ROY COOPER Governor ELIZABETH S. BISER Secretary BRAXTON DAVIS Director



CRC-22-28

November 1, 2022

# **MEMORANDUM**

TO:Coastal Resources CommissionFROM:Mike LopazanskiSUBJECT:Fiscal Analysis- 15A NCAC 7K .0207 & 7H .0308 - Beach Mats

In 2021, the Commission amended the specific use standards for structural pedestrian accessways (dune crossovers) that allow for public access to the beach. These use standards previously limited accessways to elevated, piled-supported structures terminating on the beach near the seaward toe of the frontal dune. Due to numerous local governments expressing interest in using synthetic or wooden roll-out matting as a handicap-accessible alternative for beach access, the accessway rules were amended to allow the use of these types of mats for public beach access. However, the use these materials was limited to State, federal or local governments due to concerns expressed by the NC Wildlife Resources Commission (NC WRC) and the U.S. Fish & Wildlife Service (USFWS) about potential adverse impacts on sea turtle habitat resulting from their use waterward of the frontal dune.

At the September 2022 meeting, the CRC discussed and approved the use of beach matting for residential applications as an alternative to structural accessways. By limiting matting to the same general standards that apply to structural accessways (six feet wide and no farther waterward than six feet from the toe of the dune), public access and wildlife protection goals will be met while reducing debris on the state's beach during storm events. Residential application of matting material would adhere to the same standards previously approved including installation at grade and prohibiting extension onto the public trust beach.

The Commission has also approved a change to 07H.0308(c)(2)(C) to allow beach mats on the dry sand beach without the need for a variance, where projects are sponsored by a local government for the purpose of enhanced handicap accessibility and are subject to review by the NC WRC and USFWS. This amendment is consistent with several variances issued by the Commission.

# **COST/BENEFIT SUMMARY**

Government entities and private property owners will benefit from the proposed rule changes by potentially reducing costs associated with providing public & handicap access to the beach. The proposed rule language would give private property owners and government entities the option to use matting material installed at grade for beach accessways rather than requiring construction of



an elevated, pile-supported (typically wooden) accessway. Beach mats provide handicap access at a lower cost compared to wooden accessways. Cost savings are estimated at up to \$291 per linear foot over traditional piling supported accessways. The proposed rule language could also benefit government entities by allowing them to use beach matting further seaward than currently allowed to enhance handicap accessibility at public beach access points.

The fiscal analysis has been reviewed and approved by both the Department and OSBM. Staff recommends approval. I look forward to discussing the fiscal analysis at our upcoming meeting in Beaufort.

# **Fiscal Analysis**

Proposed Changes to Structural Accessways to Include the Use of Beach Mats 15A NCAC 07H .0308 15A NCAC 07K .0207

> Prepared by Mike Lopazanski

NC Division of Coastal Management 252-553-5431

October 18, 2022

| Summary                           |   |
|-----------------------------------|---|
| Agency                            | DEQ, Division of Coastal Management (DCM)<br>Coastal Resources Commission (CRC)   |
| Title of the Proposed Rules       | Specific Use Standards for Ocean Hazard Areas-<br>Structural Accessways - 15A NCAC 07H .0308(c)<br>Structural Accessways Over Frontal Dunes<br>Exempted 15A NCAC 07K .0207  |
| Description of the Proposed Rules | Rule 07H .0308(c) is amended to allow installation by<br>government entities of beach matting further seaward to enhance<br>handicap accessibility at public beach accesses. Rule 07K .0207<br>establishes a permit exemption for beach matting to include<br>private access.                                       |
| Agency Contact                    | Mike Lopazanski<br>Deputy Director<br>Mike.Lopazanski@ncdenr.gov<br>(252) 553-5431  |
| Authority                         | G.S. 113-229(cl); G.S. 113A-107; 113A-113; 113A-115; 113A-<br>118; 113A-124   |
| Necessity                         | The Coastal Resources Commission proposes to amend its<br>administrative rules in order to provide greater flexibility to<br>local governments, government agencies and private<br>property owners in constructing accessways and enhanced<br>handicap access to the beach by allowing the use of beach<br>matting. |
| Impact Summary                    | State government: No<br>Local government: Yes<br>Private citizens: Yes<br>Substantial impact: No  |
|                                   |   |

## Introduction and Purpose

Facilitating public access to our state's coastal shorelines while managing development to minimize impacts to the natural environment and our coastal resources are among the central tenets of the Coastal Area Management Act (CAMA) as well as an objective of the rules of NC Coastal Resources Commission.

The CAMA states, "In the implementation of the coastal area management plan, the public's opportunity to enjoy the physical, esthetic, cultural, and recreational qualities of the natural shorelines of the State shall be preserved to the greatest extent feasible; water resources shall be managed in order to preserve and enhance water quality and to provide optimum utilization of water resources; land resources shall be managed in order to guide growth and development and to minimize damage to the natural environment."

15A NCAC 07H .0303 states the management objective of the ocean hazard area is to "further the goals set out in G.S. 113A-102(b), with particular attention to minimizing losses to life and property resulting from storms and long-term erosion, preventing encroachment of permanent structures on public beach areas, preserving the natural ecological conditions of the barrier dune and beach systems, and reducing the public costs of inappropriately sited development. Furthermore, it is the objective of the Coastal Resources Commission to protect present common-law and statutory public rights of access to and use of the lands and waters of the coastal area."

Synthetic or wooden material roll-out matting has increasingly been developed and used as a costeffective and handicap-accessible alternative for beach access. Numerous local governments in North Carolina have expressed interest in using these types of mats for public beach access. However, current Commission rules do not allow these types of mats in all applications.

Additionally, the NC Wildlife Resources Commission (NCWRC) and U.S. Fish & Wildlife Service (USFWS) have expressed concerns about the use of these mats on the beach, particularly when installed waterward of the frontal dune, in that they may adversely impact sea turtles during nesting season (May 1-November 15). Interactions between beach matting and nesting sea turtles raise concerns about potential violations of the federal Endangered Species Act (ESA).

In 2021, the Coastal Resources Commission (CRC) amended the rules that established specific use standards for structural pedestrian accessways (dune crossovers) that allow for public access to the beach. These use standards previously limited these accessways to elevated, piled-supported structures terminating on the beach near the seaward toe of the frontal dune. Due to numerous local governments expressing interest in using synthetic or wooden roll-out matting as a handicap-accessible alternative for beach access, the accessway rules were amended to allow the use of these types of mats for public beach access. However, the use these materials was limited to State, federal or local governments due to concerns expressed by the NC Wildlife Resources Commission (NC WRC) and the U.S. Fish & Wildlife Service (USFWS) about potential adverse impacts on sea turtle habitat resulting from their use waterward of the frontal dune.

Since the amendments went into effect, Division Staff and the CRC have had further discussion regarding the use of beach matting for residential applications as an alternative to structural accessways. During storms, dune crossovers (including stairways) can account for a great deal of the debris that become scattered across beaches and in waterways. The CRC believes that by limiting matting to the same general standards that apply to structural accessways (six feet wide and no farther waterward than six feet from the toe of the dune), public access and wildlife protection goals will be met while reducing debris on the state's beach during storm events. Residential application of matting material would adhere to the same standards previously approved including installation at grade and prohibiting extension onto the public trust beach.

In addition, in recent years the Commission has approved three petitions for variances from local governments (Carolina Beach, Topsail Beach and Kure Beach) seeking to install beach mats on the dry sand beach (seaward of the frontal or primary dune and vegetation line) in support of enhanced handicap accessibility. The Division and Commission have supported the variance petitions, and in both cases, efforts were taken to minimize risks to sea turtles, including changes in siting, size, and orientation of the proposed structures. However, following the Commission's variance and issuance of

a CAMA Minor Permit to the towns for installation of beach mats, each town still assumes some liability for any "takes" of threatened or endangered species under the federal Endangered Species Act. For this reason, the Division has advised the towns to consult directly with the U.S. Fish and Wildlife Service to resolve this situation, potentially through the development of "Habitat Conservation Plans" or other formal approvals that can be issued by the USFWS for non-federal entities in accordance with the Endangered Species Act.

The Commission is now proposing a change to 07H.0308(c)(2)(C) to allow beach mats on the dry sand beach without the need for a variance from the Commission, where they are sponsored by a local government for the purpose of enhanced handicap accessibility and are subject to review by the NC WRC and USFWS. The proposed amendments to 07K .0207 would also add residential use of matting material to the exemption language for beach accessways.

DCM anticipates the effective date of these rule amendments to be April 1, 2023.

## **Description of the Current and Proposed Rules**

The CRC currently offers property owners the ability to install elevated structural accessways for pedestrians to cross over the frontal dune through a permit exemption if the structure is limited to 6' in width or less. Local governments and state and federal agencies can also install these elevated accessways subject to the same conditions. The majority of structural accessways are constructed under the exemption criteria. Alternatively, property owners may instead opt to leave the accessway to the beach natural with no improvements, which would not qualify as development, and therefore not require any approval from the Division of Coastal Management. DCM currently issues minor permits or exemptions for public accessways pursuant to use standards described in 15A NCAC 07H .0308(c) and 15A NCAC 07K .0207.

The CRC is proposing the following amendments:

- Allow for local governments, and state or federal agencies providing public access to use beach mats farther seaward to enhance handicap accessibility at a public beach access, subject to review by the Wildlife Resources Commission and the U.S. Fish and Wildlife Service to determine whether the proposed design or installation will have an adverse impact on sea turtles or other threatened or endangered species.
- Allow private property owners to use beach mats for accessways, rather than requiring the access to be elevated on pilings when installed at grade and no excavation or fill is required;
- Allow these mat accessways to be no wider than 6;
- Allow the permit exemption for structural beach accessways to also apply to the beach mats; and
- The overall requirements for access siting and all other use standards currently in place would still apply.

Figure 1. A typical wooden structural accessway.



Image source: DCM

Figure 2. A typical beach mat accessway.

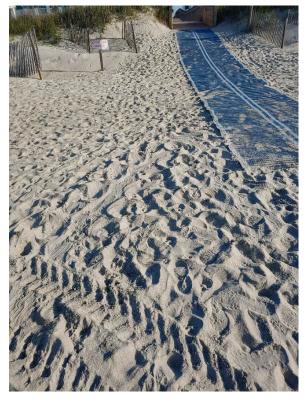


Image source- Ocean Isle Beach Sea Turtle Protection Organization.

### **Anticipated Impacts**

### Private Citizens and Natural Resources

Because the overall location and dimensions of structural accessways will remain unchanged and will just allow an expanded use for local governments and government agencies, the proposed amendments will not result in any additional construction costs for private property owners or negatively impact public access to the beach. The proposed amendments are expected to provide private property owners with an alternative to the traditional piling elevated access structures. The use of beach mats may also serve to enhance access, particularly handicap access in areas using non-structural natural accessway to the beach.

Compared to elevated accessways, beach mats may adversely impact sea turtles during nesting season when installed waterward of the frontal dune, a potential violation of the Endangered Species Act. To balance public access and wildlife protection goals, the Commission is proposing creating a specific permit exemption for the use of these mats in limited circumstances. Specifically, allowing only local, state, and federal governments to install mats more than six feet seaward of the frontal dune only after consultation with State and federal wildlife agencies regarding the size and location of these structures.

As the rule amendments simply provide an alternative to traditional piling supported structural accessways and are not a requirement, it is unknown how many governmental entities or private property owners may utilize this alternative. Based on inquiries by property owners over the past two years, the Division anticipates approximately 75 beach mat requests per year should they gain popularity. These would be a combination of new and replacement accessways; however, any attempt to quantify new versus replacement would be speculative as it is dependent on the frequency and severity of storms as well as the intent of property owners.

These private property owners may see a reduced cost (\$42 per linear foot vs \$333 per linear foot) by using beach matting rather than the traditional piling supported accessways. There is no permit fee associated with the exemption.

## Department of Transportation

Pursuant to G.S. 150B-21.4, the agency reports that the proposed amendments to 7H.0308(c) and 7K .0207 will not significantly affect environmental permitting for the NC Department of Transportation (NCDOT). No cost or benefit applicable to NCDOT is anticipated as a result of these rule amendments as NC DOT does not typically construct such facilities.

## Local, State and Federal Government

Local, State (NC Division of Parks and Recreation) and Federal (National Park Service) governments are expected to benefit from the increased flexibility in allowing the use of beach mats for the construction of pedestrian beach accessways, particularly when installing handicap-accessible accessways. While the proposed amendments are not expected to affect government entity revenues or expenditures significantly, the ability to provide public access at a reduced cost (\$42 per linear foot vs \$333 per linear foot) and should also reduce maintenance costs of these accessways in addition to potentially allowing them to install more handicap-accessible accessways. However, any attempt to quantify the benefit beyond construction/installation costs would be speculative since the action would be dependent upon the frequency of damaging storm events (for replacement of existing access) and the intentions of these government entities.

## Division of Coastal Management

DCM does not anticipate that the proposed action will significantly change operating cost over

what is currently required for permitting, inspecting, and ensuring compliance of structural accessways as request for beach mats would replace requests for traditional accessways. The DCM does not anticipate any significant changes in permitting receipts due to the proposed action as there is no permit fee associated with the exemption.

## **COST/BENEFIT SUMMARY**

Government entities and private property owners will benefit from the proposed rule changes by potentially reducing costs associated with providing public & handicap access to the beach. The proposed rule language would give private property owners and government entities the option to use matting material installed at grade for beach accessways rather than requiring construction of an elevated, pile-supported (typically wooden) accessway. Beach mats provide handicap access at a lower cost compared to wooden accessways. Cost savings are estimated at up to \$291 per linear foot over traditional piling supported accessways. The proposed rule language could also benefit government entities by allowing them to use beach matting further seaward than currently allowed to enhance handicap accessibility at public beach access points.

Compared to elevated accessways, beach mats may adversely impact sea turtles during nesting season and violate the Endangered Species Act. For government entities, the proposed amendments seek to avoid and minimize these potential adverse impacts by requiring review by State and federal wildlife agencies prior to installation of beach mats. For beach mats installed for private access, adverse impacts to sea turtles are possible, but less likely, since mats will be required to terminate no more than six feet seaward of the waterward toe of the frontal or primary dune where sea turtle nesting is uncommon.

#### 15A NCAC 07H .0308 SPECIFIC USE STANDARDS FOR OCEAN HAZARD AREAS

(a) Ocean Shoreline Erosion Control Activities:

- (1) Use Standards Applicable to all Erosion Control Activities:
  - (A) All oceanfront erosion response activities shall be consistent with the general policy statements in 15A NCAC 07M .0200.
  - (B) Permanent erosion control structures may cause significant adverse impacts on the value and enjoyment of adjacent properties or public access to and use of the ocean beach, and, therefore, unless specifically authorized under the Coastal Area Management Act, are prohibited. Such structures include bulkheads, seawalls, revetments, jetties, groins and breakwaters.
  - (C) Rules concerning the use of oceanfront erosion response measures apply to all oceanfront properties without regard to the size of the structure on the property or the date of its construction.
  - (D) Shoreline erosion response projects shall not be constructed in beach or estuarine areas that sustain substantial habitat for fish and wildlife species, as identified by State or federal natural resource agencies during project review, unless mitigation measures are incorporated into project design, as set forth in Rule .0306(h) of this Section.
  - (E) Project construction shall be timed to minimize adverse effects on biological activity.
  - (F) Prior to completing any erosion response project, all exposed remnants of or debris from failed erosion control structures must be removed by the permittee.
  - (G) Permanent erosion control structures that would otherwise be prohibited by these standards may be permitted on finding by the Division that:
    - (i) the erosion control structure is necessary to protect a bridge that provides the only existing road access on a barrier island, that is vital to public safety, and is imminently threatened by erosion as defined in Part (a)(2)(B) of this Rule;
    - (ii) the erosion response measures of relocation, beach nourishment or temporary stabilization are not adequate to protect public health and safety; and
    - (iii) the proposed erosion control structure will have no adverse impacts on adjacent properties in private ownership or on public use of the beach.
  - (H) Structures that would otherwise be prohibited by these standards may also be permitted on finding by the Division that:
    - (i) the structure is necessary to protect a state or federally registered historic site that is imminently threatened by shoreline erosion as defined in Part (a)(2)(B) of this Rule;
    - (ii) the erosion response measures of relocation, beach nourishment or temporary stabilization are not adequate and practicable to protect the site;
    - (iii) the structure is limited in extent and scope to that necessary to protect the site; and
    - (iv) a permit for a structure under this Part may be issued only to a sponsoring public agency for projects where the public benefits outweigh the significant adverse impacts. Additionally, the permit shall include conditions providing for mitigation or minimization by that agency of significant adverse impacts on adjoining properties and on public access to and use of the beach.
  - (I) Structures that would otherwise be prohibited by these standards may also be permitted on finding by the Division that:
    - (i) the structure is necessary to maintain an existing commercial navigation channel of regional significance within federally authorized limits;
    - (ii) dredging alone is not practicable to maintain safe access to the affected channel;
    - (iii) the structure is limited in extent and scope to that necessary to maintain the channel;
    - (iv) the structure shall not have significant adverse impacts on fisheries or other public trust resources; and
    - (v) a permit for a structure under this Part may be issued only to a sponsoring public agency for projects where the public benefits outweigh the significant adverse impacts. Additionally, the permit shall include conditions providing for mitigation or minimization by that agency of any significant adverse impacts on adjoining properties and on public access to and use of the beach.
  - (J) The Commission may renew a permit for an erosion control structure issued pursuant to a variance granted by the Commission prior to 1 July 1995. The Commission may authorize the replacement

of a permanent erosion control structure that was permitted by the Commission pursuant to a variance granted by the Commission prior to 1 July 1995 if the Commission finds that:

- (i) the structure will not be enlarged beyond the dimensions set out in the permit;
- (ii) there is no practical alternative to replacing the structure that will provide the same or similar benefits; and
- (iii) the replacement structure will comply with all applicable laws and with all rules, other than the rule or rules with respect to which the Commission granted the variance, that are in effect at the time the structure is replaced.
- (K) Proposed erosion response measures using innovative technology or design shall be considered as experimental and shall be evaluated on a case-by-case basis to determine consistency with 15A NCAC 07M .0200 and general and specific use standards within this Section.
- (2) Temporary Erosion Control Structures:
  - (A) Permittable temporary erosion control structures shall be limited to sandbags placed landward of mean high water and parallel to the shore.
  - (B) Temporary erosion control structures as defined in Part (A) of this Subparagraph may be used to protect only imminently threatened roads and associated right of ways and buildings and their associated septic systems. A structure is considered 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 no obvious erosion scarp may also be found to be imminently threatened when site conditions, such as a flat beach profile or accelerated erosion, increase the risk of imminent damage to the structure.
  - (C) Temporary erosion control structures shall be used to protect only the principal structure and its associated septic system, but not appurtenances such as pools, gazebos, decks or any amenity that is allowed under Rule .0309 of this Section as an exception to the erosion setback requirement.
  - (D) Temporary erosion control structures may be placed waterward 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.
  - (E) Temporary erosion control structures shall not extend more than 20 feet past the sides of the structure to be protected except to align with temporary erosion control structures on adjacent properties, where the Division has determined that gaps between adjacent erosion control structures may result in an increased risk of damage to the structure to be protected. The landward side of such temporary erosion control structures shall not be located more than 20 feet waterward of the structure to be protected or the right-of-way in the case of roads. If a building or road is found to be imminently threatened and at an increased risk of imminent damage due to site conditions such as a flat beach profile or accelerated erosion, temporary erosion control structures may be located more than 20 feet waterward of the structure being protected. In cases of increased risk of imminent damage, the location of the temporary erosion control structures shall be determined by the Director of the Division of Coastal Management or the Director's designee in accordance with Part (A) of this Subparagraph.
  - (F) Temporary erosion control structures may remain in place for up to eight years for a building and its associated septic system, a bridge or a road. The property owner shall be responsible for removal of any portion of the temporary erosion control structure exposed above grade within 30 days of the end of the allowable time period.
  - (G) An imminently threatened structure or property may be protected only once, regardless of ownership, unless the threatened structure or property is located in a community that is actively pursuing a beach nourishment project or an inlet relocation or stabilization project in accordance with Part (H) of this Subparagraph. Existing temporary erosion control structures may be permitted for additional eight-year periods provided that the structure or property being protected is still imminently threatened, the temporary erosion control structure is in compliance with requirements of this Subchapter, and the community in which it is located is actively pursuing a beach nourishment or an inlet relocation or stabilization project in accordance with Part (H) of this Subparagraph. 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 Part (F) or (H) of this Subparagraph shall begin at the time the initial erosion control structure was installed. For the purpose of this Rule:

- (i) a building and its septic system shall be considered separate structures,
- (ii) a road or highway may be incrementally protected as sections become imminently threatened. The time period for removal of each contiguous section of temporary erosion control structure shall begin at the time that the initial section was installed, in accordance with Part (F) of this Subparagraph.
- (H) For purposes of this Rule, a community is considered to be actively pursuing a beach nourishment or an inlet relocation or stabilization project in accordance with G.S. 113A-115.1 if it:
  - (i) has been issued an active CAMA permit, where necessary, approving such project; or
  - (ii) has been identified by a U.S. Army Corps of Engineers' Beach Nourishment Reconnaissance Study, General Reevaluation Report, Coastal Storm Damage Reduction Study, or an ongoing feasibility study by the U.S. Army Corps of Engineers and a commitment of local or federal money, when necessary; or
  - (iii) has received a favorable economic evaluation report on a federal project; or
  - (iv) is in the planning stages of a project designed by the U.S. Army Corps of Engineers or persons meeting applicable State occupational licensing requirements and initiated by a local government or community with a

commitment of local or state funds to construct the project or the identification of the financial resources or funding bases necessary to fund the beach nourishment, inlet relocation or stabilization project.

If beach nourishment, inlet relocation, or stabilization is rejected by the sponsoring agency or community, or ceases to be actively planned for a section of shoreline, the time extension is void for that section of beach or community and existing sandbags are subject to all applicable time limits set forth in Part (F) of this Subparagraph.

- (I) Once a temporary erosion control structure is determined by the Division of Coastal Management to be unnecessary due to relocation or removal of the threatened structure, it shall be removed to the maximum extent practicable by the property owner within 30 days of official notification from the Division of Coastal Management regardless of the time limit placed on the temporary erosion control structure. If the temporary erosion control structure is determined by the Division of Coastal Management to be unnecessary due to the completion of a storm protection project constructed by the U.S. Army Corps of Engineers, a large-scale beach nourishment project, or an inlet relocation or stabilization project, any portion of the temporary erosion control structure exposed above grade shall be removed by the property owner within 30 days of official notification from the Division of Coastal Management regardless of the time limit placed on the temporary erosion control structure.
- (J) Removal of temporary erosion control structures is not required if they are covered by sand. Any portion of the temporary erosion control structure that becomes exposed above grade after the expiration of the permitted time period shall be removed by the property owner within 30 days of official notification from the Division of Coastal Management.
- (K) The property owner shall be responsible for the removal of remnants of all portions of any damaged temporary erosion control structure.
- (L) 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 temporary erosion control structure shall not exceed 20 feet, and the total height shall not exceed six feet, as measured from the bottom of the lowest bag.
- (M) Soldier pilings and other types of devices to anchor sandbags shall not be allowed.
- (N) Existing sandbag structures may be repaired or replaced within their originally permitted dimensions during the time period allowed under Part (F) or (G) of this Subparagraph.
- (3) Beach Nourishment. Sand used for beach nourishment shall be compatible with existing grain size and in accordance with Rule .0312 of this Section.

(4) Beach Bulldozing. Beach bulldozing (defined as the process of moving natural beach material from any point seaward of the vegetation line to create a protective sand dike or to obtain material for any other purpose) is development and may be permitted as an erosion response if the following conditions are met:

(A) The area on which this activity is being performed shall maintain a slope of adequate grade so as to not endanger the public or the public's use of the beach and shall follow the pre-emergency slope as closely as possible. The movement of material utilizing a bulldozer, front end loader, backhoe, scraper, or any type of earth moving or construction equipment shall not exceed one foot in depth measured from the pre-activity surface elevation;

- (B) The activity shall not exceed the lateral bounds of the applicant's property unless permission is obtained from the adjoining land owner(s);
- Movement of material from seaward of the mean low water line will require a CAMA Major (C) Development and State Dredge and Fill Permit;
- The activity shall not increase erosion on neighboring properties and shall not have an adverse (D) effect on natural or cultural resources;
- The activity may be undertaken to protect threatened on-site waste disposal systems as well as (E) the threatened structure's foundations.
- (b) Dune Protection, Establishment, Restoration and Stabilization.
  - No development shall be permitted that involves the removal or relocation of primary or frontal dune sand (1)or vegetation that would adversely affect the integrity of the dune. Other dunes within the ocean hazard area shall not be disturbed unless the development of the property is otherwise

impracticable. Any disturbance of these other dunes shall be allowed only to the extent permitted by this Rule.

- (2)Any new dunes established shall be aligned to the greatest extent possible with existing adjacent dune ridges and shall be of the same configuration as adjacent natural dunes.
- Existing primary and frontal dunes shall not, except for beach nourishment and emergency situations, be (3) broadened or extended in an oceanward direction.
- Adding to dunes shall be accomplished in such a manner that the damage to existing vegetation is (4) minimized. The filled areas shall be replanted or temporarily stabilized until planting can be completed.
- Sand used to establish or strengthen dunes shall be of the same general characteristics as the sand in the (5) area in which it is to be placed.
- No new dunes shall be created in inlet hazard areas. Reconstruction or repair of existing dune systems as (6) defined in Rule .0305 of this Section and within the Inlet Hazard Area may be permitted.
- Sand held in storage in any dune, other than the frontal or primary dune, shall remain on the lot or tract of (7)land to the maximum extent practicable and may be redistributed within the Ocean Hazard AEC provided that it is not placed any farther oceanward than the crest of a primary dune, if present, or the crest of a frontal dune.
- (8) No disturbance of a dune area shall be allowed when other techniques of construction can be utilized and alternative site locations exist to avoid dune impacts.

(c) Structural Accessways:

- Structural accessways shall be permitted across primary or frontal dunes so long as they are designed and (1)constructed in a manner that entails negligible alteration of the primary or frontal dune. Structural accessways shall not be considered threatened structures for the purpose of Paragraph (a) of this Rule.
- (2)An accessway shall be considered to entail negligible alteration of primary or frontal dunes provided that:
  - The accessway is exclusively for pedestrian use; (A)
  - (B) The accessway is a maximum of six feet in width;
  - Except in the case of beach matting matting, for a local, State, or federal government's public (C) access, the accessway is raised on posts or pilings of five feet or less depth, so that wherever possible only the posts or pilings touch the dune, in accordance with any more restrictive local, State, or federal building requirements. Beach matting for a local, State, or federal government's public access shall be installed at grade and not involve any excavation or fill of the dune; and (D)
    - Any areas of vegetation that are disturbed are revegetated as soon as feasible.
- (3) An accessway that does not meet Part (2)(A) and (B) of this Paragraph shall be permitted only if it meets a public purpose or need which cannot otherwise be met and it meets Part (2)(C) of this Paragraph. Public fishing piers are allowed provided all other applicable standards of this Rule are met.
- In order to preserve the protective nature of primary and frontal dunes, a structural accessway (such as a (4) "Hatteras ramp") may be provided for off-road vehicle (ORV) or emergency vehicle access. Such accessways shall be no greater than 15 feet in width and may be constructed of wooden sections fastened together, or other materials approved by the Division, over the length of the affected dune area. Installation of a Hatteras ramp shall be done in a manner that will preserve the dune's function as a protective barrier against flooding and erosion by not reducing the volume of the dune.
- Structural accessways and beach matting may be constructed no more than six feet seaward of the waterward (5) toe of the frontal or primary dune, provided they do not interfere with public trust rights and emergency access along the beach. Structural accessways and beach matting are not restricted by the requirement to be landward of the First Line of Stable and Natural Vegetation as described in Rule .0309(a) of this Section.

A local, State, or federal entity may install beach matting farther seaward to enhance handicap accessibility at a public beach access, subject to review by the Wildlife Resources Commission and the U.S. Fish and Wildlife Service to determine whether the proposed design or installation will have an adverse impact on sea turtles or other threatened or endangered species.

(d) Building Construction Standards. New building construction and any construction identified in .0306(a)(5) of this Section and 15A NCAC 07J .0210 shall comply with the following standards:

(1) In order to avoid danger to life and property, all development shall be designed and placed so as to minimize damage due to fluctuations in ground elevation and wave action in a 100-year storm. Any building constructed within the ocean hazard area shall comply with relevant sections of the

North Carolina Building Code including the Coastal and Flood Plain Construction Standards and the local flood damage prevention ordinance as required by the National Flood Insurance Program. If any provision of the building code or a flood damage prevention ordinance is inconsistent with any of the following AEC standards, the more restrictive provision shall control.

- (2) All building in the ocean hazard area shall be on pilings not less than eight inches in diameter if round or eight inches to a side if square.
- (3) All pilings shall have a tip penetration greater than eight feet below the lowest ground elevation under the structure. For those structures so located on or seaward of the primary dune, the pilings shall extend to five feet below mean sea level.
- (4) All foundations shall be designed to be stable during applicable fluctuations in ground elevation and wave forces during a 100-year storm. Cantilevered decks and walkways shall meet the requirements of this Part or shall be designed to break-away without structural damage to the main structure.

*History Note: Authority G.S. 113A-107(a); 113A-107(b); 113A-113(b)(6)a.,b.,d.; 113A-115.1; 113A-124; Eff. June 1, 1979:* 

Temporary Amendment Eff. June 20, 1989, for a period of 180 days to expire on December 17, 1989; Amended Eff. August 3, 1992; December 1, 1991; March 1, 1990; December 1, 1989; RRC Objection Eff. November 19, 1992 due to ambiguity; RRC Objection Eff. January 21, 1993 due to ambiguity; Amended Eff. March 1, 1993; December 28, 1992; RRC Objection Eff. March 16, 1995 due to ambiguity; Amended Eff. March 16, 1995 due to ambiguity; Amended Eff. April 1, 1999; February 1, 1996; May 4, 1995; Temporary Amendment Eff. July 3, 2000; May 22, 2000; Amended Eff. April 1, 2019; May 1, 2013; July 1, 2009; April 1, 2008; February 1, 2006; August 1, 2002; Readopted Eff. December 1, 2020; Amended Eff. August 1, 2022; December 1, 2021.

#### 15A NCAC 07K .0207 STRUCTURAL ACCESSWAYS OVER FRONTAL DUNES EXEMPTED

(a) The North Carolina Coastal Resources Commission exempts from the CAMA permit requirement all structural pedestrian accessways, including beach matting installed by a local, State, or federal government to provide public or private access over primary and frontal dunes when such accessways can be shown to meet the following criteria:

- (1) The accessway shall not exceed six feet in width and shall be for private residential or for public access to an ocean beach. This exemption does not apply to accessways for commercial use or for motor-powered vehicular use.
- (2) The accessway shall be constructed so as to make no alterations to the frontal dunes that are not necessary to construct the accessway. This means that the accessway shall be constructed over the frontal dune without any alteration of the dunes. In no case shall the dune be altered so as to diminish its capacity as a protective barrier against flooding and by not reducing the volume of the dune. Driving of pilings into the dune or a local, State, or federal government's use of beach matting for public access that is installed at grade and involves no excavation or fill shall not be considered alteration of a frontal dune for the purposes of this Rule.
- (3) The accessway shall conform with any applicable local or State building code standards.
- (4) Structural accessways may be constructed no more than six feet seaward of the waterward toe of the frontal or primary dune, provided they do not interfere with public trust rights and emergency access along the beach. Structural accessways are not restricted by the requirement to be landward of the First Line of Stable and Natural Vegetation as described in 15A NCAC 07H .0309(a).
- (5) Damaged, non-functioning, or portions of accessways that become non-compliant with Subparagraph (4) of this Paragraph shall be removed by the property owner.

(b) Before beginning any work under this exemption the CAMA local permit officer or Department of Environmental Quality representative shall be notified of the proposed activity to allow on-site review of the proposed accessway. Notification can be by telephone, in person, or in writing and must include:

- (1) name, address, and telephone number of landowner and location of work including county and nearest community; and
- (2) the dimensions of the proposed structural accessway.

History Note: Authority G.S. 113A-103(5)c; Eff. November 1, 1984; Amended Eff. December 1, 1991; May 1, 1990; Readopted Eff. August 1, 2021; Amended Eff. December 1, 2021.