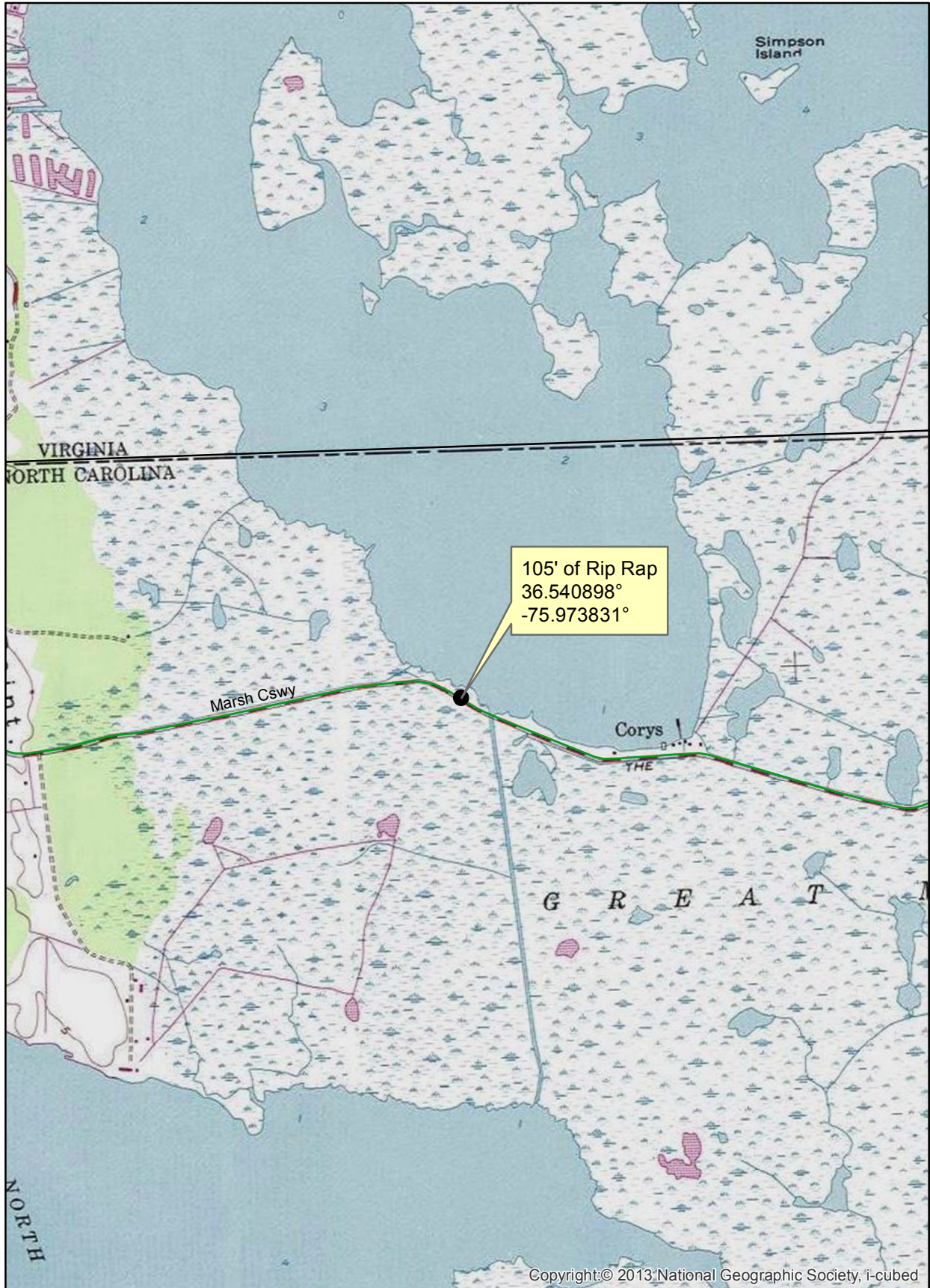
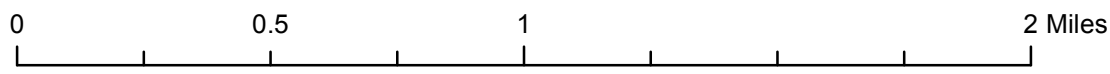


Shoreline Stabilization on NC 615
Marsh Causeway
Currituck County Quad Name Knotts Island



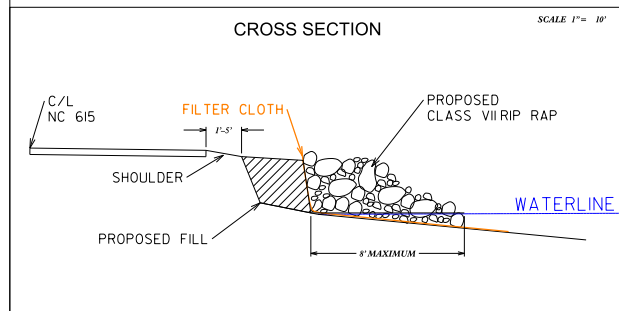
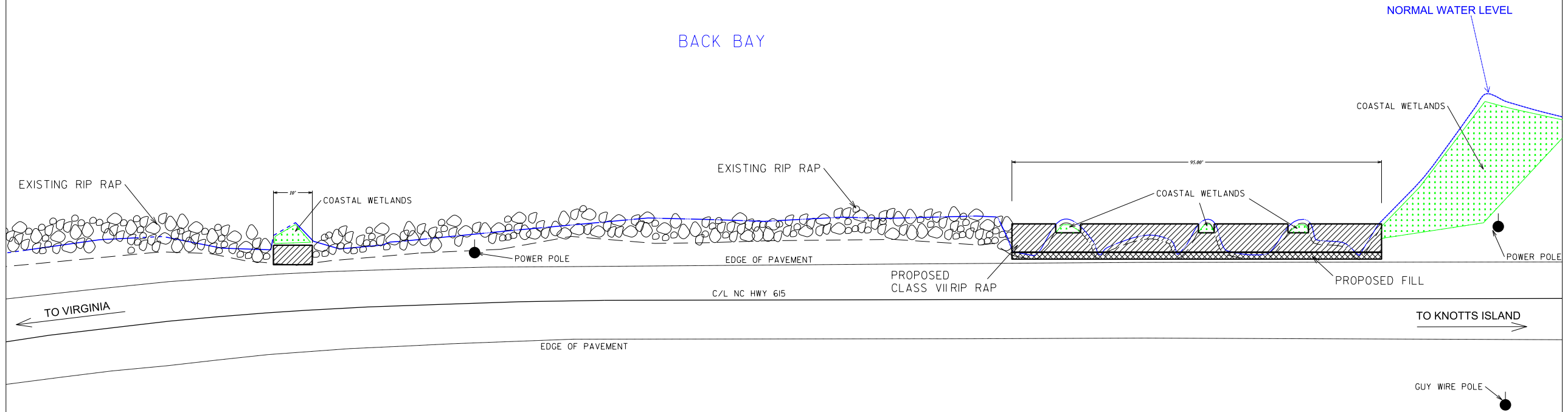
Copyright © 2013 National Geographic Society, i-cubed



MARSH CAUSEWAY SHORELINE STABILIZATION HURRICANE MATTHEW DAMAGE CURRITUCK COUNTY

LAT: 36.540898°
LONG: -75.973831°

BACK BAY



SURFACE WATER IMPACT: 400 SQ. FT.

PROPOSED CLASS VII RIP RAP: 655 SQ. FT.

PROPOSED FILL: 167 SQ. FT.

U.S. FISH AND WILDLIFE SERVICE
MACKAY ISLAND NATIONAL WILDLIFE REFUGE
P.O. BOX 39
KNOTTS ISLAND, N.C. 27950

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

COUNTY: CURRITUCK
BASIN: PASQUOTANK
QUAD: KNOTTS ISLAND
WBS #: DF15001.1027010
DATE: 10/18/2016
DRAWN BY: PAUL WILLIAMS

SCALE 1" = 30'



CAMA / DREDGE & FILL
GENERAL PERMIT

New Modification Complete Reissue Partial Reissue

Nº 67382

(A) B C D

Previous permit # _____

Date previous permit issued _____

As authorized by the State of North Carolina, Department of Environment and Natural Resources and the Coastal Resources Commission in an area of environmental concern pursuant to 15A NCAC _____

07H .1100

Rules attached.

Applicant Name NCDOT

Project Location: County CURRITUCK

Address 113 AIRPORT DR., SUITE 100

Street Address/ State Road/ Lot #(s) NC 615 (MARSH CAUSEWAY)

City EDENTON State NC ZIP 27932

APPROX. 350' WEST OF BRIDGE #7

Phone # (252) 462-1861 E-Mail pwilliams@ncdot.gov

Subdivision _____

Authorized Agent PAUL WILLIAMS

City KNOTTS ISLAND ZIP 27968

Affected CW EW PTA ES PTS

Phone # (____) _____ River Basin PASQUOTANK

AEC(s): OEA HHF IH UBA N/A

Adj. Wtr. Body BACK BAY (nat) / (man) / (unkn)

PWS: _____

Closest Maj. Wtr. Body BACK BAY

ORW: yes no PNA yes no

Type of Project/ Activity STABILIZE APPROXIMATELY 105' OF NC 615 (MARSH CAUSEWAY) SHOULDER WITH ~~CLASS II RIPRAP~~. STABILIZATION WILL OCCUR ON NORTH SIDE OF ROADWAY. (Scale: N/A)

- Pier (dock) length _____
- Fixed Platform(s) _____
- Floating Platform(s) _____
- Finger pier(s) _____
- Groin length _____
- number _____
- Bulkhead/ Riprap length 105'
- avg distance offshore 5'
- max distance offshore 8'
- Basin, channel _____
- cubic yards _____
- Boat ramp _____
- Boathouse/ Boatlift _____
- Beach Bulldozing _____
- Other _____

SELECT MATERIAL CLASS VII

PLANS ATTACHED AND INCORPORATED INTO PERMIT.
* ONE (1) DATED 10/18/2016

Shoreline Length < 500'
SAV: not sure yes no
Moratorium: n/a yes no
Photos: yes no
Waiver Attached: yes no

A building permit may be required by: CURRITUCK See note on back regarding River Basin rules.
(Note Local Planning Jurisdiction) **SELECT MATERIAL CLASS VII**

Notes/ Special Conditions (1) RIPRAP REVETMENT MATERIAL SHALL BE OF SUFFICIENT SIZE TO PREVENT MOVEMENT FROM THE SITE BY WAVE ACTION OR CURRENTS (2) RIPRAP MATERIAL SHALL BE FREE OF LOOSE DIRT AND/OR OTHER POLLUTANTS. **SELECT MATERIAL CLASS VII**

Agent or Applicant Printed Name PAUL WILLIAMS
Signature _____
Application Fee(s) \$400.00 Check # WBS# DF15001.102701

Permit Officer's Printed Name GREG DAISEY
Signature _____
Issuing Date 10/31/2016 Expiration Date 2/28/2017

**SECTION .1100 - GENERAL PERMIT FOR CONSTRUCTION OF BULKHEADS AND RIPRAP
REVTMENTS FOR SHORELINE PROTECTION IN ESTUARINE AND PUBLIC TRUST WATERS AND
OCEAN HAZARD AREAS**

15A NCAC 07H .1101 PURPOSE

A permit under this Section shall allow the construction of bulkheads and riprap revetments for shoreline protection in the public trust waters and estuarine waters AECs according to authority provided in Subchapter 07J .1100 and according to the Rules in this Section. This permit shall not apply to shoreline protection along the oceanfront or to waters and shorelines adjacent to the Ocean Hazard AEC with the exception of those shorelines that feature characteristics of the Estuarine Shoreline AEC. Such features include the presence of wetland vegetation, lower wave energy and lower erosion rates than the adjoining Ocean Erodible Area.

*History Note: Authority G.S. 113A-107(a); 113A-107(b); 113A-113(b); 113A-118.1; 113A-124;
Eff. March 1, 1984;
Amended Eff. July 1, 2009; April 1, 2003.*

15A NCAC 07H .1102 APPROVAL PROCEDURES

(a) An applicant for a General Permit under this Subchapter shall contact the Division of Coastal Management and request approval for development. The applicant shall provide information on site location, dimensions of the project area, and the applicant's name and address.

(b) The applicant shall provide:

- (1) confirmation that a written statement has been obtained signed by the adjacent riparian property owners indicating that they have no objections to the proposed work; or
- (2) confirmation that the adjacent riparian property owners have been notified by certified mail of the proposed work. The notice shall instruct adjacent property owners to provide written comments on the proposed development to the Division of Coastal Management within 10 days of receipt of the notice, and, indicate that no response shall be interpreted as no objection. The Division of Coastal Management shall review all comments and determine, based on their relevance to the potential impacts of the proposed project, if the proposed project can be approved by a General Permit. If the Division of Coastal Management determines that the project exceeds the guidelines established by the General Permit Process, DCM shall notify the applicant that an application for a major development permit shall be required.

(c) No work shall begin until an on-site meeting is held with the applicant and a Division of Coastal Management representative so that the proposed alignment may be marked. Written authorization to proceed with the proposed development shall be issued if the Division representative finds that the application meets all the requirements of this Subchapter. Construction of the bulkhead or riprap revetment shall be completed within 120 days of the issuance of the general authorization or the authorization shall expire and it shall be necessary to re-examine the alignment to determine if the general authorization may be reissued.

*History Note: Authority G.S. 113A-107(a); 113A-107(b); 113A-113(b); 113A-118.1; 113A-124;
Eff. March 1, 1984;
Amended Eff. July 1, 2009; October 1, 2007; September 1, 2006; January 1, 1990; December 1, 1987.*

15A NCAC 07H .1103 PERMIT FEE

The applicant shall pay a permit fee of two hundred dollars (\$200.00) for riprap revetments sited at or above normal high water or normal water level, or a permit fee of four hundred dollars (\$400.00) for riprap revetments sited below normal high water or normal water level. The applicant shall pay a permit fee of four hundred dollars (\$400.00) for bulkheads. Permit fees shall be paid by check or money order payable to the Department.

*History Note: Authority G.S. 113A-107; 113A-113(b); 113A-118.1; 113A-119; 113-119.1; 113A-124;
Eff. March 1, 1984;
Amended Eff. October 5, 2009; September 1, 2006; August 1, 2000; March 1, 1991.*

15A NCAC 07H .1104 GENERAL CONDITIONS

- (a) This permit authorizes only the construction of bulkheads and riprap revetments conforming to the standards herein.
- (b) Individuals shall allow authorized representatives of the Department of Environment and Natural Resources to make periodic inspections at any time deemed necessary in order to ensure 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 interference with the use of the waters by the public by the existence of the bulkhead or the riprap revetment authorized herein. Bulkheads and riprap revetments authorized in this Rule shall not interfere with the established or traditional rights of navigation of the waters by the public.
- (d) This permit shall not be applicable to proposed construction where the Division of Coastal Management 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 shall not eliminate the need to obtain any other required state, local, or federal authorization.
- (f) Development carried out under this permit shall be consistent with all local requirements, AEC rules, and local land use plans current at the time of authorization.

History Note: Authority G.S. 113A-107(a); 113A-107(b); 113A-113(b); 113A-118.1; 113A-124; Eff. March 1, 1984; Amended Eff. May 1, 1990; December 1, 1987; RRC Objection due to ambiguity Eff. May 19, 1994; Amended Eff. July 1, 2009; August 1, 1998; July 1, 1994.

15A NCAC 07H .1105 SPECIFIC CONDITIONS

- (a) Along shorelines void of wetland vegetation:
 - (1) New bulkheads shall have an average approximation of normal high water or normal water level. The bulkhead position shall not exceed a distance of five feet waterward of normal high water or normal water level at any point along its alignment.
 - (2) New bulkheads or riprap revetments on shorelines within manmade upland basins, canals, and ditches, shall be positioned so as not to exceed an average distance of two feet and maximum distance of five feet waterward of normal high water or normal water level.
 - (3) When replacing an existing bulkhead, the new alignment shall be positioned so as not to exceed a maximum distance of two feet waterward of the current bulkhead alignment. To tie into a like structure on the adjacent property, replacement bulkhead position shall not exceed a maximum distance of five feet waterward of the current bulkhead alignment. When replacing a bulkhead where lands landward of the bulkhead were lost in the last year, bulkheads shall be positioned a maximum of two feet waterward of the original/existing alignment.
 - (4) Riprap revetments shall be positioned so as not to exceed a maximum distance of 10 feet waterward of the normal high water or normal water level at any point along its alignment.
- (b) Along shorelines with wetland vegetation, bulkheads and riprap revetments shall be positioned so that all construction is to be accomplished landward of such vegetation.
- (c) Bulkheads shall be constructed of vinyl, or steel sheet pile, concrete, stone, timber, or other suitable materials approved by the Division of Coastal Management.
- (d) Riprap revetments shall be constructed of granite, marl, concrete without exposed rebar, or other suitable materials approved by the Division of Coastal Management.
- (e) Revetment material shall be free from loose dirt or other pollutants.
- (f) Revetment material shall be of sufficient size to prevent movement from the site by wave action or currents.
- (g) Construction design for riprap revetments shall take into consideration the height of the area to be protected (i.e. bulkhead height, escarpment height, water depth) and the alignment shall allow for a slope no flatter than three feet horizontal per one foot vertical and no steeper than 1 ½ feet horizontal per one foot vertical.
- (h) All backfill material shall be obtained from an upland source pursuant to 15A NCAC 07H .0208. The bulkhead or riprap revetment shall be constructed prior to any backfilling activities and shall be structurally tight so as to prevent seepage of backfill materials through the structure.
- (i) No excavation, grading or fill shall be permitted except for that which may be required for the construction of the bulkhead or riprap revetment. This permit shall not authorize any excavation waterward of the approved alignment.
- (j) Runoff from construction shall not visibly increase the amount of suspended sediments in adjacent waters. 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, sand fence, etc.).
- (k) If one contiguous acre or more of property is to be excavated or filled, an erosion and sedimentation control plan shall be filed with the Division of Land Resources, Land Quality Section, or appropriate local government having jurisdiction. This plan shall be approved prior to commencing the land-disturbing activity.

- (l) For the purposes of these Rules, the Atlantic Intracoastal Waterway (AIWW) is considered a natural shoreline.
- (m) Construction authorized by this general permit shall be limited to a maximum shoreline length of 500 feet.

History Note: Authority G.S. 113A-107(a); 113A-107(b); 113A-113(b); 113A-118.1; 113A-124;
Eff. March 1, 1984;
Amended Eff. July 1, 2009; April 1, 2005; December 1, 1991; January 1, 1989; December 1, 1987.

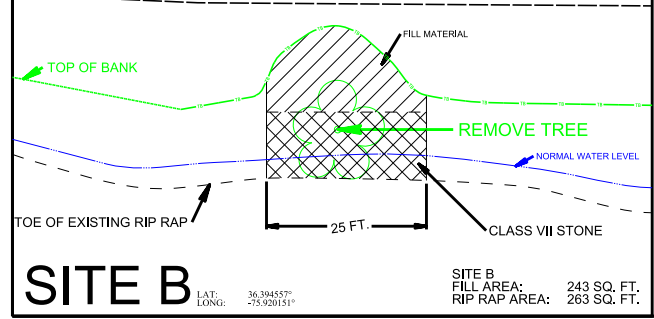
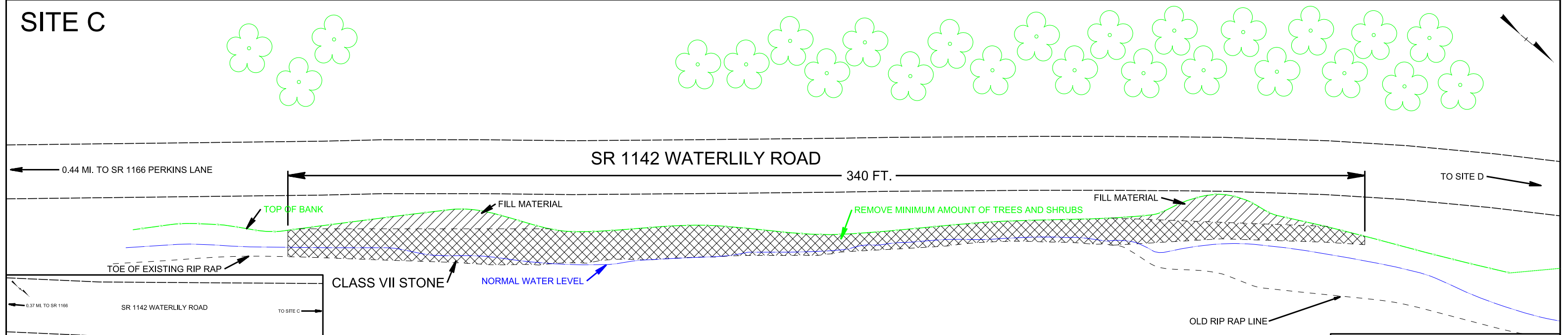
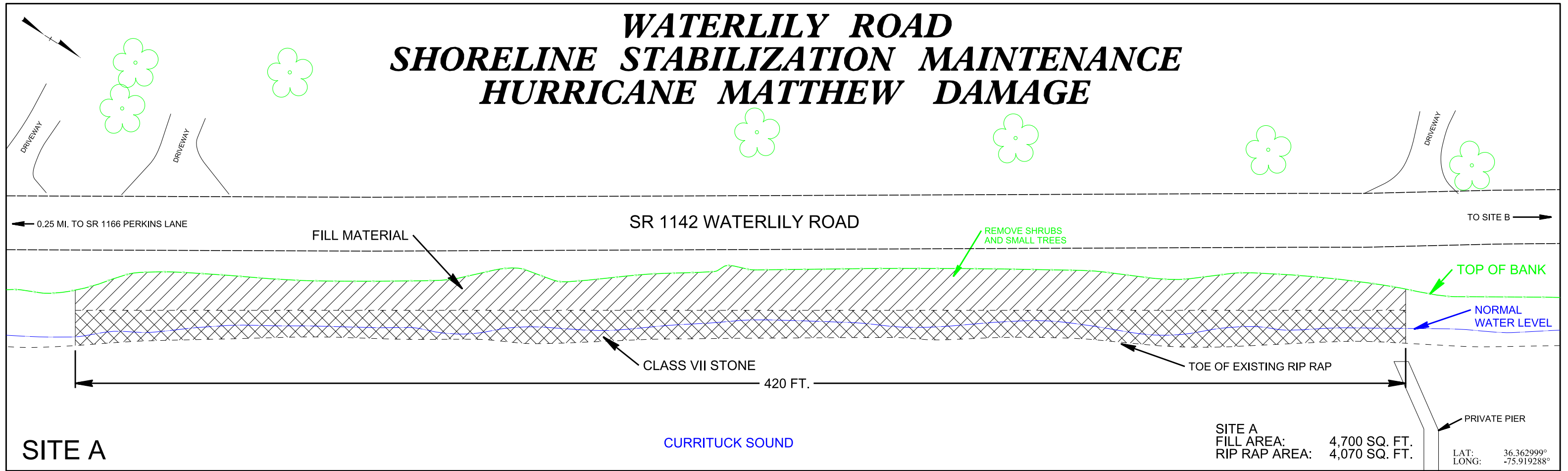
Shoreline Stabilization on SR 1142
Hurricane Matthew Damage
Waterlily Road
Currituck County Quad Name Barco



Copyright © 2013 National Geographic Society, i-cubed

0 0.5 1 2 Miles

WATERLILY ROAD SHORELINE STABILIZATION MAINTENANCE HURRICANE MATTHEW DAMAGE

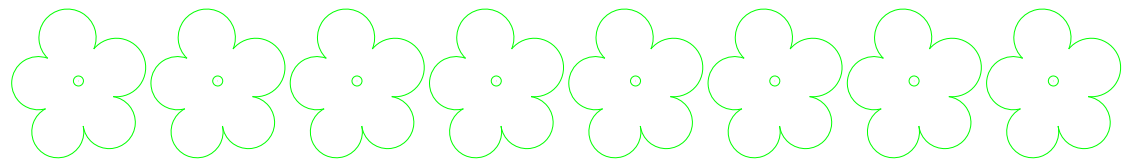


SITE C
FILL AREA: 550 SQ. FT.
RIP RAP AREA: 2,678 SQ. FT.

LAT: 36.395535°
LONG: -75.920889°

NC DEPT. OF TRANSPORTATION	
COUNTY:	CURRITUCK
QUAD:	BARCO
BASIN:	PASQUOTANK
PROJECT:	SHOULDER STABILIZATION
WBS ELEMENT:	DF15001.2027010
SCALE:	1" = 30'
DATE:	12/1/2016
DRAWN BY:	PAUL WILLIAMS

**WATERLILY ROAD
SHORELINE STABILIZATION MAINTENANCE
HURRICANE MATTHEW DAMAGE**

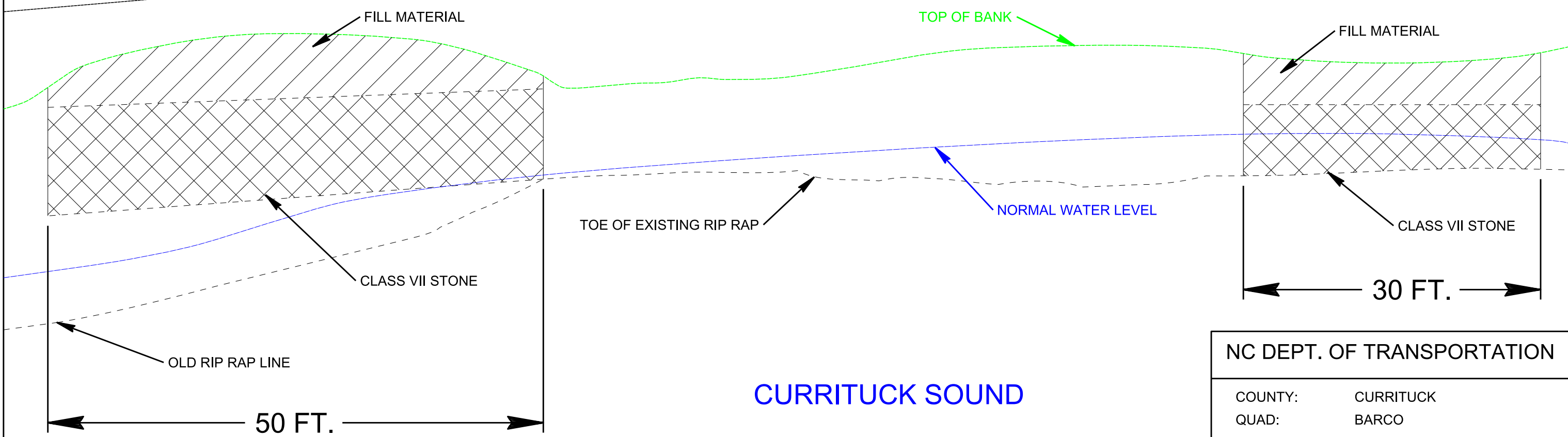


0.53 MI. TO SR 1166

SR 1142 WATERLILY ROAD

SITE D

SITE E



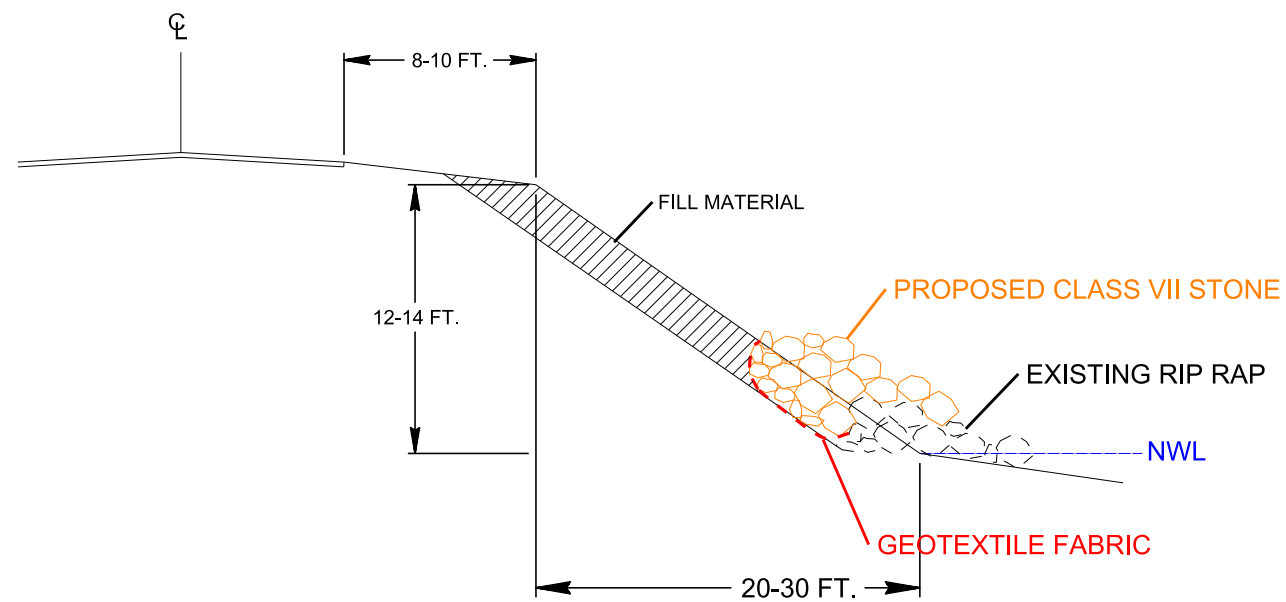
NC DEPT. OF TRANSPORTATION

COUNTY: CURRITUCK
 QUAD: BARCO
 BASIN: PASQUOTANK
 PROJECT: SHOULDER STABILIZATION
 WBS ELEMENT: DF15001.2027010
 SCALE: 1" = 10'
 DATE: 12/1/2016
 DRAWN BY: PAUL WILLIAMS

SITE D		SITE E	
FILL AREA:	260 SQ. FT.	FILL AREA:	135 SQ. FT.
RIP RAP AREA:	500 SQ. FT.	RIP RAP AREA:	202 SQ. FT.

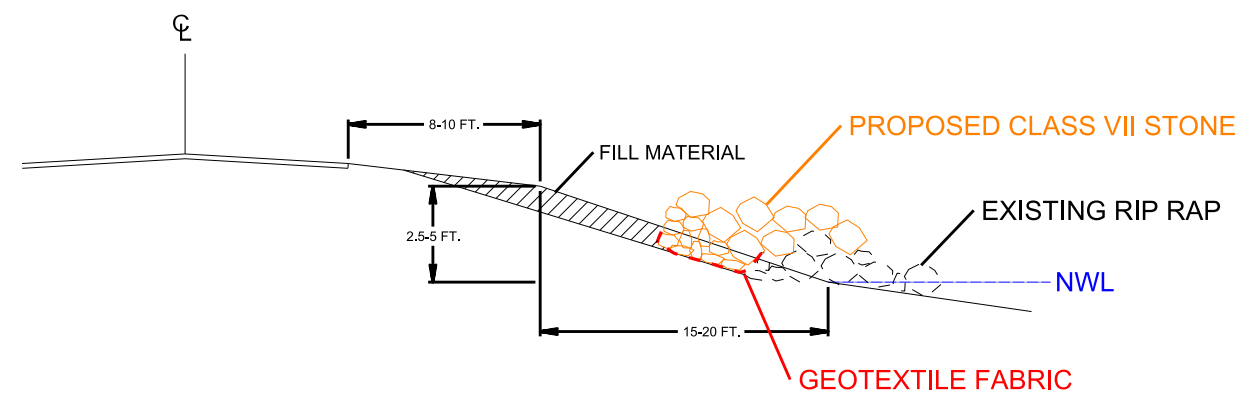
**LAT: 36.396646°
LONG: -75.921620°**

WATERLILY ROAD SHORELINE STABILIZATION MAINTENANCE HURRICANE MATTHEW DAMAGE



ELEVATION VIEW - SITES A & B

1 INCH = 10 FEET



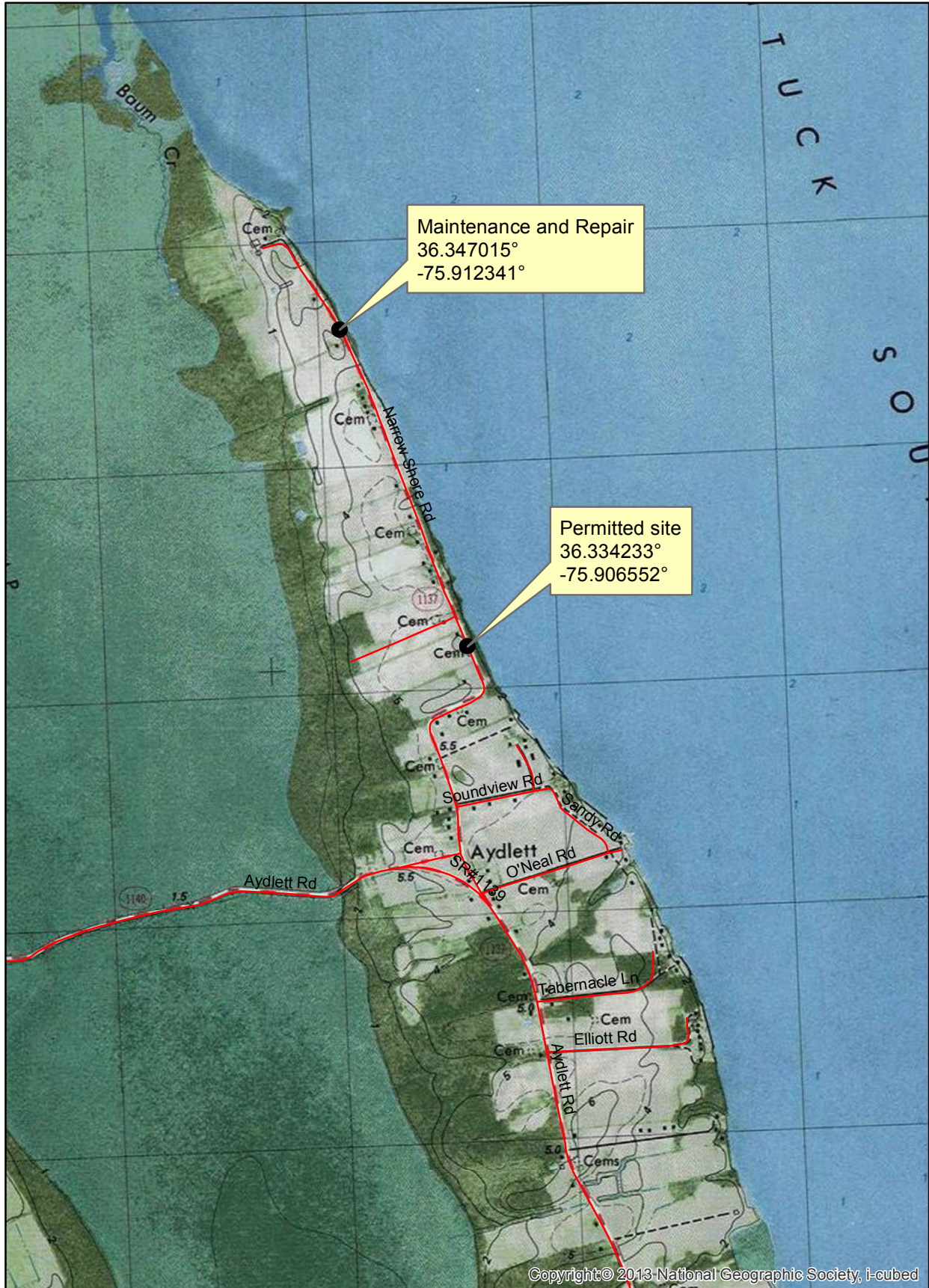
ELEVATION VIEW - SITES C, D, & E

1 INCH = 10 FEET

NC DEPT. OF TRANSPORTATION

COUNTY:	CURRITUCK
QUAD:	BARCO
BASIN:	PASQUOTANK
PROJECT:	SHOULDER STABILIZATION
WBS ELEMENT:	DF15001.2027010
SCALE:	1" = 10'
DATE:	12/1/2016
DRAWN BY:	PAUL WILLIAMS

Shoreline Stabilization on SR 1137
Hurricane Matthew Damage
Narrow Shore Road
Currituck County Quad Name Coinjock



NARROW SHORE ROAD SHORELINE STABILIZATION

PATRICIA PARKER
136 W. RANDALL AVE.
NORFOLK, VA 23503

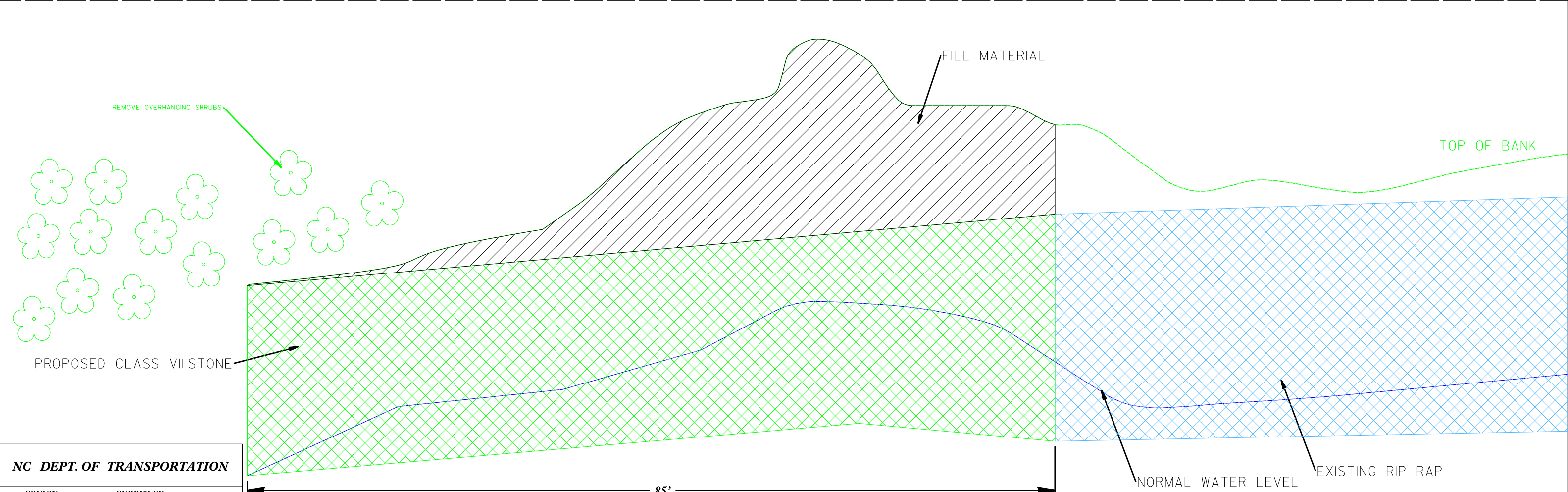
ROBERT AND BARBARA JORDAN
330 NARROW SHORE ROAD
AYDLETT, NC 27916



PROPERTY LINE

← 0.68 MI. TO SR 1140 AYDLETT ROAD

SR 1137 NARROW SHORE ROAD



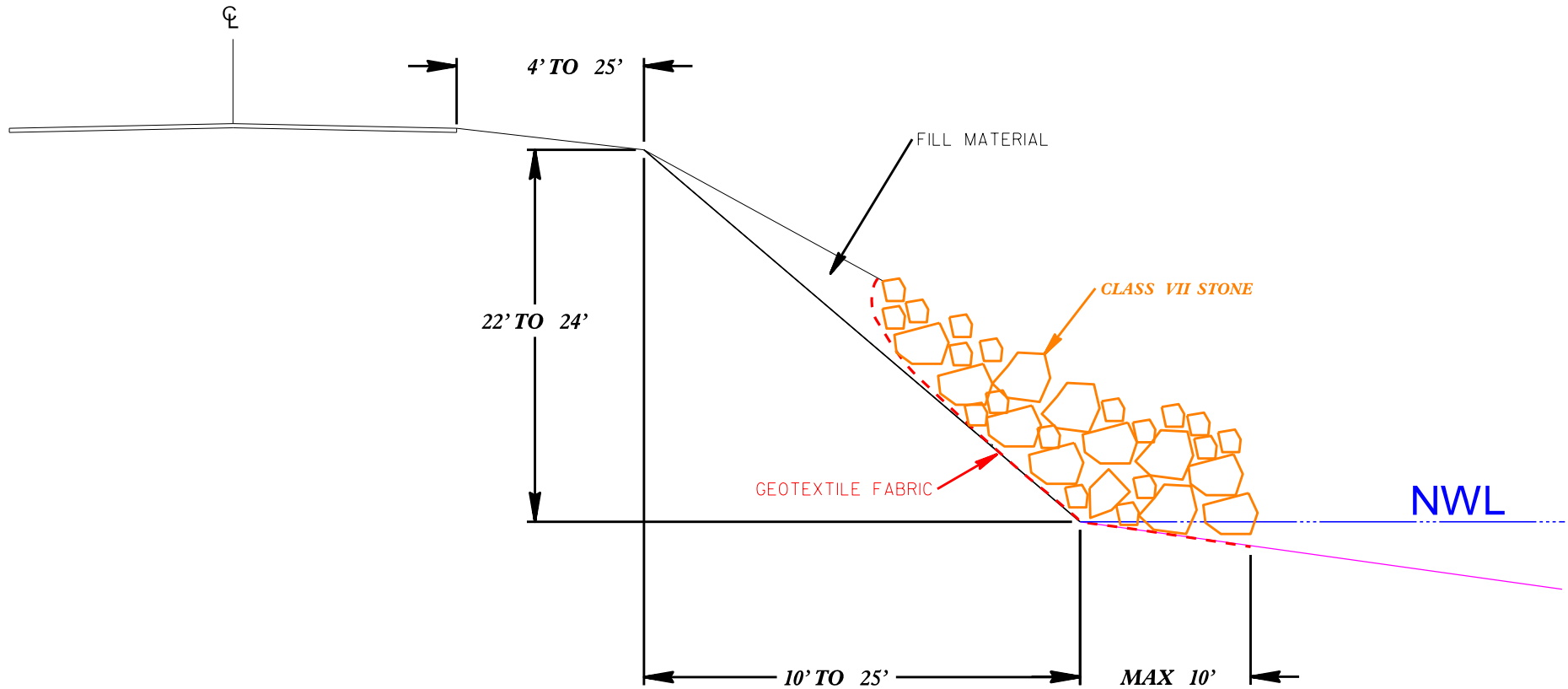
NC DEPT. OF TRANSPORTATION	
COUNTY:	CURRITUCK
QUAD:	COINJOCK
BASIN:	PASQUOTANK
PROJECT:	SHOULDER STABILIZATION
WBS ELEMENT:	DF15001.2027012
SCALE:	1" = 10'
DATE:	12/5/2016
DRAWN BY:	PAUL WILLIAMS

SURFACE WATER IMPACT:	706 SQ. FT.
TOTAL RIP RAP:	1747 SQ. FT.
FILL AREA:	740 SQ. FT.
SHORELINE IMPACT:	85 LINEAR FT.

CURRITUCK SOUND

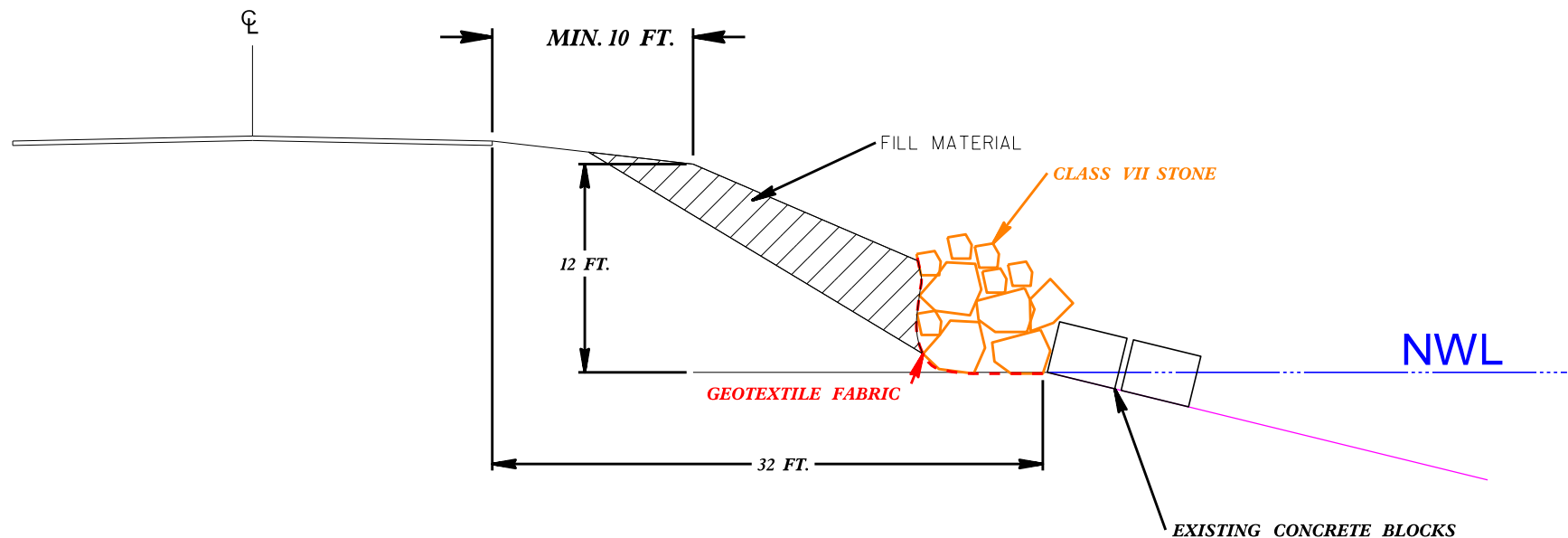
N 36.334233°
W 75.906552°

NARROW SHORES ROAD SHORELINE STABILIZATION ELEVATION VIEW - TYPICAL



NC DEPT. OF TRANSPORTATION	
COUNTY:	CURRITUCK
QUAD:	COINJOCK
BASIN:	PASQUOTANK
PROJECT:	SHOULDER STABILIZATION
WBS ELEMENT:	DF15001.2027012
SCALE:	1" = 10'
DATE:	12/5/2016
DRAWN BY:	PAUL WILLIAMS

NARROW SHORE ROAD SHORELINE STABILIZATION – MAINTENANCE ELEVATION VIEW – NORTHERN SITE HURRICANE MATTHEW DAMAGE



36.347015°
-75.912341°

NC DEPT. OF TRANSPORTATION

COUNTY:	CURRITUCK
QUAD:	COINJOCK
BASIN:	PASQUOTANK
PROJECT:	SHOULDER STABILIZATION
WBS ELEMENT:	DF15001.2027013
SCALE:	1" = 10'
DATE:	12/5/2016
DRAWN BY:	PAUL WILLIAMS

PROJECT NO.	SHEET NO.	TOTAL NO.
DF15001.1027010, ETC.	15	

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	MOBILIZATION LS	CLEARING & GRUBBING ACRE(S) LS	SUPPLEMENTAL CLEARING & GRUBBING AC	BORROW CY	FABRIC FOR SOIL STABILIZATION SY	GENERIC GRADING ITEM (SHOULDER & SLOPE RECONSTRUCTION) ACR	AC PLANT MIX (REPAIR) TONS	MATTING FOR EROSION CONTROL SY	SEED & MULCHING AC	SELECT MATERIAL, CLASS VII TON	TEMPORARY TRAFFIC CONTROL LS
DF15001.1027010	Currituck	1	NC 615	VARIOUS LOCATIONS	1	2	2WU	NO	NO	0.02	20	1			60	170	0.03	15	100	0.03	220	1
DF15001.2027010	Currituck	2	SR 1142 WATERLILY ROAD	VARIOUS LOCATIONS	1	2	2WU	NO	NO	0.164	20	*	1	0.50	1,100	1,200	0.25	15	1,300	0.25	1,600	*
DF15001.2027012	Currituck	3	SR 1137 NARROW SHORE ROAD	PERMITTED LOCATION	1	2	2WU	NO	NO	0.02	20	*	*	0.50	500	340	0.07	15	120	0.07	400	*
DF15001.2027013	Currituck	4	SR 1137 NARROW SHORE RD	MAINTENANCE LOCATION	1	2	2WU	NO	NO	0.02	20	*	*		250	120	0.03	15	180	0.03	150	*
GRAND TOTAL										0.224		1	1	1	1,910	1,830	0.38	60	1,700	0.38	2,370	1