration is located approximately 12 miles north at the groin location on the Pea Island Refuge and the adjacent state owned property where the Old Coast Guard Station is located. The proposed mining area behind the groin is approximately 13 acres in size and was recommended for use by the USFWS. This area was previously mined in the late 90's under supervision by the USFWS. The mining was conducted, so that shallow areas of excavation created pools that improved foraging habitat for shore birds using the area. These pools have filled in over the years and there is only one remnant pool area, which will not be impacted by the proposed project. The current project is proposing to accomplish the same result and will follow direction of the USFWS refuge staff during the excavation. The mining will not go beyond 6-8 feet below the surface and will only extend within the area shown on the provided location map. This area currently is located above the normal high water mark, it

consist of an open sand flat with no vegetation. This area can be accessed through the existing State Rd. 1257. Beyond the end of SR 1257 are established dunes that lie approximately 700-800 feet from the normal high water line. This area of dunes can be crossed by off-road dump trucks. Efforts to minimize impacts to vegetated areas will be conducted through the dune crossing. The adjacent state property is approximately 10 acres in size and will also be used to provide sand for the project. Sand will be removed from SR 1257 that leads into the state property. Sand removal from the roadway will stay within NCDOT R-O-W. Once sand is removed from the roadway and access is gained to the Old Coast Guard Station Property, excavation around the remnant parking areas of the Old Coast Guard Station will begin. Sand removal is proposed to be excavated down to the old pavement elevation. This varies in depth, but likely averages around 10-20 ft. Coordination with the state property owners will be conducted prior to any sand removal to establish a safe boundary around the Coast Guard building. Once the Old Coast Guard Station area is complete, then the area behind the groin will be accessed and sand mining will begin there.

NCDOT has conducted a sand analysis within the proposed mining areas and the receiving beach area. The sand was analyzed for grain size, percent calcium carbonate and heavy mineral content. This data is provided in the application. In order to prevent potential impacts to protected shorebirds and nesting sea turtles NCDOT will conduct the proposed work outside of applicable moratoriums and under supervision of the USFWS managing biologist.

Along with the CAMA Major permit NCDOT is also in the process of acquiring a COE, DWQ and USFWS Special Use Permit.

Included with this request are a location map, plan view, cross-sections and photographs showing the proposed work. If any additional information is needed please contact Clay Willis at 252-482-7977.

Sincerely, Jerry Jennings, P.E. Acting Division Engineer, Division One

Clay Willis Environmental Officer, Division One

CC: Bill Biddlecome, USACOE Garcy Ward, DWQ Travis Wilson, WRC Sarah Winslow, NCMFC Ron Sechler, NMFS Gary Jordan, USFWS Dennis Stuart, USFWS Rick Kanaski, USFWS Renee Gladhill-Early, NCHPO Chris Ivers, NCAquariums Gretchen Byrum, NCDOT Mary Pope-Furr, NCDOT Jerry Jennings, NCDOT

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S-Curves Beach Habitat Restoration Project Pea Island Refuge, Dare County



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APPLICATION for Major Development Permit



(last revised 12/27/06)

Email

North Carolina DIVISION OF COASTAL MANAGEMENT

1. Primary Applica	nt/ Landowner Info	orm	ation						
Business Name				Project Name (if a	applicable	e)			
Ncdot Division One				Pea Island Beach Habitat Restoration					
Applicant 1: First Name		MI		Last Name					
Clay				Willis					
Applicant 2: First Name		MI		Last Name					
If additional applicants, plea	se attach an additional pag	je(s)	with names l	isted.					
Mailing Address				PO Box	City			State	
113 Airport Drive	Suite 100				Eder	nton		NC	
ZIP	Country		Phone No.	,			FAX No.		
27932	US		252 - 482 -	- 7977 ext. 221	1		252 - 48	2 - 872	2
Street Address (if different f	rom above)		L	City	State)		ZIP	
									-
Emaii								i	
tcwillis@ncdot.gov									
L			<u></u>			·····			
2. Agent/Contract	or Information			······································					
Business Name									
Agent/ Contractor 1: First N	lame	MI		Last Name					
Agent/ Contractor 2: First N	lame	MI		Last Name					*****

Mailing Address			···	PO Box	City		······································		State
ZIP		Pho	ne No. 1		ž.,,	Phone	No. 2		1
			-	- ext.					ext.
FAX No.		Cor	ntractor #			1			
Street Address (If different I	from above)			City	State	3	• • • • • • • • • • • • • • • • • • • •	ZIP	

<Form continues on back>

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3. Project Location						
County (can be multiple)	Street Address			State Rd. #		
Dare Pea Island Refuge			Turns area		NC 12	
Subdivision Name		City	······································	State	Zip	
				NC		
Phone No.			Lot No.(s) (if many, atta	ch additional	(page with list)	
- e x	t.		1 7 9	,		
a. In which NC river basin is the p	roject located?		b. Name of body of water nearest to proposed project			
Pasquotank			Atlantic Ocean			
c. Is the water body identified in (t) above, natural or manm	ade?	d. Name the closest ma	or water boo	dy to the proposed project site.	
Natural Manmade DUn	known		Atlantic Ocean			
e. Is proposed work within city lim	its or planning jurisdiction	?		ianning juris	diction or city limit the proposed	
⊡Yes ⊠No			work falls within.			

4 . S	Site Description	
a. To	otal length of shoreline on the tract (ft.)	b. Size of entire tract (sq.ft.)
20	000 ft.	766609 sq. ft. approximately 18 acres
c. Siz	ze of individual lot(s)	 d. Approximate elevation of tract above NHW (normal high water) or NWL (normal water level)
(If	many lot sizes, please attach additional page with a list)	5-8 ft INHW or NWL
e. Ve	getation on tract	
S	ea Oats, American Beach Grass, Bitter panicum	
f Ma	in-made features and uses now on tract	
1	IC 12 and Dune line	
a. Ide	entify and describe the existing land uses adjacent to the propose	d project site.
1	· · · · · · · · · · · · · · · · · · ·	rvation use under the Pea Island Refuge management. To the
	outh the village of Rodanthe is commercial and residential	
	-	
h. Ho	ow does local government zone the tract?	i. Is the proposed project consistent with the applicable zoning?
1	ederal property in conservation	(Attach zoning compliance certificate, if applicable)
j. Ist	the proposed activity part of an urban waterfront redevelopment p	roposal? 🛛 Yes 🖾 No
k Ma	as a professional archaeological assessment been done for the tr	act? If yes, attach a copy. □Yes ⊠No □NA
K. 330	a professional alcheeological assessment been unle for the tr	ace in yes, allacina copy. Lifes Mino Lina
lfy	res, by whom?	
I. Is t Na	the proposed project located in a National Registered Historic Dis ational Register listed or eligible property?	trict or does it involve a Yes No NA

<Form continues on next page>

m.	(i) Are there wetlands on the site?	Yes	No
	(ii) Are there coastal wetlands on the site?	∐Yes	⊠No
	 (iii) if yes to either (i) or (ii) above, has a delineation been conducted? (Attach documentation, if available) 	□Yes	□No

Major Development Permit

n.	Describe existing wastewater treatment facilities.
	None
_	Describe existing drinking water supply source.
ψ.	Describe existing unriving water supply source.
	None
р.	Describe existing storm water management or treatment systems.
N	one

F	Astivities and imposts						
1	. Activities and Impacts						
a,)Comme					
	•••••]Private/	Community				
b.	Give a brief description of purpose, use, and daily operations of the project when complete.						
	The purpose of this project is to restore beach habitat as directed by the U.S.F.W.S. S the emergency placement of sandbags along 900 ft. of NC 12 on Pea Island. Once the beach will continue to remain within the Pea Island refuge management area and	e sand monitor	placement project is complete red as directed by the USFWS.				
¢.	Describe the proposed construction methodology, types of construction equipment to be used of equipment and where it is to be stored.						
	This project proposes to mine sand from the north end of Pea Island within the areas the sand material to the S-Turns area on the south end of Pea Island. The sand will the primarily below the Mean High water mark. The estimated volume of sand will be aro length of the area the sand will be placed is 1500 ft. with tapers on each end to match on the provide permit drawings. The sand will be dumped by trucks on the beach and loaders and buildozers.	hen be j und 200 n existin	placed on the lower beach face 0,000 cubic yards of sand. The ng grades. This area is depicted				
d.	List all development activities you propose.						
	NCDOT proposes to mine sand from the north end of Pea Island behind the Rock groin area and within the state property. The sand will be trucked to the south end of Pea Island and placed on the beach as depicted on the provided drawings. This is being done to restore beach habitat that was considered impacted by the USFWS during the installation of emergency sand bags adjacent to NC 12.						
e.	Are the proposed activities maintenance of an existing project, new work, or both?	sandb	naintaining NC 12 through ag placement and required restoration)				
f.	What is the approximate total disturbed land area resulting from the proposed project?	3	☐Sq.Ft or ⊠Acres				
9	Will the proposed project encroach on any public easement, public accessway or other area that the public has established use of?	□Yes					
h	Describe location and type of existing and proposed discharges to waters of the state. None						
Ϊ.	Will wastewater or stormwater be discharged into a wetland?	[]Yes					
L	If yes, will this discharged water be of the same salinity as the receiving water?	□Yes					
J.	Is there any mitigation proposed?	□Yes					
	If yes, attach a mitigation proposal.						

<Form continues on back>

6. Additional Information

In addition to this completed application form, (MP-1) the following items below, if applicable, must be submitted in order for the application package to be complete. Items (a) – (f) are always applicable to any major development application. Please consult the application instruction booklet on how to properly prepare the required items below.

a. A project narrative.

Major Development Permit

b. An accurate, dated work plat (including plan view and cross-sectional drawings) drawn to scale. Please give the present status of the proposed project. Is any portion already complete? If previously authorized work, clearly indicate on maps, plats, drawings to distinguish between work completed and proposed.
c. A site or location map that is sufficiently detailed to guide agency personnel unfamiliar with the area to the site.
d. A copy of the deed (with state application only) or other instrument under which the applicant claims title to the affected properties.
e. The appropriate application fee. Check or money order made payable to DENR.
f. A list of the names and complete addresses of the adjacent waterfront (riparian) landowners and signed return receipts as proof that such owners have received a copy of the application and plats by certified mail. Such landowners must be advised that they have 30 days in which to submit comments on the proposed project to the Division of Coastal Management.
Name Michael P. Creasy
Phone No.
Address 516 Nebo Rd. Ext.
Champion, PA 156223065
Name Dept. of Interior U.S.F.W.S. Pea Island Refuge
Phone No.
Address P.O. Box 1969 Manteo, N.C. 27954
10/a1160, N.C. 27504
Name
Phone No.
Address
g. A list of previous state or federal permits issued for work on the project tract. Include permit numbers, permittee, and issuing dates.
A COE Individual Permit, cooresponding DWQ 401 certification and Special Use Permit from the USFWS will be acquired in conjunction with
the CAMA permit.
h. Signed consultant or agent authorization form, if applicable.
i. Wetland delineation, if necessary.
j. A signed AEC hazard notice for projects in oceanfront and inlet areas. (Must be signed by property owner)
k. A statement of compliance with the N.C. Environmental Policy Act (N.C.G.S. 113A 1-10), if necessary. If the project involves expenditure of public funds or use of public lands, attach a statement documenting compliance with the North Carolina Environmental Policy Act.
7. Certification and Permission to Enter on Land
I understand that any permit issued in response to this application will allow only the development described in the application.
The project will be subject to the conditions and restrictions contained in the permit.
I certify that I am authorized to grant, and do in fact grant permission to representatives of state and federal review agencies to enter on the aforementioned lands in connection with evaluating information related to this permit application and follow-up monitoring of the project.

I further certify that the information provided in this application is truthful to the best of my knowledge.

Date

8/27/08

da Print Name Aur

Form DCM MP-1 (Page 5 of 5)

APPLICATION for Major Development Permit

llay little Signature

Please indicate application attachments pertaining to your proposed project.

DCM MP-5 Bridges and Culverts DCM MP-2 Excavation and Fill Information DCM MP-3 Upland Development

DCM MP-4 Structures Information

Form DCM MP-2

EXCAVATION and **FILL**

(Except for bridges and culverts)

Attach this form to Joint Application for CAMA Major Permit, Form DCM MP-1. Be sure to complete all other sections of the Joint Application that relate to this proposed project. Please include all supplemental information.

Describe below the purpose of proposed excavation and/or fill activities. All values should be given in feet.

	Access Channel (NLW or NWL)	Canal	Boat Basin	Boat Ramp	Rock Groin	Rock Breakwater	Other (excluding shoreline stabilization)
Length							
Width				······································			
Avg. Existing Depth					NA	NA	
Final Project Depth					NA	NA	

1. EXCAVATION

 Amount of material to be excavated from below NHW or NWL in cubic yards.
 None

c. (i) Does the area to be excavated include coastal wetlands/marsh (CW), submerged aquatic vegetation (SAV), shell bottom (SB), or other wetlands (WL)? If any boxes are checked, provide the number of square feet affected.

□cw	 □SAV	 ⊡ S8
TWL.	None	

(ii) Describe the purpose of the excavation in these areas:

The arca behind the groin is be excavated at the request of the USFWS Pea Island Staff. The shallow excavation creates small pool areas that are used by foraging shore birds. This will also give NCDOT additional sand to be used at the S-curves location. The Old Coast Guard Station and SR 1257 is being used as a sand source.

This section not applicable

- Type of material to be excavated.
 Sand
- d. High-ground excavation in cubic yards.
 200,000 cubic yards

2.	DISPOSAL OF EXCAVATED MATERIAL		☐ This section not applicable
a.	Location of disposal area.	b.	Dimensions of disposal area.
	Pea Island Refuge at the S-Turns locations		1500 ft. long by approximatley 85 ft. in width
	(i) Do yo⊔ claim title to disposal area? □Yes ⊠No □NA	d.	 (i) Will a disposal area be available for future maintenance? □Yes ⊠No □NA
	(ii) If no, attach a letter granting permission from the owner.		(ii) If yes, where?
ə,	(i) Does the disposal area include any coastal wetlands/marsh (CW), submerged aquatic vegetation (SAV), shell bottom (SB), or other wetlands (WL)? If any boxes are checked, provide the number of square feet affected.	f.	 (i) Does the disposal include any area in the water? ☑Yes □No □NA (ii) If yes, how much water area is affected?
			Approximately 2 acres of sand will be placed below the normal

3.	SHORELINE STABILIZATION (If development is a wood groin, use MP-4 – Structures)		This section not applicable
a.	Type of shoreline stabilization:	b.	Length:
	Bulkhead Riprap Breakwater/Sill Other:		Width:
Ç.	Average distance waterward of NHW or NWL:	d.	Maximum distance waterward of NHW or NWL:
e.	Type of stabilization material:	f.	 (i) Has there been shoreline erosion during preceding 12 months? ☐Yes ☐No ☐NA (ii) If yes, state amount of erosion and source of erosion amount information.
g.	Number of square feet of fill to be placed below water level. Bulkhead backfill Riprap Breakwater/Sill Other Source of fill material. Context and the second sec	h.	Type of fill material.
4.	OTHER FILL ACTIVITIES		⊠This section not applicable
	(Excluding Shoreline Stabilization)		
а.	 (i) Will fill material be brought to the site? □Yes □No □NA If yes, (ii) Amount of material to be placed in the water (iii) Dimensions of fill area (iv) Purpose of fill 	b.	 (i) Will fill material be placed in coastal wetlands/marsh (CW), submerged aquatic vegetation (SAV), shell bottom (SB), or other wetlands (WL)? If any boxes are checked, provide the number of square feet affected. CW SAV SB WL None (ii) Describe the purpose of the fill in these areas:
5.	GENERAL		
a.	How will excavated or fill material be kept on site and erosion	b.	What type of construction equipment will be used (e.g., dragline,
	controlled? The sand will be pushed along the beach as shown on the plan drawings. The material will be dispersed by natural wave force to create the restored beach habitat profile. There will be no erosion control used on this project.		backhoe, or hydraulic dredge)? Excavators, Front End Loaders, Bulldozers and Dump Trucks.
C,	 (i) Will navigational aids be required as a result of the project? □Yes ⊠No □NA 	d.	 (i) Will wetlands be crossed in transporting equipment to project site? □Yes ☑No □NA
	(ii) If yes, explain what type and how they will be implemented.		 (ii) If yes, explain steps that will be taken to avoid or minimize environmental impacts.
	8/25/08		
Da	te S-Turns Beach Hubitat Restoration		NOT- Division 1 Cha. Willis

Current Dune Line over the Sandbag Location





S-Curves Storm Damage which initiated Sandbag Project Looking North



S-Curves Storm Damage which initiated Sandbag Project Looking South







Proposed Beach Habitat Restoration Pea Island Dare County



SAND GRAIN ANALYSIS S-CURVES

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Sand Bag S-Curves Data Sand Grain Analysis	Mean Low Water Location "A"	Mid Tide Location "B"	Mean High Water Location "C"	Dune Toe Location "D"	Transect Mean	S-curves Combined Mean
Transect S-1						
fines	less than 0.8 %	less than 1.4 %	less than 0.8 %	0%	less than 0.75 %	less than 0.958 %
sand	71.40%	96.60%	98.10%	99.80%	91.48%	93.72%
granular	20.90%	1.50%	0.60%	0%	5.75%	3.84%
gravel	6.90%	0.50%	0.50%	0.20%	2.03%	1.48%
Transect S-2	· · · · · · · · · · · · · · · · · · ·					
fines	less than 1.1 %	less than 1.3 %	less than 0.7 %	less than 0.4 %	less than 0.875 %	••••••••••••••••••••••••••••••••••••••
sand	74.50%	91.00%	98.70%	99.30%	90.88%	
granular	16.10%	5.80%	0.40%	0.10%	5.60%	
gravel	8.30%	1.90%	0.20%	0.20%	2.65%	A.IIII WARANI "I' WWW. "VII' W "IIIIIIII"
Transect S-3						
fines	less than 0.8 %	less than 1.4 %	less than 0.6 %	less than 0 %	less than 0.7 %	
sand	94.50%	94.70%	98.90%	99.60%	96.93%	
granular	3.40%	3.10%	0.30%	0.20%	1.75%	<u>*</u>
gravel	1.30%	0.80%	0.20%	0.20%	0.63%	
Transect S-4					······································	
fines	less than 2.1 %	less than 2.1 %	less than 1.9 %	less than 0.2 %	less than 1.575 %	<u> </u>
sand	95.00%	97.20%	97.70%	99.40%	97.33%	
granular	2.40%	0.50%	0.20%	0.10%	0.80%	
gravel	0.50%	0.20%	0.20%	0.30%	0.30%	
Transect S-5				· · · · · · · · · · · · · · · · · · ·		
fines	less than 0.7 %	less than 1.1 %	less than 1.7 %	less than 0.9 %	less than 1.1 %	
sand	88.10%	95.20%	97.50%	98.00%	94.70%	
granular	9.00%	2.90%	0.60%	0.90%	3.35%	
gravel	2.20%	0.80%	0.20%	0.20%	0.85%	99999999999999999999999999999999999999
Transect S-6		иа				
fines	less than 0.6 %	less than 1.1 %	less than 1.1 %	less than 0.2 %	less than 0.75 %	10101W
sand	74.10%	93.40%	98.50%	98.20%	91.05%	
granular	17.20%	4.60%	0.20%	1.20%	5.80%	
gravel	8.10%	0.90%	0.20%	0.40%	2.40%	

T - Dung las

1 + MEAN High Warrow

E. Mid Tide

A= MERIA LAND Water









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CALCIUM CARBONATE ANALYSIS S-CURVES

S-CURVES RECEIVING BEACH INFORMATION

SUMMARY OF SOIL LABORATROY RESULTS PERCENT CALCUIM CARBONATE

Rec	eiving Beach Cal	cium Carbonate Data
Sample ID S-Curves	Sample Depth	Percent Calcium Carbonate
Transect - 1	surface	0.39%
Transect - 2	surface	0.45%
Transect - 3	surface	0.71%
Transect - 4	surface	0.82%
Transect - 5	surface	5.70%
Transect - 6	surface	4.90%

HEAVY MINERAL ANALYSIS S-CURVES

C = COUTROL SITE

G = SANRAG S-LURVES LOCATION

	No. HMs	Average									
Sample	Field 1	Field 2	Field 3	Field 4	Field 5	Field 6	Field 7	Field 8	Field 9	No. HMs	STDEV
C-1-A	0	0	1	0	0	0	0	0	0	0.1	0.33
C-1-B	1	0	0	1	1	0	0	1	0	0.4	0.53
C-1-C	2	6	5	3	6	3	7	4	2	4.2	1.86
C-1-D	53	109	136	27	13	26	32	82	56	59.3	41.77
S-1-A	0	0	1	0	Û	2	0	0	0	0.3	0.71
S-1-B	2	0	1	2	1	0	3	1	2	1.3	1.00
S-1-C	61	52	97	39	57	83	61	29	77	61.8	21.32
S-1-D	122	62	37	83	133	106	85	126	79	92.6	31.93
C-2-A	0	4	1	0	3	1	2	2	8	2.3	2.50
C-2-B	0	1	1	2	5	0	2	7	2	2.2	2.33
C-2-C	7	10	6	4	4	1	11	7	14	7,1	4.01
C-2-D	49	61	38	40	28	31	39	62	67	46.1	14.27
S-2-A	29	31	47	59	43	19	16	63	49	39.6	16.76
S-2-B	13	23	31	27	15	21	22	16	26	21.6	6.00
S-2-C	16	9	27	31	25	36	14	3	26	20.8	10.86
S-2-D	24	34	41	51	37	22	57	32	53	39.0	12.55
C-3-A	0	0	0	0	1	0	0	0	0	0.1	° 0.33
C-3-B	2	1	4	0	1	0	1	1	1	1.2	1.20
C-3-C	3	4	3	5	5	0	2	2	2	2.9	1.62
C-3-D	61	64	72	77	102	87	56	56	88	73.7	16.12
S-3-A	11	16	21	13	10	31	24	24	29	19.9	7.75
S-3-B	27	31	16	13	17	7	9	9	16	16.1	8.18
S-3-C	13	17	4	21	36	20	7	7	21	16.2	9.88
S-3-D	96	156	107	111	88	103	127	127	92	111.9	21.58
C-4-A	16	22	37	28	13	10	29	29	5	21.0	10.61
C-4-B	2	3	1	3	1	3	5	5	2	2.8	1.48
C-4-C	4	5	6	11	1	7	6	6	2	5.3	2.92
C-4-D	127	101	131	87	97	157	110	110	137	117.4	22.22
5-4-A	1	4	6	5	3	3	1	1	1	2.8	1.92
S-4-B	16	23	26	31	17	20	31	31	11	22.9	7.41
S-4-C	56	31	51	40	29	47	33	33	35	39.4	9.67
5-4-D	137	111	129	101	93	141	97	97	133	115.4	19.44
2-5-A	6	3	1	8	1	1	5	1	7	3.7	2.87

C-5-B	1	t	0	1	5	2	0	7	1	2.0	2.40
C-5-C	11	4	2	13	8	2	3	5	9	6.3	4.06
C-5-D	66	71	57	83	51	47	42	67	50	59.3	13.29
S-5-A	6	1	2	1	8	6	2	6	2	3.8	2.68
S-5-B	1	1	1	2	2	1	2	3	2	1.7	0.71
S-5-C	1	23	9	5	4	3	2	6	16	7.7	7.31
S-5-D	97	124	69	131	109	107	99	137	121	110.4	20.82
C-6-A	0	0	1	0	2	1	0	0	1	0.6	0.73
C-6-B	1	0	0	4	2	3	3	1	1	1.7	1.41
C-6-C	4	3	0	6	3	2	0	2	2	2.4	1.88
C-6-D	82	101	72	86	91	49	83	77	67	78.7	14.99
S-6-A	2	1	1	0	1	0	1	0	0	0.7	0.71
S-6-B	3	0	1	2	1	2	2	0	3	1.6	1.13
S-6-C	6	2	1	1	4	4	7	6	2	3.7	2.29
S-6-D	157	146	161	132	155	148	169	149	152	152.1	10.40

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C = CONSTROL SITE

S: SANLBAG S-CURVES LOCATION

0	% HMs	Average									
Sample	Field 1	Field 2	Field 3	Field 4	Field 5	Field 6	Field 7	Field 8	Field 9	% HMs	STDEV
C-1-A	0	0	0.5	0	0	0	0	0	0	0.1	0.17
C-1-B	0.5	0	0	0.5	0.5	0	0	0.5	0	0.2	0.26
C-1-C	0.5	1	1	0.5	1	0.5	1	0.5	0.5	0.7	0.26
C-1-D	10	15	20	5	3	5	7	15	10	10.0	5.68
S-1-A	0	0	0.5	0	0	0.5	0	0	0	0.1	0.22
S-1-8	0.5	0	0.5	0.5	0.5	0	0.5	0.5	0.5	0.4	0.22
S-1-C	10	10	15	10	12	15	12	7	12	11.4	2.55
S-1-D	17	12	7	15	20	17	15	20	15	15.3	4.03
C-2-A	0	0.5	0.5	0	0.5	0.5	0.5	0.5	1	0.4	0.30
C-2-B	0	0.5	0.5	0.5	1	0	0.5	1	0.5	0.5	0.35
C-2-C	1	1	1	0.5	0.5	0.5	2	1	2	1.1	0.58
C-2-D	10	15	10	10	7	7	10	15	15	11.0	3.24
S-2-A	7	7	10	12	10	7	5	15	10	9.2	3.07
S-2-B	3	5	7	5	3	5	5	3	7	4.8	1.56
S-2-C	3	2	7	7	7	7	3	1	7	4.9	2.57
S-2-D	7	7	10	10	10	7	12	10	12	9.4	2.01
C-3-A	0	0	0	0	0.5	0	0	0	Ü	0.1	× 0.17
C-3-B	0.5	0.5	0.5	0	0.5	0	0.5	0.5	0.5	0.4	0.22
C-3-C	0.5	1	0.5	1	1	0	0.5	0	0.5	0.6	0.39
C-3-D	15	15	17	17	20	20	15	20	20	17.7	2.35
5-3-A	2	3	3	2	2	5	5	2	5	3.2	1.39
S-3-B	5	5	3	3	3	2	2	3	3	3.2	1.09
S-3-C	3	3	1	5	5	3	1	5	5	3.4	1.67
5-3-D	15	25	20	20	15	20	22	22	15	19.3	3.61
C-4-A	3	3	5	3	2	2	3	2	1	2.7	1.12
C-4-B	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.00
D-4-C	0.5	0.5	1	2	0.5	1	1	0.5	0.5	0.8	0.50
C-4-D	25	20	25	20	20	30	20	17	25	22.4	4.03
S-4-A	0.5	1	1	1	0.5	0.5	0.5	1	0.5	0.7	0.26
S-4-B	3	5	5	5	3	3	7	5	3	4.3	1.41
S-4-C	7	5	7	7	3	5	5	3	5	5.2	1.56
S-4-D	25	20	25	20	20	25	20	20	25	22.2	2.64
C-5-A	1	0.5	0.5	1	0.5	0.5	1	0.5	1	0.7	0.26

C-5-B	0.5	0.5	0	0.5	1	0.5	0	1	0.5	0.5	0.35
C-5-C	2	0.5	0.5	2	1	0.5	0.5	1	2	1.1	0.70
C-5-D	15	15	10	15	10	10	7	15	10	11.9	3.10
S-5-A	1	0.5	0.5	0.5	1	1	0.5	1	0.5	0.7	0.26
S-5-B	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.00
S-5-C	0.5	3	2	1	1	0.5	0.5	1	2	1.3	0.87
S-5-D	15	20	10	25	20	20	20	25	20	19.4	4.64
C-6-A	0	0	0.5	0	0.5	0.5	0	0	0.5	0.2	0.26
C-6-B	0.5	0	0	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.22
C-6-C	0.5	0.5	0	1	0.5	0.5	0	0.5	0.5	0.4	0.30
C-6-D	15	17	12	15	17	7	15	15	10	13.7	3.35
S-6-A	0.5	0.5	0.5	0	0.5	0	0.5	0	0	0.3	0.26
S-6-B	0.5	0	0.5	0.5	0.5	0.5	0.5	0	0.5	0.4	0.22
S-6-C	1	0.5	0.5	0.5	1	1	1	1	0.5	0.8	0.26
S-6-D	25	25	25	20	25	25	25	25	25	24.4	1.67

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	•			1			1			Pvroxene/		
Sample	Epidote	Staurolite	Garnet	Kyanite	Ilmenite	Magnetite	Zircon	Tourmaline	Rutile	amphibole	Others	Total
C-3-D	18	27	37	4	234	27	3	17	2	12	0	381
%	4.7	7.1	9.7	1.0	61.4	7.1	0.8	4.5	0.5	3.1	0.0	100.0
S-5-D	31	29	41	2	213	22	0	19	0	21	0	378
%	8.2	7.7	10.8	0.5	56.3	5.8	0.0	5.0	0.0	5.6	0.0	100.0

Pea Isl	and Nat	ional Wi	Idlife R	efuge, C	C of he	avy min	ieral ana	alysis, c	ollected	1/22/20	107	
Sample	No. HMs Fleid 1	No. HMs Field 2	No. HMs Field 3	No. HMs Field 4	No. HMs Field 5	No. HMs Field 6	No. HMs Field 7	No. HMs Fleid 8	No. HMs Field 9	Average No. HMs in QC	STDEV	Original count
C-3-A	1	1	1	0	0	0	1	0	0	0.4	0.53	0.1
S-1-A	0	0	3	1	0	0	1	1	1	0.8	0.97	0.3
S-5-C	6	4	8	1	12	1	7	2	13	6.0	4.47	7.7
C-3-C	5	4	0	1	3	7	0	1	1	2.4	2.46	2.9
Sample	% HMs Field 1	% HMs Field 2	% HMs Field 3	% HMs Field 4	% HMs Field 5	% HMs Field 6	% HMs Field 7	% HMs Field 8	% HMs Field 9	Average % HMs in QC	STDEV	Original %
C-3-A	0.5	0.5	0.5	0	0	0	0.5	0	0	0.2	0.26	0.1
S-1-A	0	0	0.5	0.5	0	0	0.5	0.5	0.5	0.3	0.26	0.1
S-5-C	1	1	1	0.5	2	0.5	1	0.5	2	1.1	0.58	1.3
C-3-C	1	1	0	0.5	0.5	1	0	0.5	0.5	0.6	0.39	0.6

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Shell Material greater than 3 inches on the receiving beach

* The "background" value of shell material greater than three inches in diameter between mean low water and the dune toe, within a 50,000 sq. ft. area of the beach habitat restoration site is <u>75</u>.

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Groin Area and Old Coast Guard Station Proposed Sand Mining Location

0 250 500 1,000 Feet

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SAND GRAIN ANALYSIS GROIN AREA AND OLD COAST GUARD STATION

Sample Point SB-01		(Depth (0 - 5 feet)	Depth (5 - 10 feet)
······································	loop them 4 2 0/	INT IN		
fines	less than 1.3 %	less than 1.4 %	less than 1.385 %	less than 1.74 %
sand	97.33%	90.50%	97.13%	96.54%
granular	0.58%	5.20%	0.67%	0.94%
gravel	0.80%	2.90%	0.73%	0.74%
Sample Point SB-02	· · · · · · · · · · · · · · · · · · ·			
fines	less than 1.4 %	less than 1.7 %		<u>+</u>
sand	97.20%	97.90%	n	\$ }
granular	0.80%	0.00%		······································
gravel	0.60%	0.40%		00000-1.01
Sample Point SB-03	······································			
fines	less than 0.7 %	less than 1.5 %		
sand	98.70%	98.00%	·····	
granular	0.20%	0.10%	·····	
gravel	0.40%	0.40%	a	
Sample Point SB-04				
fines	less than 1.2 %	less than 2.3 %		
sand	98.30%	97.10%		
granular	0.10%	0.20%		·
gravel	0.40%	0.40%	11VV111	
Sample Point SB-05				
fines	less than 1.5 %	less than 1.5 %	wvmn n	AAP
sand	97.10%	97.90%	/	
granular	1.00%	0.20%	vr	
gravel	0.40%	0.40%		
Sample Point SB-06	1			174
fines	less than 1.7 %	less than 1.8 %		
sand	95.10%	97.10%	Webcome	WIIIIII
granular	1.60%	0.60%	IIII	······································
gravel	1.60%	0.50%	N. A	······································
Sample Point SB-07		₩₩.h.,.h./		<u></u>
fines	less than 1.9 %	less than 2 %		
sand	96.20%	97.30%		
granular	0.40%	0.30%		
gravel	1.50%	0.40%		

Old Coast Guard Location Sand Grain Analysis	Depth (0 - 5 feet)	Depth (5 - 10 feet)	Depth (10 - 15 feet)	Depth (15 - 20 feet)
Sample Point SB-08			A	
fines	less than 0.3 %	less than 1.3 %	less than 5.8 %	less than 2.2 %
sand	99.20%	98.30%	93.80%	97.40%
granular	0.10%	0.00%	0.00%	0.00%
gravel	0.40%	0.40%	0.40%	0.40%
Sample Point SB-09				
fines	less than 0.4 %	less than 0.7 %	less than 4.1 %	less than 20.6 %
sand	99.20%	98.90%	88.10%	78.70%
granular	0.00%	0.00%	4.80%	0.30%
gravel	0.40%	0.40%	3.00%	0.40%
Sample Point SB-10				
fines	less than 5.5 %	less than 1.7 %	less than 24.4 %	less than 7.2 %
sand	93.20%	97.70%	75.20%	92.40%
granular	0.70%	0.20%	0.00%	0.00%
gravel	0.60%	0.40%	0.40%	0.40%
	Sample Point SB 08 thru SB 10 Mean Depth (0 - 5 feet)	Sample Point SB 08 thru SB 10 Mean Depth (5 - 10 feet)	Sample Point SB 08 thru SB 10 Mean Depth (10 - 15 feet)	Sample Point SB 08 thru SB 10 Mean Depth (15 - 20 feet)
				less than 10.00 %
fines sand	less than 2.06 % 97.20%	less than 1.23 % 98.30%	less than 11.43 % 85.70%	1055 (nan 10.00 % 89.50%
granular	0.26%	0.06%	1.60%	0.10%
gravel	0.46%	0.40%	1.26%	0.40%

M & F Form 500

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS MATERIALS & TEST UNIT SOILS LABORATORY

Ref Proj

REPORT ON SAMPLES OF DETAILED SAND SIEVE ANALYSIS

PROJECT:	11701 1028	COUNTY	Dare		
DATE SAMPLED	12/11/2007	RECEIVED	12/28/2007	REPORTED	1/3/2008
SAMPLED FROM	BEACH	SOURC	CE. PEAISI	AND	
SUBMITTED BY	CYRUS PARKER	1	995 STD. SPEC	CIFICATIONS	

TEST RESULTS

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Proj Sample No.	PI-S801	PI-SB01	PI-S802	PI-S802	PI-5803	PI-5803	P1-5804	PI-5804	PI-\$805	FI-S805	71-3808	PI-SB00	Pt-3007
Lab. Sampie No.	742776	742777	742778	742779	742780	742781	742782	742783	742784	742785	742786	742787	742788
Sieve No	%Passing												
#4 (198 m m) 🖓	99.2	97.1	99.4	99.6	99.6	99.6	99.6	99.6	99.6	99.6	98.4	99.5	98.5
#10 (2 mm)	97.4	919	98.6	99.6	99.4	99.5	99.5	99.4	98.6	99.4	96.8	98.9	98.1
#60 (0.25mm)	44.2	56.2	43.8	54.3	43.6	53.5	S1.3	65.5	55.6	88.5	55.2	77	44.8
#200 (.075 mm)	1.3	1.4	1.4	1.7	07	1.5	1.2	2.3	1.5	1.5	1,7	18	19

PI-SB07 742789	PI-S808 742790	PI-S808 742791	Pi-S808 742792	PI-SB08 742793	Pf-S809 742794	PI-S809 742795	PI-SBU9 742796	Pi-5809 742797	PI-SB10 742798	₽⊫SB10 742799	Pr-SB10 742800	PESB10 742801
%Passing	%Passing	%Passing	%Passing									
99.6	99.6	99.6	99.6	99.6	99.6	99.6	97	99.6	99.4	99,6	99.6	99.6
99.3	99.5	99.6	99.6	99.6	99.6	99.6	92.2	99.3	98.7	99,4	99.6	99.6
88.6	55.8	49.8	91.4	92.3	50.9	44.5	45	95.4	41.2	46.5	78.9	99.4
2	0.3	13	5.8	2.2	0.4	0.7	4.1	20.6	5.5	1.7	24.4	7.2

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CALCIUM CARBONATE ANALYSIS GROIN AREA AND OLD COAST GUARD STATION

TABLE 1

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SUMMARY OF SOIL LABORATORY RESULTS PERCENT CALCIUM CARBONATE

Analytical Methods: EPA Methods 6010B and 3050B Site Name: NCDOT-North End of Pea Island

	Parar	neter>		
Sample ID	Date Collected	Sample Depth (ft. BGS)	Percent Calcium Carbonate	
PI-SB01 (0-5)	12/11/2007	·0-5	0.14	
PI-SB01 (5-10)	12/11/2007	5-10	0.32	
PI-SB02 (0-5)	12/11/2007	0-5	0.32	
PI-SB02 (5-10)	12/11/2007	5-10	0.16	
PI-SB03 (0-5)	12/11/2007	0-5	0.08	AVERAGE
PI-SB03 (5-10)	12/11/2007	5-10	0.45	274B
P1-SB04 (0-5)	12/11/2007	0-5	0.05	
PI-SB04 (5-10)	12/11/2007	5-10	0.24	2 <u>0.215</u>
PI-SB05 (0-5)	12/11/2007	0-5	0.15	6
PI-SB05 (5-10)	12/11/2007	5-10	0.30	
PI-SB06 (0-5)	12/11/2007	0~5	0.35	
PI-SB06 (5-10)	12/11/2007	5-10	0.13	
PI-SB07 (0-5)	12/11/2007	0-5	0.23	
PI-SB07 (5-10)	12/11/2007	5-10	0.09	ć
PI-SB08 (0-5)	12/12/2007	0-5	0.04	
PI-SB08 (5-10)	12/12/2007	5-10	0.05	11-5,
PI-SB08 (10-15)	12/12/2007	10-15	0.09	AIIIE for AGE
PI-SB08 (15-20)	12/12/2007	15-20	0.06	
PI-SB09 (0-5)	12/12/2007	0-5	0.11	×1.5
PI-SB09 (5-10)	12/12/2007	5-10	0.05	
PI-SB09 (10-15)	12/12/2007	10-15	6.24	3 0.092E
PI-SB09 (15-20)	12/12/2007	15-20	0.17	· Ť
PI-SB09 (20-25)	12/12/2007	20-25	0.09	CORST:
PI-SB10 (0-5)	12/12/2007	0-5	0.15	
PI-SB10 (5-10)	12/12/2007	5-10	0.09	4 7
PI-SB10 (10-15)	12/12/2007	10-15	0.15	\$
PI-SB10 (15-20)	12/12/2007	15-20	0.06	

All results in percent maximum CaCO3 available from total calcium analysis. It. BGS = feet below ground surface

HEAVY MINERAL ANALYSIS GROIN AREA AND OLD COAST GUARD STATION

7 13

Opaque counts

NC DENH DLH Geological Survey Confidential HEAVY MINERAL Content

Pea Island		No.	No.	No.							
										-	Augrano
Sample No.	Depth	opaque	opaque	opaque	Average						
•	•	grains Field 1	grains Field 2	grains Field 3	grains Field 4	grains Field 5	grains Field 6	grains Field 7	grains Field 8	grains Field 9	No. opaque grains
SB-01	0 - 5 ft		5				4	· · · · · · · · · · · · · · · · · · ·		3	3.33
<u>30-01</u>	<u> </u>	4	<u>5</u> 6	<u>3</u> 4	1	7	3	2	2 3	····	
	<u>1011 - C</u>	3	0		4	3	3	6	3	0	4.00
SB-02	0 - 5 ft	1	16	14	14	24	21	5	4	11	12.22
	5 - 10 ft	4	3	2	7	1	5	7	7	3	4.33
SB-03	0 - 5 ft	6	9	4	4	11	8	8	3	6	6.56
	5 - 10 ft	4	11	6	3	4	22	10	2	3	7.22
SB-04	0 - 5 ft	4	4		5	6	7	6	4	8	5.33
	5 - 10 ft	11	3	12	11	5	9	7	1	13	8.00
SB-05	0 - 5 ft	12	5	3	12	6	15	7	16	11	9.67
	5 - 10 ft	19	22	24	28	13	16	25	15	23	20.56
SB-06	0 - 5 ft	28	84	48	36	26	25	32	68	50	44.11
	5 - 10 ft	24	12	15	22	20	38	14	32	18	21,67
SB-07	0 - 5 ft	42	35	24	11	23	39	7	12	21	23.78
	5 - 10 ft	33	28	13	27	22	19	34	26	27	25.44
SB-08	0 - 5 ft	51	39	53	40	46	50	29	36	35	42.11
	5 - 10 ft	43	55	51	62	16	30	47	68	82	50.44
	10 - 15 ft	86	72	35	69	81	57	83	34	71	65.33
	15 - 20 ft	96	22	74	57	83	27	23	79	72	59.22
SB-09	0 - 5 ft	107	83	96	107	37	62	67	71	98	80.89
	5 - 10 ft	57	28	26	37	33	38	46	68	66	44.33
	10 - 15 ft	108	97	111	26	38	107	42	53	95	75.22
	15 - 20 ft	38	29	12	28	40	71	62	31	34	38.33
SB-10	0 - 5 ft	32	36	42	56	33	42	37	32	51	40.11
	5 - 10 ft	30	28	36	19	24	37	50	41	37	33.56
· · · · · · · · · · · · · · · · · · ·	10 - 15 ft	83	61	95	79	31	101	57	33	79	68.78
	15 - 20 ft	31	69	42	40	46	71	36	28	47	45.56

NC DENR DLR Geological Survey Confidential

Pea Island		Percent	······································	Percent	print r r r r r r r r r r r r r r r r r r r	Percent	generation of the second s	Deveent	Davaant	Bayaani	A
Sample No.	Depth	opaque grains Field 1	Percent opaque grains Field 2	opaque grains Field 3	Percent opaque grains Field 4	opaque grains Field 5	Percent opaque grains Field 6	Percent opaque grains Field 7	Percent opaque grains Field 8	Percent opaque grains Field 9	Average percent opaque
SB-01	0 - 5 ft	1	2	3	1	Field 5	2	3	TIEIU O	3	grains 2.33
30-01	5 - 10 ft	3	5	7	2	1	3	3	3	5	3.56
	<u>5-1011</u>	<u> </u>	U		<u> </u>			<u> </u>	<u> </u>	<u> </u>	0.00
SB-02	0 - 5 ft	3	2	1	3	2	3	3	2	2	2.33
	5 - 10 ft	2	2	2	1	3	3	2	2	2	2.33
								····		·····	~
SB-03	0 - 5 ft	3	3	2	2	3	3	2	2	3	2.56
	5 - 10 ft	2	3	3	3	2	5	3	2	2	2.78
SB-04	0 - 5 ft	3	5	5	3	5	5	3	3	3	3.89
	5 - 10 ft	2	3	1	2	1	3	3	2	1	2.00
	~ = 0							~ ~ ~ ~	~		0.44
SB-05	0 - 5 ft	3	3	3	3	5	5	3	3	3	3.44
	5 - 10 ft	5	7	5	5	5	1	3	5	5	4.56
SB-06	0 - 5 ft	7	7	10	10	7	10	7	10	10	8.67
	5 - 10 ft	5	3	3	3	3	1	7	5	5	3.89
			·		······································						
SB-07	0 - 5 ft	7	7	5	3	5	<u>5</u> 5	5	7	5	5.44
	5 - 10 ft	7	5	7	5	5	5	5	7	5	5.67
SB-08	0 - 5 ft	7	10	10	10	7	10	10	7	15	9.56
	<u>5 - 10 ft</u>	15	15	10	15	15	10	10	15	15	13.33
	10 - 15 ft	5	7	5	7	10	7	15	5	15	8.44
	15 - 20 ft	15	5	10	10	15	5	5	15	10	10.00
SB-09	0 - 5 ft	15	15	15	20	10	10	10	15	15	13.89
	5 - 10 ft	10	7	10	15	10	10	7	10	10	9.89
	10 - 15 ft	15	10	10	7	7	15	15	15	10	11.56
	15 - 20 ft	10	10	7	7	10	10	15	10	7	9.56
		· · · · · · · · · · · · · · · · · · ·					· · · · ·			1	
SB-10	0 - 5 ft	7	10	7	10	10	15	7	10	7	9.22
	5 - 10 ft	15	15	10	7	15	10	7	10	10	11.00
	10 - 15 ft	10	10	15	10	20	15	15	15	15	13.89
	15 - 20 ft	15	10	10	10	15	15	10	10	7	11.33

Sample No.	Depth	No. opaque grains Field 1	No. opaque grains Field 2	No. opaque grains Field 3	No. opaque grains Field 4	No. opaque grains Field 5	No. opaque grains Field 6	No. opaque grains Field 7	No. opaque grains Field 8	No. opaque grains Field 9	Average No. opaque grains
SB-01	5 - 10 ft	4	4	9	2	3	5	8	3	1	4.33
SB-05	0 - 5 ft	18	20	6	3	11	15	8	11	10	11.33
SB-10	5 - 10 ft	27	33	16	55	24	41	48	38	29	34.56

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DENIAL LETTER



North Carolina Department of Environment and Natural Resources **Division of Coastal Management**

Michael F. Easley, Governor

James H. Gregson, Director

William G. Ross Jr., Secretary

October 20, 2008

CERTIFIED MAIL **Return Receipt Requested**

N.C. Department of Transportation **Division One** c/o Jerry Jennings, Division Engineer 113 Airport Drive, Suite 100 Edenton, NC 27932

Dear Mr. Jennings:

This letter is in response to your major permit application request under the Coastal Area Management Act (CAMA) and the State Dredge and Fill Law to conduct a beach habitat restoration project in Dare County, North Carolina. Processing of the application, which was accepted as complete by the North Carolina Division of Coastal Management's (DCM's) Elizabeth City office on September 5, 2008, is now complete. Based on the state agency review, DCM has made the following findings:

- The proposal is to excavate approximately 200,000 cubic yards of sand from behind the 1) terminal groin located on Hatteras Island and place the material along approximately 1,500 linear feet of beach on Pea Island National Wildlife Refuge in an area known as the "Rodanthe S-curves". The recipient beach is approximately 12 miles south of the borrow area. The beach fill will be placed on the beach by creating a breach in the existing dune and trucking the material onto the beach face.
- The area where the placement of beach fill is proposed includes an area where the installation 2)of approximately 900 linear feet of sandbags was authorized by CAMA General Permit 07H .1700 on February 13, 2007. The applicant is pursuing this beach fill project in an effort to restore beach habitat as directed by the USFWS Special Use Permit #2006-014 that was issued on December 11, 2006 for the installation of these same sandbags.
- The borrow area behind the terminal groin includes lands owned by the U.S. Fish and Wildlife 3) Service at Pea Island National Wildlife Refuge and lands owned by the State of North Carolina at the Old Coast Guard Station.

400 Commerce Avenue, Morehead City, North Carolina 28557 Phone: 252-808-2808 \ FAX: 252-247-3330 \ Internet: www.nccoastalmanagement.net

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- 4) The proposed project constitutes development under the Rules of the Coastal Resources Commission (CRC).
- 5) The beach habitat restoration project is in an area classified by CAMA as an Ocean Hazard System Area of Environmental Concern (AEC), an Estuarine Waters AEC and a Public Trust AEC.
- 6) The state agency review of the proposed project was generally favorable.
- 7) The following Rules of the Coastal Resources Commission are applicable to the proposed project:

Technical Standards for Beach Fill Projects.

15A NCAC 07H .0312(1)(c). Shore-perpendicular topographic and bathymetric surveying of the recipient beach shall be conducted to determine the beach profile. Topographic and bathymetric surveying shall occur along a minimum of five (5) shore-perpendicular transects evenly spaced throughout the entire project area. Each transect shall extend from the frontal dune crest seaward to a depth of 20 feet (6.1 meters) or to the shore-perpendicular distance 2,400 feet (732 meters) seaward of mean low water, whichever is in a more landward position. Transect spacing shall not exceed 5,000 feet (1,524 meters) in the shore-parallel direction. Elevation data for all transects shall be referenced to the North American Vertical Datum on 1988 (NAVD 88) and the North American Datum of 1983 (NAD 83).

15A NCAC 07H .0312(1)(d). No less than 13 sediment samples shall be taken along each beach profile transect. At least one (1) sample shall be taken from each of the following morphodynamic zones where present: frontal dune, frontal dune toe, mid berm, mean high water (MHW), mid tide (MT), mean low water (MLW), trough, bar crest and at even depth increments from 6 feet (1.8 meters) to 20 feet (6.1 meters) or to a shore-perpendicular distance 2,400 feet (732 meters) seaward of mean low water, whichever is in a more landward position. The total number of samples taken landward of MLW shall equal the total number of samples taken seaward of MLW.

8) At the borrow area site, the minimum number of sediment samples required by the technical standards for beach fill projects (15A NCAC 07H .0312) was acquired and the carbonate analysis completed. However, at the recipient beach, the minimum number of sediment samples required by the technical standards for beach fill projects was not acquired and the associated carbonate analysis for those missing samples was not completed. The proposed recipient beach is 1,500 feet long, therefore, the Rules of the CRC require a minimum number of 65 sediment samples at the recipient beach (13 sediment samples from a minimum of five transects). However, only 20 sediment sàmples and the associated carbonate analysis for those samples was obtained at the recipient beach. Therefore, approximately 45 additional sediment samples would be required to comply with the technical standards for beach fill projects. Due to the fact that the applicant did not collect the minimum number of samples at the recipient beach as required by 15A NCAC 07H .0312(1)(c) and 15A NCAC 07H .0312(1)(d), the proposed project has been determined to be inconsistent with the Rules of the CRC listed in Item No. 7 above.

Given the preceding findings, it is necessary that your request for a permit under the Coastal Area Management Act be denied. This denial is made pursuant to N.C.G.S. 113A-120(a)(8), which requires permit denial for projects inconsistent with the state guidelines for Areas of Environmental Concern.

If you wish to appeal this denial, you are entitled to a hearing. The hearing will involve appearing before an Administrative Law Judge who listens to evidence and arguments of both parties and then makes a recommendation to the Coastal Resources Commission. 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, (919) 733-2698, within twenty (20) days from the date of this letter. A copy of this petition should be filed with this office.

The Federal Coastal Zone Management Act (CZMA) gives you the right to appeal this finding to the U.S. Secretary of Commerce within thirty (30) days of receipt of this letter. Your appeal must be based on the grounds that the proposed activity is (1) consistent with the objectives or purposes of the CZMA, or (2) is necessary in the interest of national security, and thus, may be federally approved.

If you have any questions concerning this matter, please contact Mr. Doug Huggett, Major Permits and Consistency Coordinator, at (252) 808-2808, N.C. Division of Coastal Management, 400 Commerce Avenue, Morehead City, NC 28557.

Sincerely, James H. Gregson

JG/cb

Cc: Mr. David Kennedy, Director OCRM/NOAA Silver Spring, MD

> Colonel Jefferson Ryscavage U.S. Army Corps of Engineers Wilmington, NC

US ARMY CORPS OF ENGINEERS

INDIVIDUAL PERMIT REQUEST FOR BEACH HABITAT RESTORATION





STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY GOVERNOR

.

LYNDO TIPPETT SECRETARY

August 25, 2008

Bill Biddlecome USACOE - Regulatory Field Office Washington, NC 27889-1000

Dear Mr. Biddlecome,

NCDOT is requesting the issuance of an Individual Permit for the placement of approximately 200,000 cubic yards of sand on the beach face at the Pea Island Refuge S-Curves location. This sand placement is being pursued in an effort to restore beach habitat as directed by the USFWS Special Use Permit # 2006-014 issued 12/11/2006. This permit was issued for the installation of 900 ft. of sandbags adjacent to NC 12 to increase protection from the roadway washing out during storm events. Along with the beach restoration habitat commitment, NCDOT also agreed to a monitoring program that involves pre and post sandbag installation monitoring of physical and biological elements of the beach face within the project area. This monitoring is done 4 times each year and will continue until the sandbags are no longer needed and removed.

The area of the Beach Habitat Restoration begins at the southern tip of the refuge property and continues north for a distance of 1500 ft., which includes the 900 ft. location of the sandbags. The beach profile was surveyed to establish a proposed cross-section with mean high and low water marks, showing the existing and proposed beach face. Based on the amount of available material and the existing profile it was determined that the beach restoration would extend from an approximate elevation of 5.5 ft. and extend seaward for a distance of approximately 85 ft., raising the beach face by 1 to 5 ft. Natural wave process will taper the slope below the mean low water line carrying material beyond the 85 ft. point to an assumed additional distance of 30 to 40 ft. This profile is depicted on the provided permit drawings at three different cross sections. At the north and southern ends of the 1500 ft. habitat restoration area the elevated beach face will be tapered to match the existing dune and trucking the material onto the beach face. The sand will then be pushed to the proposed profile by bulldozers and frontend loaders. The location of the dune breach will be established through coordination with CAMA and the USFWS biologist. A location will be established based on minimal impact to vegetated dunes.

The sand source for the beach habitat restoration is located approximately 12 miles north at the groin location on the Pea Island Refuge and the adjacent state owned property where the Old Coast Guard Station is located. The proposed mining area behind the groin is approximately 13 acres in size and was recommended for use by the USFWS. This area was previously mined in the late 90's under supervision by the USFWS. The mining was conducted, so that shallow areas of excavation created pools that improved foraging habitat for shore birds using the area. These pools have filled in over the years and there is only one remnant pool area, which will not be impacted by the proposed project. The current project is proposing to accomplish the same result and will follow direction of the USFWS refuge staff during the excavation. The mining will not go beyond 6-8 feet below the surface and will only extend within the area shown on the provided location map. This area currently is located above the normal high water mark, it consist of an open sand flat with no vegetation. This area can be accessed through the existing State Rd.

1257. Beyond the end of SR 1257 are established dunes that lie approximately 700-800 feet from the normal high water line. This area of dunes can be crossed by off-road dump trucks. Efforts to minimize impacts to vegetated areas will be conducted through the dune crossing. The adjacent state property is approximately 10 acres in size and will also be used to provide sand for the project. Sand will be removed from SR 1257 that leads into the state property. Sand removal from the roadway will stay within NCDOT R-O-W. Once sand is removed from the roadway and access is gained to the Old Coast Guard Station Property, excavation around the remnant parking areas of the Old Coast Guard Station will begin. Sand removal is proposed to be excavated down to the old pavement elevation. This varies in depth, but likely averages around 10-20 ft. Coordination with the state property owners will be conducted prior to any sand removal to establish a safe boundary around the Coast Guard building. Once the Old Coast Guard Station area is complete, then the area behind the groin will be accessed and sand mining will begin there.

NCDOT has conducted a sand analysis within the proposed mining areas and the receiving beach area. The sand was analyzed for grain size, percent calcium carbonate and heavy mineral content. This data is provided in the application. In order to prevent potential impacts to protected shorebirds and nesting sea turtles NCDOT will conduct the proposed work outside of applicable moratoriums and under supervision of the USFWS managing biologist and direction from the WRC.

Along with the Individual COE permit, NCDOT is also in the process of acquiring a DCM, DWQ and USFWS Special Use Permit.

Included with this request are a location map, plan view, cross-sections and photographs showing the proposed work. If any additional information is needed please contact Clay Willis at 252-482-7977.

Sincerely, Jerry Jennings, P.E. Acting Division Engineer, Division One

Clay Willis Environmental Officer, Division One

CC: Cathy Brittingham, DCM Garcy Ward, DWQ Travis Wilson, WRC Sarah Winslow, NCMFC Ron Sechler, NMFS Gary Jordan, USFWS Dennis Stuart, USFWS Rick Kanaski, USFWS Renee Gladhill-Early, NCHPO Chris Ivers, NCAquariums Gretchen Byrum, NCDOT Mary Pope-Furr, NCDOT Jerry Jennings, NCDOT

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT	OMB APPROVAL NO. 0710-003
APPENCATION FOR DEPARTMENT OF THE ARMIT FERMIN	ONB ALL MOTAL (O. VIIVOU)
177 ATTEN 747	Expires October 1996
(33 CFR 325)	Expires Occuper 1990

Public reporting burden for this collection of information is estimated to average 5 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Service Directorate of Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302; and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003), Washington, DC 20503. Please DO NOT RETURN your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authority: 33 USC 401, Section 10; 1413, Section 404. Principal Purpose: These laws require permits authorizing activities in, or affecting, navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters. Routine Uses: Information provided on this form will be used in evaluating the application for a permit. Disclosure: Disclosure of requested information is voluntary. If information is not provided, however, the permit application cannot be processed nor can a permit be issued.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

	ITEMS I THRU 4 TO BE F	ILLED BY THE CORPS)
APPLICATION NO	2. FIELD OFFICE CODE	3. DATE RECEIVED 4. DATE APPLICATION COMPLETED
	(ITEMS BELOW TO BE F	LLED BY APPLICANT)
5. APPLICANT'S NAME	NCDOT Division One	8. AUTHORIZED AGENT'S NAME AND TITLE (an agent is not required) Clay Willis, Division Environmental Officer
6. APPLICANT'S ADDRESS	NCDOT 113 Airport Road Edenton, N.C. 27932	9. AGENT'S ADDRESS NCDOT 113 Airport Road Edenton, N.C. 27932
7. APPLICANT'S PHONE N	OS. W/AREA CODE	10. AGENT'S PHONE NOS. W/AREA CODE
a. Residence b. Business	(252) 482-7977	a. Residence b. Business (252) 482-7977
11.		AUTHORIZATION
I hereby authorize supplemental information in s APPLICANT'S S	upport of this permit application.	f as my agent in the processing of this application and to furnish, upon request, DATE
	NAME, LOCATION AND DESCRIPT	TION OF PROJECT OR ACTIVITY
12. PROJECT NAME OR TT Beach Habitat Restors		<u>, and another and a second and a second and a second a second second second second second second second second</u>
13. NAME OF WATERBOD Atlantic Ocean	Y, IF KNOWN (if applicable)	14. PROJECT STREET ADDRESS (if applicable) NC 12 at the Southern end of Pea Island
15. LOCATION OF PROJEC	т. Т	7
Dare COUNTY	<u> </u>	
	SCRIPTIONS, IF KNOWN (see instructions)	I telend Defines 14 housing 1500 ft. North of the refere

Project is located at the S-Curves area on the Southern end of Pea Island Refuge. It begins 1500 ft. North of the refuge boundary and extends to the southern edge of the refuge property.

17. DIRECTIONS TO THE SITE

Travel South on NC 12 in Dare County, project is located approximately 11.5 miles south of the Oregon Inlet Bridge on the Pea Island National Wildlife Refuge.

ENG FORM 4345, Feb 94

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

This project proposes to place approximately 200,000 cubic yards of sand on the beach face in an effort to comply with a USFWS Special Use Permit condition. This permit condition required NCDOT to mitigate for impacts to the beach face community. The impacts occurred because of maintaining NC 12 on the current alignment by placing 900 ft. of sandbags adjacent to the roadway. The Beach Habitat Restoration project is 1500 ft. in length. The sand fill will begin at an elevation of 5.5 ft. and extend seaward 85 ft. as shown on the provided drawings.

19. Project Purpose (Describe the reason or purpose of the project, see instructions) Mitigate for loss of Beach Habitat as directed by the USFWS Special Use Permit # 2006-014.

USE BLOCKS 29-22 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

The placement of 200,000 cubic yards of sand will create beach habitat that helps provide important foraging and nesting areas for animals using the Pea Island National Wildlife Refuge.

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

Beach Sand will be mined from the Northern end of Pea Island behind the Rock Groin area, Old Coast Guard Station Property and SR 1257. There are maps provided that show the proposed mining locations. The sand will be mined using excavators and trucked on NC 12, 11.5 miles south to the Beach Habitat Restoration area. This sand has been analyzed for compatibility with the receiving beach. The results are included with this application. The proposed Beach Habitat Restoration will result in approximately 200,000 cubic yards of sand being placed along a 1500 ft. section within the S-Curves location.

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

Approximately 2 acres of fill below the Normal High Water mark will result from this project. Sand will be placed on the beach by dump trucks and front end loaders at a elevation of 5.5 ft. The sand will then be pushed seaward by bulldozers to an distance of approximately 85 ft. This is depicted on the provided work plat.

23. Is Any Portion of the Work Already Complete ? Yes ____ No X ___ IF YES, DESCRIBE THE COMPLETED WORK

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

Michael P. Creasy 516 Nebo Road Ext. Champion, PA 15622

Dept. of Interior U.S.F.W.S. Pea Island National Wildlife Refuge P.O. Box 1969 Manteo, N.C. 27954

25. List Other Certifications or Approvals/Denials Received from other Federal/State /Local Agencies for Work Described in This Application.									
AGENCY DCM DWQ USFWS	TYPE APPROVAL* Major Permit 401 Individual Special Use Permit	IDENTIFICATION NUMBER in process in process in process	DATE APPLIED	DATE APPROVED	DATE DENIED				

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

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

SIGNATURE OF APPLICANT

_____ <u>___/2//48</u>____ DATE

SIGNATURE OF AGENT

DATE

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

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

*U.S.GPO:1994-520-478/82018

DIVISION OF WATER QUALITY

401 INDIVIDUAL CERTIFICATION REQUEST FOR BEACH HABITAT RESTORATION

FXHIBIT



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY GOVERNOR LYNDO TIPPETT SECRETARY

August 25, 2008

David Wainwright Division of Water Quality 401 Wetlands Unit 1650 Mail Service Center Raleigh, NC 27699

Dear Mr. Wainwright,

NCDOT is requesting the issuance of a 401 Individual Certification for the placement of approximately 200,000 cubic yards of sand on the beach face at the Pea Island Refuge S-Curves location. This sand placement is being pursued in an effort to restore beach habitat as directed by the USFWS Special Use Permit # 2006-014 issued 12/11/2006. This permit was issued for the installation of 900 ft. of sandbags adjacent to NC 12 to increase protection from the roadway washing out during storm events. Along with the beach restoration habitat commitment, NCDOT also agreed to a monitoring program that involves pre and post sandbag installation monitoring of physical and biological elements of the beach face within the project area. This monitoring is done 4 times each year and will continue until the sandbags are no longer needed and removed.

The area of the Beach Habitat Restoration begins at the southern tip of the refuge property and continues north for a distance of 1500 ft., which includes the 900 ft. location of the sandbags. The beach profile was surveyed to establish a proposed cross-section with mean high and low water marks, showing the existing and proposed beach face. Based on the amount of available material and the existing profile it was determined that the beach restoration would extend from an approximate elevation of 5.5 ft. and extend seaward for a distance of approximately 85 ft., raising the beach face by 1 to 5 ft. Natural wave process will taper the slope below the mean low water line carrying material beyond the 85 ft. point to an assumed additional distance of 30 to 40 ft. This profile is depicted on the provided permit drawings at three different cross sections. At the north and southern ends of the 1500 ft. habitat restoration area the elevated beach face will be tapered to match the existing dune and trucking the material onto the beach face. The sand will then be pushed to the proposed profile by bulldozers and frontend loaders. The location of the dune breach will be established through coordination with CAMA and the USFWS biologist. A location will be established based on minimal impact to vegetated dunes.

The sand source for the beach habitat restoration is located approximately 12 miles north at the groin location on the Pea Island Refuge and the adjacent state owned property where the Old Coast Guard Station is located. The proposed mining area behind the groin is approximately 13 acres in size and was recommended for use by the USFWS. This area was previously mined in the late 90's under supervision by the USFWS. The mining was conducted, so that shallow areas of excavation created pools that improved foraging habitat for shore birds using the area. These pools have filled in over the years and there is only one remnant pool area, which will not be impacted by the proposed project. The current project is proposing to accomplish the same result and will follow direction of the USFWS refuge staff during the excavation. The mining will not go beyond 6-8 feet below the surface and will only extend within the area

shown on the provided location map. This area currently is located above the normal high water mark, it consist of an open sand flat with no vegetation. This area can be accessed through the existing State Rd. 1257. Beyond the end of SR 1257 are established dunes that lie approximately 700-800 feet from the normal high water line. This area of dunes can be crossed by off-road dump trucks. Efforts to minimize impacts to vegetated areas will be conducted through the dune crossing. The adjacent state property is approximately 10 acres in size and will also be used to provide sand for the project. Sand will be removed from SR 1257 that leads into the state property. Sand removal from the roadway will stay within NCDOT R-O-W. Once sand is removed from the roadway and access is gained to the Old Coast Guard Station Property, excavation around the remnant parking areas of the Old Coast Guard Station will begin. Sand removal is proposed to be excavated down to the old pavement elevation. This varies in depth, but likely averages around 10-20 ft. Coordination with the state property owners will be conducted prior to any sand removal to establish a safe boundary around the Coast Guard building. Once the Old Coast Guard Station area is complete, then the area behind the groin will be accessed and sand mining will begin there.

NCDOT has conducted a sand analysis within the proposed mining areas and the receiving beach area. The sand was analyzed for grain size, percent calcium carbonate and heavy mineral content. This data is provided in the application. In order to prevent potential impacts to protected shorebirds and nesting sea turtles NCDOT will conduct the proposed work outside of applicable moratoriums and under supervision of the USFWS managing biologist.

Along with the 401 Individual Certification NCDOT is also in the process of acquiring a COE, DCM and USFWS Special Use Permit.

Included with this request are a location map, plan view, cross-sections and photographs showing the proposed work. If any additional information is needed please contact Clay Willis at 252-482-7977.

Sincerely, Jerry Jennings, P.E. Acting Division Engineer, Division One Clay Willis

Environmental Officer, Division One

CC: Bill Biddlecome, USACOE Garcy Ward, DWQ Travis Wilson, WRC Cathy Brittingham, DCM Sarah Winslow, NCMFC Ron Sechler, NMFS Gary Jordan, USFWS Dennis Stuart, USFWS Rick Kanaski, USFWS Renee Gladhill-Early, NCHPO Chris Ivers, NCAquariums Gretchen Byrum, NCDOT Mary Pope-Furr, NCDOT Jerry Jennings, NCDOT

US FISH AND WILDLIFE SERVICE

SPECIAL USE PERMIT AND CONCURRENCE LETTER FOR BEACH HABITAT RESTORATION





STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY GOVERNOR LYNDO TIPPETT SECRETARY

August 25, 2008

Mike Bryant U.S. Fish and Wildlife Service P.O. Box 1969 Manteo, NC 27954

Dear Mr. Bryant,

NCDOT is requesting the issuance of an Special Use Permit for the placement of approximately 200,000 cubic yards of sand on the beach face at the Pea Island Refuge S-Curves location. This sand placement is being pursued in an effort to restore beach habitat as directed by the USFWS Special Use Permit # 2006-014 issued 12/11/2006. This permit was issued for the installation of 900 ft. of sandbags adjacent to NC 12 to increase protection from the roadway washing out during storm events. Along with the beach restoration habitat commitment, NCDOT also agreed to a monitoring program that involves pre and post sandbag installation monitoring of physical and biological elements of the beach face within the project area. This monitoring is done 4 times each year and will continue until the sandbags are no longer needed and removed.

The area of the Beach Habitat Restoration begins at the southern tip of the refuge property and continues north for a distance of 1500 ft., which includes the 900 ft. location of the sandbags. The beach profile was surveyed to establish a proposed cross-section with mean high and low water marks, showing the existing and proposed beach face. Based on the amount of available material and the existing profile it was determined that the beach restoration would extend from an approximate elevation of 5.5 ft. and extend seaward for a distance of approximately 85 ft., raising the beach face by 1 to 5 ft. Natural wave process will taper the slope below the mean low water line carrying material beyond the 85 ft. point to an assumed additional distance of 30 to 40 ft. This profile is depicted on the provided permit drawings at three different cross sections. At the north and southern ends of the 1500 ft. habitat restoration area the elevated beach face will be tapered to match the existing dune and trucking the material onto the beach face. The sand will then be pushed to the proposed profile by bulldozers and frontend loaders. The location of the dune breach will be established through coordination with CAMA and the USFWS biologist. A location will be established based on minimal impact to vegetated dunes.

The sand source for the beach habitat restoration is located approximately 12 miles north at the groin location on the Pea Island Refuge and the adjacent state owned property where the Old Coast Guard Station is located. The proposed mining area behind the groin is approximately 13 acres in size and was recommended for use by the USFWS. This area was previously mined in the late 90's under supervision by the USFWS. The mining was conducted, so that shallow areas of excavation created pools that improved foraging habitat for shore birds using the area. These pools have filled in over the years and there is only one remnant pool area, which will not be impacted by the proposed project. The current project is proposing to accomplish the same result and will follow direction of the USFWS refuge staff during the excavation. The mining will not go beyond 6-8 feet below the surface and will only extend within the area shown on the provided location map. This area currently is located above the normal high water mark, it

consist of an open sand flat with no vegetation. This area can be accessed through the existing State Rd. 1257. Beyond the end of SR 1257 are established dunes that lie approximately 700-800 feet from the normal high water line. This area of dunes can be crossed by off-road dump trucks. Efforts to minimize impacts to vegetated areas will be conducted through the dune crossing. The adjacent state property is approximately 10 acres in size and will also be used to provide sand for the project. Sand will be removed from SR 1257 that leads into the state property. Sand removal from the roadway will stay within NCDOT R-O-W. Once sand is removed from the roadway and access is gained to the Old Coast Guard Station Property, excavation around the remnant parking areas of the Old Coast Guard Station will begin. Sand removal is proposed to be excavated down to the old pavement elevation. This varies in depth, but likely averages around 10-20 ft. Coordination with the state property owners will be conducted prior to any sand removal to establish a safe boundary around the Coast Guard building. Once the Old Coast Guard Station area is complete, then the area behind the groin will be accessed and sand mining will begin there.

NCDOT has conducted a sand analysis within the proposed mining areas and the receiving beach area. The sand was analyzed for grain size, percent calcium carbonate and heavy mineral content. This data is provided in the application. In order to prevent potential impacts to protected shorebirds and nesting sea turtles NCDOT will conduct the proposed work outside of applicable moratoriums and under supervision of the USFWS managing biologist and direction from the WRC.

Along with the Special Use permit, NCDOT is also in the process of acquiring a DCM, COE and DWQ Permit.

Included with this request are location maps, plan view, cross-sections and photographs showing the proposed work. If any additional information is needed please contact Clay Willis at 252–482-7977.

Sincerely, Jerry Jennings, P.E. Acting Division Engineer, Division One

May Willis Clay Willis Environmental Officer, Division One

CC: Cathy Brittingham, DCM Garcy Ward, DWQ Travis Wilson, WRC Sarah Winslow, NCMFC Ron Sechler, NMFS Gary Jordan, USFWS Dennis Stuart, USFWS Rick Kanaski, USFWS Renee Gladhill-Early, NCHPO Chris Ivers, NCAquariums Gretchen Byrum, NCDOT Mary Pope-Furr, NCDOT Jerry Jennings, NCDOT

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United States Department of the Interior

FISH AND WILDLIFE SERVICE **Rateigh Field Office** Post Office Box 33726 Raleigh, North Carolina 27636-3726

October 1, 2008

Clav Willis North Carolina Department of Transportation 113 Airport Dr., Suite 100 Edenton, North Carolina 27932

Dear Mr. Willis:

This letter is in response to your letter of September 23, 2008 which provided the U.S. Fish and Wildlife Service (Service) with the biological determination of the North Carolina Department of Transportation that the proposed S-Curves Beach Habitat Restoration project on Pea Island in Dare County may affect, but is not likely to adversely affect the federally threatened piping plover (Charadrius melodus), loggerhead sea turtle (Caretta caretta) and green sea turtle (Chelonia mydas), and the federally endangered leatherback sea turtle (Dermochelys coriacea). These comments are provided in accordance with section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531-1543).

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The purpose of this project is to restore beach habitat that may be used by federally threatened and endangered species, as well as other species. The project is being conducted as per a condition of Special Use Permit #2006-014, which was issued by the Service on December 11, 2006. That special use permit was issued for the placement of sand bags adjacent to NC 12 within the Pea Island National Wildlife Refuge.

Based on submitted information, the project will be conducted outside of piping plover and sea turtle nesting seasons (cumulatively April 1 through November 15) to avoid and minimize effects to these species to the greatest extent. Though wintering or migrating piping plovers may be present within the action area during the time frame of the proposed work, any effects are expected to be insignificant and discountable. The sand mining in the area behind the terminal groin will occur partially within proposed critical habitat for wintering piping plovers; however, the sand excavation will improve the quality of the critical habitat by enhancing the primary constituent elements and improving foraging habitat quality, which will likely produce beneficial effects for foraging piping plovers.

Though sea turtle nesting is possible within the action area, the high wave energy and the narrowness of the beach within this area likely precludes successful nesting. No direct effects on sea turtles are anticipated, and indirect effects are expected to be insignificant and discountable.

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Based on available information, the Service concurs with your determination that the proposed project may affect, but is not likely to adversely affect the piping plover, loggerhead sea turtle, green sea turtle, and leatherback sea turtle. We believe that the requirements of section 7(a)(2)of the ESA have been satisfied. We remind you that obligations under section 7 consultation must be reconsidered if: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner not previously considered in this review; (2) this action is subsequently modified in a manner that was not considered in this review; or (3) a new species is listed or critical habitat determined that may be affected by this identified action.

The Service appreciates the opportunity to review this project. If you have any questions regarding our response, please contact Mr. Gary Jordan at (919) 856-4520 (Ext. 32).

Sincerely,

Pete Benjamin Field Supervisor

cc: Bill Biddlecome, USACE, Washington, NC Travis Wilson, NCWRC, Creedmoor, NC Chris Militscher, USEPA, Raleigh, NC John Sullivan, FHWA, Raleigh, NC David Harris, NCDOT, Raleigh, NC

CAMA GENERAL PERMIT FOR SANDBAG PLACEMENT



GENERAL PERMIT	Previous permit #
	Partial Reissue Date previous permit issued
As authorized by the State of North Carolina, Department of Environ	nment and Natural Resources concern pursuant to 15A NCAC 74
and the Coastal Resources Commission in an area of environmental c	I Rules attached.
Applicant Name NC DOT	Project Location: CountyARE
Address 113 AIRPORT DR SUITE	#100 Street Address/ State Road/ Lot #(s)
City EDENTON State NC ZIP 279	
Phone # (252 4827977Fax # ()	- ,
Authorized Agent CLAY WILLIS	City RODANTHE ZIP
	Phone # () River Basin PASQUOTRAC
AEC(s):	Adj. Wtr. Body ATLANTIC OCEAN (man /unk
DRW: yes / 60) PNA yes / 60 Crit. Hab. yes	(16) Closest Maj. Wtr. Body ATLANTIC OCEAN
Type of Project/ Activity /NSTALL	· · · · · · · · · · · · · · · · · · ·
<u> </u>	(Scale: NTS
Pier (dock) length	
Platform(s)	ATLANTIC OCEAN
Finger pier(s)	MICHINE DEEHIN NWL
number	And I ma
Bulkhead/ Riprap length	MALON MALON
avg distance offshore YWET SAND LI	INE CREAS
max distance offshore	· · · · · · · · · · · · · · · · · · ·
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cubic yards	win evy
Boat ramp	NC 12
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Statement of Compliance and Consistency

This permit is subject to compliance with this application, site drawing and attached general and specific conditions. Any violation of these terms may subject the permittee to a fine or criminal or civil action; and may cause the permit to become null and void.

This permit must be on the project site and accessible to the permit officer when the project is inspected for compliance. The applicant certifies by signing this permit that 1) prior to undertaking any activities authorized by this permit, the applicant will confer with appropriate local authorities to confirm that this project is consistent with the local land use plan and all local ordinances, and 2) a written statement or certified mail return receipt has been obtained from the adjacent riparian landowner(s).

The State of North Carolina and the Division of Coastal Management, in issuing this permit under the best available information and belief, certify that this project is consistent with the North Carolina Coastal Management Program.

River Basin Rules Applicable To Your Project:

Tar - Pamlico River Basin Buffer Rules

Neuse River Basin Buffer Rules

Other:_____

If indicated on front of permit, your project is subject to the Environmental Management Commission's Buffer Rules for the River Basin checked above due to its location within that River Basin. These buffer rules are enforced by the NC Division of Water Quality. Contact the Division of Water Quality at the Washington Regional Office (252-946-6481) or the Wilmington Regional Office (910-796-7215) for more information on how to comply with these buffer rules.

Division of Coastal Management Offices

Central Office

Mailing Address: 1638 Mail Service Center Raleigh, NC 27699-1638

Location:

Parker-Lincoln Building 2728 Capital Blvd. Raleigh, NC 27604 919-733-2293 Fax: 919-733-1495

Elizabeth City District

1367 U.S. 17 South Elizabeth City, NC 27909 252-264-3901 Fax: 252-264-3723 (Serves: Camden, Chowan, Currituck,

Dare, Gates, Pasquotank and Perquimans Counties)

Morehead City District

400 Commerce Ave Morehead City, NC 28557 202-808-2808/ 1-888-4RCOAST Fax: 252-247-3330 (Serves: Carteret, Craven, Onslow -above New River Inlet- and Pamlico Counties)

Washington District

943 Washington Square Mall Washington, NC 27889 252-946-6481 Fax: 252-948-0478 (Serves: Beaufort, Bertie, Hertford, Hyde, Tyrrell and Washington Counties)

Wilmington District

127 Cardinal Drive Ext. Wilmington, NC 28405-3845 910-796-7215 Fax: 910-395-3964 (Serves: Brunswick, New Hanover, Onslow -below New River Inlet- and Pender Counties)

SECTION .1700 - GENERAL PERMIT FOR EMERGENCY WORK REQUIRING A CAMA AND/OR A DREDGE AND FILL PERMIT

15A NCAC 07H .1701 PURPOSE

This permit allows work necessary to protect property and/or prevent further damage to property caused by a sudden or unexpected natural event or structural failure which imminently endangers life or structure. For the purposes of this general permit, major storms such as hurricanes, northeasters or southwesters may be considered a sudden unexpected natural event although such storms may be predicted and publicized in advance.

History Note: Authority G.S. 113-229(cl); 113A-107(a),(b); 113A-113(b); 113A-118.1; Eff. November 1, 1985.

15A NCAC 07H .1702 APPROVAL PROCEDURES

(a) Any person wishing to undertake development in an area of environmental concern necessary to protect life or endangered structures will notify the Division of Coastal Management or Local Permit Office (LPO) when a possible emergency situation exists.

(b) The applicant may qualify for approval of work described in this permit after an onsite inspection by the LPO or Division of Coastal Management Field Consultant and upon his findings that the proposed emergency work requires a CAMA and/or Dredge and Fill permit. The LPO shall issue the permit if the required emergency measures constitute minor development.
(c) Once the LPO or Consultant determines that the applicant's proposed project may qualify for an emergency permit, he shall consult with the applicant and assist him in preparing an application. The applicant shall include a sketch showing existing conditions and the proposed work.

(d) The applicant for an emergency permit must take all reasonable steps to notify adjacent riparian landowners of the application, and prior to receiving a permit will certify by signing the permit the following:

(1) that a copy of the application and sketch has been served on all adjacent riparian landowners, or if service of a

copy was not feasible, that the applicant has explained the project to all adjacent riparian landowners;

(2) that the applicant has explained to all adjacent riparian landowners that they have a right to oppose the issuance of a permit by filing objections with the local CAMA permit officer or with the Secretary of the Department of Environment, Health, and Natural Resources;

(3) that, as to adjacent riparian landowners not contacted, the applicant has made a reasonable attempt to contact them and furnish them with the required information.

(e) All work authorized by this general permit will cease after thirty days from the date of issuance.

History Note: Authority G.S. 113-229(cl); 113A-107(a),(b); 113A-113(b); 113A-118.1; Eff. November 1, 1985; Amended Eff. May 1, 1990.

07H .1703 PERMIT FEE

The agency shall not charge a fee for permitting work necessary to respond to emergency situations except in the case when a temporary erosion control structure is used. In those cases, the applicant shall pay a permit fee of four hundred dollars (\$400.00) by check or money order made payable to the Department.

History Note: Authority G.S. 113-229(cl); 113A-107(a),(b); 113A-113(b); 113A-118.1; 113A-119; Eff. November 1, 1985; Amended Eff. September 1, 2006; August 1, 2002; March 1, 1991; October 1, 1993

15A NCAC 07H .1704 GENERAL CONDITIONS

(a) Work permitted by means of an emergency permit shall be subject to the following limitations:

(1) No work shall begin until an onsite meeting is held with the applicant and appropriate Division of Coastal Management representative so that the proposed emergency work can be appropriately marked. Written authorization to proceed with the proposed development can be issued during this visit.

(2) No work shall be permitted other than that which is necessary to reasonably protect against or reduce the imminent danger caused by the emergency to restore the damaged property to its condition immediately before the emergency, or to re-establish necessary public facilities or transportation corridors.

(3) Any permitted erosion control projects shall be located no more than 20 feet waterward of the endangered structure.

(4) Fill materials used in conjunction with emergency work for storm or erosion control shall be obtained from an upland source. Excavation below MHW in the Ocean Hazard AEC may be allowed to obtain material to fill sandbags used for emergency protection.

(5) Structural work shall meet sound engineering practices.

(6) This permit allows the use of oceanfront erosion control measures for all oceanfront properties without regard to the size of the existing structure on the property or the date of construction.

- (b) Individuals shall allow authorized representatives of the Department of Environment and Natural Resources to make inspections at any time deemed necessary to be sure that the activity being performed under authority of this general permit is in accordance with the terms and conditions prescribed herein.
- * (c) There shall be no unreasonable interference with navigation or public use of the waters during or after construction.
 (d) This permit will not be applicable to proposed construction where the Department has determined, based on an initial review of the application, that notice and review pursuant to G.S. 113A-119 is necessary because there are unresolved questions concerning the proposed activity's impact on adjoining properties or on water quality; air quality; coastal wetlands; cultural or historic sites; wildlife; fisheries resources; or public trust rights.

(e) This permit does not eliminate the need to obtain any other state, local, or federal authorization.

* (f) Development carried out under this permit must be consistent with all local requirements, CAMA rules, and local land use plans, storm hazard mitigation, and post-disaster recovery plans current at the time of authorization.

History Note: Authority G.S. 113-229(cl); 113A-107(a),(b); 113A-113(b); 113A-118.1; Eff. November 1, 1985; Amended Eff. December 1, 1991; May 1, 1990; RRC Objection due to ambiguity Eff. May 19, 1994; Amended Eff. August 1,1998; July 1, 1994.

15A NCAC 07H .1705 SPECIFIC CONDITIONS

- (a) Temporary Erosion Control Structures in the Ocean Hazard AEC.
 - (1) Permittable temporary erosion control structures shall be limited to sandbags placed above mean high water and parallel to the shore.

(2) Temporary erosion control structures as defined in Subparagraph (1) of this Paragraph may be used to protect only imminently threatened roads and associated right of ways, and buildings and associated septic systems. A structure will be considered to be imminently threatened if its foundation, septic system, or, right-of-way in the case of roads, is less than 20 feet away from the erosion scarp. Buildings and roads located more than 20 feet from the erosion scarp or in areas where there is not obvious erosion scarp may also be found to be imminently threatened when site conditions, such as a flat beach profile or accelerated erosion, tend to increase the risk of imminent damage to the structure.

(3) Temporary erosion control structures may be used to protect only the principal structure and its associated septic system, but not such appurtenances as gazebos, decks or any amenity that is allowed as an exception to the erosion setback requirement.

(4) Temporary erosion control structures may be placed seaward of a septic system when there is no alternative to relocate it on the same or adjoining lot so that it is landward of or in line with the structure being protected.

(5) Temporary erosion control structures must not extend more than 20 feet past the sides of the structure to be protected. The landward side of such temporary erosion control structures shall not be located more than 20 feet seaward of the structure to be protected or the right-of-way in the case of roads.

★ (6) The permittee shall be responsible for the removal of remnants of all or portions of any damaged temporary erosion control structure.

(7) A temporary erosion control structure may remain in place for up to two years after the date of approval if it is protecting a building with a total floor area of 5000 sq. ft. or less, or, for up to five years if the building has a total floor area of more than 5000 sq. ft. A temporary erosion control structure may remain in place for up to five years if it is protecting a bridge or a road. The property owner shall be responsible for removal of the temporary structure within 30 days of the end of the allowable time period. A temporary sandbag erosion control structure with a base width not exceeding 20 feet and a height not exceeding 6 feet may remain in place for up to five years or until May 2008, whichever is later, regardless of the size of the structure it is protecting if the community in which it is located is actively pursuing a beach nourishment project as of October 1, 2001. For purposes of this Rule, a community is considered to be actively pursuing a beach nourishment project if it has:

- (A) been issued a CAMA permit, where necessary, approving such project, or
- (B) an ongoing feasibility study by the U.S. Army Corps of Engineers and a commitment of local money, when necessary, or

- (C) received a favorable economic evaluation report on a federal project approved prior to 1986. If beach nourishment is rejected by the sponsoring agency or community, or ceases to be actively planned for a section of shoreline, the time extension is void and existing sandbags are subject to all applicable time limits set forth in Parts (1) through (15) of this Subparagraph. Sandbag structures within nourishment project areas that exceed the 20 foot base width and 6 foot height limitation may be reconstructed to meet the size limitation and be eligible for this time extension: otherwise they must be removed by May 1, 2000 pursuant to Part (15) of this Subparagraph.
- X (8) Once the temporary erosion control structure is determined to be unnecessary due to relocation or removal of the threatened structure or beach nourishment, it must be removed by the permittee within 30 days.
- χ (9) Removal of temporary erosion control structures shall not be required if they are covered by dunes with
- vegetation sufficient to be considered stable and natural.
- \star (10) Sandbags used to construct temporary erosion control structures shall be tan in color and three to five feet wide and seven to 15 feet long when measured flat. Base width of the structure shall not exceed 20 feet, and the height shall not exceed six feet.
- #(11) Soldier pilings and other types of devices to anchor sandbags shall not be allowed.
- ★(12) Excavation below mean high water in the Ocean Hazard AEC may be allowed to obtain material to fill sandbags used for emergency protection.

(13) An imminently threatened structure may only be protected once regardless of ownership. In the case of a building, a temporary erosion control structure may be extended, or new segments constructed, if additional areas of the building become imminently threatened. Where temporary structures are installed or extended incrementally, the time period for removal under Subparagraph (7) shall begin at the time the initial erosion control structure is installed. For the purpose of this rule:

- (i) a building and septic system will be considered as separate structures.
- (ii) a road or highway shall be allowed to be incrementally protected as sections become imminently threatened. The time period for removal of each section of sandbags shall begin at the time that section is installed in accordance with Subparagraph (7) of this Rule.

(14) Existing sandbag structures may be repaired or replaced within their originally permitted dimensions during the time period allowed under Subparagraph (7) of this Rule.

(15) Existing sandbag structures that have been properly installed prior to May 1, 1995 shall be allowed to remain in place according to the provisions of Subparagraphs (7), (8) and (9) of this Paragraph with the pertinent time periods beginning on May 1, 1995.

(b) Erosion Control Structures in the Estuarine Shoreline, Estuarine Waters, and Public Trust AECs. Work permitted by this general permit shall be subject to the following limitations:

(1) no work shall be permitted other than that which is necessary to reasonably protect against or reduce the imminent danger caused by the emergency or to restore the damaged property to its condition immediately before the emergency;

- (2) the erosion control structure shall be located no more than 20 feet waterward of the endangered structure;
- (3) fill material used in conjunction with emergency work for storm or erosion control in the Estuarine Shoreline,
- Estuarine Waters and Public Trust AECs shall be obtained from an upland source.

(c) Protection, Rehabilitation, or Temporary Relocation of Public Facilities or Transportation Corridors.

- (1) Work permitted by this general permit shall be subject to the following limitations:
 - (A) no work shall be permitted other than that which is necessary to reasonably protect against or reduce the imminent danger caused by the emergency or to restore the damaged property to its condition immediately before the emergency;
 - (B) the erosion control structure shall be located no more than 20 feet waterward of the endangered structure;
 - (C) any fill materials used in conjunction with emergency work for storm or erosion control shall be obtained from an upland source except that dredging for fill material to protect public facilities or transportation corridors will be considered in accordance with standards in 15A NCAC 7H.0208;
 - (D) all fill materials or structures associated with temporary relocations which are located within Coastal Wetlands, Estuarine Water, or Public Trust AECs shall be removed after the emergency event has ended and the area restored to pre-disturbed conditions.

(2) This permit only authorizes the immediate protection or temporary rehabilitation or relocation of existing public facilities. Long-term stabilization or relocation of public facilities shall be consistent with local governments' post-disaster recovery plans and policies which are part of their Land Use Plans.

History Note: Authority G.S. 113-229(cl); 113A-107(a),(b); 113A-113(b); 113A-118.1; Eff. November 1, 1985;

Amended Eff. April 1, 1999; February 1, 1996; June 1, 1995; Temporary Amendment Eff. July 3, 2000; May 22, 2000; Amended Eff. August 1, 2002.
SANDBAGS REMOVAL NOTICE

I, \underline{CLAY} <u>WILLIS</u>, have read, 15A NCAC 07H .1700, and understand that sandbags are temporary, and may remain in place up to:

two years after the date of permit approval.

 \star five years after the date of permit approval

Agency or Company Requesting Sandbags:	NCDOT
Property Owner/ Agency or Company Representative:	(SIGNATURE)

252-402-7977

NC 12 JUST NORTH OF RODANTIE

Permit Number: 6P 46816A

Date: 2/13/

I, _____, give permission to, _____, to act as my agent in obtaining a CAMA General Permit to place sandbags as a temporary erosion control structure on my property at the address listed above.

Property Owner:

(SIGNATURE)

* NOTE: The requirements for the placement, maintenance and removal of sandbags run with the property*

AEC HAZARD NOTICE

Project Is In An: _____ Ocean Erodible Area _____ High Hazard Flood Area _____ Inlet Hazard Area

Date Lot Was Platted:

This notice is intended to make you, the applicant, aware of the special risks and conditions associated with development in this area, which is subject to natural hazards such as storms, erosion and currents. The rules of the Coastal Resources Commission require that you receive an AEC Hazard Notice and acknowledge that notice in writing before a permit for development can be issued.

The Commission's rules on building standards, ocean front setbacks and dune alteration are designed to minimize, but not eliminate, property loss from hazards. By granting permits, the Coastal Resources Commission does not guarantee the safety of the development and assumes no liability for future damage to the development.

The rate was established by careful analysis of aerial photographs of the coastline taken over the past 50 years.

Studies also indicate that the shoreline could move as much as ______ feet landward in a major storm.

The flood waters in a major storm are predicted to be about $_____$ feet deep in this area.

Preferred oceanfront protection measures are beach nourishment and relocation of threatened structures. Hard erosion control structures such as bulkheads, seawalls, revetments, groins, jetties and breakwaters are prohibited. Temporary devices, including sand bags, may be allowed under certain conditions.

This structure shall be relocated or dismantled within two years of becoming imminently threatened.

The applicant must acknowledge this information and requirements by signing this notice in the below space. Without the proper signature, the application will not be complete.

Applicant Signature

2/13/07

SPECIAL NOTE: This hazard notice is required for development in areas subject to sudden and massive storms and erosion. Permits issued for development in this area expire on December 31 of the third year following the year in which the permit was issued. Shortly before work begins on the project site, the Local Permit Officer will determine the vegetation line and setback distance at your site. If the property has seen little change and the proposed development can still meet the setback requirement, the LPO will inform you that you may begin work. It is important that you check with the LPO before the permit expires for official approval to continue the work after the permit has expired. Generally, if foundation pilings have been placed and substantial progress is continuing, permit renewal may not be necessary. If substantial progress has not been made, the permit must be renewed and a new setback line established. It is unlawful to continue work after permit expiration without this approval.

For more information, contact:

Local Permit Officer

Address

Locality

Phone

Setting Back for Safety: A Guide to Wise Development Along the Oceanfront

When you build along the oceanfront you take a calculated risk. Natural forces of water and wind collide with tons of force, even on calm days.

Man-made structures cannot be guaranteed to survive the force of a hurricane. Long-term erosion (or barrier island migration) may take from two to ten feet of the beach each year and, sooner or later, will threaten oceanfront structures. These are the facts of life for oceanfront property owners.

The Coastal Resources Commission (CRC) has adopted rules for building along the oceanfront. The rules are intended to avoid an unreasonable risk to life and property and to limit public and private losses from storms and long-term erosion. These rules lessen but do not eliminate the element of risk in oceanfront development.

As you consider building along the oceanfront, the CRC wants you to understand the rules and the risks. With this knowledge you can make a more informed decision about where and how to build in the coastal area.

The Rules

When you build along the oceanfront, coastal management rules require that the structure be sited to fit safely into the beach environment.

Structures along the oceanfront must be behind the frontal dune, landward of the crest of the primary dune and set back from the first line of natural stable vegetation a distance equal to 30 times the annual erosion rate (a minimum of 60 feet). Large structures (multi-family residential structures greater than 5,000 square feet and non-residential structures greater than 5,000 square feet) must be set back from the first line of natural stable vegetation a distance equal to 60 times the annual erosion rate or 120 feet,



whichever is greater. If the erosion rate is greater than 3.5 feet/year, the setback is 30 times the erosion rate plus 105 feet.

The Reasons

The beachfront is an ever-changing landform. The beach and the dunes are natural "shock absorbers", taking the beatings of the winds and waves and protecting the inland areas. By setting back 30 or 60 times the annual long-term erosion rate, you have a good chance of enjoying the full life of the structure. At first, it seems very inviting to build your dream house as close to the beach as possible, but in five years you could find the dream has become a nightmare as high tides and storm tides threaten your investment.

The Exception

The Coastal Resources Commission recognized that these rules, initially passed in June of 1979, might prove a hardship for some property owners. Therefore, they established an exception for lots which cannot meet the setback requirement. The exception allows buildings in front of the setback line if the following conditions apply:

(1) the lot must have been platted as of June 1, 1979, and not capable of being enlarged by combining with adjoining land under the same ownership, (2) development must be as far back on the property as possible and in no case less than 60 feet landward of the vegetation line, (3) no development can take place on the frontal dune (4) special construction standards on piling depth and square footage must be met and (5) all other CAMA, state and local regulations must be met.

The exception is not available in the Inlet Hazard Area.

To determine eligibility for the exception, the Local Permit Officer will make these measurements and observations:

- required setback from vegetation line exception setback (maximum feasible) rear property line setback max. allowable square footage on lowest floor lot area as calculated from vegetation line

 - _____ piling length needed to extend 4 feet below MSL



After the storm, the house on the dune will be gone. The other house has a much better chance of survival.

US FISH AND WILDLIFE SERVICE

SPECIAL USE PERMIT FOR SANDBAG PLACEMENT

	EXHIBIT
tebbles'	
3	

		Station No. to be Credited	Permit Number	
UNITED STATES DEPARTMENT O)F I HE	41630	2006-014	
FISH AND WILDLIFE SERVIC	Æ	Date		
	life Defuee	40 4	1-2006	
Pea Island National Wild	ille Neiuye	Period of Use (inclusive)		
			2006	
SPECIAL USE PERMIT		From December 11	, 2000	
		To December 10	, 2007	
Permittee Name	Permittee	Address		
Anthony Roper		artment of Transportation		
(252) 482-7977		13 Airport Drive, Suite 100 denton, NC 27932		
	-) 482-8722		
		,		
boom. A temporary work berm approximately 50 feet from the edg tides from affecting the work area. The temporary berm and sand p on top of the sandbags. The dune will be sprigged with suitable nat actions are allowable as they are considered to be minor and they a 12. Initial protective measures were completed under an emergence Description (specify unit numbers; metes and bounds, or other reco Pea Island National Wildlife Refuge, Dare County, North Carolina in Rodanthe in a section known locally as the "S-curves".	bumping will d tive plant spe are needed to by declaration ognizable des	occur outside the existing righ cles during the appropriate pl meet safety standards for m by Governor Michael F. Easl ignations)	it-of-way. A dune will be built lanting season. These aintaining the integrity of NC ley on 11/29/06 (EO #113).	
Full Payment	aintain a safe	f charge: public transportation corridor	•	
Partial Payment -Balance of payments to be made as follows:				
Record of Payments N/A				
Special Conditions 1. See attached: a. "General Conditions" & "Conditions for Special Use Permits				
 b. "Sand Fence Specifications and Conditions", "Grass Sprigg c. "Conditions for Using Sandbags to protect NC Highway 12" 2. Full compliance with all terms and conditions of this permit is ex installation of sandbags and implementation of the beach/dune con 3. All work must be done to the satisfaction of the Refuge Manage 	pected to res	ult in no net loss in habitat qu	antity or quality upon	
This permit is issued by the U.S. Fish and Wildlife Service and a and reservations, expressed or implied herein, and to the condit			nants, obligations,	
Permittee Signature Inthony Rosen (by Chy Willy) Anthony Roper, Division One Engineer	Issuing C	fficer Signature and Title	like Bryant	
		Mike Bryant, Proje		

General Conditions

1. Payments

All payments shall be made on or before the due date to the local representative of the U.S. Fish and Wildlife Service by a postal money order or check made payable to the U.S. Fish and Wildlife Service.

2. Use limitations

The permittee's use of the described premises is limited to the purposes herein specified; does not unless provided for in this permit allow him/her to restrict other authorized entry on to his/her area; and permits to the Service to carry on whatever activities are necessary for (1) protection and maintenance of the premises and adjacent lands administered by the Service and (2) the management of wildlife and fish using the premises and other

3. Damages

The United States shall not be responsible for any loss or damages to property including but not limited to growing crops, animals, and machinery; or injury to the permittee, or his/her relatives, or to the officers, agents, employees, or any others who are on the premises from instructions or by the sufferance of the permittee or his/her associates; or for damages or interference caused by wildlife or employees or representatives of the Government carrying out their official responsibilities. The permittee agrees to save the United States or any of its agencies harmless from any and all claims for damages or losses that may arise or be incident to the flooding of the premises resulting from any associated Government river and harbor, flood control, reclamation, or Tennessee Valley Authority activity.

4. Operating Rules and Laws

The permittee shall keep the premises in a neat and orderly condition at all times, and shall comply with all municipal, county, and State laws applicable to the operations under the permit as well as all Federal laws, rules, and regulations governing National Wildlife Refuges and the area described in this permit. The permittee shall comply with all instructions applicable to this permit issued by the refuge officer in charge. The permittee shall take all reasonable precautions to prevent the escape of fires and to suppress fires and shall render all reasonable assistance in the suppression of refuge fires.

5. Responsibility of Permittee

The permittee, by operating on the premises, shall be considered to have accepted these premises with all the facilities, focures, or improvements in their existing condition as of the date of this permit. At the end of the period specified or upon earlier termination, the permittee shall give up the premises in as good order and condition as when received except for reasonable wear, tear, or damage occurring without fault or negligence. The permittee will fully repay the Service for any and all damage directly or indirectly resulting from negligence or failure on his/her part, or the part of anyone of his/her associates, to use reasonable care.

6. Revocation Policy

This permit may be revoked by the Regional Director of the Service without notice for noncompliance with the terms hereof or for violation of general and/or specific laws or regulations governing National Wildlife Refuges or for nonuse. It is at all times subject to discretionary revocation by the Director of the Service. Upon such revocation the Service, by and through any authorized representative, may take possession of the said premises for its own and sole use, or may enter and possess the premises as the agent of the permittee and for his/her account.

7. Compliance

Failure of the Service to insist upon a strict compliance with any of this permit's terms, conditions, and requirements shall not constitute a waiver or be considered as a giving up of the Service's right to thereafter enforce any of the permit's terms, conditions, or requirements.

8. Termination Policy

At the termination of this permit, the permittee shall immediately give up possession to the Service representative, reserving, however, the rights specified in paragraph 9. If he/she fails to do so, he/she will pay the Government, as liquidated damages, an amount double the rate specified in this permit for the entire time possession is withheld. Upon yielding possession, the permittee will still be allowed the reenter as needed to remove his/her property as stated in paragraph 9. The acceptance of any fee for liquidated damages or any other act of administration relating to the continued tenancy is not to be considered as an affirmance of the permittees or cancel the permit for the breach of any specified condition or requirement.

9. Removal of Permittee's Property

Upon the expiration or termination of this permit, if all rental charges and/or damage claims due to the Government have been paid, the permittee may within a reasonable period as stated in the permit or as determined by the refuge officer in charge but not to exceed 60 days, remove all structures, machinery, and/or other equipment, etc., from the premises for which he/she is responsible. Within the period the permittee must also remove any other of his/her property including his/her acknowledged share of products or crops grown, cut, harvested, stored, or stacked on the premises. Upon failure to remove any of the above items within the aforesaid period, they shall become the property of the United States.

10. Transfer of Privileges

This permit is not transferable, and no privileges herein mentioned may be sublet or made available to any person or interest not mentioned in this permit. No interest hereunder may accrue though lien or be transferred to a third party without the approval of the Regional Director of the U.S. Fish and Wildlife Service and the permit shall not be used for speculative purposes.

11. Conditions of Permit not Fulfilled

If the permittee fails to fulfill any of the conditions and requirements set forth herein, all money paid under this permit shall be retained by the Government to be used to satisfy as much of the permittee's obligation as possible.

12. Official Barred from Participating

No Member of Congress or Residential Commissioner shall participate in any part of this contract or to any benefit that may arise from it, but this provision shall not pertain to this contract if made with a corporation for its general benefit.

13. Nondiscrimination in Employment

The permittee agrees to be bound by the equal opportunity clause of Executive Order 11246, as amended.

Privacy Act Statement–Special Use Permit

NOTICE: In accordance with the Privacy Act of 1974, 5 U.S.C. 552a, please be advised that:

- The issuance of a permit and collection of fees on lands of the National Wildlife Refuge System is authorized by the National Wildlife Refuge System Administration Act (16 U.S.C. 668dd - 668ee), and the Refuge Recreation Act, (16 U.S.C. 460k-3); implemented by regulations in 50 CFR 25-36.
- 2. Information collected in issuing a permit may be used to evaluate and conclude the eligibility of, or merely document, permit applicants.
- 3. Routine use disclosures may also be made (1) to the U.S. Department of Justice when related to litigation or anticipated litigation; (2) of information indicating a violation or potential violation of a statute, regulation, rule, order or license, to appropriate Federal, State, local or foreign agencies responsible for investigating or prosecuting the violation or for enforcing or implementing the statute, rule, regulation, order or license; (3) from the record of the individual in response to an inquiry from a Congressional office made at the request of that individual; (4) to provide addresses obtained from the Internal Revenue Service to debt collection agencies for purposes of locating a debtor to collect or compromise a Federal claim against the debtor, or to consumer reporting agencies to prepare a commercial credit report for use by the Department (48FR 54716; December 6, 1983).
- 4. Any information requested is required to receive this permit. Failure to answer questions may jeopardize the eligibility of individuals to receive permits.

Alligator River National Wildlife Refuge Pea Island National Wildlife Refuge



CONDITIONS FOR SPECIAL USE PERMITS & AUTHORIZED ACTIVITIES

- * 1. The Permittee or authorized person, and all officers, agents, employees, representatives, and clients of the Permittee or authorized person, shall comply with all Refuge, Federal, State, and local regulations and conditions that apply to the special use activity. Failure to comply with any applicable regulation or condition, and all Federal laws, rules, and regulations governing National Wildlife Refuges and the area described in the Special Use Permit (Permit) or authorizing documents, may result in revocation of the Permit or authorized activity and/or criminal prosecution.
- X 2. While engaged in a special use activity on the Refuge, the Permittee or authorized person, and his/her officers, agents, employees, or representatives, shall be in possession of a <u>copy</u> of the Permit or authorizing documents (including all attachments that contain conditions) and shall, upon request by an authorized Refuge official or by any authorized local, state, or federal law enforcement officer, display the <u>copy</u> authorizing their presence and activity on the Refuge and shall furnish any other licenses and identification documents as may be requested.
 - 3. Entry on the Refuge during nighttime hours (i.e., ½-hour after sunset to ½-hour before sunrise) is prohibited, <u>unless authorized in writing by the Refuge Manager</u>.
- ★ 4. It is unlawful to disturb, destroy, injure, collect, or take any wildlife, plant, natural object, mineral, cultural or historical feature, or public property on the Refuge, <u>unless authorized in writing by the Refuge Manager</u>.
 - Wildlife shall not be harmed or harassed and disturbance shall be kept to a minimum, this includes all snakes (poisonous and non-poisonous snakes), <u>unless authorized in writing by the Refuge</u> <u>Manager</u>.
- ★ 6. The Refuge Manager should be contacted <u>immediately</u> at (252) 473-1131 upon discovery of any <u>wildfire</u>, or any leak, spill, or break in a pipeline, power line, canal, or dike, or any other accident or incident that has the potential to have an adverse impact on the soil, wildlife, or plants in the area. Any unusual wildlife sightings or suspected illegal activities should be reported to the Refuge Manager.
- * 7. Any accident that results in a personal injury (i.e., an accident that requires professional medical treatment) shall be reported to the Refuge Manager within 24 hours of the accident.
 - All <u>locked</u> Refuge gates shall be closed and locked upon entering and leaving Refuge property. Refuge gates should be left the way they are found (i.e., open, closed, either locked or unlocked as the case may be).

- 9. Vehicle travel shall only be on designated roads or routes of travel, <u>unless authorized in writing by</u> <u>the Refuge Manager</u>. Vehicles, boats, trailers, and other equipment shall be parked in such a manner that <u>roads and trails, including canoe trails and navigable waters, are not be blocked</u>. Roads and trails need to be accessible to other Refuge visitors and to Refuge staff, cooperative farmers, fire trucks, emergency vehicles, maintenance equipment, and law enforcement patrols.
- 10. Vehicles with catalytic converters shall be restricted to paved roads, recently maintained gravel or dirt roads, or bare soil areas because of the high fire potential. Vehicles with catalytic converters shall not be parked over high vegetation or other fire hazardous materials.
- 11. Refuge gate or building keys **shall not be loaned** to other agencies, companies, or persons. If there is a need for access by other persons, please have them contact the Refuge Manager. All Refuge keys shall be returned to the Refuge Manager, or a designated staff member, within 10 calendar days, after expiration or termination of the Permit or authorized activity.
- 12. All dogs (or any other pet) must be confined or on a leash while on the Refuge, <u>unless authorized in</u> <u>writing by the Refuge Manager</u>. Leashed pets must be under the immediate control of the Permittee or authorized person, or the leash must be secured to a stationary object. The leash shall not be in excess of 10 feet in length.
- 13. Possession or use of firearms, air guns, bows and arrows, cross bows, spears, or gigs; or illegal knives, weapons, or devices; or explosives of any type is prohibited on the Refuge when engaged in a special use activity, <u>unless authorized in writing by the Refuge Manager</u>.
- 14. Littering is prohibited. <u>All</u> materials brought into the Refuge shall be removed and properly disposed. Drink cans, bottles, candy wrappers, toilet paper, and other garbage and refuse shall not be left on the Refuge.
- 15. The Refuge Manager shall be contacted **before** any surface work is done. This includes mowing, road or trail improvements, digging, clearing or trimming of brush or vegetation, installation of structures, etc.
- 16. The use of herbicides and pesticides on Refuge property is prohibited, <u>unless authorized in writing</u> <u>by the Refuge Manager</u>. Unrestricted, over-the-counter-type, insect repellents may be used on or near the body and clothing to repel biting or stinging insects.
- 17. No permanent or semi-permanent markings shall be made on any Refuge building, structure, gate, post, sign, fence, tree, vegetation, or soil by either marking, painting, cutting, scratching, blazing, mowing, digging, or other destructive method, <u>unless authorized in writing by the Refuge</u> <u>Manager</u>. When needed, only temporary, removable markers (e.g., flagging tape, survey stakes, metal/paper/plastic tags, etc.) shall be used to mark site locations, plots, etc. Safety signs, informational signs, and any other signs required by law or regulation for the special use activity being conducted, shall be posted as required, <u>but only with prior authorization by the Refuge Manager</u>.

Page 2 of 3

All markers and signs shall be removed upon conclusion of the special use activity or upon expiration or termination of the Permit.

- 18. The use or possession of traps, snares, or other passive (i.e., unattended) collection devices, which are used to collect wildlife, is prohibited, <u>unless authorized in writing by the Refuge Manager</u>. Each individual trap, snare, or passive collection device shall have a weather-resistant, permanent tag attached with the Permittee's, authorized person's, and/or organization's name legibly marked on the tag <u>or</u> shall have the Permittee's, authorized person's, and/or organization's name legibly marked, imprinted, or engraved on the trap, snare, or device.
- 19. You may use specimens collected under this permit, any components of any specimens (including natural organisms, enzymes, genetic materials or seeds), and research results derived from collected specimens for scientific or educational purposes only, and not for commercial purposes unless you have entered into a Cooperative Research and Development Agreement (CRADA) with us. We prohibit the sale of collected research specimens or other transfers to third parties. Breach of any of the terms of this permit will be grounds for revocation of this permit and denial of future permits. Furthermore, if you sell or otherwise transfer collected specimens, any components thereof, or any products or research results developed from such specimens or their components without a CRADA, you will pay us a royalty rate of 20 percent of gross revenue from such sales. In addition to such royalty, we may seek other damages and injunctive relief against you.
- 20. No permanent or semi-permanent fences, buildings, shelters, docks, piers, or other structures or facilities may be erected, built, or placed on the Refuge, <u>unless authorized in writing by the Refuge Manager</u>. No machinery, equipment, supplies, or materials may be placed or stored on the refuge, <u>unless authorized in writing by the Refuge Manager</u>.
- 21. All open fires are prohibited, <u>unless authorized in writing by the Refuge Manager</u>. Leaving an <u>authorized</u> open fire unattended or not completely extinguished is prohibited. Setting on fire or causing to be set on fire any timber, brush, grass, or other inflammable material, including camp or cooking fires, is prohibited, <u>unless authorized in writing by the Refuge Manager</u>. The use of cutting torches, arc welders, or any other open flame/sparking devices (which are required to conduct the special use activity) shall be exercised with caution and <u>only with prior authorization from the Refuge Manager or Refuge Fire Management Officer</u>. When use of these devices is necessary, the operator(s) shall have <u>immediate access to appropriate fire control equipment</u> (e.g., fire extinguishers, shovels, etc.) and <u>immediate communication access to local emergency services</u> (e.g., cellular telephone, two-way radio, etc.). Tobacco smokers shall practice caution when smoking; shall completely extinguish all matches, cigars, cigarettes, and pipes; and shall dispose of same in a proper container (e.g., a vehicle ash tray).

Sand Fence Specifications and Conditions

Pea Island National Wildlife Refuge - Special Use Permit PINWR -2006-014

- Sand fencing will consist of 10-foot sections, supported by a minimum of 2 posts, 1. and placed perpendicular to the prevailing wind at 7-foot intervals as illustrated in the attached copy of the brochure entitled "Building Back the Dunes". Sand fencing will be made of biodegradable materials and untreated wooden posts. 2"X4" or larger, that are set at least 4 feet in the ground. In order to blend with the natural surroundings, sand fencing will be either unpainted or stained wood or other biodegradable material and will be in a neutral, beige, brown, tan, dark green, or natural wood color.
- 2. The Refuge Manager or designee must approve final location and alignment of sand fencing prior to installation. The Refuge Manager or designee will be made available to assist the Permittee in marking and/or locating the proper placement of the sand fencing.
- 3. The Permittee agrees, for the life of the sand fencing and posts, to accept all responsibility for maintenance or removal and disposal of any sand fencing and posts installed by the Permittee, including damaged or displaced sand fencing and posts, that are determined by the Refuge Manager to be hazardous to public safety or to wildlife resources in the area. The Refuge Manager will make this determination after consultation with U.S. Fish & Wildlife Service engineers. safety officers, or wildlife biologists. The Permittee will remove sections of hazardous or non-functional sand fencing and posts and property dispose of the same within 30 days of receipt of official notice from the Refuge Manager.

Anthon Proc (by Chy 1/1.7 Permittee Signature

<u>/-/2-/4-</u> Date

Issuing Officer Signature and Title

<u>/-/2-2007</u> Date

Grass Sprigging Specifications and Conditions

Pea Island National Wildlife Refuge - Special Use Permit 2006-014

- 1. Mechanical manipulation of soils for incorporation of fertilizer or springing of grasses will only be allowed depending upon site-specific conditions. The Refuge Manager reserves the right to provide final authorization to allow mechanical manipulation of soils at the time of planting (i.e. location and alignment.
- 2. Any fertilizers applied shall not contain any integrated pesticides (i.e. herbicide, insecticides, or fungicides) or other chemicals regulated by State or Federal law without separate approval by the Refuge Manager. Pelletized fertilizers shall be incorporated into the soil.
- 3. Sprigging shall be done by hand or by a method that will not disturb or destroy existing vegetation.
- 4. Vehicles or equipment shall not be operated on the ocean side of the dune for any purpose unless approved by the Refuge Manager. Requests for departures from this condition will be considered on a case-by-case basis.
- 5. The Refuge Manager must approve any changes in the grass species (i.e. species composition or percentage) proposed by sprigging specifications prior to planting.

Hathing Popular (og Clay With) Permittee Signature

///2/07 Date

Mike Supert P.L. Issuing Officer Signature & Title

<u>1-12-2007</u> Date

SPECIAL CONDITIONS FOR SANDBAG INSTALLATION FOR THE PROTECTION OF N. C. HIGHWAY 12 Pea Island National Wildlife Refuge Attachment to Special Use Permit 2006-014

- ★ 1. Special Use Permit # 2006-014 is issued for the expressed and sole purpose of installing sandbags within the N. C. Highway 12 (NC 12) right-of-way as a temporary measure to protect the highway pavement from the impacts of ocean over-wash during minor storm events and spring tide events in an area known locally as the "Rodanthe S-Curves".
- X 2. This permit is valid for one year from the date of issuance. The permit may be renewed on an annual basis for up to 60 months (5 years) from the date of issue provided that the North Carolina Department of Transportation (NCDOT) is actively planning, developing, and implementing a long-term solution to problems associated with maintaining NC 12 immediately adjacent to the Atlantic Ocean in the vicinity of the "Rodanthe S-Curves Hotspot".
 - 3. It shall be the responsibility of the NCDOT to request renewal of this permit on an annual basis. The renewal request shall be submitted to the Refuge Manager no less than 30 days prior to the expiration date of Special Use Permit # 2006-014.
 - 4. This permit does not authorize any activity other than the use of refuge lands for the expressed purposes stated in SUP# 2006-014. It is the permittee's responsibility to obtain any and all other necessary local, state, or federal approvals prior to commencing work activities. All other permits, approvals, or agreements, written or verbal whether from individuals or local, state, or government agencies or other entities shall not in any way interfere with implementation of the terms and provisions of SUP # 2006-014.
- ★ 5. Sandbags shall be removed without delay or challenge within 60 days of completing a satisfactory alternative for the highway or when they are no longer serving the purpose for which they were established as a result of natural forces or due to human actions.
- ★6. Sandbags shall be filled and installed prior to May 1. In the event of bird or turtle nesting activity within or adjacent to the project area prior to May 1, construction and associated activities shall be either suspended or moved a sufficient distance from the biological activity so as to avoid direct and indirect impacts. If the project is not completed by or before May 1, work may resume after September 1. Any type of encroachment into this time period wherein work activities would be required on the dune or on the ocean side of the dune shall be done with full coordination and at the discretion of the Refuge Manager.
 - 7. The permittee agrees to prepare a beach/dune restoration plan. Beach/dune restoration is needed to augment the installed sandbags that are protecting the highway pavement from the effects of ocean over-wash during minor storm events and spring tide events. The beach/dune restoration plan will encompass but is not limited to the following goals:

- a. Through appropriate beach/dune restoration techniques, the upper beach/dune shall be restored to a mutually agreed upon extent. This is intended to be a one-time action and maintaining upper beach in perpetuity is neither the intent nor a condition of this permit. Any subsequent beach/dune restoration actions necessary to maintain the integrity of the sandbag structure shall be fully coordinated with the Refuge Manager prior to any construction/restoration activity.
- ★ b. Through prudent sand placement, sandbags shall be covered by suitable sand, as determined by the Refuge Manager, in accordance with NCDOT specifications as stated in the application for this permit. This measure shall be repeated in the event of removal of the sand cover over the sandbags through the action of wind or water. The intent is to provide the most productive barrier dune habitat possible through covering the sandbags with suitable sand and through incorporation of suitable dune stabilization measures.
 - c. The beach/dune restoration plan shall include a monitoring program of sufficient detail so as to document baseline (pre-sandbag and pre-beach/dune restoration) physical and biological parameters of the beach face community in and adjacent to the affected area, impacts to that community as determined immediately after construction, and seasonal (4 times per year) monitoring for as long as the sandbags are in place plus for a minimum of one full year after removal of the sandbags. For comparative purposes, a control area, as agreed upon by the Refuge Manager and NCDOT, will be monitored in the vicinity of the project area.
 - d. The NCDOT or their designee shall provide the refuge with copies of raw data after each sampling session in an EXCEL data format.

The beach/dune restoration plan and monitoring protocols shall be developed through coordination with the Refuge Biologist and must be acceptable to the Refuge Manager. Funding for the monitoring component of the restoration plan shall be provided by NCDOT. Progress reports shall be provided to the Refuge Manager at no cost to the refuge on a semi-annual basis. A final report shall be submitted to the Refuge Manager within 90 days of satisfactory completion of monitoring as stated in Special Use Permit Condition # 6.c.

8. Compatible sand is defined as sand consisting of a grain size and mineral content similar to native refuge beach sand as determined by the Refuge Manager or designee. All sand to be used for beach/dune habitat restoration shall be sampled and analyzed for the presence of hazardous or toxic materials, debris, or other pollutants. Sand containing any unsuitable material cannot be placed on the refuge beach or into a dune system.

- 9. If sand sources for compliance with the terms and conditions of SUP # 2006-014 are located on the refuge, relocation of the sand by whatever means will be covered by a separate Special Use Permit.
- 10. Any and all work areas on the refuge shall be sloped and contoured to pre-work conditions or to the satisfaction of the Refuge Manager.
- #11. Permittee is responsible for removing any and all construction debris, materials, and equipment from the refuge. If, during the period when the sandbags or other related materials are in place on the refuge, there is damage resulting in debris from the project, it shall be NCDOT's responsibility to clean up and remove the debris from the refuge.
- 12. Monitoring and maintaining the structural stability of the sandbag structure, including the sand covering the sandbags with associated vegetative community shall be the responsibility of NCDOT.
- ¥ 13. At the discretion of the Refuge Manager, a determination of failure to comply with all terms and provisions of SUP # 2006-014 shall result in revocation of the permit and removal of the sandbags within 60 days of the refuge notifying NCDOT of permit condition violation(s). Upon revocation or expiration of SUP # 2006-014, all sandbags along with associated appurtenances deemed by the Refuge Manager to be an un-natural addition to the refuge shall be removed within 60 days from receipt of notice of revocation of the permit.
 - 14. Upon discovery of new ecological or biological information regarding fish, wildlife, or their habitats that could be affected by this project, the Refuge Manager retains the authority to amend this permit to protect natural resources in the interests of achieving the refuge system mission or the purpose for establishing the refuge.

Hollong Por 6 Ch Ully Permittee Signature

Issuing Officer Signature and

1-12-2007

Date

PROPOSED FACTS



PETITIONER'S FACTS

1. The North Carolina Department of Transportation (hereinafter "Petitioner" or "NCDOT") controls and maintains NC Highway 12, also known as Virginia Dare Trail, which runs along the oceanfront on the Outer Banks in Dare County.

2. NC-12 is a primary route in Dare County and an important highway evacuation route in the event of an impending major storm or hurricane.

3. Historically, there has been a larger stretch of beach located between the eastern edge of NC-12 and the Atlantic Ocean near a portion of NC-12 known as the "Rodanthe S-Curves." Over time, storms and natural beach erosion has decreased the size and significance of the beach area to where it no longer protect segments of Highway 12 from over wash, flooding, and deposition of sand during storm events.

4. The "Rodanthe S-Curves" segment of NC-12 most affected by beach erosion measures approximately 1500 linear feet. The beach at the affected location, is relatively flat between Highway 12 and the Atlantic Ocean (hereinafter the "project area").

5. Under a CAMA General Permit issued on March 15, 2007, the Petitioner placed sandbags along a 900 foot section of the project area in order to protect the highway from erosion. On January 12, 2007, the Petitioner also obtained a Special Use Permit from the US Fish and Wildlife Service (USFWS) to place the sandbags.

6. The USFWS Special Use Permit was required due to the project area also being on the Pea Island National Wildlife Refuge.

7. As a condition of the USFWS Special Use Permit, the USFWS requires the Petitioner to perform a beach habitat restoration project at the project area. The beach habitat restoration project is the basis of this variance request. 8. The Petitioner controls and maintains a 100-foot right-of-way for Highway 12 within the project area.

9. The project area is within the Ocean Hazard Area of Environmental Concern as designated by the Coastal Resources Commission. The project area is susceptible to frequent erosion during storm events. During storm events, the surf washes over, floods, and deposits sand on the NC-12 at the project area.

10. On August 25, 2008, the NC Department of Transportation applied to the Division of Coastal Management for a CAMA Major Permit for placement of approximately 200,000 cubic yards of sand (beach habitat restoration) on the beach face at the project area as allowed under Rule 15A NCAC 7H Section 0.308 and 15A NCAC 7H Section .0312.

11. The beach habitat restoration will be performed at the same location where approximately 900 feet of sand bags were placed under the CAMA general permit granted to Petitioner on March 15, 2007.

12. Pursuant to its Major Permit request, Petitioner transected the Project Area (6) six times at equal intervals. Due to the project area being only 1500 linear feet long, each transect was approximately 250 feet apart.

13. Petitioner took sediment samples at the mean low water line (MLW), mid toe (MT), mean high water line (MHW) and dune toe at each transect.

14. Petitioner took a total of twenty-four (24) sediment samples at the project area. Each sediment sample was tested for sand grain size, calcium carbonate and heavy minerals.

15. The sediment tests from the project area did not show a great disparity in results among the samples.

16. Petitioner did not obtain the minimum number of sediment samples from the project

area as required by 15A NCAC 07H.0312.

17. Due to the relatively flat slope of the beach at the project area, a strict application of the sediment sampling would require Petitioner to perform sampling to a depth of 20 feet seaward of the mean low water line (MLW), which is approximately 1500-2000 linear feet seaward. Such sampling would be extremely extensive and costly considering the relatively small area (1500 feet) of the beach habitat restoration.

18. The borrow area where 200,000 cubic yards of sand will be acquired for the beach habitat restoration project is located approximately 12 miles from the Project Area.

Petitioner obtained the minimum number of sediment samples as required by 15A
 NCAC 07H.0312 at the borrow area.

20. Each sediment sample at the borrow area was tested for sand grain size, calcium carbonate, and heavy minerals.

21. The sediment samples from the borrow area and the project area are consistent for sand grain size, calcium carbonate and heavy minerals and do not pose a major environmental impact.

22. On August 25, 2008, the Petitioner requested an Individual Permit from the US Army Corps of Engineers for the beach habitat restoration project. Approval of the Individual Permit is still pending.

23. On August 25, 2008, the Petitioner requested a 401 Individual Certification from the Division of Water Quality for the beach habitat restoration project. Approval of the 401 certificate is still pending.

24. On August 25, 2008, the Petitioner requested a Special Use Permit from the USFWS for the beach habitat restoration project. The USFWS had concurred with the beach habitat restoration project as evidenced by their letter dated October 1, 2008.

25. Without the variance, NCDOT would violate the USFWS Special Use Permit which allowed the placement of the sandbags on NC-12. Without the sandbags NC-12 will be increasingly threatened by erosion, which may result in periodic closings and in the loss of NC-12 as an evacuation route and inhibit access for emergency vehicles.

26. Should the variance be granted, the current proposed borrow site will be excavated under the supervision of the USFWS refuge staff in order to provide foraging habitat for shore birds. In addition, in order to prevent potential impacts to protected shorebirds and nesting sea turtles, NCDOT will conduct the proposed work outside of applicable moratoriums and under the supervision of the USFWS managing biologist and direction from the WRC.

27. Pursuant to the USFWS Special Use Permit, Petitioner has agreed to a monitoring program that involves pre and post sandbag installation monitoring of physical and biological elements of the beach face within the project area.

28. On October 20, 2008, the Division of Coastal Management disapproved a CAMA Major Permit for the beach habitat restoration project. The permit was denied because the Petitioner failed to collect the minimum number of sediment samples at the recipient beach.

29. The NCDOT filed a Variance Request with the Coastal Resources Commission on October 23, 2008.

CRC-VR-08-56



State of North Carolina

ROY COOPER ATTORNEY GENERAL

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Department of Justice PO Box 629 Raleigh, North Carolina 27602

RE:	Variance Request by The North Carolina Seafood Industrial Park Authority
DATE:	January 29, 2009 (for the February 11-12, 2009 CRC Meeting)
FROM:	Christine A. Goebel Assistant Attorney General
TO:	Coastal Resources Commission

Petitioner is a state authority created pursuant to Article 23C of Chapter 113 of the General Statutes. It owns property located at Wanchese Harbor on Roanoke Island in Dare County. Petitioner applied for a CAMA Major Permit in 2004 to construct a floating pier/boat slip facility, totaling 49 slips at Broad Creek Marina in Wanchese Harbor. That permit was denied because the proposal did not meet the "one-quarter width" pier rule, as well as rules protecting the right of navigation of public trust areas. The Commission granted a variance from these provisions in June 2005, and CAMA Major Permit No. 119-05 was issued in July 2005 pursuant to the variance. Petitioner now seeks a variance from the "one-quarter width" rule again, after its CAMA Major Permit Modification request was denied on August 13, 2008 due to the project's non-conformity only with 15A NCAC 7H.0208(b)(6)(J)(iii). The modification sought to redesign a portion of the floating pier/boat slip facility and add a total of 3 new slips. Specifically, it seeks to reconfigure the piers and replace 6 existing slips with 9 new slips, much of which is outside the original footprint of the permitted facility.

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 Criteria
Attachment D:	Petitioner's Variance Request Materials
Attachment E:	Additional Referenced Items

cc: I. Clark Wright, Esq., Attorney for Petitioner, by US Mail
 Dare County CAMA LPO, by US Mail
 DCM Staff, electronically
 Jennie W. Hauser, Special Deputy Attorney General, electronically

CRC-VR-08-56

ATTACHMENT A

RELEVANT STATUTES OR RULES

15A NCAC 07H.0200 THE ESTUARINE AND OCEAN SYSTEMS

.0208 Use Standards

- (b) Specific Use Standards ***
- (6) Docks and Piers.
- (J) Pier length shall be limited by:

(iii) not extending more than one-fourth the width of a natural water body, or human-made canal or basin. Measurements to determine widths of the water body, canals or basins shall be made from the waterward edge of any coastal wetland vegetation which borders the water body. The one-fourth length limitation shall not apply in areas where the U.S. Army Corps of Engineers, or a local government in consultation with the Corps of Engineers, has established an official pier-head line. The one-fourth length limitation shall not apply when the proposed pier is located between longer piers within 200 feet of the applicant's property. However, the proposed pier cannot be longer than the pier head line established by the adjacent piers, nor longer than 1/3 the width of the water body.

ATTACHMENT B

STIPULATED FACTS

- 1. Petitioner is the North Carolina Seafood Industrial Park Authority ("NCSIPA"). Under Article 23C of Chapter 113 of the General Statutes, NCSIPA is authorized by the General Assembly to "develop and improve the Wanchese Seafood Industrial Park . . . for a more expeditious and efficient handling of seafood commerce from and to any place or places in the State of North Carolina and other states and foreign countries." [See N.C.G.S. 113-315.28(1).]
- 2. Under Chapter 113 of the General Statutes (Article 23C), NCSIPA specifically is authorized to "acquire, construct, equip, maintain, develop and improve the port facilities" at Wanchese.
- 3. The Petitioner's property is located along the north-eastern half of Wanchese Harbor. The Harbor empties into Roanoke Sound near the mouth of Broad Creek. The total land area is approximately 54 acres. The area of lots 22 and 23, the proposed project site, is 97,500 square feet, with 390 feet of shoreline. The deed to NCSIPA was recorded in 1980 at Book 302, Page 835 of the Dare County Registry.
- 4. In 1979, the Wanchese Harbor was dredged from high ground as a part of a publicly funded project to create the Wanchese Seafood Industrial Park.
- 5. Prior to construction of the Wanchese upland basin in 1979, there were no public trust waters over the specific area where the proposed piers, docks and boat slips are to be located. Before the basin was created, adjacent property owners and other users of the public trust waters could only navigate through Mill Creek in part of the area that is now the basin.
- 6. NCSIPA owns the submerged lands underneath the areas where the piers, docks and slips are to be located. The waters over the submerged lands in Wanchese Harbor are public trust waters.
- 7. The proposed development is located in Estuarine Waters and Public Trust Waters Areas of Environmental Concern (AECs).
- 8. The waters within the project area have been classified SA by the Environmental Management Commission and are closed to the harvest of shellfish.
- 9. In 1993, the General Assembly amended NCSIPA's controlling statute to enlarge the purposes of the Authority to include "general maritime activities." This included encouraging and developing "the general maritime and marine-related industries and activities at or in the vicinity of the seafood industrial parks" per N.C.G.S. 113-315.28(5a).

History of the Previous Project, Approved by the CRC's June 2005 Variance

- 10. On May 17, 2004, the NCSIPA Board unanimously approved the proposed piers, docks and boat slips proposed at that time as a project in the public interest, which furthers the purposes of the Wanchese Seafood Industrial Park by fostering additional economic and water-dependent growth at the Wanchese Seafood Industrial Park.
- 11. In September 2004, Petitioner applied for a CAMA Major Permit to construct 32 new floating marina slips at the 15-slip Broad Creek Marina, a privately owned marina leasing space from NCSIPA. This configuration provided for approximately 210-220 feet of harbor area open for use by adjacent property owners, tenants of the Seafood Industrial Park, and other users of these public trust waters.
- 12. For the Seafood Park, DCM determines riparian access rights for each lease-holder, and not for the entire Park as a whole.
- 13. The piers, docks and boat slips proposed in 2004 and constructed pursuant to the 2005 variance extend more than one-fourth of the width of the waters within the improved upland basin, and are about half the width of the basin.
- 14. The September 2004 permit application was denied on January 20, 2005 (See denial letter, attached). The 2004 permit application was denied because it (1) violated the one-quarter rule and (2) because it was determined that the project would have an adverse impact on navigation.
- 15. Petitioner filed its prior variance request on May 25, 2005, seeking relief from application of the one-quarter rule in 15A NCAC 7H .0208(b)(6)(J)(iii), as well as from 15A NCAC 7H .0207(d), .0208(a)(2)(H) and .0208(b)(5)(H) for navigation of public trust areas. Petitioner sought permission to build out to 250 feet, approximately 46-50% across the width of the basin.
- 16. The Commission granted Petitioner's variance request on June 17, 2005. On July 18, 2005, DCM issued CAMA Major Permit No. 119-05 pursuant to the Commission's Variance Order. This permit allowed the floating piers/boat slip facility to be developed as proposed and allowed by the variance. Copies of the permit and Variance Order are attached.
- 17. The project was completed on or around January 2006. The power point includes photographs depicting the project as it currently exists.

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The Currently Proposed Modification/Expansion Project

- 18. On March 14, 2008, DCM received as complete, an application for a CAMA Major Permit Modification for permit No. 119-05 from the Petitioner.
- 19. On April 28, 2008, the NCSIPA Board approved the proposed modification/expansion project as revised and proposed in its CAMA Major Permit Modification request. The minutes of that meeting are attached.
- 20. Petitioner's proposed modification/expansion consists of the elimination of 6 existing slips, and the reconfiguration and addition of 9 new slips, with a net increase of 3 slips. Much of the area for the reconfiguration and new slips is outside the original "footprint" of the initially permitted project, and is northwest of the existing configuration in the "shadow" of the original facility. As was the situation before, the proposed piers, docks and boat slips extend more than one-fourth of the width of the waters within the improved upland basin, and are about half the width of the basin. In this case, the width at the proposed location is 565' and the piers are proposed to extend 300' or 53% of the waterway width. (A diagram of the proposed modification/expansion is attached.)
- 21. As part of the Major Permit Modification process, DCM staff sent information on the proposed development to state and federal agencies for comment. No adverse comments were received by DCM on concerning this proposed modification.
- 22. As a part of the Major Permit Modification process, notice was given to riparian owners and to the public. No comment letters were received by DCM.
- 23. The permit modification was denied on August 13, 2008 (See denial letter, attached). The permit was denied because it violated the "one-quarter rule" of 15A NCAC 7H.0208(b)(6)(J)(iii).
- 24. Petitioner filed this variance request on December 17, 2008, seeking relief from application of the one-quarter rule in 15A NCAC 7H .0208(b)(6)(J)(iii). Petitioner seeks permission to develop the marina expansion/modification project by reconfiguring its piers/docks with a net increase of 3 slips, and building out to 300 feet which is approximately 53% across the width of the basin at this location. Petitioner's variance request materials are attached hereto as Attachment D and are incorporated by reference.

Petitioner's and Staff's Positions

I. Will practical difficulties or unnecessary hardships result from strict application of the guidelines, rules, standards or other restrictions applicable to the property?

Petitioner's Position: Yes

Petitioner's Introduction:

Pursuant to North Carolina Law [N.C.G.S. 113-315.28(1)], Petitioner North Carolina Seafood Industrial Park Authority (NCSIPA) is authorized by the General Assembly to "develop and improve the Wanchese Seafood Industrial Park . . . for a more expeditious and efficient handling of seafood commerce from and to any place or places in the State of North Carolina and other states and foreign countries." The General Assembly also authorized Petitioner to "acquire, construct, equip, maintain, develop and improve the port facilities at said parks." To accomplish these and other purposes as set forth in Article 23C of Chapter 113 of the General Statutes, the General Assembly created and designated Petitioner as "an instrumentality of the State of North Carolina."

To carry out the General Assembly's mandates, Petitioner NSIPA has undertaken a number of projects at the Wanchese Seafood Industrial Park ("Park"), including the original construction of the Harbor Basin, Wharf and onshore facilities, numerous projects designed to upgrade the facilities at the Park, and - more recently - projects designed to bring renewed growth in commercial and recreational fishing and boating-related activity.

The conceptual ideas for the Park date as far back as the 1960s. In 1974, (then) Governor Jim Hunt designated the (then) Department of Natural and Economic Resources as the lead agency for purposes of planning and developing a seafood industrial park at Wanchese. In 1977, a Final Environmental Impact Statement (EIS) was prepared in connection with specific proposals to create a commercial harbor and basin, with onshore seafood industrial park facilities at Wanchese. Exhibits "A" through "F" from the 2005 variance request are referenced and incorporated by reference, but not set out here to save time and resources.

According to the engineer's final report, work on the "Phase I" (harbor and wharf) Park project began on August 7, 1978, and was completed on or about November 15, 1979 at a cost of over \$3 million dollars. In the past, the Park has experienced difficulties in attracting major seafood businesses. Members of the NCSIPA attribute some of the difficulty to ongoing challenges in finalizing an environmentally acceptable form of inlet stabilization for Oregon Inlet. Growing competition from international seafood providers also may have contributed. Regardless of the reason(s), in more recent years, the NCSIPA has worked to attract a broader range of commercially viable, water-related tenants, including those catering to recreational boating and fishing interests. In connection with these efforts, on or about September 7, 2004, Petitioner NCSIPA submitted an application for a Major Development CAMA Permit authorizing construction and operation of a floating dock and boat slip facility, to be located over submerged lands owned by the NCSIPA, which lands are part of the lands excavated in the late 1970's to create the Wanchese Seafood Industrial Park. This permit application was denied by DCM on the basis of non-compliance with the one-quarter width rule, and on the basis of navigational concerns. In May of 2005, NCSIPA submitted a variance request to the Commission requesting that the Commission issue a variance for the proposed boat slip and docking facility known as Broad Creek Marina - specifically seeking a variance from the "one quarter width" rule, 5A NCAC 07H .0208(b)(6)(J)(iii), and from more general navigational use standards of potential concern. On July 18, 2005, the Commission issued an Order granting the variance.

Since construction, commercial operations associated with the facility authorized by the Commission's July 18, 2005 Order have been successful. Attached as Exhibit "A" is a photograph showing the current boat slip and docking facilities. Due to increased demand for such services, NCSIPA recently submitted an application for a major modification to CAMA Permit No. 119-05, previously issued by the Commission in accordance with its July 18, 2005 Order granting NCSIPA's variance request. The major modification sought approval for a dock and slip reconfiguration that would result in deletion of six existing slips and construction of nine new slips, for a net addition of three slips within the Broad Creek Marina facility. Attached as Exhibit "B" is a site drawing and project description for the proposed boat dock and slip reconfiguration/expansion. On August 13, 2008, DCM denied NCSIPA's request, based solely on the one quarter width rule [15A NCAC 07H .0208(b)(6)(J)(iii)]. No adverse agency or public comments regarding navigation issues (or any other issue) were received. A copy of DCM's denial letter is attached as Exhibit "C".

Strict Application/Unnecessary Hardship:

As confirmed in DCM's August 13, 2008 Denial Letter, application of the "one fourth width" use standard found at 15A NCAC 07H .00208(b)(6)(j)(iii) required DCM to deny the requested CAMA Permit Modification/Application. Undisputed facts document that Petitioner NCSIPA, a State Agency: (a) owns the submerged lands over which the proposed structures will be located; (b) previously excavated this upland basin using public monies as a public interest project for the benefit of all citizens of North Carolina; (c) has concluded that construction and leased operation of the proposed new dock facilities will serve the public interests set forth by the General Assembly in Article 23A of chapter 113 of the General Statutes; (d) has concluded that the proposed project leaves adequate space for other users of the Mill Creek channel and the larger basin to safely navigate; and (e) has documented that experience over the past three years within the 2005 slip expansion project has not resulted in any significant navigation conflicts. Strict application of the "one fourth" pier length rule (cited above) thus will cause significant hardship to Petitioner and its public interest needs.

The agency's August 13, 2008 denial letter does **<u>not</u>** cite to or rely on any adverse impacts to public trust and navigation use standards, such as those found in 15A NCAC 07H .0207(d), 15A NCAC 07H .0208(a)(2)(II), and 15A NCAC 07H .0208(b)(5)(II). Therefore, such use standards, which were cited in the 2005 variance proceedings, are not an issue in this variance request. Petitioner NCSIPA reasonably and properly has concluded that the public interest is best served by construction and leased operation of the proposed additional docks and slips, located in the

same alignment as existing facilities; this determination should be entitled to significant weight in evaluating the unnecessary hardship variance factor.

Staff's Position: Yes.

Staff recognizes that Petitioner is authorized by the General Assembly to "develop and improve the Wanchese Seafood Industrial Park...for a more expedition and efficient handling of seafood commerce from and ...to acquire, construct, equip, maintain, develop and improve the port facilities at said park" and the responsibility that the Petitioner has in trying to meet its legislative mandate and purpose. Staff agrees with Petitioner that the proposed new dock facilities will serve the public interest, that the project proposal leaves adequate space for other users of the basin and that no significant navigation conflicts exist as a result of the proposal. If Staff's interpretation of Petitioner's argument is correct, Staff agrees that unnecessary hardships will result from a strict application of the "one-quarter rule" because strict application will prevent the Petitioner from maximizing and using the public trust basin area in a more efficient way then it is currently permitted to.

II. Do such difficulties or hardships result from conditions which are peculiar to the property involved?

Petitioner's Position: Yes.

Petitioner NCSIPA is an instrumentality of the State of North Carolina. Petitioner NCSIPA owns the submerged bottom where the proposed docks and slips will be located. Petitioner NCSIPA created the upland boat basin at issue here as a public interest project, using public monies. All these undisputed facts document satisfaction with this variance factor. Prior to the original excavation and construction of the Wanchese Seafood Industrial Park, the persons and businesses on the other side of Mill Creek had no navigation rights of any kind with regard to the areas at issue. During the ensuing 30 years, these neighbors and businesses have enjoyed the benefits of the enlarged harbor and basin. Unlike the 2005 variance request, no adjoining neighbors or users of the basin have raised any navigation concerns, nor has any commenting agency. These conditions, taken together, uniquely support satisfaction with this and all variance requirements.

Staff's Position: Yes.

The fact that this is a publicly funded harbor created for public purposes is a peculiarity of this basin which causes Petitioner's hardships. Other peculiarities of this site include the fact that Petitioner owns the submerged land under the project site, and the fact that deep water is closely adjacent to the bulkhead, reducing the need to pier out a distance to reach deep water.

III. Do the hardships result from actions taken by the Petitioner?

Petitioner's Position: No.

The hardships at issue here result in significant part from the physical configuration of the upland boat basin at issue. While the Wanchese harbor and upland basin were constructed in the late 1970's by Petitioner NCSIPA, that action does not constitute adverse action by Petitioner within the meaning of this variance factor. The public interest nature of Petitioner's actions in constructing the Wanchese harbor and upland basin alone suffice to meet this variance factor. If a variance is not granted, Petitioner effectively will be prohibited from maximizing the future public interest development of the Wanchese Seafood Park based on navigational concerns subsumed in the one-quarter rule which concerns, as a matter of undisputed fact, did not even exist prior to Petitioner's public interest actions in constructing the Wanchese Harbor. Furthermore, unlike with the 2005 variance request (which still was granted by the Commission), no person or agency has raised any navigational concerns with regard to the requested net three boat slip expansion.

Staff's Position: No.

Petitioner created the basin for the public interest pursuant to its legislative mandate, and has operated in compliance with the Commission's rules for many years. Staff contends that while the Petitioner could have designed this project to meet the rules, it would result in the loss of valuable area available for additional uses pursuant to Petitioner's mandate. As the one-quarter rule is excessively limiting when applied to a publically created basin such as this, the hardships are created by the peculiarities of the property and not so much the design proposed by Petitioners maximizing the use of the facility.

IV. Is the proposed development consistent with (1) 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?

Petitioner's Position: Yes.

As described above, Petitioner is a public agency charged with implementing a statutory mandate to further the purposes of the Wanchese Seafood Industrial Park on behalf of all citizens of North Carolina. Given that Petitioner NCSIPA: (a) built the harbor and basin at issue; (b) owns the submerged lands therein; and (c) has determined the proposed development to be in the public interest, and given the absence of any adverse public or agency comments, it is a fair conclusion to be drawn that the public interest is fully and well served by allowance of the proposed expansion and modification. After construction of the reconfigured docks and slips, the public will still have navigation rights far superior to those that existed in the area prior to construction of the Wanchese Seafood Industrial Park, and the public will still be able to navigate to and from all privately owned properties and businesses adjacent to the Wanchese Harbor and Basin. Moreover, the success of the 2005 project, and the lack of any agency or public

opposition to either that project as implemented, or the proposed reconfiguration here confirms that there are little or no adverse factors for the Commission to weigh, and thus the public interest benefits of the proposed dock reconfiguration satisfy this final variance factor.

Petitioner's Conclusion:

Petitioner NCSIPA is a public agency. The areas at issue in this matter involve public trust waters that flow over submerged lands owned by Petitioner. Wanchese Harbor and Basin were constructed by Petitioner as a public interest project almost 30 years ago. The current proposed net addition of three new slips clearly falls within Petitioner NCSIPA's legislatively authorized mandate to enhance the commercial and recreational uses of the Wanchese Seafood Industrial Park. Petitioner, a state agency, has concluded that the project is in the public interest, and within the statutory mandates given to it by the General Assembly. After project constructed public trust waters for use and enjoyment by adjacent property owners, other boat-related businesses and members of the public. For all these reasons, Petitioner North Carolina Seafood Industrial Park Authority respectfully requests that the Coastal Resources Commission grant the requested variance from strict application of the one-quarter width use standard, 15A NCAC 07H .00208(b)(6)(j)(iii).

Staff's Position: Yes.

Staff agrees that the variance will be consistent with the spirit, purpose, and intent of the rules. The proposed expansion/modification does not significantly impact navigation and the public trust areas compared to what is already permitted, but instead, reconfigures the project to make better use of the space, pursuant to Petitioner's mandate. Since this is a wide man-made basin, Staff understands that following this rule strictly is burdensome, and agrees that a project in excess of the one-quarter rule is made to maximize use of this area. As there apparently have not been navigation concerns raised as had been with the previous variance, staff is comfortable with the resulting 25% of the basin-width which remains for navigation. Based on the review of the proposed modification/expansion, it appears to Staff that the project will not likely have negative affects on navigation—rights which the Commission's rules aim to protect. Therefore Staff contends that the proposal is consistent with the spirit, purpose, and intent of the rules and will be in the interests of public safety.

This variance will preserve substantial justice because the project will maximize and make the use of the Petitioner's riparian area more efficient, pursuant to its legislative mandate, without raising new navigation concerns.

Attachment D

Petitioner's Petition Materials

RECEIVED

HELL 1 7 2008

DAVIS HARTMAN WRIGHT PLLC

ATTORNEYS AT LAW

MICHAEL SCOTT DAVIS MARK SPENCE HARTMAN 1. CLARK WRIGHT, JR.

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N.C. A THE DEACT IN SERAL Er SAN DEACH IN SERAL NEW BERN, NC 26560 252-514-2828 FAX 252-514-9878 NEW@dbwiegsl.com

December 16, 2008

Mr. Jim Gregson, Director Division of Coastal Management 400 Commerce Avenue Morehead City, NC 28557

30D

RE: Variance Request North Carolina Seafood Industrial Park Authority DCM Permit Denial Letter dated August 13, 2008

Dear Jim:

Enclosed please find a Request For Variance package on behalf of our client, the North Carolina Seafood Industrial Park Authority ("NCSIPA"). This package requests that the Coastal Resources Commission ("CRC") grant a variance from the one quarter width rule found at 15A NCAC 07H.0208(b)(6)(J)(iii). This variance request is similar to one granted by the CRC in 2005, except: (a) the net effect of the boat slip and dock reconfiguration proposed here is much smaller (a net of three additional slips); (b) there were no adverse agency or public comments received during the permit review process; and (c) the sole stated basis for permit denial was the one quarter width rule. In sum, the potential impacts associated with the enclosed variance request are much smaller than those that were associated with the 2005 request that was approved by the Commission in May 2005.

If at all possible, our client would like to have this matter heard at the Commission's February 11-13, 2009 meeting.

With warmest personal regards for the Holiday Season, I remain

Yours truly

I. Clark Wright, Jr. ICW:icw Enclosures cc: Mr. Bob Peele (via e-mail) Mr. Joe Lassiter (via e-mail) Christy Goebel (via e-mail and U.S. Mail)

CAMA VARIANCE REQUEST

North Carolina Seafood Industrial Park c/o Mr. Bob Peele P.O. Box 549 Wanchese, NC 27981 252-473-5867 bpeele@nccommerce.com

I. Clark Wright, Jr. Davis Hartman Wright PLLC 209 Pollock Street New Bern, NC 28560 252-514-2828 (ext. 1) 252-514-9878 (fax) icw@dhwlegal.com



Have you received a decision from the Division of Coastal Management (DCM) or a Local Permit Officer denying your application for a CAMA permit?

- no
- o (You are not entitled to request a variance until your permit application has been denied.)
- X_y yes (You may proceed with a request for a variance.)

What did you seek a permit to do?

Modify and expand existing CAMA Permit No. 119-05 by reconfiguring a previously permitted boat dock and slip facility with a net addition of three boat slips.

What Coastal Resources Commission rule(s) prohibit this type of development?

15A NCAC 07H.0208(b)(6)(J)(iii)

Can you redesign your proposed development to comply with this rule? No (see below). If your answer is no, explain why you cannot redesign to comply with the rule.

See attachment; the expansion proposal is necessary in the public interest to further NCSIPA's public mandates.

Can you obtain a permit for a portion of what you wish to do? No (see below). If so, please state what the permit would allow.

The unique configuration of the man-made upland harbor simply does not allow for any commercially viable expansion that does not violate the one-quarter width rule. The proposed

modification adds a net total of three additional slips. See attachment for more detail.

State with specificity what you are NOT allowed to do as a result of the denial of your permit application. It will be assumed that you can make full use of your property, except for the uses that are prohibited as a result of the denial of your permit application.

See attachment. NCSIPA created this upland harbor over two decades ago, thus creating new public trust waters and an inland harbor where none previously existed. In order to satisfy its public interest mandates, NCSIPA needs to expand its commercially successful docks and slips to accommodate increased demand for same and help the Seafood Park to remain commercially viable for the benefit of the public and all users.

RESPOND TO THE FOUR STATUTORY VARIANCE CRITERIA:

I. Identify the hardship(s) you will experience if you are not granted a variance and explain why you contend that the application of this rule to your property constitutes an unnecessary hardship. [The North Carolina Court of Appeals has ruled that this factor depends upon the unique nature of the property rather than the personal situation of the landowner. It has also ruled that financial impact alone is not sufficient to establish unnecessary hardship, although it is a factor to be considered. The most important consideration is whether you can make reasonable use of your property if the variance is not granted. [*Williams v. NCDENR, DCM, and CRC,* 144 N.C. App. 479, 548 S.E.2d 793 (2001).]

See Attachment.

II. Describe the conditions that are peculiar to your property (such as location, size, and topography), and cause your hardship.

See Attachment.

III. Explain why your hardship does not result from actions that you have taken.

See Attachment.

IV. Explain why the granting of the variance you seek will be consistent with the spirit, purpose, and intent of the CRC's rules, standards, or orders; preserve substantial justice; and secure public safety.

See Attachment.

Please attach copies of the following:

Permit Application and Denial documents Site Drawing with Survey and Topographical Information Any letters filed with DCM or the LPO commenting on or objecting to your project

Provide a numbered list of all true facts that you are relying upon in your explanation as to why you meet the four criteria for a variance. Please list the variance criterion, ex. unnecessary hardship, and then list the relevant facts under each criterion. [The DCM attorney will also propose facts and will attempt to verify your proposed facts. Together you will arrive at a set of facts that both parties agree upon. Those facts will be the only facts that the Commission will consider in determining whether to grant your variance request.]

Attach all documents you wish the Commission to consider in ruling upon your variance request. [The DCM attorney will also propose documents and discuss with you whether he or she agrees with the documents you propose. Together you will arrive at a set of documents that both parties agree upon. Those documents will be the only documents that the Commission will consider in determining whether to grant your variance request.]

Pursuant to N.C.G.S. 113A-120.1 and 15A NCAC 7J .0700, the undersigned hereby requests a variance.

- Atomer Date: December 15, 2008 Signature:

This variance request must be filed with the Director, Division of Coastal Management, and the Attorney General's Office, Environmental Division, at the addresses shown on the attached Certificate of Service form.

CERTIFICATE OF SERVICE

I certify that this Variance Request has been served on the State agencies named below by United States Mail or by personal delivery to the following:

Original served on: Jim Gregson, Director Division of Coastal Management 400 Commerce Avenue Morehead City, NC 28557

copy:

Christine Anne Goebel, Esq. Environmental Division 9001 Mail Service Center Raleigh, NC 27699-9001

This the 16th day of December, 2008.

Signature of Petitioner of Attorney

<u>Attachment to CAMA Variance Request</u> N.C. Seafood Industrial Park Authority – Petitioner December 15, 2008

Introduction:

Pursuant to North Carolina Law [N.C.G.S. 113-315.28(1)], Petitioner North Carolina Seafood Industrial Park Authority (NCSIPA) is authorized by the General Assembly to "develop and improve the Wanchese Seafood Industrial Park . . . for a more expeditious and efficient handling of seafood commerce from and to any place or places in the State of North Carolina and other states and foreign countries." The General Assembly also authorized Petitioner to "acquire, construct, equip, maintain, develop and improve the port facilities at said parks." To accomplish these and other purposes as set forth in Article 23C of Chapter 113 of the General Statutes, the General Assembly created and designated Petitioner as "an instrumentality of the State of North Carolina."

To carry out the General Assembly's mandates, Petitioner NCSIPA has undertaken a number of projects at the Wanchese Seafood Industrial Park ("Park"), including the original construction of the Harbor Basin, Wharf and onshore facilities, numerous projects designed to upgrade the facilities at the Park, and – more recently - projects designed to bring renewed growth in commercial and recreational fishing and boating-related activity.

The conceptual ideas for the Park date as far back as the 1960s. In 1974, (then) Governor Jim Hunt designated the (then) Department of Natural and Economic Resources as the lead agency for purposes of planning and developing a seafood industrial park at Wanchese. In 1977, a Final Environmental Impact Statement (EIS) was prepared in connection with specific proposals to create a commercial harbor and basin, with onshore seafood industrial park facilities at Wanchese. Exhibits "A" through "F" from the 2005 variance request are referenced and incorporated by reference, but not set out here to save time and resources.

According to the engineer's final report, work on the "Phase I" (harbor and wharf) Park project began on August 7, 1978, and was completed on or about November 15, 1979 at a cost of over \$3 million dollars. In the past, the Park has experienced difficulties in attracting major seafood businesses. Members of the NCSIPA attribute some of the difficulty to ongoing challenges in finalizing an environmentally acceptable form of inlet stabilization for Oregon Inlet. Growing competition from international seafood providers also may have contributed. Regardless of the reason(s), in more recent years, the NCSIPA has worked to attract a broader range of commercially viable, water-related tenants, including those catering to recreational boating and fishing interests. In connection with these efforts, on or about September 7, 2004, Petitioner NCSIPA submitted an application for a Major Development CAMA Permit authorizing construction and operation of a floating dock and boat slip facility, to be located over submerged lands owned by the NCSIPA, which lands are part of the lands excavated in the late 1970's to create the Wanchese Seafood Industrial Park. This permit application
was denied by DCM on the basis of non-compliance with the one-quarter width rule, and on the basis of navigational concerns. In May of 2005, NCSIPA submitted a variance request to the Commission requesting that the Commission issue a variance for the proposed boat slip and docking facility known as Broad Creek Marina – specifically seeking a variance from the "one quarter width" rule, 5A NCAC 07H.0208(b)(6)(J)(iii), and from more general navigational use standards of potential concern. On July 18, 2005, the Commission issued an Order granting the variance.

Since construction, commercial operations associated with the facility authorized by the Commission's July 18, 2005 Order have been successful. Attached as Exhibit "A" is a photograph showing the current boat slip and docking facilities. Due to increased demand for such services, NCSIPA recently submitted an application for a major modification to CAMA Permit No. 119-05, previously issued by the Commission in accordance with its July 18, 2005 Order granting NCSIPA's variance request. The major modification sought approval for a dock and slip reconfiguration that would result in deletion of six existing slips and construction of nine new slips, for a net addition of three slips within the Broad Creek Marina facility. Attached as Exhibit "B" is a site drawing and project description for the proposed boat dock and slip reconfiguration/expansion. On August 13, 2008, DCM denied NCSIPA's request, based solely on the one quarter width rule [15A NCAC 07H.0208(b)(6)(J)(iii)]. No adverse agency or public comments regarding navigation issues (or any other issue) were received. A copy of DCM's denial letter is attached as Exhibit "C."

Strict Application/Unnecessary Hardship:

As confirmed in DCM's August 13, 2008 Denial Letter, application of the "one fourth width" use standard found at 15A NCAC 07H.00208(b)(6)(j)(iii) required DCM to deny the requested CAMA Permit Modification/Application. Undisputed facts document that Petitioner NCSIPA, a State Agency: (a) owns the submerged lands over which the proposed structures will be located; (b) previously excavated this upland basin using public monies as a public interest project for the benefit of all citizens of North Carolina; (c) has concluded that construction and leased operation of the proposed new dock facilities will serve the public interests set forth by the General Assembly in Article 23A of Chapter 113 of the General Statutes; (d) has concluded that the proposed project leaves adequate space for other users of the Mill Creek channel and the larger basin to safely navigate; and (e) has documented that experience over the past three years with the 2005 slip expansion project has not resulted in any significant navigation conflicts. Strict application of the "one fourth" pier length rule (cited above) thus will cause significant hardship to Petitioner and its public interest needs.

The agency's August 13, 2008 denial letter does <u>not</u> cite to or rely on any adverse impacts to public trust and navigation use standards, such as those found in 15A NCAC 07H.0207(d), 15A NCAC 07H.0208(a)(2)(II), and 15A NCAC 07H.0208(b)(5)(II). Therefore, such use standards, which were cited in the 2005 variance proceedings, are not an issue in this variance request. Petitioner NCSIPA reasonably and properly has concluded that the public interest is best served by construction and leased operation of the proposed additional docks and slips, located in the same alignment as existing facilities; this determination should be entitled to significant weight in evaluating the unnecessary hardship variance factor.

Peculiar Conditions:

Petitioner NCSIPA is an instrumentality of the State of North Carolina. Petitioner NCSIPA owns the submerged bottom where the proposed docks and slips will be located. Petitioner NCSIPA created the upland boat basin at issue here as a public interest project, using public monies. All these undisputed facts document satisfaction with this variance factor. Prior to the original excavation and construction of the Wanchese Seafood Industrial Park, the persons and businesses on the other side of Mill Creek had no navigation rights of any kind with regard to the areas at issue. During the ensuing 30 years, these neighbors and businesses have enjoyed the benefits of the enlarged harbor and basin. Unlike the 2005 variance request, no adjoining neighbors or users of the basin have raised any navigation concerns; nor has any commenting agency. These conditions, taken together, uniquely support satisfaction with this and all variance requirements.

Actions of Petitioner:

The hardships at issue here result in significant part from the physical configuration of the upland boat basin at issue. While the Wanchese harbor and upland basin were constructed in the late 1970's by Petitioner NCSIPA, that action does not constitute adverse action by Petitioner within the meaning of this variance factor. The public interest nature of Petitioner's actions in constructing the Wanchese harbor and upland basin alone suffice to meet this variance factor. If a variance is not granted, Petitioner effectively will be prohibited from maximizing the future public interest development of the Wanchese Seafood Park based on navigational concerns subsumed in the one-quarter rule which concerns, as a matter of undisputed fact, did not even exist prior to Petitioner's public interest actions in constructing the Wanchese Harbor. Furthermore, unlike with the 2005 variance request (which still was granted by the Commission), no person or agency has raised any navigational concerns with regard to the requested net three boat slip expansion.

Public Interest/Substantial Justice:

As described above, Petitioner is a public agency charged with implementing a statutory mandate to further the purposes of the Wanchese Seafood Industrial Park on behalf of all citizens of North Carolina. Given that Petitioner NCSIPA: (a) built the harbor and basin at issue; (b) owns the submerged lands therein; and (c) has determined the proposed development to be in the public interest, and given the absence of any adverse public or agency comments, it is a fair conclusion to be drawn that the public interest is fully and well served by allowance of the proposed expansion and modification. After construction of the reconfigured docks and slips, the public will still have navigation rights far superior to those that existed in the area prior to construction of the Wanchese Seafood Industrial Park, and the public will still be able to navigate to and from all

privately owned properties and businesses adjacent to the Wanchese Harbor and Basin. Moreover, the success of the 2005 project, and the lack of any agency or public opposition to either that project as implemented, or the proposed reconfiguration here confirms that there are little or no adverse factors for the Commission to weigh, and thus the public interest benefits of the proposed dock reconfiguration satisfy this final variance factor.

Conclusion:

Petitioner NCSIPA is a public agency. The areas at issue in this matter involve public trust waters that flow over submerged lands owned by Petitioner. Wanchese Harbor and Basin were constructed by Petitioner as a public interest project almost 30 years ago. The current proposed net addition of three new slips clearly falls within Petitioner NCSIPA's legislatively authorized mandate to enhance the commercial and recreational uses of the Wanchese Seafood Industrial Park. Petitioner, a state agency, has concluded that the project is in the public interest, and within the statutory mandates given to it by the General Assembly. After project construction, there will remain appropriate and adequate areas of unobstructed public trust waters for use and enjoyment by adjacent property owners, other boat-related businesses and members of the public. For all these reasons, Petitioner North Carolina Seafood Industrial Park Authority respectfully requests that the Coastal Resources Commission grant the requested variance from strict application of the one-quarter width use standard, 15A NCAC 07H.00208(b)(6)(j)(iii).

Will Be Included in the Power-point to the CRC in color

Exhibit "A"



Broad Creek Marina Wanchese Seafood Park Marina Expansion Major CAMA Permit Modification Application (#119-05) May 12, 2008

Introduction

The proposed project involves the expansion of the Broad Creek Marina located in the Wanchese Seafood Industrial Park in Wanchese, Dare County, and approximately centered around latitude 35.8443056° north and longitude 75.6213555° west. A copy of the USGS Topographic Quadrangle-Wanchese, with the site identified, has been included. This narrative includes the proposed pier, slips and finger piers as approved by the Wanchese Seafood Park.

Broad Creek Marina currently offers 49 wet slips as part of its inshore and offshore fishing charter operation. The proposed project will increase the number of wet slips to 52.

Proposed Work Requiring CAMA Major Modification (#119-05)

Proposed activities associated with the development, which require modification of the CAMA Major Permit #119-05 include installation of a 100 linear feet (lf) of eight feet wide floating pier, one 16 feet by 40 feet slip, one 18 feet by 40 feet slips, one 20 feet by 40 feet slip, two 23 feet by 40 feet slips, one 26 feet by 50 feet slip and three 25 feet by 50 feet slips. The applicants also propose to construct four finger piers. Two at six feet by 24.5 feet and two each at six feet by 28.5 feet.

All of the proposed activities are shown on the attached site plans. In addition, the proposed pier and slip alignment falls within the previously permitted marina footprint in CAMA Major Permit 119-05 and subsequent modifications.

The floating pier and pilings will be installed by barge. No wetlands will be crossed or impacted during construction of the marina expansion. All materials and equipment will be stored on site.

Stormwater Management

Stormwater at the Wanchese Seafood Industrial Park is handled via a network of engineered swales and infiltration ponds. The proposed work is entirely within the Public Trust and does not involve any impervious development.

Water and Sewer

Potable water is provided by the Wanchese Seafood Industrial Park water distribution system. Sewer is handled on site via a conventional septic tank and drain field.

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North Carolina Department of Environment and Natural Resources Division of Coastal Management James H. Gregson, Director

Michael F. Easley, Governor

William G. Ross Jr., Secretary

August 13, 2008

CERTIFIED MAIL **RETURN RECEIPT REOUESTED**

Mr. Bob Peele, Director N.C. Seafood Industrial Park Authority P.O. Box 549 Wanchese, NC 27981

Dear Mr. Peele:

This letter is in regard to your application request under the Coastal Area Management Act (CAMA) for a major modification to Permit No. 119-05, which was originally issued by CRC variance on July 18, 2005. The major modification involves the construction of additional slips at the Broad Creek Marina, which is located within the N.C. Scafood Industrial Park property in Wanchese, Dare County. Processing of the application, which was received as complete by the Division of Coastal Management's Elizabeth City office on March 14, 2008, is now complete. Based on the state's review, the Division of Coastal Management has made the following findings:

- 1) The proposed project would be constructed adjacent to the existing Broad Creek Marina main access pier. The existing marina currently offers 49 formalized boat slips. The major modification proposal, as amended by the applicant's authorized agent on May 12, 2008, involves the construction of an additional 9 boat slips, and the removal of 6 existing slips.
- 2) The entire project would take place within the Wanchese Harbor Basin, a heavily utilized manmade basin adjoining Mill Creek, off the Roanoke Sound. The width of the harbor basin in the vicinity of the proposed marina facility is approximately 565 feet.
- 3) The newly proposed boat slips will extend approximately 300 feet into, or approximately 53 percent across, the harbor basin.
- 4) During the course of the joint State and Federal agency review process, no concerns were raised concerning potential navigational impacts resulting from the proposed addition of the nine slips. Additionally, no public comments were received as a result of the public review process.
- 5) Based upon the findings outlined above, the proposed project has been determined to be inconsistent with the following Rules of the Coastal Resources Commission:

15A NCAC 07H.0208(b)(6)(J)(iii), which states "Pier length shall be limited by not extending more than one-fourth the width of a natural water body, or human-made canal or basin.".

400 Commerce Avenue, Morehead City, North Carolina 28557 Phone: 252-808-2808 \ FAX: 252-247-3330 \ internet: www.nccoastalmanagement.net

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N.C. Seafood Industrial Park Page 2

Given the preceding findings, it is necessary that your request for issuance of a CAMA Major Permit 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.

If you wish to appeal this denial, you are entitled to a hearing. The hearing will involve appearing before an Administrative Law Judge who listens to evidence and arguments of both parties and then makes a recommendation to the Coastal Resources Commission. 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, (919) 733-2698, within twenty (20) days from the date of this letter. A copy of this petition should be filed with the Division of Coastal Management's Raleigh office.

Also, you should be advised that as long as this state permit renewal denial stands, your project must be deemed inconsistent with the N.C. Coastal Management Program, thereby precluding the issuance of federal permits for this project. The Federal Coastal Zone Management Act (CZMA) gives you the right to appeal this finding to the U.S. Secretary of Commerce within thirty (30) days of receipt of this letter. Your appeal must be on the grounds that the proposed activity is (1) consistent with the objectives or purposes of the CZMA, or (2) is necessary in the interest of national security, and thus, may be foderally approved.

If you have any questions concerning this matter, please contact Mr. Doug Huggett at (252) 808-2808.

Sincerely,

asH. Grogen

ames H. Gregson

JHG/dh

cc: Mr. David Kennedy, Director - OCRM/NOAA, Silver Spring, MD Colonel Jefferson Ryscavage - U.S. Army Corps of Engineers, Wilmington, NC

Attachment E

Other Referenced Items



North Carolina Department of Environment and Natural Resources

Division of Coastal Management

Michael F. Easley, Governor

James H. Gregson, Director

William G. Ross Jr., Secretary

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August 13, 2008

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Bob Peele, Director N.C. Seafood Industrial Park Authority P.O. Box 549 Wanchese, NC 27981

Dear Mr. Peele:

This letter is in regard to your application request under the Coastal Area Management Act (CAMA) for a major modification to Permit No. 119-05, which was originally issued by CRC variance on July 18, 2005. The major modification involves the construction of additional slips at the Broad Creek Marina, which is located within the N.C. Seafood Industrial Park property in Wanchese, Dare County. Processing of the application, which was received as complete by the Division of Coastal Management's Elizabeth City office on March 14, 2008, is now complete. Based on the state's review, the Division of Coastal Management has made the following findings:

- The proposed project would be constructed adjacent to the existing Broad Creek Marina main access pier. The existing marina currently offers 49 formalized boat slips. The major modification proposal, as amended by the applicant's authorized agent on May 12, 2008, involves the construction of an additional 9 boat slips, and the removal of 6 existing slips.
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- 3) The newly proposed boat slips will extend approximately 300 feet into, or approximately 53 percent across, the harbor basin.
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N.C. Seafood Industrial Park Page 2

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If you have any questions concerning this matter, please contact Mr. Doug Huggett at (252) 808-2808.

Sincerely,

sH. Gugan

James H. Gregson

JHG/dh

cc: Mr. David Kennedy, Director - OCRM/NOAA, Silver Spring, MD Colonel Jefferson Ryscavage - U.S. Army Corps of Engineers, Wilmington, NC



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Potable water is provided by the Wanchese Seafood Industrial Park water distribution system. Sewer is handled on site via a conventional septic tank and drain field.

Permit Class		Permit Number 119-05
<u>NEW</u> (By CRC Variance)	STATE OF NOR	
(-),	Department of Environme	
	an Coastal Resourc	
	J act	mit
	fo	
	<u>x</u> Major Development pursuant to NCGS 11	in an Area of Environmental Concern 13A-118
:	Excavation and/or fil	lling pursuant to NCGS 113-229
Issued to N.C. Seafood I	ndustrial Park Authority, P.C). Box 549, Wanchese, NC 27981
Authorizing development	in <u>Dare</u>	County at Wanchese Harbor and Mill Creek
	, as requested in the j	permittee's application dated <u>9/1/04, including attached</u>
workplan drawings (2), 1	dated 9/1/04 and 1 dated revise	ed 9/1/04
This permit, issued on <u>Jul</u>		subject to compliance with the application (where consistent
	ble regulations, special conditions	s and notes set forth below. Any violation of these terms may be the permit to be null and void.
	······································	ek Marina
		I under this permit, a marine pumpout sewage disposal ined for the life of the permitted marina.
· · · · · ·		the location of the on-site pumpout facility, including e entrance and exit from both main piers.
marina. Any sewa	ge discharge at the marina fac e is responsible. This prohibiti	be discharged at any time from any boats using the ility shall be considered a violation of this permit for on shall be applied and enforced throughout the entire
	(See attached sheets for	Additional Conditions)
other qualified persons within	e appealed by the permittee or twenty (20) days of the issuing lution prior to work initiation or e.	Signed by the authority of the Secretary of DENR and the Chairman of the Coastal Resources Commission.
This permit must be acc personnel when the project is i	essible on-site to Department inspected for compliance:	Dont VHuggtt Charles S. Jones, Director
Any maintenance work or project modification not covered hereunder requires further Division approval.		Charles S. Jones, Director Division of Coastal Management
All work must cease when the	ne permit expires on	This permit and its conditions are hereby accepted.
December 31, 2008	•	
	State of North Carolina agrees with the North Carolina Coastal	

N.C. Seafood Industrial Park

Permit #119-05 Page 2 of 3

ADDITIONAL CONDITIONS

- 4) This permit authorizes only the docks, piers, and other structures and uses located in or over the water that are expressly and specifically set forth in the permit application. No other structure, whether floating or stationary, shall become a permanent part of this marina facility without permit modification. No non-water dependent uses of structures shall be conducted on, in or over public trust waters without permit modification.
- 5) The authorized structures and associated activity shall not cause an unacceptable interference with navigation.
- 6) No attempt shall be made by the permittee to prevent the use by the public of all navigable waters at or adjacent to the authorized work.
- 7) The permittee shall maintain the authorized work in good condition and in conformance with the terms and conditions of this permit. The permittee is not relieved of this requirement if he abandons the permitted activity without having it transferred to a third party.
- 8) This permit does not authorize the interference with any existing or proposed Federal project, and the permittee shall not be entitled to compensation for damage to the authorized structure or work, or injury which may be caused from existing or future operations undertaken by the United States in the public interest.
- 9) The permittee shall install and maintain at his expense any signal lights or signals prescribed by the U.S. Coast Guard, through regulation or otherwise, on the authorized facilities. At a minimum, permanent reflectors shall be attached to the structure in order to make it more visible during hours of darkness or inclement weather.
- 10) This permit authorizes a maximum of 32 new boat slips boat slips, in addition to the 14 existing slips, resulting in a total number of 46 slips at the permitted marina.
- **<u>NOTE:</u>** It is strongly recommended that the permittee exercise all available precautions in the day-to-day operation of the facility to prevent facility waste from entering the adjacent waters. Such discharge, either directly or indirectly, to adjacent waters could contravene state water quality standards, thereby violating state law.

General

11) The permittee understands and agrees that, if future operations by the United States requires the removal, relocation, or other alteration of the structure or work authorized by this permit, or if in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to free navigation of the navigable waters, the permittee shall be required, upon due notice from the Corps of Engineers, to remove, relocate or alter the structural work or obstructions caused thereby, without expense to the United States or the state of North Carolina. No claim shall be made against the United States or the state of North Carolina on account of any such removal or alteration.

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N.C. Seafood Industrial Park

Permit #119-05 Page 3 of 3

ADDITIONAL CONDITIONS

12) No vegetated wetlands or open water areas shall be excavated or filled without permit modification.

<u>NOTE:</u> This permit does not eliminate the need to obtain any additional state, federal or local permits, approvals or authorizations that may be required.

- <u>NOTE:</u> Future development of the permittee's property may require a modification of this permit. Contact a representative of the Division at (252) 264-3901 prior to the commencement of any such activity for this determination. The permittee is further advised that many non-wate dependent activities are not authorized within 30 feet of the normal high water level.
- **NOTE:** The N.C. Division of Water Quality has authorized the proposed project under General Water Quality Certification No. 3351 (DWQ Project No. 041517), which was issued on 11/23/04.

NOTE: The U.S. Army Corps of Engineers has assigned the proposed project COE Action Id. No. 2000411736.

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State of North Carolina

Department 'of Justice 9001 Mail Service Center RALEIGH, NORTH CAROLINA *, 27699-9001 Reply to: Jill B. Hickey Environmental Division 9001 Mail Service Center Raleigh, NC 27699-9001 Tel: (919)716-6600 Fax: (919)716-6767 jhickey@mail.jus.state.nc.us

June 27, 2005

NC Seafood Industrial Park Authority c/o I. Clark Wright, Jr. Ward and Davis, LLP 409 Pollard Street New Bern, North Carolina 28560

CERTIFIED MAIL RETURN RECEIPT REQUESTED

.

Dear Mr. Wright:

Re: Variance Request to Coastal Resources Commission By NC Seafood Industrial Park Authority, CRC-VR-05-07

At its June 17, 2005 meeting, the Coastal Resources Commission voted to grant the above referenced variance request. Attached is a copy of the Final Order, signed by the Chairman of the Coastal Resources Commission. Prior to undertaking the development for which you sought a variance, you must first obtain a CAMA permit from your local permitting authority or the Division of Coastal Management.

Sincerely,

3. Hickley

YII B. Hickey Special Deputy Attorney General Counsel to the Commission

cc: Christine Anne Goebel Charles Jones Courtney T. Hackney

ROY COOPER ATTORNEY GENERAL

STATE OF NORTH CAROLINA

COUNTY OF DARE

BEFORE THE NORTH CAROLINA COASTAL RESOURCES COMMISSION CRC-VR-05-07

IN THE MATTER OF:)	
PETITION FOR VARIANCE)	FINAL ORDER
BY NORTH CAROLINA SEAFOOD'*)	
INDUSTRIAL PARK AUTHORITY)	4

This matter was heard on oral arguments and stipulated facts at the regularly scheduled meeting of the North Carolina Coastal Resources Commission (hereinafter CRC) on June 17, 2005, in Greenville, North Carolina pursuant to N.C.G.S. § 113A-120.1 and T15A NCAC 7J.0700, et seq. Assistant Attorney General Christine A. Goebel appeared for the Department of Environment and Natural Resources, Division of Coastal Management; I. Clark Wright appeared on behalf of Petitioner North Carolina Seafood Industrial Park Authority.

Upon consideration of the record documents and the arguments of the parties, the CRC adopts the following:

STIPULATED FACTS

- Petitioner is the North Carolina Seafood Industrial Park Authority ("NCSIPA"). Under Article 23C of Chapter 113 of the General Statutes, NCSIPA is authorized by the General Assembly to "develop and improve the Wanchese Seafood Industrial Park . . . for a more expeditious and efficient handling of seafood commerce from and to any place or places in the State of North Carolina and other states and foreign countries." [See N.C.G.S. 113-315.28(1).]
- 2. Under Chapter 113 of the General Statutes (Article 23C), NCSIPA specifically is authorized to "acquire, construct, equip, maintain, develop and improve the port facilities" at Wanchese.

- 3. The Petitioner's property is located along the north-eastern half of Wanchese Harbor. The harbor empties into Roanoke Sound near the mouth of Broad Creek. The total land area is approximately 54 acres. The area of lots 22 and 23, the proposed project site, is 97,500 square feet, with 390 feet of shoreline. The deed to NCSIPA was recorded in 1980 at Book 302, Page 835 of the Dare County Registry.
- 4. In 1979, the Wanchese Harbor was dredged from high ground as a part of a publicly funded project to create the Wanchese Seafood Industrial Park. Exhibit A to NCSIPA's Variance Request is a true and accurate copy of plans and drawings showing the small basin that existed in 1978, and the proposed upland basin to be dredged from high ground to create the Wanchese Seafood Industrial Park.
- 5. Exhibit C to NCSIPA's Variance Request is a true and accurate copy of an aerial photograph showing the land from which the improved upland basin was dredged.
- 6. Exhibit I to NCSIPA's Variance Request is a true and accurate copy of an aerial photograph showing the Wanchese Seafood Industrial Park and related facilities as it existed at the time of the NCSIPA's Permit Application, and showing the proposed piers, docks and boat slips.
- 7. Prior to construction of the Wanchese upland basin in 1979, there were no public trust waters over the specific area where the proposed piers, docks and boat slips are to be located. Before the basin was created, adjacent property owners and other users of the public trust waters could only navigate through Mill Creek in part of the area that is now the basin.
- 8. NCSIPA owns the submerged lands underneath the areas where the piers, docks and slips are to be located. The waters over the submerged lands in Wanchese Harbor are public trust waters.

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- 9. The proposed development is located in Estuarine Waters and Public Trust Waters Areas of Environmental Concern (AEC's).
- 10. The waters within the project area have been classified SC by the Environmental Management Commission and are closed to the harvest of shellfish.
- 11. The narrowest width of the harbor adjacent to the proposed site is approximately 500 feet.
- 12. In 1993, the General Assembly amended NCSIPA's controlling statute to enlarge the purposes of the Authority to include "general maritime activities." This included encouraging and developing "the general maritime and marine-related industries and activities at or in the vicinity of the seafood industrial parks" per N.C.G.S. 113-315.28(5a).
- 13. On May 17, 2004, the NCSIPA Board unanimously approved the proposed piers, docks and boat slips proposed as a project in the public interest, which furthers the purposes of the Wanchese Seafood Industrial Park by fostering additional economic and water-dependent growth at the Wanchese Seafood Industrial Park.
- 14. By application dated September 2004, Petitioner applied for a CAMA Major Permit to construct 32 new floating marina slips at the 15 slip Broad Creek Marina, a privately owned marina leasing space from NCSIPA. It would consist of three 8 feet wide floating dock sections 220 feet, 260 feet and 220 feet long, totaling 700 feet. Also proposed are 12 finger slips and 52 pilings, creating a total of 32 new slips. The Estuarine Waters and Public Trust areas affected by the structures would be about 5,870 square feet, while the dock enclosure will capture about 66,000 square feet. Petitioner proposed the maximum length of the docking structures to be 250 feet into the harbor. The proposed project is shown on a 2003 survey by Quible & Associates.

- 15. For the Seafood Park, DCM determines riparian access rights for each lease-holder, and not for the entire Park as a whole.
- 16. After construction of the proposed piers, docks and boat slips, there will remain approximately 210-220 feet of open, navigable waters for use by adjacent property owners, tenants of the Seafood Industrial Park, and other users of these public trust waters. The measurement included the 250 feet from the proposed project to the opposite shoreline, minus the 30-40 feet of docking that currently exists there. This measurement does not factor in any possible future development by the riparian owners across from the site.
- 17. While this project is designed to be in the inner portion of the basin, there are approximately 10-12 "upstream" users in the basin that may be affected by this proposed development, including some lease-holders in the park as well as private owners.
- 18. The proposed piers, docks and boat slips extend more than one-fourth of the width of the waters within the improved upland basin and are about half the width of the basin.
- As a part of the permit process, notice was given to riparian owners and to the public.
 Comment letters were received from Briggs Boat Works, Inc. and from Daniels Seafood Co.
- 20. The letter from Briggs Boat Works, authored by Thomas H. "Sunny" Briggs raises concerns that the 540 feet harbor width would be reduced by half. He felt that three equal parts was a more fair way to divide the width, allowing owners on both sides to develop, while leaving room for the public in the middle. He also noted that the northwest area of the harbor often has four large trawlers docked there at once. Briggs Boat Works is located in the northwestern end of the harbor.
- 21. The letter from Daniels Seafood Co., authored by Mickey T. Daniels through his Power of

Attorney for Edith F. Daniels, opposed the project because it could limit access in the harbor. He notes that there are 3 to 5 large trawlers unloading at one time during certain seasons. They are an adjacent property owner, and their business has been located in the northwest part of the harbor for forty-five years. They also lease the land used by Fisherman's Seafood in the northwestern end of the Harbor.

- 22. As a part of the permit process, information on the proposed development was given to state and federal agencies for comment. Comment letters were received from the NC Department of Marine Fisheries and from the US Army Corps of Engineers.
- 23. The letter from the NC Department of Marine Fisheries expressed concern about the proposed project's potential impact to navigation into and out of the harbor.
- 24. The letter from the US Army Corps of Engineers recommended conditions be added to the permit requiring the full and free use by the public of all navigable waters at or adjacent to the project area.
- 25. The permit was denied on January 20, 2005 because it violated the one-quarter rule and because it was determined that the project would have an adverse impact on navigation.
- 26. Petitioner filed this variance request on May 25, 2004, seeking relief from application of the one-quarter rule in 15A NCAC 7H .0208(b)(6)(J)(iii), as well as from 15A NCAC 7H .0207(d), .0208(a)(2)(H) and .0208(b)(5)(H) for navigation of public trust areas rules. Petitioner seeks permission to build out to 250 feet, approximately 46-50% across the width of the basin.

CONCLUSIONS OF LAW

1. The CRC has jurisdiction over the parties and the subject matter.

2. All notices for the proceeding were adequate and proper.

3. The Petitioner has demonstrated that strict application of 15A NCAC 7H .0207(d), .0208(b)(6)(J)(iii), .0208(a)(2)(H), and .0208(b)(5)(H) to its permit application will result in unnecessary hardship. The Petitioner's variance request materials and the staff recommendation are incorporated by reference as support for this conclusion.

4. The Petitioner has demonstrated that its hardship is peculiar to its property. The Petitioner's variance request materials and the staff recommendation are incorporated by reference as support for this conclusion.

5. The Petitioner has demonstrated that its hardship does not result from actions it has taken. The Petitioner's variance request materials and the staff recommendation are incorporated by reference as support for this conclusion.

6. The Petitioner has demonstrated that its proposed development is within the spirit, purpose and intent of the Commission's rules; that it will secure public safety and welfare; and that it will preserve substantial justice. The Petitioner's variance request materials and the staff recommendation are incorporated by reference as support for this conclusion.

<u>ORDER</u>

THEREFORE, the variance from 15A NCAC 7H .0207(d), .0208(b)(6)(J)(iii), .0208(a)(2)(H), and .0208(b)(5)(H) is GRANTED as proposed.

This variance is based upon the stipulated facts. The granting of this variance does not relieve Petitioner of the responsibility for obtaining a CAMA permit from the proper permitting authority.

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This the 27 day of June, 2005.

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Courtney T. Hackhey, Chairman Coastal Resources Commission

CERTIFICATE OF SERVICE

This is to certify that I have caused the foregoing Final Order to be served upon the Petitioner

by depositing a copy thereof in the U.S. Postal Service CERTIFIED MAIL, RETURN RECEIPT

REQUESTED with sufficient postage for delivery and addressed to:

NC SEAFOOD INDUSTRIAL PARK AUTHORITY c/o I. Clark Wright, Jr. Ward and Davis, LLP 409 Pollard St. New Bern, NC 28560

Christine A. Goebel Hand Delivery Assistant Attorney General N.C. Department of Justice

This the 27 day of June, 2005.

Vieley. KIVB. Hickey

Special Deputy Attorney General N.C. Department of Justice 9001 Mail Service Center Raleigh, NC 27699-9001 Counsel to the Commission

MINUTES OF SPECIAL MEETING NORTH CAROLINA SEAFOOD INDUSTRIAL PARK AUTHORITY APRIL 21, 2008 WANCHESE SEAFOOD INDUSTRIAL PARK

The meeting was called to order at 10AM by Ron Tillett, Chair of the Park Authority. All members were present. Opening prayer was offered by Harold Baum. Guests present:

Leann Rhodes, Attorney General's office Jessica Horbach, The Coastland Times Wayne Umphlett & Theresa Moser Benny O'Neal, O'Neal's Sea Harvest John Bayliss, Bayliss Boatworks Susan Bolling, Bayliss Boatworks staff Brad Woodall, Moffatt & Nichol Mark Vrablic Rex Tillett Will Etheridge

Wayne Umphlett, managing partner of Broad Creek Marina, explained that their original proposal was to expand existing docks 212' to the north. At a meeting with Director Peele, Benny O'Neal and John Bayliss, he agreed to decrease the project to 150'. The docks will not extend into the harbor any further than existing docks. He said the accepted rule of thumb is 1½ times turnaround for boats. At present, the CAMA permit application is in a 120-day comment period.

John Bayliss told of his large investment into Bayliss Boatworks. He said only a 100' expansion would accommodate his operation. He explained that his is a full-service boatyard compared to Broad Creek's recreational marina.

Brad Woodall, engineer with Moffatt & Nichol, explained his experience with waterfront projects. Some of these projects reference up to a 2½ times turnaround. Also, disabled vessels need to be taken into account.

Benny O'Neal said his business benefits from both Broad Creek Marina and Bayliss Boatworks. The maximum length boat docked at his business is 45'; occasionally a 65' boat from Pirates Cove will unload seafood. He does business with 30-50 fishermen a week. He can live with 100-150' dock. He doesn't want access limited to the Marine Fisheries building, which he will eventually lease.

Leann Rhodes replied to a question of liability that the Park holds no liability if a boat is struck by another.

As to time of day of boat traffic, Tow Boat US & SeaTow both operate 24-hours daily.

Will Etheridge asked about the status of the CAMA permit application. Director Peele said the application has been submitted but that the Board has the ultimate decision whether to allow the project.

Mr. Etheridge also spoke on behalf of Mickey Daniels who is not present but is opposed to the project. He stated there is already a hardship due to existing docks. Fifty percent of commercial boats do not carry insurance and this could affect an already suffering industry.

Motion was made by Pogie Worsley, seconded by Harold Baum, to go into closed session to discuss expansion of existing industry served by a public body and the purchase of property. Motion passed unanimously.

(SEE CLOSED SESSION MINUTES)

Motion made by Gwen White, seconded by Sarah Banks, to exit closed session.

Motion was made in open session by Rusty Stetson, seconded by Gwen White to allow the expansion of Broad Creek Marina docks to 100' and allow transient mooring of smaller vessels on the outer end of the tee and limit 2 slips to 60' vessels on outer northern slips. The proposal is subject to Board review after the site plan is amended. Motion passed unanimously.

The meeting adjourned after a unanimous vote by Board members.



	Coastal Resources Commission
FROM:	Elizabeth Jill Weese
DATE:	January 26, 2009 (for the February 11-12, 2009 CRC Meeting)
RE:	Variance Request by John and Debra Rouse

Petitioners John and Debra Rouse own a 0.57 acre lot located at 116 Leslie Drive in Hubert, near Swansboro, Onslow County. Petitioners applied for a CAMA major permit to build a docking facility consisting of a pier, a platform and two boat lifts. The CAMA major permit was denied on December 9, 2008 because the proposed docking facility is inconsistent with the Coastal Resources Commission's rule governing pier lengths found at 15A NCAC 7H .0208(b)(6)(J)(iii).

The following additional information is attached to this memorandum:

Attachment A:	Relevant Rules
Attachment B:	Stipulated Facts
Attachment C:	Staff Summary of Petitioners' Position and Staff's Responses to Criteria
Attachment D:	Petitioners' Variance Request
Attachment E:	Petitioners' Additional Variance Request Materials, including site drawings
Attachment F:	DCM Letter to Petitioners Denying CAMA major permit

cc: W.A. Raney, Jr., Esq., electronically
 Jennie Wilhelm Hauser, Special Deputy Attorney General, electronically
 DCM Staff
 Onslow County LPO

ATTACHMENT A

RELEVANT STATUTES OR RULES

15A NCAC 7H .0200 THE ESTUARINE AND OCEAN SYSTEMS

.0208 Use Standards

- (b) Specific Use Standards ***
- (6) Docks and Piers ***

(J) Pier length shall be limited by:

(I) not extending beyond the established pier length along the same shoreline for similar use; (This restriction shall not apply to piers 100 feet or less in length unless necessary to avoid unreasonable interference with navigation or other uses of the waters by the public);

(ii) not extending into the channel portion of the water body; and

(iii) not extending more than one-fourth the width of a natural water body, or human-made canal or basin. Measurements to determine widths of the water body, canals or basins shall be made from the waterward edge of any coastal wetland vegetation which borders the water body. The one-fourth length limitation shall not apply in areas where the U.S. Army Corps of Engineers, or a local government in consultation with the Corps of Engineers, has established an official pier-head line. The one-fourth length limitation shall not apply when the proposed pier is located between longer piers within 200 feet of the applicant's property. However, the proposed pier cannot be longer than the pier head line established by the adjacent piers, nor longer than 1/3 the width of the water body.

15A N.C.A.C. 7H.0208 THE ESTUARINE AND OCEAN SYSTEMS

.0208 USE STANDARDS

(a) General Use Standards ***

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

(H) Development shall not impede navigation or create undue interference with access to, or use of, public trust areas or estuarine waters.

ATTACHMENT B

STIPULATED FACTS

1. Petitioners John and Debra Rouse own a 0.57 acre lot located at 116 Leslie Drive in Hubert, near Swansboro, Onslow County.

2. Petitioners, through their agent Mark Westendorff of Land Management Group Inc., applied for a CAMA major permit to build a docking facility consisting of a pier, a platform and two boat lifts. A completed application was received in the Division of Coastal Management's Morehead City Office on August 5, 2008.

3. The Petitioners' lot faces southeast toward the Atlantic Intracoastal Waterway (AIWW) but is separated from the channel of the AIWW by a small island identified on the plans submitted with the CAMA application as a "spoil island". (See aerial photo)

4. Between the spoil island and Petitioners' lot is a small, unnamed slough-like channel having a controlling depth of about -4 feet normal low water.

5. The Petitioners' lot is on an indentation in the shoreline which makes the distance to the pierhead line from their lot greater than the distance to the pierhead line from the lots on either side of the Petitioners' lot. (See aerial photo)

6. The width of the water body in the location of the proposed pier is approximately 218 feet measured from the waterward edge of the coastal wetlands on both sides of the water body.

7. The total length of the proposed docking facility is 148.5 feet with approximately 113 feet extending from the waterward edge of the coastal wetlands.

8. One-fourth of the distance across the water body at the location of the proposed pier measured from coastal wetlands to coastal wetlands is approximately 54 feet and one-third the distance is approximately 73 feet. The Petitioners' proposed docking facility extends about 40 feet beyond the point that is one-third of the width of the water body.

9. The end of Petitioners' proposed docking facility is located within the pierhead line determined by drawing a line between the ends of the immediately adjacent piers on either side of the Petitioner's proposed docking facility.

10. From the point at which the proposed docking facility reaches the one-third distance to a point about 5 feet short of the end of the proposed docking facility is a distance of about 35 feet. The water depth in this 35 foot stretch increases from +6 inches normal low water to -6 inches normal low water.

11. From a point about 5 feet short of the end of the proposed docking facility to a point about 20 feet beyond its end, the water depth increases from -6 inches normal low water to -2 feet normal low water; in the next 20 feet beyond this point the water depth increases from -2 feet normal low water to -3.5 feet normal low water.

12. The proposed development is located in the Public Trust Areas and Estuarine Waters Areas of Environmental Concern (AECs).

13. The waters in the vicinity of the docking facility are classified SA, ORW; however, this area is not within a primary or secondary nursery area.

14. Neither of the adjacent riparian property owners objected to the proposed docking facility.

15. The CAMA major permit was denied on December 9, 2008 because the proposed docking facility exceeds 1/3 the width of the water body by approximately 40 feet and is therefore inconsistent with the Coastal Resources Commission's rule governing pier lengths found at 15A NCAC 7H .0208(b)(6)(J)(iii).

16. The North Carolina Division of Marine Fisheries (DMF) also objected to the proposed project due to the significant adverse impacts to shallow bottom habitat from potential prop dredging. However, the DMF indicated it would remove its objection if stops were included on both boat lifts at 18 inches above the substrate in order to minimize the potential for prop dredging.

17. Petitioners filed this variance request on December 22, 2008, seeking relief from the requirements of 7H .0208(b)(6)(J)(iii). In their request, Petitioners state that they accept that if a permit is granted, it shall include a condition requiring the installation of stops on both boat lifts at 18 inches above the substrate as recommended by the DMF. Petitioners' variance request materials are attached and incorporated by reference.

ATTACHMENT C

Summary of Petitioners' and Staff's Positions

I. Will practical difficulties or unnecessary hardships result from strict application of the guidelines, rules, standards or other restrictions applicable to the property?

Petitioners' Position: Yes.

The Rouses' will suffer the hardship of being unable to build a pier long enough to reach a water depth that is useful for docking boats of size customary for residential lots along this stretch of shoreline. The riparian right to utilize waterfront property to gain access to deep water for navigation and docking is unnecessarily restricted by the rules of the Coastal Resources Commission under the facts of this case thereby constituting an unnecessary hardship.

Staff's Position: Yes.

Staff agrees that strict application of the Commission's rules regarding pier length likely creates an unnecessary hardship in this case. The limit on pier length prescribed by 15A NCAC 7H .0208(b)(6)(J) requires that piers not exceed one-fourth of the width of the water body (the "1/4 rule"). An exception to this length limit is when the proposed pier will be located between longer piers within 200 feet of the applicant's property. However, even then, the proposed pier cannot be longer than the pierhead line established by the adjacent piers, nor longer than 1/3 the width of the water body (the "1/3 rule exception"). Even though Petitioners' proposed pier will be longer than the adjacent property owners' piers, it will not exceed the established pierhead line and, because of the shallow waters of the embayment, appears to be the only way for Petitioners to reach sufficient water depth for the use and docking of a small boat.

II. Do such difficulties or hardships result from conditions which are peculiar to the property involved?

Petitioners' Position: Yes.

The Rouses property is peculiar in that it is located on a shallow water embayment and is much farther from deep water than other lots along this stretch of shoreline. Piers have been constructed on the residential lots on either side of the Rouse lot that provide those lots with access to deeper water for purpose of docking boats. The CRC rule that limits the length of piers to 1/4th of the width of the body of water would cause a pier on the Rouses' lot to terminate at a point where the elevation of the bottom is 6" above the mean low water line. Such a terminus is about 50' from the point at which the bottom has a depth of -1' at mean low water. The shallow embayment at the

Petitioners' lot results in a condition that makes the Petitioners' lot peculiar with regard to this stretch of shoreline.

Staff's Position: Yes.

Staff agrees that the Petitioner's property is unique in that the Petitioner's shoreline dips farther back into the property than the shoreline of the two neighboring properties, thus creating an indentation along this stretch of shoreline. Therefore, for the Petitioner to reach the pierhead line established by the neighboring piers, or to reach the same water depth that the neighboring piers were allowed to reach, creates an inconsistency with the 1/4 rule or the 1/3 rule exception.

III. Do the hardships result from actions taken by the Petitioners?

Petitioners' Position: No.

The hardship results from the embayment in the shoreline at the Rouses' lot, not from any action by the Rouses.

Staff's Position: No.

While some of the hardship can be attributed to Petitioners' desire to build a pier with a dock similar to their neighbors, Staff agrees that the primary hardship is due to the peculiarity of the shape of the 90 feet of shoreline on the Petitioners' lot.

IV. Is the proposed development consistent with (1) the spirit, purpose, and intent of the rules, standards or orders issued by the Commission; (2) does it secure the public safety and welfare; and (3) does it preserve substantial justice?

Petitioners' Position: Yes.

The variance is consistent with the spirit, purpose and intent of the Rule that limits pier length. The intent and purpose of the Rule is to prevent piers from unreasonably interfering with public navigation and other public trust uses. The Rouses' proposed pier will be built across a shallow flat that is not suitable for navigation because most of the area in the embayment is exposed at low tide. Other public trust uses such as clamming can occur even if the pier is built. The type of vessels that can utilize the area for navigation at higher stages of the tide, such as canoes and kayaks, can easily navigate under the pier structure. Larger boats navigating in the area would use the deeper navigation channel beyond the end of the pier.

B. Preserve Substantial Justice.

The proposed pier would be located between piers extending from adjacent lots. The end of the Rouses' proposed pier would be in line with the end of the existing adjacent piers on either side. The depth of water at the end of the Rouses' proposed pier would be no deeper than necessary to obtain minimal use for docking of customary vessels. There is an exception to the 1/4th Rule which allows piers to extend to the pier head line established by adjoining piers within 200' on either side of the proposed pier, provided the proposed pier does not exceed 1/3rd of the width of the body of water. This exception is of no benefit to the Rouses because even the 1/3rd distance leaves the end of their pier landward of the normal low water mark and about 40' short of reaching a depth of -1' normal low water. For the Rouses to enjoy the same access to deeper water as is enjoyed by the property owners along the same stretch of shoreline they need a variance from the application of the pier length rules. Neither of the adjoining owners has objected to the Petitioners' pier application.

C. Secure Public Safety.

The pier proposed by the Rouses does not adversely affect public safety because it lines up with piers on either side. The pier may actually assist in safe navigation by defining the deeper water where navigation is safer.

Staff's Position: Yes.

Staff agrees that the proposed project is consistent with the spirit, purpose and intent of the rule that limits pier length. The proposed docking facility is a water dependent and a traditional use that is allowed in Estuarine Waters and Public Trust Areas. The proposed pier and boat lifts will not extend beyond the established pier length along the same shoreline for similar uses. It will not extend into the channel portion of the AIWW and it will not impact traditional navigation. Allowing the pier to span the extremely shallow areas of the embayment minimizes any potential impact to the estuarine resources. Staff also believes that conditions (boat lift stops) that limit the use of the boat lifts will address any resource driven concerns that the resource agency (DMF) has. Allowing this pier to align with the neighboring piers may actually promote safer navigation by funneling boaters to the deeper water areas of the embayment. Substantial justice will be preserved by affording Petitioners the same riparian use as that of the neighboring properties.



ATTACHMENT D

DCM FORM 11 (revised 6/26/06)

CAMA VARIANCE REQUEST

DCM FILE NO.

Petitioner supplies the following information:

Your NameJohn and Debra RouseAddress2232 Warrenton Way, Jacksonville, NC 28546Telephone(910) 347-4049Fax and/or Email347-4049

Name of Your Attorney (if applicable)	W. A. Raney, Jr.
Address	PO Box 1049, Wilmington, NC 28402
Telephone	(910) 762-7475
Fax and/or Email	waraney@bellsouth.net

Have you received a decision from the Division of Coastal Management (DCM) or a Local Permit Officer denying your application for a CAMA permit?

no

(You are not entitled to request a variance until your permit application has been denied.)

X yes (You may proceed with a request for a variance.)

What did you seek a permit to do?

Construct a pier and boat dock serving a residential lot.

What Coastal Resources Commission rule(s) prohibit this type of development?

15A NCAC 7H.0208(b)(6)(J)(iii)

Can you redesign your proposed development to comply with this rule? <u>No</u> If your answer is no, explain why you cannot redesign to comply with the rule.

A pier redesigned to comply with the rule would terminate in a water depth that is so shallow that the dock would be useless.

Can you obtain a permit for a portion of what you wish to do? <u>No</u> If so, please state what the permit would allow.

A pier and dock that complies with the ¼ Rule would end in an area that is so shallow that usage for docking and operation of boats would probably cause damage to shallow water habitat at all stages of the tide.

State with specificity what you are NOT allowed to do as a result of the denial of your permit application. It will be assumed that you can make full use of your property, except for the uses that are prohibited as a result of the denial of your permit application.

The applicant will be unable to build a dock providing access to deep enough water to reasonably serve as a dock for small recreational boats of the size customary in this vicinity.

RESPOND TO THE FOUR STATUTORY VARIANCE CRITERIA:

I. Identify the hardship(s) you will experience if you are not granted a variance and explain why you contend that the application of this rule to your property constitutes an unnecessary hardship. [The North Carolina Court of Appeals has ruled that this factor depends upon the unique nature of the property rather than the personal situation of the landowner. It has also ruled that financial impact alone is not sufficient to establish unnecessary hardship, although it is a factor to be considered. The most important consideration is whether you can make reasonable use of your property if the variance is not granted. [*Williams v. NCDENR, DCM, and CRC*, 144 N.C. App. 479, 548 S.E.2d 793 (2001).]

Please see Attachment A.

II. Describe the conditions that are peculiar to your property (such as location, size, and topography), and cause your hardship.

Please see Attachment A.

III. Explain why your hardship does not result from actions that you have taken.

Please see Attachment A.

IV. Explain why the granting of the variance you seek will be consistent with the spirit, purpose, and intent of the CRC's rules, standards, or orders; preserve substantial justice; and secure public safety.

Please see Attachment A.

Please attach copies of the following:

Permit Application and Denial documents

Site Drawing with Survey and Topographical Information

Any letters filed with DCM or the LPO commenting on or objecting to your project Provide a numbered list of all true facts that you are relying upon in your explanation as to why you meet the four criteria for a variance. Please list the variance criterion, ex. unnecessary hardship, and then list the relevant facts under each criterion. [The DCM attorney will also
propose facts and will attempt to verify your proposed facts. Together you will arrive at a set of facts that both parties agree upon. Those facts <u>will be the only facts that the Commission will</u> consider in determining whether to grant your variance request.]

Attach all documents you wish the Commission to consider in ruling upon your variance request. [The DCM attorney will also propose documents and discuss with you whether he or she agrees with the documents you propose. Together you will arrive at a set of documents that both parties agree upon. Those documents <u>will be the only documents that the Commission will consider in determining whether to grant your variance request.</u>]

Pursuant to N.C.G.S. 113A-120.1 and 15A NCAC 7J .0700, the undersigned hereby requests a variance.

Date: 12-22-08

Signature: W. Q. Roman Vr. . W. A. Rangur . Atty- for Petitioners

This variance request must be filed with the Director, Division of Coastal Management, and the Attorney General's Office, Environmental Division, at the addresses shown on the attached Certificate of Service form.

CERTIFICATE OF SERVICE

I hereby certify that this Variance Request has been served on the State agencies named below by United States Mail or by personal delivery to the following:

Original served on: Director

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

copy:

Attorney General's Office Environmental Division 9001 Mail Service Center Raleigh, NC 27699-9001

This the 22rd day of December, 2008.

<u>W</u>.O.<u>K</u> Signature of Petitioner or Autorney

WAR\environ\R08-150-001

APPLICATION for Major Development Permit

(last revised 12/27/06)

DCM MP-1

North Carolina DIVISION OF COASTAL MANAGEMENT

1. Primary Applica	ant/ Landowner Info	orm	ation	· ·	· · · ·	· · ·		
Business Name		Project Name (if applicable)						
				·				
Applicant 1: First Name Mi			Last Name					
John		R.		Rouse				
Applicant 2: First Name MI		Last Name						
Debbie			Rouse					
If additional applicants, plea	ase attach an additional pag	e(s)	with names l	isted.				
Mailing Address			PO Box	City	City State			
2232 Warrenton Way				Jacksonville		NC		
ZIP Country Phone No.		FAX No.						
28546	28546 USA 910 - 347		- 4629 ext. 910 - 347 - 64		17 - 6485			
Street Address (if different	from above)			City	State		ZIP	
116 Leslie Dr.				Hubert	NC		-	
Email	······································							
john.rouse@wachovia.c	om							
······································	······································			······································			·····	
2 Agent/Contract	tor Information							

Business Name		······································				·····	
Land Management Group Inc.							
Agent/ Contractor 1: First Name Mark	Mi	Last Name Westendorff					
Agent/ Contractor 2: First Name Laura	MI	Last Name Stasavich					
Mailing Address PO BOX		PO Box 2522	City Wilmir	ngton		State NC	
ZIP 28402	Phone No. 1 910 - 452 - 0001 ext.			Phone No. 2	1	ext.	
FAX No. 910 452 0060	Contractor	- #		, ,			
Street Address <i>(if different from above)</i> 3805 Wrightsville Ave	<u>.</u>	City Wilmington	Stat NC	6	ZIP 2840	3 -	
Email mwestendorff@Imgroup.net_or.lstasavic	h@lmgroup.net						

<Form continues on back>

APPLICATION for

Major Development Permit

3. Project Location						
County (can be multiple)	Street Address	Street Address			State Rd. #	
Onslow	116 Leslie Dr.				1546	
Subdivision Name		City		State	Zip	
· ·		Hubert		NC	-	
Phone No.		Lot No.(s) (if many, attach additional page with list)				
910 - 347 - 4629 ext.			LOT 9, , , ,			
a. Injwhich NC river basin is the	project located?		 b. Name of body of water nearest to proposed project AIWW 			
c. Is the water body identified in Natural Manmade		nade?	d. Name the closest major water body to the proposed project site. AIWW			
e. Is proposed work within city limits or planning jurisdiction? ⊠Yes □No		 f. If applicable, list the planning jurisdiction or city limit the proposed work falls within. Hubert 				
				. · · ·		
4. Site Description	·····		<u></u>	· · · ·		
a. Total length of shoreline on the tract (ft.)		b. Size of entire tract (sq.ft.)				
91.71 ft.		0.57 acres or 24,829.2 sq.ft.				
c. Size of individual lot(s)		d. Approximate elevation of tract above NHW (normal high water) o NWL (normal water level)				
(If many lot sizes, please attach additional page with a list)		6' - 13' ⊠N	HW or □N	WL		
e. Vegetation on tract						
Upland areas are predom alternilfora, S. patens, and		rass with s	ome oaks and wax myrtle	. Coastal	wetland species include S.	
f. Man-made features and uses	now on tract					
Upland portion of the lot is		ulkhead is l	located along the waterwa	ard edge o	of the property.	
g. Identify and describe the exis Residential	ling land uses <u>adjacent</u> to t	the propose	d project site.	<u>, 10001</u> .t. ,	nnoi	
h. How does local government z	one the treat?		Le the proposed project on	naintant wit	h the applicable areis of	
Residential			 Is the proposed project consistent with the applicable zoning? (Attach zoning compliance certificate, if applicable) ⊠Yes □No □NA 			
j. Is the proposed activity part of	an urban waterfront redev	elopment pi	roposal?	□Yes	⊠No	
k. Has a professional archaeolog	gical assessment been dor	ne for the tra	act? If yes, attach a copy.	∐Yes	⊠No □NA	
If yes, by whom?						
I. Is the proposed project located National Register listed or elig	1 in a National Registered	Historic Dis	trict or does it involve a	□Yes	⊠No □NA	

<Form continues on next page>

APPLICATION for

Major Development Permit

	KX
m. (i) Are there wetlands on the site?	
(ii) Are there coastal wetlands on the site?	⊠Yes □No
(iii) If yes to either (i) or (ii) above, has a delineation been conducted? (Attach documentation, if available)	∐Yes ⊠No
n. Describe existing wastewater treatment facilities.	
None exist on the property.	
o. Describe existing drinking water supply source.	-
None	
 p. Describe existing storm water management or treatment systems. None 	
5. Activities and Impacts	
a. Will the project be for commercial, public, or private use?	Commercial Public/Government
b. Give a brief description of purpose, use, and daily operations of the project when complete between the project when complete a start of the project a	-
The applicant wishes to construct a two slip dock with two boat lifts to be used	
 Describe the proposed construction methodology, types of construction equipment to be of equipment and where it is to be stored. 	e used during construction, the number of each type
Standard construction machinery for the pier and dock structures and no dredg	jing is proposed.
d. List all development activities you propose.	
The applicant wishes to construct a fixed pier 6' wide and 137.5 ft. long termina	ating in a 11' X 32' T-Head with two hoat lifts to
be used at mid to high tide situations only.	
·	
e. Are the proposed activities maintenance of an existing project, new work, or both?	nowwood
	new work
f. What is the approximate total disturbed land area resulting from the proposed project?	N/A Sq.Ft or Acres
· · · · · · · · · · · · · · · · · · ·	
g. Will the proposed project encroach on any public easement, public accessway or other that the public has established use of?	area 🛛 Yes 🖾 No 🗍 NA
h. Describe location and type of existing and proposed discharges to waters of the state.	
No discharge is proposed to the waters of the state.	
i. Will wastewater or stormwater be discharged into a wetland?	□Yes ⊠No □NA
-	
If yes, will this discharged water be of the same salinity as the receiving water?	□Yes □No ⊠NA
j. Is there any mitigation proposed?	□Yes ⊠No □NA
If yes, attach a mitigation proposal.	

<Form continues on back>

~ .

Major Development Permit

 6. Additional Information In addition to this completed application form, (MP-1) the following items below, if applicable, must be submitted in order for the application package to be complete. Items (a) – (f) are always applicable to any major development application. Please consult the application instruction booklet on how to properly prepare the required items below. a. A project narrative. b. An accurate, dated work plat (including plan view and cross-sectional drawings) drawn to scale. Please give the present status of the proposed project. Is any portion already complete? If previously authorized work, clearly indicate on maps, plats, drawings to distinguist
b. An accurate, dated work plat (including plan view and cross-sectional drawings) drawn to scale. Please give the present status of the
b. An accurate, dated work plat (including plan view and cross-sectional drawings) drawn to scale. Please give the present status of the proposed project. Is any portion already complete? If previously authorized work, clearly indicate on maps, plats, drawings to distinguis
between work completed and proposed.
c. A site or location map that is sufficiently detailed to guide agency personnel unfamiliar with the area to the site.
d. A copy of the deed (with state application only) or other instrument under which the applicant claims title to the affected properties.
e. The appropriate application fee. Check or money order made payable to DENR.
f. A list of the names and complete addresses of the adjacent waterfront (riparian) landowners and signed return receipts as proof that succovers have received a copy of the application and plats by certified mail. Such landowners must be advised that they have 30 days in which to submit comments on the proposed project to the Division of Coastal Management.
Name Cecil S. Jr. and Anneatte G. Hargett Phone No.
Address 119 Leslie Dr., Hubert, NC 28539
Name Barbara Rae Nelson Treble Phone No.
Address 707 Doris Ave., Jacksonville, NC 28540
Name Phone No. Address
g. A list of previous state or federal permits issued for work on the project tract. Include permit numbers, permittee, and issuing dates, N/A
h. Signed consultant or agent authorization form, if applicable.
i. Wetland delineation, if necessary.
j. A signed AEC hazard notice for projects in oceanfront and inlet areas. (Must be signed by property owner)
k. A statement of compliance with the N.C. Environmental Policy Act (N.C.G.S. 113A 1-10), if necessary. If the project involves expenditu of public funds or use of public lands, attach a statement documenting compliance with the North Carolina Environmental Policy Act.

7. Certification and Permission to Enter on Land

I understand that any permit issued in response to this application will allow only the development described in the application. The project will be subject to the conditions and restrictions contained in the permit.

I certify that I am authorized to grant, and do in fact grant permission to representatives of state and federal review agencies to enter on the aforementioned lands in connection with evaluating information related to this permit application and follow-up monitoring of the project.

I further certify that the information provided in this application is truthful to the best of my knowledge. Und Mongement Group

Print Name / Date Signature

Please indicate application attachments pertaining to your proposed project.

DCM MP-2 Excavation and Fill Information

DCM MP-3 Upland Development

DCM MP-4 Structures Information

DCM MP-5 Bridges and Culverts

dender

Form DCM MP-4

STRUCTURES

(Construction within Public Trust Areas)

Attach this form to Joint Application for CAMA Major Permit, Form DCM MP-1. Be sure to complete all other sections of the Joint Application that relate to this proposed project. Please include all supplemental information.

1. DOCKING FACILITY/MARINA CHARACTERISTICS

- a. (i) Is the docking facility/marina:
- c. (i) Dock(s) and/or pier(s)
 - (ii) Number 1
 - (iii) Length <u>137.5'</u>
 - (iv) Width 6'
 - (v) Floating Yes No
- e. (i) Are Platforms included? ⊠Yes □No
 If yes:
 (ii) Number 1
 (iii) Length 32'
 (iv) Width 11'
 (v) Floating □Yes ⊠No

Note: Roofed areas are calculated from dripline dimensions.

- g. (i) Number of slips proposed
 - 2 (ii) Number of slips existing 0

- b. (i) Will the facility be open to the general public?
 □Yes ⊠No
- d. (I) Are Finger Piers included?
 Yes No
 - If yes: (ii) Number _____ (iii) Length _____ (iv) Width
 - (v) Floating Yes No
- f. (i) Are Boatlifts included? ⊠Yes ⊡No If yes:
 - (ii) Number
 2

 (iii) Length
 11.5'

 (iv) Width
 12'
- h. Check all the types of services to be provided.
 - Full service, including travel lift and/or rail, repair or maintenance service
 - Dockage, fuel, and marine supplies
 - Dockage ("wet slips") only, number of slips: 2
 - Dry storage; number of boats:
 - Boat ramp(s); number of boat ramps:
 - C Other, please describe:

Check the proposed type of siting:
 Land cut and access channel
 Open water; dredging for basin and/or channel
 Open water; no dredging required
 Other; please describe:

 Describe the typical boats to be served (e.g., open runabout, charter boats, sail boats, mixed types).
 open runabouts 20' - 25'

- k. Typical boat length: 25'
- m. (i) Will the facility have tie pilings?
 □Yes ⊠No
 (ii) If yes number of tie pilings?

I. (i) Will the facility be open to the general public? ☐Yes ⊠No

□ This section not applicable

2.	DOCKING FACILITY/MARINA OPERATIONS	This section not applicable
а.	Check each of the following sanitary facilities that will be included in the proposed project.	***************************************
	Toilets for patrons; Number: None; Location:	
	Showers Boatholding tank pumpout; Give type and location: None	
b .	Describe treatment type and disposal location for all sanitary wastewater. None	·
с.	Describe the disposal of solid waste, fish offal and trash. None	
d.	How will overboard discharge of sewage from boats be controlled? None	
e.	(i) Give the location and number of "No Sewage Discharge" signs proposed. None	·······
	(ii) Give the location and number of "Pumpout Available" signs proposed. None	антаналана - така дина со
f.	Describe the special design, if applicable, for containing industrial type pollutants, such as paint, sandblasting None	waste and petroleum products.
g.	Where will residue from vessel maintenance be disposed of? None	
n.	Give the number of channel markers and "No Wake" signs proposed. None	
i.	Give the location of fuel-handling facilities, and describe the safety measures planned to protect area water que None	uality.
	What will be the marina policy on overnight and live-aboard dockage? None	
د.	Describe design measures that promote boat basin flushing? None	
I.	If this project is an expansion of an existing marina, what types of services are currently provided? None	

m. Is the marina/docking facility proposed within a primary or secondary nursery area? □Yes ⊠No

n.	Is the marina/docking facility proposed within or adjacent to any she ☐Yes ⊠No	ellfish har	vesting area?
ο.	Is the marina/docking facility proposed within or adjacent to coastal (SB), or other wetlands (WL)? If any boxes are checked, provide CW NONE SAV SB WL None	l wetlands e the num	:/marsh (CW), submerged aquatic vegetation (SAV), shell bottom iber of square feet affected.
p.	Is the proposed marina/docking facility located within or within close If yes, give the name and address of the leaseholder(s), and give the		
3.	BOATHOUSE (including covered lifts)		⊠This section not applicable
a.	 (i) Is the boathouse structure(s): Commercial Public/Government Private/Community (ii) Number (iii) Length (iv) Width Note: Roofed areas are calculated from dripline dimensions. 		
4.	GROIN (e.g., wood, sheetpile, etc. If a rock groin, use MP-	-2, Exca	vation and Fill.)
a.	(i) Number		
5.	BREAKWATER (e.g., wood, sheetpile, etc.)		⊠This section not applicable
	Length Maximum distance beyond NHW, NWL or wetlands	b.	Average distance from NHW, NWL, or wetlands
6.	MOORING PILINGS and BUOYS		⊠This section not applicable
а.	Is the structure(s):	b.	Number
C.	Distance to be placed beyond shoreline Note: This should be measured from marsh edge, if present.	d.	
e,	Arc of the swing		

7. GENERAL

 Proximity of structure(s) to adjacent riparlan property lines
 Outer pilings for boat lifts to be built up to the 15' setback lines and edge of T-head to be 28' from riparlan corridor lines on both sides

Note: For buoy or mooring piling, use arc of swing including length of vessel.

c. Width of water body

218' on average

- e. (i) Will navigational aids be required as a result of the project? ☐Yes ⊠No ☐NA
 - (ii) If yes, explain what type and how they will be implemented.

8. OTHER

Proximity of structure(s) to adjacent docking facilities.
 147.4' to the northeast and 114.7' to the southwest

 Water depth at waterward end of structure at NLW or NWL -1.0. Boatlifts usage limited to mid to high tide.

This section not applicable

a. Give complete description:

Applicant wishes to construct a fixed pier (6' X 137.5') terminating in a T-Head (11' X 32') equipped with two boatlifts (each 11.5' X 12') out to the current pierhead line established by adjacent dock within 200 ft. The proposed dock will exceed the 1/4 and 1/3 waterbody width in order to position the structure in sufficient water depths so as to avoid the need to dredge in sensitive mud flat areas possibly containing shellfish. The use of the boatlifts will be limited to mid to high tide situations. No upland develop is proposed withing the current 75' AEC.

13 May 2008 Date

116 Leslie Dr.

Project Name

John and Debbie Rouse / Mark Westendorff - Land Management Group

oblicant Namy Applicant Signature

Project Narrative CAMA Major Permit Application Rouse Property Lot 9, 116 Leslie Drive, Hubert Onslow County, North Carolina John and Debbie Rouse, Applicant

John and Debbie Rouse, applicant, proposes to construct a residential pier with a T-Head dock equipped with two boat lifts constituting two slips. The property is located in Hubert, North Carolina, Lot number 9 (Parcel ID# 13210-29) adjacent to the AIWW in Onslow County. Waters in the vicinity of the property are classified as SA, ORW (Outstanding Resource Waters) by the North Carolina Environmental Commission (EMC) but are not Primary Nursery Area.

The proposed pier and dock structures include a 137.5' long 6' wide fixed pier terminating with an 11 ft x 32 ft fixed T-Head platform. Two boat lifts, 12 ft x 11.5 ft, will be constructed on either side of the T-Head platform. Water depths at the end of the dock are -1 ft (NLW). Boat lift use will be restricted to mid to high tide situations and no dredging is proposed. The waterward end of the proposed dock and associated boat lifts will not exceed the established pierhead line or the edge of the navigable channel between the existing spoil island and the mainland. All proposed structures will be located within the 15 ft. Riparian Setbacks.

The entire dock system will be privately owned and utilized solely by the applicant and their guests. No commercial activities or services are proposed. No wetlands will be impacted and all structures will be a minimum of 3.0 ft above any wetland vegetation. The proposed project involves water-dependent structures only. There will be no additional upland development.

ORSLOW COUNTY 06/12/2001 \$400.00 STATE COUNTY Position State Excise Tax	THIS DOCUMENT PRESENTED TO THE ONSLOW COUNTY TAX OFFICE DATE LO ITAL OF CLERK TO M
Excise Tax \$ 400,00	Recording Time, Book and Page
Mail after recording to DEBRAR RAY, 3484 Heno	
	GENERAL WARRANTY DEED
Brief Description for the index METES & BOUN	NDS LESLIE DRIVE
Brief Description for the index METES & BOUR	NDS LESLIE DRIVE
Brief Description for the index METES & BOUN NORTH CAROLINA THIS DEED made May 01, 2001, by and between	NDS LESLIE DRIVE GENERAL WARRANTY DEED

WTTNESSETH, that the Grantor, for a valuable consideration paid by the Grantce, 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 , SWANSBORO Township, ONSLOW County, North Carolina and more particularly described as follows:

BEGINNING at an iron stake in the southern right of way line of State Road 1546, Leslie Drive; said point located 720.0 feet along said right of way in a north east direction from a concrete monument, Nathan Matthews' corner, as shown on a Map of Peninsula Manor Street Dedication, recorded in Map Book 10, Page 75, Onslow County Registry; thence from said beginning point and following said right of way North 56 degrees 23 minutes East 90.0 feet to an iron stake; thence South 33 degrees 37 minutes East 265.98 feet to an iron stake, normal tide line of Intracoastal Waterway; thence following said tide line South 46 degrees 05 minutes West 91.47 feet to an iron stake; thence North 33 degrees 37 minutes West 282.33 feet to the point of beginning.

This conveyance is made subject to restrictive and protective covenants as recorded in Warranty Deed dated the 16th day of July, 1968, from Herbert A. Nelson and wife, Carol C. Nelson, to Grantors and appearing of record in Onslow County Registry.

The above property is also described as Lot 9, Peninsula Manor, Map Book 15, Page 25, Onslow County Registry.

50UX 1718 PARE 288

The property hereinabove described was acquired by Grantor by instrument recorded in Book 454, Page 171.

A map showing the above described property is recorded in

TO HAVE AND TO HOLD the aforesaid 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 selzed 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:

SUBJECT to 2001 Onslow County ad valorem taxes.

IN WITNESS WHEREOF, the Grantor has hereunto set his hand and seal, or if corporate, has caused this histrument 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.

	· · · · · · · · · · · · · · · · · · ·	Elizabeth M Jusan J. Cas atterney in	Walton by tellance, ther
	(Corporate Name)	ELIZABETH M. WALTON HER ATTORNEY IN FACT	N, 😽 SUSAN W. CASTELLANOS,
By:	анан — — — — — — — — — — — — — — — — — —	1104 (FL 1708 (120 F 17 5 2 5 6 4	(SEAL)
President			<u>, , , , , , , , , , , , , , , , , , , </u>
ATTEST:		al the William and a survey of the William and the survey of the sur	(SEAL)
Scutetary (Corporate Sea		a kan ang kananan ang kanan	, (SEAL)
SEAL-STAMP		he County and State of oresaid, certify the	n Grantor, personally appeared before me my hand and official stamp or seal, this Notary Public
SEAL-STAMP	acknowledged that he/she is Secretary of the corporation, the foregoing instru-	he County and State aforesaid, certify that of _, a North Carolina corporation, and t	personally came before me this day and bat by authority duly given and as the act mident, sealed with its corporate scal and 1. this _/_/
	My commission expires: / / /	······································	Notary Public
The foregoing Certificates, a	(his instrument and this constrants are duly regi	tered at the date and time and in the Bor ISTER OF DEEDS POR	sk and Page shown in the first page hereof
₩ <u> </u>			Deput/Assistant-Register of Deeds,

NORTH CAROLINA ONSLOW COUNTY

I, <u>Juan A. Thomas</u>, a Notary Public for said County and State, do hereby certify that <u>Susan W. Castellanos</u>, attorney in fact for <u>Elizabeth M. Walton</u>, personally appeared before me this day, and being by me duly sworn, says that he executed the foregoing and annexed instrument for and in behalf of the said <u>Elizabeth M. Walton</u>, and that his authority to execute and acknowledge said instrument is contained in an instrument duly executed, acknowledged, and recorded in the office of the Register of Deeds of Onslow County, State of North Carolina. on the ^{22nd} day of <u>June</u>, <u>19 >6</u> and that this instrument was executed under and by virtue of the authority given by said instrument granting him power of attorney.

I do further certify that the said <u>Susan W. Castellanos</u> acknowledged the due execution of the foregoing and annexed instrument for the purposes therein expressed for and in behalf of the said Elizabeth M. Walton

Witness my hand and official seal, this the <u>JAL</u> day of <u>June</u>, <u>209</u>.

MY COMMISSION EXPIRES: 5-20-2001

Thomas

SUSAN O. THOMAS NO TARY PUBLIC ONSLOW COUNTY, NC My Commission Expires 05/20/2009

NORTH CAROLINA, ORSLOW COUNTY The Integroing certificate(s) of <u>SUSAN 0_THOMAS</u> Notary(in) Public is (and employed to be and the integration of the integration of

it was place a table of the correct. This instruct	nent was presented for registration and recorded in this office in
Book 1718 Page 287 This 12	TH day of JUNE
2001 0 - 0 3.76 //	
	<u>L</u> , M.
MARIANA TA Thomas 11	
V	By
Register of Dards. Dashow County	Remister of Bread-



Agent Disclosure Form

To Whom It May Concern:

I/we, the undersigned, hereby authorize Land Management Group, Inc., to act as our agent in the preparation and representation of information submitted within the 404/401 and/or CAMA applications and/or septic permits. All questions in regards to this application should be directed to Land Management Group, Inc.

Please provide the following information:

Property Address/Project Name: Leslic Dr.Ve, HuberT. NK TAN JO 1321A-29

Debb: Ray Rouse Print Owner/Applicant Name Sign Owner/Applicant Name 4/23/07

Date

www.lmgroup.net • info@lmgroup.net • Phone: 910.452.0001 • Fax: 910.452.0060 3805 Wrightsville Ave., Suite 15, Wilmington, NC 28403 P.O. Box 2522, Wilmington, NC 28402

Land Management Group, Inc. Environmental Consultants Post Office Box 2522

Wilmington, NC 28402 Tel: 910-452-0001 Fax: 910-452-0060

Rob L. Moul Larry F. Baldwin W. Stephen Morrison G. Craig Turner Suite 14 Downy Branch Office Park 3805 Wrightsville Avenue Wilmington, NC 28403

12 May 2008

Mr. and Mrs. Cecil S. Hargett, Jr. 114 Leslie Dr. Hubert, NC 28539

RE: CAMA Major permit application, 116 Leslie Dr., John and Debbie Rouse, Hubert, Onslow County, NC

Dear Mr. and Mrs. Hargett:

As required by the North Carolina Division of Coastal Management, you are being notified of a request to construct a private dock and pier located adjacent to the Atlantic Intracoastal Waterway to the northeast of your property. The applicant, John and Debbie Rouse, proposes to construct a residential pier with a T-Head dock equipped with two boat lifts constituting two slips. The proposed pier and dock structures include a 137.5' long 6' wide fixed pier terminating with an 11 ft x 32 ft fixed T-Head platform. Two boat lifts, 12 ft x 11.5 ft, will be constructed on either side of the T-Head platform. Water depths at the end of the dock are -1 ft (MLW). Boat lift use will be restricted to mid to high tide situations and no dredging is proposed. The waterward end of the proposed dock and associated boat lifts will not exceed the established pierhead line or the edge of the navigable channel between the existing spoil island and the mainland. All proposed structures will be located within the 15 ft. Riparian Setbacks. I have enclosed a copy of the application forms and figures for your review. If you have no objection to the proposed work, the enclosed form should be completed and returned using the selfaddressed, stamped envelope. No response within thirty days of receipt of this letter also indicates no objection. Any objections to the proposed work should be directed to the NC Division of Coastal Management (contact information provided on enclosed form). If you have any questions concerning this information, please contact me at your convenience and I will be happy to discuss it with you.

Sincerel

Mark Westendorff Environmental Scientist

Enclosure: Notification form copy of application package

.

CERTIFIED MAIL

RETURN RECEIPT REQUESTED

Date: 12 May 2008

Dear: Mr. and Mrs. Hargett

This letter is to notify you as the representative for the adjacent riparian landowner of John and Debbie Rouse's, applicant, proposal to construct a residential pier with a T-Head dock equipped with two boat lifts constituting two slips. The proposed pier and dock structures include a 137.5' long 6' wide fixed pier terminating with an 11 ft x 32 ft fixed T-Head platform. Two boat lifts, 12 ft x 11.5 ft, will be constructed on either side of the T-Head platform. Water depths at the end of the dock are -1 ft (MLW). Boat lift use will be restricted to mid to high tide situations and no dredging is proposed. The waterward end of the proposed dock and associated boat lifts will not exceed the established pierhead line or the edge of the navigable channel between the existing spoil island and the mainland. All proposed structures will be located within the 15 ft. Riparian Setbacks. Attached is the complete Application Package as it was submitted to the North Carolina Department of Environment and Natural Resources, Division of Coastal Management.

Should you have no objections to this proposal, please check the appropriate statement below, sign and date the blanks below the statement and return this letter to: Debbie Wilson, 127 Cardinal Drive Ext. Wilmington, NC 28405-3845 as soon as possible.

Should you have objections to this proposal, please send your written comments to: Debbie Wilson, 127 Cardinal Drive Ext. Wilmington, NC 28405-3845. Comments must be received within 30 days.

Sincereiv Mark Westendorff

_____I have no objections to the project as presently proposed.

I have objections to the project as presently proposed and have enclosed comments.

Signature

Date

Enclosure: Notification form copy of application package

Land Management Group,Inc. Environmental Consultants Post Office Box 2522 Wilmington, NC 28402 Tel: 910-452-0001 Fax: 910-452-0060

Rob L, Moul Larry F. Baldwin W. Stephen Morrison G. Craig Turner Suite 14 Downy Branch Office Park 3805 Wrightsville Avenue Wilmington, NC 28403

12 May 2008

Miss Barbara Rae Nelson Treble 707 Doris Ave. Jacksonville, NC 28540

RE: CAMA Major permit application, 116 Leslie Dr., John and Debbie Rouse, Hubert, Onslow County, NC

Dear Miss Treble:

As required by the North Carolina Division of Coastal Management, you are being notified of a request to construct a private dock and pier located adjacent to the Atlantic Intracoastal Waterway to the southwest of your property. The applicant, John and Debbie Rouse, proposes to construct a residential pier with a T-Head dock equipped with two boat lifts constituting two slips. The proposed pier and dock structures include a 137.5' long 6' wide fixed pier terminating with an 11 ft x 32 ft fixed T-Head platform. Two boat lifts, 12 ft x 11.5 ft, will be constructed on either side of the T-Head platform. Water depths at the end of the dock are -1 ft (MLW). Boat lift use will be restricted to mid to high tide situations and no dredging is proposed. The waterward end of the proposed dock and associated boat lifts will not exceed the established pierhead line or the edge of the navigable channel between the existing spoil island and the mainland. All proposed structures will be located within the 15 ft. Riparian Setbacks. I have enclosed a copy of the application forms and figures for your review. If you have no objection to the proposed work, the enclosed form should be completed and returned using the selfaddressed, stamped envelope. No response within thirty days of receipt of this letter also indicates no objection. Any objections to the proposed work should be directed to the NC Division of Coastal Management (contact information provided on enclosed form). If you have any questions concerning this information, please contact me at your convenience and I will be happy to discuss it with you.

Sincerely,

Mark Westendorff Environmental Scientist

CERTIFIED MAIL

RETURN RECEIPT REQUESTED

Date: 12 May 2008

Dear: Miss Treble

This letter is to notify you as the representative for the adjacent riparian landowner of John and Debbie Rouse's, applicant, proposal to construct a residential pier with a T-Head dock equipped with two boat lifts constituting two slips. The proposed pier and dock structures include a 137.5' long 6' wide fixed pier terminating with an 11 ft x 32 ft fixed T-Head platform. Two boat lifts, 12 ft x 11.5 ft, will be constructed on either side of the T-Head platform. Water depths at the end of the dock are -1 ft (MLW). Boat lift use will be restricted to mid to high tide situations and no dredging is proposed. The waterward end of the proposed dock and associated boat lifts will not exceed the established pierhead line or the edge of the navigable channel between the existing spoil island and the mainland. All proposed structures will be located within the 15 ft. Riparian Setbacks. Attached is the complete Application Package as it was submitted to the North Carolina Department of Environment and Natural Resources, Division of Coastal Management.

Should you have no objections to this proposal, please check the appropriate statement below, sign and date the blanks below the statement and return this letter to: Debbie Wilson, 127 Cardinal Drive Ext. Wilmington, NC 28405-3845 as soon as possible.

Should you have objections to this proposal, please send your written comments to: Debbie Wilson, 127 Cardinal Drive Ext. Wilmington, NC 28405-3845. Comments must be received within 30 days.

Sincerely.

Mark Westendorff

_____I have no objections to the project as presently proposed.

I have objections to the project as presently proposed and have enclosed comments.

Signature

Date

SENDER: COMPLETE THIS SECTION		COMPLE	TE THIS SI	ECTION ON	I DELIVERY	•
 Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the revers so that we can return the card to you. Attach this card to the back of the mailpie or on the front if space permits. 	se	Bar	Dan red by (Prin Balka	TRE	216 C. De	
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 Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. 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. 	
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Hubert, NC 28539	3. Service Type 3. Certified Mail □ Express Mail □ Registered □ Return Receipt fi □ Insured Mail □ C.O.D.
	4. Restricted Delivery? (Extra Fee)
2. Article Number (Transfer from service label) 7	

.



4 August 2008

Jonathan Howell Division of Coastal Management 400 Commerce Ave. Morehead City, N.C. 28557

Re: CAMA Major Permit Application – 116 Leslie Dr, Hubert, Onslow County.

Dear Jonathan,

Enclosed are the updated application materials as requested in your recent memo dated 25 July 2008. If I may be of any assistance during your review of this application, please contact me at your convenience.

Sincerely, Mark Westendorff

Environmental Scientist

Encl.: Application forms and figures cc: John and Debbie Rouse

www.lmgroup.net • info@lmgroup.net • Phone: 910.452.0001 • Fax: 910.452.0060 3805 Wrightsville Ave., Suite 15, Wilmington, NC 28403 • P.O. Box 2522, Wilmington, NC 28402

LMG's Response to Request for Additional Information dated 25 July 2008 CAMA Major Permit Application Package 116 Leslie Drive, Hubert, NC

4 August 2008

Division of Coastal Management, Morehead City - Jonathan Howell

RE: Major Permit Corrections - John and Debbie Rouse

1) MP-1(4) o and p should read none instead of N/A.

- Noted and changed
- 2) Fill out MP-4 Section 2.
- Noted and completed Section 2.
- 3) Sign and date all plats.

- Signed and dated all plats

4) Take off reference to MHW and MLW and replace with NHW and NLW. MHW is located in the notes in places also as well as the cross sections.

- Changed MHW and MLW to NHW and NLW

5) Label the existing bulkhead on the plats.

-Noted and labeled on all plats as bulkhead or existing bulkhead

6) The existing conditions map states a 75' AEC in the legend.

- Removed entire legend since it was reflecting color differences between lines and current application is in Black and White.







WaB: Wando fine sand w: water

*Boundaries are approximate and are not meant to be absolute. Map Source: NRCS Soil Survey.

> John and Debbie Rouse Leslie Drive Onslow County, NC 02-07-209



SCALE 1" = 100'

Figure 3 of 9 Soils Map



John and Debbie Rouse Leslie Drive Onslow County, NC 02-07-209



Figure 4 of 9 Aerial Photograph















North Carolina Department of Environment and Natural Resources

Division of Coastal Management

Michael F. Easley, Governor

James H. Gregson, Director December 9, 2008 William G. Ross Jr., Secretary

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. John R. Rouse Mrs. Debbie Rouse 2232 Warrenton Way Jacksonville, NC 28546

Dear Mr. and Mrs. Rouse:

This letter is in response to your application for a Major Permit under the Coastal Area Management Act (CAMA), in which authorization was requested to install a dock with two boatslips adjacent to the Atlantic Intracoastal Waterway (AIWW), in Onslow County. Processing of the application, which was received as complete by the Division of Coastal Management's Morehead City Office on August 5, 2008, is now complete. Based on the state's review, the Division of Coastal Management has made the following findings:

- 1) The docking facility is located between two longer piers within 200 feet of the applicant's property.
- 2) The 138 feet proposed docking facility would extend approximately 113 feet into the waters of the AIWW as measured from the waterward edge of the coastal wetlands. The width of the water body at this location is approximately 218 feet at the project location as measured from the waterward edge of the coastal wetlands on both sides of the waterbody. The docking facility would exceed 1/3 the width of the water body by approximately 40 feet.
- 3) During the course of the joint State and Federal environmental review for the proposed project, the Division of Marine Fisheries (DMF) objected to the proposed project due to the significant adverse impacts of shallow bottom habitat. DMF would remove their objection if stops were included on both boatlifts at 18" above the substrate in order to limit the use to mid and high tide and minimize any potential for prop dredging within the waterbody.
- 4) The Division of Coastal Management has determined that the proposed project is inconsistent with the following rule of the Coastal Resources Commission:
 - a) 15A NCAC 07H.0208(b)(6)(J)(iii), which states that pier length shall be limited by "not extending more than one-fourth the width of a natural water body, or human-made canal or basin. Measurements to determine widths of the water body, canals or basins shall be made from the waterward edge of any coastal wetland vegetation which borders the water-body. The one-fourth length limitation shall not apply in areas where the U.S. Army Corps of Engineers, or local government in consultation with the Corps of Engineers, has established an official pier-head line. The one-fourth length limitation shall not apply when the proposed pier is located between longer piers within 200 feet of the applicant's property. However, the proposed pier cannot be longer than the pier head line established by the adjacent piers, nor longer than 1/3 the width of the water body."

400 Commerce Avenue, Morehead City, North Carolina 28557 Phone: 252-808-2808 \ FAX: 252-247-3330 \ Internet: www.nccoastalmanagement.net

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STATE OF NORTH CAROLINA DEPARTMENT OF JUSTICE

ROY COOPER Attorney General P.O. BOX 629 Raleigh, NC 27602 REPLY TO: WARD ZIMMERMAN ENVIRONMENTAL DIVISION TEL: (919) 716-6600 FAX: (919) 716-6767 wzimmermau@ncdoj.gov

MEMORANDUM

то:	Coastal Resources Commission
FROM:	Ward Zimmerman, Assistant Attorney General
DATE:	January 28, 2009 (for the February 11-13 CRC Meeting)
RE:	Variance Request # 09-01 by Bald Head Island Limited, LLC.

Petitioner proposes a paved marina access road on Bald Head Island, Brunswick County, North Carolina. The proposed project includes the construction of an eight-foot wide paved access road at Deep Point Marina in addition to five wooden landings at the dock entrances and a V-shaped marina entrance sign in the waters of the Cape Fear River. Petitioner's application was denied based on the proposed development's inconsistency with the Coastal Resources Commission's (CRC) 30-foot buffer rule in 15A NCAC 7H.0209(d)(10), and 15A NCAC 07H.0208(a)(1) and (a)(2)(B) which state that "[u]ses which are not water dependant shall not be permitted in coastal wetlands, estuarine waters and public trust areas" and that "[b]efore receiving approval for location of a use or development within these AEC's, the permitting authority shall find that no suitable alternative site or location outside of the AEC exists for the use or development." Petitioner seeks a variance from these requirements.

The following additional information is attached to this memorandum:

Attachment A: Relevant Rules Attachment B: Stipulated Facts Attachment C: Petitioner's Position and Staff's Response to Criteria Attachment D: Petitioner's Variance Request and Other Exhibits

cc: George L. Fletcher, Attorney for Petitioner
 Brunswick County CAMA LPO
 DCM Staff
 Jennie Hauser, Special Deputy Attorney General

ATTACHMENT A (Relevant Rules)

15A NCAC 07H.0208

(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 may include: utility easements; docks; wharfs; boat ramps; dredging; bridges and bridge approaches; revetments, bulkheads; culverts; groins; navigational aids; mooring pilings; navigational channels; simple access channels and drainage ditches.
- (2) Before being granted a permit by the CRC or local permitting authority, there shall be a finding 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 stated management objective.
 - (B) Before receiving approval for location of a use or development within these AECs, the permit-letting authority shall find that no suitable alternative site or location outside of the AEC exists for the use or development and, further, that the applicant has selected a combination of sites and design that will have a minimum adverse impact upon the productivity and biologic integrity of coastal marshland, shellfish beds, beds of submerged aquatic vegetation, spawning and nursery areas, important nesting and wintering sites for waterfowl and wildlife, and important natural erosion barriers (cypress fringes, marshes, clay soils).

15A NCAC 7H.0209

(d) Use Standards.

- (10) Within the Coastal Shorelines category (estuarine and public trust shoreline AECs), new development shall be located a distance of 30 feet landward of the normal water level or normal high water level, with the exception of the following:
 - (A) Water-dependent uses as described in Rule 07H .0208(a)(1) of this Section;
 - (B) Pile-supported signs (in accordance with local regulations);
 - (C) Post- or pile-supported fences;
 - (D) Elevated, slatted, wooden boardwalks exclusively for pedestrian use and six feet in width or less. The boardwalk may be greater than six feet in width if it is to serve a public use or need;
- (E) Crab Shedders, if uncovered with elevated trays and no associated impervious surfaces except those necessary to protect the pump;
- (F) Decks/Observation Decks limited to slatted, wooden, elevated and unroofed decks that shall not singularly or collectively exceed 200 square feet;
- (G) Grading, excavation and landscaping with no wetland fill except when required by a permitted shoreline stabilization project. Projects shall not increase stormwater runoff to adjacent estuarine and public trust waters;
- (H) Development over existing impervious surfaces, provided that the existing impervious surface is not increased and the applicant designs the project to comply with the intent of the rules to the maximum extent feasible;
- (I) Where application of the buffer requirement would preclude placement of a residential structure with a footprint of 1,200 square feet or less on lots, parcels and tracts platted prior to June 1, 1999, development may be permitted within the buffer as required in Subparagraph (d)(10) of this Rule, providing the following criteria are met:
 - (i) Development shall minimize the impacts to the buffer and reduce runoff by limiting land disturbance to only so much as is necessary to construct and provide access to the residence and to allow installation or connection of utilities such as water and sewer; and
 - (ii) The residential structure development shall be located a distance landward of the normal high water or normal water level equal to 20 percent of the greatest depth of the lot. Existing structures that encroach into the applicable buffer area may be replaced or repaired consistent with the criteria set out in Rules .0201 and .0211 in Subchapter 07J of this Chapter; and
- (J) Where application of the buffer requirement set out in 15A NCAC 07H .0209(d)(10) would preclude placement of a residential structure on an undeveloped lot platted prior to June 1, 1999 that are 5,000 square feet or less that does not require an on-site septic system, or on an undeveloped lot that is 7,500 square feet or less that requires an on-site septic system, development may be permitted within the buffer if all the following criteria are met:
 - (i) The lot on which the proposed residential structure is to be located, is located between:
 - (I) Two existing waterfront residential structures, both of which are within 100 feet of the center of the lot and at least one of which encroaches into the buffer; or
 - (II) An existing waterfront residential structure that encroaches into the buffer and a road, canal, or other open body of water, both of which are within 100 feet of the center of the lot;
 - (ii) Development of the lot shall minimize the impacts to the buffer and reduce runoff by limiting land disturbance to only so much as is necessary to construct and provide access to the residence and to allow installation or connection of utilities;
 - (iii) Placement of the residential structure and pervious decking may be aligned no further into the buffer than the existing residential structures and existing pervious decking on adjoining lots;

- (iv) The first one and one-half inches of rainfall from all impervious surfaces on the lot shall be collected and contained on-site in accordance with the design standards for stormwater management for coastal counties as specified in 15A NCAC 02H .1005. The stormwater management system shall be designed by an individual who meets applicable State occupational licensing requirements for the type of system proposed and approved during the permit application process. If the residential structure encroaches into the buffer, then no other impervious surfaces will be allowed within the buffer; and
- (v) The lots must not be adjacent to waters designated as approved or conditionally approved shellfish waters by the Shellfish Sanitation Section of the Division of Environmental Health of the Department of Environment and Natural Resources.

ATTACHMENT B (Stipulated Facts)

- 1. Bald Head Island Limited, LLC (Limited) has been the owner and developer of Bald Head Island since 1984. Bald Head Island was originally comprised of approximately 12,000 acres of land and estuarine marsh. The actual development on the Island consists of approximately 2,000 acres with the balance having been donated to the state of North Carolina for conservation purposes.
- 2. Plans call for a total of approximately 2,000 dwelling structures when Island build-out is completed; with the vast majority of those structures being single family and cluster single family homes.
- 3. In addition to visits by homeowners Bald Head Island receives thousands of annual visitors who rent vacation accommodations, visit the Old Baldy Lighthouse and participate in the programs of the Bald Head Island Conservancy. All of those individuals are transported through the existing Indigo Plantation Marina; however, these operations will be transferred to the Deep Point Marina in early summer of 2009. The entire Deep Point project totals seventy eight acres and will accommodate parking for 3,000 vehicles. According to records maintained by Limited in excess of 300,000 annual passenger trips are taken on ferries operated by the applicant.
- 4. With the exception of limited access by private boat, all persons, supplies, and materials are delivered to Bald Head Island by passenger ferries owned and operated by Limited; or barge service provided by Limited. The ferry is the principal means of evacuation for persons involved in medical emergencies. Passenger ferry operations are regulated by the North Carolina Utilities Commission.
- 5. The property immediately at issue is nine acres on which has been developed the Deep Point Marina. This development has taken place under the authority of CAMA Major Permit Number 91-96, issued on June 3, 1996. The marina bulkhead and entrance channel were completed in 2000. Since this completion, barge service and contractor/employee ferry operations have taken place from Deep Point. Ferry passengers currently utilize an existing covered landing dock and related walkways.
- 6. Limited is nearing completion of its new Deep Point passenger terminal, a multi-level 40,000 square foot structure authorized under Permit 91-96. Much of the design and ultimate function of the terminal was dictated by the requirements of the Transportation Safety Administration in the areas of passenger, baggage and staging security.
- 7. Deep Point passenger operations will primarily utilize Limited's two eighty-two foot passenger catamaran ferries. When placed in service at total capacity these vessels will have US Coast Guard K-boat certification enabling them to carry 230 passengers per trip. Currently these vessels are certified to carry 149 passengers per trip.

- 8. Limited is currently completing development of an 80 slip marina within a large portion of the Deep Point marina basin. The entire marina, including ferry and other commercial operations, will accommodate 100 slips. There is a jetty wall on the south shore.
- 9. Two of the items sought through this variance request pertain only to the recreational marina located generally southwest of the marina entrance and south jetty wall. The third item involves the proper location of marina signage adjacent to the Cape Fear River.
- 10. Pursuant to requests dated July 8, 2008 Limited initially sought:

(a) a minor modification of Permit 91-96 to allow it to construct an eight-foot wide paved access surface approximately 12 feet waterward of the normal water level within the thirty foot normal high water line, approximately a quarter mile in length, and approximately six-feet landward of the permitted six-foot wooden walkway that surrounds the recreational marina now under development. This was also to include a single 28 by 28 ft. paved turn-around area.

(b) a minor modification of Permit 91-96 to allow it to construct five (5) 20 by 28 ft. landings (platforms) at the tops of the ramps, within 30 feet of the normal water level, that allow access to the five floating pier or dock structures within the recreational marina, identified as Docks A, B, C, D, and E/F.

(c) a minor modification of Permit 91-96 to allow construction of a Deep Point Marina entrance sign out in the water as depicted on drawing DPM-5.

- 11. Pursuant to a letter dated August 28, 2008, the Division of Coastal Management denied the request for minor permit modification to allow the construction of the paved access surface and the turn-around area finding that it was to be located within the 30-foot Coastal Shoreline buffer inconsistent with 15A NCAC 07H.0209(d) (10); and also denied the request for minor permit modification to allow construction of five 20 by 28 ft. wooden landings or platforms at the tops of the dock access ramps within the 30-foot Coastal Shoreline buffer, based on a determination that the total square footage of the five structures was 2,800 square feet and thus in excess of the 200 feet allowed under 15A NCAC 07H.0209 (d)(10).
- 12. Pursuant to a letter dated December 5, 2008, DCM denied the request for a minor permit modification to allow placement of marina signage in the Public Trust Areas and Estuarine Waters Areas of Environmental Concern, due to three main reasons: the sign was considered a non-water dependent structure; a feasible high ground alternative location existed; and the proposed project was inconsistent with 15A NCAC 07H.0208(a)(1) and 15A NCAC 07H.0208(a)(2)(b).
- 13. During the course of the review of the in-water sign request, the U.S. Army Corps of Engineers indicated that they did not object to the proposed project.

- 14. The paved surface (road) requested by applicant runs from the Harbormaster's Office around the recreational marina to the entrance channel bulkhead a total distance of one-quarter of a mile.
- 15. Each of the five landings or platforms requested at the tops of the dock access ramps measures 20 by 28 ft. or 560 square feet, for a total area of 2,800 square feet.
- 16. The five landings or platforms requested will serve the six docks (A through F) and the number of slips (individual boat or vessel moorings) shown adjacent to the following dock designation:

A Dock	6 slips
B Dock	17 slips
C Dock	19 slips
D Dock	11 slips
E/F Dock	27 slips (total)

These existing docks have been used since 2000.

17. The Deep Point marina was originally sited and permitted in 1996, at which point in time the thirty foot buffer did not exist. Marina site clearing and excavation began in 1997 and 1998.

ATTACHMENT C (Petitioner's Position and Staff's Response to Criteria)

I. Will strict application of the applicable development rules, standards, or orders issued by the Commission cause the petitioner unnecessary hardships? If so, the petitioner must identify the hardships.

Petitioners' Position: Yes.

Petitioner contends that the application of the cited rules constitutes an unnecessary hardship because the rules do not appear to address facts and characteristics inherent to this property and project. The rules are directed at individual piers, docks and related structures such as are customarily built on residential lots or smaller tracts. This quite naturally might lead to hardship in cases such as the one that is the subject of this request, involving a 100 slip facility.

The thirty foot high water set back became effective after the marina was designed and initially permitted in 1996. The original design for the marina was largely driven by the characteristics of the property, and these are the characteristics which CAMA took into account when issuing the permit. The 8' wide paved surface is meant as a safety/access road surrounding the recreational portion of the marina running from the Harbormaster's Office to the northeast end of the marina (F-Dock) at the entrance channel bulkhead. The distance from the Harbormaster's Office to this point is approximately one quarter of a mile. One of the principal purposes of this surface is to allow access for fire and other emergency vehicles; including equipment that would be employed in order to contain a fuel or hazmat spill.

In addition, the first CAMA permit for the Deep Point site that was issued before the marina was constructed tasked Limited to assure adequate trash pickup to keep the waters of the marina clean. Petitioners' plans call for the Harbormaster to use electric golf carts or similar vehicles for daily trash pickups. Servicing numerous trash receptacles that surround the marina as well as garbage generated by recreational use is better accomplished by these means, which in turn serves the original intent at the time of permitting, as well as preventing degradation of the adjacent waters and land within the AEC.

At the time the marina was originally sited/permitted in 1996, there was not an issue with placing the minimal width paved surface between the adjacent wetland and the marina bulkhead. The property has not changed; nor has the concept for the marina. The paved access surface will facilitate a limited and defined use that will occur behind a substantial bulkhead within the marina confines. When one considers that this use is being made in the interest of safety and the environmental objectives upon which CAMA is in part premised, Petitioners submit that it becomes the reasonable use for the property and to do otherwise becomes a hardship per se.

Petitioners also suggest that the 200 square foot dock landing limitation is more appropriate for an individual residential dock and landing constructed on an individual lot. Deep Point Marina is both a commercial and recreational 100 slip marina. There are five docks servicing six to seventeen slips served by each of the proposed wooden landings. Petitioners contend that if the rule is applied as currently cited, only 40 square feet is allowed for each landing. Handicap turn around space (5' diameter circle) alone requires 20 square feet of clear space at the top of each ramp.

By way of further illustration, if one allocates the total decks and landings square footage requested by Petitioners among all the boat slips, the area allocable to each slip is well below the regulatory limitation. Eighty individual piers or docks would arguably qualify for a total of 16,000 square feet of deck or landing space. However, these five landings will occupy only 3,000 square feet, or less than 40 square feet per each boat accommodated, well below the 200 square foot total contained in the rule. It is only in the aggregate that an issue arises; but no provision is made in the rule for this circumstance. Petitioners believe that a marina such as this, permitted, constructed and operated under a total use of the property, becomes reasonable because more citizens can make use of the coastal environment via a facility that has less total impact upon the AEC. Since strict application of the rule will not allow for this result, it can only be reasonably concluded that an unnecessary hardship exists by virtue of the application of the rule.

With regard to the location of the marina signage, Petitioners believe that a variance is justified because the current ruling of the DCM fails to take into account the unique circumstances that arise at this project and property, which in turn produces an unnecessary hardship. Approaching the marina property from the northeast boaters traveling the Cape Fear River/ICW encounter the lengthy Archer Daniels Midlands (ADM) pier, Price's Creek (the inlet on which the terminal for the Southport-Fort Fisher Ferry is located) and then Limited's Deep Point Marina within a distance of 3000 feet. Approaching from the southwest, the Deep Point Marina, Price's Creek and the ADM pier are still prominent navigational features; and below Deep Point Marina are a number of lengthy private piers and small inlets.

Even using charts, GPS and Plotters, which many recreational boaters carry today, the features near the property can be confusing. This possibility is all the more likely at night or during reduced visibility because all of these features are marked by the standard red and green lighted markers. The ADM facility is purely commercial and handles larger sea going vessels. The car ferries that operate in and out of Price's Creek are sizable and have little room to maneuver in that inlet. Petitioners believe that placement of the Deep Point Marina sign as requested will reduce the likelihood of confusion when identifying the marina entrance from among all these features. This in turn will help avoid potential safety issues if pleasure boaters were to encounter commercial vessels because of a mistake in locating the marina entrance.

With safety and avoidance of confusion being the primary concerns the Petitioners seek to address, they suggest that the placement of the sign becomes, in part, the reasonable use of the property. Petitioners also note that the Army Corps of Engineers does not object to this request.

Staff's Position: No.

Staff believes that strict application of the buffer rule and the general use standards for non-water dependent uses such as a marina sign do not cause an unnecessary hardship for the Petitioner. The Petitioner believes that the cited rules are directed at residential development or small lots and not for marinas such as this. Staff does not agree. Large developments such as this marina and its associated amenities are exactly the type of entity the staff believes the Commission intended to regulate with its regulations. Impervious coverage and built upon areas within the 30-foot buffer are the major causes of stormwater runoff. In addition, the Commission recognized that there are traditional activities that do not create significant impacts to water quality and thus adopted 10 exceptions to the buffer rule that would have minimal impact to the buffer itself and to the water quality of the adjacent waters. Petitioners request does not fall into any of the 10 exceptions.

In the staff's opinion, the Petitioner has not attempted to minimize the project in either size or location of either the road or the five platforms. Similarly, the Petitioner has not submitted any kind of innovative stormwater collection system to mitigate for the impacts to the 30-foot buffer as a result of the paved 8-foot road or five platforms. Staff recognizes the need for measures to ensure public safety within the marina including fire and emergency vehicles, but alternatives that are more compliant with the buffer standards appear to be available. In addition, arguing that the 8-foot wide paved road will facilitate trash pickup, and therefore prevent degradation of the adjacent waters, is not an adequate justification for the staff.

Petitioner also argues that the buffer standards limiting how much slatted and elevated decking can be located in the buffer is too restrictive for a marina of this size and that the square footage limitation should be allocated for each pier or dock. In this case, the Petitioner is confusing dock and pier standards with buffer standards. The regulations associated with the size of docks and piers are more associated with Public Trust impacts, while the water quality concerns addressed in this case relate to the buffer standards. Docks and piers located within large marinas over the water are already given tremendous freedom in terms of size to address the specific uses of those structures. In addition, the rules in question here are the buffer standards which are intended to protect water quality.

Finally, the Petitioner argues that the marina sign needs to be located in the Public Trust Areas and Estuarine Waters and not on the shoreline because of limited visibility and large docks adjacent to the marina tract. Staff argues that allowing such non-water dependent uses out into the Public Trust Waters is unnecessary and contrary to the Public Trust doctrine.

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

Petitioners' Position: Yes.

Deep Point Marina is situated along the Cape Fear River/Intracoastal Waterway, at the north end of Southport, adjacent to the NC Southport-Fort Fisher State Ferry Site at the end of NC Route 211/Ferry Road. The 78 acre site was purchased in 1996 in order to provide sufficient parking capacity for future build out of Bald Head Island and to accommodate the corresponding demands for passenger ferry and barge operations. The marina basin was sited with much feedback from CAMA, and the entrance channel was shifted based on CAMA recommendations. The final siting was within approximately 25' of the east wall of the marina. Petitioners recall that at the time the 30' buffer restrictions were not in place.

The Deep Point Marina Passenger Ferry Terminal has undergone much thought and planning as to staging passenger and baggage drop-off and pick-up. The Bald Head Island Ferry is now and will likely continue to be the largest passenger carrying operation in the state, conducting the most frequent passenger runs between destinations. The ferries are currently certified to carry 149 passengers and when the Deep Point facility is completed will be certified under US Coast Guard K-Boat requirements for the carriage of up to 230 passengers. As a consequence of this the property design and marina operation were driven by the need for a sizeable passenger ferry terminal, the design of which was independently influenced by Transportation Safety Administration and US Coast requirements.

While ferry operations do not directly necessitate this variance request, the needs and requirements of the Ferry Terminal were of prime importance in shaping the whole site. The recreational portion of the marina is located mostly on the southern end of the marina, instead of being wrapped around the whole marina as would usually be the case. Petitioners believe that the 80 boat slips at issue require sufficient access for safety vehicles and equipment; and that the decks and landings as requested are reasonable given this property and project. The location of the property, adjacent to the Southport-Fort Fisher ferry operation and ADM pier, and other existing piers and small inlets, is a condition peculiar to the Deep Point Marina that creates the hardship from the signage perspective.

Petitioners assert that it is thus the comprehensive character of the marina with the incorporated recreational component that constitutes conditions peculiar to the property which in turn cause the hardship under the rules as currently applied.

Staff's Position: No.

Staff disagrees with the Petitioner that there are hardships that result from conditions that are peculiar to the Petitioner's property. The Deep Point Marina is typical of many high ground basins in size of the basin as well as the number of slips. Because it runs a passenger ferry to an island more frequently than other marinas does not give it the privilege or right to unnecessarily encroach into the Public Trust Areas with signs, or to impact the buffer such that water quality of the adjacent waters is impaired. Staff sees nothing in the location of the Deep Point Marina that is unique or special.

III. Do the hardships result from the actions taken by the Petitioner? Explain.

Petitioners' Position: No.

Petitioners note that with regard to the paved access to the marina slips, the marina permit was issued in 1996, before the 30' "buffer rule" was in existence. Although there have been numerous minor permit modifications through the years, the basic design, size and siting of the marina is the same as initially approved in 1996. It is the previously approved characteristics of design and siting that apparently have come into question under the current rules application, which in turn creates hardship. It is impossible to shift the marina, and the space constraints due to the 404 wetland were not an issue when the marina was constructed.

The Deep Point Marina is a comprehensive development providing for passenger ferry, cargo and recreational boater usage, constructed pursuant to an equally comprehensive matrix of permits and approvals. The design and engineering was determined by the characteristics of the site and best reasonable usage. Petitioners submit that the deck and landing limitation was misapplied to this set of facts in that it does not address the attributes of a large marina. As Petitioners have previously set forth above, if this issue is approached from the standpoint of allocation of the total deck and landing area among the number of slips served, the total square footage is well below that which would be permitted for this number of pier or dock users.

Regarding the marina signage, Petitioners note that those concerns arise because of the influences on this property from substantial neighboring commercial and public transportation operations, matters that are completely separate from actions taken by the applicants.

Staff's Position: Yes.

Staff believes that any hardship that the applicant suggests is as a result of the design of this particular project. Many marinas have dry hydrants on the docks for fire protection to serve inaccessible boat slips. This is a common solution to fire protection for docks and marinas. Furthermore, the Petitioner has not attempted to shift the 8'-wide paved road away from the water while in fact there are many locations along the perimeter of the marina where the road could be shifted. Similarly, the same can be said of the platforms. These structures do not have to be located in the buffer at all. Finally, the Petitioner has not attempted to provide any kind of innovative stormwater collection system to address the encroachment of the road and platforms into the buffer or the increase in impervious coverage.

The Petitioner submits that the deck and landing limitation was misapplied to their facts because they are a large marina. Staff disagrees. The four square foot per linear foot of shoreline rule for docks and piers can be waived for marinas when a documented use justifies the need. This case deals with platforms in the buffer, however, the rule is explicit and the exception to the rule only allows for a total of 200 square feet of platform in the 30'-buffer. It should be noted that the existing marina has an 8'-wide dock around much of its perimeter with a 6'-wide high ground wooden walkway around the entire perimeter. Staff asserts that additional platforms within the buffer appear unnecessary or at least not critical to the operation of the marina.

IV. 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.

Petitioners' Position: Yes.

Petitioners contend that the primary purpose of the requested paved access surface is to provide access for fire and emergency vehicles and transportation of equipment in the event of an emergency. In order to accomplish this purpose the surface must access all marina slips and run to the channel entrance bulkhead. These vehicles are heavy and are not particularly suited for travel on the sand based surface of the marina site generally. Petitioners submit that these concerns for safety are entirely consistent with the applicable rules, the underlying intent, and justice.

The size (square footage) of the wood dock landings is based on the placement of items that are necessary for a safe and modern marina including life rings and lines, site lighting, bike racks, dock carts and suitable garbage receptacles. There is also a concern for ample space to accommodate handicap access. In addition, the total area of deck or landing space will be substantially less than would be allowable in the case of individual or smaller structures serving the same number of boaters. The minor changes sought pursuant to Petitioners' variance request will have no conceivable adverse impact on water quality or the surrounding estuarine areas. In fact, to the extent that they facilitate better trash containment and collection, they will prevent degradation of the surrounding waters.

Regarding the marine signage, Petitioners submit that their request falls largely in the realm of concern for public safety as it seeks to avoid confusion and potential encounters between commercial and private vessels/boaters. In addition, within the letter and spirit of the applicable rules moorings pilings and pilings used for navigational aids would likely be permitted; and so Petitioners believe that this use is similar in application.

Petitioners assert that the changes requested will not expand the usage of the permitted area or enlarge the development. They will, however, improve the use and enjoyment of this facility by members of the public; a facility which in and of itself will provide significant recreational access to these waters and surrounding coastal environments. Most importantly, the changes will contribute to improved safety for those using the marina.

Staff's Position: No.

Staff does not believe that the project meets the spirit, purpose and intent of the rules. The signage in the water conflicts with typical Public Trust Areas (waters and bottoms) uses. Such allowances could open up the Public Trust Waters to a commercializing of these waters and the possibility of other uses would be limitless.

The primary purpose of the 30'-buffer is to ensure protection of the water quality of the adjacent waterbody. Constructing an 8'-wide paved road within the buffer with no means of controling stormwater runoff is in direct conflict with the management objectives of the Coastal Shoreline AEC as well as the use standards of the rule. The management objective of the Coastal Shoreline is to ensure that development is compatable with the dynamic nature of coastal shorelines as well as the values and the management objectives of the estuarine and ocean system. Other objectives are to coordinate and establish a management system capable of conserving and utilizing these shorelines so as to maximize their benefits to the estuarine and ocean system. Staff believes a paved road along much of the perimeter of the marina, five 560-square foot platforms and a sign in the water are more than mere changes as the Petitioner asserts, and that each has significant ramifications that run contrary to the objectives of the Commission's rules.

ATTACHMENT D (Petitioner's Variance Request and Other Exhibits)

DCM FORM 11 (revised 6/26/06)

CAMA VARIANCE REQUEST

DCM FILE N0. 91-96

RECANDO

Petitioner supplies the following information:

N.C. ATTORNEY GENERAL Environmental District

JAN 1、年前

Your NameBald Head Island Limited, LLC (Bruce Marek, P.E., Agent)AddressP.O. Box 3069Telephone910-457-7517Fax and/or Email910-457-7463 bmarek@bhisland.com

Name of Your Attorney (if applicable)George L. FletcherFletcher, Ray & Satterfield, LLPAddress 131 Racine DriveSuite 201Wilmington, NC 28403Telephone910-251-9900gfletch@fletcherlaw.com

Have you received a decision from the Division of Coastal Management (DCM) or a Local Permit Officer denying your application for a CAMA permit?

____ no

(You are not entitled to request a variance until your permit application has been denied.)

________X_____ yes (You may proceed with a request for a variance.)

What did you seek a permit to do?

- 1. To have an 8-foot wide paved access road with a turnaround for emergency vehicles and harbormaster access to the end of the Deep Point Marina, within the 30' marina buffer. Drawing DPM-6
- 2. To have five 20'x 28' wooden landings (platforms), one each at the tops of the ramps leading to A, B, C, D & F Docks of the recreational portion of the 100 slip marina. This size is requested to allow for space for "raccoon proof" garbage receptacles, dock cart storage, ring buoy storage, a bike rack, and proper space for handicap turnaround without encroaching on the continuous flow of pedestrian traffic on the already approved parallel to bulkhead 6' wood walkway. Drawing DPM-4
- 3. To have an 8' x 20' V-shaped marina entrance sign, north of the Deep Point Marina entrance channel, in the waters of the Cape Fear River, landward of a line between the end of the ADM Pier and the Deep Point Jetty (waterward) end. Drawing DPM-5

What Coastal Resources Commission rule(s) prohibit this type of development?

1. 15A NCAC 07H.0209(d)(10) (A) Private Roads that are non-water dependent within 30 of normal high water;

2. 15A NCAC 07H.0209(d)10) (F) Decks/Observation Decks limited to slatted, wooden, elevated, and unroofed decks that shall not singularly or collectively exceed 200 square feet. 3. 15A NCAC 07H.0208(a)(1) "Uses which are not water dependent shall not be permitted in coastal wetlands, estuarine waters and public trust areas" and 15 NCAC 07H.0208(a)(2)(b) "Before receiving approval for location of a use or development within these AEC's, the permitletting authority shall find that no suitable alternative site or location outside of the AEC Exists for the use or development."

Can you redesign your proposed development to comply with this rule? ______ If your answer is no, explain why you cannot redesign to comply with the rule.

Actually this is best expressed as a qualified "no" when viewed in context. The marina is home to the Bald Head Island Passenger Ferries and the tug/barge service to the island. Limited is already well into development and construction of the recreational marina; and some passenger (contractor) operations have been operating out of Deep Point since 2001. The barge service to the island has been operating out of the marina entrance channel berth since 2000, and prior to that was operating off the beach-head on the site since 1996. This has been accomplished pursuant to the original permit and a number of renewals and minor modifications occurring since 1996. We believe that the best, most reasonable and safest use of the marina, including the recreational portion of the marina, can be accomplished pursuant to the designs and structures sought by this variance request. We also believe that the rules should not be strictly applied in this instance because of the unique characteristics of this property and indeed all large marinas. As discussed infra., we contend that the spirit of CAMA and its rules and regulations is fully served by this request.

Can you obtain a permit for a portion of what you wish to do? ___yes__ If so, please state what the permit would allow.

A number of what the applicant has identified as Marina Necessities/Accessories have already been approved. And, as stated the general marina permit has been issued since 1996. However the three matters at issue under this request have been denied by DCM rulings. In this instance we believe that the access surface, size of decks and landings, and signage location are important stand alone issues; although integral to overall design and marina operations.

State with specificity what you are NOT allowed to do as a result of the denial of your permit application. It will be assumed that you can make full use of your property, except for the uses that are prohibited as a result of the denial of your permit application.

- 1. We will not have safe access for emergency vehicles along the major docks.
- 2. The top of ramp dock landings will be undersized for safe usage of the marina.
- 3. Place the marina entrance sign in a location that is visible from both the north and south approaches from the Cape Fear River to the marina, considering the visual obstructions from the ADM fixed pier and the entrance to the adjacent NC State Ferry landing at Prices Creek.

RESPOND TO THE FOUR STATUTORY VARIANCE CRITERIA:

I. Identify the hardship(s) you will experience if you are not granted a variance and explain why you contend that the application of this rule to your property constitutes an unnecessary hardship. [The North Carolina Court of Appeals has ruled that this factor depends upon the unique nature of the property rather than the personal situation of the landowner. It has also ruled that financial impact alone is not sufficient to establish unnecessary hardship, although it is a factor to be considered. The most important consideration is whether you can make reasonable use of your property if the variance is not granted. [*Williams v. NCDENR, DCM, and CRC*, 144 N.C. App. 479, 548 S.E.2d 793 (2001).]

In general we believe that application of the cited rules constitutes an unnecessary hardship because the rules do not appear to address facts and characteristics inherent to this property and project, or for that matter any sizeable commercial/recreational marina. The rules, although thoughtfully drafted, are directed at individual piers, docks and related structures such as are customarily built on residential lots or smaller tracts. This quite naturally might lead to hardship in cases such as the one that is the subject of this request involving a 100 slip facility.

The thirty foot high water set back became effective after the marina was designed and initially permitted in 1996. The original design for the marina was largely driven by the characteristics of the property, and these are the characteristics which CAMA took into account when issuing the permit. The 8' wide paved surface is meant as a safety/access road surrounding the recreational portion of the marina running from the Harbormaster's Office to the northeast end of the marina (F-Dock) at the entrance channel bulkhead. The distance from the Harbormaster's Office to this point is approximately one quarter of a mile. One of the principal purposes of this surface is to allow access for fire and other emergency vehicles; including equipment that would be employed in order to contain a fuel or hazmat spill.

In addition, the first CAMA permit for the Deep Point site issued before the marina was constructed tasked Limited to assure adequate trash pickup to keep the waters of the marina clean. Our plans call for the Harbormaster to use electric golf carts or similar

vehicles for daily trash pickups. Servicing the numerous trash receptacles that surround the marina as well as garbage generated by recreational use is better accomplished by this means, which in turn serves the original intent at the time of permitting, as well as preventing degradation of the adjacent waters and land within the AEC.

At the time the marina was originally sited/permitted in 1996 there was not an issue with placing the minimal width paved surface between the adjacent wetland and the marina bulkhead. The property has not changed; nor has the concept for the marina. The paved access surface will facilitate a limited and defined use that will occur behind a substantial bulkhead within the marina confines. When one considers that this use is being made in the interest of safety and the environmental objectives upon which CAMA is in part premised, we submit that it does become the reasonable use for the property and to do otherwise becomes a hardship per se.

Continuing in this regard we suggest that the 200 sq ft dock landing limitation is more appropriate for an individual residential dock and landing constructed on an individual lot. Deep Point Marina is both a commercial and recreational 100 slip marina. There are five docks servicing six to seventeen slips served by each of the proposed wooden landings. If the rule is applied as currently cited only 40 sq ft is allowed for each landing. Handicap turn around space (5' diameter circle) alone requires 20 sq ft of clear space at the top of each ramp.

By way of further illustration, if one allocates the total decks and landings square footage herein requested among all the boat slips the area allocable to each slip is well below the regulatory limitation. Eighty individual piers or docks would arguably qualify for a total of 16,000 square feet of deck or landing space. However, these five landings will occupy only 3,000 square feet, or less than 40 square feet per each boat accommodated, well below the 200 square foot total contained in the rule. It is only in the aggregate that an issue arises; but no provision is made in the rule for this circumstance. We believe that a marina such as this, permitted, constructed and operated under a comprehensive plan better accomplishes the regulatory intent of CAMA. The applicant's total use of the property becomes reasonable in fact because more citizens can make use of the coastal environment via a facility that has less total impact upon the AEC. Since strict application of the rule will not allow this result, it can only be reasonably concluded that an unnecessary hardship exists by virtue of the application of the rule.

Turning to our request with regard to the location of marina signage, we believe that a variance is justified because the current ruling of the DCM fails to take into account the unique circumstances that arise at this project and property, which it turn produces an unnecessary hardship. Approaching the marina property from the northeast boaters traveling the Cape Fear River/ICW encounter the lengthy Archer Daniels Midlands (ADM) pier, Price's Creek (the inlet on which the terminal for the Southport-Fort Fisher Ferry is located) and then Limited's Deep Point Marina within a distance of 3000 feet. Approaching from the southwest, the Deep Point Marina, Price's Creek and the ADM pier are still prominent navigational features; and below the Deep Point Marina are a

number of lengthy private piers and small inlets.

Even using charts, GPS and Plotters, which many recreational boaters carry today, the features near the property can be confusing. This possibility is all the more likely at night or during reduced visibility because all of these features are marked by the standard red and green lighted markers. The ADM facility is purely commercial and handles larger sea going vessels. The car ferries that operate in and out of Price's Creek are sizeable and have little room to maneuver in that inlet. We believe that placement of the Deep Point Marina sign as requested will reduce the likelihood of confusion when identifying the marina entrance from among all these features. This in turn will help avoid potential safety issues if pleasure boaters were to encounter commercial vessels because of a mistake in locating the marina entrance.

With safety and the avoidance of confusion being the primary concerns we seek to address via this request, we suggest that placement of the sign as requested becomes, in part, the reasonable use of the property. We also note that the Army Corps of Engineers does not object to this request.

II. Describe the conditions that are peculiar to your property (such as location, size, and topography), and cause your hardship.

Deep Point Marina is situated along the Cape Fear River/Intracoastal Waterway, at the north end of Southport, adjacent to the NC Southport-Fort Fisher State Ferry Site at the end of NC Route 211/Ferry Road. The 78 acre site was purchased in 1996 in order to provide sufficient parking capacity for future build out of Bald Head Island and to accommodate the corresponding demands for passenger ferry and barge operations. The marina basin was sited with much feedback from CAMA, and the entrance channel was shifted based on CAMA recommendations. The final siting was within approximately 25' of the east wall of the marina. We recall that at the time the 30' buffer restrictions were not in place.

The Deep Point Marina Passenger Ferry Terminal has undergone much thought and planning as to staging passenger and baggage drop-off and pick-up. The Bald Head Island Ferry is now and will likely continue to be the largest passenger carrying operation in the state, conducting the most frequent passenger runs between destinations. The ferries are currently certified to carry 149 passengers and when the Deep Point facility is completed will be certified under US Coast Guard K-Boat requirements for the carriage of up to 230 passengers. As a consequence of this the property design and marina operation were driven by the need for a sizeable passenger ferry terminal, the design of which was independently influenced by Transportation Safety Administration and US Coast Guard requirements.

While ferry operations do not directly necessitate this variance request, the needs and requirements of the Ferry Terminal were of prime importance in shaping the whole site. The recreational portion of the marina is located mostly on the southern end of the

marina, instead of being wrapped around the whole marina as would usually be the case. We believe that the 80 boat slips at issue require sufficient access for safety vehicles and equipment; and that the decks and landings as requested are reasonable given this property and project. The location of the property, adjacent to the Southport-Fort Fisher ferry operation and ADM pier, and other existing piers and small inlets, is a condition peculiar to the Deep Point Marina that creates the hardship from the signage prospective.

It is thus the comprehensive character this marina with the incorporated recreational component that constitutes conditions peculiar to the property which in turn cause the hardship under the rules as currently applied.

III. Explain why your hardship does not result from actions that you have taken.

With regard to the paved access to the marina slips we note that when the marina permit was issued in 1996 the 30' "buffer rule" was not in existence. Although there have been numerous minor permit modifications through the years the basic design, size and siting of the marina is the same as initially approved in 1996. It is the previously approved characteristics of design and siting that apparently have come into question under the current rules application, which in turn creates the hardship. It is impossible to shift the marina, and the space constraints due to the 404 wetland were not an issue when the marina was constructed.

The Deep Point Marina is a comprehensive development providing for passenger ferry, cargo and recreational boater usage, constructed pursuant to an equally comprehensive matrix of permits and approvals. The design and engineering was determined by the characteristics of the site and best reasonable usage. We submit that the deck and landing limitation was misapplied to this set of facts in that it does not address the attributes of a large marina. As we have shown supra, if this issue is approached from the standpoint of allocation of the total deck and landing area among the number of slips served the total square footage is well below that which would be permitted for this number of pier or dock users.

In the case of our request regarding the location of the marina signage we note that these concerns arise because of the influences on this property from substantial neighboring commercial and public transportation operations, matters that are completely separate from actions taken by the applicant.

IV. Explain why the granting of the variance you seek will be consistent with the spirit, purpose, and intent of the CRC's rules, standards, or orders; preserve substantial justice; and secure public safety.

The primary purpose of the requested paved access surface is to provide access for fire and emergency vehicles and transportation of equipment in the event of an emergency. In order to accomplish this purpose the surface must access all marina slips and run to the channel entrance bulkhead. These vehicles are heavy and are not particularly suited for travel on the sand based surface of the marina site generally. We submit that these concerns for safety are entirely consistent with the applicable rules, the underlying intent, and justice.

The size (square footage) of the wood dock landings is based on the placement of items that are necessary for a safe and modern marina including life rings and lines, site lighting, bike racks, dock carts and suitable garbage receptacles. There is also a concern for ample space to accommodate handicap access. In addition, the total area of deck or landing space will be substantially less than would be allowable in the case of individual or smaller structures serving the same number of boaters. The minor changes sought pursuant to this variance request will have no conceivable adverse impact on water quality or the surrounding estuarine areas. In fact, to the extent that they facilitate better trash containment and collection they will prevent degradation of the surrounding waters.

With regard to location of the marina signage we submit that our request falls largely in the realm of concern for public safety as it seeks to avoid confusion and potential encounters between commercial and private vessels/boaters. In addition, within the letter and spirit of the applicable rules mooring pilings and pilings used for navigational aids would likely be permitted; we believe that this use is similar in application.

The changes requested will not expand the usage of the permitted area or enlarge the development. They will, however, improve the use and enjoyment of this facility by members of the public; a facility which in and of itself will provide significant recreational access to these waters and surrounding coastal environments. Most importantly the changes will contribute to improved safety for those using the marina.

Please attach copies of the following:

Permit Application and Denial documents Site Drawing with Survey and Topographical Information

Any letters filed with DCM or the LPO commenting on or objecting to your project Provide a numbered list of all true facts that you are relying upon in your explanation as to why you meet the four criteria for a variance. Please list the variance criterion, ex. unnecessary hardship, and then list the relevant facts under each criterion. [The DCM attorney will also propose facts and will attempt to verify your proposed facts. Together you will arrive at a set of facts that both parties agree upon. Those facts <u>will be the only facts that the Commission will</u> consider in determining whether to grant your variance request.]

Attach all documents you wish the Commission to consider in ruling upon your variance request.

[The DCM attorney will also propose documents and discuss with you whether he or she agrees with the documents you propose. Together you will arrive at a set of documents that both parties agree upon. Those documents will be the only documents that the Commission will consider in determining whether to grant your variance request.]

Please see the attached list of Attachments and Exhibits.

Pursuant to N.C.G.S. 113A-120.1 and 15A NCAC 7J .0700, the undersigned hereby requests a variance.

Date: Jamay 13, 2009

Date: Jamey 13, 2009 Signature: George L. Fletcher Br RAW This variance request must be filed with the Director, Division of Coastal Management, and the Attorney General's Office, Environmental Division, at the addresses shown on the attached Certificate of Service form.

CERTIFICATE OF SERVICE

I hereby certify that this Variance Request has been served on the State agencies named below by United States Mail, by personal delivery, UPS or Fed-Ex to the following:

Original served on: Director Division of Coastal Management 400 Commerce Avenue Morehead City, NC 28557

copy:

Attorney General's Office Environmental Division 9001 Mail Service Center Raleigh, NC 27699-9001

This the __13th___ day of ___January_____, 2009.

Genze J. Fletchen Signature of Petitioner or Attorney By RAW

In Re: Variance Request of Bald Head Island Limited LLC Attachments and Exhibits

1. Minor Permit Modification Request dated July 8, 2008 re: Access surface (road).

2. Minor Permit Modification Request dated July 8, 2008 re: deck and landings.

3. Minor Permit Modification Request dated July 8, 2008 re: Location of marina signage.

4. Division of Coastal Management (DCM) letter dated August 28, 2008 denying modification request re: access road and square footage of decks and landings.

5. DCM letter dated December 5, 2008 denying modification request re: location of marina signage.

6. Original DENR/CRC Permit No. 91-96

7. Deep Point Marina drawing dated October 1, 2008 showing approved structures-DPM 3 with submittal letter.

8. Deep Point Marina drawing dated January 21, 2008 depicting the requested variance items per revision three submission to DCM (DPM-3a) with submittal letter.

9. Deep Point Marina drawing dated July 8, 2008 depicting decks/landings as requested and illustrative photos-DPM 4.

10. Deep Point Marina drawing dated July 8, 2008 depicting marina signage as requested and illustrative photos-DPM 5.

11. Deep Point Marina drawing dated July 8, 2008 depicting paved surface area-DPM 6.

12. Deep Point Marina Overall Site Plan.

13. Aerial depicting Deep Point Marina and nearby features including ADM Plant pier facility and State Ferry Terminal for Southport-Fort Fisher Ferry.

14. Digitized depiction of Bald Head Island ferries moored at Deep Point Passenger Terminal.

15. Review of Deep Point Permit history (2 pages).

16. Two pages of photos depicting areas in the vicinity of the proposed sign location.

17. Three pages of photos depicting construction and development at the Deep Point Marina generally.

Bruce Marek, P.E. P. O. Box 3069 Bald Head Island, NC 28461 910-457-7517 July 8, 2008

Ms. Heather Coats NCDENR Division of Coastal Management 127 Cardinal Drive Extension Wilmington, NC 28405

Re: CAMA Permit #91-96 Minor Modification Request: Deep Point Marina, Southport, NC Drawing DPM6 7-8-08 Fire Department Access Road

Dear Ms. Coats:

Included are five 24" x 36" copies of drawing DPM6 dated & sealed 7-8-08, for the Bald Head Island Limited, LLC owned Deep Point Marina. This minor modification request is specifically for the 8' wide Fire Department/Emergency Vehicles access road along the south and east perimeters of the Deep Point Marina. Also included is one copy of Stormwater Drawing SW8-071004 Deep Point Marina Basin Low Density, seal dated 10-3-07, with DWQ approval date 10-16-07.

As shown on our detail, we are proposing an 8'wide safety/harbormaster access road to the north end of F-Dock. In our stormwater permit, we have 7100 sf of "streets" approved for this purpose. The north end of F-Dock is approximately 850 If from the already CAMA approved turnaround at the restaurant entrance. It is also approximately a quarter of a mile to the Harbormaster Office. Hopefully it will never need to be used for its intended purpose as a Fire/EMT Access Road, but 850 feet is a long way to lug hoses or a stretcher. I have seen the disasterous effects of boat fires, and I have had a couple of heart attacks myself. As a professional engineer, I do like to adhere to my duty to protect the health and safety of the people of the State of North Carolina. More and more so, we are required to follow the NFPA regulations relating to Marina Design.

Ideally, this access road would be incorporated into our simultaneous DPM3 Marina Necessities/Amenities Request. We have separated it out per your recommendation as this separate DPM6 submission, with the understanding that you will be denying this request and requiring us to seek a variance from the CRC.

Hopefully we can have staff recommendation that will allow us to successfully pursue obtaining a variance for what I consider a "marina necessity". As we have discussed many times in the past year since my first DMP3 Marina Necessities submission, the original CAMA permits for this marina date back to 1996. Rules at that time would not have precluded this road within 30' of the marina bulkhead. Additionally, the marina basin was sited specifically with guidance from CAMA as to its final location to the wetland(s). We are constrained with a wetland as close as 25' to the bulkhead along F-dock, so feel that we should be allowed to implement our "road for safety" as shown. I am including a check for \$100 for this "Minor Modification" request to CAMA Permit # 91-96.

We would like to be scheduled for the variance as soon as possible, and want to mention that we would also like for DPM4 (Dock Landings) and DPM 5 (Marina, Entrance, Sign) also being submitted today to be scheduled for the same date. Thanking you in advance for Option to this matter.

Respectfully,

Bruce Marek, P.E. For Bald Head Island Limited, LLC Planning Dept, CC: Jim Henry, Director, BHI Planning & Development M. Kent Mitchell, CEO, Bald Head Island Limited LLC

20 WOFESSIO, South and the second second 15684

Bruce Marek, P.E. P. O. Box 3069 Bald Head Island, NC 28461 910-457-7517 July 8, 2008

Ms. Heather Coats NCDENR Division of Coastal Management 127 Cardinal Drive Extension Wilmington, NC 28405

Re: CAMA Permit #91-96 Minor Modification Request: Deep Point Marina, Southport, NC Drawing DPM4 7-8-08 Dock Landings

Dear Ms. Coats:

Included are five 24" x 36" revised copies of drawing DPM4 dated & sealed 7-8-08, for the Bald Head Island Limited, LLC owned Deep Point Marina. This minor modification request is specifically for appropriate sized dock landings at the top of the ramps to A, B, C, D & E/F docks.

As shown on our detail, to have adequate space on these water dependent structures for raccoon proof trash enclosures, bicycle racks, dock cart storage as well as wheel chair turning radius not in the alignment of the 6' wood walkway, the necessary wood decked landing size is 20'x28' each.

We sincerely believe that the CAMA regulation of 200 sf total of pervious wood dock landings is not appropriate for a 100 slip recreational/commercial marina project. Ideally, these 5 larger dock landings would be incorporated into our simultaneous DPM3 Marina Necessities/Amenities Request. We have separated them out per your recommendation as this separate DPM4 submission, with the understanding that you will be denying this request and requiring us to seek a variance from the CRC.

Since the state is looking for more water access for the people of the State of North Carolina, I hope that these appropriately sized marina dock landings will be looked on favorably. Building a new marina is difficult and expensive. This project has had a CAMA permit for 12 years, and we have yet to open up the recreational side of the marina. It would be a shame if all of the planning and development time has actually harmed us in trying to develop a world class marina in Southport, NC. An individual homeowner's permissible dock landing at 200 sf doesn't come close to having the space needs of recreational marina docks serving the boat owners, guests and trash of upwards of 20 boats per landing.

Bald Head Island Limited, LLC has always done a tasteful and environmentally sensible job at its 2 other marinas (Bald Head Island and Indigo Plantation Marina). Hopefully we can have staff recommendation that will allow us to successfully pursue obtaining a variance for what I consider a "marina necessity". I have previously submitted BHI Planning Department check #1322 for \$100 for this "Minor Modification" request to CAMA Permit # 91-96.

We would like to be scheduled for the variance as soon as possible, and want to mention that we would also like for DPM5 (Marina Sign) and DPM 6 (Fire/Safety Access Road) also being submitted today to be scheduled for the same date. Thanking you in gavance for attention to this matter.

Respectfully,

Bruce Marek, P.E. For Bald Head Island Limited, LLC Planning Dept. CC: Jim Henry, Director, BHI Planning & Development M. Kent Mitchell, CEO, Bald Head Island Limited LLC



Bruce Marek, P.E. P. O. Box 3069 Bald Head Island, NC 28461 910-457-7517 July 8, 2008

Ms. Heather Coats NCDENR Division of Coastal Management 127 Cardinal Drive Extension Wilmington, NC 28405

Re: CAMA Permit #91-96 Minor Modification Request: Deep Point Marina, Southport, NC Drawing DPM5 7-8-08 Marina Entrance Sign

Dear Ms. Coats:

Included are five 24" x 36" revised copies of drawing DPM5 dated & sealed 7-8-08, for the Bald Head Island Limited, LLC owned Deep Point Marina. This minor modification request is specifically for an in the water marina entrance sign.

As shown on our detail, we are proposing an approximate 8'x20' 2-sided Vee-shaped in-the-water sign north of the Deep Point Marina north jetty, to the west of a line between the north jetty end and the A.D.M. Pier end. This is outside of any navigation channel or route.

I have given much consideration to this sign location, and based on the A.D.M. Pier location, a land based sign does not adequately project the marina message to vessels travelling southward down the Cape Fear River. Placing the sign on one of the Deep Point Jetties would obscure the navigational lights on the jetty. Tucked behind the line between pier end and jetty end will not impact larger vessels or non-local vessels navigation lines. It actually can be a good warning "sign" if someone inadvertently gets tucked in between the shore and the jetty end.

Ideally, this marina entrance sign would be incorporated into our simultaneous DPM3 Marina Necessities/Amenities Request. We have separated it out per your recommendation as this separate DPM5 submission, with the understanding that you will be denying this request and requiring us to seek a variance from the CRC.

Allowing boaters to be aware of this new facility and planned fuel docks, pump out and restaurant should be welcome. There are studies that indicate a key to a successful marina is making sure that the boating public knows what your services include. We are just trying to have a world class marina in Southport, NC.

Hopefully we can have staff recommendation that will allow us to successfully pursue obtaining a variance for what I consider a "marina necessity". I have previously submitted BHI Planning Department check #1323 for \$100 for this "Minor Modification" request to CAMA Permit # 91-96.

We would like to be scheduled for the variance as soon as possible, and want to mention that we would also like for DPM4 (Dock Landings) and DPM 6 (Fire/Safety Access Road) also being submitted today to be scheduled for the same date. Thanking you in advanceGermiention to this matter.

Respectfully,

Bruce Marek, P.E. For Bald Head Island Limited, LLC Planning Dept. cc: Jim Henry, Director, BHI Planning & Development M. Kent Mitchell, CEO, Bald Head Island Limited LLC



N	CDENR

91-96 DOM 4 & DOM 6

North Carolina Department of Environment and Natural Resources Division of Coastal Management

Michael F. Easley, Governor

James H. Gregson, Director

William G. Ross Jr., Secretary

August 28, 2008

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Bald Head Island Limited, LLC c/o Mr. Bruce Marek, P.E. P.O. Box 3069 Bald Head Island, NC 28461

Dear Mr. Marek:

This letter is in response to your two written requests, acting as authorized agent for Bald Head Island Limited, LLC, in which authorization is requested to modify CAMA Major Permit Number 91-96, issued June 3, 1996 under the Coastal Area Management Act (CAMA) and State Dredge and Fill Law. The two requests were seeking authorization to construct an 8-foot wide paved access road located 6 feet landward of the wooden walkway at Deep Point Marina, a 28-foot x 28-foot paved turn-around at the northeastern end of the proposed paved access road, and secondly, five wood landings (platforms) at the dock entrances measuring 20 feet by 28 feet. Both requests were received by the Division of Coastal Management July 9, 2008. Based on the state's review, the Division of Coastal Management has made the following findings:

- 1) The proposed paved 8-foot wide access road and the 28 ft. x 28 ft. paved turn-around area would be located entirely within 30 feet of the normal high water line.
- 2) The five proposed 20 ft. x 28 ft. wooden landings (platforms), totaling an area of 2,800 square feet, would be located entirely within 30 feet of the normal high water line and exceed the total allowable platform area of 200 square feet set forth in NCAC 07H.0209(d)(10).
- 3) Based upon the above referenced findings, the Division has determined that the proposed project (although requested via two letters dated July 8, 2008) is inconsistent with the following rules of the Coastal Resources Commission:
 - a) 15A NCAC 07H.0209(d)(10), which states "Within the Coastal Shorelines category (estuarine and public trust shoreline AECs), new development shall be located a distance of 30 feet landward of the normal water level or normal high water level, with the exception of the following: (A) Water-dependent uses as described in Rule 07H.0208(a)(1) of the Section;" 15A NCAC 07H.0208 specifically lists private roads and parking areas as uses that are not water dependent.

Bald Head Island Limited, LLC August 28, 2008 Page 2

b) 15A NCAC 07H.0209(d)(10), which states "Within the Coastal Shorelines category (estuarine and public trust shoreline AECs), new development shall be located a distance of 30 feet landward of the normal water level or normal high water level, with the exception of the following: (F) Decks/Observation Decks limited to slatted, wooden, elevated and unroofed decks that shall not singularly of collectively exceed 200 square feet." The total combined area for the five proposed decks totals 2,800 square feet, exceeding the allowable 200 square feet.

Given the preceding findings, it is necessary that your request for a modification 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.

If you wish to appeal this denial, you are entitled to a hearing. The hearing will involve appearing before an Administrative Law Judge who listens to evidence and arguments of both parties and then makes a recommendation to the Coastal Resources Commission. 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 letter. A copy of this petition should be filed with this office.

Also, you are advised that as long as this state permit denial stands, your project must be deemed inconsistent with the N.C. Coastal Management Program, thereby precluding the issuance of federal permits for this project. The Federal Coastal Zone Management Act (CZMA) gives you the right to appeal this finding to the U.S. Secretary of Commerce within thirty days of receipt of this letter. Your appeal must be on the grounds that the proposed activity is (1) consistent with the objectives or purposes of the CZMA, or (2) is necessary in the interest of national security, and thus, may be federally approved.

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 Doug Huggett at (252) 808-2808, extension 212.

Sincerely, es H. Gregson

cc:

Colonel Jefferson Ryscavage – U.S. Army Corps of Engineers, Wilmington, NC David Kennedy, Director – OCRM/NOAA, Silver Spring, MD David Timpy, ACOE- Wilmington Steve Everhart, DCM – Wilmington.



North Carolina Department of Environment and Natural Resources

Division of Coastal Management

Michael F. Easley, Governor

James H. Gregson, Director

William G. Ross Jr., Secretary

December 5, 2008

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Bald Head Island Limited, LLC c/o Mr. Bruce Marek P.O. Box 3069 Bald Head Island, NC 28461

Dear Mr. Marek:

This letter is in response to your written request, acting as authorized agent for Bald Head Island Limited, LLC, in which authorization was requested to modify CAMA Major Permit Number 91-96 under the Coastal Area Management Act (CAMA). Authorization was requested to construct an 8-foot by 20-foot V-shaped sign to be located in the waters of the Cape Fear River north of the Deep Point Marina entrance channel. This minor modification request was received by the Division of Coastal Management's Wilmington regional office on July 9, 2008. Based on the state's review, the Division of Coastal Management has made the following findings:

- 1) The proposed sign would be located in both Estuarine Waters and Public Trust Areas of Environmental Concern.
- 2) The U.S. Army Corps of Engineers had no objection to the proposed project.
- 3) Signs of this nature are considered non-water dependent structures. Furthermore, the Division of Coastal Management believes that a feasible high ground alternative location for this sign exists.
- 4) Based upon the above referenced findings, the Division has determined that the proposed project is inconsistent with the following rules of the Coastal Resources Commission:
 - a) 15A NCAC 07H.0208(a)(1), which states "Uses which are not water dependent shall not be permitted in coastal wetlands, estuarine waters, and public trust areas."; and
 - b) 15A NCAC 07H.0208(a)(2)(b), which states "Before receiving approval for location of a use or development within these AECs, the permit-letting authority shall find that no suitable alternative site or location outside of the AEC exists for the use or development."

400 Commerce Avenue, Morehead City, North Carolina 28557 Phone: 252-808-2808 \ FAX: 252-247-3330 \ Internet: www.nccoastalmanagement.net

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Bald Head Island Limited, LLC December 5, 2008 Page 2

Given the preceding findings, it is necessary that your request for a modification of a CAMA Major Permit under the Coastal Area Management Act 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.

If you wish to appeal this denial, you are entitled to a hearing. The hearing will involve appearing before an Administrative Law Judge who listens to evidence and arguments of both parties and then makes a recommendation to the Coastal Resources Commission. 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 letter. A copy of the petition should be filed with this office.

Also, you are advised that as long as this state permit denial stands, your project must be deemed inconsistent with the N.C. Coastal Management Program, thereby precluding the issuance of federal permits for this project. The Federal Coastal Zone Management Act (CZMA) gives you the right to appeal this finding to the U.S. Secretary of Commerce within thirty days of receipt of this letter. Your appeal must be on the grounds that the proposed activity is (1) consistent with the objectives or purposes of the CZMA, or (2) is necessary in the interest of national security, and thus, may be federally approved.

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 Doug Huggett at (252) 808-2808, extension 212.

Sincerely,

Jone H. Croyon

cc: Colonel Jefferson Ryscavage – U.S. Army Corps of Engineers, Wilmington, NC David Kennedy, Director – OCRM/NOAA, Silver Spring, MD Steve Everhart, DCM-Wilmongton DCM Central Files

Ptnit Class	Permit Number
NEW	91-96
Department of Environment	RTH CAROLINA t, Health & Natural Resources
	nd rces Commission
	or rea of Environmental Concern 8
X Excavation and/or filling put	rsuant to NCGS 113-229
Issued to Bald Head Island, Limited, P. O. Box 3069,	
authorizing development in Brunswick County a	at Cape Fear River, at Southport off of SR1540
, as requested in the permittee'	's application dated 10/16/96 incl. att. workplan drawings,
site plan dated rev. 2/15/96 & sheets 4, 7 & 11-13 of	f 13 for bulkhead & jetty detail dated rec. 11/15/95.
This permit, issued on, is a with the permit), all applicable regulations, special conditions be subject to a fine, imprisonment or civil action; or may cause	s and notes set forth below. Any violation of these terms may
	1 * w
Excav	ration
in the River may not take place between Febr	varine resources, excavation of the entrance channel uary 1 and July 31 of any year without prior ment in consultation with the Division of Marine
	nd basin and the Cape Fear River until excavation prevent sedimentation in adjacent waters, 24 hours moved.
(See attached sheet for A	Additional Conditions)
This permit action may be appealed by the permittee or other qualified persons within twenty (20) days of the ssuing date. An appeal requires resolution prior to work nitiation or continuance, as the case may be.	Signed by the authority of the Secretary of DEHNR and the Chairman of the Coastal Resources Commission.
This permit must be accessible on-site to Department ersonnel when the project is inspected for compliance.	- And Darker (
Any maintenance work or project modification not overed hereunder requires further Departmental approval.	Roger N. Schecter, Director Division of Coastal Management
All work must cease when the permit expires on December 31. 1999	This permit and its conditions are hereby accepted.
In issuing this permit, the State of North Carolina agrees hat your project is consistent with the North Carolina Coastal Management Program	

Permit #91-96 Page 2 of 6

ADDITIONAL CONDITIONS

- 3) All excavated materials will be confined landward of the mean high water (MHW) elevation contour within adequate dikes or other retaining structures to prevent the spillover of solids into any vegetated wetlands or surrounding waters.
- 4) The terminal end of the pipeline from the dredge into the diked retention area will be positioned at or greater than 50 feet from any part of the dike and a maximum distance from spillways to prevent dike erosion and to allow adequate settlement of suspended solids.
- 5) A water control structure will be installed at the intake end of the effluent pipe leading from the retention area to ensure maximum settlement of suspended solids.
- 6) Flow from the diked retention area will be confined by pipe, trough, or similar device to a point at or below the mean low water (MLW) elevation contour to prevent gully erosion and siltation.
- 7) No excavated or fill materials will be placed any time in any vegetated wetlands or waters.
- 8) No vegetated wetlands will be filled.
- 9) Excavation will not exceed ten (10) feet below the elevation of mean low water (MLW).
- 10) The temporary placement or double handling of excavated or fill materials within waters or vegetated wetlands is not authorized.

Bulkhead Construction

11) All bulkheads will be positioned in strict accordance with permit plans.

Marina Flushing/Water Quality Certification

- (a) The Division of Environmental Management issued Water Quality Certification Nos.
 3025 and 2668 for this project on May 29, 1996. Any violation of that Certification will be considered a violation of this permit.
 - (b) All project activity will be conducted in a way that prevents a significant increase in turbidity outside the area of construction or construction-related discharge. Increases such that the turbidity in the waterbody is 25 NTUs or less are not considered significant.

Permit #91-96 Page 3 of 6

ADDITIONAL CONDITIONS

Stormwater Management

- 13) The Division of Environmental Management issued Stormwater Management Permit No. 951012 on April 24, 1996. Any violation of this SW Permit will be considered a violation of this CAMA permit.
- **NOTE:** The permittee is encouraged to provide a buffer between all upland development and adjacent wetlands. A 30-50 buffer is recommended.
- NOTE: An Erosion and Sedimentation Control Plan will be required for this project. This plan must be filed at least thirty (30) days prior to the beginning of any land-disturbing activity. Submit this plan to the Department of Environment, Health and Natural Resources, Land Quality Section, 127 Cardinal Drive Extension, Wilmington, NC 28405-3845.

Archaeological Resources

- 14) Prior to initiation of ground-disturbing construction activities in the immediate vicinity of archaeological sites 31BW564** and 31BW571, an archaeological assessment (site testing) will be conducted to evaluate if the sites are eligible for listing in the National Register of Historic Places.
- 15) If either site 31BW564** or 31BW571 is determined eligible for listing in the National Register of Historic Places, and if the sites will be adversely affected by proposed construction activities, a detailed impact mitigation plan will be developed and executed.
- 16) All archaeological investigations will be conducted under the direction of an experienced archaeologist. Upon completion of the site testing and evaluation process, a written report will be submitted to the N. C. Division of Archives and History. Any mitigation plans developed for the site must be approved by the Division of Archives and History prior to implementation.

Other Requirements and Recommendations

- 17) Prior to jetty construction or other structural installation in the River, an Easement is required from the State Property Office, Department of Administration (telephone: 919/733-4346).
- **NOTE:** The proposed entrance connection and work adjacent the highway right-of-way should be coordinated through the local DOT District office in Wilmington, and the Ferry Division.
- **NOTE:** Spoil areas can breed mosquitoes. Therefore, Bald Head Island mosquito control or the Division of Environmental Health should be consulted to help prevent creating mosquito breeding habitat.

Permit #91-96 Page 4 of 6

ADDITIONAL CONDITIONS

Endangered Species Protection

- 18) The permittee will ensure that the following construction guidelines are followed to avoid impacts to the Federally endangered West Indian Manatee (Trichechus manatus):
 - (a) The permittee will instruct all personnel associated with the project of the potential presence of manatees and the need to avoid collisions with manatees.
 - (b) The permittee will advise all construction personnel that there are civil and criminal penalties for harming, harassing or killing manatees which are protected under the Marine Mammal Protection Act of 1972 and the Endangered Species Act of 1973. The permittee and any contractor may be held responsible for any manatee harmed, harassed or killed as a result of construction activity.
 - (c) Siltation barriers will be properly secured and made of material in which manatees cannot become entangled. The barriers will be regularly monitored to avoid manatee entrapment. Barriers must not block manatee entry or exit from essential habitat.
 - (d) All vessels associated with the project will operate at "no wake/idle" speeds at all times while in water where the draft of the vessel provides less than four feet clearance from the bottom. Vessels will follow routes of deep water whenever possible.
 - (e) If manatees are seen within 100 yards of the dredging area, all appropriate precautions will be implemented to ensure protection of the manatees. These precautions will include operating all equipment in such a manner that moving equipment does not come any closer than 50 feet of any manatee. If a manatee comes within 50 feet of an operating piece of equipment, or vice versa, the equipment will immediately be shut down.
 - (f) Any collision with, or injury to, a manatee will be reported immediately to:

Mr. Robert O. Turner Manatee Coordinator 6620 Southport Drive, South Suite 330 Jacksonville, Florida 32216-0912 (904) 232-2580

(g) The permittee will maintain a log detailing sighting, collisions or injuries to manatees should they occur during the construction period. Following project completion, a report summarizing incidents and sightings will be submitted to Mr. Robert O. Turner.

Permit #91-96 Page 5 of 6

Marina Operational Conditions

- 19) The marina entrance channel jetties shall be permanently lighted. Such lights and signals shall be in keeping with U. S. Coast Guard specifications and regulations. Lights shall be installed at the expense of the permtittee.
- 20) The permittee shall provide for the life of the project fuel and waste spillage protection around the marine maintenance site to protect surface waters in the event of a spill.
- 21) This permit does not authorize the interference with any existing or proposed Federal project. The permittee will not be entitled to compensation for damage or injury to the authorized structure or work that may be caused from existing or future operations undertaken by the United States in the public interest.
- 22) No attempt will be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the authorized work. Use of the permitted activity must not interfere with the public's right to free navigation on all navigable waters of the United States.
- 23) The permittee will maintain the authorized work in good condition and in concordance with the terms and conditions of this permit. The permittee is not relieved of this requirement if he abandons the permitted activity without having the permit transferred to a third party.
- 24) Prior to occupancy of any new slips authorized under this permit, the permittee will permanently equip the marina with a pumpout facility to service boats with holding tanks.
- 25) The marina shall prominently post and enforce a no sewage discharge policy at the entrance and exit from the main pier.
- 26) No sewage, whether treated or untreated, shall be discharged at any time from boats using the marina. Any sewage discharge at the dock facility shall be considered a violation of this permit for which the permittee is responsible. This prohibition shall be applied and enforced throughout the entire existence of the permitted structure.
- 27) Marina operation rules detailing safety and clean boat handling practices will be posted.
- 28) Trash receptacles, sufficient in numbers, to provide easy access and capacity will be installed at the marina prior to occupancy.

Permit #91-96 Page 6 of 6

ADDITITIONAL CONDITIONS

- 29) This permit authorizes only the docks, pies and other structures and uses located in or over the water that are expessly and specifically set forth in the permit application. No other structures, whether floating or stationary, may become a permanent part of this marina without permit modification. No non-water dependent uses of structures may be conducted on, in, or over public trust waters without permit modification.
- **NOTE:** The permittee is reminded that any additional work not depicted on the attached plats involving basic subdivision infra-structure, marina amenities, including dock design and channel markers, will require a modification of this permit. Should a question arise as to the requirement for further authorization, do not hesitate to contact the Division of Coastal Management.
- **NOTE:** The permittee is reminded of the need to maintain a suitable spoil disposal site at the project for future channel and basin maintenance.
Bruce Marek, P.E. P. O. Box 3069 Bald Head Island, NC 28461 910-457-7517 October 1, 2008

Ms. Heather Coats NCDENR Division of Coastal Management 127 Cardinal Drive Extension Wilmington, NC 28405

Re: CAMA Permit #91-96 Minor Modification Request: Deep Point Marina, Southport, NC Marina Necessities & Amenities per Drawing DPM3 Rev 8: 10-1-08 Includes Typical Marina Necessities within the 30' Marina Buffer and Necessities/Amenities within the 75' Marina AEC

Dear Ms. Coats:

Included are five 24" x 36" copies of drawing DPM3 Rev 8 dated & sealed 8-18-08, for the Bald Head Island Limited, LLC owned Deep Point Marina. Note that my first submittal for this Necessities & Amenities project was submitted July 9, 2007. With subsequent drawing revisions dated 9-4-07, 12-6-07, and 1-21-08, 4-24-08, 5-15-08, 7-8-08 & 8-18-08 based on your comments. I believe that I have finally removed all marina necessity items that you felt would delay us obtaining this minor modification. We are already working on a variance request for some of those items

I have previously submitted a 24" x 36" copy of approved Low Density Deep Point Marina Area Stormwater Permit #SW8-071004 for your reference. It includes all of the over land impervious items that I am asking for, as well as an additional 752 sf of "miscellaneous other" in case final transformer pads, electrical klosks, storage shed entry pads, etc. needs to be slightly larger than our first estimates. Also, at this time we are only asking for CAMA permission for one of our two Stormwater permitted 526 sq ft impervious gazebo/pergolas (N). I had one in the 30' buffer for stormwater, which I have eliminated per your comments.

My 2/25/2000 and 7/9/07 Deep Point Marina and Slip layout drawings were approved only for slip layout, and did not include all of the marina necessary items that ended up as multiple Letters of Refinement and Minor Modifications at Bald Head Island Marina (CAMA#172-87) and Indigo Plantation Marina (CAMA #41-85). The intent of this minor modification is to get one approval for the numerous items around the recreational part of the marina in one minor modification. On drawing DPM3, buildings and the 6' wide wood boardwalk around the marina perimeter that are already CAMA permitted based on the original permit and other minor modifications are so indicated.

The benefit of being involved in the design/engineering of 3 marinas for the same client, Bald Head Island Limited, LLC, means that by this third marina we have a pretty good idea of all of the water dependent necessities and amenities that need to be built at a marina.

Below is a list of items. Designations start with Letter A. On the drawing(s) requested items are in red.

A. Slip width change to slip F20 for use as a catamaran slip (50' x 36' width): this involved a slight shift and reconfiguration of slips F12 thru F20, without any increase in number of slips. Revised layout is shown in red in the marina basin; existing permitted layout is shown in a black & white detail mid-left on the drawing.

B. Harbormaster Storage Sheds (4): 144 sq ft roof area each (100 sf building footprint) accessory structures. All are now outside of the 30' buffer, but within the 75'AEC. B1 is between the harbormaster office and the fuel dock (A-Dock). B2 & B3 are near the gazebo/pergola N, and B4 is near the "crofters" Q1&Q2. An impervious entry pad of 40 sq ft is associated with each of these sheds.

C. Wood Dock Landings (5): Within the marina buffer, at the top of each of 5 ramps at A, B, C, D & E/F. To be built at 40 sf each (in 2 pieces), connected to the 6' wide previously permitted wood boardwalk. This totals the allowable per marina 200 sf of landing CAMA Limit. Note that this amount of landing does not allow sufficient area for trash cans, dock cart storage, bike racks, etc.

.....

D. Ramps from landings to the Floating Docks (8). 4'-6" wide x 26'+/- Aluminum Ramps. Six are shown at the recreational part of the marina and designated D-1 thru D-6, and two are shown at the ferry maintenance dock. I always assumed ramps as part of permitted slip layout drawings(s), but I have not found ramps specifically mentioned in our permits. Please include in this minor mod if necessary.

E, Electrical Transformers/Junction Enclosures/pads (5) shown: Electrical engineer/power company will decide final locations based on wiring path(s) available. Assumption is to have a transformer or junction enclosure within 25' to 50' of the electrical panels. Along with transformers is the underground electrical wiring necessary to power the transformers, and all service wiring. Stormwater permit is for 64 sf of transformer pads. Pads will be based on electric company enclosure sizes, estimated at 6 sf for small enclosures and 12 sf +/- for larger enclosures

F. Electrical Kiosks (8): for the electrical power panels, these marina dependent panel backboards are shown within the 30' marina buffer with approx 48 sf roof area each. The stormwater permit includes 385 sf of electrical panel roofs. We do not know yet if A-Dock will require 1 or 2 panel boards. Note that the electrical panels need to be accessed to reset circuit breakers. The roofs are a life safety feature to protect the workers from rain.

G. Marina Holding Tank Pump Out Shore Side Tank: This is a pump station for the A-Dock (fuel dock) holding tank pump out. There is already an additional pump out permitted for the ferries in the marine maintenance area.

H. Pump Out Station: This is the dock component on A-Dock to shore side tank/pump G

I. Fish Cleaning Station (1): Aluminum or stainless steel, cantilevered from wood boardwalk, between A-Dock & B-Dock along walkway.

J. Dockmaster/Fuel/Ice Sales Screened Gazebo: (1) At A-Dock/Fuel Dock end in slip A6. Approx 12' x 20' footprint/screened area (no fixed walls). 14' x 22' with roof overhangs. Having attendant location near the pumps for busy summer season is desirable from a safety & turnaround standpoint.

K. Fuel dispensers and hose reels indicated on the fuel dock (A-Dock). There will also be an isolation/ transfer box near the top and the bottom of the A-dock ramp, in order to shut-off fuel to the dock in storm conditions. Fuel piping will be double wall piping per UST regulations. Fuel lines and valves will run underground through both the Marina buffer and the 75' marina AEC. Note; Fuel tank location for the 12,000 gal diesel tank and the 8000 gailon gasoline tank and the vent piping are outside of the AEC, in the turnaround south of the harbormaster office, and are already in our CAMA Permit.

L. Wood Handicap Ramp (Labeled in Red, drawn in black): L1 is from between the B Dock & C Dock Landings up to the Harbor Master Office/the marina parking turnaround. This wood handicap compliant ramp has the required ADA landings every 30' and is shown at a 1V:12H slope. Due to FEMA Flood Zone Regulations, the Harbormaster Office (Finished Floor Elevation 13.0) is raised on a plateau above the marina bulkhead cap (Elevation 6.1'+/-). The handicap ramp is required for the vertical rise due to the 4' retaining wall in front of the Harbor Master Office and Retail Space.

M. Over-The-Water 16'x16' Roofed Gazebo/8'x17' Wood Platform/Landing. The end of F- Dock is over a quarter of a mile from the Harbormaster office. This roofed, open air structure will have bench seats which will provide for respite from rain or sun, with alignment as shown.

N. Gazebo/Pergola similar to the pictured gazebo/pergola at Bald Head Island Marina. N is outside of the Marina Buffer but inside of the 75' Marina AEC. It has 526 sq ft of roof (22'x24'+/-). Deck size is 24'x42'. A pervious "pergola" area covers the unroofed portion. Stormwater permit is for two such structures at 526 sf of impervious each = 1052 sf, but we have reduced our CAMA request to just one at this time.

O. Pool & Pool Deck outside of the 30' Marina Buffer, but within the 75'AEC. 1500 sf impervious is in Stormwater Permit SW8-071004 for the Pool Deck not under the roof line, with the pool size being approximately 34' x 48' (pools are considered pervious surfaces). Note that we have included a rendered detail of the Harbor Master Building showing pool and deck. There is an architectural pool "overflow" area along the east side of the pool, which is sited outside of the 30' marina buffer.

P. Impervious Surfaces/Parking P1-P3: Speckled red areas on the drawing. 7500 sf is Stormwater Permitted as "parking". It is all shown outside of the 30' marina buffer, with the majority within the 75' AEC. Part of P2 is outside of 75'. P3 is a 20'x20' impervious pad between crofters Q1 & Q2, with some of the area underneath the crofter decks.

Q. Crofters (2): These are outside of the 30' Marina buffer, but within the 75' Marina AEC. Q1 has a stormwater permitted 510 sf roofed area and A2 has 600 sf roofed area. These 2-3 story crofters are Bald Head Island style small buildings with living or office space above a break-away walled garage. Shown with 8' wide decks around perimeters of buildings (assumed 2' roof overhangs, thus decking shown as 6' outside of roof edges. Architectural styling is not complete, so roof shapes may change...

R. Wetland Boundary Fence/Bench/Knee wall. Please note that there is a 404 wetland indicated the east of the E &F-dock bulkheads. This constrains our useful area along this side. In order to protect the wetland area, we have provided on the drawing a detail showing a sloppy vee/6x6 post knee wall, with 3"x10" horizontal cap, all with ground contact treated lumber. We have now limited this "knee wall" to the areas outside of the 30' marina buffer.

In addition to the above listed items, the following three items which are so closely related to the water dependent needs of the marina but don't seem to be listed in other CAMA permits are the following utilities. I include them if you feel the need to specifically list them in this minor modification.

1. Telephone, Cable TV & DSL service lines & junction boxes, underground sewer & fuel lines.. Location of lines: inside of the 30' marina buffer, with appropriate utility separations and depths.

2. Installation of a water/fire main(s), service laterals and hydrants and/or fire standpipes. North Carolina building code has adopted several of the NFPA Fire Codes, with which we need to comply as appropriate to provide adequate levels of fire/life safety. Included in water service lines are landscape irrigation lines (with valve boxes), and any required back-flow preventers.

3. Site Lighting: for the boardwalks, dock landings, etc.

I have previously submitted a Bald Head Island Planning Department check for \$100 for "Minor Modification" to CAMA Permit # 91-96 for Marina Necessities/Accessories. If you have any questions and/or comments, please call me at 910-457-7517, 799-9245 or 228-2484. Additionally, when the minor mod is completed, please have copies e-mailed or faxed to previous 1609/0457-7463 & 457-7220.

Respectfully,

Bruce Marek, P.E. For Bald Head Island Limited, LLC Planning Dept. cc: Jim Henry, Director, BHI Planning & Development M. Kent Mitcheli, CEO, Bald Head Island Limited LLC

20 OFESSION 11108 SEAL 15684

Bruce Marek, P.E. P. O. Box 3069 Bald Head Island, NC 28461 910-457-7517 January 21, 2008

Ms. Heather Coats NCDENR Division of Coastal Management 127 Cardinal Drive Extension Wilmington, NC 28405

Re: CAMA Permit #91-96 Minor Modification Request: Deep Point Marina, Southport, NC Marina Necessities & Amenities per Drawing DPM-3 Rev 1-21-08 Includes Typical Marina Necessities/Ammenities within the 30' Marina Buffer and/or 75' Marina AEC. Acceptance of new SW8-071004 Deep Point Marina Basin Low Density Stormwater Permit for impervious surfaces of the above items.

Dear Ms. Coats:

Enclosed, please find five 24" x 36" copies of drawing DPM-3 Rev 3 dated & sealed 1-21-08, for the Bald Head Island Limited, LLC owned Deep Point Marina. I have previously also submitted; copies of State Stormwater Permit SW8-071004 with drawing dated & sealed 10-3-07 and DWQ approved 10-16-07. Note that my first submittal for the Necessities & Amenities drawing was submitted July 9, 2007.

This latest revision incorporates your & Doug Huggett's recent comments. I have moved the 4 proposed harbormaster sheds (B) out of the 30' marina buffer. I have also totally removed the Pergola/ Gazebo(D2) that was in the marina buffer near the north end of F-Dock. I have per our discussions added three over the water 16'x16' roofed gazebos (with storage benches) as a place to escape rain/sun at both ends of F-Dock (O1 & O2), and at the D-Dock to E-Dock landing (O3). One Pergola/Gazebo (D1) remains outside of the 30' buffer, but within the 75' AEC.

My 2/25/2000 and 7/9/07 Deep Point Marina and Slip layout drawings, did not include all of the marina necessary items that ended up as multiple Letters of Refinement and Minor Modifications at Bald Head Island Marina (CAMA#172-87) and Indigo Plantation Marina (CAMA #41-85). The intent of this minor modification is to get approval for these numerous items in one minor modification. On drawing DPM-3, items that are already CAMA permitted based on the original permit and other minor modifications are shown in gray. The area for the Deep Pointy Marina Low Density Stormwater permit SW8-071006 is shaded in yellow. The already permitted 6' wood walkway is shown in brown, but the plotted brown came out very dark. We have used a blue roof for the crofters, sheds and electrical (roofed) kiosks.

The benefit of being involved in the design/engineering of 3 marinas for the same client, Bald Head Island Limited, LLC, means that by this third marina we have a pretty good idea of all of the marine dependent necessities that need to be built at a first class marina. There may be some slight juggling of locations as the marina design evolves, but DPM-3 and the following lists are pretty well all-inclusive.

I did do an enlarged detail of our proposed wood landings at the top of the various dock ramps. I have also included pictures of our typical dock carts (58"x32") and our raccoon-proof trash can enclosures (37"x36"). Architectural Graphic Standards indicates a 5' manuevering area behind the back of a bike in a bike rack. Typical one person adult bikes are 5'-6" long. Thus, approximate 10'-6" x 8'-0" of space is needed for a 4-5 bike rack. I hope these details explain better the need for our requested wood landing sizes. Note that the travel path of the previously approved 6' wood walkway runs through the landing area.

Below is a list of letter designated items. Designations start with Letter A.

A. Crofters(2) These are outside of the 30' Marina buffer, but within the 75' Marina AEC. A1 has a stormwater permitted 510 st roofed area and A2 has 600 st roofed area. Crofters are Bald Head Island style small buildings on piles with bedroom(s) or office space above a break-away walled garage. Part of possible storage scheme for the restaurant. With wood balconies, decks & stairs, footprint for each is approximately 800 sf. Included in the stormwater streets/parking allotment is a 20' x 20' parking pad. (One shed B1 is now shown at this location)

B. Harbormaster Storage Sheds (4): 12'x12' max roof area each (100 sf building footprint) accessory structures. All are now outside of the 30' buffer, but within the 75'AEC. B1 is near the crofters. B2 & B3 are near the pergola/gazebo, and the fourth will be near the harbor master building. An impervious entry pad of approximate 40 sq ft is associated with each of these sheds.

C. Electrical Kiosks (9): for the marina power panels, these panel backboards are roughly 4'-5'x8'-10' roof area, depending on the associated dock slips and power requirements. These are labeled C1-C10: C9 is existing near the ferry slip position G1. Stormwater permit is for 385 sf of roof. There is an additional 752 sf of miscellaneous "other" impervious if needed.

D. Pergolas/Gazebo similar to the pictured pergola/gazebo from Bald Head Island Marina along Keelson Row near the Sailing Clubhouse. D1 is outside of the Marina Buffer but inside of the 75' Marina AEC, near the restaurant. It is approximately 20' x 42', with roof area of 20'x20'. Stormwater permit is for two such pergola/gazebos at 526 sf of impervious each = 1052 sf.

E. Electrical Transformers/Junction (6) Enclosures/pads shown: Electrical engineer/power company will decide final locations based on wiring path(s) available. Assumption is to have a transformer or junction enclosure within 25' to 50' of the electrical panel kiosks. Along with transformers is the underground electrical siring necessary to power the transformers, and all service wiring. Stormwater permit is for 64 sf of transformer pads. There is an additional 752 sf of miscellaneous "other" impervious if needed.

F. Fish Cleaning Station: With wood decking. Permit Request: 1, between A-Dock & B-Dock.

G. Marina Holding Tank Pump-Out Stations: (2) One at A-Dock (fuel dock), and one for the ferries. The pump out for the ferries is already included in a prior minor mod for the site. It will most likely be near slip G4, but possibly at slip G1. At A-dock, G1 indicates the pump out station portion on the fuel dock, and G2 is indicating the landside tank/pump component.

H. Dockmaster/Fuel Sales Office : (1) At A-Dock/Fuel Dock end in slip A6. Approx 14' x 20' building, 18' x 24' with overhangs. Picture shown is for similar structure at nearby Southport Marina. Fuel Sales office helps by having attendant at the pumps for busy summer season. Closely attended pumps is a plus for fuel spill prevention, and turnaround time is quicker/safer for the boating public. Spill prevention materialsand fuel system monitors would be included in the dockmaster/fuel sales office H. We will seek a variance for this item if not approvable as drawn.

J. J-Dock. A 250' x 8' wide dock along the north side of the southern marina entrance bulkhead. Bald Head Island Limited annually hosts one or two sailing regattas, and there is often a lack of slip space for the out of town trailerable and small crane launchable boats such as J-24's, Melges 24's and Ranger 22's. Likewise, in summer, this dock can be used by locals coming to the Marina Restaurant. During Spring and Fall, this provides us with transient overnight space for larger yachts awaiting a weather window. This 250' dock could berth 10 small boats or 2-3 megayachts. We are asking for 10 slip positions to be added for this "new" J-Dock. Additionally, one new slip x 50' is created at position F21 due to the geometry/location of J-Dock. We are thus asking for the addition of 11 slips to our existing 100 slip marina slip count for a total of 111 slips.

K. Fuel dispensers and hose reels are indicated on the fuel dock (A-Dock). There will be an isolation/ transfer box somewhere near the top and the bottom of the A-dock ramp, in order to shut-off fuel to the dock in storm conditions. Fuel piping will be double wall piping per UST regulations. Fuel lines and valves will run underground through both the Marina buffer and the 75' marina AEC. Note: Fuel tank location for the 12,000 gal diesel tank and the 8000 gallon gasoline tank and the vent piping are outside of the AEC, in the turnaround south of the harbormaster office. Modification request is for entire fuel system, tanks, monitor system, fuel lines, isolation/transfer boxes, dispensers and hose reels. Tanks themselves were also shown on a prior minor mod.

L. Grill pad. Brick Pavers. One shown near north end of F-dock, outside of 30' marina buffer, inside of 75' AEC. Approximate 90 sf pavers. Approx 350 sf of wood deck w/wood bench seats and/or picnic tables. The impervious pad will be subtracted out of the 752 sf of miscellaneous "other" impervious.

M. Marina Entrance Sign (1 Double Sided) 10'x20' solar lighted. An example is shown on the drawing of the Southport Marina sign. Similar level of information for Deep Point's accommodations and contact information. Shown north of the east end of the north jetty. Not sure if this is a CAMA jurisdictional item, or other reviewing agency.

N. Wood Handicap Ramps 6' wide, N1 from A-Dock Landing to the Harbormaster Office and N2 from the D-Dock Landing to the Harbormaster/Retail Store area. Due to FEMA Flood Zone Regulations, the Harbormaster Office and Retail Store are on a plateau approximately 6' above the marina bulkhead cap. Plateau is created b a 4' high +/- retaining wall at 30' off of the bulkhead cap, just outside the marin buffer. With a 1:12 grade of the soil coming off of the bulkhead to the waterside of the ramp 24' off of the wall, the ramps required vertical rise is approximately 4'. Maximum 1:12 slope, plus 6' flat landings every 32' of run are required. Wood decks outside of the marina buffer but inside the 75' AEC are shown at N1 & N2.

O. Three over the water 16'x16' roofed gazebos (with storage benches) as a place to escape rain/sun at both ends of F-Dock (O1 & O2), and at the D-Dock to E-Dock landing (O3). Gazebo O1 is approximately ¼ mile from the Harbor Master Building. Similar metal roof as pergola/gazebo D1, but with some sort of ornamental top.

Below are the non-labeled items that may or may not need to be mentioned in the minor modification. They are so closely related to the marina usage that they seem obviously automatically included, but I don't want to miss anything. I mention them though for you to include on the minor modification if you feel it is necessary.

1. Land-side landings 7 landings/8 ramps for the recreational portion of the marina, and 2 landings/4 ramps for the ferry side of the marina. These are wood decking, and incorporate bulletin boards, bike racks, dock dolly storage, a life ring & fire extinguisher, garbage cans, etc. 20'x28' landings are shown at A.B.C & D docks, with 12' x 20' landings at the other positions. We feel that these are appropriate sizes for safe access to the boating related activities of this marina. Over water gazebos O1-O3 will be incorporated into the Landing/Ramp design.

2. Telephone, Cable TV & DSL service lines & junction boxes, Sewer Lines. Location of lines: inside of the 30' marina buffer, outside of the tieback deadmen, which are approximately 20' off the marina wall.

3. Installation of a 6" water/fire main with hydrants and/or fire standpipes. North Carolina building code has adopted NFPA 303 Fire Code, with which we need to comply as appropriate.

4. Site Lighting: Not sure if we will stick with the hangman's post type lighting poles, lighthouse topped bollard lighting and/or 8x8 wood post bollard lighting that are on the island or come up with a new style, but we will have a need for site lighting. Don't know if you care. Locations, tbd.

5. Please note that there is a 404 wetland indicated approximately 25' to 30' east of much of the 450 If of the F-dock bulkhead. This constrains our useful area along this side. I anticipate some sort of wood bench/fence/wall type protection to keep people out of the 404. No definitive design has yet been proposed.

6. Impervious Parking & Pool Deck outside of the 30' Marina Buffer. Speckled Yellow area on the drawing. 1500 sf is Stormwater Permitted for the Pool Deck, and 7500 sf is permitted for Parking. Pool Deck is within the 75' AEC, and the parking is mostly within the 75' AEC.

7. Last, we request acceptance of the proposed 7100 sf of marina impervious path (appx 8.2' x 860 LF) for use as harbormaster access for trash pickup and for emergency vehicle access to the northern end of F-Dock. Due to site constraints of the 404 wetland, this path is shown within the 30' marina buffer. It is permitted under Low Density Stormwater Permit SW8-071004. Due to the very high infiltration rate of the surrounding sand soils (>20"/hr infiltration rates) runoff will not reach the marina. The harbormaster will, like on Bald Head, have a mini-truck or golf cart to service the docks/landings.

Note that the marina location in 1996 was determined after several studies and multiple rounds of comments from CAMA and other review agencies. At that time, I do not believe there was a restriction on impervious surface for such access roads in the marina buffer. For safety of the public, having ambulance/fire truck/hazmat vehicle access to the marina end is well justified. We are asking for the narrowest of roads to meet both safety and marina trash collection functional requirements. As an engineer, I feel that this road is a reasonable design for safe water dependent use of the marina by the citizens of North Carolina. We will seek a variance for this item if not approvable as drawn.

I have previously submitted a check for \$100 for "Minor Modification" to CAMA Permit # 91-96 for Marina Necessities/Accessories. If you have any questions and/or comments, please call me at 910-457-7517, 799-9245 or 228-2484. We will seek a variance for any item if not approvable as drawn. Additionally, when the minor mod is completed, please have copies faxed to 910-457-7463 & 457-7220.

Thanking you in advance for attention to this matter.

Respectfully,



Bruce Marek, P.E. For Bald Head Island Limited, LLC Planning Dept.

Enclosures

CC:

Jim Henry, Director, BHI Planning & Development M. Kent Mitchell, CEO, Bald Head Island Limited LLC

















Mr. John R. Rouse Mrs. Debbie Rouse December 9, 2008 Page 2

Given the preceding findings, it is necessary that your request for issuance of a CAMA Major Permit under the Coastal Area Management Act 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.

If you wish to appeal this denial, you are entitled to a hearing. The hearing will involve appearing before an Administrative Law Judge who listens to evidence and arguments of both parties and then makes a recommendation to the Coastal Resources Commission. 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 letter. A copy of this petition should also be filed with this office.

Also, you are advised that as long as this state permit denial stands, your project must be deemed inconsistent with the N.C. Coastal Management Program, thereby precluding the issuance of federal permits for this project. The Federal Coastal Zone Management Act (CZMA) gives you the right to appeal this finding to the U.S. Secretary of Commerce within thirty days of receipt of this letter. Your appeal must be on the grounds that the proposed activity is (1) consistent with the objectives or purposes of the CZMA, or (2) is necessary in the interest of national security, and thus, may be federally approved.

If you have any questions concerning this matter, please contact either Mr. Doug Huggett or Mr. Daniel Govoni at (252) 808-2808.

Sincerely,

my H. Creyon

cc: Colonel Jefferson M. Ryscavage- U.S. Army Corps of Engineers, Wilmington, NC David Kennedy, Director - OCRM/NOAA, Silver Spring, MD Dave Timpy, ACOE DCM central file Tere Barrett, DCM



State of North Carolina

ROY COOPER ATTORNEY GENERAL Department of Justice PO Box 629 Raleigh, North Carolina 27602

TO:	Coastal Resources Commission
FROM:	Christine A. Goebel Assistant Attorney General

DATE: January 30, 2009 (for the February 11-12, 2009 CRC Meeting)

RE: Variance Request by the Town of Oak Island (09-02)

Petitioner owns an existing water treatment system in Oak Island, North Carolina. Petitioner plans to extend this system, in a phased approach. This Commission approved a variance of the "large structure setback" for Phase I in November 2007. Now, for Phase II, Petitioner is seeking variances from the "large structure setback" measured landward from the static or regular vegetation line as the case may be. Additionally, other areas of Phase II do not meet the applicable 30-foot estuarine shoreline buffer. Petitioner sought and was granted a Major CAMA Permit modification of CAMA Major Permit No. 152-07 for Phase II. Petitioner now seeks variances from permit conditions No. 3 (disallowed those portions of the project which did not comply with the large structure setback) and condition No. 6 (disallowed those portions of the project which did not comply with the 30-fooot buffer).

The following additional information is attached to this memorandum:

Attachment A:	Relevant Rules
Attachment B:	Stipulated Facts
Attachment C:	Petitioner's Position and Staff's Responses to Criteria
Attachment D:	Petitioner's Variance Request Materials
Attachment E:	Stipulated Exhibits

 cc: Brian Edes, Town Attorney for Petitioner, U.S. Mail CAMA LPO for Oak Island, U.S. Mail DCM Staff, electronically Jennie W. Hauser, CRC Counsel, electronically

ATTACHMENT A

RELEVANT STATUTES OR RULES

15A NCAC 7H .0209 Coastal Shorelines

(d) Use Standards

(10) Within the Coastal Shorelines category (estuarine and public trust shoreline AECs), new development shall be located a distance of 30 feet landward of the normal water level or normal high water level, with the exception of the following: (Only the bridge crossings meet the water-dependent uses exception in this case)

(In 2008, rule changes made by the Commission renumbered and lettered the definitions in 7H. 0305. Please note that Petitioner uses the old cites in its argument. The cites below are the current version of the rule.)

15A NCAC 7H .0305 GENERAL IDENTIFICATION AND DESCRIPTION OF LANDFORMS

(a)(5) Vegetation Line. The vegetation line refers to the first line of stable and natural vegetation, which shall be used as the reference point for measuring oceanfront setbacks. This line represents the boundary between the normal dry-sand beach, which is subject to constant flux due to waves, tides, storms and wind, and the more stable upland areas. The vegetation line is generally located at or immediately oceanward of the seaward toe of the frontal dune or erosion escarpment. The Division of Coastal Management or Local Permit Officer shall determine the location of the stable and natural vegetation line based on visual observations of plant composition and density. If the vegetation has been planted, it may be considered stable when the majority of the plant stems are from continuous rhizomes rather than planted individual rooted sets. The vegetation may be considered natural when the majority of the plants are mature and additional species native to the region have been recruited, providing stem and rhizome densities that are similar to adjacent areas that are naturally occurring. In areas where there is no stable natural vegetation present, this line may be established by interpolation between the nearest adjacent stable natural vegetation by on ground observations or by aerial photographic interpretation.

(6) Static Vegetation Line. In areas within the boundaries of a large-scale beach fill project, the vegetation line that existed within one year prior to the onset of initial project construction shall be defined as the static vegetation line. A static vegetation line shall be established in coordination with the Division of Coastal Management using on-ground observation and survey or aerial imagery for all areas of oceanfront that undergo a large-scale beach fill project. Once a static vegetation line is established, and after the onset of project construction, this line shall be used as the reference point for measuring oceanfront setbacks in all locations where it is landward of the vegetation line. In all locations where the vegetation line as defined in this Rule is landward of the static vegetation line, the vegetation line shall be used as the reference point for measuring oceanfront setbacks. A static vegetation line shall not be established where a static vegetation line is already in place, including those established by the Division of Coastal Management prior to the effective date of this Rule. A record of all static vegetation lines, including those established by the Division of Coastal Management prior to the effective date of this Rule, shall be maintained by the Division of Coastal Management for determining development standards as set forth in Rule .0306 of this Section. Because the impact of Hurricane Floyd (September 1999) caused significant portions of the vegetation line in the Town of Oak Island and the Town of Ocean Isle Beach to be relocated landward of its pre-storm position, the static line for areas landward of the beach fill construction in the Town of Oak Island and the Town of Ocean Isle Beach, the onset of which occurred in 2000, shall be defined by the general trend of the vegetation line established by the Division of Coastal Management from June 1998 aerial orthophotography.

(7) Beach Fill. Beach fill refers to the placement of sediment along the oceanfront shoreline. Sediment used solely to establish or strengthen dunes shall not be considered a beach fill project under this Rule. A large-scale beach fill project shall be defined as any volume of sediment 23 greater than 300,000 cubic yards or any storm protection project constructed by the U.S. Army Corps of Engineers. The onset of construction shall be defined as the date sediment placement begins with the exception of projects completed prior to the effective date of this Rule, in which case the award of contract date will be considered the onset of construction.

(9) Measurement Line. The line from which the ocean hazard setback as described in Rule .0306(a) of this Section is measured in the unvegetated beach area of environmental concern as described in Rule .0304(4) of this Section. Procedures for determining the measurement line in areas designated pursuant to Rule .0304(4)(a) of this Section shall be adopted by the Commission for each area where such a line is designated pursuant to the provisions of G.S. 150B. These procedures shall be available from any local permit officer or the Division of Coastal Management. In areas designated pursuant to Rule .0304(4)(b) of this Section, the Division of Coastal Management shall establish a measurement line that approximates the location at which the vegetation line is expected to reestablish by:

(A) determining the distance the vegetation line receded at the closest vegetated site to the proposed development site; and

(B) locating the line of stable natural vegetation on the most current pre-storm aerial photography of the proposed development site and moving this line landward the distance determined in

Subparagraph (g)(1) of this Rule. The measurement line established pursuant to this process shall in every case be located landward of the average width of the beach as determined from the most current pre-storm aerial photography.

15A NCAC 7H .0306 GENERAL USE STANDARDS FOR OCEAN HAZARD AREAS

(a) In order to protect life and property, all development not otherwise specifically exempted or allowed by law or elsewhere in these Rules shall be located according to whichever of the following rules is applicable.

(1) If neither a primary nor frontal dune exists in the AEC on or landward of the lot on which the development is proposed, the development shall be landward of the erosion setback line. The erosion setback line shall be set at a distance of 30 times the longterm annual erosion rate from the first line of stable natural vegetation or measurement line, where applicable. In areas where the rate is less than two feet per year, the setback line shall be 60 feet from the vegetation line or measurement line, where applicable.

ATTACHMENT B

STIPULATED FACTS

1. The Petitioner is the Town of Oak Island, a North Carolina municipal corporation located in Brunswick County. Petitioner is represented in this variance request by Town Attorney Brian Edes of Crossley, McIntosh, Collier, Hanley, and Edes, PLLC.

- 2. In 1999 and pursuant to North Carolina Session Law 1999-66, the former Town of Yaupon Beach and the former Town of Long Beach, both of which were established in 1955, were consolidated to establish the existing Town, and the corporate limits of the Town were established as the combined corporate boundaries of the former Town of Yaupon Beach and the former Town of Long Beach.
- 3. Geographically, the Town consists of a mainland area (the "Mainland") and an island area (the "Island"). The Mainland is served by the Southeast Brunswick Sanitary District, which provides sanitary sewer service to the residential, commercial and institutional users located in the Mainland. Only a small portion of the Island is sewered while a majority of the Island is unsewered.
- 4. The sewered portion of the Island is served by a wastewater collection system that was constructed to serve the former Town of Yaupon Beach (the "Existing Wastewater Collection System"). The Town owns and operates the Existing Wastewater Collection System, which contains an estimated nine (9) miles of gravity sewer, six (6) miles of force mains, 220 manholes, and thirteen (13) lift stations.
- 5. The Existing Wastewater Collection System discharges to the Oak Island Biological Treatment Plant and Water Reuse Facility for treatment. The Existing Wastewater Collection System currently serves an estimated ten percent (10%) of the existing residences within the Town's corporate limits and also serves the Oak Island Golf Course, the Oak Island Beach Villas, and business district located along Oak Island Drive from N.E. 46th Street E. to N.E. 65th Street.
- 6. The unsewered portion of the Island, which largely corresponds with the corporate limits of the Town of Long Beach, is developed with predominantly single-family residential uses.
- 7. The unsewered portion of the Island treats wastewater using individual, on-site septic tanks with nitrification drain fields ("Septic Systems").

- 8. The development pattern for the Town has been established as all land area within the Town has been platted and almost all of the infrastructure serving residential and commercial areas has been constructed.
- 9. With the exception of the unsewered area of the Town, all utilities have been installed and are functioning to support the complete build-out of the Town.

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- 10. Given that the development pattern for the Island has been established and that most of the infrastructure serving residential and commercial areas has been constructed, the construction of the New Wastewater Collection System will serve existing development, and will not cause a secondary impact of new platted areas or new street construction on the Island.
- 11. Construction of the New Wastewater Collection System will not result in denser development of the Island as the entire Island has been subdivided into lots, with most lots being sixty (60) feet by one hundred (100) feet, allowing for the construction of only one residence per lot, both practically and by ordinance. Redevelopment may occur, but only through the replacement of existing structures.
- 12. As a result of recent and anticipated population growth and associated development, the Town has planned and designed a centralized wastewater collection system to serve all of the unsewered areas of the Island (the "New Wastewater Collection System"). The New Wastewater Collection System will convey all wastewater off of the Island for treatment at Brunswick County's West Brunswick Regional Water Reclamation Facility.
- 13. The certified CAMA Land Use Plan has a stated goal of providing an island-wide central wastewater collection system to address the problem of failing septic tanks by reducing the number of septic tanks in operation.
- 14. For the purposes of the construction of the New Wastewater Collection System, the Town has been divided into nine service areas, each of which will have its own collection system and vacuum sewer station, and which are referred to as Service Areas 1 through 9.
- 15. Phase II, which is the subject of the CAMA Major Modification request at issue now, covers Service Areas 1, 2, 4, 7, 8, and 9.
- 16. Service Areas 1, 2, and 9 are the subject of this Variance Request. Service Areas 1, 2, and 9 are depicted on Exhibits B1, B2, and B9 as well as on the December 28, 2007 Drawing entitled "Town of Oak Island Wastewater Collection & Treatment Project CAMA Phase II Area of Environmental Concern" submitted to DCM on January 2, 2008, and attached hereto. → A full size copy will be available to the CRC of the heaving.
- 17. The stated purpose for the New Wastewater Collection System is to provide several public benefits by replacing on-site septic tank systems. These existing septic systems are prone

to failure, resulting in negative health and environmental impacts. Currently, there are approximately 6700 lots in the Town that are served by septic systems. Brunswick County Health Department data indicate that there are approximately 100 septic tank replacements per year in the Town. This failure rate indicates that over a five-year period, approximately 10% of the septic systems in the Town will fail, necessitating repair and/or replacement.

- 18. Physical conditions on the Island are conducive to septic system failure because soils are not conducive to optimum drain field performance, the high groundwater table may reduce hydraulic and process capacity of septic systems on the Island by either infiltration or exfiltration, and the proximity to tidal waterways result in tidal inflows to the septic systems.
- 19. In addition, many septic systems were not designed adequately for their use. Many of the systems on the Island are undersized and cannot handle peak loadings, especially during the summer, which results in the discharge of completely untreated wastewater to receiving soils, groundwater, and waterways.
- 20. Many residents of the Town are seasonal, which results in only sporadic maintenance of many of the existing septic systems on the Island. Sporadic maintenance by seasonal residents has contributed to the poor performance of septic systems on the Island.
- 21. Septic system failure results in many adverse environmental impacts, including the pollution of groundwater, the discharge of pollutants to waterways, and the possible contamination of water supply wells. The Cape Fear River Basinwide Water Quality Plan, 2000 and the Lumber River Basinwide Water Quality Plan, 1999 identify failing septic tanks as a source of elevated coliform counts, indicating pollutant contribution to the waters in and around the Town.
- 22. The sewer lines in Service Areas 1, 2, and 9 have been designed to be located in the public rights of way.
- 23. The right-of-ways are located in an area along the oceanfront that is nearly fully developed with single family residences with an occasional vacant lot. Many of the oceanfront houses in this area were constructed prior to CAMA.
- 24. These right-of-ways at issue for this variance are located within the Ocean Erodible and High Hazard Flood Areas of Environmental Concern (AECs), both subcategories of the Ocean Hazard AEC designated by the Coastal Resources Commission (CRC) in Rule 15A NCAC 7H.0304. Also, part of Service Area 1 is within the Inlet Hazard. Also, part of Service Area 9 at issue is located in the Coastal Shorelines AEC, designated through Rule 15A NCAC 7H.0209.

Beach Spoil Deposition Project

- 25. In the winter of 2001-2002, the U.S. Army Corps of Engineers began a "Section 933" spoil deposition project on the oceanfront within the Town's corporate limits. (the "Spoil Project" or "933 project").
- 26. The spoil used for the Spoil project was dredged from the Wilmington Harbor Navigation Channel and placed on the beaches as the "beneficial use of dredge material."
- 27. In March of 2002, the Spoil Project was completed.
- 28. Since completion of the Spoil Project, the beach in the vicinity of Service Area 2, part of Service Area 1, and part of Service Area 9 have remained relatively stable.
- 29. In a letter dated June 9, 2000, Colonel James W. DeLony, District Engineer, U.S. Army. Corps of Engineers summarized the proposed project to the Town's mayor.
- 30. Colonel DeLony stated that beach quality sand would be placed along approximately 25,600 linear feet of the westernmost shoreline of the Town. The final in-place volume at the Town was expected to range from 1,272,000 cubic yards to 1,590,000 cubic yards.
- 31. Based on projections by the Corps of Engineers, the Spoil Project was expected to be a "large scale spoil deposition project" under the CRC's ocean hazard rules in 15A NCAC 7H .0305(f) because the Corps planned to deposit more than 200,000 cubic yards of sand along the shoreline at an average ratio of more than 50 cubic yards of sand per linear foot of shoreline.
- 32. In response to a request from DCM, the Corps provided information regarding the amount of sand actually deposited for this Project based on contractors' reports. The Corps' information led to its conclusion that 50.08 cubic yards of spoil had been deposited per linear foot of shoreline. The Corps has recently confirmed that the amount deposited exceeded the 50 cubic yard threshold. 50.08 cubic yards of spoil per linear foot is only marginally greater than the threshold of 50 cubic yards or more for a "large scale" project under the rule.
- 33. The amount of sand deposited on the shoreline during the Spoil Project was 33 percent less than the Corps of Engineers had estimated prior to the project, though it was still greater than the 200,000 cubic yard threshold under the rule.

Applicable Ocean Setback under CAMA

34. Effective April 17, 1979, the Coastal Resources Commission adopted an erosion setback requirement that applies to structures along the oceanfront, Rule 15A NCAC 7H .0306(a).

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- 35. The general rule is that large structures must be set back at a distance of 60 times the longterm annual erosion rate from the first line of stable natural vegetation. In areas where the rate is less than 2 feet per year, the setback line shall be from the vegetation line or measurement line, whichever is applicable. Rule 15A NCAC 7H .0306(a)(1).
- 36. Based on the current rates of erosion adopted by the CRC, the average annual erosion rate factor in Service Areas 1 and 2 is 2 feet per year. The erosion rate is part of Service Area 9 is 2-feet per year until near 74th Street where it increases to 3 or 4 feet per year. Therefore, the erosion setback applicable to large structures in Service Areas 1 and 2 is 120 feet, and the rate in Service Area 9 ranges between 120 feet and 240 feet.
- 37. The erosion setback generally is measured from the first line of stable natural vegetation. "This line represents the boundary between the normal dry sand beach which is subject to constant flux due to waves, tides, storms and wind and more stable upland areas. It is generally located at or immediately oceanward of the seaward toe of the frontal dune or erosion escarpment." Rule 15A NCAC 7H .0305(e).
- 38. In September 1996 the Coastal Resources Commission adopted an amendment to Rule 15A NCAC 7H .0305(f) which states in pertinent part: "In areas within the boundaries of a large scale beach nourishment or spoil deposition project, the vegetation line that existed prior to the onset of the [spoil deposition project] shall be used as the vegetation line for determining ocean front setbacks after the project is completed."
- 39. Because a large scale spoil deposition project was completed in front of Service Areas 2 and 9, and parts of Service Area 1 in the winter of 2001-2002, the first line of stable natural vegetation that existed prior to the spoil deposition project is used by the CRC to measure the erosion setback.
- 40. The vegetation line that existed prior to the Section 933 Project ("Pre-project Vegetation Line") was identified by the Division of Coast Management ("DCM") in accordance with 15A NCAC 7H .0305(f). After DCM identified the line, it was surveyed by the North Carolina Geodetic Survey, a section of the N.C. Division of Land Resources, and the line was placed on maps available to the general public.
- 41. Applying 7H .0305(f) and based on the annual long-term erosion rate factors of 2-4 feet per year, the applicable erosion setbacks for Service Areas 1, 2 and 9 range from 120 feet to 240 feet from the first line of stable natural vegetation that existed prior to the onset of the 2001 Spoil Deposition Project, or the Pre-project Vegetation Line.

Applicable 30-Foot Buffer under CAMA

42. Effective in August of 2000, the CRC adopted the 30-foot buffer requirement of 15A NCAC 7H.0209. The general rule is that within the Coastal Shorelines AEC, no new non-water dependant development shall be located within 30-feet of the normal water level or normal high water level unless it is one of the types of development that meets an exception to this rule. The only development in this case that meets any of the listed exceptions to the 30-foot buffer rule are the utility line crossings of waterbodies in Service Area 4, which are water dependant structures and thus, exceptions to the 30-foot buffer. Therefore, Condition 6 on the modified permit does not apply to these crossings.

CAMA Permit Application

43. On October 3, 2006, the Town applied for a CAMA Major Permit to construct Phase I of the New Wastewater Collection System.

- 44. In accordance with CAMA, N.C.G.S. § 113A-119, and with 15A NCAC 7J .0200, et seq., written notification of the proposed developments was provided to the adjacent property owners, was posted on the site, and was published in the State Port Pilot newspaper. No objections to the proposed development were filed or otherwise raised by anyone.
- 45. CAMA Major Permit No. 152-07, was issued by DCM to the Town on October 12, 2007, authorizing the development of Phase I of the New Wastewater Collection System, subject to certain conditions.

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- 46. Petitioners application for a Major Permit Modification of CAMA Permit No. 152-07 for Phase II of the project was received as complete by DCM on August 4, 2008. DCM received no objections to the modification to the project. The Major Modification of CAMA Major Permit No. 152-07 was issued on October 29, 2008.
- 47. Condition No. 3 on Modified CAMA Permit No. 152-07 requires that all proposed structures be located entirely landward of the appropriate development setback line required by 15A N.C.A.C. 7H.0306. Further, Condition No. 3 expressly prohibits all sections of the New Wastewater Collection System that extend waterward of the large structure setback line.
- 48. As a result of Condition No. 3 and strict application of 15A N.C. Admin. Code 7H.0305(f) and 7H.0306(a), certain sections of the Phase II sewer lines within Service Areas 1, 2, and 9 are prohibited from construction as designed. Of the approximately 142,210 feet of line proposed, about 11,540 liner feet does not meet the setback, which is most of the lines to be located along Beach Drive and Yacht Drive. The breakdown is as follows: Service Area 1-approximately 4300 liner feet that don't meet the setback, Service Area 2- approximately

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6200 liner feet that don't meet the setback, and Service Area 9- approximately 1040 linear feet that don't meet the setback.

49. Those sections of the wastewater collection system in Service Areas 1, 2 and 9 that are located within the boundaries of the large scale spoil deposition project will not be able to comply with the appropriate development setback line required by 15A N.C. Admin. Code 7H.0306, given the location of the Service Areas 1, 2 and part of 9 relative to the Pre-project Vegetation Line.

50. Some of Service Area 1 is located in an Inlet Hazard AEC, and was not within the bounds of the large scale spoil deposition project, so the setback is measured from the traditional first line of stable natural vegetation, and not a static line.

51. When DCM visited the Lots recently, the "first line of stable natural vegetation" was located approximately 270' from the berm to the right of way in Service Area 9, approximately as close as 100' from the berm to the right of way in Service Area 2, and Service Area 1 had no stable natural vegetation from which to measure a setback.

52. Condition No. 6 on Modified CAMA Permit No. 152-07 requires that all proposed non-water dependant structures be located entirely landward of the appropriate 30-foot buffer required by 15A N.C.A.C. 7H.0209.

53. As a result of Condition No. 6 and strict application of 15A N.C.A.C. 7H.0209(b)(10), certain sections of the Phase II sewer lines within Service Area 9 are prohibited from construction as designed. Approximately 200 feet of line proposed in Service Area 9 does not meet the 30-foot buffer located along E. Yacht Drive.

54. The Town applied for this variance on January 14, 2009, seeking relief from application of 15A NCAC 7H .0305(f), the CRC's rule requiring use of the Pre-project Vegetation Line from which the applicable setbacks are measured, from the applicable setbacks themselves, and from 15A NCAC 7H.0209(b)(10), the CRC's 30-foot buffer rule.

55. Without a variance, it would be difficult to serve the residences in Service Areas 1, 2, and 9 with a wastewater treatment system without encroaching into the static line setback or the 30-foot buffer, as applicable, because engineering and practical realities necessitate that Service Areas 1, 2, and 9 of the New Wastewater Collection System be constructed as planned, including those sections of the wastewater collection system that extend waterward of the appropriate setback or buffer lines.

56. The construction of the New Wastewater Collection System in Service Areas 1, 2, and 9 will increase production of reuse quality water, conserve water resources, and meet the Town's CAMA Land Use Plan's stated goal for water reuse.

- 57. The construction of the New Wastewater Collection System in Service Areas 1, 2, and 9 will eliminate the potential for failure of the septic systems.
- 58. The construction of the New Wastewater Collection System in Service Areas 1, 2, and 9 will provide a public benefit by affording residents with a method of wastewater management that is environmentally sound and more protective of public health than the current method of on-site septic systems.
- 59. Pursuant to 15A N.C.A.C. 7H .0306(k) and permit condition 4 of the Town's permit, all structures authorized by this permit shall be relocated or dismantled when they become imminently threatened by changes in shoreline configuration. A structure(s) shall be relocated or dismantled within 2 years of the time when it becomes imminently threatened, and in any case, upon its collapse or subsidence.
- 60. Section 30-39A of the Town Code governs when lots must connect to the sewer and water mains. A copy is attached.
- 61. Section 18-32 of the Town Code defines "lots". A copy is attached.

For the Petitioner:

FOR BEIAN EDES

Brian Edes, Town Attorney for Oak Island Crossley, McIntosh, Collier, Hanley & Edes, PLLC

1430 Commonwealth Drive, Suite 202 Wilmington, NC 28403

Date: 128/09

For the Division of Coastal Management:

Christine A. Goebel Assistant Attorney General N.C. Department of Justice Attorney for Respondent 9001 Mail Service Center Raleigh, NC 27699-9001

Date: 12809

ATTACHMENT C

Summary of Petitioner and Staff Positions

I. Will strict application of the applicable development rules, standards, or orders issued by the Commission cause the petitioner unnecessary hardships? If so, the petitioner must identify the hardships.

Petitioners' Position: Yes.

The strict application of 15A N.C. Admin. Code 7H .0305(f), 7H .0306(a) and 07H .0209 denies the ability to make reasonable use of Service Areas 1, 2, 4 and 9 for the purpose of constructing the wastewater collection system and water main as planned, which causes the Town unnecessary hardship and risks to public health and the environment.

The purpose of the expansion of the wastewater collection system is to provide an alternative to the current wastewater management practice of on-site septic tank systems. Currently in the Town, approximately 6,700 lots are served by on-site septic tank systems. Brunswick County Health Department data indicate that there are approximately 100 septic tank replacements per year in the Town. This failure rate indicates that over a five-year period, approximately 10% of the septic tank systems in the Town will fail, necessitating repair and/or replacement. Physical conditions on the island are conducive to septic system failure. Specifically, soils are not conducive to optimum drain field performance, and the high groundwater table may reduce hydraulic and process capacity of septic systems by either infiltration or exfiltration. Many of the septic systems on the island are undersized and cannot handle peak loadings, especially during the summer, which results in the discharge of completely untreated wastewater to receiving soils, groundwater, and waterways.

In addition, many residents of the Town are seasonal, which results in sporadic maintenance of many of the existing septic systems. A sizeable seasonal population and sporadic maintenance undoubtedly contributes to the poor performance of septic systems on the island.

Septic system failure results in many adverse environmental impacts including the pollution of groundwater, the discharge of pollutants to waterways, and the possible contamination of water supply wells. The high likelihood of failure and the associated adverse environmental impacts render on-site septic systems an unfavorable alternative for wastewater management by the Town.

Given the continued growth experienced by the Town and the significant new residential construction in unsewered areas of the Town even despite the poor performance of on-site septic systems on the island, an expansion of the waterwater collection system is necessary to protect public health and the environment.

Application of 15A N.C. Admin. Code 7H .305(f), 7H .0306(a) and 07H .0209 cause the Town unnecessary hardship with respect to Service Areas 1, 2, 4 and 9 because the potential public health and environmental benefits of the wastewater collection system cannot be accomplished as planned.

For additional information on the public health and environmental benefits of the wastewater collection system, please see the executive summary to the <u>201 Facilities Plan Update</u> for the Town of Oak Island, July 2006, attached hereto as <u>Exhibit C</u>.

Staff's Position: Yes.

Staff agree that the strict application of both the large structure setback rules as measured from the applicable vegetation line, and strict application of the 30-foot buffer rule impact Petitioner's ability to make "reasonable use" of its right-of-way property by installing the wastewater system as proposed. This is a town-wide project attempting to alleviate problems to water quality caused by septic system failure, and was described for in the Town's CAMA Land Use Plan. The infrastructure is proposed to be placed in the town-owned street right-of-ways, and the location of the sewer lines are further dictated by other regulations (ie: health regulations, DOT regulations, town ordinances). In many areas of the project, if the area was not subject to a static line and the applicable setback was measured from the "actual" vegetation line as it exists today, the project would meet the setback. Given all of the other regulations and the considerations required for a project of this size and scope, staff agrees that unnecessary hardships result from strict application of the CRC's rules.

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

Petitioners' Position: Yes.

The application of N.C.A.C. 7H .0305(f), 7H .0306(a) and 07H .0209, as presently worded, prohibit the construction of the wastewater collection system and water main in Service Areas, 1, 2, 4 and 9 as planned. As discussed above in detail, the physical conditions of the island present a challenge to effective and environmentally sound wastewater management.

As stated above, soils are not conducive to optimum drain field performance and the high groundwater table may reduce hydraulic and process capacity of septic systems on the island by either infiltration or exfiltration.

Several wastewater management alternatives were considered as part of the 201 Facilities Plan process. Specifically, the following alternatives were considered: 1) gravity collection system; 2) vacuum collection system; 3) gravity/vacuum combination collection system; and 4) septic tanks effluent pump collection system; and 5) on-site septic tank systems.

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Given the physical conditions of the island as outlines above and contained in the statement of facts, the costs associated with the alternatives considered, and the operational advantages over the alternatives considered, the vacuum wastewater collection system and water main, as has been planned for Service Areas 1, 2, 4 and 9 was selected as the optimal method of wastewater management for the Town.

Staff's Position: Yes.

Staff contends that the hardship caused by strict application of the static line rule, large structure setback rule, and 30-foot buffer rule result from conditions peculiar to the Petitioenr's property. The sewer system, including Phase II at issue in this case, is proposed for the island portion of the Town. In order to accommodate a island-wide sewer system using the existing road right-of-ways, many of which were platted and constructed prior to the enactment of CAMA, are bound to overlap the more recently implemented 30-foot buffer and ocean erosion setbacks. For such a small portion of the Phase II project to not be able to conform with these setbacks is a peculiarity of the property of the Town, given the shape of the island and location of the right-ofways. Additionally, it is a peculiarity that only 200 linear feet of sewer line proposed to be located in the existing road right-of-ways, of the 142,210 total liner feet in all of Phase II, can't comply with the 30-foot buffer rule. To have such a small portion of the project site right-of-ways be nonconforming is a peculiarity of the Town's right-of-way property. Also, Staff agree that because large portions of Phase II are located within the bounds of the marginal 933 project, that does contribute to the Petitioner's hardship. As the Commission is aware, this project was determined to have placed 50.08 cubic yards per linear foot of spoil along the project bounds, being just over the threshold found in the commission's rule to trigger the application of a pre-project static line. While much of the proposed project would meet the applicable setback if measured from the 'actual' vegetation line today, it does not meet the setback when measured from the static line. As such, the determination that this location is subject to a static, line when the project was so close to the threshold, is a peculiarity of the property which contributes to the hardship.

III. Do the hardships result from the actions taken by the Petitioner? Explain.

Petitioners' Position: No.

As explained above, the physical conditions of the island, operational advantages, and costeffectiveness render the vacuum wastewater collection system as the optimal method of wastewater management for the Town. Currently, the Town is experiencing a high rate of growth and development despite the lack of a public wastewater management system. Build-out of the island is expected to occur within the next decade regardless of whether a public wastewater management system is constructed. The growth occurring on the island in conjunction with the poor performance of the prevalent method of wastewater management, necessitate that the Town take action to provide for the responsible collection and management of wastewater that is protective of public health and the environment.

The need to address wastewater management on the island is legitimate and the Town is attempting to do so in a manner that is cost effective and protective of human health and the environment. The hardships faced in managing wastewater collection do not result from actions taken by the Town but rather from the physical limitations of the island, a large population of seasonal residents that provide only sporadic maintenance to on site septic systems, a population influx during the summer vacation months, and the consequent poor performance of on-site septic systems.

Staff's Position: No.

On balance, Staff agree that the Town has not contributed to their hardship because the project was designed to minimize the size of the structures in the setback and the buffer by choosing a vacuum system which utilizes smaller pipes than other systems, and minimizes disturbance of existing structures by locating the pipes in the town's existing right-of-ways. Further, staff agrees that the high rate of growth in the town and the increased impact on the existing septic systems along this barrier island town contribute to the hardship, and the Town's actions are a reasonable response these impacts.

IV. 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.

Petitioners' Position: Yes.

Granting a variance from 15A N.C. Admin. Code 7H .0305(f), 7H .0307(a), and 07H .0209 to allow for the construction of the wastewater collection system in Service Area 1, 2, 4, and 9 would be consistent with the spirit, purpose and intent of the CRC's rules and standards pertaining to the protection of water quality, see e.g., 15A N.C. Admin. Code 7M .0801 and 7M .0802, and would be consistent with goals set forth in the applicable CAMA Land Use Plan. The approved CAMA Land Use Plan has a stated goal providing an island-wide central wastewater collection system to address the problem of failing septic tanks by reducing the number of septic tanks in operation.

Granting a variance from 15A N.C. Admin. Code 7H .0305(f), 7H .0306(a) and 07H .0209 would secure public safety and welfare because such would allow the Town to make reasonable use of Service Areas 1, 2, 4 and 9 in a manner that best serves the wastewater management needs of residents of the Town in a manner more protective of public health and the environment that the prevalent use of individual septic systems. Also, expansion of the wastewater system to Service Area 1, 2, 4 and 9 would increase production of reuse quality water, conserving water resources of the region and meeting Town goals for water use.

Granting a variance from 15A N.C. Admin. Code 7H .0305(f), 7H .0306(a) and 07H .0209 would preserve substantial justice by affording those resident of the Town residing within Service Areas 1, 2, 4 and 9 the same wastewater collection service as those residing in the remaining five service areas.

Finally granting a variance from 15A N.C. Admin. Code 7H .0305(f), 7H .0306(a) and 07H .0209 would be consistent with prior orders of the CRC, including but not limited to, CRC-VR-02-13 and CRC-VR-07-18.

Staff's Position: Yes.

The management objective of the Ocean Hazard AEC is set forth in the rules as follows: "It is the CRC's objective to provide management policies and standards for ocean hazard areas that serve to eliminate unreasonable danger to life and property and achieve a balance between the financial, safety, and social factors that are involved in hazard area development." 15A NCAC 7H .0303(a). It is stated in several places in the CRC's rules that the primary purpose of the Ocean Hazard AEC rules is protecting life and property.

Petitioners have made an effort to demonstrate compliance with the spirit of the CRC's rules by choosing a vacuum wastewater system which would reduce the Town's reliance on septic systems prone to failure, and by placing the pipes within the town's existing right-of-way which minimize disturbance to existing structures. For much of Phase II, the placement of the proposed pipes in the right-of-way would meet the large-structure setback if measured from the "actual" vegetation line today. Further, the large majority of the proposed pipes in the Coastal Shorelines AEC meet the 30-foot buffer, and the impacts from buried pipes proposed within the buffer are minimal, when compared to the scope of the project and all its other benefits. Additionally, it would further secure the public safety and welfare because of the benefits to the resources by changing from the existing septic systems to a wastewater system, which overall, would represent less structure being located within the Ocean Erodible Setback area and would preserve safety and welfare by replacing the often-failing septic systems which currently exist. It would preserve substantial justice by including all town residences in the wastewater system, and not excluding only Service Area 1, 2, and 9 residents in need of this variance.

Attachment D

Petitioner's Variance Materials

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DCM FORM 11 (revised 6/26/06)

Fax and/or Email

CAMA VARIANCE REQUEST DCM FILE NO. 152-07

Petitioner supplies the following information:

Your Name	Town of Oak Island
Address	4601 E. Oak Island Drive, Oak Island, NC
Telephone	910-278-5011
Fax and/or Email	910-278-3400
Name of Your Attorney (if applicable)	Brian E. Edes
Address	1430 Commonwealth Drive, Suite 202,
	Wilmington, NC 28403
Telephone	910-762-9711

Have you received a decision from the Division of Coastal Management (DCM) or a Local Permit Officer denying your application for a CAMA permit?

 no	(You are not entitled to request a variance until your permit application has been denied.)

910-256-0310

What did you seek a permit to do?

The Town of Oak Island, a North Carolina body politic and municipal corporation, (the "Town") is in the process of obtaining the requisite governmental approvals to expand its municipal wastewater collection system. The Town's existing wastewater collection system currently serves approximately ten percent (10%) of the Town's existing homes, while the remainder of the homes is served by septic tanks. Given the Town's anticipated growth, increasingly stressed groundwater supplies, and persistent septic tank failures, the Town has developed plans to expand its wastewater utility in order to improve certain environmental and public health conditions on and around the island.

The expansion has been planned to occur in two phases. The second phase, Phase II, is the is the subject of this Variance Request. Phase II involves the development of six (6) services areas- Service Area 1, Service Area 2, Service Area 4, Service Area 7, Service Area 8 and Service Area 9-which entail vacuum stations and associated transmission pipeline to the main lift station from which all wastewater will be pumped off of the island. The wastewater collection system will be laid in and along real property that is the public right

of way. For your review, a drawing depicting the geographic scope of the six service areas in Phase II was submitted to and received by the Division of Coastal Management on January 2^{nd} 2008 and is hereinafter referred to as <u>Exhibit A</u>.

For your review, drawings depicting Service Areas1, 2, 4 and 9 are attached hereto as <u>Exhibits B1, B2, B4 and B9</u>.

What Coastal Resources Commission rule(s) prohibit this type of development?

N.C. Gen. Stat. § 113A-107, § 113A-113; and 15A N.C. Admin Code 7H.0305(f), 7H.0306(a) and 15A N.C. Admin Code 07H.0209.

On October 12, 2007, CAMA Permit No. 152-07 was issued to authorize the construction of the New Wastewater Collection System subject to certain conditions set forth in the permit. Pursuant to this Request the Town of Oak Island Seeks a variance from two of those conditions:

1. Condition No. 3 provides that:

All structures shall be located entirely landward of the appropriate small and large structure development setback lines.

Thus as is made apparent by Condition No. 3, Phase II of the wastewater collection system is subject to the large structure setback requirements is subject to the large structure setback requirements of 15A N.C. Admin. Code 07H.0306(a).

In service area 1 there are several sections of pipeline which do not meet the criteria established in CAMA Major Developmental Permit 152-07 issued on October 29, 2008. Specifically, the following areas do not meet permit condition #3 which states that all structures shall be located entirely landward of the appropriate small and/or large structure setback development line.

The portion of the project in service area 1 which lies entirely seaward of the large structure setback includes the vacuum sewer pipeline, sewer force main, and potable water main located in the south right-of-way of West Beach Drive between 51st Place West and 36th Place West. This includes all pipelines shown on Drawing SA1-9 approximately between STA7+00 and STA 19+00, all pipelines shown on Drawing SA1-10 approximately between STA 19+00 and STA 43+00, all pipelines shown on Drawing SA1-11 approximately between STA 43+00 and STA 45+95. Additionally, a section of vacuum sewer pipeline and potable water main located in the south right-of-way on King's Lynn Drive is located entirely seaward of the

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large setback. This section includes the final 60-feet of the vacuum sewer pipeline 1A-1 as shown on Drawing SA1-15 from approximately STA 36+75 to STA 36+15, as well as, the section on Drawing SA1-4 approximately between STA 32+00 and STA 28+50. There is also a section of vacuum sewer pipeline and potable water main in the south right-of-way of King's Lynn Drive that is entirely seaward of the small structure setback line. This section is shown on Drawing SA1-4 and is approximately located between STA 30+00 and STA 28+50. (See drawings submitted with Permit Application)

In service area 2 there are several sections of pipeline which do not meet the criteria established in CAMA Major Development Permit 152-07 issued on October 29, 2008. Specifically, the following areas do not meet permit condition #3 which states that all structures shall be located entirely landward of the appropriate small and/or large structure setback development line.

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The portion of the project in service area 2 which lies entirely seaward of the large structure setback includes the vacuum sewer pipeline in the south right-of-way of West Beach Drive between the 25th Place West and 14th Place East. This includes all pipelines shown on Drawing SA2-13 approximately between STA 63+00 and STA 48+00, Drawing SA2-14 approximately between STA 48+00 and STA 24+00, Drawing SA2-15 approximately between STA 24+00 and STA 5+00, Drawing SA2-3 approximately between STA 55+00 and STA 48+00, Drawing SA2-4 approximately between STA 48+00 and STA 48+00, Drawing SA2-5 approximately between STA 24+00 and STA 42+00, Drawing SA2-5 approximately between STA 24+00 and STA 42+00, Drawing SA2-5 approximately between STA 24+00 and STA 42+00, Drawing SA2-5 approximately between STA 24+00 and STA 42+00, Drawing SA2-5 approximately between STA 24+00 and STA 42+00, Drawing SA2-5 approximately between STA 24+00 and

In service area 9 there are several sections of pipeline which do not meet the criteria established in CAM Major Development Permit 152-07 issued on October 29, 2008. Specifically, the following areas do not meet permit condition #3 which states that all structures shall be located entirely landward of the appropriate small and/or large structure setback development line.

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The portion of the project in service area 9 which lies entirely seaward of the large structure setback includes the vacuum sewer pipeline in the south right-of-way of East Beach Drive between SE 75th Street and SE 78th Street. This includes all pipelines shown on Drawing SA9-23 approximately located between STA 11+00 and STA 0+50. Furthermore, this section includes all pipelines which cross East beach Drive and are located in the north right-of-way of East Beach Drive. This includes vacuum sewer line 9C-2 shown on Drawing SA9-17 approximately located between STA 0+50 and STA 0=00, vacuum sewer line 9C-3 shown on Drawing SA9-19 approximately located between STA 0+50 and STA 0+00, and vacuum sewer line 9C-4 shown on Drawing SA9-21 approximately located between STA 0+50 and STA 0+00. (See drawings submitted with Permit Application)

Consequently, the wastewater collection system within Service Areas 1, 2 and 9 is prohibited from being constructed under strict application of the rules, in particular Condition No. 3 of CAMA Permit No. 152-07.

2. Condition No. 6 provides that:

In accordance with 15A NCAC 07H.0209, no section of the vacuum sewer system shall be located within 30 feet of the normal high water line. Any directional boring required under Condition No. 6 of this permit shall begin 30 ft or more landward of the normal high water level.

In service area 4 there are two sections of pipeline which do not meet the criteria established in CAMA Major Development Permit 152-07 issued on October 29, 2008. Specifically, the following areas do not meet permit condition #6 which states that no section of vacuum sewer system should be located within 30-feet of the normal high water line.

> The sections of vacuum sewer pipeline which will be hung on the sides of the bridges located on SW 28th Street and SW 15th Street. This includes the section of vacuum sewer pipeline 4A-14 shown on Drawing SA4-8 approximately located between STA 5+00 and STA 7+00. This also includes the section of vacuum sewer pipeline 4B-14 shown on Drawing SA4-21 approximately located between STA 3+00 and STA 5+00.

In service area 9 there are two sections of pipeline which do not meet the criteria established in CAMA Major Development Permit 152-07 issued on October 29, 2008. Specifically, the following areas do not meet permit condition #6 which states that no section of the vacuum sewer system shall be located within 30-feet of the normal high water line.

The section of vacuum sewer pipeline located along East Yacht Drive at NE 67th Street and NE 78th Street are located within the 30-foot buffer of the normail high water line. This includes the section of vacuum sewer pipeline 9A shown on Drawing SA9-2 approximately located between STA 22+25 an STA 21+25. Additionally, the section of vacuum sewer pipeline 9B shown on Drawing SA9-15 approximately located between STA 10+50 and STA 13+00 is located within the 30-foot buffer of normal high water line.

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Can you redesign your proposed development to comply with this rule? <u>No</u> If your answer is no, explain why you cannot redesign to comply with the rule.

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Engineering and practical necessities dictate that Service Area 1,2,4 and 9 be developed as set forth in the application for CAMA Permit No. 152-07, and, therefore, require that several sections of the wastewater collection system and water main within Service Areas 1, 2 and 9 extend waterward of the large structure setback line; likewise several sections of the wastewater collection system and water main within Service Areas 4 and 9 be located within the 30-foot buffer of the normal high water line. Specifically, given the locations of the existing structures to be serviced by the wastewater collection system relative to these setback lines, several sections of the large structure setback line. Service Areas 4 and 9 must extend waterward of the large structure setback line. Service Areas 4 and 9 must be located within the 30-foot buffer of the normal high water collection system relative to these setback lines, several sections of the wastewater collection system within Service Areas 1, 2 and 9 must extend waterward of the large structure setback line. Service Areas 4 and 9 must be located within the 30-foot buffer of the normal high water line due to the existing characteristics of the Island. Among other things, the location of the vacuum sewer lines cannot be changed due to the location of existing location of potable water lines, N.C. DOT prohibitions regarding disturbing paved areas on State owned highways and the dangers associated with disturbing paved areas that constitute the sole means of ingress and egress for emergency vehicles.

Can you obtain a permit for a portion of what you wish to do? <u>YES</u> If so, please state what the permit would allow.

CAMA Permit No. 152-07 authorizes the construction and implementation of Phase II, subject to certain conditions. The wastewater collection systems within Service Area 7 and Service Area 8 and the main lift station may be constructed as planned.

State with specificity what you are NOT allowed to do as a result of the denial of your permit application. It will be assumed that you can make full use of your property, except for the uses that are prohibited as a result of the denial of your permit application.

Those sections of the wastewater collection system and water main within Service Areas 1, 2 and 9 that will not satisfy the large structure setback requirement are prohibited from being developed. Those sections of the wastewater collections system and water main within Service Areas 4 and 9 that will not satisfy the 30-foot buffer of the normal high water line are prohibited from being developed. Accordingly, the wastewater collection system and water main cannot be constructed to serve the residents of the Town living within these Service Areas.

RESPOND TO THE FOUR STATUTORY VARIANCE CRITERIA:

I. Identify the hardship(s) you will experience if you are not granted a variance and explain why you contend that the application of this rule to your property constitutes an unnecessary hardship. [The North Carolina Court of Appeals has ruled that this factor depends upon the unique nature of the property rather than the personal situation of the landowner. It has also ruled that financial impact alone is not sufficient to establish unnecessary hardship, although it is a factor to be considered. The most important consideration is whether you can make reasonable use of your property if the variance is not granted. [Williams v. NCDENR, DCM, and CRC, 144 N.C. App. 479, 548 S.E.2d 793 (2001).]

The strict application of 15A N.C. Admin. Code 7H.0305(f), 7H.0306(a) and 07H.0209 denies the ability to make reasonable use of Service Areas 1, 2, 4 and 9 for the purpose of constructing the wastewater collection system and water main as planned, which causes the Town unnecessary hardship and risks to public health and the environment.

The purpose of the expansion of the wastewater collection system is to provide an alternative to the current wastewater management practice of on-site septic tank systems. Currently in the Town, approximately 6,700 lots are served by on-site septic tank systems. Brunswick County Health Department data indicate that there are approximately 100 septic tank replacements per year in the Town. This failure rate indicates that over a five-year period, approximately 10% of the septic tank systems in the Town will fail, necessitating repair and / or replacement. Physical conditions on the island are conducive to septic system failure. Specifically, soils are not conducive to optimum drain field performance, and the high groundwater table may reduce hydraulic and process capacity of septic systems by either infiltration or exfiltration. Many of the septic systems on the island are undersized and cannot handle peak loadings, especially during the summer, which results in the discharge of completely untreated wastewater to receiving soils, groundwater, and waterways.

In addition, many residents of the Town are seasonal, which results in sporadic maintenance of many of the existing septic systems. A sizeable seasonal population and sporadic maintenance undoubtedly contributes to the poor performance of septic systems on the island.

Septic system failure results in many adverse environmental impacts including the pollution of groundwater, the discharge of pollutants to waterways, and the possible contamination of water supply wells. The high likelihood of failure and the associated adverse environmental impacts render on-site septic systems an unfavorable alternative for wastewater management by the Town.

Given the continued growth experienced by the Town and the significant new residential construction in unsewered areas of the Town even despite the poor performance of on-site septic systems on the island, an expansion of the wastewater collection system is necessary

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to protect public health and the environment.

Application of 15A N.C. Admin. Code 7H.305(f), 7H.0306(a) and 07H.0209 cause the Town unnecessary hardship with respect to Service Areas 1, 2, 4 and 9 because the potential public health and environmental benefits of the wastewater collection system cannot be accomplished as planned.

For additional information on the public health and environmental benefits of the wastewater collection system, please see the executive summary to the <u>201 Facilities Plan</u> <u>Update for the Town of Oak Island</u>, July 2006, attached hereto as <u>Exhibit C</u>.

II. Describe the conditions that are peculiar to your property (such as location, size, and topography), and cause your hardship.

The application of N.C.A.C. 7H.0305(f), 7H.0306(a) and 07H.0209, as presently worded, prohibit the construction of the wastewater collection system and water main in Service Areas 1, 2, 4 and 9 as planned. As discussed above in detail, the physical conditions of the island present a challenge to effective and environmentally sound wastewater management.

As stated above, soils are not conducive to optimum drain field performance and the high groundwater table may reduce hydraulic and process capacity of septic systems on the island by either infiltration or exfiltraion.

Several wastewater management alternatives were considered as part of the 201 Facilities Plan process. Specifically, the following alternatives were considered: 1) gravity collection system; 2) vacuum collection system; 3) gravity / vacuum combination collection system; and 4) septic tanks effluent pump collection system; and 5) on-site septic tank systems.

Given the physical conditions of the island as outlined above and contained in the statement of facts, the costs associated with the alternatives considered, and the operational advantages over the alternatives considered, the vacuum wastewater collection system and water main, as has been planned for Service Areas 1, 2, 4 and 9 was selected as the optimal method of wastewater management for the Town.

III. Explain why your hardship does not result from actions that you have taken.

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As explained above, the physical conditions of the island, operational advantages, and costeffectiveness render the vacuum wastewater collection system as the optimal method of wastewater management for the Town. Currently, the Town is experiencing a high rate of growth and development despite the lack of a public wastewater management system. Build-out of the island is expected to occur within the next decade regardless of whether a public wastewater management system is constructed. The growth occurring on the island in conjunction with the poor performance of the prevalent method of wastewater

management, necessitate that the Town take action to provide for the responsible collection and management of wastewater that is protective of public health and the environment.

The need to address wastewater management on the island is legitimate and the Town is attempting to do so in a manner that is cost effective and protective of human health and the environment. The hardships faced in managing wastewater collection do not result from actions taken by the Town but rather from the physical limitation so f the island, a large population of seasonal residents that provide only sporadic maintenance to on site septic systems, a population influx during the summer vacation months, and the consequent poor performance of on-site septic systems.

IV. Explain why the granting of the variance you seek will be consistent with the spirit, purpose, and intent of the CRC's rules, standards, or orders; preserve substantial justice; and secure public safety.

Granting a variance from 15A N.C. Admin Code 7H.0305(f), 7H.0307(a), and 07H.0209 to allow for the construction of the wastewater collection system in Service Area 1, 2, 4, and 9 would be consistent with the spirit, purpose and intent of the CRC's rules and standards pertaining to the protection of water quality, see e.g., 15A N.C. Admin. Code 7M.0801 and 7M0802, and would be consistent with goals set forth in the applicable CAMA Land Use Pian. The approved CAMA Land Use Plan has a stated goal providing an island-wide central wastewater collection system to address the problem of failing septic tanks by reducing the number of septic tanks in operation.

Granting a variance from 15A N.C. Admin. Code 7H.0305(f), 7H.0306(a) and 07H.0209 would secure public safety and welfare because such would allow the Town to make reasonable use of Service Areas 1, 2, 4 and 9 in a manner that best serves the wastewater management needs of residents of the Town in a manner more protective of public health and the environment that the prevalent use of individual septic systems. Also, expansion of the wastewater system to Service Area 1, 2, 4 and 9 would increase production of reuse quality water, conserving water resources of the region and meeting Town goals for water use.

Granting a variance from 15A N.C. Admin. Code 7H0305(f), 7H.0306(a) and 07H.0209 would preserve substantial justice by affording those residents of the Town residing within Service Areas 1, 2, 4 and 9 the same wastewater collection service as those residing in the remaining five service areas.

Finally granting a variance from 15A N.C. Admin. Code 7H.0305(f), 7H.0306(a) and 07H.0209 would be consistent with prior orders of the CRC, including but not limited to, CRC-VR-02-13 and CRC-VR-07-18.

Please attach copies of the following:

1 ** * 2 * 2 * 2 Permit Application and Denial documents Site Drawing with Survey and Topographical Information Any letters filed with DCM or the LPO commenting on or objecting to your project

Provide a numbered list of all true facts that you are relying upon in your explanation as to why you meet the four criteria for a variance. Please list the variance criterion, ex. unnecessary hardship, and then list the relevant facts under each criterion. [The DCM attorney will also propose facts and will attempt to verify your proposed facts. Together you will arrive at a set of facts that both parties agree upon. Those facts <u>will be the only facts that the Commission will consider in determining whether to grant your variance request.</u>] Please see the list of all true facts that the Town is relying on in its explanation as to why it meets the four criteria for a variance, attached hereto as **Exhibit D**.

Attach all documents you wish the Commission to consider in ruling upon your variance request. [The DCM attorney will also propose documents and discuss with you whether he or she agrees with the documents you propose. Together you will arrive at a set of documents that both parties agree upon. Those documents will be the only documents that the Commission will consider in determining whether to grant your variance request.]

Pursuant to N.C.G.S. 113A-120.1 and 15A NCAC 7J .0700, the undersigned hereby requests a variance.

Signature:

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Date:

This variance request must be filed with the Director, Division of Coastal Management, and the Attorney General's Office, Environmental Division, at the addresses shown on the attached Certificate of Service form.

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CERTIFICATE OF SERVICE

I hereby certify that this Variance Request has been served on the State agencies named below by United States Mail or by personal delivery to the following:

Original served on: Director

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

copy:

Attorney General's Office Environmental Division 9001 Mail Service Center Raleigh, NC 27699-9001

This the 14 day of January . 2009. Signature of Petitioner or Attorney

EXHIBIT A Drawing Entitled Town of Oak Island Wastewater Collection & Treatment Project CAMA Phase II Area of Environmental Concern

Submitted to and received by the Division of Coastal Management on January 2nd 2008.

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SECTION 1. EXECUTIVE SUMMARY

1.1. Purpose and Scope

This report addresses the recommended plan for wastewater collection, treatment, disposal, and reuse facilities to serve the Town of Oak Island. Municipal wastewater treatment for the Town of Oak Island is presently accomplished in part at the Town of Oak Island Biological Treatment and Water Reuse Facility for the sewered portion of the Town, in part by on-site individual septic systems on the island, and for the mainland portion along NC 133 through the Southeast Brunswick Sanitary District.

The Town of Oak Island Biological Treatment and Water Reuse Facility is a water reclamation facility (referred to as existing East Oak Island WRF in this report) and presently serves approximately 900 customers, with an average flow of 0.082 mgd from permanent residents and a total average seasonal flow during the summer months of 0.170 mgd. This existing treatment facility and disposal areas are designed for 0.4 mgd. It operates in the extended aeration mode, and includes conventional gravity filters and chlorination for disinfection. It is capable of meeting the present reuse quality water standards. The East Oak Island WRF service area includes the previous town limit of Yaupon Beach and the commercial area along East Oak Island Drive to 46th Street.

There are approximately 6,708 housing units along with a small number of commercial establishments along the beach that are presently using septic tanks. The failure rate of the septic tanks averages 100 housing units per year resulting in a 10 percent probability that a building's septic tank will fail every five years. This failure rate is based on records from the Brunswick County Health Department. The on-site systems also suffer from elevated water table and in some cases poor soils, hence poor percolation. The existing septic tanks are primarily located in the former Long Beach area.

Due to lack of present or planned capacity, and due to the lack of a crossing under the Intracoastal Waterway (ICW) on the east side of the Town, the entire Town of Oak Island cannot be served by Southeast Brunswick Sanitary District. The Southeast Brunswick Sanitary District will continue to provide sanitary sewer service to the residential, commercial, and institutional customers in the area of the Town on the mainland that is presently served by the District.

Oak Island is continuing to experience significant growth as evidenced by the significant number of housing starts through 2006. Housing starts have been significant even during the economic slowdown during the early part of this decade. Significant number of new residences are being constructed in the un-sewered areas with septic tanks, some with alternative onsite treatment systems. This growth is occurring even though existing septic tanks experience frequent failure resulting in risk of contamination.

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Revised July 2006





Section 1. Executive Summary

Town of Oak Island, 201 Facilities Plan Update

At the present rate of growth with existing infrastructure and onsite treatment systems, build-out on the island will occur around 2018. This rate of growth is expected to occur regardless of the construction of a central wastewater collection system. Nearly the entire island is subdivided and there are no large, vacant tracts remaining.

The Cape Fear River Basinwide Water Quality Plan, 2000 and the Lumber River Basinwide Water Quality Plan, 1999 both identify failing septic tanks as a source of elevated coliform counts, indicating pollutant contribution to the waters in and around the Town of Oak Island. The approved CAMA Land Use Plan has a stated goal of providing an island-wide central wastewater collection system to address the problem of failing septic tanks. The creation of this central wastewater collection system will necessitate the need for expanded wastewater treatment facilities. Creation of a central wastewater collection system will also preclude the installation of additional septic tanks.

The Town of Oak Island has a stated goal of producing reuse quality water from all wastewater treatment facilities, and in promoting a reuse program by identifying reuse opportunities within the corporate boundaries of the Town along with any opportunities in adjacent areas to conserve the water resources of the region. Producing reuse quality water with low nitrogen concentrations will also protect the groundwater and surface water in the land application areas.

In recognition of the responsibility to provide a central wastewater collection system to all residents on the island, and produce reuse quality water from treatment facilities, the Town of Oak Island has developed this planning document related to improvements for wastewater collection and treatment. This 201 Facilities Plan, a planning and engineering feasibility report for the Town of Oak Island, is a required component of the North Carolina Department of Environment and Natural Resources (NCDENR) revolving loan program for public treatment works improvements.

1.1.1. 201 Facilities Plan Method

The 201 Facilities Plan provides a systemic selection process whereby cost-effective wastewater collection, treatment, disposal, and reuse facilities are designated for implementation. The cost-effective analysis determines which wastewater systems will require the minimum total cost to the community over the selected 20-year planning period that will also achieve compliance with federal, state, and local standards and objectives. Total cost requirements are evaluated in terms of resource costs, generally represented in monetary terms, in conjunction with social and environmental considerations. Public participation is considered an integral part of the development of the 201 Facilities Plan.





Section 1. Executive Summary

Town of Oak Island, 201 Facilities Plan Update

1.2. Future Conditions

Significant changes are expected within the Town of Oak Island, the Town's Extra Territorial Jurisdiction (ETJ), and the contiguous mainland areas over the 20-year planning period selected for the 201 Facilities Plan. The number of housing units on lots already platted in the unsewered portions of the island is expected to grow during the planning period. Development is also expected in the Town's ETJ on the mainland.

Because of this rapid growth potential, the Town decided to evaluate building a wastewater treatment facility, including the spray irrigation disposal sites for reuse quality effluent. The facilities were evaluated for a 20-year planning period (to the year 2025). The population projections for the two planning years 2013 and 2025 for both the island portion and the mainland portion of the Town of Oak Island and the estimated wastewater flows are given below in Tables 1-1 and 1-2. Analysis of the population in conjunction with the number of platted lots without structures indicate that the island will reach build-out in approximately 2018.

Planning Year	2013		2025		
	Island	Mainland ^{*.}	Island	Mainland	
Seasonal	32,630 10,200	2,140 1,690	35,960	5,350	
Permanent			11,240	4,220	
Total	42,830	3,830	47,200	9,570	

Table 1-1: Population Projections for the Town of Oak Island

Table 1-2: Estimated Wastewater Flows for the Town of Oak Island

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Planning Year	2013	2025
Permanent Average Daily Flows	1.01 mgd	1.31 mgd
Total Permanent and Seasonal Average Daily Flows	2.75 mgd	3.38 mgd
Total Permanent and Seasonal Maximum Month Average Daily Flows	3,30 mgd	4.06 mgd
Total Permanent and Seasonal Peak Daily Flow	4.95 mgd	6.08 mgd

The existing WRF is designed for a maximum month average daily flow of 0.40 mgd and an average daily flow of 0.33 mgd. The Town has purchased additional spray irrigation disposal sites to support this





Section 1. Executive Summary Town of Oak Island, 201 Facilities Plan Update

capacity. The Town of Oak Island has entered into a contract with the Oak Island Golf Course that allows for irrigation of the course with reuse quality water. The Town can initially irrigate at a sustained flow of 0.2 mgd.

Using the projected flows as shown in Table 1-2, and the defined capacities mentioned above, for years 2013 and 2025, additional treatment will be required for the excess flow from the Town and is given in the Table 1-3. These flows are from the existing residential and commercial areas, as well as flows from the future residential and commercial areas.

Planning Year	2013	2025
Permanent Average Daily Flows	0.48 mgd	0.78 mgd
Total Permanent and Seasonal Average Daily Flows	2.22 mgd	2.85 mgd
Total Permanent and Seasonal Maximum Month Average Daily Flows	2.70 mgd	3.46 mgd
Total Permanent and Seasonal Peak Daily Flow	4.36 mgd	5.49 mgd

Table 1-3: Treatment Capacity Requirement for the Town of Oak Island

The Town is constructing a separate satellite reuse facility that will handle 0.3 mgd. Reuse water from this plant will be used for spray irrigation on the Oak Island Golf Course and on other public parks in the Town. The existing WRF on the mainland will remain at 0.33 mgd average daily flow with no upgrades in capacity.

The wastewater organic and nutrient design loads were estimated for permanent average daily, the total permanent and seasonal average daily, the maximum month permanent and seasonal daily, and the total permanent and seasonal peak day flows. The wastewater loads that will be conveyed to the County Facilities are as follows:

- o The loads for the permanent population in 2025
 - o 2,775 lbs/day BODs
 - o 3,080 lbs/day TSS
 - o 415 lbs/day TKN.
- o The loads for the total permanent and seasonal population in 2025
 - o 7,160 lbs/day BODs





- o 7,950 lbs/day TSS
- o 1,070 lbs/day for TKN.

The maximum month peaking factor for BOD₅, TSS, and TKN is estimated to be 1.2. The peak day peaking factor for BOD₅, TSS, and TKN is estimated to be 1.8.

1.3. Selection of Wastewater Collection, Treatment, Disposal, and Reuse Systems

The Town of Oak Island's recommended collection, treatment, disposal, and reuse systems were evaluated by screening an universe of alternatives for each issue, selecting systems for a detailed costeffective evaluation based on viability and then performing a cost-effective evaluation on each of the selected alternatives. The evaluation determined that a vacuum collection system was the cost-effective solution for wastewater collection on Oak Island. The evaluation of treatment methods determined that an extended aeration system with anoxic basins to operate in a denitrification mode with cloth disk filters, and ultraviolet in combination with sodium hypochlorite disinfection, was the cost-effective wastewater treatment alternative. The above mentioned evaluation led to a conclusion of constructing a new treatment facility to handle the Town's wastewater flows. However, the Town of Oak Island also evaluated regionalization with many communities, including regionalizing with Brunswick County. A separate Town of Oak Island treatment facility was compared to a regional facility. The latter proposal is to connect to the West Brunswick Regional Water Reclamation Facility (West Brunswick Regional WRF) for the treatment of the wastewater flows generated from the Town of Oak Island. The project involves the construction of a lift station on the island and a force main from the island to the County treatment facilities to convey the wastewater from the Town. In the end, the Town had decided to opt for the latter even though it may not be the most cost effective alternative in the short term. A detailed description of the events leading to this decision and the reasons for it has been included in Chapter 5.

Additionally, there was a plan of reuse water disposal options on two spray irrigation sites. The Town will provide two sites for reuse water disposal to the County. One site is Town-owned land contiguous to the previously proposed new treatment facilities, and the other site is north of NC 211. A detailed evaluation was performed for both the sites that included a soil scientist study, an agronomy study, and a hydrogeological study, which had been integrated into this report as Section 7, portions of Section 12, portions of Appendix B, portions of Appendix F, and Appendix M. The authors of studies are Scott Frederick, NCLSS, of the Soil, Water & Environment Group (formerly Greenvest), and Ed Andrews, PG of Ed Andrews and Associates. The site evaluation concluded that a maximum of 2.63 mgd can be irrigated at the two sites provided by the Town. Additional disposal capacities of 3,297 mgd will be provided by the County at the West Brunswick Drip Irrigation Facility, St. James Plantation, and Winding





River Plantation. The total flow produced by Town of Oak Island will be land applied and the details have been discussed in Chapter 7 and 11.

The proposed locations of all the proposed facilities are shown on Figure 1-1.

1.3.1. Description of Wastewater Collection System

Several sewer collection system options were evaluated for Oak Island, including gravity collection, vacuum collection, on-site septic tank systems, and septic tank effluent pumping systems. Vacuum collection systems were recommended over the other evaluated options because they offer operational advantages over gravity collection systems, have no infiltration, and have a lower initial capital cost. The vacuum collection system for Oak Island will utilize approximately 300,000 feet of 4-inch, 62,000 feet of 6-inch, 33,000 feet of 8-inch, and 26,000 feet of 10-inch PVC collection piping and 9 vacuum collection station will also contain a lift station to convey the collected wastewater to a centralized lift station. The average lift station will serve approximately 900 homes and businesses.

1.3.2. Description of Wastewater Treatment System

The wastewater from the Town will be treated at the County's West Brunswick Regional Water Reclamation Facility on US 17 and NC 211. This facility is presently at 3 mgd and can be expanded to 12 mgd. This facility will undergo an expansion of 3 mgd to be able to handle the wastewater flow from the Town. This expansion will be strictly for the Town of Oak Island. The plant expansion will be essentially duplicating the existing facility design. The proposed expansion will include the following:

- A mechanical bar screen, grit removal unit with pump, cyclone and a classifier unit
- o An equalization basin
- o New blower building
- New WAS/RAS pumping building with RAS, WAS and scum pumps
- o Activated sludge oxidation ditches
- o Secondary clarifiers
- o New filters
- o Chemical storage building expansion
- o Effluent pump station
- o Miscellaneous site work and piping





Town of Oak Island, 201 Facilities Plan Update

Figure 1-1. Locations of Proposed Facilities





Town of Oak Island, 201 Facilities Plan Update

1.3.3. Description of Reuse System

The Town of Oak Island will construct a Satellite WRF to provide a sustained flow of 300,000 gpd (0.3 mgd) of reuse water to the golf course and other users. The Oak Island Satellite WRF will be located south of Oak Island Drive near 49th Street on property adjacent to a Town Park and soccer fields. Connection of the west end of the Town's existing reuse transmission main to the Oak Island Satellite WRF will require construction of approximately 10,000 feet of 8-inch main along Oak Island Drive.

This reuse system is being funded by a grant from Clean Water Management Trust Fund and is not included in the project scope for the State Revolving Fund Loan. This system has been referred to at different locations in this document to provide a comprehensive description of existing and proposed facilities.

1.4. Project Implementation Plan

The project will likely be designed, bid, and constructed in phases. The project is divided into these distinct construction phases for the following reasons:

- Divide the work into contracts compatible with different funding sources.
- Promote competition by reduction in contract costs.
- Divide the work into areas compatible with the expertise and experience of contractors.
- · Expedite the construction of the work to completion as expeditiously as possible.

The construction phases will be as follows:

- Phase I Collection System This phase includes three collection system service areas and force
 main network. This Phase will be further subdivided into two contracts: one for just the pipeline
 work and the other for the vacuum station buildings. In each construction contract, there shall be
 three sections, one for each service area, thereby allowing bidders to bid on just one, two, or three
 sections. These construction contracts will be let by the Town.
- Phase II Collection System This phase includes six collection system service areas and force
 main network. This Phase will be further subdivided into two contracts: one for just the pipeline
 work and the other for the vacuum station buildings. In each construction contract, there shall be
 six sections, one for each service area, thereby allowing bidders to bid on which ever sections
 they desire to. These construction contracts will be let by the Town.



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- Phase I Transmission System This phase includes the construction of the Middleton Lift Station that will deliver the wastewater from the Town to the County's force main on Route 211. This project will include the construction of the lift station on the island and a portion of the force main to the Town ETJ. Brunswick County will construct the remaining portion of this forcemain from the Town ETJ to Route 211. Hence, the construction contracts for this Phase will be let by both the Town and the County.
- Phase II Transmission System This phase includes the construction of the forcemain from the connection point in Phase I, along Route 211, Clemens Road, Gilbert Road and Benton Road to the West Brunswick Water Reclamation Facility. Brunswick County will construct this forcemain connection.
- West Brunswick Regional Water Reclamation Facility Expansion The existing 3 mgd plant will be expanded to 6 mgd. Brunswick County will lead this effort.
- Disposal of Effluent This phase of the project will involve the construction of disposal structures and effluent transmission pipelines to these disposal areas. Brunswick County will lead this effort.

1.5. Summary of Costs for Recommended Facilities and Financial Requirements

The capital and annual operating and maintenance opinion of costs for the recommended plan is estimated to be \$98,270,800 and \$1,391,900, respectively. These costs are for the design flow of 3 mgd, which includes the regional facility improvements from Brunswick County. The costs are based on the cost-effective analysis performed in Section 8. These costs are explained below.

1.5.1. Project Capital Costs

Table 1-1 provides a summary of the opinion of project capital costs associated with each portion of the project.



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Town of Oak Island, 201 Facilities Plan Update

Item	Construction Cost
Phase I Vacuum Collection System	\$12,355,000
Phase II Vacuum Collection System ¹	\$25,520,000
Lift Station and Force Main ²	\$3,055,000
Collection System Vacuum Stations	\$8,654,000
Subtotal Construction Costs	\$49,584,000
Engineering	\$6,409,420
Land Acquisition	\$1,835,000
Legal	\$200,000
Administrative	\$500,000
Miscellaneous	\$750,000
Capitalized Interest-Net	\$1,600,000
Subtotal Non-Construction Costs	\$11,294,420
TOTAL PROBABLE LOCAL COSTS	\$60,878,420
Regional Project Costs Allocated to Oak Island from Brunswick County	\$48,686,779
Total Probable Project Cost (Local and Regional)	\$109,565,199

Table 1-1. Probable Project Cost Summary

1. This includes the cost of vacuum pipelines, forcemain network, and vacuum station construction

2. This include the Middleton Lift Station and the portion of forcemain to the Town ETJ

1.5.2. Operation and Maintenance Costs

The operation and maintenance cost for the proposed project have been estimated to be \$1,391,900 annually for the design flow. The opinion of probable operation and maintenance is for the design flow in 2013, but the value is in 2006 dollars. These operation and maintenance expenses must be paid through local sources and are not eligible for any federal or state grants or loans.

1.5.3. Project Financing

The project is expected to receive financing from a variety of sources including a revolving loan from the State of North Carolina, market financing as permitted by North Carolina General Statutes Section 160A-20, and revenue bond financing. While the Town aggressively pursues any available grant funding for project costs, no grant funding is forecast in the financing assumptions presented herewith. Repayment of loans will occur through a combination of special assessments authorized by the North Carolina General Statutes and user rate charges to individual wastewater customers. The loan repayment process as security for the project financing will be discussed in greater detail below.



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Section 1. Executive Summary Town of Oak Island, 201 Facilities Plan Update

The overall impact of the special assessment portion of the financing of the recommended plan is to provide approximately \$42,281,400 in special assessment principal over a ten-year period (10,067 lots at the rate of \$4,200 each) as permitted by statute.

The Town plans to finance \$57,340,020 (Phases I and II exclusive of main lift station and force main) through revenue bond financing permitted under the North Carolina General Statutes. The projected interest is expected to be 5.5%. The revenue bond financing is expected to be in two issues covering both Phase I and Phase II expenses at completion of construction. Interim financing is expected to be used during construction of both Phases.

The Town also seeks to secure a revolving loan in the amount of \$3,538,000 from NCDENR at an expected rate of not greater than 4%. Payback of all financing described above is expected to be over a twenty-five year period with level annual payments over the term of the loans. The Town has also secured financing for land purchases for four vacuum station sites in Phase II of the project. The financing was authorized by NCGS 160A-20 and the debt service payment has been included in the rate model. Expenses (capital allocations and operation and maintenance expense) of the West Regional System allocated to Oak Island will be billed to Oak Island by Brunswick County on a monthly basis. Financing of West Regional System capital expenses is the responsibility of Brunswick County.

The operation and maintenance of the new system is estimated to be \$1,391,898 in the first full year of operation. Operation and maintenance (includes all expenses) for the present Oak Island wastewater system is expected to be \$640,650. The combined system operation and maintenance expense is expected to be \$2,035,548 in the first full year of combined system operation. Direct debt service on obligations of Oak Island in the first year of operation is estimated to be \$4,916,465. Payments to Brunswick County in the first year of operation are expected to total \$3,980,372. Estimated billable flow for the first year of operation is expected to total \$3,980,372. Estimated billable flow for the first year of operation is expected to total \$3,980,372. Estimated billable flow for the first year of operation is expected to total \$3,980,372. Estimated billable flow for the first year of operation is expected to total \$3,980,372. Estimated billable flow for the first year of operation is expected to total \$3,980,372. Estimated billable flow for the first year of operation is expected to total \$3,980,372. Estimated billable flow for the first year of operation is expected to total \$3,000 is attributable to the new system improvements and \$4,822,000 from the existing wastewater system. Estimated monthly billings for the average customer (5,000 gallons) will be \$67.15.

The recommended plan, as presented, provides for wastewater collection and treatment systems that will comply with permit limits, but is also cost-effective and affordable to the community. Based on a preliminary assessment of surrounding communities in Brunswick County, the Town of Oak Island will enjoy moderate rates when compared with other communities.





Section 1. Executive Summary

Town of Oak Island, 201 Facilities Plan Update

1.5.4. Environmental Assessment

Primary short term impacts will include noise and increased emissions from construction equipment. Short term impacts will include the migration of wildlife from construction areas at the disposal sites, but the wildlife will return after construction is completed. Dewatering of groundwater will occur during construction for installation of collection sewers and vacuum stations. No long term primary impacts is expected.

Increased noise level will occur from forest management activities at the disposal sites; however, this should be no different from the timber production activities at the sites.

Construction of several of the vacuum stations and the satellite WRF fall into the 100-year and the 500year flood plains, and will require safeguards to the structures.

No primary impacts will result to wetlands; prime and unique agricultural lands; public lands and scenic recreations, and state natural areas; areas of architectural, archeological or historical value; shellfish or fish and their habitats; toxic substances; and mineral resources.

The proposed service area of Oak Island is a community that has matured as far as land development and installation of infrastructure. The development pattern for the island has been established as virtually all areas have been platted and nearly all roads serving residential and commercial areas of the island have been constructed. Development is continuing on the island in the un-sewered areas in a random manner with nearly every area and every street experiencing housing starts. The proposed project will not cause a secondary impact of new platted areas or new street construction on the island. Except for the collection sewer, all infrastructure is already in place on the island in the un-sewered areas. All electric lines, telephone lines, cable lines, and water lines are in place and functioning. Except for the collection sewer, all infrastructure is already in place on the island in the un-sewered areas. All electric lines, telephone lines, cable lines, and water lines are in place and functioning. Except for the collection sewer, all infrastructure is already in place on the island in the un-sewered areas. All electric lines, telephone lines, cable lines, and water lines are in place and functioning. Any properties currently prevented from constructing structures by CAMA regulations will not be allowed to construct structures with a new sewer collection system in place. There will no impacts from this project on beachfront construction.

Elsewhere on the island construction in the un-sewered portion of the island is continuing, even during times of slow national economic activity. This is occurring even without a sewer collection system in place, and virtual build out of the island will occur in the 2017 to 2020 range regardless of whether or not this project is constructed. The pace of new construction may quicken somewhat with the construction of a new sewer collection system, but the construction and the resulting increase in population will occur





Section 1. Executive Summary

Town of Oak Island, 201 Facilities Plan Update

regardless. The Second Bridge to Oak Island EIS, 2002 reached the same conclusion when impacts of the new bridge were considered.

The extraterritorial jurisdiction (ETJ) area of the Town on the mainland proposed for sewer service will experience development and population growth. However, property owners will proceed with development whether or not a new treatment plant is constructed. The *Second Bridge to Oak Island EIS*, 2002 documented that property owners will proceed with development whether or not the bridge is installed.

Construction of the 3 mgd expansion to the West Brunswick Regional Water Reclamation Facility is strictly for the Town of Oak Island and no secondary or cumulative impacts outside the jurisdictional boundaries of the Town will result.

The Town has adopted a stormwater management ordinance to protect, maintain, and enhance water quality in the vicinity. With this program the Town is taking a proactive approach to protecting surface waters and improving water quality in nearby impacted shellfish waters. With this ordinance and proactive approach to implementing a stormwater program that equals the EPA, NPDES Phase II program, it is anticipated secondary and cumulative impacts from this project will be minimized. The Town of Oak Island also promulgated an illicit stormwater discharge ordinance. This ordinance not only regulates any new illicit stormwater discharges, it regulates existing illicit stormwater discharges with the requirement that property owners correct these discharges. In addition to the new ordinances to establish compliance with NPDES Phase II requirements, the Town of Oak Island is taking the initiative to develop a Long Range Drainage Program. The goal of this program is to achieve the control of stormwater to current rates of runoff or even lower those rates, even with increased residential housing units. Any impacts as a result of stormwater will likely occur whether or not the project is constructed. The goal of the Town of Oak Island will be to minimize the impacts of stormwater runoff in conjunction with this project.

The significant positive impacts associated with the wastewater project include the following:

- Eliminating potential adverse impacts to water quality from existing subsurface septic systems.
- · Preserving forestland associated with disposal site properties from future development.
- Enhancement of wildlife habitat through the creation of edge habitat and nesting areas within irrigation corridors.
- · Increased productivity of forestland on disposal sites from the high quality tertiary treated water.
- Enhancement of adjacent wetlands by increasing base flow and improving associated wildlife habitat.





Section 1. Executive Summary Town of Oak Island, 201 Facilities Plan Update

Produce reclaimed water that exceeds State mandated requirements for fecal coliform concentrations. Water quality will be maintained thus protecting nearby shellfish waters.

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STATE OF NORTH CAROLINA Department of Environment and Natural R and Coastal Resources Commission	A
Department of Environment and Natural R and Coastal Resources Commission	
Coastal Resources Commission	
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for X Major Development in an Area of Env	vironmental Concern
pursuant to NCGS 113A-118	
Excavation and/or filling pursuant to l	NCGS 113-229
used to Town of Oak Island, 4601 E. Oak Island Drive, Oak Island,	NC 28466
hthorizing development in <u>F Brunswick</u> County at <u>Davis</u>	Canal and the AIWW, Oak Island
, as requested in the permittee's applic	cation dated 8/11/08 (MP-1) and 7/31/08
P-3), including the workplan drawings (198), as referenced in condition No. 1 of this	permit.
is permit, issued on <u>October 29, 2008</u> , is subject to complian	nce with the application (where consiste
h the permit), all applicable regulations, special conditions and notes set forth	h below. Any violation of these terms m
subject to fines, imprisonment/or civil action; or may cause the permit to be r	null and void.
following list of altached workplan drawings: 1 sheet dated 12/20 197 dated 5/13/08, Sheets 4 and 7 of 197 dated 6/25/08, Sheets 2 5/23/08 and Sheets 46 and 47 of 197 dated 2/4/08, Sheets 12-16, 9/12/08, and the attached AEC Hazard Notice dated 5/6/08.	4-45, 48-124,136-197 of 197 dated 125-134,135A-D of 197 dated
See attached sheets for Additional Con	ditions)
This permit action may be appealed by the permittee or Signed by the a	authority of the Secretary of DENR and il Coastal Resources Commission.
her qualified persons within twenty (20) days of the issuing Chairman of the ties an appeal fequires resolution prior to work initiation or	
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OCT-29-2008 12:33 From: DCM MHDCTY

To: 919194628356

Page: 3/5

Town of Clark Island

Permit # 152-07 Page 2 of 4

ADDITIONAL CONDITIONS

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Ocean Hazard Area Development

2) Price to the initiation of construction within the Ocean Hazard AEC, the permittee shall stake, and a Division representative shall approve, the first line of stable, natural vegetation and the corresponding small and large structure setbacks. In this case, the first line of stable natural vegetation is defined as the vegetation line that existed prior to the onset of the most recent large-scale beach renourishment project. These setback determinations shall replace those done at the time the permit application was processed and approved. Construction shall begin within sixty days of this determination or the measurement is void and shall be re-established. In the case of a major shoreline change within that period, a new setback determination shall be required before construction begins.

- 3) All surjuctures shall be located entirely landward of the appropriate small and/or large structure development setback lines.
- 4) All structures authorized by this permit shall be relocated or dismantled when they become imminently threatened by changes in shoreline configuration. A structure(s) shall be relocated or dismantled within two (2) years of the time when it becomes imminently threatened, and in any case, upon its collapse or subsidence. However, if natural shoreline recovery or beach re-nourishment takes place within two (2) years of the time the structure becomes imminently threatened, so that the structure is no longer imminently threatened, then it need not be relocated or dismantled at that time. This condition shall not affect the permittee's right to seek authorization of temporary measures allowed under CRC rules.

Estuarine Shoreline Area Development

- 5) Portions of the authorized project are located in a primary nursery area (PNA). Therefore, in accordance with T15A:07H.0208 of the Rules of the Coastal Resources Commission, no new dredging or excavation within the PNA shall be parmitted. Dredging in any manner, including "kicking" with boat propellers is not authorized. This prohibition shall be applied and enforced throughout the entire existence of the permitted facilities.
- 6) In abcordance with 15A NCAC 07H.0209, no section of the vacuum sewer system shall be located within 30 feet of the normal high water line. Any directional boring required under Condition No. 6 of this permit, shall begin 30 ft. or more landward of the normal high water level.

Upland Development

7) Unless specifically altered herein, this permit authorizes the grading and other land disturbing activities associated with the development of the above referenced project, including but not limited to all the development of the Town of Oak Island Phase I Vacuum Scwer system, unless specifically altered herein by conditions of this permit. Any additional land disturbing activities and/or construction may require a modification of this permit. Contact a Division of Coastal Management representative at (910) 796/7215 for this determination.

OCT-19-008 12:33 From: DCM MHDCTY

Twn of Oak Island

Permit # 152-07 Page 3 of 4

ADDITIONAL CONDITIONS

Sedimentation and Erosion Control

NOTE: An Erosion and Sedimentation Control Plan shall be required for this project. This plan shall be filed at least thirty (30) days prior to the beginning of any land disturbing activity. Submit this plan to the Department of Environment and Natural Resources, Land Quality Section, 127 (Cardinal Drive Extension, Wilmington, NC 28405.

- 8) In order to protect water quality, runoff from construction shall not visibly increase the amount of suspended sediments in adjacent waters.
- 9) Appropriate sedimentation and erosion control devices, measures or structures shall be implemented to ensure that eroded materials do not enter adjacent wetlands, watercourses and property (e.g. silt fence, diversion swales or berms, etc.).

Stormwater Management

10) The N.C. Division of Water Quality approved this project under stormwater management rules of the Environmental Management Commission under Stormwater Permit No. SW8061219, which was molified on 8/29/08. Any violation of the permit approved by the DWQ shall be considered a violation of this CAMA permit.

General

- 11) The permittee understands and agrees that, if future operations by the United States requires the removal, relocation, or other alteration of the structure or work authorized by this permit, or if in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to free navigation of the navigable waters, the permittee shall be required, upon due notice from the Corps of Engineers, to remove, relocate or alter the structural work or obstructions caused thereby, without expense to the United States or the state of North Carolina. No claim shall be made against the United States or the state of North Carolina on account of any such removal or alteration.
- 12) No vegetated wetlands, Coasial Wetlands, or open water areas shall be excavated or filled, even temporarily.
- 13) This permit shall not be not be assigned, transferred, sold, or otherwise disposed of to a third party without the written approval of the Division of Coastal Management.
- 14) All new or modified sewer lines or force mains located in close proximity to water lines shall comply with the separation requirements as stated in the Public Water Supply Section Rules, Section 0906 (Relation of Water Mains to Sewers). Contact the Public Water Supply Section at (910) 796-7215 for more information.

OCT-29-2008 12:34 From: DCM MHDCTY

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To:919194628356

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Town	of Oal	Leland	Permit # 152-07 Page 4 of 4
		ADDITIONAL CONDITIONS	
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15)	shali	event of a sewer overflow, the Division of Environmental Health, Shell be immediately notified so that appropriate shellfish closures and pro- ries may be issued.	fish Sanitation Section ecautionary swimming
NOTE		Bored sewer lines that lie beneath waterbodies present special concerns r There is potential for adverse impacts to public health from the consum shellfish, as well as swimming in contaminated waters. The permi- implement all appropriate safeguards to minimize the likelihood of a break system.	ption of contaminated itee is encouraged to
NOTE		This permit does not eliminate the need to obtain any additional state, for approvals or authorizations that may be required, including but not limited from the NC DOT.	
NOTE	ä	Future development of the permittee's property may require a modific Contact a representative of the Division at (910) 796-7215 prior to the such activity for this determination. The permittee is further advised dependent activities are not authorized within 30 feet of the normal high w	commencement of any that many non-water
NOTE	ä	The N.C. Division of Water Quality has authorized the proposed project Quality Certification No. 3642 (DWQ Project No. 061879v2), which was i	
NOTE	i	The U.S. Army Corps of Engineers has assigned the proposed project COE 2007-01776-010.	E Action Id. No. SAW-
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B&V File F

April 9, 2008

B&V Project 132160.0312



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Town of Oak Island Wastewater Collection & Treatment Project Phase II – CAMA Major Development Permit

Ms Heather Coats Division of Coastal Management Wilmington Regional Office 127 Cardinal Drive Ext. Wilmington, NC 28405-3845

Subject:

Request for Additional Information, Town of Oak Island

Dear Heather:

In response to your request for additional information dated February 11, 2008, Black & Veatch has prepared this information packet to address each of your comments.

Please find the following items included under cover of this letter for your review:

- 1. Revised Application Form MP-1 Indicating All Previously Approved Permits for Project Work.
- 2. Response Narrative Indicating Responses to Each Comment From Your February 11, 2008 Letter.
- 3. Revised Project Narrative Including Information About Modifying Existing CAMA Permit.
- 4. Revised Figures including List of all Enclosed Figures.

Initially, the Town of Oak Island applied for a CAMA Major Development permit for the work associated with Phase II of their Wastewater Collection and Treatment Project. At this time, the Town would like to change their request and instead ask that the Phase II construction be added as a major modification to the existing CAMA Major Development Permit #152-07 originally issued on October 12, 2007 for all work associated with Phase I. Based on our phone conversations, it is our understanding that the required submittals for the issuance of a new permit are the same as those required for a major modification to an existing permit. Please let us know if any additional steps are required to change the application from a new permit to a modification of an existing permit.

The issue of the wetlands at the vacuum station #2 site is currently being reviewed by Black & Veatch, the Town of Oak Island, and the U.S. Army Corps of Engineers. The 404 wetland boundary has been field located, but as of the date of this letter, has not been verified by the Corps. Discussions are underway with the Corps to include the wetlands on the vacuum station #2 site in an already existing mitigation plan for a different portion of the project. Please see the attached revised project narrative and response narrative for more information on the vacuum station #2 wetlands issue.

We hope this application package will meet the requirements for a major modification to CAMA permit #152-07. If you have any questions or need further clarifications, please feel free to contact me at 919-462-7513 (email: tafilakuml@bv.com) or Matt Skidmore at 919-462-7519 (email: skidmorem@bv.com). Thank you for your assistance.

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NC Division of Coastal Management Heather Coats

Page 2

B&V Project 132160.0312 April 9, 2008

Very truly yours,

BLACK & VEATCH International Company

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Mellssa L.A. Tafilaku, P.E. Project Engineer

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Enclosure(s) cc: File w/ enclosures Troy Davis w/ enclosures Jerry Walters w/o enclosures



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B&V Project 132160.0312

B&V File F May 28, 2008

Town of Oak Island Wastewater Collection & Treatment Project Phase II – CAMA Major Development Permit

Ms Heather Coats Division of Coastal Management Wilmington Regional Office 127 Cardinal Drive Ext. Wilmington, NC 28405-3845

Subject:

Request for Additional Information, Town of Oak Island

Dear Heather:

In response to your request for additional information dated April 21, 2008, Black & Veatch has prepared this information packet to address your comments.

Please find the following items included under cover of this letter for your review:

- 1. Completed Application Form MP-2.
- 2. Response Narrative Indicating Responses to Each Comment From Your April 21, 2008 Letter.
- 3. Revised Project Narrative.
- 4. Revised Figures including List of all Enclosed Figures.
- 5. Table of Pipe Square Footage.

We hope this application package will meet the requirements for a major modification to CAMA permit #152-07. If you have any questions or need further clarifications, please feel free to contact me at 919-462-7513 (email: tafilakuml@bv.com) or Matt Skidmore at 919-462-7519 (email: skidmorem@bv.com). Thank you for your assistance.

Very truly yours,

BLACK & VEATCH nternational Comoa

Melissa L.A. Tafilaku, P.E. Project Engineer

Enclosure(s)

cc: File w/ enclosures Troy Davis w/ enclosures Jerry Walters w/o enclosures

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Town of Oak Island Wastewater Collection & Treatment Project Phase II – CAMA Major Development Permit B&V Project 132160.0312 B&V File F June 26, 2008

Ms Heather Coats Division of Coastal Management Wilmington Regional Office 127 Cardinal Drive Ext. Wilmington, NC 28405-3845

Subject:

1.1.1.1

Request for Additional Information, Town of Oak Island

Dear Heather:

In response to your request for additional information dated June 18, 2008, Black & Veatch has prepared this information packet to address your comments.

Please find the following items included under cover of this letter for your review:

- 1. Response Narrative Indicating Responses to Each Comment From Your June 18 Letter.
- 2. Revised Project Narrative.
- 3. Revised Figures including List of all Enclosed Figures.
- 4. Table of Pipe Square Footage.

As a follow-up to our discussions regarding the US Army Corps of Engineers (USACE) jurisdictional determination of the 404 wetlands boundary for vacuum station #2 located at the intersection of 5th Place West and West Pelican Drive, Kimberly Garvey with the USACE met with the Town and B&V today to perform the determination and discuss potential mitigation/restoration sites. Based on the field conversations, the USACE verified boundary will not change from the wetland boundary shown on figure 36 of 193 attached in this submittal. We will forward you copies of any correspondence with the USACE and will forward you the formal USACE verified wetland boundary map once it becomes available.

The site plan for vacuum station #2 will need to be rearranged to avoid impacts to the wetland area. We are working with the NCDENR stormwater division to discuss alternative materials and stormwater BMP's for the revised station design. We will forward you this revised layout no later than July 14th. Also, please note that we have had conversations with Rhonda Hall with the stormwater division of NCDENR which indicate that based on her offices review the stormwater controls designed for vacuum stations #1,#4,#7,#8, and #9 are all acceptable. She is awaiting our redesign of vacuum station #2 to complete her review and approval of the stormwater permit.

In accordance with our previous conversations, we are only submitting one copy of all of the figures for your review. Once you have completed your review of the figures, we will make any required modifications and submit you the required copies. To avoid any potential issues with light gray lines not reproducing well, B&V would like to provide you with the required number of copies for both the color and black & white figures.

We hope this application package will meet the requirements for a major modification to CAMA permit #152-07. If you have any questions or need further clarifications, please feel free to contact me at 919-462-7513 (email: tafilakuml@bv.com) or Matt Skidmore at 919-462-7519 (email: skidmorem@bv.com). Thank you for your assistance.

Black & Veatch International Company - 9000 Regency Parkway, Suite 200 - Cary, NC USA 27518 - Telephone; 919.462.7501

REQUEST FOR MAJOR MODIFICATION TO CAMA PERMIT #152-07 ISSUED 10/12/2007

TOWN OF OAK ISLAND WASTEWATER COLLECTION AND TREATMENT PROJECT PHASE II

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION, June 18, 2008

Responses are indication in bold italics

- 1. Plan views of the proposed development in each service area should be submitted, as well as a plan view of the entire project as a whole. Plans should include the following features:
 - Existing and proposed features (i.e. dunes, shorelines, water bodies, coastal
 marsh, wetlands, existing and proposed structures, exact areas and dimensions of
 proposed excavation, fill and/or spoil disposal, approximate high and low water
 levels, property boundaries and riparian corridors, the 1st line of stable natural
 vegetation, setback lines and standard north arrow).

Additionally:

• Figures 5 and 5a have 27th Place West labeled at two different locations.

Please see revised Figure 18 which shows the correct location of 27th Place West.

• Figures should show all proposed work. The location of the pipeline to be directionally drilled should be shown on Figures 115 and 133. Sewer lines must be clearly shown on vacuum station plans in black (including Figure 136, DCFM-1).

Please see revised Figures 132, 142, 146, and 150 all of which now show the pipeline installed by horizontal directional drill. Figure 152 (plan and profile for horizontal directional drill) has also been revised to show all of the piping included in service area 2.

• Figures 135 and 178-192 have not been submitted. Please clarify figure numbering.

All Figures have been renumbered. Revised Figures 1 through 193 have been included with this submittal.

• The property lines are still not shown on the plans for vacuum stations.

Property lines now show in a darker line weight and will show up when photocopied. B&V will provide you with copies of both the black & white and color figures once you have completed your initial review.
REQUEST FOR MAJOR MODIFICATION TO CAMA PERMIT #152-07 ISSUED 10/12/2007

TOWN OF OAK ISLAND WASTEWATER COLLECTION AND TREATMENT PROJECT PHASE II

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION, June 18, 2008

Responses are indication in bold italics

 Figure 19 of 192 still does not clearly show the proposed disposal area for excavated material.

Please see revised Figure 36 which includes the proposed location of the disposal pile for the excavated material from vacuum station 2.

• Existing wetland vegetation is still not shown at Kings Lynn Drive.

Based on a phone conversation between Matthew Skidmore of Black & Veatch and Heather Coats of NCDCM on June 16, 2008, the small half-moon shaped marsh island located north of King's Lynn Drive has been added to the Drawings. Please see revised Figures 12 and 13 for location of the marsh island.

• Please clearly show setback lines and sewer lines as separate and distinct features on plans. If you are unable to clearly show these features on existing enlarged section plans, please show the setback lines on the detail sheets or re-submit these figures using a smaller scale.

Please see revised Figures 8 through 22. Each of these Figures is now shown in color to clearly show all features. One copy of each of the aforementioned color Figures has been included with this submittal. Once the Figures have been approved, we will supply additional color copies to distribute to other reviewers as directed.

- 2. Cross-sectional (side-view) drawings must be to scale, using a standard engineer's scale, 1"=200' or less. Cross-sectional or side view drawing must include the following features:
 - All side view plans should show depths and elevations of existing structures and proposed work relative to existing ground level.

Please see revised Figures 25, 26, 28, 29, 31, 32, 34, 35, 37, 38, 40, and 41. These Figures show side-view sectional plans for each of the 6 vacuum station buildings. The revised Figures show the location of the finished grade and the existing grade.

• Please show MHW and MLW levels (as lines) and the §404 wetland boundaries on the side view plan for the directional drill, DCFM-1.

REQUEST FOR MAJOR MODIFICATION TO CAMA PERMIT #152-07 ISSUED 10/12/2007

TOWN OF OAK ISLAND WASTEWATER COLLECTION AND TREATMENT PROJECT PHASE II

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION, June 18, 2008

Responses are indication in bold italics

Please see revised Figure 152 for the side view profile of the horizontal directional drill which now includes the MHW and MLW levels shown as lines.

Please include a side view plan showing the entire project area for vacuum station
 2, including areas to be excavated and filled relative to existing ground level, final proposed grade and wetland boundaries.

The side-view plan of the entire vacuum station 2 area will be forwarded for review at a later date. Kim Garvey of the US Army Corps of Engineers performed the jurisdictional determination of the 404 wetland boundary on the vacuum station 2 site on June 26, 2008. Per field discussions, the boundary will be identical to that shown on Figure 36 of 193. B&V will update the vacuum station 2 site plan and prepare the side-view plan you have requested. We anticipate making this additional submittal to you by July 14.

• Figures 53 and 54, the plans for the bridge crossings at SW 15th Street and SW 28th Street, must be to scale, using an engineer's scale (e.g. 1"=2', 1"= 5', 1"=10", etc). Figures 25 & 26 should be removed from plan set, or should clearly state they are to be used as a reference of existing conditions only and do not show proposed work. The same statement should also be included in your narrative.

Please see revised Figures 70 and 71 for side view plans of the bridge crossings at SW 15th Street and SW 28th Street. Each of the sectional views is shown in engineer's scale Figures 42 and 43 have been clearly marked with notes indicating that they are supplied for information only and do not represent any proposed work.

 Sections of the proposed line in Service Area 9 are still shown within the 30' buffer. If you are unable to relocate these lines, you are urged to indicate in your narrative why you are unable to do so (and to show any existing features which may prevent you from doing so on your plans).

Sections of proposed pipeline in service area 9 were placed within the 30-foot buffer due to State required minimum separation distance from potable water lines. Moving the pipelines outside of the 30-foot buffer would place the sewer lines within the 10-foot mandated separation to existing potable water lines.

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REQUEST FOR MAJOR MODIFICATION TO CAMA PERMIT #152-07 ISSUED 10/12/2007

TOWN OF OAK ISLAND WASTEWATER COLLECTION AND TREATMENT PROJECT PHASE II

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION, June 18, 2008

Responses are indication in bold italics

The existing water lines are shown on the area 9 pipeline profile plans. Please see revised project narrative for more explanation.

• A Satellite Water Reclamation Facility is shown on Figures 10 and 62 of 192. Please clarify the status of this facility (i.e. existing or under construction) in both your narrative and on plans. If proposed, it needs to be included in your narrative, on Sheet MP-3 and side view plans must be submitted.

The Satellite Water Reclamation Facility (SWRF) is an existing structure which is currently under construction. The SWRF is located on the SW corner of the intersection of East Yacht Drive and NE 54th Street and is adjacent to the vacuum station 8 building. The SWRF does not require a CAMA permit and is not being permitted under this major modification to existing CAMA permit #152-07, nor was it permitted under the original CAMA permit #152-07. Please see the revised project narrative for more explanation. Figures 27 and 79 have been revised and now include a note about the SWRF being an existing structure and not part of any CAMA permit.

Project Narrative

The Town of Oak Island is installing a vacuum sewer system for wastewater collection for a significant portion of the island. The island has been divided into nine service areas, each with its own collection system and vacuum station. Each vacuum collection station also contains a lift station to convey the collected wastewater to a centralized lift station. The nine service areas are shown in *Figure 1* along with the locations of the proposed vacuum stations.

Three of the nine service areas have already been permitted. CAMA major development permit #152-07 was issued on October 12, 2007 for all project construction related to phase I. The remaining six service areas are proposed to be added as a major modification to this existing CAMA major development permit. The remaining six service areas are considered to be phase II construction. A detailed description of phase I and phase II construction is included in this project narrative.

Town of Oak Island Project Overview

Several sewer collection system options were evaluated for Oak Island, including gravity collection, vacuum collection, on-site septic tank systems, and septic tank effluent pumping systems. Vacuum collection systems were recommended over the other evaluated options because they offer operational advantages over gravity collection systems, have no infiltration, and have a lower initial capital cost. Such systems are also ideal for flat terrain with high groundwater and sandy soils where it is difficult to construct deep pipelines.

The vacuum collection system for Öak Island will utilize approximately 300,000 feet of 4-inch, 62,000 feet of 6-inch, 33,000 feet of 8-inch, and 26,000 feet of 10-inch PVC collection piping and nine vacuum collection stations over the entire island.

The satellite facility and the vacuum stations are being designed to look like beach cottages to blend in with the neighborhood. The architectural features include vinyl siding, metal hipped roofs, false windows, access doors with a "residential" look, and porches with handrails. The vacuum system equipment will be located inside the vacuum station. The bottom "basement" level, located below grade, shall contain a steel collection tank, two sewage pumps, and a sump pump. The sewage discharge pumps are provided in duplicate, with each pump capable of pumping the design peak flow. These pumps will be dry-pit, horizontal, non-clog, centrifugal sewage pumps. The operating floor is on the second level (ground level or 2-feet above the 100-year flood level depending on the site characteristics and the flood zone classification). This floor will house the three vacuum pumps and electrical controls. The vacuum pumps will be skid-mounted sliding-vane pumps. Stairs to the basement level of the vacuum station will be located within the building. Some stations will have a third level for use by the Town. Stairs to this level will be outside the building. Other onsite equipment includes odor control equipment, engine generator, air conditioning, and ventilation system.

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The vacuum stations will discharge into a force main network that will feed the Middleton Lift Station. From the Middleton Lift Station, wastewater will be pumped off the island to the West Brunswick Regional Reclamation Facility for treatment. The Middleton Lift Station will be co-located with Vacuum Station 5 and will have three pumps to transport wastewater to the west end of Oak Island via a 20-inch force main under the Intracoastal Waterway (ICW) to Sunset Harbor. The ICW crossing will be completed using horizontal directional drilling (HDD) techniques.

Brunswick County Project Overview

Upon crossing the ICW, the Town's forcemain will connect to a 20-inch forcemain that is being built by the County. The force main will connect to an existing 16-inch forcemain on NC Route 211. This 16-inch pipeline will transport wastewater from the Town to the County's treatment facility in the interim period (Phase I). At a latter date, the County will build a dedicated 24-inch forcemain from NC 211 to connect to the County's treatment facility. The County is also upgrading the existing treatment facility to handle the Town's wastewater flows.

What is a Vacuum Sewer System?

A vacuum sewer system is essentially a mechanized system of wastewater transport and is very similar to a water distribution system, except wastewater is placed under a vacuum and pulled through the system. Unlike typical gravity sewers, it uses differential air pressure to move the wastewater and all the sewer mains are under negative pressures from the vacuum. The normal sequence of a vacuum sewer system under operation is as follows:

- Wastewater is drained from a household to a collection chamber (valve pit) by gravity.
- Once the wastewater reaches a pre determined level within the valve pit the interface valve opens. This interface valve connects the valve pit to the vacuum collection system piping. When the valve is open the wastewater is suctioned into the sewer.
- The wastewater is then suctioned through the collection network until it reaches the vacuum station.
- At the vacuum station the wastewater is collected in a collection tank and then pumped to its final destination using forced mains.

The three major components to a vacuum sewer system: the valve pit, the collection piping, and the vacuum station are explained in further detail below.

Valve Pits

The valve pit serves as an interface between the gravity line from the household and the vacuum collection system. The valve pit consists of two parts: an upper chamber that contains the interface valve and a bottom chamber that collects the wastewater from the household. The chambers are sealed as individual compartments. Wastewater collects in the sump until a sensor tube connected to the valve controller activates the vacuum valve

to open. The vacuum valve, which is located in the upper chamber, is pneumatic (air controlled valve) so it does not need electricity to operate. When the valve is closed, the vacuum throughout the collection system is maintained. When the valve is open, the vacuum within the collection system evacuates the wastewater from the sump. The valve opens for a pre-set period of time. The timing cycle is set to allow for air at atmospheric pressure to enter behind the wastewater and help transport the wastewater forward. For valve pits, each time the valve is open, 10 gallons of wastewater are evacuated into the collection system.

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The valve pits come in different sizes and for the Oak Island project five feet, six feet, and eight feet deep pits are being considered. Valve pits are typically installed along property boundaries or within road rights-of-way to allow for more than one household connection to each valve pit. Up to a total of four connections can be made to a single valve pit. The sump is typically made of fiberglass and a traffic rated cast iron lid allows access to the upper chamber of the valve pit.

Atmospheric air is supplied to the system through a four or six-inch air intake connected to the valve pit. A six inch air intake is used for each valve pit except those serving the first three rows of houses off the beach. Those will each have a 4-inch intake installed on their home service connection.

Collection System Piping

Vacuum sewer piping creates a network connecting the valve pits to collection tanks at the vacuum stations. A sawtooth profile maintains an open air passage throughout the system. The piping material is PVC thermoplastic in 3", 4", 6", 8", or 10" diameters. The joints and pipe fittings are either solvent welded or rubber ring joint types. The vacuum mains are laid at the same slope as the ground maintaining a minimum slope of 0.2 percent. The piping has a general downward slope toward the vacuum station with the exception of vertical lifts that help maintain the shallow trench depths. There are no manholes along the system.

The square footage of piping for each service area is as follows:

Service Area 4: $17,809 \text{ ft}^2$ Service Area 8: $19,929 \text{ ft}^2$ Service Area 9: 18.014 ft^2 Service Area 1: $9,192 \text{ ft}^2$ Service Area 2: $22,683 \text{ ft}^2$ Service Area 7: $38,208 \text{ ft}^2$

For a complete listing of pipe areas by street, please see the attached piping area Tables 1.1 - 1.6

Vacuum Stations

The vacuum stations maintain a vacuum on the collection system, collect wastewater in a tank, and pump wastewater to a central lift station. The vacuum station buildings house

the collection tank, vacuum reservoir tank, vacuum and sewage pumps, and control panels. Collection tanks are either steel with protective coatings or fiberglass. The collection tank is the termination for the vacuum sewer system because wastewater is then pumped out of it via force mains.

Phase I

Phase I construction consisted of vacuum service areas 3, 5, and 6, as well as, the centralized lift station and force main. The phase I portion has already received a CAMA major development permit (Permit #152-07 issued on October 12, 2007).

Phase II

At this time the Town of Oak Island is requesting that phase II construction be added as a major modification to the existing CAMA major development permit #152-07 issued on October 12, 2007 for phase I construction. Phase II covers construction of vacuum service areas and vacuum stations 1, 2, 4, 7, 8, and 9. A description of each of the six vacuum station buildings follows.

Vacuum Station 1

Vacuum Station 1 is located near the intersection of West Beach Drive (SR-1104) and 54th Place West. The building is located in the "VE" flood zone and therefore wave action design is required. The building shall be required to withstand the force of waves breaking against the structure which may occur during a severe storm event. Vacuum station 1 will be built on several columns with the area under the building open. The design shall be similar to a "beach" style house which is built on stilts. The building will be approximately 37 ft long and 21 ft wide. This station will be two storied with the operating level at approximately 10 ft above MSL. Exterior stairs will be provided for access to the operating floor. A dedicated portable generator will be provided onsite because the vacuum station will be located in a flood prone area. During a flood event, the generator will be removed from the site to avoid damage. Odor control and ventilation equipment will be located on site. Entrance to the site will be from West Beach Drive.

Vacuum Station 2

Vacuum Station 2 is located at the intersection of West Pelican Drive and 5th Place West. The operating floor is located 17 ft above MSL. The building will be approximately 37 ft long and 21 ft wide. Exterior stairs will be provided for access to the top floor. Stairs to the basement level of the vacuum station will located within the building. Odor control facilities will be located onsite. A dedicated portable generator will be provided onsite because the vacuum station will be focated in a flood prone area. During a flood event, the generator will be removed from the site to avoid damage. Entrance to this site will be from West Pelican Drive

Vacuum Station 4

Vacuum Station 4 is located at the intersection of SW 22^{nd} Street and West Oak Island Drive. The operating floor will be located approximately 15 feet above MSL. The building will be approximately 41 ft long and 26 ft wide. Exterior stairs will be provided for access to the operating floor. Stairs to the basement level of the vacuum station will be located within the building. A dedicated portable generator will be provided onsite because the vacuum station will be located in a flood prone area. During a flood event, the generator will be removed from the site to avoid damage. Entrance to this site will be from SW 22^{nd} Street.

Vacuum Station 7

Vacuum Station 7 is located at the intersection of NW 19^{th} Street and West Yacht Drive. The operating floor will be located approximately 15 feet above MSL. The building will be approximately 40 ft long and 21 ft wide. Exterior stairs will be provided for access to the operating floor. Stairs to the basement level of the vacuum station will be located within the building. A dedicated portable generator will be provided onsite because the vacuum station will be located in a flood prone area. During a flood event, the generator will be removed from the site to avoid damage. Entrance to this site will be from NW 19^{th} Street.

Vacuum Station 8

Vacuum Station 8 is located at the intersection of NE 54th Street and East Yacht Drive. The operating floor will be located approximately 14 feet above MSL. The building will be approximately 42 ft long and 26th wide. Exterior stairs will be provided for access to the operating floor. Stairs to the basement level of the vacuum station will be located within the building. A dedicated portable generator will be provided onsite because the vacuum station will be located in a flood prone area. During a flood event, the generator will be removed from the site to avoid damage. Entrance to this site will be from NE 54th Street. Vacuum Station 8 is located adjacent to the Town of Oak Island Satellite Water Reclamation Facility (SWRF). The SWRF is an existing structure which is not part of this major CAMA permit modification or the original CAMA permit #152-07.

Vacuum Station 9

Vacuum Station 9 is located at the intersection of NE 75th Street and East Yacht Drive. The operating floor will be located approximately 13 feet above MSL. The building will be approximately 42 ft long and 26 ft wide. Exterior stairs will be provided for access to the operating floor. Stairs to the basement level of the vacuum station will be located within the building. A dedicated portable generator will be provided onsite because the vacuum station will be located in a flood prone area. During a flood event, the generator will be removed from the site to avoid damage. Entrance to this site will be from NE 75th Street.



CAMA Areas of Environmental Concern

Figures 1-6 depict the Area of Environmental Concern (AEC) per the CAMA Handbook for Development in North Carolina. A description of each AEC type is listed below and is followed by a description of which AEC zones are present in each proposed service area.

- Estuarine and Ocean System AEC:
 - From normal high water level (2.0 ft EL) to a distance of 75 feet inland of estuarine waters.
 - From normal high water level (2.0 ft EL) to a distance of 30 feet inland of public trust waters.
 - From normal high water level (2.0 ft EL) to a distance of 575 feet inland of waters classified Outstanding Resource Waters.
- Ocean Erodible AEC:
 - From normal high water level to 445 feet off the first line of vegetation as defined by CAMA. The large and small structure setbacks have also been identified as 60 times the average annual erosion rate and 30 times the average annual erosion rate respectively. The large and small structure setbacks are offset landward from the first line of stable natural vegetation. For the portion of Oak Island where Service Area 1 and 2 are located, the average annual erosion rate is 2.0 feet/year. For the portion between SE 70th St and SE 74th St, this rate is 3.0 feet/year. For the oceanfront portion of service area 9, the rate is 4.0 feet/year.
- High Hazard Flood AEC:
 - All lands located within the "VE" flood zone as identified on the 2006 Federal Emergency Management Association floodplain maps.
- o Inlet Hazard AEC
 - The portion of the project located within the Lockwoods Folly inlet AEC as defined by CAMA.

Service Area 1 AEC

The proposed service area 1 contains all 4 of the aforementioned AEC zones. The entire proposed pipeline in area 1 would be located within at least one of the four AEC types. The proposed vacuum station building for service area 1 would be located entirely within the High Hazard Flood AEC, as well as, the Ocean Erodible AEC.

Service Area 2 AEC

The proposed service area 2 contains a High Hazard Flood AEC, an Ocean Erodible AEC, and an Estuarine and Ocean System AEC. A significant portion of the proposed pipelines would fall into at least one of the three AEC types. A portion of the proposed vacuum station site will be located within the Estuarine and Ocean Systems AEC while the majority of the pipelines are located within the Ocean Erodible AEC and the High Hazard Flood AEC.

Service Area 4 AEC

The proposed service area 4 contains an Estuarine and Ocean System AEC. There are several small portions of the proposed pipelines in the AEC zone. There are two small bridges which provide access to small islands on the southern portion of service area 4. The bridges are located on SW 28th Street and SW 15th Street. The proposed pipelines will be attached to these bridges and will be located in the Estuarine and Ocean System AEC. Furthermore, the pipeline at the southwest end of West Yacht Drive will extend into the Estuarine and Ocean System AEC. Also the pipeline at the southern end of SW 14th Street, SW 15th Street, and Swain Street extends into the Estuarine and Ocean System AEC. With the exception of the pipelines associated with the crossings of the aforementioned bridges, none of the pipelines extend into the 30-foot buffer zone from the Normal High Water Line. The proposed vacuum station building for service area 4 will also be located outside of any AEC zones.

Service Area 7 AEC

There are no proposed pipelines or vacuum station building installations in an AEC zone for service area 7. There is an Estuarine and Ocean System AEC zone that runs along the north side of service area 7. However, all pipelines and buildings will be located outside of this zone.

Service Area 8 AEC

The proposed service area 8 contains a small portion of the Estuarine and Ocean System AEC. A short section of the proposed pipeline at the intersection of East Yacht Drive and NE 48th Street would be the only proposed pipeline installed in the AEC zone. The proposed vacuum station 8 building will be located outside of any AEC zone.

Service Area 9 AEC

The proposed service area 9 contains three of the four aforementioned AEC zones. The portion of the proposed pipelines installed South of East Oak Island Drive would be located the Ocean Erodible AEC and the High Hazard Flood AEC. The northern portion of area 9 contains two sections of pipelines that are located within the 30-foot buffer of the normal high water level. These lines were located within the buffer to provide adequate separation from existing potable water lines. Moving the sewer lines outside of the 30-foot buffer so that all construction activity would be outside buffer would require running the lines parallel to existing potable water lines with less than 10-feet of separation which would violate the minimum separation required by State of NC regulations. The proposed vacuum station 9 building will be located outside of any AEC zone.

Setbacks

The small and large structure setbacks are shown on the AEC drawings. The setback lines were measured from the first line of stable natural vegetation. The small structure setback was calculated as 30 times the average annual erosion rate which is 2 ft/year for areas 1 and 2 and 4 ft/year for area 9. The large structure setback was calculated as 60 times the average annual erosion rate. There were no building structures located within

either the small or large structure setbacks for service areas 1, 2, and 9. There are several pipelines located within the large structure setback in service areas 1, 2, and 9. There is no ocean shoreline in service areas 4, 7, and 8 therefore the setbacks were not located on those drawings.

Wetlands

There are three small portions of the proposed project that contain wetlands. In the westernmost portion of service area 1, the proposed pipelines running along King's Lynn Road would likely be located near a section of estuarine wetlands. However, as the pipeline will be installed in an established right-of-way along an existing road, the pipeline would not directly disturb any wetland areas.

Additionally, in service area 9 the proposed pipeline along East Beach Drive and SE 74th Street would be near a section of freshwater wetlands. Once again the pipeline is located in the right-of-way along an established roadway and no direct disturbance of wetland areas would result.

Finally, the site for vacuum station 2 contains approximately 0.08 acres of 404 wetlands that will be disturbed by construction activities. The 404 wetland boundary is still in the process of being verified by the US Army Corps of Engineers. We have submitted a formal request to USACE to have the 404 wetland boundary verified and Kim Garvey was out on site on June 26th to perform the jurisdictional determination. We are in discussions with USACE regarding potential mitigation sites and plans.

Disturbance at the vacuum station #2 site will include the excavation necessary to construct the vacuum station and the regrading of the site. Currently the site elevation is approximately 4.5 feet MSL. The proposed excavation depth is approximately -10.08 ft MSL. The total expected excavation depth will be approximately 14.58 feet. The expected excavation material will be subsoil. Excavated material will be stored at the north end of 5th Place West. The excavated material will be stored outside of any nearby wetlands areas and will have silt fencing placed to prevent siltation nearby water bodies and soil loss through runoff. A significant portion of the excavated material will be used in regrading of the site.

12-inch Force Main

In order to connect vacuum stations 1 and 2 to the backbone force main network that feeds into the Middleton Lift Station, a 12-inch sewer force main needs to cross the Eastern Channel. This force main will be installed by Horizontal Directional Drill (HDD). The force main is proposed to be high-density polyethylene (HDPE) pipe which will run from 5th Place West across the Eastern Channel to the south end of SW 5th Street. The HDD will involve a drilling rig that will be set on 5th Place West and drill underneath the Eastern Channel. The proposed depth for the channel crossing is 15-feet below the channel bottom. The pipe will be strung along SW 5th Street and will be pulled back through the drilled opening and set in place. Plan & profile drawings of the channel crossing have been included with this submittal.

Environmental Impacts of the Project

Primary short term impacts during the construction of these facilities will include noise and increased emissions from construction equipment. Dewatering of groundwater will occur during construction for installation of collection sewers and vacuum stations. No long term primary impacts are expected.

Construction for Vacuum Stations 1 and 2 falls within the 100-year and the 500-year flood plains, and will require safeguards to the structure. No primary impacts will result to prime and unique agricultural lands; public lands and scenic recreations, and state natural areas; areas of architectural, archeological or historical value; shellfish or fish and their habitats; toxic substances; and mineral resources. There will be the aforementioned disturbance to 404 wetlands at the vacuum station #2 site. This is the only vacuum station which contains either 404 wetlands or coastal wetlands.

The proposed service area of Oak Island is a community that has matured in land development and installation of infrastructure. The development pattern for the Island has been established and virtually all areas have been platted and nearly all roads serving residential and commercial areas of the island have been constructed. Development is continuing on the island in the un-sewered areas in a random manner with nearly every area and every street experiencing housing starts. The proposed project will not cause a secondary impact of new platted areas or new street construction on the island. Except for the collection sewer, all other utilities are already in place on the Island in the unsewered areas. All electric lines, telephone lines, cable lines, and water lines are in place and in service. There will be no impacts from this project on beachfront construction.

Construction in the un-sewered portion of the island is occurring even without a sewer collection system in place, and virtual build out of the island will occur by 2017 to 2020; regardless of whether or not this project is constructed. The pace of new construction may quicken somewhat with the construction of a new sewer collection system, but housing construction and increases in population will occur regardless. The Second Bridge to Oak Island EIS prepared by the Federal Highway Administration and the NC Department of Transportation in 2002 reached the same conclusion when impacts of the new bridge were considered.

Stormwater Management Program

The Town has adopted a stormwater management ordinance to protect, maintain, and enhance water quality in the project area. With this program, the Town is taking a proactive approach to protecting surface waters and improving water quality in nearby impacted shellfish waters. With this ordinance and a proactive approach to implementing a stormwater program that equals the EPA NPDES Phase II program, it is anticipated that impacts from this project will be minimized. The Town of Oak Island also implemented an illicit stormwater discharge ordinance. This ordinance not only regulates any new illicit stormwater discharges, it regulates existing illicit stormwater discharges with the

requirement that property owners correct these discharges. In addition to the new ordinances that establish compliance with NPDES Phase II requirements, the Town of Oak Island is taking the initiative to develop a Long Range Drainage Program. The goal of this program is to achieve zero net stormwater runoff increase, even with increased residential housing units. Any impacts as a result of stormwater will likely occur whether or not the project is constructed. The goal of the Town of Oak Island will be to minimize the impacts of stormwater runoff in conjunction with this project.

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Service Area 4 Pipe

Street	STA Begin	STA End			Pipe Area (11^2)
West Oak Island Drive	2974	1800	1174	6	587
West Oak Island Drive	1800	800	1000	6	500
West Oak Island Drive	800	706	94	6	47
West Oak Island Drive	708	0	706	8	471
SW 22nd St	658	0	658	4	219
NW 22nd St	400	C _	400	10	333
NW 22nd St	1494	400	1094	10	912
SW 23rd St	631	0	631	4	210
NW 23rd St	1224	0	1224	4	408
SW 24th St	728	0	728	4	243
NW 24th St	1165	0	1165	4	388
SW 26th St 1	357	0	357	4	119
NW 26th St	979	0	979	4	326
SW 25th St	357	0	357	4	119
NW 25th St	1050	1 0	1050	4	350
West Island Drive	800	0	800	4	267
East Island Drive	500	Ö	500	4	167
East Island Drive	813	500	313	4	104
SW 28th St	854	1 0	854	Ā	285
NW 28th St	825	1 õ	825	4	275
SW 27th St	380	- ŏ	380	4	127
NW 27th St	825	ŏ	825	4	275
Anderson Orive	510	275	235	4	78
	275	2/5	230	4	92
SW 30th St	400	1 0	400	4	133
NW 30th St				4	
SW 29th St	383	<u> </u>	383	4	128
NW 29th St	700	0	700		233
West Yacht Drive	1050		1050	4	350
West Yacht Drive	2065	1050	1015	4	338
West Yacht Drive	740	<u> </u>	740	4	247
West Oak Island Drive	1200	0	1200	6	600
West Oak Island Drive	1575	1200	375	6	188
West Oak Island Drive	2400	1575	825	4	275
West Oak Island Drive	2750	2400	350	4	117
SW 21st St	677	0	677	4	226
NW 21st St	1219	0	1219	4	406
SW 20th St	525	0	525	4	175
NW 20th St	1241	0	1241	4	414
SW 19th St	315	0	315	4	105
NW 19th St	1260	0	1260	4	420
SW 18th St	412	0	412	4	137
NW 18th St	1209	0	1209	4	403
Swain Drive	900	525	375	4	125
SW 17th St	525	0	525	4	175
NW 17th St	1265	0	1265	4	422
SW 16th St	583	0	583	4	194
NW 16th St	1326	0	1326	4	442
SW 15th St	1259	0	1259 \cdots	4	420
NW 15th St	1525	200	1325	4	442
NW 15th St	200	0	200	4	67
SW 14th St	429	1 0 1	429	4	143
NW 14th St	1675	Ó	1675	4	556
SW 13th St	769	ō	769	4	256
NW 13th St	1887	850	1217	4	406
NW 13th St	650	1 0	650	4	217
West Yacht Drive	1202		1202	4	401
West Yacht Drive	1300	t č t	1300	8	867
West Yacht Orive	1625	1300	325	8	217
West Yacht Drive	2600	1625	975	6	488
West Yacht Drive	2950	2600	350	6	<u>988</u> 175

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West Oak Island Drive west of vacuum station 4 1605 ft*2

West Oak Island Drive east of vacuum station 4 1179 ft*2

West Yacht Drive west of vacuum station 4 935 ft*2

West Yacht Drive east of vacuum station 4 2147 #^2

Totel Pipe Area

17809 #*2

Service Area 8 Pipe

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Street	STA Begin	STA End	Pipe Length (ft)	Pipe Diam (in)	Pipe Area (ft^2)
East Yacht Drive	800	0	800	10	667
East Yacht Drive	2100	800	1300	10	1083
NE 47th St	200	0	200	6	100
NE 47th St	2200	200	2000	4	667
NE 48th St	1495	Q	1495	4	498
NE 49th St	1500	0	1500	4	500
NE 50th St	850	0	850	6	425
NE 50th St	2100	850	1250	4	417
NE 51st St	964	0	964	4	321
NE 52nd St	34	0	34	4	11
NE 54th St	34	0	34	4	11
East Yacht Drive	1300	0	1300	8	867
East Yacht Drive	2000	1300	700	8	467
East Yacht Drive	3200	2000	1200	8	800
NE 55th St	200	0	200	6	100
NE 55th St	2075	200	1875	4	625
NE 56th St	1900	0	1900	4	633
NE 57th St	1900	0	1900	4	633
NE 58th St	400	0	400	6	200
NE 58th St	2200	400	1800	4	600
NE 59th St	400	0	400	6	200
NE 59th St	2200	400	1800	4	600
NE 60th St	300	0	300	6	150
NE 60th St	2200	0	2200	4	733
NE 61st St	1890	0	1890	4	630
NE 62nd St	1769	0	1769	4	590
NE 63rd St	1600	0	1600	4	533
NE 46th St	1500	0	1500	4	500
NE 45th St	500	0	500	6	250
NE 45th St	2100	500	1600	4	533
NE 43rd St	500	0	500	6	250
NE 43rd St	2100	500	1600	4	533
NE 42nd St	500	0	500	6	250
NE 42nd St	2100	500	1600	4	533
NE 41st St	500	0	500	6	250
NE 41st St	2100	500	1600	4	533
NE 40th St	500	0	500	6	250
NE 40th St	2100	500	1600	4	533
NE 39th St	500	0	500	6	250
NE 39th St	2100	500	1600	4	533
East Yacht Drive	4100	3200	900	10	750
East Yacht Drive	3200	2100	1100	10	917

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East Yacht Drive west of vacuum station 8 3417 ft^2

East Yacht Drive east of vacuum station 8 2133 ft^2

Total Pipe Area

19929 ft^2

Service Area 9 Pipe

Street	STA Begin	STA End	Pipe Length (ft)	Pipe Diam (in)	Pipe Area (ft^2)
East Yacht Drive	1100	93	1007	10	839
East Yacht Drive	2400	1100	1300	8	867
East Yacht Drive	2475	2400	75	8	50
East Yacht Drive	3070	2475	595	6	298
NE 74th St	1000	0	1000	6	500
NE 74th St	1200	1000	200	4	67
NE 74th St	2300	1200	1100	4	367
SE 74th St	840	100	740	4	247
Beach Drive	100	0	100	4	33
NE 73rd St	1125	0	1125	4	375
NE 72nd St	200	0	200	6	100
NE 72nd St	1200	200	1000	4	333
NE 72nd St	2150	1200	950	4	317
NE 71st St	100	0	100	6	50
NE 71st St	2050	100	1950	4	650
NE 70th St	200	0	200	6	100
NE 70th St	2250	200	2050	4	683
NE 69th St	400	0	400	6	200
NE 69th St	2400	400	2000	4	667
NE 68th St	350	0	350	6	175
NE 68th St	2360	350	2010	4	670
NE 67th St	500	0	500	6	250
NE 67th St	2340	500	1840	4	613
NE 66th St	300	0	300	6	150
NE 66th St	2300	300	2000	4	667
NE 65th St	300	0	300	6	150
NE 65th St	2250	300	1950	4	650
NE 64th St	1990	0	1990	4	663
East Yacht Drive	500	0	500	10	417
East Yacht Drive	1350	500	850	8	567
East Yacht Drive	1900	1350	550	4	183
NE 75th St	400	0	400	6	200
NE 75th St	2275	400	1875	4	625
SE 75th St	890	0	890	_4	297
NE 76th St	500	0	500	6	250
NE 76th St	2275	500	1775	4	592
SE 76th St	1010	0	1010	4	337
NE 77th St	300	0	300	6	150
NE 77th St	2175	300	1875	4	625
SE 77th St	1090	0	1090	4	363
NE 78th St	1200	0	1200	8	800
NE 78th St	2400	1200	1200	8	800
SE 78th St	3100	2400	700	8	467
East Beach Drive	1225	0	1225	6	613

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East Yacht Drive west of vacuum station 9 2053 ft^2

East Yacht Drive east of vacuum station 9 1167 ft^2

East Beach Drive

646 ft^2

Total Pipe Area 18014 ft^2

Service Area 1 Pipe

Street	STA Begin	STA End	Pipe Length (ft)	Pipe Diam (in)	Pipe Area (ft^2)
West Beach Drive	5200	4800	400	4	133
West Beach Drive	4800	3600	1200	4	400
West Beach Drive	3600	2400	1200	8	800
West Beach Drive	2400	1200	1200	8	800
West Beach Drive	1200	0	1200	8	800
Kings Lynn Drive	4500	3600	900	6	450
Kings Lynn Drive	3600	2400	1200	6	600
Kings Lynn Drive	2400	1200	1200	6	600
Kings Lynn Drive	1200	0	1200	6	600
57th Place West	200	0	200	6	100
West Dolphin Drive	1400	1200	200	6	100
West Dolphin Drive	1200	250	950	6	475
54th Place West	250	0	250	6	125
West Beach Drive	1200	0	1200	6	600
West Beach Drive	2400	1200	1200	6	600
West Beach Drive	3600	2400	1200	6	600
West Beach Drive	3900	3600	300	6	150
West Beach Drive	4600	3900	700	4	233
39th Place West	450	0	450	6	225
Shoreline Drive	750	450	300	6	150
Shoreline Drive	1300	750	550	4	183
West Dolphin Drive	700	0	700	4	233
West Dolphin Drive	700	0	700	4	233

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West Beach Drive west of vacuum station 1 2933 ft^2

West Beach Drive east of vacuum station 1 2183 ft^2

King's Lynn Drive

2250 ft^2

Total Pipe Area

9192 ft^2

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Service Area 2 Pipe

Street	STA Begin	STA End	Pipe Length (ft)	Pipe Diam (in)	Pipe Area (ft^2)
West Beach Drive	8725	8400	325	4	108
West Beach Drive	8400	7200	1200	4	400
West Beach Drive	7200	6500	700	6	350
West Beach Drive	6500	4800	1700	8	1133
West Beach Drive	4800	3600	1200	8	800
West Beach Drive	3600	2400	1200	10	1000
West Beach Drive	2400	1200	1200	10	1000
West Beach Drive	1200	0	1200	10	1000
West Pelican Drive	2100	1200	900	4	300
West Pelican Drive	1200	475	725	6	363
27th Place West	475	0	475	8	317
West Pelican Drive	800	0	800	4	267
West Dolphin Drive	750	ō	750	4	250
West Dolphin Drive	2325	750	1575	4	525
West Dolphin Drive	750	õ	750	e e	375
West Dolphin Drive	5470	3600	1870		823
West Dolphin Drive	3600	1700	1900	6	950
West Dolphin Drive	1700	1200	500	8	333
West Dolphin Drive	1200	900	300	8	200
7th Piace West	900	700	200	8	133
West Pelican Drive	700	- v~	700	ě š	467
West Pelican Drive	900	200	700	4	233
10th Place West	200	0 1	200	4	67
West Pallcan Drive	2040	1000	1040	4	347
20th Place West	1000	900	100	4	33
West Peican Drive	900	500	400	4	133
West Pelican Drive	500	~~~	500	6	250
East Beach Drive	6850	4800	2050	8	1367
East Beach Drive	4800	2400	2400	8	1500
East/West Beach Drive	2400	500	1900	8	1267
5th Place West	500	0	500	10	417
West Dolphin Drive	600	0	600	4	200
		6600			
16th Place East East Dolphin Drive	6900 6600	6000	300 600	4	100
East Dolphin Drive	6000	5925	75	4	200
East Dolphin Drive	5925	4350	1575		788
	4350	3600	750		500
East Doiphin Drive East Doiphin Drive	3600	1900	1700	8 8	1133
				10	
East Doiphin Drive	1900	1200	700		583
2nd Piace West	1200	1000	200	10	187
East Pelican Drive	875	200	675	4	225
9th Place East	200	0	200	4	67
West Pellcan Drive	900	0	900	10	750
14th Place East	240	0	240	4	80
West Dolphin Drive	1550	800	750	<u> </u>	250
Area 2 HDD	912	48	864	14	1008

West Beach Drive west of vacuum station 2 5792 ft*2

Beach Drive east of vacuum station 2 4233 ft^2

West Dolphin Drive west of vacuum station 2 3257 ft^2

Dolphin Drive east of vacuum station 2 3479 ft*2

West Pelican Drive west of vacuum station 2 2359 ft*2

Pelican Drive east of vacuum station 2 975 ft^2

Total Pipe Area

22683 11*2

Service Area 7 Pipe

Steel	1 1200			Pipe Diam (in)	1000
East Yacht Drive		<u> </u>	1200	10	
East Yacht Drive	1200		1200		1000
East Yacht Drive	2400	1200	1200	10	1000
East Yacht Drive	2400	1200	1200	10	1000
East Yecht Drive	3600	2400	1200		1000
East Yecht Drive	3600	2400	1200	10	
East Yeaht Drive	4800	3600	1200	10	1000
East Yecht Drive	4800	3600	1200	10	1000
East Yacht Drive	6000	4800	1200	10	1000
East Yacht Drive	6000	4800	1200 70	10	56
East Yachi Drive	8070	6000		10	1000
East Yecht Drive	7200	8000	1200	10	1000
East Yacht Drive	8400	7200	1200		
East Yacht Drive	9400	8400	1000	10	<u>833</u> 633
NE 18th St	1900	0		4	633
NE 17th St	1900		1900		533
NE 16th St	1600	<u> </u>	1600	4	500
NE 15th St	1500	<u> </u>	1500		
NE 14th St	800	0	<u>800</u> 900		<u>267</u> 300
NE 14th St	900	ŏ	1100		367
NE 12th St	1100				
NE 11th St	800	<u> </u>	800	<u> </u>	267 333
NE 10th St	1000	<u> </u>	1000	<u> </u>	
NE 9th St	1100	<u> </u>	1100		367
NE 8th St	1100	0	1100		367
NE 7th St	1100		1100	<u> </u>	367 333
NE 6th St	1000		1000		367
NE 5th St		0	1100		367
NE 4th St	1100	- ŏ - I	1100		367
NE 3rd St	1100	ŏ	1100		600
NE 2nd St				1	
NE fiel St	1100	8	1100	4	367
NW 1st St	1000	Timere	1000 1000	L	<u>333</u> 333
NW 2rxt St	1000	8		4	
NW 3rd St	1100	- Å	1100		367
NW 4th St NW 5th St	1100				
	1100	0	1100		<u>367</u> 367
NW 68h St	1100	- č	1100		387
NW 7th St NW 8th St	1000	- X	1000	4	333
NW 9th St	1100	ŏ	1100		367
NW 10th St	1000	ŏ	1000		333
NW 11th St	1000	õ	1000	4	333
NW 12th St	1000	ŏ	1000	4	333
East Yaoht Drive	1200	ŏ	1200	10	1000
East Yacht Drive	2400	1200	1200	10	1000
East Yecht Drive	3600	2400	1200	10	1000
East Yacht Drive	4800	3600	1200	10	1000
East Yacht Drive	6000	4800	1200	10	1000
East Yacht Drive	8100	6000	100	10	83
NE 19th St	1800	0 1	1800	i i i	600
NE 20th St	1800	ŏ	1800	4	600
NE 21st St	1800	- ŏ 1	1600		533
NE 22nd St	1400		1400	- i	467
NE 23rd St	1 1100	ŏ	1100	Ĩ	367
NE 24th St	1000	ŏ	1000		333
NE 25th St	1000	ŏ	1000		333
NE 26th St	1000	ŏ	1000	4	333
NE 27th St	1000	- 6	1000		333
NE 28th St	1000	ŏ t	1000		333
NE 20th St	1400	č 	4.600		<u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>
NE 30th St	1800	ŏ	1800	- 7 1	600
NE 31st St	1300		1300	- 4	433
NE 32nd St	1700	ŏt	1700		435 567
NE 33rd St	1400	- ŏ t	1400	4	467
NE 34th St	1100	ŏ	1100		467 367
NE 35th St	1100	ö	1100	4	367 367
NE 38th St	1200	č t	1200	4	400
NE 37th St	1200		1200		
NE 38th St	1200	- 8	1200		400

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Yacht Drive west of vacuum station 7 \$2892 #*2

Yacht Drive east of vecuum station 7 5083 ft*2

Total Pipe Area

Figure #	Title	Print	Description	Date
1	Service Area 4 Overview	Black & White	Service Area 4 CAMA AEC zones and wetlands	May 13, 2008
2	Service Area 4 Enlarged Section	Black & White	Service Area 4 Enlarged Section	May 13, 2008
3	Service Area 4 Enlarged Section			May 13, 2008
4	Service Area 4 Enlarged Section	Black & White	Service Area 4 Enlarged Section	June 25, 2008
5	Service Area 8 Overview	Black & White	Service Area 8 CAMA AEC zones and wetiands	May 13, 2008
6	Service Area 8 Enlarged Section	Black & White	Service Area 8 Enlanced Section	May 13, 2008
7	Service Area 8 Enlarged Section	Black & White	Service Area 8 Enterced Section	June 25, 2008
8	Service Area 9 Overview	Color	Service Area 9 CAMA AEC zones and wetlands	May 13, 2008
9	Service Area 9 Enlarged Section	Color	Service Area 9 Enlarged Section	May 13, 2008
10	Service Area 9 Enlarged Section	Color	Service Area 9 Enlarged Section	May 13, 2008
11	Service Area 9 Enlarged Section	Color	Service Area 9 Enlarged Section	May 13, 2008
12	Service Area 1 Overview	Color	Service Area 1 CAMA AEC zones and wetlands	May 13, 2008
13	Service Area 1 Enlarged Section	Color	Service Aras 1 Enlarged Section	May 13, 2008
14	Service Area 1 Enlarged Section	Color	Service Area 1 Enlarged Section	May 13, 2008
15	Service Area 1 Enlarged Section	Color	Service Area 1 Enlarged Section	May 13, 2008
16	Service Area 1 Enlarged Section	Color	Service Area 1 Enlarged Section	May 13, 2008
17	Service Area 2 Overview	Color	Service Area 2 CAMA AEC zones and webands	May 13, 2008
18	Service Area 2 Enlarged Section	Color	Service Area 2 Enlarged Section	May 13, 2008
19	Service Area 2 Enlarged Section	Color	Service Area 2 Enlarged Section	May 13, 2006
20	Service Area 2 Enlarged Section	Color	Service Area 2 Enlarged Section	May 13, 2008
- 21	Service Area 2 Enlarged Section	Color	Service Area 2 Enlarged Section	May 13, 2008
22	Service Area 2 Enlarged Section	Color	Service Area 2 Enlarged Section	May 13, 2008
23	Service Area 7 Overview		Service Area 7 CAMA AEC zones and wetlands	May 13, 2008
24	VS4-1		Section 1 - Vacuum Station 4 - Site Plan	May 23, 2008
25	VS4-9		Section 1 - Vacuum Station 4 - Civil / Structural Sections	May 23, 2006
26	VS4-10		Section 1 - Vacuum Station 4 - Civit / Structural Sections	May 23, 2008
27	VS8-1		Section 2 - Vacuum Station 8 - Site Pien	May 23, 2008
28	VS8-9	Biack & White	Section 2 - Vacuum Station 8 - Civil / Structural Sections	May 23, 2008
29	VS8-10		Section 2 - Vacuum Station 8 - Civil / Structural Sections	May 23, 2008
30	VS9-1		Section 3 - Vacuum Station 8 - Site Plan	May 23, 2008
31	V\$9-9		Section 3 - Vacuum Station 9 - Civil / Structural Sections	May 23, 2008
32	VS9-10		Section 3 - Vacuum Station 9 - Civil / Structural Sections	May 23, 2008
33	VS1-1		Section 4 - Vecture Station 1 - Site Plan	May 23, 2008
34	V\$1-9		Section 4 - Vacuum Station 1 - Civil / Structural Sections	May 23, 2008
35	VS1-10		Section 4 - Vacuum Station 1 - Civil / Structural Sections	May 23, 2008
36	V\$2-1		Section 5 - Vacuum Station 2 - Sita Plan	May 23, 2008
37	V\$2-9		Section 5 - Vacuum Station 2 - Civil / Structural Sections	May 23, 2008
38	V\$2-10		Section 5 - Vecuum Station 2 - Civil / Structural Sections	May 23, 2008
39	V\$7-1		Section 6 - Vacuum Station 7 - Site Plan	May 23, 2008
40	V\$7-9		Section 6 - Vacuum Station 7 - Civil / Structural Sections	May 23, 2008
41	VS7-10		Section 6 - Vacuum Station 7 - Civil / Structural Sections	May 23, 2008
42	SW 15th St Bridge	Black & White	SW 15th St bridge, drawing supplied by Town of Oak Island	February 4, 2008
43	SW 28th St Bridge		ISW 28th St bridge, drawing supplied by Town of Oak Island	February 4, 2008
44	SA4-1		Section 1 - Service Area 4 - Key Sheet Index	May 23, 2008
45	SA4-2		Section 1 - Service Area 4 - Vacuum Main 4A - West Oak Island Drive	Mary 23, 2008
46	SA4-3		Section 1 - Service Area 4 - Vacuum Main 4A - West Oak Island Drive	May 23, 2008
47	SA4-4	Black & White	Section 1 - Service Area 4 - Vacuum Branch 4A-1 and 4A-2 - 22nd Street	May 23, 2008
48	SA4-5		Section 1 - Service Area 4 - Vacuum Branch 4A-3 and 4A-4 - 23rd Street	May 23, 2008
49	SA4-6		Section 1 - Service Area 4 - Vacuum Branch 4A-5 and 4A-6 - 24th Street	May 23, 2008
50	SA4-7	Black & White	Section 1 - Service Area 4 - Vacuum Branch 4A-7 thru 4A-10 - 25th Street and 28th Street	May 23, 2008

Figure #	Title	Print	Description	Date
51	SA4-8	Black & White Section 1 - Service	Area 4 - Vacuum Branch 4A-14, 4A-14-1, 4A-14-2 - 28th Street and Island Drive	May 23, 2008
52	SA4-9		Area 4 - Vacuum Branch 4A-11 thru 4A-13 - 27th Street and 28th Street	May 23, 2008
53	SA4-10		Area 4 - Vacuum Branch 4A-15 thru 4A-18 - 29th Street and 30th Street	May 23, 2008
54	SA4-11		Area 4 - Vacuum Branch 4A-19 - West Yacht Drive	May 23, 2008
55	SA4-12		Area 4 - Vacuum Branch 4A-20 - West Yacht Drive	May 23, 2008
56	SA4-13	Black & White Section 1 - Service	Area 4 - Vacuum Main 48 - West Oak Island Drive	Mary 23, 2008
57	SA4-14		Area 4 - Vacuum Main 48 - West Oak Island Drive	May 23, 2008
58	SA4-15		Area 4 - Vacuum Branch 48-1 and 48-2 - 21st Street	May 23, 2008
59	SA4-16		Area 4 - Vacuum Branch 48-3 and 48-4 - 20th Street	May 23, 2008
60	SA4-17	Black & White Section 1 - Service	Area 4 - Vacuum Branch 4B-5 and 4B-6 - 19th Street	May 23, 2008
61	SA4-18	Black & White ISection 1 - Service	Area 4 - Vacuum Branch 4B-7 and 4B-8 - 18th Sireet	May 23, 2008
62	SA4-19		Area 4 - Vacuum Branch 48-9 and 48-10 - 17th Street	May 23, 2008
63	SA4-20		Area 4 - Vacuum Branch 48-11 and 48-12 - 16th Street	May 23, 2008
64	SA4-21		Area 4 - Vacuum Branch 48-13 and 48-14 - 15th Street	May 23, 2008
65	SA4-22		Area 4 - Vacuum Branch 48-13, 48-15 and 48-16 - 14th Street and 15th Street	May 23, 2008
66	SA4-23		Area 4 - Vacuum Branch 48-13, 40-13 and 48-18 - 13th Street	May 23, 2006
87	SA4-24		Area 4 - Vacuum Branch 48-17 and 4A-1-1 - 13th Street and East Yacht Drive	May 23, 2008
68	SA4-25		Area 4 - Valuam Branch 4A-1-2 - East Yacht Drive	May 23, 2008
69	SA4-26		Area 4 - Vacuum Dianch 4A-1-2 - Cast Yacht Drive	May 23, 2008
70	- SA4-27		Area 4 - Vectorin Drarch 4A-142 - Cast Facilit Drive Area 4 - Vectorin Branch 4A-14 - SW 28th Street Bridge - Enlerged Plan and Sections	May 23, 2008
71	A 4 4 00			May 23, 2008
72	**** SA4-28 **** SA8-1		Area 4 - Vacuum Branch 48-14 - SW 15th Street Bridge - Enlarged Plan and Sections	
		Black & White Section 2 - Service		May 23, 2008
73 74	SA8-2		Area 8 - Vacuum Main 8A - East Yacht Drive	May 23, 2008
	SA8-3		Area 8 - Vacuum Branch 8A-6 - NE 47th Street	May 23, 2008
75	SA8-4		Area 8 - Vacuum Branch 8A-5 - NE 48th Street	May 23, 2008
76	SA8-5		Area 8 - Vacuum Branch 8A-4 - NE 49th Street	May 23, 2008
77	SA8-6		Area 8 - Vacuum Branch 8A-3 - NE 50th Street	May 23, 2008
78	SA8-7		Area 8 - Vacuum Branch 8A-2 - NE 51st Street - Partial NE 52nd Street and NE 54th Street	May 23, 2008
79	SA8-8		Area 8 - Vacuum Main 88 - East Yacht Drive	May 23, 2008
80	SA8-9		Area 8 - Vacuum Main 68 - East Yacht Drive	May 23, 2008
81	SA8-10		Area 8 - Vacuum Branch 88-2 - NE 55th Street	May 23, 2008
	SA8-11		Area 8 - Vacuum Branch 8B-3 - NE 56th Streat	May 23, 2008
83	SA8-12		Area 8 - Vacuum Branch 88-4 - NE 57th Street	May 23, 2008
84	SA8-13		Area 8 - Vacuum Branch 88-5 - NE 58th Street	May 23, 2008
85	SA8-14		Area 8 - Vacuum Branch 8B-6 - NE 59th Street	May 23, 2008
86	SA8-15		Area 8 - Vacuum Branch 88-7 - NE 60th Street	May 23, 2008
87	SA8-16		Area 8 - Vacuum Branch 88-8 - NE 61st Street	May 23, 2008
88	SA8-17		Area 8 - Vacuum Branch 88-9 - NE 62nd Street	May 23, 2008
89	SA8-18		Area 8 - Vacuum Branch 8B-10 - NE 63rd Street	May 23, 2008
90	SA8-19		Area 8 - Vacuum Branch 8A-7 - NE 46th Street	May 23, 2008
91	SA8-20		: Area 8 - Vacuum Branch 8A-8 - NE 45th Street	May 23, 2008
92	SA8-21		a Area 8 - Vacuum Branch 8A-9 - NE 43rd Street	May 23, 2008
93	SA8-22		Area 8 - Vacuum Branch 8A-10 - NE 42nd Street	May 23, 2008
94	SA8-23	Black & White Section 2 - Service	a Area 8 - Vacuum Branch 8A-11 - NE 41st Street	May 23, 2008
95	SA8-24	Black & White Section 2 - Service	Area 8 - Vacuum Branch 8A-12 - NE 40th Street	Mey 23, 2008
96	SA8-25	Black & White Section 2 - Service	a Area 8 - Vacuum Branch 8A-13 - NE 39th Street	May 23, 2008
97	SA8-26	Black & White Section 2 - Service	e Area 8 - Vacuum Main 8A - East Yacht Drive	May 23, 2008
98	SA9-1	Black & White Section 3 - Service	e Area 9 - Key Sheet Index	Mary 23, 2008
99	SAD-2		a Area 9 - Vacuum Main 9A - East Yacht Drive	May 23, 2008
100	SA9-3		e Area 9 - Vecteum Main 9A/9A-1 - East Yacht Drive	May 23, 2008

igure #	Title	Print	Description	Date
101	SA9-4	Black & White	Section 3 - Service Area 9 - Vacuum Branch 9A-1 & 9C-1 - Northeast 74th Street	May 23, 2008
102	SA9-5	Biack & White	Section 3 - Service Area 9 - Vacuum Branch 9A-1-1 - Northeast 73rti Street -	May 23, 2008
103	SA9-8		Section 3 - Service Area 9 - Vacuum Branch 9A-2 - Northeast 72rd Street	May 23, 2008
104	SA9-7		Section 3 - Service Area 9 - Vacuum Branch 9A-3 - Northeast 71st Street	May 23, 2008
105	SA9-8		Section 3 - Service Area 9 - Vacuum Branch 9A-4 - Northeast 70th Street	Mary 23, 2008
106	\$A9-9		Section 3 - Service Area 9 - Vacuum Branch 9A-5 - Northeast 89th Street	May 23, 2008
107	SA9-10	Black & White	Section 3 - Service Area 9 - Vacuum Branch 9A-6 - Northeast 68th Streat	May 23, 2008
108	SA9-11	Black & White	Section 3 - Service Area 9 - Vacuum Branch 9A-7 - Northeast 67th Street	May 23, 2008
109	SA9-12	Black & White	Section 3 - Service Area 9 - Vacuum Branch 9A-8 - Northeast 66th Street	Mary 23, 2008
110	SA9-13	Black & White	Section 3 - Service Area 9 - Vacuum Branch 9A-9 - Northeast 65th Street	May 23, 2008
111	SA9-14	Black & White	Section 3 - Service Area 9 - Vacuum Branch 9A-10 - Northeast 64th Street	May 23, 2008
112	SA9-15	Black & White	Section 3 - Service Area 9 - Vacuum Main 98 - East Yacht Drive	May 23, 2008
113	SA9-16		Section 3 - Service Area 9 - Vacuum Branch 98-1 - Northeast 75th Street	May 23, 2008
114	SA9-17		Section 3 - Service Area 9 - Vacuum Branch 9C-2 - Northeast 75th Street	May 23, 2008
115	SA9-18		Section 3 - Service Area 9 - Vacuum Branch 98-2 - Northeast 76th Street	May 23, 2008
116	SA9-19		Section 3 - Service Area 9 - Vacuum Branch 9C-3 - Northeast 76th Street	May 23, 2008
117	SA9-20		Section 3 - Service Area 9 - Vacuum Branch 9B-3 - Northeast 77th Street	May 23, 2008
118	SA9-21	Biack & Wheel	Section 3 - Service Area 9 - Vaciam Branch 9B-4 - Northeast 77th Street	May 23, 2008
119	SA9-22		Section 3 - Service Area 9 - Vacuum Branch 98-4 - Northeast 78th Street	May 23, 2008
120	SA9-23		Section 3 - Service Area 9 - Vacuum Branch 9C & 9B-4 - East Beach Drive & Northeast 78th Street	May 23, 2008
121	SA1-1		Section 4 - Service Area 1 - Key Sheet Index	May 23, 2008
122	SA1-2		Section 4 - Service Area 1 - Vacuum Main 1A West Beach Drive	May 23, 2006
123	SA1-3		Section 4 - Service Area 1 - Vacuum Main 1A West Beach Drive	May 23, 2008
124	SA1-4		Section 4 - Service Area 1 - Vacuum Main 1A and Vacuum Branch 1A -1 West Beach Drive and Kings Lynn Drive	May 23, 2008
125	SA1-5		Section 4 - Service Area 1 - Vacuum Branch 1A-1 Kings Lynn Drive	May 23, 2008
126	SA1-6		Section 4 - Service Area 1 - Vacuum Branch 1A-1, 1A-2 and 1A-2-1 Kings Lynn Drive and West Dolphin Drive	May 23, 2008
127	SA1-7		Section 4 - Service Area 1 - Vacuum Main 18 and Vacuum Branch 1A-2 West Beach Drive	May 23, 2008
128	SA1-8		Section 4 - Service Area 1 - Vacuum Main 1B Sect Beach Drive	May 23, 2008
129	SA1-9		Section 4 - Service Area 1 - Vacuum Branch 18-1, 18-1-3 39th Place W, Shoreline Drive and W Pelican Drive	May 23, 2008
130	SA1-10		Section 4 - Service Area 1 - Vacuum Branch 18-1 - 1 and 18-1-2W Dolphin Drive	May 23, 2008
131	SA1-11		Section 4 - Service Area 1 - Vacuum Branch 1B-1-3 W Pelican Drive	May 23, 2008
132			Section 5 - Service Area 2 - Key Sheet Index	May 23, 2008
133	SA2-2		Section 5 - Service Area 2 - Vacuum Main 2A West Beach Drive	May 23, 2008
134	SA2-3		Section 5 - Service Area 2 - Vacual man 2A West Beach Drive	May 23, 2008
135	SA2-4		Section 5 - Service Area 2 - Vacuum Main 2A West Beach Drive	May 23, 2008
136	SA2-5		Section 5 - Service Area 2 - Vacuum Main 2A West Beach Drive	May 23, 2008
137	SA2-6		Section 5 - Service Area 2 - Vacuum Main 2A-1 West Dolphin Drive and West Pelican Drive	May 23, 2008
138	SA2-7		Section 5 - Service Area 2 - Vacuum Main 2A-1 and 2A-2 West Polican Drive	May 23, 2008
139	SA2-7 SA2-8		Section 5 - Service Area 2 - Vacuum Main 2B and 28-1 West Dolphin Drive and West Pelican Drive	May 23, 2008
140	5A2-9		Section 5 - Service Area 2 - Vacuum Main 28 - West Doiphin Drive and West Pelican Drive	May 23, 2008
141	SA2-10		Section 5 - Service Area 2 - Vacuum Main 28 - West Dolphin Drive and West Pelican Drive	May 23, 2008
142	SA2-11		Section 5 - Service Area 2 - Vacuum Main 2C - West Beach Drive	May 23, 2008
143	SA2-12		Section 5 - Service Area 2 - Vaccum Main 2C - West Beach Drive	May 23, 2008
144	SA2-13		Section 5 - Service Area 2 - Vacuum Main - West Beach Drive	May 23, 2008
145	SA2-13		Section 5 - Service Area 2 - Vacuum Main 2D - West Pelican Drive	May 23, 2008
146	SA2-14 SA2-15		Section 5 - Service Area 2 - Vacuum Main 2D - West Pelican Drive	May 23, 2008
147	SA2-15		Section 5 - Service Area 2 - Vacuum Main 2D - West Pelican Drive	May 23, 2008
148	SA2-10 SA2-17		Section 5 - Service Area 2 - Vacuum Branch 2A-3 and 2A-5 - West Dolphin Drive	May 23, 2008
149	SA2-18		Section 5 - Service Area 2 - Vacuum Branch 2A-4 - West Dolphin Drive	May 23, 2008
150	SA2-19		Section 5 - Service Area 2 - Vacuum Branch 2B-2 - West Dolphin Drive	May 23, 2008

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Figure #	Title	Print	Description	Date
151	SA2-20	Biack & White Sect	ion 5 - Service Area 2 - Vacuum Branch 28-3 and 2D-1 - West Dolphin Drive	May 23, 2008
152	DCFM-1	Black & White Sect	Ion 5 - Force Main - Davis Canal Crossing	May 23, 2008
153	SA7-1	Black & White Sec	ion 6 - Service Area 7 - Key Sheet Index	May 23, 2008
154	SA7-2	Black & White Sect	ion 6 - Service Area 7 - Vacuum Main 7A - East Yacht Drive	May 23, 2008
155	SA7-3		ion 6 - Service Area 7 - Vacuum Main 7A - West Yacht Drive	May 23, 2008
156	SA7-4	Black & White Sec	ion 6 - Service Area 7 - Vacuum Main 7A - West Yacht Drive	May 23, 2008
157	SA7-5	Black & White Sec	ion 6 - Service Area 7 - Vacuum Main 7A - West Yacht Drive	May 23, 2008
158	SA7-6	Black & White Sec	ion 6 - Service Area 7 - Vacuum Branch 7A-1 - NE 18th Street	May 23, 2008
159	SA7-7		ion 6 - Service Area 7 - Vacuum Branch 7A-2 - NE 17th Street	May 23, 2008
160	SA7-8	Black & White Sec	ton 6 - Service Area 7 - Vacuum Branch 7A-3 - NE 18th Street	May 23, 2008
161	SA7-9	Black & White Sec	km 6 - Service Area 7 - Vacuum Branch 7A-4 - NE 15th Street	May 23, 2008
162	SA7-10	Black & White Sec	ion 6 - Service Area 7 - Vacuum Branch 7A-5 & 6 - NE 13th & 14th Street	May 23, 2008
163	SA7-11	Black & White Sect	ion 6 - Service Area 7 - Vacuum Branch 7A-7 & 8 - NE 11th & 12th Street	May 23, 2008
164	SA7-12	Black & White Sec	ion 6 - Service Area 7 - Vacuum Branch 7A-9 & 10 - NE 9th & 10th Street	May 23, 2008
165	SA7-13	Black & White Sec	Ion 6 - Service Area 7 - Vacuum Branch 7A-11 & 12 - NE 7th & 8th Street	May 23, 2008
166	SA7-14	Black & White Sec	ion 6 - Service Area 7 - Vacuum Branch 7A-13 & 14 - NE 5th & 5th Street	May 23, 2008
167	SA7-15	Black & White Sec	Ion 6 - Service Area 7 - Vacuum Branch 7A-15 & 16 - NE 3rd & 4th Street	May 23, 2008
168	SA7-16		ion 6 - Service Area 7 - Vacuum Branch 7A-17 - NE 2nd Street	May 23, 2008
169	SA7-17	Black & White Sec	ion 6 - Service Area 7 - Vacuum Branch 7A-18 & 19 - NE: 1st Street & N. Middleton Ave.	May 23, 2008
170	SA7-18	Biack & White Sec	ton 6 - Service Area 7 - Vacuum Branch 7A-20 & 21 - NW 1st & 2nd Street	May 23, 2006
171	SA7-19	Black & White Sec	ton 6 - Service Area 7 - Vacuum Branch 7A-22 & 23 - NW.3rd & 4th Street	May 23, 2008
172	SA7-20	Black & White Sec	Ion 6 - Service Area 7 - Vacuum Branch 7A-24 & 25 - NW 5th & 6th Street	May 23, 2008
173	SA7-21	Black & White Sec	ion 6 - Service Area 7 - Vacuum Branch 7A-26 & 27th - NW 7th & 8th Street	May 23, 2008
174	SA7-22	Black & White Sec	tion 6 - Service Area 7 - Vacuum Branch 7A-28 & 29 - NW 8th & 9th Street	May 23, 2008
175	SA7-23	Black & White Sec	ion 6 - Service Area 7 - Vacuum Branch 7A-30 & 31 - NW 11th & 12th Street	May 23, 2008
176	SA7-24	Black & White Sec	ion 6 - Service Area 7 - Vacuum Main 78 - E. Yacht Dr.	May 23, 2008
177	SA7-25	Black & White Sec	ion 6 - Service Area 7 - Vacuum Main 7B - E. Yacht Dr.	May 23, 2008
178	SA7-26	Black & White Sec	ion 6 - Service Area 7 - Vacuum Main 78 - E. Yachi Dr.	May 23, 2008
179	SA7-27	Black & White Sec	ton 6 - Service Area 7 - Vacuum Branch 78-1 - NE 19th Street	May 23, 2008
180	SA7-28	Black & White Sec	ion 6 - Service Area 7 - Vacuum Branch 78-2 - NE 20th Street	May 23, 2008
181	SA7-29	Black & White Sec	ion 6 - Service Area 7 - Vacuum Branch 78-3 - NE 21st Street	May 23, 2008
182	SA7-30	Black & White Sec	tion 6 - Service Area 7 - Vacuum Branch 78-4 - NE 22nd Street	May 23, 2008
183	SA7-31	Black & White Sec	ion 6 - Service Area 7 - Vacuum Branch 78-5 & 6 - NE 23rd & 24th Street	May 23, 2008
184	SA7-32	Black & White Sec	ion 6 - Service Area 7 - Vacuum Branch 78-7 & 8 - NE 25th & 26th Street	May 23, 2008
185	SA7-33	Black & White Sec	tion 6 - Service Area 7 - Vacuum Branch 78-9 & 10 - NE 27th & 28th Street	May 23, 2008
186	SA7-34	Black & White Sec	ton 6 - Service Area 7 - Vacuum Branch 7B-11 - NE 29th Street	May 23, 2008
187	SA7-35	Slack & White Sec	ion 6 - Service Area 7 - Vacuum Branch 78-12 - NE 30th Street	May 23, 2008
188	SA7-36	Black & White Sec	tion 6 - Service Area 7 - Vacuum Branch 7B-13 - NE 31st Street	May 23, 2008
189	SA7-37		ion 6 - Service Area 7 - Vacuum Branch 7B-14 - NE 32nd Street	May 23, 2008
190	SA7-38		tion 6 - Service Area 7 - Vacuum Branch 78-15 - NE 33rd Street	May 23, 2008
191	SA7-39		tion 6 - Service Area 7 - Vacuum Branch 7B-16 & 17 - NE 34th & 35th Street	May 23, 2008
192	SA7-40		tion 6 - Service Area 7 - Vacuum Branch 7B-17 & 18 - NE 35th & 36th Street	May 23, 2008
193	SA7-41	Black & White Sec	tion 6 - Service Area 7 - Vacuum Branch 7B-19 & 20 - NE 37th & 38th Street	May 23, 2008

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Town of Oak Island Wastewater Collection & Treatment Project Phase II – CAMA Major Development Permit B&V Project 132160.0312 B&V File F July 18, 2008

Ms Heather Coats Division of Coastal Management Wilmington Regional Office 127 Cardinal Drive Ext. Wilmington, NC 28405-3845

Subject:

Request for Additional Information, Town of Oak Island

Dear Heather:

This submittal is a follow-up to the set of revised Drawings we sent you on June 26, 2008 in response to your request for additional information dated June 18, 2008. In our previous cover letter, we informed you that the USACE had verified the 404 wetland boundary located on the vacuum station 2 site and that we would forward you the revised vacuum station 2 site plans. We have finished making all necessary revisions to the vacuum station 2 site plan and have updated all Drawings which show the site plan. The revised site plan does not show any construction activity located within the 404 wetlands area. Additionally, we have created three new Drawings in response to your request for a sectional view of the entire station site showing cut and fill.

Under cover of this letter please find the following items which address your request for additional information dated June 18, 2008:

- Revised Figure 38 of 193 (Drawing VS2-1, Vacuum Station 2 site plan).
- Revised Figure 142 of 193 (Drawing SA2-11, plan and profile for service area 2 including vacuum station 2 site plan).
- Revised Figure 148 of 193 (Drawing SA2-15, plan and profile for service area 2 including vacuum station 2 site plan).
- Revised Figure 150 of 193 (Drawing SA2-19, plan and profile for service area 2 including vacuum station 2 site plan).
- Revised Figure 152 of 193 (Drawing DCFM-1, plan and profile for horizontal directional drill including vacuum station 2 site plan).
- New Figure 193A of 193 (Drawing VS2-1 w/section cuts showing existing and proposed grade lines for vacuum station 2 site).
- New Figure 193B of 193 (Drawing VS2-9 showing north/south section cut of vacuum station 2 site plan).
- New Figure 193C of 193 (Drawing VS2-10 showing east/west section cut of vacuum station 2 site plan).
- Revised Project Narrative updated to include information about verified wetlands at vacuum station 2.

Each of the revised figures shall supersede the previous version submitted to you on June 26, 2008. Please replace the older versions of the Drawings with the newly revised ones included with this submittat.

The revised vacuum station 2 site plan has also been sent to Rhonda Hall of the Division of Water Quality for review as part of the stormwater management permit for phase II of the Oak Island Project.

We have also included information related to the Jurisdictional Determination made by the USACE. This information includes a copy of the approved JD form and the wetland delineation form. This information was furnished to Black & Veatch by Scott Frederick of Soil, Water, and Environment Group.

Black & Veatch International Company - 9000 Regency Parkway, Suite 200 - Cary, NC USA 27518 - Telephone: 919,462,7501

NC Division of Coastal Management **Heather Coats**

B&V Project 132160.0312 July 18, 2008

In accordance with our previous conversations, we are only submitting one copy of all of the figures for your review. Once you have completed your review of the figures, we will make any required modifications and submit you the required copies. To avoid any potential issues with light gray lines not reproducing well, Black & Veatch would like to provide you with the required number of copies for both the color and black & white figures.

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We hope this application package will complete the requirements for a major modification to CAMA permit #152-07. If you have any questions or need further clarifications, please feel free to contact me at 919-462-7513 (email: tafilakuml@bv.com) or Matt Skidmore at 919-462-7519 (email: skidmorem@bv.com). Thank you for your assistance.

Very truly yours,

BLACK & VEATCH International Company

for Melissa L.A. Tafilaku, P.E. **Project Engineer**

Enclosure(s)

CC: File w/ enclosures Troy Davis w/ enclosures Jerry Walters w/o enclosures Page 2

file Wastenestr Project

B&V Project 132160.0312

B&V File F

August 1, 2008



ENERGY . WATER . INCORDATION . GOVERNMENT

Town of Oak Island Wastewater Collection & Treatment Project Phase II – CAMA Major Development Permit

Ms Heather Coats Division of Coastal Management Wilmington Regional Office 127 Cardinal Drive Ext. Wilmington, NC 28405-3845

Subject:

Town of Oak Island Request for Major Modification to Existing CAMA Permit 152-07

Dear Heather:

On behalf of the Town of Oak Island, Black & Veatch is submitting 27 copies of all Drawings required for a major modification to existing CAMA permit 152-07. This modification is for the Oak Island Wastewater Collection and Treatment Project Phase II which includes vacuum sewer piping, sewer force main, and vacuum station buildings for service areas 4, 8, 9, 1, 2, and 7 located in Oak Island, NC.

Please find the following items included under cover of this letter for your review and approval:

- Figures 1 through 197 with Figure List (27 copies).
- Revised Form MP-1 (1 copy).
- Form MP-2 (1 copy).
- Revised Form MP-3 (1 copy).
- Project Narrative (1 copy).
- Table of Pipe Areas (1 copy).
- Jurisdictional Determination Information Related to Vacuum Station 2 (1 copy).

In response to your email dated July 30, 2008, we have included the erosion & sedimentation control plan sheet for vacuum station #2 which shows the location of the spoil pile for all excavated material. Additonally, the sectional views of vacuum station #2 now have a note that says all elevations are relative to sea level. We have also revised forms MP-1 and MP-3 as directed.

We have submitted all forms and materials to have the USACE verify and sign the Jurisdictional Determination map of the vacuum station #2 site. We have asked the USACE to forward a signed copy of the JD map to you. Black & Veatch will also receive a copy of the JD map and, if needed, will forward you a copy once it is available to us.

Please make sure you have received the correct number of copies. We have sent the copies in three different packages due to size constraints. If you require additional copies, please notify Black & Veatch and we will forward additional copies to you as needed.

Page 2

NC Division of Coastal Management Heather Coats B&V Project 132160.0312 August 1, 2008

We hope this application package will meet the requirements for a major modification to CAMA permit #152-07. If you have any questions or need further clarifications, please feel free to contact me at 919-462-7513 (email: tafilakuml@bv.com) or Matt Skidmore at 919-462-7519 (email: skidmorem@bv.com). Thank you for your assistance.

Very truly yours,

BLACK & VEATCH International Company

Melissa L.A. Tafilaku, P.E. Project Engineer

Enclosure(s)

cc: File w/ enclosures Troy Davis w/ enclosures Jerry Walters w/o enclosures

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ENERGY . WATER . INFORMATION . GOVERNMENT

Town of Oak Island Wastewater Collection & Treatment Project Phase III – CAMA Major Development Permit

Mr. Jason Dail Express Permit Coordinator Division of Coastal Management Wilmington Regional Office 127 Cardinal Drive Ext. Wilmington, NC 28405-3845

Subject:

Application for a CAMA Major Development Permit

Dear Jason:

On behalf of the Town of Oak Island, NC, we are submitting this application for an Express Review CAMA major development permit for the Town of Oak Island Wastewater Collection and Treatment Project – Phase III. Given the nature of this overall project, we would like to arrange a meeting with you and your staff to review this application. We have included the following items for your review.

- 1. Completed Application Form DCM-MP-1 (1 copy)
- 2. Completed Application Form DCM-MP-3 (1 copy)
- 3. Completed AEC Hazard Notice (1 copy)
- 4. Project Narrative
- 5. Application fee of \$2000.00
- 6. Overall project map indicating all AEC zones within the proposed area including wetlands (1 copy)
- 7. Plan & profile sheets for all proposed pipelines (1 copy)

In your email to Matt Skidmore dated September 10, 2008, you informed Black & Veatch that you had visited the site and you did not feel that there were any coastal wetlands on, or adjacent, to the proposed linework. You did mention that there were federal wetlands in the area, but that as long as the pipelines are installed within the existing rights-of-way, the project should not impact any wetlands.

We hope this application package will meet the requirements for a major development permit from CAMA for this project. If you have any questions or need further clarifications, please feel free to contact me at 919-462-7513 (email: tafilakum@bv.com) or Matt Skidmore at 919-462-7519 (email: skidmorem@bv.com). Thank you for your assistance.

Very truly yours,

BLACK & VEATCH International Company

Melissa L.A. Tafilaku, P.E. Project Engineer

Enclosures

cc: File w/ enclosures Troy Davis w/ enclosures Jerry Walters w/o enclosures

Black & Veatch International Company - 11000 Regency Parkway, Suite 100 - Cary, NC USA 27511 - Telephone: 919.462.7501

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B&V Project 132160.0312

September 22, 2008

B&V File F

APPLICATION for

Major Development Permit

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County (can be multiple)					State Rd. #	
Brunswick		Please see attached project narrative and maps for information regarding project location				
Subdivision Name		City	<u> </u>	1	State	Zip
N/A		Oak Island			NC	28465 -
Phone No. 910 - 278 - 5011 ext.		Lot	Nio.(s) (# r	nany, attach a	idditional pi	age with list)
a. In which NC river basin is the p Atlantic Ocean	roject located?	1	Vame of bo Atlantic O		earest to pr	oposed project
c. Is the water body identified in (I ØNatural OManmade OUn	•	4	Name the c Atlantic O	-	water body i	to the proposed project site
e. Is proposed work within city limits or planning jurisdiction?			f. If applicable, list the planning jurisdiction or city limit the propose work falls within. Town of Oak Island			
	nu , , a maximuum, <u>esemen a</u> ximuummee <u>ne e</u> en	Tov		Island		
4. Site Description 1. Total length of shoreline on the	• •	[b. s	vn of Oak	e tract (sq.ft.)		
 Site Description Total length of shoreline on the Approximately 2,400 linear 	teet me in public right-of-way	b. 5 d. A N	vn of Oak Size of entir Approxima	e tract (sq.ft.) ately 3,100 s s elevation of al water level)	-	<u></u>
 4. Site Description a. Total length of shoreline on the Approximately 2,400 linear f a. Size of Individual lot(s) All proposed work will be do 	teet me in public right-of-way	b. 5 d. A N	vn of Oak Size of entir Approximati WL (normati	e tract (sq.ft.) ately 3,100 s s elevation of al water level)	tract above	, , , , , , , , , , , , , , , , , , ,

All land adjacent to proposed project site is residential

h. How does local governme Right-of-Way	nt zone the tract?	i. Is the proposed project co (Attach zoning compliance ØYes DNo DNA	possistent with the applicable zoning? a certificate, if applicable)		
j. Is the proposed activity par	t of an urban waterfront redevel	opment proposal?			
k. Has a professional archae	k. Has a professional archaeological assessment been done for the tract? If yes, attach a copy.				
If yes, by whom?			Not required for EA. Tract is classified as previously disturbed and no significant archaelogical findings are expected.		
I. is the proposed project loca National Register listed or					

<Form continues on back>

6. Additional Information	
In addition to this completed application form, (MP-1) the following iter package to be complete. Items (a) – (1) are always applicable to any i instruction booklet on how to properly prepare the required items belo	nejor development application. Please consult the application
a. A project narrative.	
b. An accurate, dated work plat (including plan view and cross-section proposed project. Is any portion already complete? If previously a between work completed and proposed.	hal drawings) drawn to scale. Please give the present status of the uthorized work, clearly indicate on maps, plats, drawings to distinguish
c. A site or location map that is sufficiently detailed to guide agency p	ersonnel unfamiliar with the area to the site.
d. A copy of the deed (with state application only) or other instrument	under which the applicant claims title to the affected properties.
e. The appropriate application fee. Check or money order made paya	ble to DENR.
f. A list of the names and complete addresses of the adjacent waterfro owners have received a copy of the application and plats by certifie which to submit comments on the proposed project to the Division of	d mail. Such landowners must be advised that they have 30 days in
Name N/A	Phone No. NA
Address N/A	에 가지 않는 것이 같아요. 이 가지 않는 것이 같아요. 이 가지 않는 것이 가지 않는 것이 가지 않는 것이 있다. 가지 않는 것이 가지 않는 것이 있다. 가지 않는 것이 가지 않는 것이 있다. 가지 같이 같아요. 이 같아요.
Name N/A	Phone No. N/A
Address N/A	
Name MA Address N/A	Phone No. N/A
g. A list of previous state or federal permits issued for work on the proj	ect tract. Include permit numbers, permittee, and issuing dates.
General Permit 198000291 - Issued by USACE on October 30, 2007	CAMA Major Permit 152-07 - Issued by NCDENR on October 12, 2007
Subaqueous Easement, File #10-ZB- Issued by NCDOA on February 5, 2008	Stormwater Permit #SW8-061219 - Issued by NCDENR on August 23, 2007
Erosion & Sedimentation Control Permit Bruns-2007-178 - Issued by NCDENR on November 21, 2008	Erosion & Sedimentation Control Permit Bruns 2008-058 Issued by NCDENR on August 28, 2007
Erosion & Sedimentation Control Permit Bruns-2007-340 - Issued by NCDENR on August 8, 2007	
h. Signed consultant or agent authorization form, if applicable.	
. Wetland delineation, if necessary.	₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩
. A signed AEC hazard notice for projects in oceanfront and inlet area	8. (Must be signed by property owner)
k. A statement of compliance with the N.C. Environmental Policy Act (f of public funds or use of public lands, attach a statement documenting)	V.C.G.S. 113A 1-10), if necessary. If the project involves expenditure ng compliance with the North Carolina Environmental Policy Act.

7. Certification and Permission to Enter on Land

I understand that any permit issued in response to this application will allow only the development described in the application. The project will be subject to the conditions and restrictions contained in the permit.

I certify that I am authorized to grant, and do in fact grant permission to representatives of state and federal review agencies to enter on the aforementioned lands in connection with evaluating information related to this permit application and follow-up monitoring of the project.

I further certify that the information provided in this application is truthful to the best of my knowledge.

Date 9-3-08

Print Name Troy Davis

Signature The ul. Davis

Please indicate application attachments pertaining to your proposed project.

Form DCM MP-3 UPLAND DEVELOPMENT

(Construction and/or land disturbing activities)

Attach this form to Joint Application for CAMA Major Permit, Form DCM MP-1. Be sure to complete all other sections of the Joint Application that relate to this proposed project. Please include all supplemental information.

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8 ,	Type and number of buildings, facilities, units or structures proposed.	b.	Number of lots or parcels. All proposed work will be done in public right-of-way.
	Proposed project includes approximately 3,500 linear feet of gravity sewer pipeline and approximately 4,600 linear feet of sewer force main. Proposed Project also includes 6 grinder pump stations to convey wastewater into existing force main network.		
c.	Density (give the number of residential units and the units per acre).	d.	Size of area to be graded, filled, or disturbed including roads, ditches, etc.
	Proposed project is for installation of municipal wastewater collection system. No residential units are proposed.		Disturbed area is approximately 3 acres
9.	If the proposed project will disturb more than one acre of land, the Division of Land Resources must receive an erosion and sedimentation control plan at least 30 days before land-disturbing activity begins.	f.	List the materials (such as mari, paver stone, asphalt, or concrete; to be used for impervious surfaces. Impervious surfaces will include metal manhole covers.
	(i) If applicable, has a sedimentation and erosion control plan been submitted to the Division of Land Resources?		,
	 If yes, list the date submitted: An Express Erosion & Sedimentation Control Permit was applied for on September 3, 2008. 		тур ¹⁸⁸⁸ - тир ¹⁹ 9- ⁹ 00 - ¹ 99-900 - ¹⁹⁹ -900 -
g.	Give the percentage of the tract within the coastal shoreline AEC to be covered by impervious and/or built-upon surfaces, such as pavement, building, rooftops, or to be used for vehicular driveways or parking.	h.	Projects that require a CAMA Major Development Permit may also require a Stormwater Certification. (i) Has a site development plan been submitted to the Division of
	< 1 % for the total project area including all pipeline work. the only impervious surface located within the coastal shoreline AEC will be a single manhole cover.		Water Quality for review?
-	Give the percentage of the entire tract to be covered by impervious		 (ii) If yes, list the date submitted: Project does not require a stormwater permit since the only proposed work are pipelines.
	and/or built-upon surfaces, such as pavement, building, rooftops, or to be used for vehicular driveways or parking.		
	Approximtely 3.5 percent of the entire tract for the proposed project will be covered by impervious surfaces. The only impervious surface used will be manhole covers.		
	Describe proposed method of sewage disposal.	k.	Have the facilities described in item (i) received state or local
I	Proposed project will install gravity sewer system for sewage collection. See project narrative for a detailed description of the proposed sewage disposal.		approval? ØYes □No □NA If yes, attach appropriate documentation.

	AEC HAZARD NOTICE	
Project le In An:	<u>X</u> Ocean Erodible Area <u>X</u> High Hazard Flood Area <u>Inlet Hazard Area</u> Town of Dak Teland	
	Street Rods of SE Cist. SE Sird. SE 64th. SE 65th. SE 67th. and SE 68th Streets	
Date Lot Was Plat	ted: Proposed Nork is located in existing right-of-way	

This notice is intended to make you, the applicant, aware of the special risks and conditions associated with development in this area, which is subject to natural hazards such as storms, erosion and currents. The rules of the Coastal Resources Commission require that you receive an AEC Hazard Notice and acknowledge that notice in writing before a permit for development can be issued.

The Commission's rules on building standards, oceanfront setbacks and dune alterations are designed to minimize, but not eliminate, property loss from hazards. By granting permits, the Coastal Resources Commission does not guarantee the safety of the development and assumes no liability for future damage to the development. Permits issued in the Ocean Hazard Area of Environmental Concern include the condition that structures be relocated or dismantled if they become imminently threatened by changes in shoreline configuration. The structure(s) must be relocated or dismantled within two (2) years of becoming imminently threatened, and in any case upon its collapse or subsidence.

The best available information, as accepted by the Coastal Resources Commission, indicates that the annual long-term average ocean crossion rate for the area where your property is located is 2 fact per year.

The rate was established by careful analysis of aerial photographs of the coastline taken over the past 50 years.

Studies also indicate that the shoreline could move as much as _______ feet landward in a major storm.

The flood waters in a major storm are predicted to be about 14-19 feet deep in this area.

Preferred oceanfront protection measures are beach nourishment and relocation of threatened structures. Hard erosion control structures such as bulkheads, scawalls, revetments, groins, jettles and breakwaters are prohibited. Temporary sand bags may be authorized under certain conditions.

The applicant must acknowledge this information and requirements by signing this notice in the space below. Without the proper signature, the application will not be complete.

Applicant Signature

SPECIAL NOTE: This hazard notice is required for development in areas subject to sudden and massive storms and erosion. Permits issued for development in this area expire on December 31 of the third year following the year in which the permit was issued. Shortly before work begins on the project site, the Local Permit Officer must be contacted to determine the vegetation line and setback distance at your site. If the property has seen little change since the time of permit issuance, and the proposed development can still meet the setback requirement, the LPO will inform you that you may begin work. Substantial progress on the project must be made within 60 days of this setback determination, or the setback must be remeasured. Also, the occurrence of a major shoreline change as the result of a storm within the 60-day period. will necessitate remeasurement of the setback. It is important that you check with the LPO before the permit expires for official approval to continue the work after the permit has expired. Generally, if foundation pilings have been placed and substantial progress is continuing, permit renewal can be authorized. It is unlawful to continue work after permit expiration.

For more information, contact:

Jason Dail					
Local Permit Officer					
127 Cardinal Drive	Ext.				
Address Wilmington, NC 2840	15. 15				
Locality					<u></u>
910-796-7302				*	
Phone Number	<u>ana an</u>			1	

Revised 2/07

Town of Oak Island Wastewater Collection System - Phase III CAMA Major Permit Application

Project Narrative

Town of Oak Island Project Overview

The Town of Oak Island is in the process of installing a vacuum sewer system for wastewater collection for a significant portion of the island. The vacuum sewer system was permitted and constructed under phase I and II of the Oak Island Wastewater Collection and Treatment Project and all CAMA permits for the vacuum sewer system have been applied for. Phase III consists of a small section of land located south of East Oak Island Drive between SE 61st and SE 68th Streets where existing grades make the installation of vacuum sewer very difficult. Instead, this section of the island will be served by a small gravity sewer system with gravity lines installed in the western rightof-way of the north/south streets. Each street will have a small grinder pump station which will pump the collected wastewater to an existing 8-inch PVC sewer force main installed in the south right-of-way along East Oak Island Drive.

Phase I

Phase I construction consisted of vacuum service areas 3, 5, and 6, as well as, the centralized lift station and force main. The phase I portion has already received a CAMA major development permit (Permit #152-07 issued on October 12, 2007).

Phase II

Phase II consists of vacuum service areas 1, 2, 4, 7, 8, and 9. The Town of Oak Island has requested that these six service areas be added to existing CAMA permit #152-07 as a major modification. The application for phase II has been submitted for traditional permitting and was accepted for review on August 4, 2008. The modification is expected to be approved on or around October 15, 2008.

Phase III

Phase III consists of approximately 3,500 linear feet of gravity sewer and 4,600 linear feet of sewer force main will be installed under the proposed project. Additionally 6 grinder pump stations will be installed in the project area. Each grinder pump station will pump approximately 15 gpm at 180 feet of head. Wastewater will flow by gravity through the collector system into a small wet well. Each wet well will be approximately 4-feet wide in diameter and will range in depth from approximately 6- to 8-feet in depth. Collected wastewater will be pumped from the wet well to the existing sewer force main through a 2-inch diameter force main located in the right-of-way approximately 3-feet away from the gravity sewer line. Once in the existing force main, the wastewater will be pumped to the existing East Wastewater Reclamation Facility (EWRF) located at 4600 Fish Factory Road in Oak Island, NC for final treatment. By using an isolation valve along the force main, 3 of the 6 grinder pump stations will have the option of flowing to the Middleton Lift Station located at 3 East Oak Island Drive. This option may be used during peak flow periods in the summer in order to alleviate some of the flow from the EWRF. The Middleton Lift Station ultimately pumps wastewater to the West Brunswick Regional Water Reclamation Facility for final treatment. The Middleton Lift Station has

Town of Oak Island Wastewater Collection System -- Phase III **CAMA Major Permit Application**

Wetlands

There are several small freshwater ponds located in the vicinity of the project area. Additionally, there are small areas of possible wetlands in the project area as well. The proposed project will be be installed only in the existing right-of-way of developed roadways. This area has previously been disturbed during road construction and the area remains cleared due to roadway and shoulder work. The proposed project will not impact any of the wetlands in the project vicinity. Wetlands information has been collected from the U.S. Fish & Wildlife Service Wetlands Inventory website.

Environmental Impacts of the Project

Primary short term impacts during the construction of these facilities will include noise and increased emissions from construction equipment. Dewatering of groundwater will occur during construction for installation of collection sewers and grinder pump stations. No long term primary impacts are expected.

Each of the seven grinder pump stations will fall within the 100-year flood plain, and will require safeguards to the structure. No primary impacts will result to wetlands; prime and unique agricultural lands; public lands and scenic recreations, and state natural areas; areas of architectural, archeological or historical value; shellfish or fish and their habitats; toxic substances; and mineral resources.

The proposed service area of Oak Island is a community that has matured in land development and installation of infrastructure. The development pattern for the Island has been established and virtually all areas have been platted and nearly all roads serving residential and commercial areas of the island have been constructed. Development is continuing on the island in the un-sewered areas in a random manner with nearly every area and every street experiencing housing starts. The proposed project will not cause a secondary impact of new platted areas or new street construction on the island. Except for the collection sewer, the utility is already in place on the Island in the un-sewered areas. All electric lines, telephone lines, cable lines, and water lines are in place and in service. All electric lines, telephone lines, cable lines, and water lines are in place and functioning. There will be no impacts from this project on beachfront construction.

Elsewhere on the Island construction in the un-sewered portion of the island is continuing, even during times of slow national economic activity. This is occurring even without a sewer collection system in place, and virtual build out of the island will occur by 2017 to 2020; regardless of whether or not this project is constructed. The pace of new construction may quicken somewhat with the construction of a new sewer collection system, but the construction and the resulting increase in population will occur regardless. The Second Bridge to Oak Island EIS, 2002 reached the same conclusion when impacts of the new bridge were considered.



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Town of Oak Island Wastewater Collection & Treatment Project Phase II – CAMA Major Development Permit

Ms Heather Coats Division of Coastal Management Wilmington Regional Office 127 Cardinal Drive Ext. Wilmington, NC 28405-3845

Subject:

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B&V Project 132160.0312 B&V File F September 22, 2008

Town of Oak Island Request for Major Modification to Existing CAMA Permit 152-07. Resubmittal of Service Area 1

Dear Heather:

The Town of Oak Island has applied for a Major Modification to existing CAMA permit #152-07 for the second phase of their wastewater collection and treatment project. The application was accepted for review on August 4, 2008. Several issues with the design of service area 1 have developed and as a result, a significant redesign was required. We are submitting to you, the revised Drawings for service area 1.

The change to area 1 involved having to run vacuum sewer lines on both the north and south rights-of-way along West Beach Drive and King's Lynn Drive. Furthermore, sewer pipelines had to be located around existing water lines and the decision was made by the Town to replace the existing water lines along West Beach Drive and King's Lynn Drive. By replacing the lines, the new lines can be installed such that the State mandated separation between water and sewer lines is not violated.

Please find the following items included under cover of this letter for your review and approval:

- Revised Figures 12 through 16 and 125 through 135D with Figure List (20 copies).
- Revised Project Narrative including information about water line replacement (1 copy)
- Revised Table of Pipe Areas for Service Area 1.

Please note that all other drawings previously submitted and accepted for review on August 4, 2008 have not changed.

In our meeting with you on September 3, 2008, we were informed that only 20 copies of the revised Drawings needed to be submitted to you for review. Please let us know if you require additional copies. We will forward them to you immediately.

It is our understanding that portions of phase II construction will likely be denied a CAMA permit due to their location relative to the large and small structure setbacks. These denied sections will require a variance from the Coastal Resources Commission before any construction can begin. Furthermore, the Town is anticipating a February 2009 construction start for all phase II work. To meet this deadline, the Town must begin the process of selling their bonds in December of 2008. The Local Government Commission requires the Town to have all permits in place before any bond sale can occur. In order to meet this schedule, we have calculated that the Town will need to request a variance from the CRC in their November 2008 meeting. This means that the CAMA permit will need to be issued in October 2008 with the appropriate denials so that the Town can request to be added to the CRC agenda for their November 2008 meeting.

Black & Veatch International Company - 9000 Regency Parkway, Suite 200 - Cary, NC USA 27518 - Telephone: 919.462.7501

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Osk island Phase II Request for Major Modification to Existing CAMA Permit 152-97 Resubmittal of Service Area 1 due to design changes List of Figures

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Figure #	Title	Print	Description	Date
12	Service Area 1 Overview	Color	Service Area 1 CAMA AEC zones and wetlands	September 12, 2008
13	Service Area 1 Enlarged Section	Color	Service Area 1 Enlarged Section	September 12, 2008
14	Service Area 1 Enlarged Section	Color	Service Area 1 Enlarged Section	September 12, 2008
15	Service Area 1 Enlarged Section	Color	Service Area 1 Enlarged Section	September 12, 2008
16	Service Area 1 Enlarged Section	Color	Service Area 1 Enlarged Section	September 12, 2008
125	SA1-1	Black & White	Section 4 - Service Area 1 - Key Sheet Index	September 12, 2008
126	SA1-2	Black & White	Section 4 - Service Area 1 - Vecuum Mein 1A West Beach Drive	September 12, 2008
127	SA1-3	Black & White	Section 4 - Service Area 1 - Vacuum Main 1A West Beach Drive	September 12, 2008
128	SA1-4	Black & White	Section 4 - Service Area 1 - Vecuum Main 1A and Vecuum Branch 1A -1 West Beach Drive and Kings Lynn Drive	September 12, 2008
129	SA1-5	Black & White	Section 4 - Service Area 1 - Vacuum Branch 1A-1 Kings Lynn Drive	September 12, 2008
130	\$A1-6	Black & White	Section 4 - Service Area 1 - Vacuum Branch 1A-1-1 and 1A-1-2 Kings Lynn Drive and West Dolphin Drive	September 12, 2008
131	SA1-7	Black & White	Section 4 - Service Area 1 - Vacuum Branch 1A-1-3 and 1A-2 West Beach Drive and Kings Lynn Drive	September 12, 2008
132	\$A1-8	Slack & White	Section 4 - Service Area 1 - Vacuum Branch 1A-2 Kinge Lynn Drive and West Beach Drive	September 12, 2008
133	5A1-9	Black & White	Section 4 - Service Area 1 - Vacuum Branch 1A-2-1 and Vacuum Main 18 West Beech Drive	September 12, 2008
134	SA1-10	Black & White	Section 4 - Service Area 1 - Vacuum Main 1B West Beach Drive	September 12, 2008
135	SA1-11	Black & White	Section 4 - Service Area 1 - Vacuum Main 18 and Vacuum Branch 18-1 West Beach Onlye, 39th Place West, and Shoreline Drive	September 12, 2008
135A	SA1-12	Black & White	Section 4 - Service Area 1 - Vacuum Branch 18-1-1, 18-1-2, and 18-1-3 West Dolphin Drive and West Pelican Drive	September 12, 2008
1358	SA1-13		Section 4 - Service Area 1 - Vacuum Branch 18-1-4 and Vacuum Main 1C West Beach Drive and West Dolphin Drive	September 12, 2008
135C	SA1-14	Black & White	Section 4 - Service Area 1 - Vacuum Main 1C, Vacuum Branch 1C-1 and Vacuum Main 1D West Dolphin Drive and 57th Place West	September 12, 2008
1350	SA1-15		Section 4 - Service Area 1 - Vacuum Main 1A, 1A-1, and Water Main Section	September 22, 2008

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Project Narrative

The Town of Oak Island is installing a vacuum sewer system for wastewater collection for a significant portion of the island. The island has been divided into nine service areas, each with its own collection system and vacuum station. Each vacuum collection station also contains a lift station to convey the collected wastewater to a centralized lift station. The nine service areas are shown in *Figure 1* along with the locations of the proposed vacuum stations.

Three of the nine service areas have already been permitted. CAMA major development permit #152-07 was issued on October 12, 2007 for all project construction related to phase I. The remaining six service areas are proposed to be added as a major modification to this existing CAMA major development permit. The remaining six service areas are considered to be phase II construction. A detailed description of phase I and phase II construction is included in this project narrative.

Town of Oak Island Project Overview

Several sewer collection system options were evaluated for Oak Island, including gravity collection, vacuum collection, on-site septic tank systems, and septic tank effluent pumping systems. Vacuum collection systems were recommended over the other evaluated options because they offer operational advantages over gravity collection systems, have no infiltration, and have a lower initial capital cost. Such systems are also ideal for flat terrain with high groundwater and sandy soils where it is difficult to construct deep pipelines.

The vacuum collection system for Oak Island will utilize approximately 300,000 feet of 4-inch, 62,000 feet of 6-inch, 33,000 feet of 8-inch, and 26,000 feet of 10-inch PVC collection piping and nine vacuum collection stations over the entire island.

The satellite facility and the vacuum stations are being designed to look like beach cottages to blend in with the neighborhood. The architectural features include vinyl siding, metal hipped roofs, false windows, access doors with a "residential" look, and porches with handrails. The vacuum system equipment will be located inside the vacuum station. The bottom "basement" level, located below grade, shall contain a steel collection tank, two sewage pumps, and a sump pump. The sewage discharge pumps are provided in duplicate, with each pump capable of pumping the design peak flow. These pumps will be dry-pit, horizontal, non-clog, centrifugal sewage pumps. The operating floor is on the second level (ground level or 2-feet above the 100-year flood level depending on the site characteristics and the flood zone classification). This floor will house the three vacuum pumps and electrical controls. The vacuum pumps will be skid-mounted sliding-vane pumps. Stairs to the basement level of the vacuum station will be located within the building. Some stations will have a third level for use by the Town. Stairs to this level will be outside the building. Other onsite equipment includes odor control equipment, engine generator, air conditioning, and ventilation system.

Town of Oak Island Wastewater Collection System - Phase II Request for Major Modification to CAMA permit 152-07 issued 10/12/07

to open. The vacuum valve, which is located in the upper chamber, is pneumatic (air controlled valve) so it does not need electricity to operate. When the valve is closed, the vacuum throughout the collection system is maintained. When the valve is open, the vacuum within the collection system evacuates the wastewater from the sump. The valve opens for a pre-set period of time. The timing cycle is set to allow for air at atmospheric pressure to enter behind the wastewater and help transport the wastewater forward. For valve pits, each time the valve is open, 10 gallons of wastewater are evacuated into the collection system.

The valve pits come in different sizes and for the Oak Island project five feet, six feet, and eight feet deep pits are being considered. Valve pits are typically installed along property boundaries or within road rights-of-way to allow for more than one household connection to each valve pit. Up to a total of four connections can be made to a single valve pit. The sump is typically made of fiberglass and a traffic rated cast iron lid allows access to the upper chamber of the valve pit.

Atmospheric air is supplied to the system through a four or six-inch air intake connected to the valve pit. A six inch air intake is used for each valve pit except those serving the first three rows of houses off the beach. Those will each have a 4-inch intake installed on their home service connection.

Collection System Piping

Vacuum sewer piping creates a network connecting the valve pits to collection tanks at the vacuum stations. A sawtooth profile maintains an open air passage throughout the system. The piping material is PVC thermoplastic in 3", 4", 6", 8", or 10" diameters. The joints and pipe fittings are either solvent welded or rubber ring joint types. The vacuum mains are laid at the same slope as the ground maintaining a minimum slope of 0.2 percent. The piping has a general downward slope toward the vacuum station with the exception of vertical lifts that help maintain the shallow trench depths. There are no manholes along the system.

The square footage of piping for each service area is as follows:

Service Area 4: $17,809 \text{ ft}^2$ Service Area 8: $19,929 \text{ ft}^2$ Service Area 9: 18.014 ft^2 Service Area 1: $30,732 \text{ ft}^2$ Service Area 2: $22,683 \text{ ft}^2$ Service Area 7: $38,208 \text{ ft}^2$

For a complete listing of pipe areas by street, please see the attached piping area Tables 1.1 - 1.6

Vacuum Stations

The vacuum stations maintain a vacuum on the collection system, collect wastewater in a tank, and pump wastewater to a central lift station. The vacuum station buildings house

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Town of Oak Island Wastewater Collection System -- Phase II Request for Major Modification to CAMA permit 152-07 issued 10/12/07

Vacuum Station 4

Vacuum Station 4 is located at the intersection of SW 22^{nd} Street and West Oak Island Drive. The operating floor will be located approximately 15 feet above MSL. The building will be approximately 41 ft long and 26 ft wide. Exterior stairs will be provided for access to the operating floor. Stairs to the basement level of the vacuum station will be located within the building. A dedicated portable generator will be provided onsite because the vacuum station will be located in a flood prone area. During a flood event, the generator will be removed from the site to avoid damage. Entrance to this site will be from SW 22^{nd} Street.

Vacuum Station 7

Vacuum Station 7 is located at the intersection of NW 19th Street and West Yacht Drive. The operating floor will be located approximately 15 feet above MSL. The building will be approximately 40 ft long and 21 ft wide. Exterior stairs will be provided for access to the operating floor. Stairs to the basement level of the vacuum station will be located within the building. A dedicated portable generator will be provided onsite because the vacuum station will be located in a flood prone area. During a flood event, the generator will be removed from the site to avoid damage. Entrance to this site will be from NW 19th Street.

Vacuum Station 8

Vacuum Station 8 is located at the intersection of NE 54th Street and East Yacht Drive. The operating floor will be located approximately 14 feet above MSL. The building will be approximately 42 ft long and 26 ft wide. Exterior stairs will be provided for access to the operating floor. Stairs to the basement level of the vacuum station will be located within the building. A dedicated portable generator will be provided onsite because the vacuum station will be located in a flood prone area. During a flood event, the generator will be removed from the site to avoid damage. Entrance to this site will be from NE 54th Street. Vacuum Station 8 is located adjacent to the Town of Oak Island Satellite Water Reclamation Facility (SWRF). The SWRF is an existing structure which is not part of this major CAMA permit modification or the original CAMA permit #152-07.

Vacuum Station 9

Vacuum Station 9 is located at the intersection of NE 75th Street and East Yacht Drive. The operating floor will be located approximately 13 feet above MSL. The building will be approximately 42 ft long and 26 ft wide. Exterior stairs will be provided for access to the operating floor. Stairs to the basement level of the vacuum station will be located within the building. A dedicated portable generator will be provided onsite because the vacuum station will be located in a flood prone area. During a flood event, the generator will be removed from the site to avoid damage. Entrance to this site will be from NE 75th Street.

Service Area 4 AEC

The proposed service area 4 contains an Estuarine and Ocean System AEC. There are several small portions of the proposed pipelines in the AEC zone. There are two small bridges which provide access to small islands on the southern portion of service area 4. The bridges are located on SW 28th Street and SW 15th Street. The proposed pipelines will be attached to these bridges and will be located in the Estuarine and Ocean System AEC. Furthermore, the pipeline at the southwest end of West Yacht Drive will extend into the Estuarine and Ocean System AEC. Also the pipeline at the southern end of SW 14th Street, SW 15th Street, and Swain Street extends into the Estuarine and Ocean System AEC. With the exception of the pipelines associated with the crossings of the aforementioned bridges, none of the pipelines extend into the 30-foot buffer zone from the Normal High Water Line. The proposed vacuum station building for service area 4 will also be located outside of any AEC zones.

Service Area 7 AEC

There are no proposed pipelines or vacuum station building installations in an AEC zone for service area 7. There is an Estuarine and Ocean System AEC zone that runs along the north side of service area 7. However, all pipelines and buildings will be located outside of this zone.

Service Area 8 AEC

The proposed service area 8 contains a small portion of the Estuarine and Ocean System AEC. A short section of the proposed pipeline at the intersection of East Yacht Drive and NE 48th Street would be the only proposed pipeline installed in the AEC zone. The proposed vacuum station 8 building will be located outside of any AEC zone.

Service Area 9 AEC

The proposed service area 9 contains three of the four aforementioned AEC zones. The portion of the proposed pipelines installed South of East Oak Island Drive would be located the Ocean Erodible AEC and the High Hazard Flood AEC. The northern portion of area 9 contains two sections of pipelines that are located within the 30-foot buffer of the normal high water level. These lines were located within the buffer to provide adequate separation from existing potable water lines. Moving the sewer lines outside of the 30-foot buffer so that all construction activity would be outside buffer would require running the lines parallel to existing potable water lines with less than 10-feet of separation which would violate the minimum separation required by State of NC regulations. The proposed vacuum station 9 building will be located outside of any AEC zone.

Setbacks

The small and large structure setbacks are shown on the AEC drawings. The setback lines were measured from the first line of stable natural vegetation. The small structure setback was calculated as 30 times the average annual erosion rate which is 2 ft/year for areas 1 and 2 and 4 ft/year for area 9. The large structure setback was calculated as 60 times the average annual erosion rate. There were no building structures located within

Town of Oak Island Wastewater Collection System -- Phase II Request for Major Modification to CAMA permit 152-07 issued 10/12/07

run parallel. The replacement water mains will be located with approximately 3-feet of cover in the same approximate location where they are currently. The existing water lines are constructed of asbestos cement (AC) pipe. The replacement water lines will be constructed of PVC C-900 which is a much stronger material and will not be as susceptible to breaking as the AC pipe. The sewer lines will be located approximately 5-feet horizontally from the replacement water mains and will be placed with 18-inches vertical separation from the top of the sewer pipe to the bottom of the potable water main.

12-inch Force Main

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In order to connect vacuum stations 1 and 2 to the backbone force main network that feeds into the Middleton Lift Station, a 12-inch sewer force main needs to cross the Eastern Channel. This force main will be installed by Horizontal Directional Drill (HDD). The force main is proposed to be high-density polyethylene (HDPE) pipe which will run from 5th Place West across the Eastern Channel to the south end of SW 5th Street. The HDD will involve a drilling rig that will be set on 5th Place West and drill underneath the Eastern Channel. The proposed depth for the channel crossing is 15-feet below the channel bottom. The pipe will be strung along SW 5th Street and will be pulled back through the drilled opening and set in place. Plan & profile drawings of the channel crossing have been included with this submittal.

Environmental Impacts of the Project

Primary short term impacts during the construction of these facilities will include noise and increased emissions from construction equipment. Dewatering of groundwater will occur during construction for installation of collection sewers and vacuum stations. No long term primary impacts are expected.

Construction for Vacuum Stations 1 and 2 falls within the 100-year and the 500-year flood plains, and will require safeguards to the structure. No primary impacts will result to prime and unique agricultural lands; public lands and scenic recreations, and state natural areas; areas of architectural, archeological or historical value; shellfish or fish and their habitats; toxic substances; and mineral resources. The proposed service area of Oak Island is a community that has matured in land development and installation of infrastructure. The development pattern for the Island has been established and virtually all areas have been platted and nearly all roads serving residential and commercial areas of the island have been constructed. Development is continuing on the island in the unsewered areas in a random manner with nearly every area and every street experiencing housing starts. The proposed project will not cause a secondary impact of new platted areas or new street construction on the island. Except for the collection sewer, all other utilities are already in place on the Island in the un-sewered areas. All electric lines, telephone lines, cable lines, and water lines are in place and in service. There will be no impacts from this project on beachfront construction.

Construction in the un-sewered portion of the island is occurring even without a sewer collection system in place, and virtual build out of the island will occur by 2017 to 2020;

Table 1.4

Service Area 1 Pipe

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Street	Right-of-way	STA Begin	STA End	Pipe Length (ft)	Pipe Diam (in)	Pipe Area (ft^2)	Line Type
West Beach Drive	south	5200	4000	1200	8	800	Vacuum Sewer
West Beach Drive	south	4000	2800	1200	8	800	Vacuum Sewer
West Beach Drive	south	2800	1600	1200	8	800	Vacuum Sewer
West Beach Drive	south	1600	400	1200	8	800	Vacuum Sewer
West Beach Drive	south	400	0	400	8	267	Vecuum Sewer
King's Lynn Drive	south	3863	1800	1863	6	932	Vacuum Sewer
King's Lynn Drive	south	1800	0	1800	8	900	Vacuum Sewer
West Beach Drive	north	1521	0	1521	6	781	Vacuum Sewer
King's Lynn Drive	south	745	0	745	4	248	Vacuum Sewer
West Beach Drive	north	475	0	475	6	238	Vacuum Sewer
King's Lynn Drive	north	3525	1700	1825	6	913	Vacuum Sewer
King's Lynn Drive	north	1700	0	1700	6	850	Vacuum Sewer
West Beach Drive	north	350	0	350	6	175	Vacuum Sewer
West Beach Drive	south	1900	0	1900	6	950	Vacuum Sewer
West Beach Drive	south	4300	1900	2400	6	1200	Vacuum Sewer
West Beach Drive	south	4600	4300	300	6	150	Vacuum Sewer
West Beach Drive	south	4650	50	4600	6	2300	Sewer Force Main
39th Place West	west	500	0	500	6	250	Vacuum Sewer
Shoreline Drive	south	1300	500	800	6	400	Vacuum Sewer
West Dolphin Drive	north	1900	0	1900	4	633	Vacuum Sewer
West Beach Drive	north	1300	0	1300	4	433	Vacuum Sewer
West Dolphin Drive	north	1500	300	1200	6	800	Vacuum Sewer
West Beach Drive	north	300	0	300	6	150	Vacuum Sewer
57th Place West	west	200	0	200	6	100	Vacuum Sewer
West Beach Drive	north	1100	Q	1100	6	550	Vacuum Sewer
West Beach Drive	south	9600	0	9600	12	9600	Potable Water
West Beach Drive	north	1400	0	1400	4	487	Potable Water
West Beach Drive	north	3700	0	3700	4	1233	Potable Water
West Beach Drive	north	1900	0	1900	4	633	Potable Water
King's Lynn Drive	south	3900	0	3900	8	2600	Potable Water

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West Beach Drive north right-of-way 4640 ft^2

West Beach Drive south right-of-way 17667 ft^2

King's Lynn Drive

6442 ft*2

Total Pipe Area

30732 ft^2



DEPARTMENT OF THE ARMY WILMINGTON DISTRICT, CORPS OF ENGINEERS P. O. BOX 1890 WILMINGTON, NORTH CAROLINA 28402-1890 October 27, 2008

IN REPLY REFER TO

Regulatory Division

Action ID No. SAW-2007-01776-010

Mr. Doug Huggett Division of Coastal Management North Carolina Department of Environment and Natural Resources 400 Commerce Avenue Morehead City, North Carolina 28557-3421

Dear Mr. Huggett:

Reference the application of Town of Oak Island for a Department of the Army permit to construct 6 vacuum stations, install sewer line and sewerage pipeline network throughout Oak Island, Brunswick County, North Carolina.

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 State authorization:

1. All work authorized by this permit must be performed in strict compliance with the attached 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.

2. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the U.S. Army Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal, relocation, or alteration. The permittee shall notify NOAA/NATIONAL OCEAN SERVICE Chief Source Data Unit N CS261, 1315 E West HWY- RM 7316, Silver Spring, MD 20910-3282 at least two weeks prior to beginning work and upon completion of work. **RECEIVED**

OCT 2 8 2008

DCM WILMINGTON, NC

3. 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.

4. 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.

5. 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.

6. 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 Quality 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.

7. The authorized structure and associated activity must not interfere with the public's right to free navigation on all navigable waters of the United States. No attempt will be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the authorized work for reason other than safety.

8. 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.

9. In order to protect juvenile³finfish resources, no excavation or filling activities will be permitted between the dates of April 1 and September 30 of any year without the prior approval of the North Carolina Division of Coastal Management and the U.S. Army Corps of Engineers.

10. Prior to initiating construction activities, the permittee and his contractor will meet onsite with a representative of the U.S. Army Corps of Engineers to discuss construction plans.

. . .

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. Approval of the structure was based on determinations that there would be no obstruction to navigation. Under conditions existing in the Atlantic Intracoastal Waterway (AIWW), a possibility exists that the structure may be damaged by wave wash from passing vessels. Unreasonable slowing down of vessel traffic cannot be required because it would tend to nullify the navigational benefits on which the AIWW was justified. Issuance of this permit should not be construed, as relieving the permittee of taking proper steps to insure the structure and moored boats will not be damaged by wave wash normally to be expected in the AIWW.

13. The permittee shall advise the Corps in writing at least two weeks prior to beginning the work authorized by this permit and again upon completion of the work authorized by this permit.

14. 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.

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15. 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).

16. 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.

17. The permittee, upon receipt of a notice of revocation of this permit or upon its 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 may direct, restore the water or wetland to its pre-project condition.

18. 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.

19. There are no wetland impacts authorized associated with the proposed project without the written approval from the Corps of Engineers.

Questions or comments may be addressed to Mr. Dave Timpy, Wilmington Field Office, Regulatory Division, telephone (910) 251-4634.

Sincerel

David L. Timpy, Project Manager Wilmington Regulatory Field Office

Copies Furnished:

Ms. Cyndi Karoly DWQ, NC Dept of Environment Health & Natural Resources, Wetlands Division 2321 Crabtree Blvd, Suite 250 Raleigh NC 27604-2260

Mr. Pete Benjamin U.S. Fish and Wildlife Service Fish and Wildlife Enhancement Post Office Box 33726 Raleigh, North Carolina 27636-3726

Mr. Ron Sechler National Marine Fisheries Service Habitat Conservation Service Pivers Island Beaufort, North Carolina 28516

CWO Steve Lyons Staff Symbol: Aton 2301 East Ft Macon Rd. Atlantic Beach, NC 28512 Pace Wilber Supervisor, Atlantic Branch Habitat Conservation Division PO Box 12559 Charleston, SC 29422-2559

Mr, Ronald J. Mikulak, Chief Wetlands Regulatory Section Water Management Division U.S. Environmental Protection Agency 61 Forsyth Street, SW Atlanta, Georgia 30303

Mr. Steve Everhart Division of Coastal Management North Carolina Department of Environment, Health, and Natural Resources 127 Cardinal Drive Extension Wilmington NC 28405-3845



North Carolina Department of Environment and Natural Resources **Division of Coastal Management**

James H. Gregson, Director

Michael F. Easley, Governor

William G. Ross Jr., Secretary

October 22, 2008

RECEIVED DCM WILMINGTON, NC

Town of Oak Island 4601 East Oak Island Drive Oak Island, NC 28465

OCT 2 8 2008

Dear Sirs:

This letter is in response to your application request under the Coastal Area Management Act (CAMA) to carry out development of the Town of oak Island Wastewarer Collection and Treatment Project (Phase II) in Brunswick County. Processing of the permit application, which was received by the Division of Coastal Management's Wilmington office on August 4, 2008, is ongoing. However, it has been determined that additional information will be required prior to the Division taking final action on your application. This item is summarized below:

It is the policy of this Division that, prior to taking final action on a project of this nature, I) a stormwater management plan for the proposed development must be approved by the Division of Water Quality (DWQ). As of this date, it appears that this approval has not yet been received for this project. Therefore, it is necessary that processing of your permit application be placed in abeyance until such time as a stormwater management plan for the proposed project is issued by the Division of Water Quality, and a copy of the approval supplied to this office.

You will be given five working days from date of mailing. If you can provide to this office a copy of a stormwater management permit within the required time, DCM staff will continue processing of the application and the processing clock will not be suspended. If the required information is not provided to this office within the specified timeframe, processing of the application will be suspended until such time as the requested information is provided. If you have any questions concerning these matters, please feel free to contact me by telephone at (252) 808-2808, or by email me at doug.huggett@ncmail.net.

Sincerely,

Day Huggoti Doug Huggoti

Major Permits Coordinator

Cc: **DCM Wilmington** Black and Veatch

400 Commerce Avenue, Morehead City, North Carolina 28557 Phone: 252 808-2808 \ FAX: 252-247-3330 \ Internet: www.nccoastalmanagement.net

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MEMORANDUM

To:	Doug Huggett Mike Christenbury, Wilmington District Planner Consistency Determination, Major Permit Application, Town of Oak
From:	Mike Christenbury, Wilmington District Planner
Subject:	Consistency Determination, Major Permit Application, Town of Oak
_	Island, Oak Island – Brunswick County
Date:	February 2, 2007

Provided all local, state and federal requirements can be met, this project appears to be consistent with the Oak Island Land Use Plan (Long Beach/Yaupon Beach consolidated plans).

The applicant proposes to construct 6 vacuum stations, install a directionally drilled sewer line under Davis Canal and a sewerage pipeline network within the Town of Oak Island, NC.

Areas of Environmental Concern (AEC's) impacted by the proposal are OH, ES, PT and EW areas. Waters at the project site are classified as SA and SB and are not open to the harvesting of shellfish. The area is a Primary Nursery Area.

I have reviewed this proposal for consistency with the Oak Island Land Use Plan (Long Beach/Yaupon Beach consolidated plans) and offer the following comments.

The general area of the project is classified as Developed (upland).

In general, Oak Island allows development in conservation classified AECs which is consistent with the State's minimum use standards. The Oak Island Land Use Plan (Long Beach/Yaupon Beach consolidated plans) contains some policies, which exceed the State's minimum use standards. However, none of these standards appear to be applicable to this proposal.

Provided all local, state and federal requirements can be met, this project appears to be consistent with the Oak Island Land Use Plan (Long Beach/Yaupon Beach consolidated plans).

Cc: File



Michael F. Easley, Governor

William G. Ross Jr., Secretary North Carolina Department of Environment and Natural Resources

> Colean H. Sullins, Director Division of Water Quality

October 3, 2008

DWQ Project # 061879v2 Brunswick County

Mr. Jerry Walters Mr. Troy Davis Town of Oak Island 4601 E. Oak Island Drive Oak Island, NC 28465

Subject Property: Town of Oak Island Phase II Vacuum Sewer System

Approval of 401 Water Quality Certification with Additional Conditions

Dear Mr. Walters & Mr. Davis:

You have our approval, in accordance with the attached conditions and those listed below, to directionally drill beneath Davis Canal and construct six vacuum stations for the Town of Oak Island Phase II Vacuum Sewer System at the subject property, as described within your CAMA Major application dated July 31, 2008 and received by the N.C. Division of Water Quality (DWQ) on August 14, 2008. After reviewing your application, we have decided that the impacts are covered by General Water Quality Certification Number(s) 3642 (GC3642). The Certification(s) allows you to use Regional General Permit Number 198000291 when issued by the US Army Corps of Engineers (USACE) and the CAMA Major Permit when issued by the Division of Coastal Management. In addition, you should obtain or otherwise comply with any other required federal, state or local permits before you go ahead with your project including (but not limited to) Erosion and Sediment Control, Non-discharge, and stormwater regulations. Also, this approval to proceed with your proposed impacts or to conduct impacts to waters as depicted in your application shall expire upon expiration of the 404 Permit.

This approval is for the purpose and design that you described in your application. If you change your project, you must notify us and you may be required to send us a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter and is thereby responsible for complying with all conditions. If total fills for this project (now or in the future) exceed one acre of wetland or 150 linear feet of stream, compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h). This approval requires you to follow the conditions listed in the attached certification and any additional conditions listed below.

The Additional Conditions of the Certification are:

1. Impacts Approved

No direct impacts including incidental impacts to wetlands or waters are approved by this Certification. This Certification only authorizes the horizontal directional drilling beneath Section 10 Waters of the U.S. (Davis Canal). If it is necessary to horizontal directional drill beneath Section 10 Waters of the U.S. on Oak Island that were not listed within your CAMA Major application in order to complete all phases and service areas of the Wastewater Collection System, further authorization from DWQ is required.

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North Carolina Division of Water Quality Wilmington Regional Office

Town of Oak Island Phase II Vacuum Sewer System **Brunswick County** 2006-1879 v2

2. Erosion & Sediment Control Practices

Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to protect surface waters standards:

- The erosion and sediment control measures for the project must be designed, installed, operated, and a. maintained in accordance with the most recent version of the North Carolina Sediment and Erosion Control Planning and Design Manual.
- The design, installation, operation, and maintenance of the sediment and crosion control measures b. must be such that they equal, or exceed, the requirements specified in the most recent version of the North Carolina Sediment and Erosion Control Manual. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
- For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, C. and maintained in accordance with the most recent version of the North Carolina Surface Mining Manual.
- The reclamation measures and implementation must comply with the reclamation in accordance with đ. the requirements of the Sedimentation Pollution Control Act.
- 3. No Waste, Spoil, Solids, or Fill of Any Kind

No waste, spoil, solids, or fill of any kind shall occur in wetlands, waters, or riparian areas beyond the footprint of the impacts depicted in the Pre-Construction Notification. All construction activities, including the design, installation, operation, and maintenance of sediment and erosion control Best Management Practices, shall be performed so that no violations of state water quality standards, statutes, or rules occur.

4. No Sediment & Erosion Control Measures w/n Wetlands or Waters

Sediment and erosion control measures shall not be placed in wetlands or waters to the maximum extent practicable. If placement of sediment and erosion control devices in wetlands and waters is unavoidable, they shall be removed and the natural grade restored within six months of the date that the Division of Land Resources has released the project.

Construction Stormwater Permit NCG010000

Upon the approval of an Erosion and Sedimentation Control Plan issued by the Division of Land Resources (DLR) or a DLR delegated local erosion and sedimentation control program, an NPDES General stormwater permit (NCG010000) administered by DWQ is automatically issued to the project, This General Permit allows stormwater to be discharged during land disturbing construction activities as stipulated by conditions in the permit. If your project is covered by this permit [applicable to construction projects that disturb one (1) or more acres), full compliance with permit conditions including the sedimentation control plan, self-monitoring, record keeping and reporting requirements are required. A copy of this permit and monitoring report forms may be found at http://h2o.enr.state.nc.us/su/Forms Documents.htm.

6. Certificate of Completion

Upon completion of all work approved within the 401 Water Quality Certification Each Each Better Rules, and any subsequent modifications, the applicant is required to return the attached certificate of completion to the 401/Wetlands Unit, North Carolina Division of Water Quality, 1650(Mail Science Center, Raleigh, NC, 27699-1650.

DCM WILMINGTON, NC

Town of Oak Island Phase II Vacuum Sewer System Brunswick County 2006-1879 v2

If you do not accept any of the conditions of this Certification (associated with the approved wetland or stream impacts), you may ask for an adjudicatory hearing. You must act within 60 days of the date that you receive this letter. To ask for a hearing, send a written petition, which conforms to Chapter 150B of the North Carolina General Statutes to the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, N.C. 27699-6714. This certification and its conditions are final and binding unless you ask for a hearing.

Violations of any condition herein set forth may result in revocation of this Certification and may result in criminal and/or civil penalties. The authorization to proceed with your proposed impacts or to conduct impacts to waters as depicted in your application and as authorized by this Certification shall expire upon expiration of the 404 or CAMA Permit.

This letter completes the review of the Division of Water Quality under Section 401 of the Clean Water Act. If you have any questions, please telephone Ian McMillan in the Central Office in Raleigh at 919-733-1786 or Chad Coburn in the DWQ Wilmington Regional Office at 910-796-7215.

ncerely.

Coleen H. Sullins, Director Division of Water Quality

Enclosures: GC 3642 Certificate of Completion

cc: Melissa L.A. Tafilaku - Black & Veatch International Company Matthew Skidmore - Black & Veatch International Company Ian McMillan - DWQ 401 Oversight and Express Unit David Timpy - USACE Wilmington Regulatory Field Office Doug Huggett - DCM Morehead City Heather Coats - DCM Wilmington WiRO

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DCM WILMINGTON, NC

Certification of Completion

DWQ Project No .:	······································	County:	 			
Applicant:	• •					
Project Name:		····, -,	 			
Date of Issuance of Wetland	Permit:		 	•••••••••••••••••	· .	

Certificate of Completion

Upon completion of all work approved within the 401 Water Quality Certification and Buffer Rules, and any subsequent modifications, the applicant is required to return this certificate to the 401 Oversight/Express Permitting Unit, North Carolina Division of Water Quality, 1650 Mail Service Center, Raleigh, NC, 27699-1650. This form may be returned to DWQ by the applicant, the applicant's authorized agent, or the project engineer. It is not necessary to send certificates from all of these.

Applicant's Certification

I, ______, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature:		Date:	
0	 		

Agent's Certification

l, ______, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: Date:

If this project was designed by a Certified Professional

I, ______, as a duly registered Professional ______ (i.e., Engineer, Landscape Architect, Surveyor, etc.) in the State of North Carolina, having been authorized to observe (periodically, weekly, full time) the construction of the project, for the Permittee hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature:	Registration No.	 Date	RECEIVED
			OCT 0 6 2008
			DCM WILMINGTON, NC

WQC #3642

CAMA PERMIT CERTIFICATION

GENERAL CERTIFICATION FOR PROJECTS ELIGIBLE FOR CORPS OF ENGINEERS GENERAL PERMIT NUMBER 198000291 (ISSUED TO THE NORTH CAROLINA DIVISION OF COASTAL MANAGEMENT) OR CORPS OF ENGINEERS GENERAL PERMIT NUMBERS 198000291, 198000048, 198700056,197800030, 197800125, and 198200277 AND NATIONWIDE PERMIT NUMBERS 3, 12, 14, 18, 27, 29, 33, 35, 39, and 43, WHEN APPLIED TO CAMA PERMITS, AND RIPARIAN AREA PROTECTION RULES (BUFFER RULES)

This General Certification is issued in conformity with requirement of Section 401, Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Quality Regulations in 15 NCAC 2H, Section .0500 and 15 NCAC 2B .0200 for the discharge of fill material as described in General Permit 198000291 and for the Riparian Area Protection Rules (Buffer Rules) in 15A NCAC 2B .0200. This Certification replaces Water Quality Certification Number 3025 issued on September 6, 1995, Water Quality Certification Number 3112 issued on February 11, 1997, Water Quality Certification Number 3274 issued June 1, 2000 and Water Quality Certification Number 3371 issued March 18, 2002 and WQC Number 3400 issued March 18, 2002. This WQC is rescinded when the Corps of Engineers re-authorizes any of these Nationwide or Regional General Permits or when deemed appropriate by the Director of DWQ.

The State of North Carolina certifies that the specified category of activity will not violate applicable portions of Sections 301, 302, 303, 306 and 307 of the Public Laws 92-500 and 95-217 if conducted in accordance with conditions hereinafter set forth.

Conditions of Certification:

 Activities authorized by CAMA major permits require written concurrence from the Division of Water Quality as well as compliance with all conditions of this General Certification;

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- Activities authorized by Coastal Area Management Act (CAMA) Minor or General Permits do not require written authorization from the Division of Water Quality as long as they comply with all other conditions of this General Certification;
- 3. In accordance with North Carolina General Statute Section 143-215.3D(e), any request for written concurrence for a 401 Water Quality Certification must include the appropriate fee. If a project also requires a CAMA Permit, one payment to both agencies shall be submitted and will be the higher of the two fees. The fee shall be collected and distributed between the two agencies in accordance with egreements reached between the Division of Water Quality and the Division of Coastal Management;
- 4. In accordance with 15A NCAC 2H .0506 (h) compensatory miligation may be required for impacts to 150 linear feet or more of streams and/or one acre or more of wetlands. In addition, buffer miligation may be required for any project with Buffer Rules in effect at the time of application for buffer impacts resulting from activities classified as "allowable with miligation" within the "Table of Uses" section of the Buffer Rules or require a variance under the Buffer Rules. A determination of buffer, wetland and stream miligation requirements shall be made for any Certification for this Nationwide Permit. The most current design and monitoring protocols from DWQ shall be followed and written plans submitted for DWQ approval as required in those protocols. When compensatory miligation is required for a project, the miligation plans must be approved by DWQ in writing before the impacts approved by the Certification occur. The miligation plan must be implemented and/or constructed before any permanent building or structure on site is occupied. In **CENERCED**

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OCT 0 6 2008

DCM WILMINGTON, NC

WQC #3642

road projects, the mitigation plan must be implemented before the road is opened to the travelling public;

- 5. Compensatory stream miligation shall be required at a 1:1 ratio for not only perennial but also intermittent stream impacts that require application to DWQ in watersheds classified as ORW, HQW, Tr, WS-I and WS-II unless the project is a linear, publiclyfunded transportation project, which has a 150-foot per-stream impact allowance;
- 6. Impacts to any stream length in the Neuse and Tar-Pamilco River Basins (or any other major river basins with Riparian Area Protection Rules [Buffer Rules] in effect at the time of application) requires written concurrence from DWQ in accordance with 15A NCAC 2B.0200. New development activities located in the protected 50-foot wide riparian areas (whether jurisdictional wetlands or not) within the Neuse and Tar-Pamilco River Basins shall be limited to "uses" identified within and constructed in accordance with 15A NCAC 2B .0200. All new development shall be located, designed, constructed, and maintained to have minimal disturbance to protect water quality to the maximum extent practicable through the use of bast management practices. Activities listed as "exempt" from these rules do not need to apply for written concurrence under this Certification;
- All sediment and erosion control measures placed in wetlands or waters shall be removed and the original grade restored after the Division of Land Resources has released the project;
- If an environmental document is required, this Certification is not valid until a Finding of No Significant Impact (FONSI) or Record of Decision (ROD) is issued by the State Clearinghouse;
- 9. That appropriate sediment and erosion control practices which equal or exceed those outlined in the most recent version of the "North Carolina Sediment and Erosion Control Planning and Design Manual" or the "North Carolina Surface Mining Manual" whichever Is more appropriate (available from the Division of Land Resources (DLR) in the DENR Regional or Central Offices) shall be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to assure compliance with the appropriate turbidity water quality standard;
- Measures shall be taken to prevent live or fresh concrete from coming into contact with freshwaters of the state until the concrete has hardened;
- Additional site-specific conditions may be added to projects which have applied for CAMA major permits which are proposed under this Certification in order to ensure compliance with all applicable water guality and effluent standards;
- 12. When written concurrence is required, the applicant is required to use the most recent version of the Certification of Completion form to notify DWQ when all work included in the 401 Certification has been completed;
- 13. Concurrence from DWQ that this Certification applies to an individual project shall expire three years from the date of the cover letter from DWQ or on the same day as the expiration date of the corresponding General Permit 198000291, whichever is sooner.

Non-compliance with or violation of the conditions herein set forth by a specific fill project shall result in revocation of this Certification for the project and may result in criminal and/or civil penalties.

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DCM WILMINGTON, NO

WQC #3642

The Director of the North Carolina Division of Water Quality may require submission of a formal application for individual certification for any project in this category of activity that requires written concurrence under this certification, if it is determined that the project is likely to have a significant adverse effect upon water quality or degrade the waters so that existing uses of the wetland or downstream waters are precluded.

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Public hearings may be held for specific applications or group of applications prior to a Certification decision if deemed in the public's best interest by the Director of the North Carolina Division of Water Quality.

Effective date: 19 March 2007

DIVISION OF WATER QUALITY

By

Alan Klinel

Alan W. Klimek

Director

WQC # 3642



OCT 0 6 2008 DCM WILMINGTON, NC

NCASWCD Area 6 2008 Changes in Leadership

Brunswick

Elected – Alan Robinson Appointed – Bryan Smith

Carteret

Elected – Clayton Garner, Jr. Appointed – Herbert Page

Craven

Elected – Gretchen Davis Appointed – Dietrich Kilpatrick

Duplin

Elected – Bill Pickett Appointed – Rouse Ivey

Greene

Elected – Mike Hardy Appointed – Jack Cunningham

Jones

Elected – Thomas Waller Appointed – Donald Stilley

Lenoir

Elected – Kenneth Jones Appointed – Gene Smith

New Hanover

Elected – Dave Thomas Appointed – Durwood Baggett

Onlsow

Elected – Jerome Shaw Appointed – Hugh Passingham

Pamlico

Elected – James Hardison Appointed - Reginald Caroon

Pender

Elected – Don Rawls Appointed – Trent Talbert

Wayne

Elected – Thomas Uzzell Appointed – Kelth Waller

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OCT 0 6 2008

DCM WILMINGTON, NC



DEPARTMENT OF THE ARMY WILMINGTON DISTRICT, CORPS OF ENGINEERS P.O. BOX 1890 WILMINGTON. NORTH CAROLINA 28402-1890

Regulatory Division

Mr. Ron Sechler

Beaufort, NC 28516

Mr. Pete Benjamin

Post Office Box 33726

61 Forsyth Street, SW

CWO Steve Lyons

Atlanta, Georgia 30303

United States Coast Guard Staff Symbol: ATON

2301 East Fort Macon Rd

Atlantic Beach, NC 28512

Pivers Island

September 2, 2008

Action ID: SAW-2007-01776-010

National Marine Fisheries Svc. NOAA

Raleigh, North Carolina 27636-3726

U.S. Environmental Protection Agency

Fish and Wildlife Enhancement U.S. Fish and Wildlife Service

Mr. Ronald J. Mikaluk, Chief Wetlands Section – Region IV

Water Management Division

Applicant: Oak Island Wastewater Phase 2

Waterway: AIWW, Davis Canal, Atlantic County: Brunswick stations, sewer lines

County: Brunswick Work Type: Vacuum

Commanding Officer United States Coast Guard 431 Crawford Street Portsmouth, Virginia 23704

Without Enclosures

Mr. Doug Huggett Division of Coastal Management NC Department of Environment, Health and Natural Resources 400 Commerce Avenue Morehead City, NC 28557-3421

Mr. Steve Everhart Wilmington Regional Office NC Division of Coastal Management 127 Cardinal Drive Ext Wilmington, NC 28405-3845

Pace Wilber Supervisor, Atlantic Branch, NMFS P O Box 12559 Charleston, SC 29422-2559

Gentlemen:

Pursuant to the CAMA-Corps Programmatic Permit process, a State Field Investigation Report is enclosed. Your comments and/or recommendations would be appreciated on or before **October 1, 2008.** Questions or comments may be addressed to the undersigned at (910) 252-4634.

Sincerely,

Dave Timpy, Regulatory Project Manager Wilmington Regulatory Field Office

SEP 5 8 2008

Enclosure

DCM WILMINGTON NO

CRC-VR-09-02

Attachment E

Other Stipulated Exhibits

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15A NCAC 18C .0906 RELATION OF WATER MAINS TO SEWERS

(a) Lateral Separation of Sewers and Water Mains. Water mains shall be laid at least 10 feet laterally from existing or proposed sewers, unless local conditions or barriers prevent a 10-foot lateral separation--in which case:

- (1) The water main is laid in a separate trench, with the elevation of the bottom of the water main at least 18 inches above the top of the sewer; or
 - (2) The water main is laid in the same trench as the sewer with the water main located at one side on a bench of undisturbed earth, and with the elevation of the bottom of the water main at least 18 inches above the top of the sewer.

(b) Crossing a Water Main Over a Sewer. Whenever it is necessary for a water main to cross over a sewer, the water main shall be laid at such an elevation that the bottom of the water main is at least 18 inches above the top of the sewer, unless local conditions or barriers prevent an 18 inch vertical separation--in which case both the water main and sewer shall be constructed of ferrous materials and with joints that are equivalent to water main standards for a distance of 10 feet on each side of the point of crossing.

(c) Crossing a Water Main Under a Sewer. Whenever it is necessary for a water main to cross under a sewer, both the water main and the sewer shall be constructed of ferrous materials and with joints equivalent to water main standards for a distance of 10 feet on each side of the point of crossing. A section of water main pipe shall be centered at the point of crossing.

History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523; Eff. January 1, 1977; Readopted Eff. December 5, 1977.

Sec. 30-39. Connection to public water and sewer and abandonment or reuse of private system.

(a) At such time as public water or sewer becomes available to properties not presently served by a public system, a direct connection shall be made from the building water and sewer to the public system within 180 days. If an existing well is to remain in service for lawn watering, washing cars or other nonpotable uses, any cross connections from such private well to the public system shall be eliminated at the time of connection. In addition, within the 180-day timeframe specified in this subsection, any existing septic tank, cesspool or similar private disposal facility shall either be connected as an extension to the property's storm drainage system, per guidelines as may be approved by the town and the county's public health department.

An availability fee plus a usage fee, in accordance with the town fee schedule, shall be charged to those being served by a new water or sewer system. Billing will commence immediately following connection to the new system or, if not connected, at the end of the 180 days allowed by the ordinance to connect to the system.

(b) New sewers and new connections shall be properly designed and constructed in accordance with such guidelines as published by the Environmental Protection Agency and approved by the town. Under no conditions shall sanitary wastewater be discharged into any storm sewer system.

(Ord. of 4-10-2001(11), § 12-9; Ord. of 4-8-2003(2); Ord. of 10-14-2008(3))



Sec. 30-40. Deposit.

(a) Water and sewer service billed to a property owner will not require a deposite at the swill make a minimum cash deposit. Deposits shall not draw interest.

(b) The individual in whose name the deposit is made shall be responsible for payment of all bills incurred in connection with the service furnished.

(c) A deposit is required for initial service and may be transferred to another residence during continued service within the service area provided there is no current account balance at the time of transfer. If service is disrupted, a separate deposit shall be made.

(d) The deposit receipt is not negotiable and can be redeemed only at the town hall.

(e) Where the town finds that the requests for a deposit refund is questionable, the town may require the applicant for refund to produce the deposit receipt, properly endorsed.

(Ord. of 4-10-2001(11), § 12-10)

Sec. 30-41. Initial charge or availability fee.

(a) The initial charge or availability fee, as provided in the rate schedule, shall be made for each meter installed, regardless of location or reason for installation. In the case of multi-family structures, mixed-use structures, strip malls or shopping centers being serviced by a single meter, an initial charge or availability fee shall be charged for each consumer/unit contained in the building. Each water meter requires a separate meter reading sheet, and each meter reading sheet shall cover a separate and individual account, with the exception of an individual user's extra water meter installed for measuring outside use only water for purposes of calculating sewer usage. Such outside use only water use shall also be included on the meter reading sheet and in the account of that individual user.

(b) Water and/or sewer furnished for a given lot shall be used on that lot only. Each

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of such guests; and having or not having one or more dining rooms, restaurants, or cafes where meals or lunches are served to such transient or permanent guests, such sleeping accommodations and dining rooms, restaurants, or cafes, if existing, being conducted in the same buildings in connection therewith.

Junkyard means any land or area used, in whole or in part, for storage and/or sale of wastepaper, rags, scrap metal, vehicles or other junk, and including storage of inoperative motor vehicles and dismantling of such vehicles or machinery.

Lot means a parcel of land whose boundaries have been established by some legal instrument such as a recorded deed or a recorded map and which is recognized as a separate legal entity for purposes of transfer of title.

Lot, corner, means a lot abutting upon two or more streets at their intersection.

Lot depth means the distance measured in the mean direction of the side lines of the lot from the midpoint of the front line to the midpoint of the opposite main rear line of the lot.

Lot, flag, means a flag-shaped lot with its widest point set back from the street or natural amenity, such as Davis Creek, at the rear of another lot and having a thin strip of land connecting to the road or natural amenity to provide legal access and frontage.

Lot, fontage. The length of the front lot line as measured at a street right of way line.

Lot, front line. The portion of a lot abutting a street right of way from which the front yard setback shall be measured. For the purpose of establishing the setbacks required within this chapter and assigning addresses to developing properties, the following standards shall apply in determining the boundary of a lot that is to be considered the front lot line: (1) In the case of a corner lot, the boundary with the shortest dimension in linear feet abutting a street right of way line shall be considered the front lot line; (2) Where a corner lot exists with equal frontage along two street rights of way, the lot shall be considered to front on the street where the lots within that block have the greater lot frontage as measured in linear feet; and (3) In the case of a through lot, both lot lines abutting a street right of way shall be deemed front lot lines. Addresses shall be assigned to correspond with the front lot line as established in accordance with these standards regardless of the orientation of the structure to be placed OAA upon the lot.

Lot, interior, means a lot other than a corner lot.

Lot lines means the lines bounding a lot.

Lot of record means a lot which is a part of a subdivision, a plat of which has been recorded in the office of the county register of deeds, or a lot described by metes and bounds, the description of which has been recorded in the office of the register of deeds.

HARTEREL

1999

Lot, through, means an interior lot having frontage on two parallel streets.

Lot width means the straight line distance between the points where the building setback line intersects the two side lot lines.

CLERK CERTIFICATION

I, Joy B. Davis, CMC, Town Clerk of the Town of Oak Island, North Carolina, do hereby certify that the attached document is a true and correct copy of Article II, Division 1. Section 18-32, of the Town of Oak Island Code of Ordinances, *Definitions*, last amended and adopted at an open meeting of the Oak Island Town Council, July 8, 2008.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official Seal of the Town of Oak Island, North Carolina, this the 29 day of January, 2009.

 $\lambda_{\rm GNL}$

Joy B. Davis, CMC Town Clerk Oak Island, North Carolina





North Carolina Department of Environment and Natural Resources

Division of Coastal Management

Beverly Eaves Perdue, Governor

James H. Gregson, Director

Dee Freeman, Secretary

CRC-09-04

MEMORANDUM

TO:	Coastal Resources Commission
FROM:	Dr. John Fear, Research Coordinator
DATE:	January 28, 2009
RE:	N.C. Coastal Reserve and National Estuarine Research Reserve Research Program

The N.C. Coastal Reserve and National Estuarine Research Reserve have an active research program comprised of three primary focus areas: site-directed research, and the nationally-coordinated National Estuarine Research Reserve System (NERRS) Graduate Research Fellowship Program and System-wide Monitoring Program. The goal of the N.C. Reserve research program is to provide new information on coastal ecosystems and processes to promote sound management of coastal resources.

The site-based nature of the N.C. Reserve provides excellent opportunities to study coastal ecosystems and their processes in a natural setting with minimal anthropogenic disturbance. Reserve sites serve as reference sites providing baseline data representative of natural conditions; these data may be compared to historic data and data from developed areas to quantify long-term changes and impacts. The sites may also be used to demonstrate and evaluate the efficacy of alternatives to generally accepted coastal development and/or management practices. N.C. Reserve research priorities address locally relevant and nationally significant coastal management issues including effects from coastal population increase, altered land use, storm water runoff and eutrophication, invasive species, tropical and coastal storm impacts, and sea level rise.

Site-Directed Research

The N.C. Reserve conducts and facilitates original high-quality research at the sites and in their associated watersheds as part of the site-directed research program. The Reserve encourages outside researchers from academic and other government and non-government agencies to use the sites to help address the priority coastal management issues above. Written permission in the form of a research permit is required to conduct research on a site (15A NCAC 07O .0202). The

400 Commerce Avenue, Morehead City, North Carolina 28557 Phone: 252-808-2808 \ FAX: 252-247-3330 \ Internet: www.nccoastalmanagement.net An Equal Opportunity \ Affirmative Action Employer – 50% Recycled \ 10% Post Consumer Paper natural state of the sites, their distribution along the N.C. coast, and Reserve research and education support are incentives for researchers to utilize the Reserve. Current examples of sitedirected research projects include: NOAA-Reserve sustainable shoreline stabilization study with demonstration projects; atmospheric deposition monitoring to determine the effects of a new egg-laying facility on water quality; and NOAA-Reserve reference and restored marsh monitoring to compare ecosystem services and monitor sea level rise impacts.

NERRS Graduate Research Fellowship Program

The Graduate Research Fellowship Program (GRF) supports students to produce high quality research at each of the Reserves within the NERRS. The fellowship provides two graduate students with funding for 1-3 years to conduct their research at one or more of the national sites within the N.C. Reserve. Projects must address coastal management issues identified as having regional or national significance; relate them to NERRS research focus areas; and be conducted at least partially within one or more designated Reserve sites. Proposals must focus on the following areas: 1) eutrophication, effects of non-point source pollution and/or nutrient dynamics; 2) habitat conservation and/or restoration; 3) biodiversity and/or the effects of invasive species; 4) mechanisms for sustaining resources within estuarine ecosystems; or 5) economic, sociological, and/or anthropological research applicable to estuarine ecosystem management. These areas correlate directly with the overarching threats facing the N.C. Reserve sites and the Reserve research priorities. Recent N.C. fellowship projects have addressed fecal coliform source tracking, oyster reef ecology, and the invasion potential of a harmful blue-green alga.

NERRS System-wide Monitoring Program

The System-wide Monitoring Program (SWMP) provides standardized quantitative measurements of short-term variability and long-term changes in the integrity and biodiversity of Reserve ecosystems. Conducted at all 27 sites within the NERRS, SWMP is designed to enhance the value and vision of the Reserves as a system of national reference sites. The program also takes a phased approach and focuses on three different ecosystem characteristics:

- 1. Abiotic Variables: Automated collection of pH, conductivity, salinity, temperature, dissolved oxygen, turbidity, water level and atmospheric conditions every 15 minutes and monthly nutrient and chlorophyll a collection;
- 2. Biotic Variables: Monitors organisms and habitats for assessment of biodiversity, habitat, and population characteristics as funds are available; and
- 3. Watershed and Land use Classifications: Tracks and evaluates changes in coastal habitats and watershed land use/cover to examine the links between watershed land use activities and coastal habitat quality.

The N.C. Reserve currently monitors abiotic variables at its Masonboro Island, Zeke's Island, and Rachel Carson sites. Data are available at <u>http://cdmo.baruch.sc.edu</u>. Watershed and land use classifications have been prepared for all four national sites within the N.C. Reserve: Currituck Banks, Rachel Carson, Masonboro Island, and Zeke's Island.



North Carolina Department of Environment and Natural Resources

Division of Coastal Management

Beverly Eaves Perdue, Governor

James H. Gregson, Director

Dee Freeman, Secretary

January 28, 2009

MEMORANDUM

CRC 09-05

- TO: Coastal Resources Commission
- **FROM:** Jeffrey Warren, PhD, CPG Coastal Hazards Specialist
- **SUBJECT**: Proposed Development Policies for Expanded Inlet Hazard Area Boundaries

At the May 2008 Coastal Resources Commission (CRC) meeting, Division of Coastal Management (DCM) staff presented draft rule language for development within the updated Inlet Hazard Area (IHA) boundaries as well as a boundary for the Bald Head Island (BHI) IHA that was a revision of the CRC Science Panel on Coastal Hazards initial recommendation. Spencer Rogers, a member of the CRC Science Panel, addressed issues that the Panel had with some of the concepts of the draft rule language, specifically those relating to how the oceanfront setback was determined adjacent to an inlet and, in particular, the calculation of erosion rates and the use of the vegetation line as a reference point for measuring setbacks. The CRC requested that the issues addressed by Rogers, as well as the revised IHA boundary developed by DCM staff, be taken back to the Science Panel.

Since the May 2008 CRC meeting, the Science Panel has met three times to discuss the issue. At the November CRC meeting, DCM staff presented an IHA boundary for BHI based on Science Panel input and additional DCM consideration. Although the Science Panel continues to support their initial IHA boundary recommendation presented in September 2007, staff presented the rationale that DCM staff used to justify the November 2008 IHA boundary revision. Spencer Rogers offered additional comments on the issue. In response, the CRC voted to adopt the boundary as presented by staff. All of the proposed IHAs (including the November revisions to BHI) can be reviewed online:

http://www.nccoastalmanagement.net/Hazards/proposed_IHA.htm

At the November 2008 meeting, DCM staff noted that draft development policies and data germane to how these policies might affect development in both the existing and proposed IHA boundaries would be provided for the Commission's consideration in February 2009. Attached is a comparison (Table 1) of the proposed development policies for the revised IHA boundaries to the existing IHA policies (for development currently in the IHA) and the existing Ocean Erodible Area or OEA policies (for development currently not in the IHA but slated to be included in the proposed boundary revisions).

Dr. Margery Overton, CRC Science Panel chair, is scheduled to speak to the CRC at the February meeting and outline the Panel's concerns with managing development adjacent to the State's 12 developed inlets. Based on comments from the most recent Science Panel meeting (January 14th), the issues appear to be fourfold: 1) application of newly calculated oceanfront shoreline erosion rate data adjacent to inlets (versus existing data based on 1998 shoreline), 2) consideration of short-term variability of shoreline (and vegetation line) when determining setbacks, 3) consideration of multiple setback criteria at each inlet (and potentially using the most restrictive), and 4) consideration of inlet-specific (i.e., unique to each inlet) policies for placement of development. DCM continues to consider the Panel's input as inlet-related development policies are developed. Although the application of a new erosion rate will be accomplished as a separate project through a phased approach, DCM feels it has developed a policy framework for addressing most, if not all, of the Panel's concerns.

At the upcoming meeting recommendations for revised IHA development criteria as outlined in Table 1 will be presented along with relevant support data (e.g., size and number of affected structures, erosion rates, etc.). Simply stated, the general concept of these IHA development criteria is twofold: 1) keep it small (<5,000 square feet) and 2) keep it from moving oceanward of existing development. CRC approval of this policy, including any amendments they feel are appropriate, can be distributed to the appropriate stakeholder groups following the meeting (including the Science Panel, which is scheduled to meet again in Raleigh on February 25th). Comments and concerns identified by stakeholders will be considered by DCM and incorporated into draft rules that can be presented to the CRC at their April meeting. Note that that the two relevant rules are 15A NCAC 07H.0304 (which defines the IHA boundaries) and 07H.0310 (which defines the development requirements within the IHA boundaries). Although the Coastal Area Management Act requires any changes to an Area of Environmental Concern (AEC) to be subject to hearings in each affected county (in this case, there are five - Brunswick, New Hanover, Pender, Onslow, and Carteret), DCM staff recommends that both rules (07H.0304 and 07H.0310) be subject to the same level of public input. If the CRC chooses to send the proposed rules to public hearing in April, it is likely that regional public hearings can occur during early to mid August with a final hearing in front of the full CRC in Raleigh (August 27th).

Table 1. Applicable development policies established by the Coastal Resources Commission in both the Inlet Hazard Area (IHA) and Ocean Erodible Area (OEA) compared to the proposed development standards proposed by the Division of Coastal Management staff. The OEA data are tabulated here because they are the current rules applicable for oceanfront development in areas that are included in the proposed IHA expansion (but not currently in an IHA).

POLICY	Existing IHA	Existing OEA	Proposed IHA
Size limits	No commercial or multi- family (4 units or greater) greater than 5,000 sq ft	No size limits as long as setback can be met	No structures greater than 5,000 sq ft (excluding development related to public access such as parking lots)
Grandfathering for existing structures >5,000 sq ft	No	No	Yes (can be replaced to pre- rule change size as long as current setbacks are met)
Parking	Not greater than 5,000 sq ft	Setback based on size	All parking >5,000 sq ft shall be gravel or packed clay
Density Limits	No more than 1 unit per 15,000 sq ft	None	None
Setback exception for lots platted prior to 1979	No	Yes	Yes
Static Line Exception*	Yes (although not addressed in current IHA rules, nothing in current rules would exclude its application)	Yes	Yes
Erosion Rates Applied to Setback Determinations	Adjacent OEA	As defined in 07H.0304	As defined in 07H.0304 (plus a 2 ft-per-yr rate assigned to a few areas on current maps without assigned erosion rates; DCM plans a coast-wide update to current erosion rates)
Vintage of Erosion Rates Applied	Primarily current rates with some exceptions dependant on lot plat date	Primarily current rates with some exceptions dependant on lot plat date	Rates in place at time of permit decision
Setback Reference Point	Vegetation line	Vegetation line	Vegetation line AND landward most adjacent structure AND as far back on lot as feasible (with provision for unique lot and shoreline geometries on a case- by-case basis)
Setback Factor	30	30 or 60 (plus potential graduated setback factor between 60 and 90 based on pending setback rules)*	30 (no greater setback needed since total floor area limited to 5,000 sq ft; size exception for public access facilities which will need to meet relevant setback*)
Sandbag Frequency**	Once	Once	Multiple times**
Sandbag Time Limits**	Max of 5 years	Max of 5 years	Max of 8 years** (with planned inlet relocation project)

* Static line exception and setback rules (15A NCAC 07H.0306) approved by CRC in September and RRC in November 2008 being sent to General Assembly for review.

** Although proposed sandbag rules are provided here for comparison, they are not part of the proposed IHA development policy and rules. The public hearing for proposed amendments to the sandbag rules (15A NCAC 07H.0308(a)(2)) that would allow the conditions described in the above table is scheduled to occur at the February CRC meeting.



North Carolina Department of Environment and Natural Resources

Division of Coastal Management

Beverly Eaves Perdue, Governor

James H. Gregson, Director

Dee Freeman, Secretary

CRC-09-07

January 27, 2009

MEMORANDUM

TO: Coastal Resources Commission (CRC) and Coastal Resources Advisory Council (CRAC)

FROM: Steve Underwood, Assistant Director for Policy and Planning

SUBJECT: Summary of BIMP Public Meetings

First Round of Public Input Meetings

Five meetings were held during the period of December 2 through December 11, 2008 to outline the ongoing development of the North Carolina Beach and Inlet Management Plan (BIMP). . These provided opportunities for members of the public and communities to be informed of the progress to date and to provide valuable input and comments. Total attendance for all of those meetings was approximately 120 people.

The meeting consisted of two main parts. The first part was a presentation on the BIMP and the second involved interactive breakout sessions where maps and flip charts were available to document comments, questions, and concerns during the session. The presentations are available for viewing on the project website <u>www.ncbimp.net</u>. The comments from the meeting break out sessions are summarized in this document. Additional opportunities for comment are the questionnaires provided at the meetings and email feedback at <u>DENR.NCBIMP@lists.ncmail.net</u> Public input and participation in the process is greatly appreciated.

Summary of Public Comments at Each Meeting

Region 1 Meeting – Held December 3, 2008 from 6-8:00 pm at Brunswick Electric Membership Corporation, Supply NC (15 attended)

Discussion in the break-out sessions ranged from data availability to strategies and priorities of the BIMP. The following list summarizes the comments made:

General

- All alternatives should be on the table. The BIMP discussion should not be limited to current policy but also consider things not currently allowed under rule or statue such as terminal structures.
- There is a difference between using structures for sediment control vs. shoreline armoring

Data

- The current sandbag structures database should be updated
- Current NCDCM erosion rates use "end point" method. Rates should be calculated more scientifically.
- Complex analysis may not be as accurate as gut feel
- The current USACE GRR- considering nearby inlets and limited offshore
- Include most recent data in erosion rates 1998 is a bit dated
- Tidal Prism data and hydrography needed at inlets
- Systematic data standard for gathering data needed

Strategies/Priorities

- Use dredge material nearshore if not beach quality (find beneficial uses when possible)
 - o wetland creation
 - o do not dispose offshore
- Prioritize where sand is needed
- Standardized defendable approach to prioritization is key (keep it simple)
- Frequency of nourishment is an environmental issue (turbidity, etc.)
 - o Big projects less often
 - Also, mobilization and cost potentially reduced with larger projects
- Sediment compatibility criterion is this limiting potential sand resources in sand starved areas?
- Holden Beach has received limited sand from inlets- any other options? Relying now on upland sources
- Don't ignore the inlets as a sediment source
- Maybe increasing depths and widths of channels should be considered
- Sediment budgets needed
- Funding sources room occupancy taxes statewide- county by county

Regions 2a and 2b Meeting – Held December 2, 2008 from 5-7:00 pm at New Hanover County Northeast Regional Library, Wilmington NC (34 attended)

The attendees were divided into six break-out sessions where discussion ranged from data sets to BIMP strategies, vulnerability indexes, and funding. The following list groups and summarizes the comments made:

General

- Regions as shown are OK
- BIMP needs to be holistic/comprehensive with human component, natural system, and ecosystem all included
- Statewide plan
- Promote better cooperation between stakeholders and regulators
- Sand as a resource maybe not just as an "asset"
- If BIMP goes beyond currently allowed state policy, where would it stop?
- How can you consider something not allowed?
- Differing opinions among break-out groups with some wanting to keep within scope of General Assembly mandate while others wanted to include all options in strategies; don't limit your project by current state policy (for example, terminal structures at inlets should be considered)
- Ease local project EA/EIS through development of "To-Do" guide for permitting

 i.e. flow charts, etc
- Have local shoreline protection officers
- Increase channel dimensions for inlet dredging
- Inlet management
- Inlets should be used as sources of sand for nourishment and not declared off limits by NMF (National Marine Fisheries)
- In cases where beach disposal is not the least cost alternative, state should make up the difference so that beach quality sand is not wasted
- Do not move environmental goal posts as far as permitting is concerned
- Biological impacts of various projects and what are the recovery rates are of beaches How long does it take?
- Frequency of nourishment projects should be looked at to allow biological community to recover from nourishment impacts
- Look at innovative ways to hasten the ability of the beach to recover from a nourishment event, such as seeding beaches with mole crabs, ghost crabs, small clams as you would fine in abundance on natural beaches
- Work on united message to General Assembly through a variety of groups, NCBIWA, Coastal Resources Advisory Council (CRAC), North Carolina Coastal Federation, NC Port Authority and others...What should the message be?
- Merge staff from DCM, DWR and others to implement the BIMP don't develop another group - afraid of the BIMP being just another bureaucracy nightmare to get projects through
- Need to understand what information that each regulatory agency needs ahead of time when planning these projects –too many surprises after the fact.

Data

- Data should include a biological database as well as geophysical database
 - Historic reports, PhD dissertations
 - Monitoring data
- Set up a panel to review the data (especially monitor data) to provide a summary or QA/QC
- Recommend on what monitoring data needs to be collected, instead of just a stock list
- Data that is being collected and assembled for the BIMP should be the "right type" for looking at any future alternative strategies
- Research prior to policy/regulations
- Science/Biological/Oceanographic Panel to report to CRC?
- Data gaps identified?
- How can public access EIS/EA data or permit data?
- Recognize importance of inlet systems (e.g. Caveats of inlet "mining")
- Don't just "get" data but also analyze/synthesize data
 - Let science drive decisions
- Sediment budgets/naturally what is happening, background is needed
- Monitoring before and after any projects

Vulnerability

- Vulnerability index:
 - "human factor" of a panel supplementing hard variables in formula (i.e. ERs, sand, etc.)
- Coastal Avoidance Hazard Fund
- Subjective data are tough for vulnerability decisions
- Scientific data and objectivity may be better variables for a vulnerability index
- Vulnerability index data should only be used to determine availability of state funding for beach fill.
- Vulnerability index could affect coastal land uses instead of just addressing funding

 Must be objective
- Vulnerability needs to be detailed and up to date
 - o 2004?
 - Otherwise do more harm
- Inlet Hazard Areas
 - Stabilize inlets
 - Insurance will go up
 - Property values will go down
- Vulnerability should take into account historic nourishment

Funding

- Money to build a project should not be the driving force
- Look at room occupancy tax and the laws and regulations around that, since it can vary from County to County and between Municipalities –it would be competing with the Regional Concept of sharing funds and resources

- Should be various dedicated pot of money for the BIMP and their associated projects money from potential oil and gas revenues, money raised through Local Governments with regional concept, annual money from the State Legislature through Division of Water Resources, allow for greater tax tools for Local Governments, reward Local Governments for doing the right thing when prioritizing projects.
- Instead of just beach fill money how about money for buybacks of property (Specifically in IHAs)
- Use the "Funding availability" as one way to prioritize projects, that is local government's ability to fund projects, because they have raised the money, should be one of the priorities that would qualify for State and other Federal Funding
- Incentive to build smaller, higher, farther back (tax breaks, cash payment, etc)
- If a community can get non-public money maybe project should still not be feasible due to environmental impact
- Should BIMP recommend funding sources from local taxation (occupancy tax, impact fees) where they don't currently exist?
- BIMP can show value of a particular management scheme to the local/county/state
- Folks in western NC need to remember that its their beach too
- If an area shouldn't be touched (e.g. sand mining) then show cost/benefit
- Show values of management away from beach upstream, out west
 - o Natural asset/capital
 - o Fiscal asset
 - Weigh together to compare and contrast
- Encourage state legislature to set up permanent funding source; future oil/gas exploration
- Will CBRA zone designations impact State funding of projects under the BIMP? (for example, stretches of beach along North Topsail)
- Beach nourishment should be the function of the US government supplemented by state and local
- What are identified sources of funding for beach nourishment?

Regions 2c and 3a Meeting – Held December 4, 2008 from 6-8:00 pm at East Carteret High School, Beaufort, NC (13 attended)

Discussion in the break-out sessions ranged from data sets to strategies and BIMP funding prioritization. The following list summarizes the comments made:

General

- Implementation plan what is the role of NCBIMP
- Plan -> Action
- Adhere to state law. No hard structures!
- What about terminal groins?

Data

- In planning and management understand limits of NHP (Natural Heritage Program) need to capture this
- Species data from Carteret County
- Expand to species of special concern, not just Federal and State protected
- SAV (2007) survey
- Analysis methods needed to utilize/apply data to understand system.
- Focus first on understanding system based on existing data and studies
- Symposium to collaborate or exchange knowledge
- USGS to report on Core Banks
- Clearly identify gaps that are important
- Data should be readily available to the public
- Keep links active
- NC One Map clearinghouse for spatial data
- Overlooked? Renourishment definition may be different among users

 How far back does data go?
- ICW first time dredged? Sand should be used for renourishment.
- More robust monitoring, e.g. shoreline is 1998

Strategy Issues

- Beneficial use of material
- For non-beach grade sediment- other beneficial uses? Build up other eroding areas? (estuarine)
- Can it be used to build up new areas of upland to build houses?
- Sea walls like at Pine Knoll Shores if it falls, can it be rebuilt?
 - What about buried wooden sea walls like at Atlantic Beach?
 - Virginia Beach (ca. 1970's) large X structures set as breakwaters for off shore appeared to work?
 - What about going offshore and finding sand to pump back onshore?
- Sea level rise needs to be important consideration policies to day that will have significant implications in the future (setbacks could take into account)
- Inlet management needs to address catastrophic changes (breaching, closure) –Inlet Hazard Areas
- Inlet maintenance is it better to go deeper?

Vulnerability

- How would other people use this data? (for example insurance companies and overwash vulnerability/erosion data)
 - Data already public. Information is already available.
- Rather than "vulnerability" call it an Assessment Index and needs to be updated

Prioritization and Funding

- Prioritization- something that has additional value in addition to beach renourishment.
 - Multiple benefits
 - More groups in favor, more \$\$
 - Figure out how many people you can attract to the beach
 - Look at economic impact of maximum congestion
 - Economic stimulation up to 50 miles from beach attracts business
- Funding?
- Economic analysis needs to be detailed to capture to use value example wading bird population.

Regions 3b and 4 Meeting – Held December 9, 2008 from 6-8:00 pm at NC Aquarium, Manteo NC (41 attended)

Discussion in the six break-out sessions ranged from procedures of keeping public/communities informed to funding. The following list summarizes the comments made:

General

- Consider frequency of updating BIMP plan
- Too many state agencies involved
- Are we adequately addressing sea level rise?
- Clarify how plan will be used in policy development
- Important to capture value of commercial fisheries
- No oversight of beach pushing
- Publicly owned seashores should be allowed to function naturally no nourishment
- Beach policies should benefit all homeowners equally
- Socio-economics should weight smart growth of Dare county
- Weigh considerations of desire of citizens versus political drivers
- Remember Currituck Sound Restoration Project "New Inlets"
- Needs to be clarification of who owns what part of the beach
- Does BIMP address sound-side beaches?
- BIMP should not be narrowly defined to how we do beach nourishment
- Opposed to hard structures
- What happens to a property when someone chooses to retreat or does not rebuild?

Data

- Would like to see data on number and location of condemned or threatened homes
- Need data on storm effects: North-Easters do more damage than hurricanes because it is sustained
- Does Duck (COE) have information on Currituck and Dare counties due to recent Virginia Beach projects?
- Bodie Island's nourishment (Dean & Dolan)
- Look at data from other areas on effectiveness of strategies
- Ensure that key environmental areas are indentified
- Data Sets:
 - o RENCI Database
 - UNC-CSI wave data AWACS?ADCP
 - Wind Data water flow
 - UNCW-ADCP's Lyn Lanard
 - UNC-IMS (Institute of Marine Science) –NCCOOS (NC Coastal Ocean Observing System –SECOORA (Southeast Coastal Observing Regional Association)
 - USGS Woods Hole; profile data- Currituck to Oregon Inlet
 - NEST sea turtle group
 - o Mike Marshall, Greg Allen- NCDMF Shellfish

- NCDOT data
- Monitoring of the beach needs to be done before and after changes are made.
 - Money available?
 - State's erosion data when available? Are funds available for update?
 - o Include monitoring of existing/previously removed structures, e.g. sandbags

Strategies

- Socioeconomic evaluation needs to be moved up in priority, not just sand management. What is next after the priorities are completed?
- Site specific design should be used- match strategy to actual field conditions.
- Consider nearshore attenuation; avoid strategies that will relocate the problem.
- Reconsider hard structures, placement of material nearshore
- Publicly owned seashores should be allowed to function naturally no nourishment
- Preference of how beaches should be treated:
 - Sand bypassing at Oregon inlet is fine sand is a problem on Pea Island's beaches
 - Is retreat really an option?
 - Are buy-outs feasible?
- Think about non-traditional alternatives:
 - Use recycled glass for beach nourishment
- Why not let State utilize USACE permits and possibly buy State dredge plants
- Clarify goals of strategies
 - Balance development with ecology (those are competing)
 - Can we balance ecology and development and can they be sustained?
- Correlate dredging and nourishment to storm events
- Consider links between physical processes and socioeconomic result
- Clarify factors used in prioritization. For example, not all communities currently have public access
- How do policies and land ownership affect project strategies? For example, beaches in Kitty Hawk vs. beaches at National Seashore and villages
- Understand effects of structures on biological community and moving sand through nourishment. What effects removal has on offshore sites (borrow sites), benthic and biological community, how does it effect erosion (wave formation)
- Encourage natural functions of all beach and inlet ecosystems and their associated habitats.
 - Encourage education associated with this idea
 - By getting this "right" we can be sustainable
- Should state provide help to let people buy out properties before they fall into the ocean?

Funding

- Funding concerns Is money available?
- Prioritization don't spend lots of money on extreme areas because under current policy, long term sustainability may be an issue
- Compare the cost of retreat and relocation to the cost of beach nourishment e.g. Rodanthe

- Represent more than local people because of federal money, and that is money from all over the US
- Perceived benefits of beach nourishment for funding oceanfront only benefit.
- Public vs. Private funding

Procedures

- Make data available to the public to allow for public involvement on strategy development and funding priorities, etc., including education
- Will maps be available online?
- Not enough time to take in all data- details? (will be on website)
- How can the public give input between meetings?
- How do we better reach out to non-resident property owners?

All Regions – Held December 11, 2008 from 6-8:00 pm at NCSU McKimmon Center, Raleigh NC (12 attended)

Discussion in the break-out sessions ranged from data sources to BIMP strategies and ecological issues. The following list summarizes the comments made:

General

- Modeling of island/inlet behavior should be performed
- Stay out of moratorium (do not allow coastal structures)
- Include other strategies currently outside state policy in study For example, terminal structures.
- Do not exclude strategies upfront state policy changes with time.

Data

- Sources:
 - o USACE
 - o DOT photos
 - o LIDAR
- Shoreline Erosion Data
- Potential offshore/nearshore resources, and hardbottom
- Identify gaps and recommend studies to gain necessities to understanding natural system.

Strategies

- Sand pushing/bulldozing/scraping what's allowable?
 - o Given frequency of events
 - Coordinate with other activities
 - o Newly created inlets- policy for response
- Frequency of nourishment- minimum 4 year (ecological considerations)
- Economic alternative should take a hard look at "do nothing" approach (For example, Bogue Inlet)
- Restore natural sediment pathways
- Land acquisition

- o Doesn't mess with existing physical/environmental processes
- o Maintenance lower
- No 'downdrift' problems
- Look at developed/undeveloped areas moving inland
 - Impervious area impacts, consideration into strategies
- If structures were considered, need to really assess whether they are needed and where
- Kelp forests? (look at possibility of using kelp forests to dissipate wave energy)
- Manage inlets such that the inlets do not destabilize (what is an acceptable level of mining?)
- Property buy-outs (structure and/or land)
 - Convert to parklands

Ecological

- Impacts of overwash loss of next habitat
- NOAA/NMFS/DMF Larval Fish Mitigation and dredge window
- Design for turtle nesting (template/slope)
- Detailed coastal processes and estuarine ecology necessary to understand and document as part of BIMP
- NEPA/SEPA not addressing complex system

Funding

- Continuous tax/funding source (occupancy tax) or property tax add-on targeted to the BIMP
- Public beach access should be tied to funding/prioritization formula



North Carolina Department of Environment and Natural Resources

Division of Coastal Management

Beverly Eaves Purdue, Governor

James H. Gregson, Director

Dee Freeman, Secretary

January 26, 2009

MEMORANDUM

CRC 09-08

TO: Coastal Resources Commission

FROM: Mike Lopazanski

SUBJECT: Review and Progress on CRC Priorities

The Commission held a strategic planning session at its January 2008 meeting (meeting notes attached) in order provide an opportunity for the Commission, Advisory Council and Division to discuss current and pending coastal issues. This objective of the planning session was to prioritize current workload and which emerging issues should take precedence on the Commission's agendas. Staff provided a list of issues to be considered, which included:

Current Issues The BIMP Inlet Hazard Areas Ocean Policy Docks & Piers Marsh Alteration Setbacks Sand Bags Static Line Stormwater Emerging Issues Working Waterfronts LUP Guideline Review Shoreline Stabilization Public Access Sea Level Rise Wind Energy

After assessing the status of current initiatives being addressed by the Division, the Commission prioritized seven issues. The following is update on progress make over the past year in addressing those issues (listed in priority order).

1. Estuarine Shoreline Stabilization

The CRC began its recent initiative almost three years ago with the formation of Shoreline Stabilization Subcommittee and the Estuarine Biological and Physical Processes Work Group. Working with the CHPP recommendation to encourage alternatives to vertical stabilization measures, the Commission has taken a number of actions, most notably focusing on the location of bulkheads at normal high or normal water level and increasing the fee for bulkhead permits to \$400. Other rule changes have included increasing the maximum distance riprap can be placed waterward of coastal wetlands; increasing the slope of the structure to

400 Commerce Avenue, Morehead City, North Carolina 28557 Phone: 252-808-2808 \ FAX: 252-247-3330 \ Internet: www.nccoastalmanagement.net facilitate marsh toe protection; and clarification on how the distances and lengths of groins are measured.

Shoreline stabilization has also been a focus of discussion by CHPP Steering Committee, which is comprised of two commissioners each from the CRC, MFC and EMC. It is likely that additional recommendations will follow as they continue to study the issue. The Division is moving forward with a property owner education effort that will utilize the recommendations of the Estuarine Biological and Physical Processes Work Group to encourage the use of appropriate shoreline stabilization techniques as determined by shoreline type.

While a General Permit exists for marsh sill construction, its usefulness is still at issue due to concerns and objections by other permit review agencies. The CRC has recently directed DCM staff to once again attempt to resolve these issues with DMF, DWQ and the USACE. A workshop is being planned for March 31-April 1, 2009 in an effort to have State and Federal regulatory staff to discuss their concerns with Living Shorelines project designs. Moreover, DCM will compile a list of marsh sill permits issued since 2000 and perform an assessment as to the efficacy and impacts of these projects. Staff will also be reviewing these permits to note what the review agencies' specific concerns.

2. Public Access

The Commission has recently completed changes to the Public Beach and Coastal Waterfront Access Program that will allow the Division greater flexibility in types of projects funded as well as the ability to act on unique opportunities.

Following the concerns of the Waterfront Access Study Committee, the CRC has taken action to help maintain ocean pier fishing opportunities for the public. Prompted by the State's purchase of Jennette's Pier in Nags Head and the development plans by the NC Aquarium for the pier site, the Commission has approved for public hearing proposed changes that would allow new and existing pier houses to be located or replaced oceanward of the setback line if absolutely necessary, but landward of mean high water. The proposed changes also allow pier houses to be a maximum of two stories high; limit a new pier house's footprint to 5,000 square feet; and limit commercial, non-water dependent uses to restaurants and retail services.

The Waterfront Access Study Committee also recommended that the CRC include a management topic in the 7B Land Use Plan Guidelines requiring local governments to develop polices regarding working waterfronts. This activity is likely to occur during the review of Planning Guidelines anticipated for 2010.

There has also been an interest in increasing public access opportunities by incorporating provisions for access in development permits – particularly at marinas. The CRC directed the Advisory Council to develop recommendations and staff has made several presentations on the issue. However, staff still

needs to discuss the possibilities internally before bringing recommendations to the Council.

3. Sea Level Rise

The Commission has had several discussions and presentations regarding sea level rise, its implications for the North Carolina coast, and what role the Commission can play in the state's response. These discussions have focused on sea level rise response measures such as CAMA land use planning policy requirements, development setbacks, and estuarine shoreline management. While there have no specific actions on the part of the Commission, several other initiatives and policy changes can be seen as addressing sea level rise. The changes to the shoreline stabilization rules and the location of bulkheads have included discussion of coastal wetlands response to rising water levels. The proposed amendments to the oceanfront setback requirements can and have been viewed by others as a measured response to rising sea level. The Commission has indicated a desire to further incorporate sea level rise as an issue in the 7B Land Use Planning Guidelines. This will occur during the review of the Planning Guidelines anticipated during 2010.

As other issues have impinged on the Commission ability to devote itself to further discussion, the CRAC has taken on sea level rise as an agenda item with the intent of making recommendations to the CRC for actions. To date the Advisory Council has heard presentations on NC specific implications of sea level rise in preparation for development of recommendations.

4. Energy Production

Recent activity at the federal level, particularly with regard to alternative energy sources, has spurred the Commission to devote time the discussion of wind energy and to what extent the State's coastal program is involved. During the September 2008 CRC meeting, the Commission's agenda focused on background information regarding wind energy development and issues of concern in coastal NC. While recognizing that the issue of "water dependency" was in the Commission's purview, a decision was made to await the recommendations of the Environmental Management Commission, as it has been charged with analyzing the permitting framework for such facilities for the General Assembly. It is expect that the EMC will make its recommendations to the Legislature by April.

Alternative Energy production is also being addressed by the DCM-coordinated Ocean Policy Study Committee. Draft recommendations are going to be taken for public comment during February and March with the final report to be presented to the Commission at the April meeting.

Updates on activities by the Minerals Management Service regarding oil and gas development and leasing activities off the NC coast have been provided to the Commission. While no lease sales have yet been proposed, it should be

noted that the Legislature has appointed a study commission and that two CRC members and a DCM staff member are include. The Commission will undoubted be kept apprised of the study commission's work as it progresses.

5. Public Education about CRC & DCM

The Division has taken a number of steps to enhance its public education and outreach efforts, most notably drafting a Division education plan. The Plan is intended to increase public awareness of DCM's and the Commission's mission and to enhance the public knowledge of the ecological impacts of development on the coastal environment. Highlights of the plan were presented to the Commission at the May 2008 meeting. The Division's Coastal Reserve Program also sponsored several workshops on Coastal Community Planning & Development, Coastal Inundation Mapping, Habitat Priority Planning, Grant Writing for Environmental Improvements and Septic Systems Workshop For Realtors. Further implementation of the Education Plan was hinged on the establishment of the Compliance Education Coordinator position in the fall of 2008. However, due to the state's budget shortfall, the position can not be created at this time and further implementation of the Education Plan will need to be re-evaluated.

6. Review of 7B Land Use Planning Guidelines

The current Land Use Planning Guidelines were adopted by the Commission in 2002. CAMA mandates that the guidelines be reviewed every five years to determine if changes are necessary. As the current Planning Guidelines represented a complete overhaul of the planning process, the Division's intention is to allow all local governments to complete plans under the new guidelines prior to initiating the formal five year view. In this way, the Commission can draw on the experience of all the local governments and other agencies in making an assessment of how the process can be improved. A total of 33 land use plans have been certified by the Commission with an additional 27 pending. Most of the pending plans have completed the Draft LUP review process. About 9 communities have yet to submit or complete the Draft LUP review process. It is expected that the remaining plans will be certified by the end of the year and that the review of the 7B Land Use Planning Guidelines would begin early 2010.

7. Estuarine Management

As many of the recent issues confronting the Commission have involved changes to the estuarine shoreline (shoreline stabilization, docks & piers, SAV etc.), there was interest in addressing shoreline management at more comprehensive level. To facilitate a holistic approach, the Division has moved forward with its initiative to delineate the estuarine shoreline along with associated shoreline types and shoreline structures. DCM is currently testing a digitizing methodology in Hyde and Beaufort Counties as part of pilot project with ECU. The two trial counties are expected to complete by July at which point the Division will begin mapping the whole coast. The Division anticipates the completion of this mapping effort by June 2011.

CRC/CRAC Strategic Planning Meeting January 17-18, 2008

Meeting Notes

Issue Selection Criteria

- 1. Items impacting many people intensely in the environment (goes with CRC's mandate)
- 2. Feasibility—can we impact it?
- 3. Resources—money, staff, etc
- 4. Consistent with the CHPP

Wish List

- 1. Retain required activities -quasi-judicial
- 2. Meet timeframes, including input from appropriate parties
- 3. Concentrated time on complex topics
- 4. Enough/right information (in a focused and digestible format) to inform decisions
- 5. Distribute work (especially pre-work) to other parties to get input, e.g. CRAC, DCM, and external partners

CRC

- 6 meetings per year, 12 hrs per meeting plus travel & prep
- Day 1: Updates; info/education; variances/contested cases; committees; public hearings
- Day 2: CRAC/Committee reports; old/new business

P&SI

- Land Use Plans—available to all members prior to the meeting
- Public access

I&S

• Development of regulations as assigned by CRC chair (ad hoc)

Committee Structure

- Approx. 30 CRC & CRAC, with usually about ¹/₂ present/voting
- All votes count equally
- Members have no say about which committee they are appointed to

CRAC

- Full members of standing committees, with voice and vote
- Initiators
- Local government perspective (representative), with input and public informational/educational role
- Technical expertise

DCM

- Staff to CRC
- Drafting rules
 - Committees
 - Commission

- Set up presenters
- Implementers and enforcers
- APA process (CRC, CRAC, DCM)
- Initiators (CRC, CRAC, DCM)

What's Not Working

1.Lack of clarity as to why a given issue is being addressed by DCM

2.Volume of info to digest pre-meeting—need to concentrate info into an executive summary (DCM?)

- 3.8 hrs (Thursday) plus 4 hrs (Friday) creates fatigue. Reorganize agenda to do variances on Friday?
- 4.Two-committee structure. Simultaneous meetings. Reports not adequate for decision making.

Suggestion: meet as committee of the whole (CRC & CRAC).

- 5.Location of public input and public hearings on the agenda—almost an afterthought.
 - no time limits on comments. Require signups and divide time among speakers.
 - would like to have pre-comment briefings/updates from DCM: history, purpose, status

6.work plan-timeline for each item (esp. rules), put in calendar format

7.Presentation format for DCM & CRAC items:

- summary in simple, clear format—why this? Why now?
- alternatives offered
- come to podium in meetings to clarify
- 8. Variance procedures-need to form subcommittee
- 9.Contested case process

What Is Working

- 1. CRC members disagree without animosity
- 2. Good, meaningful involvement of all CRC
- 3. DCM staff provides CRC with good info, makes comments to members
- 4. New land use planning process, especially community involvement aspect
- 5. Public and environmental impact in forefront for DCM & CRC
- 6. Opportunities for public involvement throughout process—openness
- 7. CRC members avoid conflicts of interest
- 8. Leadership of CRC, and membership (good number and expertise)

Changes to Process

- 1. Have public hearings earlier than 5 pm; DCM staff give a brief overview of the topic/status; sign-ups and time-limited public input
- 2. Use criteria and vote on new items to be delegated to DCM—with DCM input
- 3. Variances. If DCM staff and petitioners agree, don't have presentations unless CRC members request.
- 4. Explore options for meeting four times per year (1¹/₂ days each), starting in 2009, with the option for two additional one-day meetings to examine substantive issues in depth.
- 5. Convene a contested case and variance process review subcommittee
- 6. Use CRAC as an initial filter for CRC issues (including possibility of new rules and rule changes) and land use plan reviews. CRAC to provide recommendations to CRC. CRC will make final decisions.
- 7. Eliminate standing committees
- 8. DCM staff prepare an executive summary of meeting materials

Possible Focus Issues (with first round votes)

- 1. Climate change & sea level rise (15)
- 2. Public access (11)
- 3. Shoreline stabilization (9)
- 4. 7B land use planning guidelines review (6)
- 5. Estuarine management (6)
- 6. Public education about CRC & DCM (5)
- 7. Energy: wind farms, offshore drilling, etc (4)
- 8. Compliance & enforcement (3)
- 9. Marsh islands (2)
- 10. Stormwater (2)
- 11. Hardened structures (1)
- 12. Partnerships with local governments (1)
- 13. CRC's education (1)
- 14. Desalinization/reverse osmosis (0)
- 15. Urban waterfronts (0)
- 16. Growth management (0)
- 17. Working waterfronts (0)

Focus Issues (with second round votes)

- 1. Shoreline stabilization (18)
- 2. Public access (13)
- 3. Climate change & sea level rise (10)
- 4. Energy production (8)
- 5. Public education about CRC & DCM (7)
- 6. 7B land use planning guidelines review (5) **mandated**
- 7. Estuarine management (4)



North Carolina Department of Environment and Natural Resources

Division of Coastal Management

Beverly Eaves Perdue, Governor

James H. Gregson, Director

Dee Freeman, Secretary

January 27, 2009

MEMORANDUM

TO:CRC & Interested PartiesFROM:Tancred MillerSUBJECT:Rulemaking Update

Along with this memo is a spreadsheet that contains all of the Commission's rules that are currently in the rulemaking process—from those being proposed for initial action to those reviewed by the Rules Review Commission since the last CRC meeting. Listed below is a description and recent history of the CRC's action on each rule. Complete drafts of rules scheduled for public hearing at this meeting will be available on the DCM website.

RULE DESCRIPTIONS

1. 15A NCAC 7H.0205 Coastal Wetlands (Marsh Alteration)

Status: Approved for second public hearing. The purpose of the proposed amendments to this rule is to begin regulating certain types of marsh alteration, primarily mowing and burning. CRC approved draft rule language in March. The rule has been through public hearing and DCM staff subsequently met with stakeholders for further discussion of their comments. The Commission made additional changes in November and sent the rule for another public hearing.

2. <u>15A NCAC 7H.0208 Estuarine System Use Standards (Docks & Piers provisions)</u> **Status:** Approved for public hearing.

The CRC approved this rule for public hearing in July 2007, conditional on review and approval of the MFC's new definition of SAV habitat and satisfactory permitting coordination with DCM. DMF and DCM reported on the SAV habitat definition in May and on the interagency coordination agreement that has been developed. The CRC approved the docks and piers provisions in July 2008, to be sent to public hearing.

3. <u>15A NCAC 7H.0306 General Use Standards for Ocean Hazard Areas (Setbacks)</u> Status: Pending review by the NC General Assembly. The amendments to 7H.0306 tie oceanfront setbacks to the size of the structure, not the use. The revisions include graduated setback factors for buildings greater than 5,000 square feet, and do not allow for oceanward cantilevering. The CRC adopted the changes which were then approved by the RRC in November '09. The rule is awaiting legislative review because 10+ letters of objection were submitted to the RRC.

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- 4. <u>15A NCAC 7H.0308 Specific Use Standards for Ocean Hazard Areas</u> Status: Scheduled for public hearing in February 2009. Changes lengthen the duration and number of times that sandbags can be used in inlet hazard areas when a community is pursuing inlet relocation, and allow sandbags to be placed more than 20 feet from the structure being protected if the Director finds that it is justified. The rule is scheduled for public hearing at the February 2009 meeting.
- <u>15A NCAC 7H.0309 Use Standards for Ocean Hazard Areas: Exceptions</u> Status: Going to public hearing. The CRC approved draft changes in March to make the development limitations in this rule conform with pending changes to 7H.0306, and approved additional changes to the pier house section in May 2008 to allow construction and expansion of pier houses oceanward of the setback. Public hearing will be at the April 2009 meeting.
- <u>15A NCAC 7H.0310 Use Standards for Inlet Hazard Areas</u> Status: Scheduled for discussion in February 2009. The CRC has seen the new inlet hazard area delineations prepared by its Science Panel on Coastal Hazards and had further discussion in July and November 2008. Staff will present additional policy recommendations to the CRC at the February meeting.
- 7. <u>15A NCAC 7H.1100 GP for Construction of Bulkheads & Placement of Riprap</u> **Status:** Public hearing in February 2009.

The Commission approved this rule in May for public hearing. Proposed changes to this rule result from the CHPP recommendation that the CRC encourage alternatives to vertical stabilization structures on estuarine shorelines. See Bonnie Bendell's March memo CRC-08-08 for a complete discussion of the proposed changes.

 <u>15A NCAC 7H.1200 GP for Construction of Piers, Docks & Boat Houses</u> Status: Public hearing in February 2009.
 The CPC approved this rule for public hearing in July 2007, conditional on

The CRC approved this rule for public hearing in July 2007, conditional on review and approval of the MFC's new definition of SAV habitat and permitting coordination with DCM. Staff presented an update in July 2008 on the interagency coordination protocols and review draft rule changes and the CRC approved the rule for public hearing.

9. <u>15A NCAC 7H.1400 GP for Construction of Groins in Estuarine & Public Trust Waters</u> **Status:** Effective 2/1/09.

Changes to this rule result from the CHPP recommendation to encourage alternatives to vertical stabilization on estuarine shorelines. Proposed changes include allowing materials other than wood, prescribing a maximum spacing and frequency, and clarifying how structures are measured. The rule was approved by the RRC in January 2009 and becomes effective on 2/1/09.

10. 15A NCAC 7H.2100 GP for Marsh Enhancement Breakwaters

Status: Effective 2/1/09.

Changes to this rule result from the CHPP recommendation that the CRC encourage alternatives to vertical stabilization structures on estuarine shorelines. Changes are definitional and to ensure consistency with other shore stabilization rules. The rule was approved by the RRC in January 2009 and becomes effective on 2/1/09.

11. <u>15A NCAC 7H.2400 GP for Placement of Riprap for Wetland Protection</u> **Status:** Effective 2/1/09.

Proposed changes to this rule result from the CHPP recommendation that the CRC encourage alternatives to vertical stabilization structures on estuarine shorelines. Proposed changes include a definitional clarification and changes to the dimensions and geometry of structures. The rule was approved by the RRC in January 2009 and becomes effective on 2/1/09.

12. 15A NCAC 7J.0701 Variance Petitions

Status: RRC Objection.

CRC adopted amendments to 7J.0701 that require claimants to initially file either a variance request or a contested case, and not pursue both options at the same time. Proposed rule changes have been through public hearing but were returned to the CRC because of an objection by the RRC. The rule was re-published and a public hearing held in September. No comments were received on the proposed amendments. The CRC adopted the changes but the RRC objected to some of the proposed changes. DOJ and DCM staff are working to address the RRC's objections.

13. 15A NCAC 7J.0702 Staff Review of Variance Petitions

Status: Completed legislative review, effective 07/03/2008.

CRC adopted amendments to 7J.0702 that outline procedures for staff review, including the timing and preparation of stipulated facts and staff recommendations. More than 10 individuals objected to the proposed rule after it had been approved by the RRC. Under the APA, the rule was subject to legislative review. The rule was not disapproved by the Legislature, and is now effective.

14. 15A NCAC 7J.0703 Procedures for Deciding Variance Petitions

Status: Effective 2/1/09.

CRC adopted amendments to 7J.0703 that outline procedures for situations in which the Commission cannot reach a final decision due to incomplete stipulated facts. Proposed rule changes have been through public hearing but were returned to the CRC because of an objection by the RRC. This rule was also objected to by more than 10 individuals, but is not subject to legislative review because it was not approved by the RRC. The rule was re-published and a public hearing held in September. The rule was approved by the RRC in January 2009 and becomes effective on 2/1/09.

15. 15A NCAC 7J.1200 Static Line Exception Procedures

Status: Pending approval by the NC Rules Review Commission.

Staff developed 7J.1200 to define the requirements of applying for, receiving, and maintaining a static line exception. The rule also describes the criteria for qualifying for an exception, and CRC procedures for granting and repealing an exception. Staff presented responses to public comments, and recommended final rule language, in September. The CRC adopted the changes which were then approved by the RRC in November '09. The rule is awaiting legislative review because 10+ letters of objection were submitted to the RRC.

 <u>15A NCAC 7M.0300 Shorefront Access Policies</u>
 Status: Effective 2/1/09. Amendments to 7M. 0300 would establish a reporting requirement for user fees collected at state-funded access sites; give DCM the ability to take the lead in acquiring land and constructing access facilities without a city or county applicant; and includes provisions to utilize funds outside the usual funding cycle in order to take advantage of unique opportunities. The rule was approved by the RRC in January 2009 and becomes effective on 2/1/09.

COASTAL RESOURCES COMMISSION RULEMAKING STATUS - SEPTEMBER 2008								
ltem #	Rule Citation	Rule Title	February '09 Status	CRC Action 3/2008	CRC Action 5/2008	CRC Action 7/2008	CRC Action 9/2008	CRC Action 11/2008
1	15A NCAC 7H.0205	Coastal Wetlands	Going to Public Hearing	Approved for Hearing			Public Hearing	Approved for 2nd Hearing
2	15A NCAC 7H.0208	Estuarine System Use Standards	Going to Public Hearing	Discussion of SAV definition	Discussion of SAV definition	Approved for Hearing		
3	15A NCAC 7H.0306	General Use Standards for Ocean Hazard Areas	At General Assembly	Approved for Hearings		Public Hearings	Adopted, sent to RRC	Approved by RRC. At GA.
4	15A NCAC 7H.0308	Specific Use Standards for Ocean Hazard Areas	Public Hearing			Approved for Hearing		
5	15A NCAC 7H.0309	Use Standards for Ocean Hazard Areas: Exceptions	Discussion of staff changes	Discussed changes	Approved for Hearing	Approved for Hearing		
6	15A NCAC 7H.0310	Use Standards for Inlet Hazard Areas	Scheduled for discussion		Discussion of progress	Discussion of draft language		Discussion o use standard
7	15A NCAC 7H.1100	GP, Constr. of Bulkheads & Placement of Riprap	Public Hearing		Approved for Hearing			
8	15A NCAC 7H.1200	GP for Construction of Piers, Docks & Boat Houses	Public Hearing	Discussion of SAV Definition	Discussion of SAV Definition	Approved for Hearing		
9	15A NCAC 7H.1400	GP for Construction of Groins in Estuarine & PT Waters	Effective		Approved for Hearing		Public Hearings	Adopted
10	15A NCAC 7H.2100	GP for Marsh Enhancement Breakwaters	Effective		Approved for Hearing		Public Hearings	Adopted
11	15A NCAC 7H.2400	GP for Placement of Riprap for Wetland Protection	Effective		Approved for Hearing		Public Hearings	Adopted
12	15A NCAC 7J.0701	Variance Petitions	RRC Objection		Approved for Hearing		Public Hearing	Adopted
13	15A NCAC 7J.0702	Staff Review of Variance Petitions		No legislative acti	on, effective July	3rd. No further ac	tion necessary.	
14	15A NCAC 7J.0703	Procedures for Deciding Variance Petitions	Effective		Approved for Hearing		Public Hearing	Adopted
15	15A NCAC 7J.1200	Static Line Exception Procedures	At General Assembly	Approved for Hearings		Public Hearings	Adopted, sent to RRC	Approved by RRC. At GA.
16	15A NCAC 7M.0300	Shorefront Access Policies	Effective				Public Hearings	Adopted