# <u>Appendix B</u>

Agency Correspondence and Permits

#### U.S. ARMY CORPS OF ENGINEERS APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT 33 CFR 325. The proponent agency is CECW-CO-R.

#### Form Approved -OMB No. 0710-0003 Expires: 30-SEPTEMBER-2015

Public reporting for this collection of information is estimated to average 11 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 the collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters, Executive Services and Communications Directorate, Information Management Division and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. 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

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated 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/or 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 1 THRU 4 TO BE FILLED BY THE CORPS)					
1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE		
	(ITEMS BELOW TO BE	FILLED BY APPLICANT)			
5. APPLICANT'S NAME		8. AUTHORIZED AGENT'S NAME AND TITLE (agent is not required)			
First - Ray Middle -	Last - Gormly	First - Kristopher Middle -	Last - Krzyston		
Company - Mayor, Township of L	ittle Egg Harbor	Company - T&M Associates			
E-mail Address -		E-mail Address - kkrzyston@tandmassociates.com			
6. APPLICANT'S ADDRESS:		9. AGENT'S ADDRESS:			
Address- 665 Radio Road		Address- 11 Tindall Road			
City - Little EggHarbor State - N	J Zip - 08087 Country -	City - Middletown State -	NJ Zip - 07748 Country -		
7. APPLICANT'S PHONE NOs. w/AR	EA CODE	10. AGENTS PHONE NOS. W/AREA	CODE		
a. Residence b. Business c. Fax a. Residence b. Business c. Fax 609-296-7241 732-671-6400			ss c. Fax 6400		
	STATEMENT OF	AUTHORIZATION			
11. I hereby authorize, <u>Kristoph</u> supplemental information in support of	11. I hereby authorize,Kristopher Krzystontg act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application				
	NAME, LOCATION, AND DESCRI	PTION OF PROJECT OR ACTIVITY			
12. PROJECT NAME OR TITLE (see	instructions)				
Little Egg Harbor/Tuckerton Mars	sh Resiliency Project				
13. NAME OF WATERBODY, IF KNO	WN (if applicable)	14. PROJECT STREET ADDRESS	if applicable)		
Little Egg Harbor / Great Bay		Address See attached list			
15. LOCATION OF PROJECT Latitude: ∘N See attached list	Longitude: •W See attached list	City - LEH-Tuckerton	State- NJ Zip- 08087		
16. OTHER LOCATION DESCRIPTIC	NS, IF KNOWN (see instructions)				
State Tax Parcel ID	Municipality				
Section - To	wnship -	Range -			

#### 17. DIRECTIONS TO THE SITE

Take Garden State Parkway to Exit 58 to Route 539 south. take to Route 9. Make a Right onto Route 9 South. Make a Left onto Great Bay Boulevard. The Marsh Deposition Areas are along Great Bay Boulevard. Please refer to Site Location Maps for the locations of the Dredging and living shoreline.

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

The proposed project consists of the dredging of several lagoons throughout the Township of Little Egg Harbor and Tuckerton Borough. The material will be hydraulically dredged and will be placed within low lying / open water areas of the marsh along Great Bay Boulevard in an effort to improve marsh resiliency. Additionally, the proposed project involves the creation of a living shoreline within the area of Iowa Court that will re-establish a portion of the shoreline back to the 1977 tidelands claim line. The applicant is working closely with Rutgers University, the NJDEP, USACOE, and Barnegat Bay Partnership to ensure the project is being designed to adequately protect the marsh ecosystem.

#### 19. Project Purpose (Describe the reason or purpose of the project, see instructions)

Representatives from T&M Associates, Little Egg Harbor, and Tuckerton have met with NJDEP DLUR, Army Corps of Engineers, Rutgers Marine Field Station and the Barnegat Bay Partnership, to discuss the thin layer deposition and marsh resiliency project. The dredging is proposed to remove excess sediment that is building up in the lagoons in LEH and Tuckerton. The thin layer deposition and living shoreline is a mean and method for beneficial re-use of the dredge material. Through collaboration and months of research, together we have identified areas of low lying marsh that are in need of restoration. There are a number of "Pools" within the salt marsh that are static and not filling back up with the ebb and flow of the tides. The project is intended to spread the dredged material from the creeks and lagoons over the degraded areas of marsh, raising the areas to a healthier elevation observed in the surrounding marsh. Studies have shown that increasing sediment levels within an unhealthy marsh improve plant conditions as the area is not consistently flooded.

#### USE BLOCKS 20-23 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

#### 20. Reason(s) for Discharge

As described above, the sediment that is removed from the lagoons and creeks will be reused and spread on marsh habitat located along Great Bay Boulevard. The reason for the discharge is to restore portions of the degraded marsh habitat and to raise the elevation of the marsh to be above the Mean High Tide elevation and predicted sea level rise. The goal of the living shoreline is to add extra protection along Iowa Court and reduce wave action for the nearby homes. The living shoreline will be designed with a combination of stone and coir logs. In addition the new upland areas will be planted with spartina.

21.	Type(s) of Material	Being Discharged	and the Amount	of Each Type in	1 Cubic Yards

Type Amount in Cubic Yards Type Amount in Cubic Yards

Type Amount in Cubic Yards

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

Acres

or

Linear Feet

23. Description of Avoidance, Minimization, and Compensation (see instructions)

Representatives from T&M Associates, Little Egg Harbor, and Tuckerton have met with NJDEP DLUR, Army Corps of Engineers, Rutgers Marine Field Station and the Barnegat Bay Partnership, to discuss the thin layer deposition and marsh resiliency project. Through collaboration and months of research, together we have identified areas of low lying marsh that are in need of restoration. Every effort has been made to properly plan the project to minimize impacts on the salt marsh habitat. During dredging operation and deposition all proper SESC and BMP measures will be implemented (super silt fence, haybales and turbidity barriers) to help protect the habitat in the area.

24. Is Any Portion of t	the Work Already Complete?	Yes XNo IF YES	, DESCRIBE THE COMPLE	TED WORK	
25. Addresses of Adjoi	ining Property Owners, Lessee	s, Etc., Whose Property	Adjoins the Waterbody (if more	than can be entered here, please	attach a supplemental list).
a. Address- The prop	erty owners list is provided	l in the NJDEP Permi	t application included wit	h this application	
City -		State -	Zip -		
b. Address-					
City -		State -	Zip -		
c. Address-					
City -		State -	Zip -		
d. Address-					
City -		State -	Zip -		
e. Address-					
City -		State -	Zip -		
26. List of Other Certific	cates or Approvals/Denials rec	eived from other Federal	, State, or Local Agencies fo	r Work Described in This A	pplication.
AGENCY	TYPE APPROVAL*	NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED
NJDEP DLUR	WFD Permit		Concurrently		
* Would include but is n		a, and flood plain permits			
27. Application is hereb	by made for permit or permits t	o authorize the work des	cribed in this application. I c	ertify that this information in	this application is
applicant.	A O	the authority to undertain		or and acting as the duly at	attionzed agent of the
SIGNATUR		DATE	SIGNAT		_ 2/23/17 DATE
The Application must	t be signed by the person w	ho desires to underta	ke the proposed activity (	applicant) or it may be s	igned by a duly
18 LLS C. Section 10	101 provides that: Whoever	in any manner within	the jurisdiction of any de	partment or agency of th	e United States
knowingly and willfull	ly falsifies, conceals, or cov s or representations or mak	vers up any trick, sche kes or uses any false v	me, or disguises a materia writing or document know	al fact or makes any fals	e, fictitious or false, fictitious or
fraudulent statement	s or entry, shall be fined no	t more than \$10,000 c	or imprisoned not more the	an five years or both.	



REPLY TO

DEPARTMENT OF THE ARMY

PHILADELPHIA DISTRICT, CORPS OF ENGINEERS WANAMAKER BUILDING, 100 PENN SQUARE EAST PHILADELPHIA, PENNSYLVANIA 19107-3390

October 18, 1995

CENAP-OP-R-Coastal Zone Management (New Jersey and Pennsylvania)

#### PUBLIC NOTICE

SUBJECT: "Consistency Certification" with Approved State Coastal Zone Management Program

Federal regulations require that applicants for Department of the Army permits to perform work which falls under the jurisdiction of a State with a Coastal Zone Management (CZM) Program approved by the Secretary of Commerce, MUST PROVIDE CONSISTENCY CERTIFICATION. The certification statement must accompany the application for a Department of the Army permit.

On September 29, 1978 and September 29, 1980, respectively, CZM Programs were approved for the State of New Jersey and the Commonwealth of Pennsylvania by the Department of Commerce. Therefore, all applications for Department of the Army permits for work in their designated Coastal Zones must contain a consistency statement.

The statement should be as follows:

"The proposed activity complies with and will be conducted in a manner that is consistent with the approved State Coastal Zone Management Program."

Signature of Applicant

Additional information concerning the approved Coastal Zone Management Programs can be obtained by contacting:

State of New Jersey

New Jersey Department of Environmental Protection Land Use Regulation Program CN 401 Trenton, New Jersey 08625-0401 Telephone Number - (609) 292-0060 Commonwealth of Pennsylvania

Pennsylvania Department of Environmental Protection Division of Coastal Programs P.O. Box 8555 Harrisburg, Pennsylvania 17105-8555 Telephone Number - (717) 787-2529

FRANK . CIANFRANK Chief, Regulatory Branch

## U.S. Army Corps of Engineers (USACE) APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT

Form Approved -OMB No. 0710-0003 Expires: 01-08-2018

33 CFR 325. The proponent agency is CECW-CO-R.

The public reporting burden for this collection of information, OMB Control Number 0710-0003, is estimated to average 11 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 the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at <u>whs.mc-alex.esd.mbx dd-dod-information-collections@mail.mil</u>. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

#### PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated 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/or 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. System of Record Notice (SORN). The information received is entered into our permit tracking database and a SORN has been completed (SORN #A1145b) and may be accessed at the following website: <a href="http://dccid.defense.gov/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/570115/a1145b-ce.ascx">http://dccid.defense.gov/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/570115/a1145b-ce.ascx</a>

#### (ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

		5. DATE RECEIVED	4. DATE AFFLICATION COMPLETE		
(ITEMS BELOW TO BE	FILLED BY API	PLICANT)			
	8. AUTHORIZED AGENT'S NAME AND TITLE (agent is not required)				
Last - Marshall	First - Ericka	Middle -	Last - Naklicki		
Company - Tuckerton Borough		Company - T&M Associates			
om	E-mail Address - enaklicki@tandmassociates.com				
	9. AGENT'S ADDRESS:				
	Address- 11 Tindall Road				
o - 08087 Country - USA	City - Middle	town State - NJ	J Zip - 07748 Country - USA		
7. APPLICANT'S PHONE NOs. w/AREA CODE		10. AGENTS PHONE NOs. w/AREA CODE			
c. Fax	a. Residence	b. Business	c. Fax		
		732-671-6	400		
	(ITEMS BELOW TO BE I Last - Marshall om - 08087 Country - USA c. Fax	(ITEMS BELOW TO BE FILLED BY API   8. AUTHORIZ   Last - Marshall   First - Ericka   Company - T&   bm   E-mail Address   9. AGENT'S A   Address- 11 T   b- 08087 Country - USA   City - Middle   10. AGENTS F   a. Residence	INTERS BELOW TO BE FILLED BY APPLICANT)   8. AUTHORIZED AGENT'S NAME AN   Last - Marshall   First - Ericka Middle -   Company - T&M Associates   Demote Structure   9. AGENT'S ADDRESS:   Address - 11 Tindall Road   0- 08087 Country - USA   City - Middletown   State - N.   10. AGENTS PHONE NOS. w/AREA C   a. Residence b. Business   732-671-6		

		STATEMENT	OF AUTHORIZATION			
11 I hereby authorize,Ericka Naklickito act in my behalf as my agent in the processing of this application and to furn supplemental information in support of this permit application.					nish, upon request,	
	Si	SIGNATURE OF APPLI	Marchall CANT DATE			
	NAME,	LOCATION, AND DESC	RIPTION OF PROJECT OR AC	CTIVITY		
12. PROJECT NAME OR T South Green Street Shore	ITLE (see instructions) eline Protection					
13. NAME OF WATERBODY, IF KNOWN (if applicable) Fuckerton Cove		14. PROJECT STREET AD Address South Green St	DDRESS (if applicable)	_		
15. LOCATION OF PROJE	CT Longitude: •	W -069.8614840	City - Tuckerton	State- NJ	Zip- 08087	
6. OTHER LOCATION DE	SCRIPTIONS, IF KNOW	N (see instructions)				_
State Tax Parcel ID		Municipality Tu	ckerton			
Section -	Township -		Range -			

ENG FORM 4345, SEP 2017

17. DIRECTIONS TO THE SITE Take Garden State Parkway to E: Cove.	kit 58. Take Route 539 south. Route 539 turns	into South Green Street near Route 9. Take down to Tuckerton
18. Nature of Activity (Description of The proposed project involves the enlarge the beach area. The beach for the tide to flow into and out o	project, include all features) e construction of two stone breakwaters to pro a area will be restored with sand and the break f the beach area.	vide stabilization and assist in the natural accretion of sand to waters will be constructed outshore with open gaps to allow
19. Project Purpose (Describe the rea	ason or purpose of the project, see instructions)	
The goal of the project is to restor breakwaters will alleviate wave en natural accretion over time. The	e the shoreline of Tuckerton Cove to the originergy while also allowing the tide to flow in a stone structure can provide stabilization and h	nal shoreline as shown in historic aerials from the 1970s. The nd out. The sand will remain landward of the sill to allow the abitat for a variety of shellfish and other sessile organisms.
	SE BLOCKS 20-23 IF DREDGED AND/OR FILL M/	ATERIAL IS TO BE DISCHARGED
Shoreline stabilization and increas	se the size of beach area.	
24 Turo(a) of Material Baing Dischar		
Type	Type	Туре
Amount in Cubic Yards	Amount in Cubic Yards	Amount in Cubic Yards
Stone	Sand	
22. Surface Area in Acres of Wetlands Acres or Linear Feet	or Other Waters Filled (see instructions)	
23. Description of Avoidance, Minimiz The proposed project will minimiz natural accretion of water and sand be minimal and the stone will help	ation, and Compensation (see instructions) ze impacts to any natural habitats in the area b d back to the shoreline. The adjacent tidal ma o create habitat for shellfish and other sessile o	y designing the least invasive breakwater to allow for the rsh will not be impacted. The impact to subtidal shallows will organisms.

24. Is Any Portion of t	the Work Already Complete?	Yes No IF YES,	DESCRIBE THE COMPLE	ETED WORK	
25 Addresses of Adia	oining Property Owners, Lesse	es. Etc., Whose Property A	dioins the Waterbody (if mo	re than can be entered here, please at	tach a supplemental list)
a Address- Please re	efer to the FIS for the list of	f adjacent property own	erc		
		adjacent property own	CIS .		
City -		State -		Zip -	
b. Address-					
City_		State -		Zin -	
Oity -		State -		۲.h -	
c. Address-					
City -		State -		Zip -	
d. Address-					
City -		State -		Zip -	
e. Address-					
City -		State -		Zip -	
26. List of Other Certif	ficates or Approvals/Denials rec	eived from other Federal,	State, or Local Agencies for	or Work Described in This Ap	plication.
AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED
NJDEP	Coastal GP 24		concurrently		
* Would include but is r					
27. Application is herei	by made for permit or permits to	o authorize the work descr	ibed in this application. I c	ertify that this information in t	his application is
applicant.					
SIGNATU	Sank Marsha	DATE	SIGNATI		
The Application mus authorized agent if th	t be signed by the person w ne statement in block 11 has	ho desires to undertake s been filled out and sig	e the proposed activity ( ned.	applicant) or it may be sig	ned by a duly
18 U.S.C. Section 10	001 provides that: Whoever,	in any manner within th	ne jurisdiction of any de	partment or agency of the	United States
knowingly and willful	ly falsifies, conceals, or cover	ers up any trick, schem	e, or disguises a materia	al fact or makes any false,	fictitious or fraudulent
statements or entry,	shall be fined not more than	\$10,000 or imprisoned	I not more than five yea	rs or both.	



DEPARTMENT OF THE ARMY PHILADELPHIA DISTRICT, CORPS OF ENGINEERS WANAMAKER BUILDING, 100 PENN SQUARE EAST PHILADELPHIA, PENNSYLVANIA 19107-3390

October 18, 1995

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The statement should be as follows:

"The proposed activity complies with and will be conducted in a manner that is consistent with the approved State Coastal Zone Management Program."

Susan R. Marshell Signature of Applicant

Additional information concerning the approved Coastal Zone Management Programs can be obtained by contacting:

State of New Jersey

New Jersey Department of Environmental Protection Land Use Regulation Program CN 401 Trenton, New Jersey 08625-0401 Telephone Number - (609) 292-0060 Commonwealth of Pennsylvania

Pennsylvania Department of Environmental Protection Division of Coastal Programs P.O. Box 8555 Harrisburg, Pennsylvania 17105-8555 Telephone Number - (717) 787-2529

FRANK A. CIANFRANK Chief, Regulatory Branch



CERTIFIED MAIL- RETURN RECEIPT REQUESTED

#### DEPARTMENT OF THE ARMY PHILADELPHIA DISTRICT CORPS OF ENGINEERS WANAMAKER BUILDING, 100 PENN SQUARE EAST PHILADELPHIA, PENNSYLVANIA 19107-3390

MAY 1 4 2018

Regulatory Branch Application Section II

SUBJECT: CENAP-OP-R-2017-00775-95 (NWP 13) Township of Little Egg Harbor – Iowa Court Bank Stabilization at Great Bay, Township of Little Egg Harbor, Ocean County, New Jersey Latitude: 39.541906°N Longitude: -74.380022°W

Raymond Gormley Township of Little Egg Harbor 665 Radio Road Little Egg Harbor, NJ 08087

Dear Mr. Gormley:

This is in regard to your proposal to stabilize the shoreline of Great Bay at Iowa Court in the Township of Little Egg Harbor, Ocean County, New Jersey. Specifically, construction of an approximately 0.349-acre marsh sill comprised of 760-linear feet of timber sheeting, 2,260-cubic yards of stone fill, and 50-cubic yards of rip-rap stone revetment; and vegetative stabilization consisting of a discharge of approximately 2,625-cubic yards sand fill into of 0.721-acres of degraded tidal marsh, with subsequent plantings of native species, shall be undertaken.

Under current Federal regulations, a Department of the Army permit is required for work or structures in navigable waters of the United States and/or the discharge of dredged or fill material into waters of the United States including wetlands.

Based upon our review of the information you have provided, it has been determined that your project is approved by existing Department of the Army Nationwide Permit Number 13 (NWP 13) described below, provided the work is conducted in compliance with the NWP general conditions, regional conditions, and the project specific special conditions.

<u>NWP 13. Bank Stabilization</u>. Bank stabilization activities necessary for erosion control or prevention, such as vegetative stabilization, bioengineering, sills, rip rap, revetment, gabion baskets, stream barbs, and bulkheads, or combinations of bank stabilization techniques, provided the activity meets all of the following criteria:

(a) No material is placed in excess of the minimum needed for erosion protection;

(b) The activity is no more than 500 feet in length along the bank, unless the district engineer waives this criterion by making a written determination concluding that the discharge will result in no more than minimal adverse environmental effects (an exception

is for bulkheads—the district engineer cannot issue a waiver for a bulkhead that is greater than 1,000 feet in length along the bank);

(c) The activity will not exceed an average of one cubic yard per running foot, as measured along the length of the treated bank, below the plane of the ordinary high water mark or the high tide line, unless the district engineer waives this criterion by making a written determination concluding that the discharge will result in no more than minimal adverse environmental effects;

(d) The activity does not involve discharges of dredged or fill material into special aquatic sites, unless the district engineer waives this criterion by making a written determination concluding that the discharge will result in no more than minimal adverse environmental effects;

(c) No material is of a type, or is placed in any location, or in any manner, that will impair surface water flow into or out of any waters of the United States;

(f) No material is placed in a manner that will be eroded by normal or expected high flows (properly anchored native trees and treetops may be used in low energy areas);

(g) Native plants appropriate for current site conditions, including salinity, must be used for bioengineering or vegetative bank stabilization;

(h) The activity is not a stream channelization activity; and

(i) The activity must be properly maintained, which may require repairing it after severe storms or erosion events. This NWP authorizes those maintenance and repair activities if they require authorization.

This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to construct the bank stabilization activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. After construction, temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

**Notification:** The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if the bank stabilization activity: (1) Involves discharges into special aquatic sites; or (2) is in excess of 500 feet in length; or (3) will involve the discharge of greater than an average of one cubic yard per running foot as measured along the length of the treated bank, below the plane of the ordinary high water mark or the high tide line. (See general condition 32.)

[Authorities: Section 10 of the Rivers and Harbors Act of 1899 and section 404 of the Clean Water Act (Sections 10 and 404)]

You are advised that this verification of NWP authorization is valid until the Nationwide Permits expire on <u>March 18, 2022</u>, unless the NWP authorization is modified, suspended, or revoked prior to this date. In the event that the NWP authorization is modified during that time period, this expiration date will remain valid, provided the activity complies with any subsequent modification of the NWP authorization.

It is noted that CZM consistency from the State is only required for those activities in or affecting a State's coastal zone. Additionally, some of the NWPs do not involve a discharge of dredged or fill material, and as such, do not require a 401 WQC. If the State has denied the required WQC and/or not concurred with the Corps' CZM consistency determination, the NWP authorization is considered denied without prejudice until an individual project specific WQC and/or CZM approval is obtained.

The State of New Jersey has denied 401 WQC and has not concurred with CZM consistency during the issuance of Philadelphia District's regional conditions for NWP 13. Therefore, you are being directed to seek further review by the state in which they will attach the required Federal consistency determination and certification as part of their review as applicable. This approval must be obtained in order for the activity to be authorized under the NWP and a copy provided to this office before work begins. Any project specific conditions required by the State for the WQC and/or CZM approval will automatically become part of the NWP authorization.

The activities authorized by this NWP verification must comply with the NWP General Conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. A copy of the NWP General Conditions and the Philadelphia District 2017 NWP Regional Permit Conditions for New Jersey for which this verification is subject to, can be found at:

http://www.nap.usace.army.mil/Portals/39/docs/regulatory/publicnotices/2017%20Nationwide%2 0Permit%20General%20Conditions.pdf

http://www.nap.usacc.army.mil/Portals/39/docs/regulatory/publicnotices/2017\_NJ\_Reg\_Cond\_Final.pdf

In instances where you are unable to access a digital copy of the 2017 NWP General conditions and/or the 2017 NWP Regional Permit Conditions for New Jersey, a hard copy will be transmitted by registered mail to you per request. It is further noted that you may request a copy by email at any time in which the NWP General Conditions and Regional Permit Conditions will be provided to you by facsimile or other electronic means per your request.

Activities which have commenced (i.e, are under construction) or are under contract to commence in reliance upon an NWP will remain authorized provided the activity is completed within twelve months of the date of an NWP's expiration, modification, or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend, or revoke the authorization in accordance with 33 CFR 330.4(e) and 33 CFR 330.5 (c) or (d). Activities completed under the authorization of an NWP which was in effect at the time the activity was completed continue to be authorized by that NWP.

You should carefully note that this NWP authorization is based upon your agreement to comply with the terms and conditions of this NWP including any and all attached project specific special conditions listed below. Initiation of any authorized work shall constitute your agreement to comply with all of the NWP's conditions. You should also note that the authorized work may be subject to periodic inspections by a representative of this office. The verification of a Nationwide Permit including all general and special conditions is not subject to appeal.

## **PROJECT SPECIFIC SPECIAL CONDITIONS:**

1. All work performed in association with the above noted project shall be conducted in accordance with the attached project plans identified as E-1 through E-4, all prepared by T&M Associates; E-1 entitled "Plans for Iowa Court Living Shoreline", dated 28 March 2018; E-2 entitled "Site Plan", dated 25 April 2018; E-3 entitled "Landscaping Plan", dated 25 April 2018; and E-4 entitled "Construction Details", dated 25 April 2018.

2. Construction activities shall not result in the permanent disturbance or alteration of greater than <u>1.30-acres</u> of waters of the United States.

3. Any deviation in construction methodology or project design from that shown on the above noted drawings or repair plan must be approved by this office, in writing, prior to performance of the work. All modifications to the above noted project plans shall be approved, in writing, by this office. No work shall be performed prior to written approval of this office.

4. This office shall be notified prior to the commencement of authorized work by completing and signing the enclosed Notification/ Certification of Work Commencement Form (Enclosure 1). This office shall also be notified within 10 days of the completion of the authorized work by completing and signing the enclosed Notification/Certification of Work Completion/Compliance Form (Enclosure 2). All notifications required by this condition shall be in writing. The Notification of Commencement of work may be sent to this office by facsimile or other electronic means; all other notification shall be transmitted to this office by registered mail. Oral notifications are not acceptable. Similar notification is required each time maintenance work is to be done under the terms of this Corps of Engineers permit.

5. 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 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 or alteration.

6. To ensure compliance with Regional Condition -6 (G-6) to protect Essential Fish Habitat (EFH) species, their prey species, and/or their habitats, <u>in-water work shall NOT be performed</u>

between 01 January and 30 June of any given calendar year. Additionally, the permittee shall ensure that all structures installed within waters of the U.S. are constructed with non-polluting material, such as plastic, natural cedar or other untreated wood, polymer coated pressure-treated wood, concrete or other inert products. Examples of commonly used treated materials are creosote, pressure-treated lumber (i.e. preservative treatment such as CCA-C, ACZA, CC, ACQ, etc.) (wolmanized), which are susceptible to leaching and considered polluting materials, are <u>NOT</u> acceptable for the purpose of this permit.

7. The permittee shall ensure that visible signage and markings of in-water project structures and work areas are displayed in accordance with all applicable federal, state, and local regulations.

Also enclosed is a pre-addressed postal card (Enclosure 3) soliciting your comments on the processing of your application. Any comments, positive or otherwise, on the procedures, timeliness, fairness, etc., may be made on this card. If you should have any questions regarding this matter, please contact Mr. Robert Youhas of my staff at 215-656-6729 or write to the above address.

Sincercly,

Edward E. Bonner Chief, Regulatory Branch

Enclosures

# MEMORANDUM FOR RECORD

# SUBJECT: Department of the Army Memorandum Documenting General Permit Verification

- **1.0 Introduction and overview:** Information about the proposal subject to one or more of the Corps regulatory authorities is provided in Section 1, detailed evaluation of the activity is found in Sections 2 through 4 and findings are documented in Section 5 of this memorandum. Further, summary information about the activity including administrative history of actions taken during project evaluation is attached (ORM2 summary).
- 1.1 Applicant name:

Township of Little Egg Harbor Attn: Raymond Gormley 665 Radio Road Little Egg Harbor, NJ 08087

1.2 Activity location:

Great Bay at Iowa Court in the Township of Little Egg Harbor, Ocean County, New Jersey.

1.3 Description of activity requiring verification:

Stabilize the shoreline of Great Bay at Iowa Court in the Township of Little Egg Harbor, Ocean County, New Jersey. Specifically, construction of an approximately 0.349-acre marsh sill comprised of 760-linear feet of timber sheeting, 2,260-cubic yards of stone fill, and 50-cubic yards of rip-rap stone revetment; and vegetative stabilization consisting of a discharge of approximately 2,625-cubic yards sand fill into of 0.721-acres of degraded tidal marsh, with subsequent plantings of native species, was proposed to be undertaken.

- 1.4 Permit authority: Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) and Section 404 of the Clean Water Act (33 USC 1344)
- 1.5 Applicable Permit:

Nationwide General Permit Number 13 Bank Stabilization.

- 1.6 Activity requires written waiver? No
- 2.0 Evaluation of the Pre-Construction Notification
- 2.1 Direct and indirect effects caused by the GP activity:

Given the proposed in-water work comprised of stabilization of an eroded shoreline from scour action, direct and indirect effects are anticipated to be both minimal and temporary.

Direct effects would include acoustic and turbidity effects during bank stabilization activities. These direct effects would be temporary, with turbid conditions dissipating minutes after the conclusion of the in-water work activities; and acoustic effects terminating within seconds after work has been completed. No indirect effects are anticipated.

- 2.2 Site specific factors: The permit area is comprised predominantly of sand and silt. No special aquatic sites are present within the permit area. Submerged aquatic vegetation (SAV) is not known to be present within the permit area. According to the January 1963 Distribution of Shellfish Resources Map: "Little Egg Harbor to Longport", prepared by the New Jersey Department of Environmental Protection, the permit area is mapped for "moderate value commercial hard clam".
- 2.3 Coordination
- 2.3.1 Was the PCN coordinated with other agencies? No

If yes, describe results including resolution of any concerns. Not Applicable (N/A)

2.3.2 Was the PCN coordinated with other Corps offices? No

If yes, describe results including resolution of any concerns: N/A

- 2.4 Mitigation
- 2.4.1 Provide brief description of how the activity has been designed on-site to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site:

Avoidance and minimization measures for the project include restricting the permit area to the minimum area required to safely complete the shoreline stabilization work. Additionally, to minimize potential adverse effects to the aquatic environment, specifically Essential Fish Habitat, the following Special Condition will be included in the permit:

"To ensure compliance with Regional Condition – 6 (G-6) to protect Essential Fish Habitat (EFH) species, their prey species, and/or their habitats, in-water work shall NOT be performed between 01 January and 30 June of any given calendar year. Additionally, the permittee shall ensure that all structures installed within waters of the U.S. are constructed with non-polluting material, such as plastic, natural cedar or other untreated wood, polymer coated pressure-treated wood, concrete or other inert products. Examples of commonly used treated materials are creosote, pressuretreated lumber (i.e. preservative treatment such as CCA-C, ACZA, CC, ACQ, etc.) (wolmanized), which are susceptible to leaching and considered polluting materials, are NOT acceptable for the purpose of this permit."

2.4.2 Is compensatory mitigation required for unavoidable impacts to jurisdictional aquatic resources to reduce the individual and cumulative adverse environmental effects to a minimal level? No

Provide rationale:

USACE is not requiring compensatory mitigation for this project as impacts to waters of the U.S. will be temporary and have been minimized to the greatest extent practicable for completing the shoreline stabilization activities.

2.4.3 Type and location of compensatory mitigation

Is the impact in the service area of an approved mitigation bank? No

If yes, does the mitigation bank have appropriate number and resource type of credits available? N/A

Is the impact in the service area of an approved in-lieu fee program? N/A

If yes, does the in-lieu fee program have the appropriate number and resource type of credits available? N/A

Selected compensatory mitigation type/location(s): See Table 1

Table 1: Mitigation Type and Location	
Mitigation bank credits	
In-lieu fee program credits	
Permittee-responsible mitigation under a watershed approach	
Permittee-responsible mitigation, on-site and in-kind	
Permittee-responsible mitigation, off-site and/or out of kind	

Does the selected compensatory mitigation option deviate from the order of the options presented in 332.3(b)(2)-(6)? N/A

If yes, provide the rationale for the deviation, including the likelihood for ecological success and sustainability, location of the compensation site relative to the impact site and their significance within the watershed, and/or the costs of the compensatory mitigation project (see 33 CFR §332.3(a)(1)): N/A

2.4.4 Amount of compensatory mitigation: N/A

Rationale for required compensatory mitigation amount: N/A

2.4.5 For permittee responsible mitigation identified in 2.4.3 above, the final mitigation plan must include the items described in 33 CFR 332.4(c)(2) through (c)(14) at a level of detail commensurate with the scale and scope of the impacts. As an alternative, the district engineer may determine that it would be more appropriate to address any of the items described in (c)(2) through (c)(14) as permit conditions, instead of components of a compensatory mitigation plan. Presence of sufficient information related to each of these requirements in the applicant's mitigation plan is indicated by "Yes" in Table 2. "No" indicates absence or insufficient information in the plan, in which case, additional rationale must be provided below on how these requirements will be addressed through special conditions or why a special condition is not required.

Table 2: Permittee-Responsible Mitigation Plan Requirements		
Requirement	Yes	No
Objectives		
Site selection		
Site protection instrument		
Baseline information		
Determination of credits		
Mitigation work plan		
Maintenance plan		
Performance standards		
Monitoring requirements		
Long-term management plan		
Adaptive management plan		
Financial assurances		
Other		

For any "no", provide rationale on how the subject component(s) of the compentatory mitigation plan will be addressed as special conditions or why no special conditions are required: N/A

# 3.0 Compliance with Other Laws, Policies and Requirements

# 3.1 Section 7(a)(2) of the Endangered Species Act (ESA)

3.1.1 ESA action area:

The action area for ESA-managed species is aquatic-based only and comprises an approximately 1.30-acre area where the proposed shoreline stabilization activities are located. Aquatic-based ESA-managed species which may occur or transit across the permit include sea turtles and Atlantic sturgeon. A "Not Likely to Adversely Affect (NLAA) Program Verification Form" was not prepared for submittal to NMFS-Protected Resources Division (NMFS-PRD) as USACE determines that the work would have no effect to sea turtles or Atlantic sturgeon. USACE's determination is

based on the shallow water depths at the permit area of 1.63-feet Mean High Water and -1.59-feet Mean Low Water.

Given the relatively small permit area, the turbidity plume is anticipated to rapidly dissipate with localized turbidity effects confined to the immediate area of the shoreline stabilization work.

3.1.2 Has another federal agency taken steps to document compliance with Section 7 of the ESA and completed consultation(s) as required? No

If yes, identify that agency, the actions taken to document compliance with Section 7 and whether those actions are sufficient to ensure the activity(s) requiring DA authorization is in compliance with Section 7 of the ESA:

Additional consultation is necessary to ensure compliance of the regulated activity with Section 7 of the ESA.

3.1.3 Known species/critical habitat present? Yes

Aquatic-based ESA-managed species which may occur or transit across the permit area include sea turtles and Atlantic sturgeon.

Effect determination(s), including no effect, for all known species/habitat, and basis for determination(s):

Given the one-time shoreline stabilization work proposed, and the presence of alternate zones of passage which would effectively allow ESA-listed species to avoid the permit area and turbidity plume entirely, the Corps' determination is "no effect" for aquatic-based ESA-listed species.

3.1.4 Consultation with either the National Marine Fisheries Service and/or the U.S. Fish and Wildlife Service was initiated and completed as required, for any determinations other than "no effect" (see the attached "Summary" sheet for begin date, end date and closure method of the consultation). Based on a review of the information above, the Corps has determined that it has fulfilled its responsibilities under Section 7(a)(2) of the ESA.

# 3.2 Magnuson-Stevens Fishery Conservation and Management Act, Essential Fish Habitat (EFH)

3.2.1 Has another federal agency taken steps to comply with EFH provisions of Magnuson-Stevens Act? No

If yes, identify that agency, the actions taken to document compliance with the Magnuson-Stevens Act and whether those actions are sufficient to ensure the activity(s) requiring DA authorization is in compliance with the EFH provisions: Additional consultation is necessary to ensure compliance of the regulated activity with EFH provisions of the Magnuson Stevens Act.

- 3.2.2 Did the proposed project require review under the Magnuson-Stevens Act? Yes
- 3.2.3 If yes, EFH species or complexes considered:

Atlantic cod (adults) Red Hake (eggs, larvae, juveniles, adults) Winter Flounder (eggs, larvae, juveniles, adults) Windowpane Flounder (eggs, larvae, juveniles, adults) Atlantic Sea Herring (juveniles, adults) Monkfish (eggs, larvae, adults) Bluefish (juveniles, adults) Atlantic Butterfish (juveniles) Summer Flounder (larvae, juveniles, adults) Scup (juveniles) Black Sea Bass (juveniles, adults) King Mackerel (eggs, larvae, juveniles, adults) Spanish Mackerel (eggs, larvae, juveniles, adults) Cobia (eggs, larvae, juveniles, adults) Dusky Shark (larvae) Sandbar Shark (larvae, juveniles, adults) Tiger Shark (larvae)

Effect determination and basis for that determination:

The Corps' determination is the project may adversely affect EFH but any effects would not be substantial given the relatively small permit area, the temporary nature of the work, and the overall work scope being minor-in-nature. To minimize potential adverse effects to EFH, the following Special Condition will be included in the permit:

"To ensure compliance with Regional Condition – 6 (G-6) to protect Essential Fish Habitat (EFH) species, their prey species, and/or their habitats, in-water work shall NOT be performed between 01 January and 30 June of any given calendar year. Additionally, the permittee shall ensure that all structures installed within waters of the U.S. are constructed with non-polluting material, such as plastic, natural cedar or other untreated wood, polymer coated pressure-treated wood, concrete or other inert products. Examples of commonly used treated materials are creosote, pressuretreated lumber (i.e. preservative treatment such as CCA-C, ACZA, CC, ACQ, etc.) (wolmanized), which are susceptible to leaching and considered polluting materials, are NOT acceptable for the purpose of this permit." Based on a review of the above information, the Corps has determined that it has fulfilled its responsibilities under EFH provisions of the Magnuson-Stevens Act.

# 3.3 Section 106 of the National Historic Preservation Act (Section 106)

3.3.1 Section 106 permit area: The permit area includes only those areas comprising waters of the United States that will be directly affected by the proposed work or structures. Activities outside of waters of the U.S. are not included because all three tests identified in 33 CFR 325, Appendix C(g)(1) have not been met.

Final description of the permit area:

The permit area for the project is comprised of the permit area footprint where the shoreline stabilization work is proposed (approximately 1.3-acres).

3.3.2 Has another federal agency taken steps to comply with Section 106 of the National Historic Preservation Act and completed consultation(s) as required? No

If yes, identify that agency, the actions taken to document compliance with Section 106 and whether those actions are sufficient to ensure the activity(s) requiring DA authorization is in compliance with Section 106 of the NHPA: N/A

3.3.3 Known cultural resource sites present and/or survey or other additional information needed? No.

Basis for effect determination(s) for all known site(s) and/or site(s) identified by a survey:

Given that the proposed work is of such limited nature and scope, little likelihood exists for the proposed project to impact a cultural resource or historic property, none of which are known to exist within the permit area. The Township of Little Egg Harbor stated in their permit application that, "Based on NJDEP GIS maps and the New Jersey and National Registers of Historic Places for Ocean County, the project is not identified as containing historic resources. The proposed shoreline stabilization work does not involve any development which could impact any potential historic or archaeological resources."

3.3.4 Consultation was initiated and completed as required with the appropriate agencies, tribes and/or other parties for any determinations other than "no potential to cause effects" (see the attached "Summary" sheet for consultation type, begin date, end date and closure method of the consultation). The Corps has determined that it has fulfilled its responsibilities under Section 106 of the NHPA.

# 3.4 **Tribal Trust Responsibilities**

3.4.1 Was government-to-government consultation conducted with Federally-recognized Tribe(s)? No

Provide a description of any consultation(s) conducted including results and how concerns about significant effects to protected tribal resources, tribal rights and/or Indian lands were addressed. The Corps has determined that it has fulfilled its tribal trust responsibilities.

# 3.5 Section 401 of the Clean Water Act – Water Quality Certification (WQC)

3.5.1 Is a Section 401 WQC required, and if so, has the certification been issued or waived? An individual water quality certification is required, and has not been issued or waived to date. A provisional general permit will be verified for this activity.

# 3.6 **Coastal Zone Management Act (CZMA)**

3.6.1 Is a CZMA consistency concurrence required, and if so, has the concurrence been issued, waived or presumed? An individual CZMA consistency concurrence is required and has not been issued, waived or presumed to date. A provisional general permit will be verified for this activity.

# 3.7 Wild and Scenic Rivers Act

3.7.1 Is the project located in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system? No

If yes, summarize coordination and the determination on whether activity will adversely affect the Wild and Scenic River designation or study status. The Corps has determined that it has fulfilled its responsibilities under the Wild and Scenic Rivers Act.

# 3.8 Effects on Corps Civil Works Projects (33 USC 408)

3.8.1 Does the applicant also require permission under Section 14 of the Rivers and Harbors Act (33 USC 408) because the activity, in whole or in part, would alter, occupy, or use a Corps Civil Works project? No, there are no Corps Civil Works project(s) in or near the vicinity of the proposal.

If yes, provide date permission is provided: N/A

# 4.0 Special Conditions

4.1 Are special conditions required to ensure minimal effects, protect the public interest and/or ensure compliance of the activity with any of the laws above? Yes

If no, provide rationale: N/A

# 4.2 Required special condition(s)

Special Condition 1:

"All work performed in association with the above noted project shall be conducted in accordance with the attached project plans identified as E-1 through E-4, all prepared by T&M Associates; E-1 entitled "Plans for Iowa Court Living Shoreline", dated 28 March 2018; E-2 entitled "Site Plan", dated 25 April 2018; E-3 entitled "Landscaping Plan", dated 25 April 2018; and E-4 entitled "Construction Details", dated 25 April 2018."

Rationale for Special Condition 1:

This is a standard permit condition.

Special Condition 2:

"Construction activities shall not result in the permanent disturbance or alteration of greater than 1.30-acres of waters of the United States."

Rationale for Special Condition 2:

This is a standard permit condition which restricts the permittee to the minimum area required for completion of project activities.

Special Condition 3:

"Any deviation in construction methodology or project design from that shown on the above noted drawings or repair plan must be approved by this office, in writing, prior to performance of the work. All modifications to the above noted project plans shall be approved, in writing, by this office. No work shall be performed prior to written approval of this office."

Rationale for Special Condition 3:

This is a standard permit condition.

Special Condition 4:

"This office shall be notified prior to the commencement of authorized work by completing and signing the enclosed Notification/ Certification of Work Commencement Form (Enclosure 1). This office shall also be notified within 10 days of the completion of the authorized work by completing and signing the enclosed Notification/Certification of Work Completion/Compliance Form

(Enclosure 2). All notifications required by this condition shall be in writing. The Notification of Commencement of work may be sent to this office by facsimile or other electronic means; all other notification shall be transmitted to this office by registered

mail. Oral notifications are not acceptable. Similar notification is required each time maintenance work is to be done under the terms of this Corps of Engineers permit."

Rationale for Special Condition 4:

This is a standard permit condition.

Special Condition 5:

"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 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 or alteration."

Rationale for Special Condition 5:

This is a standard permit condition.

Special Condition 6:

"To ensure compliance with Regional Condition – 6 (G-6) to protect Essential Fish Habitat (EFH) species, their prey species, and/or their habitats, in-water work shall NOT be performed between 01 January and 30 June of any given calendar year. Additionally, the permittee shall ensure that all structures installed within waters of the U.S. are constructed with non-polluting material, such as plastic, natural cedar or other untreated wood, polymer coated pressure-treated wood, concrete or other inert products. Examples of commonly used treated materials are creosote, pressuretreated lumber (i.e. preservative treatment such as CCA-C, ACZA, CC, ACQ, etc.) (wolmanized), which are susceptible to leaching and considered polluting materials, are NOT acceptable for the purpose of this permit."

Rationale for Special Condition 6;

To protect the aquatic environment, and minimize, to the greatest extent practicable, effects to the habitats and various life stages of aquatic organisms.

Special Condition 7:

"The permittee shall ensure that visible signage and markings of in-water project structures and work areas are displayed in accordance with all applicable federal, state, and local regulations." Rationale for Special Condition 7:

This condition is included in the permit to make mariners visibly aware of in-water structures which may pose a navigation hazard.

# 5.0 Determination

- 5.1 Waiver request conclusion, if required or select N/A: N/A
- 5.2 The activity will result in no more than minimal individual and cumulative adverse effects on the aquatic environment and will not be contrary to the public interest, provided the permittee complies with the special conditions identified above.
- 5.3 This activity, as described, complies with all terms and conditions of the permits identified in Section 1.5.

# PREPARED BY:

Robert Youhas	
Biologist, Applications Section II	

**REVIEWED BY:** 

Date:\_\_\_\_\_

Date:\_\_\_\_\_

Michael H. Hayduk Chief, Applications Section II

# APPROVED BY:

Edward E. Bonner Chief, Regulatory Branch Date:\_\_\_\_\_



CERTIFIED MAIL- RETURN RECEIPT REQUESTED

DEPARTMENT OF THE ARMY PHILADELPHIA DISTRICT CORPS OF ENGINEERS WANAMAKER BUILDING, 100 PENN SQUARE EAST PHILADELPHIA, PENNSYLVANIA 19107-3390

# JUL 02 2018

Regulatory Branch Application Section II

SUBJECT: CENAP-OP-R-2018-00397-95 (NWP 13) Tuckerton Borough – Tuckerton Cove Shoreline Stabilization at South Green Street, Tuckerton Borough, Ocean County, New Jersey Latitude: 39.578364°N Longitude: -74.333149°W

Tuckerton Borough Attn: Susan Marshall 420 East Main Street Tuckerton, NJ 08087

Dear Ms. Marshall:

This is in regard to your proposal to stabilize the shoreline of Tuckerton Cove at South Green Street in Tuckerton Borough, Ocean County, New Jersey. Specifically, an approximately 225-foot long by 28-foot wide breakwater structure comprised of 885-cubic yards of stone rip-rap shall be constructed approximately 120-linear feet offshore from the existing plane of Mean High Water of Tuckerton Cove at South Green Street. Additionally, approximately 454-cubic yards of sand fill shall be discharged below the plane of Mean High Water along 0.07-acres of eroded shoreline at Tuckerton Cove at South Green Street.

Under current Federal regulations, a Department of the Army permit is required for work or structures in navigable waters of the United States and/or the discharge of dredged or fill material into waters of the United States including wetlands.

Based upon our review of the information you have provided, it has been determined that your project is approved by existing Department of the Army Nationwide Permit Number 13 (NWP 13) described below, provided the work is conducted in compliance with the NWP general conditions, regional conditions, and the project specific special conditions.

**<u>NWP 13. Bank Stabilization</u>**. Bank stabilization activities necessary for erosion control or prevention, such as vegetative stabilization, bioengineering, sills, rip rap, revetment, gabion baskets, stream barbs, and bulkheads, or combinations of bank stabilization techniques, provided the activity meets all of the following criteria:

(a) No material is placed in excess of the minimum needed for erosion protection;

(b) The activity is no more than 500 feet in length along the bank, unless the district engineer waives this criterion by making a written determination concluding that the discharge will result in no more than minimal adverse environmental effects (an exception

is for bulkheads—the district engineer cannot issue a waiver for a bulkhead that is greater than 1,000 feet in length along the bank);

(c) The activity will not exceed an average of one cubic yard per running foot, as measured along the length of the treated bank, below the plane of the ordinary high water mark or the high tide line, unless the district engineer waives this criterion by making a written determination concluding that the discharge will result in no more than minimal adverse environmental effects;

(d) The activity does not involve discharges of dredged or fill material into special aquatic sites, unless the district engineer waives this criterion by making a written determination concluding that the discharge will result in no more than minimal adverse environmental effects;

(e) No material is of a type, or is placed in any location, or in any manner, that will impair surface water flow into or out of any waters of the United States;

(f) No material is placed in a manner that will be eroded by normal or expected high flows (properly anchored native trees and treetops may be used in low energy areas);

(g) Native plants appropriate for current site conditions, including salinity, must be used for bioengineering or vegetative bank stabilization;

(h) The activity is not a stream channelization activity; and

(i) The activity must be properly maintained, which may require repairing it after severe storms or erosion events. This NWP authorizes those maintenance and repair activities if they require authorization.

This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to construct the bank stabilization activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be croded by expected high flows. After construction, temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

**Notification:** The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if the bank stabilization activity: (1) Involves discharges into special aquatic sites; or (2) is in excess of 500 feet in length; or (3) will involve the discharge of greater than an average of one cubic yard per running foot as measured along the length of the treated bank, below the plane of the ordinary high water mark or the high tide line. (See general condition 32.)

[Authorities: Section 10 of the Rivers and Harbors Act of 1899 and section 404 of the Clean Water Act (Sections 10 and 404)]

You are advised that this verification of NWP authorization is valid until the Nationwide Permits expire on <u>March 18, 2022</u>, unless the NWP authorization is modified, suspended, or revoked prior to this date. In the event that the NWP authorization is modified during that time period, this expiration date will remain valid, provided the activity complies with any subsequent modification of the NWP authorization.

It is noted that CZM consistency from the State is only required for those activities in or affecting a State's coastal zone. Additionally, some of the NWPs do not involve a discharge of dredged or fill material, and as such, do not require a 401 WQC. If the State has denied the required WQC and/or not concurred with the Corps' CZM consistency determination, the NWP authorization is considered denied without prejudice until an individual project specific WQC and/or CZM approval is obtained.

The State of New Jersey has denied 401 WQC and has not concurred with CZM consistency during the issuance of Philadelphia District's regional conditions for NWP 13. Therefore, you are being directed to seek further review by the state in which they will attach the required Federal consistency determination and certification as part of their review as applicable. This approval must be obtained in order for the activity to be authorized under the NWP and a copy provided to this office before work begins. Any project specific conditions required by the State for the WQC and/or CZM approval will automatically become part of the NWP authorization.

The activities authorized by this NWP verification must comply with the NWP General Conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. A copy of the NWP General Conditions and the Philadelphia District 2017 NWP Regional Permit Conditions for New Jersey for which this verification is subject to, can be found at:

http://www.nap.usace.army.mil/Portals/39/docs/regulatory/publicnotices/2017%20Nationwide%2 0Permit%20General%20Conditions.pdf

http://www.nap.usace.army.mil/Portals/39/docs/regulatory/publicnotices/2017\_NJ\_Reg\_Cond\_Final.pdf

In instances where you are unable to access a digital copy of the 2017 NWP General conditions and/or the 2017 NWP Regional Permit Conditions for New Jersey, a hard copy will be transmitted by registered mail to you per request. It is further noted that you may request a copy by email at any time in which the NWP General Conditions and Regional Permit Conditions will be provided to you by facsimile or other electronic means per your request.

Activities which have commenced (i.e, are under construction) or are under contract to commence in reliance upon an NWP will remain authorized provided the activity is completed within twelve months of the date of an NWP's expiration, modification, or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend, or revoke

the authorization in accordance with 33 CFR 330.4(e) and 33 CFR 330.5 (c) or (d). Activities completed under the authorization of an NWP which was in effect at the time the activity was completed continue to be authorized by that NWP.

You should carefully note that this NWP authorization is based upon your agreement to comply with the terms and conditions of this NWP including any and all attached project specific special conditions listed below. Initiation of any authorized work shall constitute your agreement to comply with all of the NWP's conditions. You should also note that the authorized work may be subject to periodic inspections by a representative of this office. The verification of a Nationwide Permit including all general and special conditions is not subject to appeal.

## **PROJECT SPECIFIC SPECIAL CONDITIONS:**

1. All work performed in association with the above noted project shall be conducted in accordance with the attached project plans identified as E-1 through E-10, all prepared by T&M Associates; E-1 entitled "Plans for South Green Street Living Shoreline", dated 18 May 2018; E-2 entitled "Existing Conditions", dated 21 May 2018; E-3 entitled "Construction Plan", dated 21 May 2018; E-4 entitled "Grading Plan", dated 21 May 2018; E-5 entitled "Cross Sections", dated 21 May 2018; E-6 also entitled "Cross Sections", dated 21 May 2018; and E-7 entitled "Construction Details", dated 18 May 2018.

2. Construction activities shall not result in the permanent disturbance or alteration of greater than <u>0.70-acres</u> of waters of the United States.

3. Any deviation in construction methodology or project design from that shown on the above noted drawings or repair plan must be approved by this office, in writing, prior to performance of the work. All modifications to the above noted project plans shall be approved, in writing, by this office. No work shall be performed prior to written approval of this office.

4. This office shall be notified prior to the commencement of authorized work by completing and signing the enclosed Notification/ Certification of Work Commencement Form (Enclosure 1). This office shall also be notified within 10 days of the completion of the authorized work by completing and signing the enclosed Notification/Certification of Work Completion/Compliance Form (Enclosure 2). All notifications required by this condition shall be in writing. The Notification of Commencement of work may be sent to this office by facsimile or other electronic means; all other notification shall be transmitted to this office by registered mail. Oral notifications are not acceptable. Similar notification is required each time maintenance work is to be done under the terms of this Corps of Engineers permit.

5. 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 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 or alteration. 6. To ensure compliance with Regional Condition -6 (G-6) for protection of Essential Fish Habitat (EFH) species, their prev species, and their habitats, <u>in-water work shall NOT be performed</u> between 01 January and 30 June of any given calendar year.

7. The permittee shall ensure that visible signage and markings of in-water project structures and work areas are displayed in accordance with all applicable federal, state, and local regulations.

Also enclosed is a pre-addressed postal card (Enclosure 3) soliciting your comments on the processing of your application. Any comments, positive or otherwise, on the procedures, timeliness, fairness, etc., may be made on this card. If you should have any questions regarding this matter, please contact Mr. Robert Youhas of my staff at 215-656-6729 or write to the above address.

Sincerely,

Edward E. Bonner Chief, Regulatory Branch

Enclosures

#### CENAP – R (File Number, NAP-OP-R-2018-00397-95)

## MEMORANDUM FOR RECORD

# SUBJECT: Department of the Army Memorandum Documenting General Permit Verification

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- **1.0 Introduction and overview:** Information about the proposal subject to one or more of the Corps regulatory authorities is provided in Section 1, detailed evaluation of the activity is found in Sections 2 through 4 and findings are documented in Section 5 of this memorandum. Further, summary information about the activity including administrative history of actions taken during project evaluation is attached (ORM2 summary).
- 1.1 Applicant name:

Tuckerton Borough Attn: Susan Marshall 420 East Main Street Tuckerton, New Jersey 08087

1.2 Activity location:

Tuckerton Cove at South Green Street in Tuckerton Borough, Ocean County, New Jersey

1.3 Description of activity requiring verification:

Stabilize the shoreline of Tuckerton Cove at South Green Street in Tuckerton Borough, Ocean County, New Jersey. Specifically, an approximately 225-foot long by 28-foot wide breakwater structure comprised of 885-cubic yards of stone rip-rap would be constructed approximately 120-linear feet offshore from the existing plane of Mean High Water of Tuckerton Cove at South Green Street. Additionally, approximately 454-cubic yards of sand fill would be discharged below the plane of Mean High Water along 0.07-acres of eroded shoreline at Tuckerton Cove at South Green Street.

- 1.4 Permit authority: Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) and Section 404 of the Clean Water Act (33 USC 1344)
- 1.5 Applicable Permit:

Nationwide General Permit Number 13 Bank Stabilization.

- 1.6 Activity requires written waiver? No
- 2.0 Evaluation of the Pre-Construction Notification
- 2.1 Direct and indirect effects caused by the GP activity:

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Given the proposed in-water work comprised of stabilization of an eroded shoreline from scour action, direct and indirect effects are anticipated to be both minimal and temporary.

Direct effects would include acoustic and turbidity effects during bank stabilization activities. These direct effects would be temporary, with turbid conditions dissipating minutes after the conclusion of the in-water work activities; and acoustic effects terminating within seconds after work has been completed.

No indirect effects are anticipated.

2.2 Site specific factors:

The permit area is comprised predominantly of sand and silt. No special aquatic sites are present within the permit area. Submerged aquatic vegetation (SAV) is not known to be present within the permit area. According to the January 1963 Distribution of Shellfish Resources Map: "Little Egg Harbor to Longport", prepared by the New Jersey Department of Environmental Protection, the permit area is mapped for "moderate value commercial hard clam".

- 2.3 Coordination
- 2.3.1 Was the PCN coordinated with other agencies? No

If yes, describe results including resolution of any concerns. Not Applicable (N/A)

2.3.2 Was the PCN coordinated with other Corps offices? No

If yes, describe results including resolution of any concerns: N/A

- 2.4 Mitigation
- 2.4.1 Provide brief description of how the activity has been designed on-site to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site:

Avoidance and minimization measures for the project include restricting the permit area to the minimum area required to safely complete the shoreline stabilization work. Additionally, to minimize potential adverse effects to the aquatic environment, specifically Essential Fish Habitat, the following Special Condition will be included in the permit:

"To ensure compliance with Regional Condition – 6 (G-6) to protect Essential Fish Habitat (EFH) species, their prey species, and/or their habitats, in-water work shall NOT be performed between 01 January and 30 June of any given calendar year." CENAP --- R (File Number, NAP-OP-R-2018-00397-95)

components of a compensatory mitigation plan. Presence of sufficient information related to each of these requirements in the applicant's mitigation plan is indicated by "Yes" in Table 2. "No" indicates absence or insufficient information in the plan, in which case, additional rationale must be provided below on how these requirements will be addressed through special conditions or why a special condition is not required.

Table 2: Permittee-Responsible Mitigation Plan Requir	Table 2: Permittee-Responsible Mitigation Plan Requirements		
Requirement	Yes	No	
Objectives			
Site selection			
Site protection instrument			
Baseline information			
Determination of credits			
Mitigation work plan			
Maintenance plan			
Performance standards			
Monitoring requirements			
Long-term management plan			
Adaptive management plan			
Financial assurances			
Other			

For any "no", provide rationale on how the subject component(s) of the compentatory mitigation plan will be addressed as special conditions or why no special conditions are required: N/A

## 3.0 Compliance with Other Laws, Policies and Requirements

## 3.1 Section 7(a)(2) of the Endangered Species Act (ESA)

## 3.1.1 ESA action area:

The action area for ESA-managed species is aquatic-based only and comprises an approximately 0.70-acre area where the proposed shoreline stabilization activities are located. Aquatic-based ESA-managed species which may occur or transit across the permit include sea turtles and Atlantic sturgeon. A "Not Likely to Adversely Affect (NLAA) Program Verification Form" was not prepared for submittal to NMFS-Protected Resources Division (NMFS-PRD) as USACE determines that the work would have no effect to sea turtles or Atlantic sturgeon. USACE's determination is based on the shallow water depths at the permit area of +1.08-feet Mean High Water (NAVD 88) and -1.08-feet Mean Low Water (NAVD 88).

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Also, given the relatively small permit area, the turbidity plume is anticipated to rapidly dissipate with localized turbidity effects confined to the immediate area of the shoreline stabilization work.

3.1.2 Has another federal agency taken steps to document compliance with Section 7 of the ESA and completed consultation(s) as required? No

If yes, identify that agency, the actions taken to document compliance with Section 7 and whether those actions are sufficient to ensure the activity(s) requiring DA authorization is in compliance with Section 7 of the ESA:

Additional consultation is necessary to ensure compliance of the regulated activity with Section 7 of the ESA.

3.1.3 Known species/critical habitat present? Yes

Aquatic-based ESA-managed species which may occur or transit across the permit area include sea turtles and Atlantic sturgeon.

Effect determination(s), including no effect, for all known species/habitat, and basis for determination(s):

Given the one-time shoreline stabilization work proposed, and the presence of alternate zones of passage which would effectively allow ESA-listed species to avoid the permit area and turbidity plume entirely, the Corps' determination is "no effect" for aquatic-based ESA-listed species.

3.1.4 Consultation with either the National Marine Fisheries Service and/or the U.S. Fish and Wildlife Service was initiated and completed as required, for any determinations other than "no effect" (see the attached "Summary" sheet for begin date, end date and closure method of the consultation). Based on a review of the information above, the Corps has determined that it has fulfilled its responsibilities under Section 7(a)(2) of the ESA.

# 3.2 Magnuson-Stevens Fishery Conservation and Management Act, Essential Fish Habitat (EFH)

3.2.1 Has another federal agency taken steps to comply with EFH provisions of Magnuson-Stevens Act? No

If yes, identify that agency, the actions taken to document compliance with the Magnuson-Stevens Act and whether those actions are sufficient to ensure the activity(s) requiring DA authorization is in compliance with the EFH provisions: Additional consultation is necessary to ensure compliance of the regulated activity with EFH provisions of the Magnuson Stevens Act.

3.2.2 Did the proposed project require review under the Magnuson-Stevens Act? Yes

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3.2.3 If yes, EFH species or complexes considered:

Atlantic cod (adults) Red Hake (eggs, larvae, juveniles) Winter Flounder (eggs, larvae, juveniles, adults) Windowpane Flounder (eggs, larvae, juveniles, adults) Atlantic Sea Herring (juveniles, adults) Bluefish (adults) Atlantic Butterfish (juveniles) Summer Flounder (larvae, juveniles, adults) Scup (juveniles) Black Sea Bass (juveniles, adults) King Mackerel (eggs, larvae, juveniles, adults) Spanish Mackerel (eggs, larvae, juveniles, adults) Cobia (eggs, larvae, juveniles, adults) Dusky Shark (larvae) Sandbar Shark (larvae, juveniles, adults)

Effect determination and basis for that determination:

The Corps' determination is the project may adversely affect EFH but any effects would not be substantial given the relatively small permit area, the temporary nature of the work, and the overall work scope being minor-in-nature. To minimize potential adverse effects to EFH, the following Special Condition will be included in the permit:

"To ensure compliance with Regional Condition – 6 (G-6) for protection of Essential Fish Habitat (EFH) species, their prey species, and their habitats, in-water work shall NOT be performed between 01 January and 30 June of any given calendar year."

Based on a review of the above information, the Corps has determined that it has fulfilled its responsibilities under EFH provisions of the Magnuson-Stevens Act.

## 3.3 Section 106 of the National Historic Preservation Act (Section 106)

3.3.1 Section 106 permit area: The permit area includes only those areas comprising waters of the United States that will be directly affected by the proposed work or structures. Activities outside of waters of the U.S. are not included because all three tests identified in 33 CFR 325, Appendix C(g)(1) have not been met.

Final description of the permit area:

The permit area for the project is comprised of the permit area footprint where the shoreline stabilization work is proposed (approximately 0.70-acres). The project's footprint is within the shoreline extent that existed in 1970.

3.3.2 Has another federal agency taken steps to comply with Section 106 of the National Historic Preservation Act and completed consultation(s) as required? No

If yes, identify that agency, the actions taken to document compliance with Section 106 and whether those actions are sufficient to ensure the activity(s) requiring DA authorization is in compliance with Section 106 of the NHPA: N/A

3.3.3 Known cultural resource sites present and/or survey or other additional information needed? No.

Basis for effect determination(s) for all known site(s) and/or site(s) identified by a survey:

USACE's determination is that, given that the proposed work is of such limited nature and scope, little likelihood exists for the proposed project to impact a cultural resource or historic property, none of which are known to exist within the permit area.

3.3.4 Consultation was initiated and completed as required with the appropriate agencies, tribes and/or other parties for any determinations other than "no potential to cause effects" (see the attached "Summary" sheet for consultation type, begin date, end date and closure method of the consultation). The Corps has determined that it has fulfilled its responsibilities under Section 106 of the NHPA.

## 3.4 **Tribal Trust Responsibilities**

3.4.1 Was government-to-government consultation conducted with Federally-recognized Tribe(s)? No Provide a description of any consultation(s) conducted including results and how concerns about significant effects to protected tribal resources, tribal rights and/or Indian lands were addressed. The Corps has determined that it has fulfilled its tribal trust responsibilities.

#### 3.5 Section 401 of the Clean Water Act – Water Quality Certification (WQC)

3.5.1 Is a Section 401 WQC required, and if so, has the certification been issued or waived? An individual water quality certification is required, and has not been issued or waived to date. A provisional general permit will be verified for this activity.

#### 3.6 **Coastal Zone Management Act (CZMA)**

3.6.1 Is a CZMA consistency concurrence required, and if so, has the concurrence been issued, waived or presumed? An individual CZMA consistency concurrence is required and has not been issued, waived or presumed to date. A provisional general permit will be verified for this activity.

## 3.7 Wild and Scenic Rivers Act

3.7.1 Is the project located in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system? No
If yes, summarize coordination and the determination on whether activity will adversely affect the Wild and Scenic River designation or study status. The Corps has determined that it has fulfilled its responsibilities under the Wild and Scenic Rivers Act.

#### 3.8 Effects on Corps Civil Works Projects (33 USC 408)

3.8.1 Does the applicant also require permission under Section 14 of the Rivers and Harbors Act (33 USC 408) because the activity, in whole or in part, would alter, occupy, or use a Corps Civil Works project? No, there are no Corps Civil Works project(s) in or near the vicinity of the proposal.

If yes, provide date permission is provided: N/A

#### 4.0 Special Conditions

4.1 Are special conditions required to ensure minimal effects, protect the public interest and/or ensure compliance of the activity with any of the laws above? Yes

If no, provide rationale: N/A

4.2 Required special condition(s)

Special Condition 1:

"All work performed in association with the above noted project shall be conducted in accordance with the attached project plans identified as E-1 through E-10, all prepared by T&M Associates; E-1 entitled "Plans for South Green Street Living Shoreline", dated 18 May 2018; E-2 entitled "Existing Conditions", dated 21 May 2018; E-3 entitled "Construction Plan", dated 21 May 2018; E-4 entitled "Grading Plan", dated 21 May 2018; E-5 entitled "Cross Sections", dated 21 May 2018; E-6 also entitled "Cross Sections", dated 21 May 2018; and E-7 entitled "Construction Details", dated 18 May 2018."

Rationale for Special Condition 1:

This is a standard permit condition.

Special Condition 2:

"Construction activities shall not result in the permanent disturbance or alteration of greater than 0.70-acres of waters of the United States."

Rationale for Special Condition 2:

This is a standard permit condition which restricts the permittee to the minimum area required for completion of project activities.

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Special Condition 3:

"Any deviation in construction methodology or project design from that shown on the above noted drawings or repair plan must be approved by this office, in writing, prior to performance of the work. All modifications to the above noted project plans shall be approved, in writing, by this office. No work shall be performed prior to written approval of this office."

Rationale for Special Condition 3:

This is a standard permit condition.

Special Condition 4:

"This office shall be notified prior to the commencement of authorized work by completing and signing the enclosed Notification/ Certification of Work Commencement Form (Enclosure 1). This office shall also be notified within 10 days of the completion of the authorized work by completing and signing the enclosed Notification/Certification of Work Completion/Compliance Form (Enclosure 2). All notifications required by this condition shall be in writing. The Notification of Commencement of work may be sent to this office by facsimile or other electronic means; all other notification shall be transmitted to this office by registered mail. Oral notifications are not acceptable. Similar notification is required each time maintenance work is to be done under the terms of this Corps of Engineers permit."

Rationale for Special Condition 4:

This is a standard permit condition.

Special Condition 5:

"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 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 or alteration."

Rationale for Special Condition 5:

This is a standard permit condition.

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**Special Condition 6:** 

"To ensure compliance with Regional Condition – 6 (G-6) to protect Essential Fish Habitat (EFH) species, their prey species, and/or their habitats, in-water work shall NOT be performed between 01 January and 30 June of any given calendar year."

Rationale for Special Condition 6;

To protect the aquatic environment, and minimize, to the greatest extent practicable, effects to the habitats and various life stages of aquatic organisms.

Special Condition 7:

"The permittee shall ensure that visible signage and markings of in-water project structures and work areas are displayed in accordance with all applicable federal, state, and local regulations."

Rationale for Special Condition 7:

This condition is included in the permit to make mariners visibly aware of in-water structures which may pose a navigation hazard.

#### 5.0 Determination

- 5.1 Waiver request conclusion, if required or select N/A: N/A
- 5.2 The activity will result in no more than minimal individual and cumulative adverse effects on the aquatic environment and will not be contrary to the public interest, provided the permittee complies with the special conditions identified above.
- 5.3 This activity, as described, complies with all terms and conditions of the permits identified in Section 1.5.

#### **PREPARED BY:**

Date: JUN 2 8 2018

Robert Youhas Biologist, Applications Section II

**REVIEWED BY:** 

HAYDUK.MICHAEL,H.1228903783 DN: C=US, GOVErnment, ou=DoD, ou=PKL, ou=USA, cn=HAYDUK.MICHAEL,H.1228903783 DX: C=US, GOVErnment, ou=DoD, ou=PKL, ou=USA, cn=HAYDUK.MICHAEL,H.1228903783

Date:\_

Michael H. Hayduk Chief, Applications Section II CENAP -- R (File Number, NAP-OP-R-2018-00397-95)

**APPROVED BY:** Edward E. Bonner

Chief, Regulatory Branch

Jene 28, 2018 Date:

#### STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF LAND USE REGULATION

Mail Code 501-02A, P.O. Box 420, Trenton, New Jersey 08625-0420



Telephone: (609) 777-0454 or Fax: (609) 777-3656

www.state.nj.us/dep/landuse



In accordance with the laws and regulations of the State of New Jersey, the Department of I grants this permit to perform the activities described below. This permit is revocable with limitations, terms and conditions listed below and on the attached pages. For the purpose of "approval, certification, registration, authorization, waiver, etc." Violation of any term, condition violation of the implementing rules and may subject the permittee to enforcement action.	Environmental Protection hereby due cause and is subject to the f this document, "permit" means on or limitation of this permit is a Description Date THE T 4 2023
Permit Number(s):Type of Approval(s):1500-17-0001.2 CZM170001Coastal Wetland Permit 24Water Quality Certificate	Enabling Statute(s): N.J.S.A. 13:19-1 et seq. CAFRA N.J.S.A. 12:5-3 WFD N.J.S.A. 58:10A WPCA
Permittee: Township of Little Egg Hathor	Site Locatiou: Project Location: Terminus of Iowa Court
665 Radio Road	<u>Block:</u> 326 Lot: 28.01
Little Egg Harbor, NJ	<u>Municipality:</u> Little Egg Harbor <u>County:</u> Ocean

#### **Description of Authorized Activities:**

This permit authorizes the establishment of a living shoreline at the terminus of Iowa Court. Specifically, this permit authorizes:

- The construction of a 15,215 square foot (0.349 acres) marsh sill that will consist of 2,260 cubic yards of stone and 760 linear feet of timber sheeting with stone on both sides of the sheeting. The total width of the marsh sill will be 20 feet.
- The restoration of 0.877 acres of coastal wetlands
- The impact of 0.179 acres of coastal wetlands for the installation of the marsh sill. Specifically, 0.027 acres for the placement of the stone sill and 0.15 acres for the placement of sand and subsequent planting of *Spartina alterniflora*.

Prior to ANY construction or site preparation for the portion of the project located below the high tide line, the permittee must obtain a Department of the Army authorization. You are advised to contact the Philadelphia District at (215) 656-6728. Please be advised that any changes to the approved plans would require a modification to this permit and shall be obtained prior to construction. This is not to be construed as a commitment to either approve or deny any future applications.

This project is authorized under and in conditional compliance with the applicable Coastal Zone Management Rules (N.J.A.C. 7:7-1.1 et seq.), as amended on January 16, 2018, including a Water Quality Certificate provided that all conditions are met.

Prepared by: <u>Jul Dornwall</u> Jill Aspinwall, Environmental Specialist 3	Received and/or Recorded by County Clerk:
THIS PERMIT IS NOT EFFECTIVE AND NO CONSTRUCTION APPROVED BY THIS PERMIT, OR OTHER REGULATED ACTIVITY, MAY BE UNDERTAKEN UNTIL THE APPLICANT HAS SATISFIED ALL PRE-CONSTRUCTION CONDITIONS AS SET FORTH HEREIN.	
This permit is not valid unless authorizing signature appears on the	a last nave.

#### **STANDARD CONDITIONS:**

- 1. The issuance of a permit shall in no way expose the State of New Jersey or the Department to liability for the sufficiency or correctness of the design of any construction or structure(s). Neither the State nor the Department shall, in any way, be liable for any loss of life or property that may occur by virtue of the activity or project conducted as authorized under a permit;
- 2. The issuance of a permit does not convey any property rights or any exclusive privilege;
- 3. The permittee shall obtain all applicable Federal, State, and local approvals prior to commencement of regulated activities authorized under a permit;
- 4. A permittee conducting an activity involving soil disturbance, the creation of drainage structures, or changes in natural contours shall obtain any required approvals from the Soil Conservation District having jurisdiction over the site;
- 5. The permittee shall take all reasonable steps to prevent, minimize, or correct any adverse impact on the environment resulting from activities conducted pursuant to the permit, or from noncompliance with the permit;
- 6. The permittee shall immediately inform the Department by telephone at (877) 927-6337 (Warn DEP Hotline) of any noncompliance that may endanger public health, safety, and welfare, or the environment. The permittee shall inform the Division of Land Use Regulation by telephone at (609) 292-0060 of any other noncompliance within two working days of the time the permittee becomes aware of the noncompliance, and in writing within five working days of the time the permittee becomes aware of the noncompliance. Such notice shall not, however, serve as a defense to enforcement action if the project is found to be in violation of this chapter. The written notice shall include:
  - i. A description of the noncompliance and its cause;
  - ii. The period of noncompliance, including exact dates and times;
  - iii. If the noncompliance has not been corrected, the anticipated length of time it is expected to continue; and
  - iv. The steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance;
- 7. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the authorized activity in order to maintain compliance with the conditions of the permit;
- 8. The issuance of a permit does not relinquish the State's tidelands ownership or claim to any portion of the subject property or adjacent properties;
- 9. The issuance of a permit does not relinquish public rights to access and use tidal waterways and their shores;
- 10. The permittee shall allow an authorized representative of the Department, upon the presentation of credentials, to:
  - i. Enter upon the permittee's premises where a regulated activity is located or conducted, or where records must be kept under the conditions of the permit;

- ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit; and
- iii. Inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. Failure to allow reasonable access under this paragraph shall be considered a violation of this chapter and subject the permittee to enforcement action under;
- 11. The permittee and its contractors and subcontractors shall comply with all conditions, site plans, and supporting documents approved by the permit;
- 12. All conditions, site plans, and supporting documents approved by a permit shall remain in full force and effect so long as the regulated activity or project, or any portion thereof, is in existence, unless the permit is modified;
- 13. For Coastal Permits the permittee shall record the permit, including all conditions listed therein, with the Office of the County Clerk (the Registrar of Deeds and Mortgages, if applicable) of each county in which the site is located. The permit shall be recorded within 30 calendar days of receipt by the permittee, unless the permit authorizes activities within two or more counties, in which case the permit shall be recorded within 90 calendar days of receipt. Upon completion of all recording, a copy of the recorded permit shall be forwarded to the Division of Land Use Regulation at the address set forth in the rules.
- 14. If any condition or permit is determined to be legally unenforceable, modifications and additional conditions may be imposed by the Department as necessary to protect public health, safety, and welfare, or the environment;
- 15. Any permit condition that does not establish a specific timeframe within which the condition must be satisfied (for example, prior to commencement of construction) shall be satisfied within six months of the effective date of the permit;
- 16. A copy of the permit and all approved site plans and supporting documents shall be maintained at the site at all times and made available to Department representatives or their designated agents immediately upon request;
- 17. A permit shall be transferred to another person only in accordance with the regulations;
- 18. A permit can be suspended or terminated by the Department for cause;
- 19. The submittal of a request to modify a permit by the permittee, or a notification of planned changes or anticipated noncompliance, does not stay any condition of a permit;
- 20. Where the permittee becomes aware that it failed to submit any relevant facts in an application, or submitted incorrect information in an application or in any report to the Department, it shall promptly submit such facts or information; and
- 21. The permittee shall submit written notification to the Bureau of Coastal and Land Use Compliance and Enforcement, 401 East State Street, 4th Floor, P.O. Box 420, Mail Code 401-04C, Trenton, NJ 08625, at least three working days prior to the commencement of regulated activities.
- 22. The permittee shall not cause or allow any unreasonable interference with the free flow of a regulated water by placing or dumping any materials, equipment, debris, or structures within or

adjacent to the channel while the regulated activity(ies) is being undertaken. Upon completion of the regulated activity(ies), the permittee shall remove and dispose of in a lawful manner, all excess materials, debris, equipment, and silt fences and other temporary soil erosion and sediment control devices from all regulated areas.

23. The regulated activity shall not destroy, jeopardize, or adversely modify a present or documented habitat for threatened or endangered species, and shall not jeopardize the continued existence of any local population of a threatened or endangered species;

#### **SPECIAL CONDITIONS:**

- 1. Prior to construction, the permittee shall receive a Tideland's Instrument. Issuance of this permit in no way relinquishes, and shall not be construed as a relinquishment by the State of New Jersey of any Tidelands right, title ownership/interest in the subject property or in any land surrounding the same. This permit is authorized under, and in compliance with the Coastal Zone Management Rules (N.J.A.C. 7:7 et. Seq.), as amended, provided that all conditions to follow are met.
- 2. All areas of temporary disturbance shall be restored to pre-existing condition and grade.
- 3. Within 60 days of completion of all activities hereby authorized by this permit, the permittee shall submit as-built plans to the Division of Land Use Regulation. Should it be necessary to implement adaptive management measures that differ from the project as shown on the approved plans, the permittee shall contact the Division for the appropriate authorization prior to construction. Following that notification, the Division will evaluate the proposed adaptive management measures pursuant to N.J.A.C. 7:7-27.5 and if it is determined that they meet the criteria of a technical modification, no permit application shall be required. In this situation Division authorization to proceed with the adaptive management measures will be issued to the permittee in writing or via electronic mail.
- 4. This authorization for a General Permit is valid for five years from the date of issuance. This authorization may be extended one time for five years, in accordance with the requirements at N.J.A.C. 7:7-3.7. All regulated activities being conducted pursuant to this authorization shall immediately cease on the date the authorization expires. If the authorization expires and the permittee intends to commence or continue the regulated activities, the permittee shall obtain a new authorization or permit under this chapter authorizing the regulated activities. The Department shall issue a new authorization only if the project is revised where necessary to comply with the requirements in effect when the application for the new authorization is declared complete for review.

#### APPROVED PLANS:

The approved project plans are referenced as: *Plans for Iowa Court Living Shoreline, Little Egg Harbor Township, Ocean County New Jersey.* The plans consists of pages one (1) through four (4), with sheet one entitled "Cover Sheet", sheet two entitled "Iowa Court Living Shoreline- Site Plan", sheet three entitled "Iowa Court Living Shoreline- Planting Plan", and sheet 4 entitled "Construction Details" all dated March 23, 2018 and revised April 24, 2018 and prepared by T&M Associates.

In accordance with the applicable regulations, any person who is aggrieved by this decision or any of the conditions of this permit may request an adjudicatory hearing within 30 calendar days after public notice of the decision is published in the DEP Bulletin. This request must include a completed copy of the Adjudicatory Hearing Request form. The DEP Bulletin is available through the Department's website at <a href="http://www.nj.gov/dep/bulletin">http://www.nj.gov/dep/bulletin</a> and the form is available through the Division's website at

<u>http://www.nj.gov/dep/landuse/download/lur\_024.pdf</u>. In addition to requesting a hearing, a request may be filed with the Department's Office of Dispute Resolution to determine whether the matter is suitable for mediation. Information concerning the dispute resolution process is available at <u>www.nj.gov/dep/odr</u>.

If you need clarification on any section of this permit or the conditions of this permit, please contact the Division of Land Use Regulation's Technical Support Call Center at (609) 777-0454.

Approved By:

David B. Fanz, Manager Land Use Management

Date

Original sent to Agent to record

c: Permittee

NJDEP Bureau of Coastal and Land Use Enforcement, Toms River NJDEP Natural Lands Trust, attention Bob Cartica Little Egg Harbor Township Municipal Clerk Little Egg Harbor Township Municipal Construction Official



#### STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF LAND USE REGULATION

Mail Code 501-02A, P.O. Box 420, Trenton, New Jersey 08625-0420 Telephone: (609) 633-2289 or Fax: (609) 777-3656

#### www.nj.gov/dep/landuse PERMIT



In accordance with the laws and regulations of the State o grants this permit to perform the activities described below limitations, terms and conditions listed below and on the a "approval, certification, registration, authorization, waiver, e violation of the implementing rules and may subject the perm	Approval Date AUG 0 2 2018 Expiration Date AUG 0 1 2023			
Permit Number(s): 1532-18-0002.1 CZM180001	Type of Approval(s): General Permit 24 Water Quality Certificate	Enabling Statute(s): N.J.S.A. 12:5-3 WFD N.J.S.A. 13:19-1 CAFRA N.J.S.A. 58:10A WPCA		
Permittee: Mayor Susan Marshall c/o Borough of Tuckerton 420 East Main Street Tuckerton, New Jersey 08087	Site Location:Project: South Green Street Living Shoreline ProjectProject Location: South Green StreetBlock: 45 & Ocean County ROWLot: 8 & Ocean CountyMunicipality: Borough of TuckertonCounty: Ocean			

**Description of Authorized Activities:** This permit authorizes the construction of a living shoreline along an eroded beach located on South Green Street in the Borough of Tuckerton. The living shoreline will consist of the construction of a 28' x 224.2' stone breakwater within Tuckerton Cove, the placement of 43 cubic yards of rip-rap slope protection along the roadway, and placement of 506 cubic yards of sand above and below the mean high water line on the existing eroded beach to restore the beach to the limits of the shoreline shown on the applicable 1977 Tidelands base map. The project is shown on the approved plans referenced on the last page of this permit.

This project is authorized under and in conditional compliance with the applicable Coastal Zone Management Rules (N.J.A.C. 7:7-1.1 et seq.), as amended on April 16, 2018, provided that all conditions to follow are met.

The work authorized by this permit is also subject to an Army Corps of Engineers Nationwide Permit 13 (NWP 13) CENAP-OP-R-2018-00397-95.

Prepared by: <u>Judjuf</u> Daus Lindsey J. Davis Environmental Scientist 2	Received and/or Recorded by County Clerk:
THIS PERMIT IS NOT EFFECTIVE AND NO CONSTRUCTION APPROVED BY THIS PERMIT, OR OTHER REGULATED ACTIVITY, MAY BE UNDERTAKEN UNTILTHE APPLICANT HAS SATISFIED ALL PRE-CONSTRUCTION CONDITIONS AS SET FORTH HEREIN.	
This permit is not valid unless authorizing signature appears on th	ie last page.

#### **SPECIAL CONDITIONS:**

- 1. Prior to any work below the mean high water line, the permittee must receive a Tidelands license for the structures and fill authorized under this permit. The new Tidelands license application is pending under file #1532-18-0002.1 TDI180001. Failure to comply with this condition will result in fines up to \$1000 plus \$100 per day, a higher fee for the conveyance and possible prosecution by the Attorney General's office to remove unauthorized structures and to pay use and occupancy charge.
- 2. In order to protect winter flounder and anadromous fish spawning activities, no work is permitted between January 1st and June 30th of the year. The Department reserves the right to suspend all regulated activities on site if it is determined that the applicant has not taken proper precautions to ensure continuous compliance with this condition.
- 3. The boundaries of the area where the structures are placed must be clearly marked in accordance with US Coast Guard requirements for regulatory and informational markers (US Coast Guard "U.S. Aids to Navigation System" <u>http://www.uscgboating.org/ATON/index.html</u>). Specifically, the corners of the footprint of the area where the structures are placed must be marked with buoys or stakes.
- 4. All structures must be constructed of nonpolluting materials such as natural cedar or other untreated wood, concrete, or other inert products. Creosote and CCA-treated lumber (a.k.a. pressure treated or wolmanized lumber) which is susceptible to leaching are considered polluting materials and are not acceptable.
- 5. Consistent with Assembly Bill, No. 2804, P.L. 2007, CHAPTER 113 the use of creosote treated material (or other descriptive term from the law) in the construction of the authorized structure(s) is prohibited.
- 6. The permittee is responsible for ensuring that the contractor and/or workers executing the activity(s) authorized by this permit have knowledge of the terms and conditions of the authorization and that a copy of this authorization is at the project site throughout the period the work is underway and available for review by any person.
- 7. The permittee shall, to the maximum extent practicable, design the project to employ methodologies that minimize the amount of ground disturbance to the existing beach face. This shall include items such as: limiting the number of access points utilized to enter/exit the project area, limiting movement of heavy machinery laterally along the waterfront, and removing debris in a manner that disturbs the surrounding sands in the least intrusive manner possible. These methodologies shall be incorporated into all project plans and documents.
- 8. All nourishment materials shall consist of clean sand fill (greater than 90 percent sand) of grain size comparable to the existing beach.
- 9. The authorized beach restoration must adhere to the requirements for beach restoration activities referenced in Subchapter 10 of the New Jersey Coastal Zone Management Rules at N.J.A.C 7:7-1.1 et seq.
- 10. All areas of temporary disturbance shall be restored to its pre-existing condition and grade.
- 11. This permit does not authorize dredging activities. If dredging is required in the future, a new Waterfront Development application showing compliance with Maintenance Dredging at N.J.A.C. 7:7-12.6 or New Dredging at N.J.A.C. 7:7-12.7 will be required to be submitted to this Division.

#### **STANDARD CONDITIONS:**

- 1. The permittee shall record the permit, including all conditions listed therein, with the Office of the County Clerk (the Registrar of Deeds and Mortgages, if applicable) of each county in which the site is located. The permit shall be recorded within 30 calendar days of receipt by the permittee. Upon completion of all recording, a copy of the recorded permit shall be forwarded to the Division of Land Use Regulation at the address listed on the first page of this permit.
- 2. The issuance of a permit shall in no way expose the State of New Jersey or the Department to liability for the sufficiency or correctness of the design of any construction or structure(s). Neither the State nor the Department shall, in any way, be liable for any loss of life or property that may occur by virtue of the activity or project conducted as authorized under a permit;
- 3. The issuance of a permit does not convey any property rights or any exclusive privilege;
- 4. The permittee shall obtain all applicable Federal, State, and local approvals prior to commencement of regulated activities authorized under a permit;
- 5. A permittee conducting an activity involving soil disturbance, the creation of drainage structures, or changes in natural contours shall obtain any required approvals from the Soil Conservation District having jurisdiction over the site;
- 6. The permittee shall take all reasonable steps to prevent, minimize, or correct any adverse impact on the environment resulting from activities conducted pursuant to the permit, or from noncompliance with the permit;
- 7. The permittee shall immediately inform the Department of any unanticipated adverse effects on the environment not described in the application or in the conditions of the permit. The Department may, upon discovery of such unanticipated adverse effects, and upon the failure of the permittee to submit a report thereon, notify the permittee of its intent to suspend the permit, pursuant to the regulations;
- 8. The issuance of a permit does not relinquish the State's tidelands ownership or claim to any portion of the subject property or adjacent properties;
- 9. The issuance of a permit does not relinquish public rights to access and use tidal waterways and their shores;
- 10. The permittee shall allow an authorized representative of the Department, upon the presentation of credentials, to:
  - i. Enter upon the permittee's premises where a regulated activity is located or conducted, or where records must be kept under the conditions of the permit;
  - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit; and
  - iii. Inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. Failure to allow reasonable access under this paragraph shall be considered a violation of this chapter and subject the permittee to enforcement action under;
- 11. All conditions, site plans, and supporting documents approved by a permit shall remain in full force and effect so long as the regulated activity or project, or any portion thereof, is in existence, unless the permit is modified;

- 12. If any condition or permit is determined to be legally unenforceable, modifications and additional conditions may be imposed by the Department as necessary to protect public health, safety, and welfare, or the environment;
- 13. A permit shall be transferred to another person only in accordance with the regulations;
- 14. A permit can be suspended or terminated by the Department for cause;
- 15. The submittal of a request to modify a permit by the permittee, or a notification of planned changes or anticipated noncompliance, does not stay any condition of a permit:
- 16. The permittee shall submit written notification to the Bureau of Coastal and Land Use Compliance and Enforcement, 401 East State Street, 4th Floor, P.O. Box 420, Mail Code 401-04C, Trenton, NJ 08625, at least three working days prior to the commencement of regulated activities;
- 17. The permittee shall not cause or allow any unreasonable interference with the free flow of a regulated water by placing or dumping any materials, equipment, debris, or structures within or adjacent to the channel while the regulated activity(ies) is being undertaken. Upon completion of the regulated activity(ies), the permittee shall remove and dispose of in a lawful manner, all excess materials, debris, equipment, and silt fences and other temporary soil erosion and sediment control devices from all regulated areas; and
- 18. The regulated activity shall not destroy, jeopardize, or adversely modify a present or documented habitat for threatened or endangered species, and shall not jeopardize the continued existence of any local population of a threatened or endangered species.

#### **ADDITIONAL CONDITION FOR A COASTAL PERMIT:**

1. This authorization for a General Permit is valid for five years from the date of issuance. This authorization may be extended one time for five years, in accordance with the requirements at N.J.A.C. 7:7-3.7. All regulated activities being conducted pursuant to this authorization shall immediately cease on the date the authorization expires. If the authorization expires and the permittee intends to commence or continue the regulated activities, the permittee shall obtain a new authorization or permit under this chapter authorizing the regulated activities. The Department shall issue a new authorization only if the project is revised where necessary to comply with the requirements in effect when the application for the new authorization is declared complete for review.

#### **APPROVED PLANS:**

The project is shown on plans in seven (7) sheets entitled "Plans For South Green Street Living Shoreline, Borough of Tuckerton, Ocean County, New Jersey", dated 5-18-2018, last revised on 7-2-2018, and prepared by Jason A. Worth, P.E. from T&M Associates.

If you need clarification on any section of this permit or conditions, please contact Lindsey J. Davis by email at Lindsey.Davis@dep.nj.gov or by phone at (609) 633-2289.

Approved By:

Ryan J. Anderson, Bureau Chief Bureau of Coastal Regulation Division of Land Use Regulation

Date

Original sent to Agent to record

c: Permittee

NJDEP Bureau of Coastal and Land Use Enforcement, Toms River Borough of Tuckerton Municipal Clerk Borough of Tuckerton Municipal Construction Official



### State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

PHILIP D. MURPHY Governor

SHEILA Y. OLIVER Lt. Governor Division of Land Use Regulation Bureau of Tidelands Management P.O. Box 420 Code 501-02B Trenton, NJ 08625-0420 Tel. # 609-777-0454 Fax # 609-777-3656

New Jersey Natural Lands Trust Attention: Robert J. Cartica Mail Code 501-04 Trenton, NJ 08625

SEP 12 2018

 RE: NEW JERSEY NATURAL LANDS TRUST, New License application, Great Bay, Lot 28.01, Block 326, Little Egg Harbor Township, Ocean County
 FILE: 1500-17-0001.2 TDI180001

Dear Mr. Cartica:

Please find the license document for the above-referenced property enclosed with this correspondence.

As stated in the license document, it is the responsibility of the licensee to submit the annual fee within thirty days of the yearly due date. The license contains a clause providing for an annual inflation adjustment of 2.5 percent.

Prior to the expiration of this license, the licensee is responsible for submitting an application to renew the license. The Tidelands Resource Council will review and may revise the annual fee at the time of renewal. Any changes in the annual license fee introduced after the expiration of this license will be retroactive to the date of termination.

This license will note that the State of New Jersey preserves their claim to areas outshore of the mean high water line at the start of the project in perpetuity.

The State of New Jersey may claim title to a portion of the property in-shore of the licensed area, and the state does not waive this claim by approving and issuing this license document.

Sincerely,

Be

Randy D. Bearce Manager Bureau of Tidelands Management

RDB/mm encl. cc: Ms. Erika Naklicki Principal Environmental Scientist T&M Associates 11 Tindall Road Middletown, NJ 07748

CATHERINE R. McCABE

Commissioner

#### File No. 1500-17-0001.2 TDI180001

#### **<u>REVOCABLE LICENSE</u>** A Rental Agreement from the State of New Jersey

The Tidelands Resource Council in the Department of Environmental Protection, empowered under N.J.S.A. 13:1B-13 to approve licenses of lands owned by the State of New Jersey that are now or were formerly under tidewater, having due regard for the public interest, has approved a license to **NEW JERSEY NATURAL LANDS TRUST**, hereafter referred to as the licensee(s).

The licensee(s) has applied for the right to rent an area of land now or formerly under tidewater in the Great Bay, out shore of Lot 28.01, Block 326 at Great Bay Boulevard in Little Egg Harbor Township, Ocean County, New Jersey.

The area to be licensed encompasses 48,287 square feet of currently flowed tidelands and is depicted on the plan entitled, "TOWNSHIP OF LITTLE EGG HARBOR, IOWA COURT LIVING SHORELINE, TOWNSHIP OF LITTLE EGG HARBOR, OCEAN COUNTY, NEW JERSEY, EXHIBIT MAP SHOWING PROPOSED TIDELANDS LICENSE & RIPARIAN GRANT AREA ALONG GREAT BAY", dated 6/20/18, prepared by Michael S. Finnegan, filed with the Bureau of Tidelands Management of the Department of Environmental Protection under file number 1500-17-001.2 TDI180001. Permit 1500-17-0001.2 CZM170001 authorized the establishment of a living shoreline at the terminus of Iowa Court. The proposed project involves the restoration of an eroded shoreline at Block 326, Lot 28.01, owned by NJ Natural Lands Trust.

The State of New Jersey preserves claim to areas outshore of the mean high water line at the start of the project in perpetnity.

The renewal of the license shall be in effect for a period of ten (10) years from JULY 11, 2018 to JULY 11, 2028. The fees due for each year of the license shall be as noted in Schedule A of this document.

The annual rental is due on July 11 in advance of each year of the license. All payments received thirty days after the due date shall be assessed a late fee of \$25.00. All fees or partial fees which remain past due for more than ninety days after said due date shall accrue interest at the rate set by the Tidelands Resource Council until received by the State. Additionally, if a check is returned for non-sufficient funds, a \$25.00 charge will be assessed to the licensee(s).

This license may be revoked at any time and for any purpose deemed necessary and reasonable by the Tidelands Resource Council in the Department of Environmental Protection.

The licensee(s) must either apply for an additional license renewal or remove all structures at the expiration of the said period of ten (10) years. The State of New Jersey is not bound to make any further renewal of the license. If a renewal is approved, a new annual fee may be fixed by the Department of Environmental Protection.

Should the license be revoked or should the licensee(s) fail to pay the fee for each year of the license or to renew the license by July 11, 2028, the licensee(s) must promptly vacate the tidelands at the licensee(s) expense, removing any and all structures to the satisfaction of the Department of Environmental Protection. Failure to appropriately vacate the tidelands may result in the filing of a lien against the licensee(s) property by the State of New Jersey.

Should the licensee(s) wish to make any alterations to the license area, the licensee(s) is required to apply for a license modification. If a modified license is approved, a new annual fee may be fixed by the Department of Environmental Protection.

This license may be assigned or otherwise transferred by the licensee(s) to any other person or persons with the written consent of the Manager of the Bureau of Tidelands Management of the Department of Environmental Protection. Forms are available from the Bureau for this purpose. The license must be assigned in the event that the licensee(s) sells the entirety of the adjacent upland prior to July 11, 2028. The annual fee will still be due should the license not be appropriately assigned.

The licensee(s) may not further improve or develop the licensed area unless a permit, as per N.J.S.A. 12:5-3, is obtained for that purpose. The licensee(s) may not appropriate the licensed area for exclusive use.

and I. Seam

Randy D. Bearce, Manager Bureau of Tidelands Management Divisiou of Land Use Regulation Department of Environmental Protectiou

12/2018

Date

Fee Year	Start Date	End Date	Fee Amouut
Year 1	7/11/2018	7/11/2019	\$100.00
Year 2	7/11/2019	7/11/2020	\$100.00
Year 3	7/11/2020	7/11/2021	\$100.00
Year 4	7/11/2021	7/11/2022	\$100.00
Year 5	7/11/2022	7/11/2023	\$100.00
Year 6	7/11/2023	7/11/2024	\$100.00
Year 7	7/11/2024	7/11/2025	\$100.00
Year 8	7/11/2025	7/11/2026	\$100.00
Year 9	7/11/2026	7/11/2027	\$100.00
Year 10	7/11/2027	7/11/2028	\$100.00
			1

#### <u>SCHEDULE A</u> Annual License Fees



#### State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

CATHERINE R. McCABE Commissioner

PHILIP D. MURPHY Governor

SHEILA Y. OLIVER Lt. Governor Division of Land Use Regulation Bureau of Tidelands Management P.O. Box 420 Trenton, NJ 08625-0420 Tel. # 609-777-0454 Fax # 609-777-3656

August 7, 2018

Borough of Tuckerton 420 East Main Street

Tuckerton, NJ 08087

AUG 1 5 2018

RE: BOROUGH OF TUCKERTON, New License application, Tuckerton Cove, Lot 8, Block 45, Tuckerton Borough, Ocean County

FILE: 1532-18-0002.1 TDI180001

Dear Applicant:

On August 7, 2018 the Bureau of Tidelands Management completed the review of the above-referenced application. A revocable ten-year license will be issued at a consideration of \$100.00 per year.

The bureau also assessed a single payment charge of \$100.00 for the processing of this application. The license is effective August 1, 2018.

The fees currently due for this license are as follows:

- 1) \$100.00 for the license consideration for the period August 1, 2018 to August 1, 2019.
- 2) \$100.00 for the license processing fee.

**Please do not send payment to the Bureau of Tidelands Management.** You will receive a bill(s) from the Department of Treasury. Payments must be received by Treasury along with the payment stub within thirty days of receipt of the bill(s). Once receipt of the payment has been recorded, the license will be processed for delivery.

Should you have any questions, please contact the Technical Support Center at (609) 777-0454.

Sincerely,

Melissa Ann Miller Environmental Specialist 3 Bureau of Tidelands Management

cc: Mrs. Ericka Naklicki, Principal Environmental Specialist
 T&M Associates
 11 Tindall Road
 Middletown, NJ 07748

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From: Jennifer Wallace <<u>Jennifer.Wallace@cardno.com</u>>
Sent: Wednesday, August 8, 2018 2:53 PM
To: Aspinwall, Jill; Fanz, Dave
Cc: Lynn Dwyer; West-Rosenthal, Jesse
Subject: RE: Iowa Court Permit

#### Good Afternoon Jill-

Thank you for sending. We will forward this information to the grantee to include in their project NEPA documentation.

Regards-Jennifer

Jennifer Wallace SENIOR PROJECT SCIENTIST CARDNO

Direct +1 703 927 3085 Address P.O. Box 162, Port Republic, Virginia 24471 Email jennifer.wallace@cardno.com Web www.cardno.com

This email and its attachments may contain confidential and/or privileged information for the sole use of the intended recipient(s). All electronically supplied data must be checked against an applicable hardcopy version which shall be the only document which Cardno warrants accuracy. If you are not the intended recipient, any use, distribution or copying of the information contained in this email and its attachments is strictly prohibited. If you have received this email in error, please email the sender by replying to this message and immediately delete and destroy any copies of this email and any attachments. The views or opinions expressed are the author's own and may not reflect the views or opinions of Cardno.

From: Aspinwall, Jill [mailto:Jill.Aspinwall@dep.nj.gov]
Sent: Wednesday, August 08, 2018 1:42 PM
To: Fanz, Dave <<u>Dave.Fanz@dep.nj.gov</u>>; Jennifer Wallace <<u>Jennifer.Wallace@cardno.com</u>>
Cc: Lynn Dwyer <<u>Lynn.Dwyer@NFWF.ORG</u>>; West-Rosenthal, Jesse <<u>Jesse.West-Rosenthal@dep.nj.gov</u>>
Subject: Iowa Court Permit

Jennifer,

Dave asked me to send you an email regarding compliance with SHPO for the IOWA Court permit.

On June 4, 2018 the Department issued a Coastal Wetland Permit 24 to the Township of little Egg Harbor to authorize activities associated with the establishment of a living shoreline at the terminus of Iowa Court, located in Little Egg Harbor, Ocean County New Jersey. In accordance with New Jersey Coastal Zone Management Rules, N.J.A.C. 7:7-9.34, the Department is required to make a finding that the permitted activity does not detract from, encroach upon, damage or destroy the value of any historic and archaeological resources. To make that finding the Division coordinates with the New Jersey Historic Preservation Office. In May of 2017 a complete permit application was forwarded to that office for review and comment. The results of that coordination can be found in the July 14, 2017 correspondence between Jesse West-Rosenthal (SHPO) and Jill Aspinwall (below). If you have any additional questions regarding this e-mail or that coordination please contact me at 609-984-9736.

HPO- F2017-080

#### HPO Project # 17-1415-1

Iowa Court

Hi Jill,

Thank you for providing the Historic Preservation Office (HPO) with the opportunity to review and comment on the potential for the above-referenced project to affect historic and archaeological resources. Based upon the documentation submitted, there are no buildings, structures, sites, objects, or historic districts on or adjacent to the project location that are listed on, or that have been identified as eligible for listing on the New Jersey or National Registers of Historic Places. Although the project setting is sensitive for archaeological resources, based upon a review of information on file at the HPO, the project only has a low potential for archaeological remains. Consequently, the HPO does not recommend further consideration prior to permit issuance. However, if additional archaeological remains are discovered during project implementation, further consultation with the HPO will be necessary

Thank you again for providing the opportunity to review this project.

If you have any questions, please feel free to contact me at 609-984-6019. If additional consultation with the HPO is needed for this undertaking, please reference the HPO project number 17-1415 in any future calls, emails, submissions or written correspondence to help expedite your review and response.

Sincerely, Jesse

From: Fanz, Dave <<u>Dave.Fanz@dep.nj.gov</u>>
Sent: Monday, January 29, 2018 1:23 PM
To: Jennifer Wallace <<u>Jennifer.Wallace@cardno.com</u>>
Cc: Brennen, Katelyn <<u>Katelyn.Brennen@dep.nj.gov</u>>; Lynn Dwyer <<u>Lynn.Dwyer@NFWF.ORG</u>>; West-Rosenthal, Jesse <<u>Jesse.West-Rosenthal@dep.nj.gov</u>>; Alek Modjeski <<u>Alek@littoralsociety.org</u>>
Subject: SHPO for 43429 ALS Creating a Resilient Delaware Bay Shoreline in Cape May and Cumberland Counties (NJ

Jennifer,

On September 13, 2017 the Department issued an Individual Waterfront Development permit and a Coastal General permit #24 to the American Littoral society to authorize activities associated with a wetland restoration project located at Thompsons Beach in Cumberland County New Jersey . In accordance with New Jersey Coastal Zone Management Rules, N.J.A.C. 7:7-9.34, the Department is required to make a finding that the permitted activity does not detract from, encroach upon, damage or destroy the value of any historic and archaeological resources. To make that finding the Division coordinates with the New Jersey Historic Preservation Office. In May of 2017 a complete permit application was forwarded to that office for review and comment. The results of that coordination can be found in the June 12, 2017 correspondence between Jesse West-Rosenthal (SHPO) and Katelyn Brennen (below). If you have any additional questions regarding this e-mail or that coordination please contact me at 609-280-9438.

Regards,

#### Jennifer Taylor

From: Sent: To: Cc: Subject: Ericka Naklicki <ENaklicki@tandmassociates.com> Thursday, August 09, 2018 11:08 AM Jennifer Taylor Jason Worth FW: South Green Street Shoreline Protection Project ; LUR File #1532-18-0002.1; HPO Project # 18-1295-1

Hi Jen, Below is South Green Street SHPO Consultation.

Let me know if you need anything else.

Thank you,



From: Davis, Lindsey <<u>Lindsey.Davis@dep.nj.gov</u>>
Sent: Thursday, August 9, 2018 11:04 AM
To: Ericka Naklicki <<u>ENaklicki@tandmassociates.com</u>>
Subject: FW: South Green Street Shoreline Protection Project ; LUR File #1532-18-0002.1; HPO Project # 18-1295-1

Hi Ericka, See below.

Lindsey

Lindsey J. Davis, M.S. Environmental Scientist 2 Bureau of Coastal Regulation Division of Land Use Regulation New Jersey Department of Environmental Protection Phone: (609) 633-2289 Fax: (609) 292-5399

From: West-Rosenthal, Jesse
Sent: Thursday, July 5, 2018 3:49 PM
To: Davis, Lindsey <<u>Lindsey.Davis@dep.nj.gov</u>>
Subject: South Green Street Shoreline Protection Project ; LUR File #1532-18-0002.1; HPO Project # 18-1295-1

HPO Project # 18-1295-1 HPO-G2018-036

Ocean County, Little Egg Harbor Township South Green Street Shoreline Protection Project Block 45, Lot 8 LUR File #1532-18-0002.1

Hi Lindsey,

Thank you for providing the Historic Preservation Office (HPO) with the opportunity to review and comment on the potential for the above-referenced project to affect historic and archaeological resources. Based upon the documentation submitted, there are no buildings, structures, sites, objects, or historic districts on or adjacent to the project location that are listed on, or that have been identified as eligible for listing on the New Jersey or National Registers of Historic Places. Although the project setting is sensitive for archaeological sites, based upon a review of information on file at the HPO, the project only has a low potential for archaeological remains. Consequently, the HPO does not recommend further consideration prior to permit issuance.

Thank you again for providing the opportunity to review this project.

If you have any questions, please feel free to contact me at 609-984-6019. If additional consultation with the HPO is needed for this undertaking, please reference the HPO project number 18-1295 in any future calls, emails, submissions or written correspondence to help expedite your review and response.

Sincerely, Jesse

\_\_\_\_\_

Jesse West-Rosenthal, M.A. | Historic Preservation Specialist 2 Historic Preservation Office | New Jersey Department of Environmental Protection 501 E. State Street | Mail Code 501-04B | PO Box 420 | Trenton, New Jersey 08625-0420 P: 609-984-6019 | F: (609) 984-0578 | Website: http://www.nj.gov/dep/hpo

#### NEW: LUCY Online Map Viewer

\*\* PLEASE NOTE: The HPO does not currently accept consultation requests for regulatory review via e-mail, at this time. All consultation requests must be submitted in hard copy via mail. \*\*





714 Lacey Road, Forked River, NJ 08731 Tel (609) 971-7002 Fax (609) 971-33 www.SoilDistrict.org

#### SOIL EROSION AND SEDIMENT CONTROL CERTIFICATION N.J.S.A. 4:24-39, ET. SEQ., CHAPTER 251, P.L.1975

**CERTIFICATION DATE: September 6, 2018** 

Little Egg Harbor Township 665 Radio Road Little Egg Harbor, NJ 08087

Re: SCD# 20037; Iowa Court Living Shoreline Project; Block 326, Lot 28.01; Iowa Court; Little Egg Harbor Township

Pursuant to Chapter 251, Soil Erosion and Sediment Control Act, P.L. 1975, the Ocean County Soil Conservation District, hereby, grants certification of the soil erosion and sediment control plan for the above-referenced project, subject to the following:

- 1. The applicant is required to schedule a pre-construction meeting with the District prior to the start of soil disturbance activities. The applicant must also notify the District, by mail or fax, at least 48 hours prior to initial land disturbance.
- 2. Any changes to the certified Soil Erosion and Sediment Control Plan will require the submission of a revised Soil Erosion and Sediment Control Plan to the District for review and approval.
- 3. The applicant must notify the District when the project is completed. <u>NOTE: No certificate of occupancy can be granted by a municipality until a report of compliance</u> is issued by the District.
- 4. The applicant must carry out all land disturbance activities in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey, promulgated by the State Soil Conservation Committee. A copy of the certified plan and a copy of these provisions must be kept on the job site at all times.
- 5. Any conveyance of the project (or portion thereof) will transfer full responsibility for compliance to subsequent owner(s). The District must be notified in writing of any change of ownership.
- 6. This certification is limited to the controls specified in this plan. It is not authorization to engage in the proposed land use unless such use has been previously approved by the municipality or other controlling agency. THIS CERTIFICATION SHALL EXPIRE IN 3-1/2 YEARS.

Failure to comply with any of the conditions listed may result in the issuance of a Stop Construction Order.

- <u>NOTE</u>: (1) All sediment spilled, dropped, washed or tracked onto roadways (public or private), or other impervious surfaces must be removed immediately.
- <u>NOTE</u>: (2) At the time of the final inspection you are required to provide confirmation that the proper type and amount of seed, lime and fertilizer have been used for permanent stabilization work.
- NOTE: (3) Additional Measures will be required if erosion problems develops.
- <u>NOTE</u>: (4) The revised Standards for Soil Erosion and Sediment Control in NJ require applicants to perform a soil test to determine the lime application rate prior to permanent stabilization.
- NOTE: (5) Certification for Iowa Court Living Shoreline only
- <u>NOTE</u>: (6) The District has determined that this project is not subject to the soil restoration requirements of the revised land grading standard.

Healthy Soil is at the Root of Every ShaPERVISOR

#### TEMPORARY AUTHORIZATION

#### NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION



Bureau of Nonpoint Pollution Control PO Box 029 Trenton, NJ 08625-0029 Phone: (609) 633-7021

Fax: (609) 984-2147

Payment Arrangement: Pay by Voucher Paid Online: No Paid On: N/A

This Authorization form is requested to be located at the regulated construction site at all times and be available for inspection by any authorized representative of the New Jersey Department of Environmental Protection. If you have designated an agent, it is your responsibility to notify your agent about this General Permit and its requirements.

#### AUTHORIZATION TO DISCHARGE 5G3 - Construction Activity Stormwater (GP)

To ensure compliance during the construction activity please print out the Stormwater Construction Permit terms and conditions at http://www.nj.gov/dep/dwq/pdf/5G3\_2017\_Final\_Permit.pdf

#### Project Name:

Iowa Court Living Shoreline Project

#### Facility Address:

Iowa Court Little Egg Harbor Twp (Ocean), NJ 08087

**Type of Activity:** Stormwater Discharge General Permit Authorization New **Owner:** Township of Little Egg Harbor 665 Radio Road Little Egg Harbor Twp (Ocean),NJ 08087

#### **Operating Entity:**

Township of Little Egg Harbor 665 Radio Road Little Egg Harbor Twp (Ocean),NJ 08087

> Issuance Date: 09/11/2018

Effective Date of Authorization: 09/11/2018

Your request for authorization under NJPDES General Permit No. NJ0088323 has been approved by the New Jersey Department of Environmental Protection.

Soil Conservation District - OCEAN 714 Lacey Road Forked River, NJ , 08731, (609) 971-7002

James J. Murphy, Chief Bureau of Nonpoint Pollution Control Division of Water Quality New Jersey Departement of Environmental Protection

Electronically certified by the responsible party, James Date: 09/11/2018 Oris on 09/11/2018

**PI ID#:** [N/A] **Portal ID#:** 845112

NJPDES#: [N/A]

Ocean County Soil Conservation District 714 Lacey Road Forked River, NJ 08731 609-971-7002 - phone 609-971-3391-fax www.solidistrict.org



For District	Use Only	
Application	Number	

#### APPLICATION FOR SOIL EROSION AND SEDIMENT CONTROL PLAN CERTIFICATION

The one-losed soil erosion and sediment control plan and supporting information are submitted for certification pursuant to the Soil Erosion and Sediment Control Act, Chapter 251, P.L. 1975 as amended (NJSA 4:24-39 et. seq.) An application for certification of a soil erosion and sediment control plan shall include the items listed on the reverse side of this form.

Name of Project Sout	South Green Street Living Shoreline Project Location: Municipality Tuckerton							
Project Street Address	South Green Street		Block	45		Lot 8		
Project (Owner(c) Name Borough of Tuckerton			E <b>meil</b> iglegho	figleghorn@tuckertonborough.con		Phone # 609-296-2701 Fax # 609-296-9247		
Project Owner(s) Street Address (No P.O. Box Numbers) 420 East Main Street			City	City Tuckerton			08087	
Total Area of Total Area or Land to be Disturbed (Acres) Project (Acres) .443 .443 Ac.			No. Dw	elling or other Units -0-		<b>1,235.00</b>		
Plane Propored by* Jason Worth, P.E.						Phone # 732 Fax # 732	-473-3400 -473-3408	
Street Address 114	4 Hooper Ave., Suit	e 202	City	Toms River		State NJ	Zip 08753	
(Engineering related storage	of the Soil Provide and Sectors Jacoby, in provide with NJ	ad Control Plan MUBT be pr AC 13:27-6.1 at and.)	epared by o	r under the danction (	of and be atting	d by a Protonition	Engineer or Architect	
Agent Responsible Durin Jason Wort	Construction h, P.E.				Email jworth(	@tandmass	ociates.com	
Storet Address	1144 Hooper	Avenue, Suite 202						
<b>City</b> Toms Rive	r Smp NJ	zip 08753	Phone	732-473-340	00 Fa	## 732-473	3-3408	
<ol> <li>To notify the District upon of accupancy can be gran District.</li> <li>To maintain a copy of the Che applicant heraby acknow and an and not for a potwith standing district cert wild only for the duration of listrict. In no case shall the sent fication is limited to the or other controlling agency. gurmant to the Open Public.</li> </ol>	a completion of the Project (No led until a report of compliance certified plan on the project sit violges that structural measures agoncy of structural design. Thi function of the subject soil arous the initial project approval gra- approval extend beyond three a controls specified in the plan. It it is further understood that all Recome Act. N.J.B.A. 47:1A-	te: No certificate is issued by the eduring construction. a contained in the Soil Erosion applicant shall retain full r fon and excliment control plan inted by the numeripality. All nd one half years at which in it is not authorization to engag documents, site plans, denied at 1991.	will tra- subset 6. To con- include incorpo- a and Sedim- suponnibility. . It is tender immedical incorpo- transferrational incorpo- transferrational incorpo- transferrational incorpo- transferrational incorpo- transferrational incorpo- transferrational incorpo- transferrational incorpo- transferrational incorpo- transferrational incorpo- transferrational incorpo- transferrational incorpo- incorpo- incorpo- subservational incorpo- subservational incorpo- subservational incorpo- incorpo- incorpo- incorpo- subservational incorpo-	nafer full responsibili- puest owners. apply with all terms as ing payment of all fee mated by reference. went Control Plan are : / for any damages wh retood that approval o recoverule of this proje- tion and certification nosed land use unless . . submitted to the dat	ity for complian ad conditions of a prescribed by roviewed for ad deb naw result of the plan subm of will be require will be require such use has be strict shall be re	nce with the certil f this application of the detrict for a from any constru- mitted with this ap submission and a d. Soil Enusion at an previously app and a veilable to d	fied plan to any and certified plan chedule hareby coffsite soil eronion and otion activity optication shall be optication shall be optication by the ad Sadiment Control Plan proved by the numicipality he public (upon request)	
1. Applicant Certification SUSANK, Signature	marshall Mart	<u>August 10,2018</u>	3, Plan	determined complete	(			
Applicant Name (Print)	the second secon	4	Şign	ature of District Offic			Data	
2. Receipt of the, plan and	supporting documents is herei	y scimowledged:	A. Plan c	artified, denied or of	per actions note	nt aboys, Special	Remarke:	
Signature of District O	ficial		Sign	stare of District Offic	ial		Date	
to serve and bealess and	, written semiorization of ov	ARE MART DE BERCHAR					CAL APTO 1/2014	

# PLANS FOR IOWA COURT & SOUTH GREEN STREET LIVING SHORELINES PROJECT

### LITTLE EGG HARBOR GOVERNING BODY

#### MAYOR:

DEPUTY MAYOR: TOWNSHIP COMMITTEE:

TOWNSHIP ADMINISTRATOR: TOWNSHIP CLERK: TOWNSHIP ATTORNEY: CONTACT INFORMATION:

BARBARA JO CREA JOHN KEHM, JR. DAVID SCHLICK

RAY GORMLEY

LISA STEVENS

MATTHEW J. SPADACCINI

DIANA MCCRACKEN, RMC

WEB' WWW LEHT COM

JEAN CIPRIANI, ESQ.

665 RADIO ROAD LITTLE EGG HARBOR, NJ 08087 PHONE: (609) 296-7241

### **TUCKERTON BOROUGH** GOVERNING BODY

MAYOR:

COUNCIL PRESIDENT: COUNCIL MEMBERS:

BOROUGH CLERK:

BOROUGH ATTORNEY:

CONTACT INFORMATION:

SUSAN R. MARSHAL

SAM COLANGELO

**KEITH VREELAND** 

DORIS MATHISEN RON PETERSON MIKE SANTO JOHN SCHWARTZ

JENNY GLEGHORN, RMC

CHRISTOPHER CONNORS, ESQ.

420 EAST MAIN STREET TUCKERTON, NJ 08087 PHONE: (609) 296-2701 WEB: WWW TUCKERTONBOROUGH COM

## UTILITY OWNERS

ELECTRIC ATLANTIC CITY ELECTRIC P.O. BOX 231

WILLMINGTON, DE 19899 (800) 833-7467 (EMERGENCY) (800) 642-3780 (CUSTOMER SERVICE)

NEW JERSEY NATURAL GAS 775 VASSAR AVENUE LAKEWOOD, NJ 08701 (800) 427-5325 (GAS LEAK) (800) 221-0051 (CUSTOMER SERVICE)

<u>CABLE</u> COMCAST 751 BRICK BOULEVARD

BRICK, NJ 08723 (732) 920-2288 (CUSTOMER SERVICE) TELEPHONE AT&T 175 WEST MAIN STREET FREEHOLD, NJ 07728 (732) 431-1275 TELEPHONE VERIZON 5100 BELMAR BOULEVARD FARMINGDALE, NJ 07727 (800) 427-9977

WATER & SEWER LITTLE EGG HARBOR MUNICIPAL UTILITIES AUTHORITY 823 RADIO ROAD LITTLE EGG HARBOR, NJ 08087 (609) 296-1168 (MAIN OFFICE) (609) 296-7606 (SERVICE)

LOCATION OF UTILITIES SHOWN ON THESE PLANS ARE NOT WARRANTED AS TO EXACTNESS. CONTRACTOR SHALL DETERMINE EXACT LOCATION AND DEPTH OF UTILITIES PRIOR TO CONSTRUCTION IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND OTHER APPLICABLE LAWS.

### PRIOR TO DIGGING CALL 1-800-272-1000



Call before you dig.



# PROJ FILE LAST REUSE ROJECT T&M RAR 빌표 FOR ALL REOF, D, WI

# LITTLE EGG HARBOR TOWNSHIP & BOROUGH OF TUCKERTON OCEAN COUNTY, NEW JERSEY

CONTRACT No. LEHT-01730

PREPARED BY JASON A. WORTH, P.E.

## **TOWNSHIP ENGINEER**



TOMS RIVER, NJ 08753 TEL 732-473-3400 FAX 732-473-3408

NEW JERSEY BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS CERTIFICATE OF AUTHORIZATION 24GA27987500

INDEX					
SHEET NO.	DESCRIPTION	DWG NO.			
1	COVER	CVR-1			
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4	IOWA COURT - CONSTRUCTION PLAN & GRADING PLAN	CSP-1			
5	IOWA COURT - LANDSCAPING PLAN	LSP-1			
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# DISTRIBUTION OF QUANTITIES BASE BID 'A' - IOWA COURT

ITEM			ITEM	IOWA CT	SUB	IF &	TOTAL
No.	ITEM DESCRIPTION	UNIT	DESIGNATION	SHEETS 4 & 5	TOTAL	WHERE	QUANTITY
1	MOBILIZATION	L.S.	(M)	1	1	_	1
2	SITE WORK	L.S.	(M)	1	1	_	1
3	MAINTENANCE AND PROTECTION OF TRAFFIC	L.S.	(M)	1	1	_	1
4	SOIL EROSION AND SEDIMENT CONTROL	L.S.	(M)	1	1	_	1
5	PREPARATION OF SUBGRADE (STONE SILL)	S.Y.	(M)	1705	1,705	_	1,705
6	SOIL AGGREGATE, DESIGNATION I-4	C.Y.	(M)	575	575	_	575
7	1" CRUSHED STONE, 8" THICK	S.Y.	(M)	1705	1,705	_	1,705
8	RIP-RAP, 50-150 LBS, 12-24" THICK	C.Y.	(M)	460	460	40	500
9	CAPSTONE, VARIOUS SIZES	TON	(M)	2050	2,050	50	2,100
10	TIMBER SHEETING, 20' LONG	L.F.	(M)	770	770	_	770
11	TIMBER PILINGS, 10" TIP, NATURAL TAPER, 30' LONG (RENDERED NON-POLLUTING) WITH SIGNAGE	UNIT	(M)	9	9	_	9
12	RIP-RAP APRON SCOUR PROTECTION (STONE SILL)	C.Y.	(M)	70	70	10	80
13	BEACH SAND FILL	C.Y.	(M)	2665	2,665	_	2,665
14	EXCAVATION, UNCLASSIFIED (ROADWAY)	C.Y.	(M)	170	170	_	170
15	D.G.A. BASE COURSE, 6" THICK	S.Y.	(M)	610	610	_	610
16	HMA 19M64 BASE COURSE, 2.5" THICK	TON	(M)	95	95	_	95
17	TACK COAT 64-22	GAL	(M)	85	85	_	85
18	HMA 9.5M64 SURFACE COURSE, 1.5" THICK	TON	(M)	55	55	_	55
19	RIP-RAP STONE STABILIZATION (ROADWAY)	C.Y.	(M)	28	28	5	33
20	BENCH	UNIT	(M)	1	1	—	1
21	PUBLIC EDUCATION SIGN	UNIT	(M)	1	1	_	1
22	TRAFFIC STRIPES, LONG-LIFE, EPOXY RESON, 4"	L.F.	(M)	35	35	_	35
23	HMA DRIVEWAY, 3" THICK	S.Y.	(M)	12	12	_	12
24	PAVER DRIVEWAY	S.Y.	(M)	12	12	_	12
25	SPARTINA ALTERNIFLORA (2" PLUG)	UNIT	(M)	16125	16,125	—	16,125
26	SPARTINA PATENS (2" PLUG)	UNIT	(M)	5425	5,425	_	5,425
27	DEMOBILIZATION AND SITE RESTORATION	L.S.	(M)	1	1	_	1
28	POST-CONSTRUCTION AS-BUILT SURVEY	L.S.	(M)	1	1	_	1

#### PROJECT NOTES

- BEEN PROVIDED BY NJDEP BUREAU OF COASTAL ENGINEERING USING NOAA VDATUM 3.4 SOFTWARE. ALSO USED AS A REFERENCE WAS TIDAL 855-7380 LEWER, FORT MILES, DE.
- HORIZONTAL SYSTEM IS NAD 1983 COORDINATE SYSTEM AND VERTICAL DATUM IS NAVD 1988.
- 3. THE TOPSOIL USED FOR THIS PROJECT SHALL BE IN STRICT MEETING THE ENGINEER'S APPROVAL SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
- 4. CONTRACTOR SHALL ESTABLISH A FULL STAND OF GRASS WITH NO PATCHES, CRABGRASS OR WEEDS.
- 5. CONTRACTOR SHALL SUBMIT SEED BAG TICKETS TO THE ENGINEER FOR 18. THE CONTRACTOR SHALL MANAGE THE DISPOSAL OF EXCESS MATERIALS APPROVAL PRIOR TO PLACING SEED.
- 6. EXISTING UTILITY INFORMATION SHOWN HEREON HAS BEEN COLLECTED FROM VARIOUS SOURCES AND IS NOT GUARANTEED AS TO ACCURACY OR COMPLETENESS. THE CONTRACTOR SHALL CONTACT THE SAFE DIG PRIOR TO ANY EXCAVATION. WHERE EXISTING UTILITIES ARE TO BE CROSSED BY PROPOSED CONSTRUCTION, TEST PITS SHALL BE DUG BY THE CONTRACTOR TO ASCERTAIN EXISTING INVERTS, MATERIALS AND SIZES. TEST PIT INFORMATION SHALL BE GIVEN TO THE ENGINEER PRIOR TO CONSTRUCTION TO PERMIT ADJUSTMENTS AS MAY BE REQUIRED TO AVOID UTILITY CONFLICTS.
- DO NOT MARK-OUT THEIR FACILITIES, THE CONTRACTOR SHALL ENGAGE THE SERVICES OF A NON-DESTRUCTIVE UNDERGROUND UTILITY LOCATION SERVICE. NO SEPARATE PAYMENT WILL BE MADE FOR THIS SERVICE. INCLUDE ALL COSTS IN THE "SITE WORK" ITEM.
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE ALL UTILITIES AND USE CAUTION WHEN DIGGING FOR UTILITIES. EXISTING UTILITIES SHALL BE EXPOSED BY HAND DIGGING AND SUPPORTED TO AVOID DAMAGE. SUPPORTS SHALL BE PROVIDED AT ALL UTILITY CROSSINGS. UTILITY SUPPORT DETAILS SHALL BE REVIEWED AND APPROVED BY THE APPROPRIATE UTILITY OWNER PRIOR TO INSTALLATION. NO SEPARATE PAYMENT.
- 9. THE CONTRACTOR SHALL NOT ORDER ANY MATERIALS UNTIL ALL TEST PITS HAVE BEEN EXCAVATED AND ANALYZED.
- 10. CONTRACTOR SHALL PROVIDE TEMPORARY RESTRAINT OF ALL EXISTING 22. CONTRACTOR SHALL PROVIDE PROTECTION AND SUPPORT TO UTILITY PIPE AND APPURTENANCES DISTURBED DURING CONSTRUCTION. NO SEPARATE PAYMENT WILL BE MADE FOR THIS SERVICE. INCLUDE ALL COSTS IN THE VARIOUS ITEMS IN THE PROPOSAL.
- 11. NO EXCAVATION SHALL BE LEFT OVERNIGHT. TRENCHES SHALL BE 23. CONTRACTOR SHALL PROVIDE TEMPORARY RESTRAINT OF ALL EXISTING BACKFILLED AT THE END OF THE DAY. NO SEPARATE PAYMENT.
- 12. NO CONSTRUCTION ACTIVITY IS TO TAKE PLACE OUTSIDE THE LIMIT OF 24. NO MATERIALS OR EQUIPMENT, INCLUDING EXCAVATED SOILS AND DISTURBANCE.
- 13. ON IOWA COURT, CONTRACTOR SHALL, AT LIMIT OF PAVING, MILL 6' WIDE KEY 1 1/2" AVERAGE DEPTH OR SAWCUT EXISTING PAVEMENT FOR NEAT STRAIGHT LINE UNLESS OTHERWISE DIRECTED. ALL KEYWAYS SHALL HAVE A SAWCUT, VERTICAL EDGE. MEET EXISTING GRADE AT OUTER LIMIT OF MILLING.
- 14. TACK COAT SHALL BE IN ACCORDANCE WITH NJDOT SPECIFICATION SECTION 401.03.02.

- PLANIMETRIC AND TOPOGRAPHIC FEATURES SHOWN HEREON HAVE 15. CONTRACTOR SHALL CLEAN AND SWEEP AND TACK THE PAVEMENT 25. STAGING AREAS SHALL BE USED TO IMMEDIATELY PRIOR TO APPLYING SURFACE COURSE. STOCKPILES AND MATERIALS SHALL BE CONSOLIDATED AT THE END OF APPROVAL PRIOR TO PLACING SEED. EACH WORK DAY.
- DATUM 853-4244 GRAVELING POINT, NJ BENCHMARK CONTROL STATION 16. INSTALLATION OF HOT MIX ASPHALT SURFACE COURSE SHALL NOT BE PERMITTED UNTIL THE BASE COURSE IS APPROVED BY THE ENGINEER. THE ENGINEER MAY DIRECT THE CONTRACTOR TO MAKE CORRECTIVE MEASURES TO THE BASE COURSE PRIOR TO THE INSTALLATION OF THE SURFACE COURSE AT NO ADDITIONAL COST TO THE OWNER.
- CONFORMANCE TO THE PROJECT SPECIFICATIONS. ANY TOPSOIL NOT 17. UNLESS ECHELON PAVING IS USED, ALL JOINTS RESULTING FROM THE PAVING OPERATIONS SHALL BE CONSIDERED COLD JOINTS AND 28. THE CONTRACTOR SHALL EMPLOY ALL APPROPRIATE SAFETY POLYMERIZED JOINT ADHESIVE SHALL BE APPLIED IN ACCORDANCE WITH THE NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2007, UNDER SUBSECTION 401.03.03 E.1.b. COLD JOINT PAVING.
  - INCLUDING EXCAVATION, STOCKPILING SAMPLING, PERMITTING AND DISPOSAL IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK. ALL COSTS SHALL BE INCLUDED IN SITE WORK.
- HOTLINE (811) AND VERIFY ALL INFORMATION TO HIS SATISFACTION 19. ALL EXCESS OR UNWANTED MATERIALS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT APPROVED DISPOSAL SITES BY THE CONTRACTOR. THE CONTRACTOR SHALL HAVE THE ENGINEER'S APPROVAL BEFORE REMOVING ANY MATERIAL FROM THE SITE. THE OWNER SHALL HAVE THE RIGHT TO CLAIM ANY MATERIAL BEFORE IT IS REMOVED. ALL COSTS OF THE ABOVE WORK SHALL BE INCLUDED IN THE VARIOUS ITEMS IN SITE WORK
- FOR UNDERGROUND UTILITY LOCATION ON SITE WHERE PUBLIC UTILITIES 20. NJDEP PERMITS HAVE BEEN OBTAINED FOR THIS PROJECT. THEY ARE PERMIT NO. 1500-17-0001.2 CZM170001 COASTAL WETLAND PERMIT 24, AND CENAP-OP-R-2017-00775-95 (NWP 13) DEPARTMENT OF THE ARMY NATIONWIDE PERMIT NUMBER 13 FOR IOWA COURT. AND CENAP-OP-R-2018-00397-95 (NWP 13) DEPARTMENT OF THE ARMY NATIONWIDE PERMIT NUMBER 13 FOR SOUTH GREEN STREET. THE NJDEP COASTAL WETLAND PERMIT 24 IS PENDING FOR SOUTH GREEN 31. QUANTITIES FOR CONSTRUCTION ITEMS SHOWN ARE APPROXIMATE. 46. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE SUBMITTALS TO THE STREET. ALL WORK SHALL BE IN COMPLIANCE WITH THE STANDARD CONDITIONS AND THE SPECIAL CONDITIONS OF THE NJDEP PERMITS, A COPY OF WHICH IS INCLUDED IN THE PROJECT SPECIFICATIONS 32. AT THE END OF EACH WORKDAY, THE CONTRACTOR SHALL CLEAN AND APPENDIX NO. 1.
  - 21. CONTRACTOR SHOULD NOTE THAT THE ORDERING OF THE SHORELINE PLANTINGS WILL REQUIRE A LONG LEAD TIME BECAUSE THEY NEED TO BE ACCLIMATED TO THE SALINITY OF THE PARK ENVIRONMENT BEFORE 33. NO SEPARATE PAYMENT SHALL BE MADE FOR SAWCUTTING, REMOVAL BEING DELIVERED AND PLANTED ON-SITE.
  - ADVISED OVERHEAD ELECTRICAL LINES MAY BE IN CLOSE PROXIMITY TO THE WORK AREA.
  - PIPE AND APPURTENANCES DISTURBED DURING CONSTRUCTION.
  - BORROW FILL, SHALL REMAIN ON ROADWAYS, SIDEWALKS OR SHOULDERS OVERNIGHT. STOCKPILING OF MATERIALS IS ONLY ALLOWED DURING CONSTRUCTION HOURS. THE CONTRACTOR IS RESPONSIBLE FOR CLEANUP AND REMOVAL OF ALL MATERIAL ACCUMULATED FROM CONSTRUCTION ACTIVITIES ON A DAILY BASIS. CONTRACTOR SHALL COORDINATE WITH THE MUNICIPALITIES AND 36. THE TOPSOIL USED FOR THIS PROJECT SHALL BE IN STRICT 51. TIME OF YEAR RESTRICTIONS: UTILIZE TOWNSHIP OWNED PROPERTY, IF AVAILABLE, FOR STAGING. NO OTHER AREAS SHALL BE USED WITHOUT WRITTEN AUTHORIZATION FROM THE PROPERTY OWNER AND APPROVAL FROM THE TOWNSHIP.

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ITEM			ITEM	SO. GREEN ST.	SUB	IF &	TOTAL
No.	ITEM DESCRIPTION	UNIT	DESIGNATION	SHEETS 7 & 8	TOTAL	WHERE	QUANTITY
1	MOBILIZATION	L.S.	(M)	1	1	_	1
2	SITE WORK	L.S.	(M)	1	1	_	1
3	MAINTENANCE AND PROTECTION OF TRAFFIC	L.S.	(M)	1	1	_	1
4	SOIL EROSION AND SEDIMENT CONTROL	L.S.	(M)	1	1	_	1
5	PREPARATION OF SUBGRADE (STONE SILL)	S.Y.	(M)	705	705	_	705
6	1" CRUSHED STONE, 8" THICK	S.Y.	(M)	705	705	_	705
7	RIP-RAP, 30-100 LBS, 12" THICK	C.Y.	(M)	235	235	20	255
8	RIP-RAP, 50-150 LBS, VARIABLE THICKNESS	C.Y.	(M)	550	550	50	600
9	CAPSTONE, VARIOUS SIZES	TON	(M)	1175	1,175	25	1,200
10	TIMBER PILINGS, 10" TIP, NATURAL TAPER, 30' LONG (RENDERED NON-POLLUTING) WITH SIGNAGE	UNIT	(M)	3	3	_	3
11	BEACH SAND FILL	C.Y.	(M)	560	560	40	600
12	RIP-RAP STONE STABILIZATION (ROADWAY)	C.Y.	(M)	44	44	6	50
13	DEMOBILIZATION AND SITE RESTORATION	L.S.	(M)	1	1	_	1
14	POST-CONSTRUCTION AS-BUILT SURVEY	L.S.	(M)	1	1	_	1

- 26. CONTRACTOR IS ADVISED THAT ANY ROAD CLOSURES SHALL BE SUBMITTED WITH APPROPRIATE TRAFFIC CONTROL PLAN FOR APPROVAL NO ADDITIONAL COST TO THE OWNER.
- 27. NO NIGHTTIME WORK SHALL BE ALLOWED.
- PROCEDURES, TRAFFIC DIRECTORS, PERSONNEL AND DEVICES AS MAY RESIDENTS SHALL BE PROVIDED AT ALL TIMES.
- HOURS PRIOR TO THE START OF EXCAVATION ACTIVITIES. MARK OUTS SHALL BE CALLED FOR EVERY TEN DAYS THEREAFTER. IN ACCORDANCE WITH NEW JERSEY STATE LAW. COPIES OF THE MARK OUT TICKETS AND RESPONSES SHALL BE SUBMITTED TO THE ENGINEER
- HOMEOWNERS AFFECTED BY THE PROJECT AS FOLLOWS:
- 30.1. AT LEAST ONE (1) WEEK PRIOR TO THE START OF CONSTRUCTION OPERATIONS.
  - \* THE CONTRACTOR SHALL SUBMIT THE VARIOUS HOMEOWNER NOTICES TO THE ENGINEER PRIOR TO THE START OF CONSTRUCTION
  - FOR APPROVAL. IN THE EVENT THAT HOMEOWNERS ARE NOT NOTIFIED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS, THEN THE CONTRACTOR SHALL NOT PROCEED WITH THE WORK UNTIL THE
  - REQUIRED NOTICE IS PROVIDED. THE OWNER SHALL NOT BE RESPONSIBLE FOR ANY DOWN TIME DUE TO THE CONTRACTORS
  - FAILURE TO PROVIDE SAID HOMEOWNER NOTICE.

ENGINEER MAY ADJUST OUANTITIES IN FIELD.

- REMOVE ALL CONSTRUCTION DEBRIS FROM ROADWAYS AND MAINTAIN SAFE ACCESS TO ALL HOMES AND BUSINESSES FOR PEDESTRIANS AND VEHICLES.
- THE ABOVE IN THE VARIOUS ITEMS IN THE BID PROPOSAL.
- PERMITTED UNTIL THE BASE COURSE IS APPROVED BY THE ENGINEER. THE ENGINEER MAY DIRECT THE CONTRACTOR TO MAKE CORRECTIVE MEASURES TO THE BASE COURSE PRIOR TO THE INSTALLATION OF THE SURFACE COURSE AT NO ADDITIONAL COST TO THE OWNER.
- 35. NEW DRIVEWAY APRONS SHALL NOT EXCEED 12% UNLESS SHOWN OTHERWISE ON THE GRADING PLANS. IN AREAS WHERE SLOPE MAY EXCEED 12%, THE CONTRACTOR SHALL REVIEW WITH THE ENGINEER PRIOR TO THE POURING OF ANY DEPRESSED CURB AND DRIVEWAY APRONS. DRIVEWAY REPAIRS SHALL BE MADE WHERE NECESSARY TO LIMIT DRIVEWAY GRADES.
- CONFORMANCE TO THE PROJECT SPECIFICATIONS. ANY TOPSOIL NOT 51.1. 1/1 TO 6/30: TIME RESTRICTION IN ANY GIVEN YEAR SO AS TO MEETING THE PROJECT SPECIFICATIONS SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

- 38. CONTRACTOR SHALL ESTABLISH A FULL STAND OF GRASS WITH NO BARE PATCHES, CRABGRASS OR WEEDS.
- BY THE TOWNSHIP AND ENGINEER; AND, IF APPROVED, WILL BE MADE AT 39. NO SEPARATE PAYMENT SHALL BE MADE FOR REMOVAL OR RESETTING 53. TO THE EXTENT PRACTICABLE, DISTRIBUTION AND RE-GRADING OF SAND OF ALL TIMBER TIES, BLOCK WALLS, OR BLOCK EDGING. INCLUDE ALL COSTS OF THE ABOVE IN SITE WORK IN THE BID PROPOSAL.
  - 40. RELOCATING OR RESETTING OF ANY UNDERGROUND SPRINKLER HEADS. PIPING OR VALVES SHALL BE INCLUDED IN SITE WORK.
- BE NECESSARY DURING PROSECUTION OF THE WORK. ACCESS TO 41. ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION.
- 29. THE CONTRACTOR SHALL CALL FOR A UTILITY MARK OUT AT LEAST 72 42. THE CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE PROJECT AREAS AND ACCESS POINTS PRIOR TO SUBMITTING THEIR BID, 55. ALL PROPOSED BEACH SAND FILL SHALL BE FREE OF ORGANIC INCLUDING THE IOWA COURT CUL-DE-SAC. THERE SHALL BE NO SEPARATE PAYMENT FOR ANY WORK REQUIRED TO PROVIDE ACCESS FOR THE WORK TO BE PERFORMED.
- 30. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING 43. THERE SHALL BE NO SEPARATE PAYMENT FOR GRADING OF ANY KIND, 56. THE POST-CONSTRUCTION AS-BUILT SURVEY SHALL BE PREPARED BY A ALL COSTS SHALL BE INCLUDED IN THE VARIOUS ITEMS IN THE PROPOSAL.
  - 44. THERE SHALL BE NO SEPARATE PAYMENT FOR FILTER FABRIC TO BE INSTALLED WITH THE STONE MARSH SILL, STONE BREAKWATER, RIP RAP SCOUR PROTECTION ALONG THE MARSH EDGE, AND RIP RAP SCOUR PROTECTION ALONG IOWA COURT AND SOUTH GREEN STREET. ALL 57. THE CONTRACTOR SHOULD NOTE THAT THE ORDERING OF THE COSTS SHALL BE INCLUDED IN THE VARIOUS ITEMS IN THE PROPOSAL.
  - 45. THERE SHALL BE NO SEPARATE PAYMENT FOR DEWATERING OF ANY KIND, INCLUDING COFFERDAMS (SUBJECT TO APPROVAL BY THE ENGINEER AND PERMITS), ALL COSTS SHALL BE INCLUDED IN THE VARIOUS ITEMS IN THE BID PROPOSAL.
  - ENGINEER INCLUDING, BUT NOT LIMITED TO, PROJECT SCHEDULE, WORK 59. THE CONTRACTOR SHALL TEMPORARILY STABILIZE THE IOWA COURT SEQUENCE, HOMEOWNER NOTICE, EMERGENCY CONTACT LIST, MATERIAL SHOP DRAWINGS, ETC. MATERIAL SHOP DRAWINGS SHALL BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO ORDERING.
  - 47. TIMBER PILES SHALL BE RENDERED NON-POLLUTING IN ACCORDANCE WITH THE PROJECT PERMITS AND AS DETAILED IN THE SPECIFICATIONS.
- OF CURB, SIDEWALK, OR CONCRETE PAVEMENT. INCLUDE ALL COSTS OF 48. THE USE OF CREOSOTE-TREATED MATERIAL IS PROHIBITED PURSUANT TO ASSEMBLY BILL NO. 2804 P.L. 2007, CHAPTER 113.
- POLES DURING CONSTRUCTION IF NECESSARY. THE CONTRACTOR IS 34. INSTALLATION OF HOT MIX ASPHALT SURFACE COURSE SHALL NOT BE 49. ALL EXCAVATION SHALL BE MECHANICAL, UTILIZING TRACK EQUIPMENT FROM BEACH AREAS. A TRACK TYPE EXCAVATOR SHALL BE USED FOR EXCAVATION. A TRACK TYPE TRACTOR (BULLDOZER) SHALL BE UTILIZED FOR GRADING.
  - 50. ANY PROPOSED STRUCTURES (I.E. TIMBER PILINGS) SHALL BE CONSTRUCTED OF NON-POLLUTING MATERIALS SUCH AS PLASTIC, NATURAL CEDAR OR OTHER UNTREATED WOOD, CONCRETE, OR OTHER INERT PRODUCTS. CREOSOTE AND CCA-TREATED LUMBER (A.K,A. PRESSURE TREATED OR WOLMANIZED LUMBER) WHICH IS SUSCEPTIBLE TO LEACHING ARE CONSIDERED POLLUTING MATERIALS AND ARE NOT ACCEPTABLE.

PROTECT ESSENTIAL FISH HABITAT SPECIES, THEIR PREY SPECIES, AND/OR THEIR HABITATS.

- CYCLE.
- THE PROPERTIES ON THE CUL-DE-SAC OF IOWA COURT.
- INCLUDED IN THE VARIOUS ITEMS IN THE PROPOSAL.
- MARSH AREA, ETC.
- SITE.
- MAY 1ST
- REMOVED ONCE PLANTED), ETC.
- 60. PLANTING NOTES:
- PLANTING TO ELIMINATE AIR POCKETS. TO BE COMPACTED BY RAINS BEFORE PLANTING. 60.3. NO PLANTING SHALL BE PERFORMED DURING PERIODS OF

# **DISTRIBUTION OF QUANTITIES** BASE BID 'B' - SOUTH GREEN STREET

MINIMIZE TURBIDITY AND PREVENT RESUSPENSION OF SEDIMENTS TURBIDITY DEVICES SHALL BE INSTALLED PRIOR TO THE START DAT AND REMOVED AFTER THE END DATE OF THE SEASONAL RESTRICTION IN ORDER FOR THE STANDARD TIME OF YEAR RESTRICTIONS TO BE WAVED

ON THE BEACH PROFILES SHOULD PROCEED FROM THE UPLANDS WATER-WARD AND OCCUR DURING LOW-TIDE PHASE OF THE TIDAL

54. PUBLIC ACCESS SHALL NOT BE RESTRICTED AS A RESULT OF THIS PROJECT. EMERGENCY ACCESS SHALL BE MAINTAINED TO ALL HOMES AT ALL TIMES THROUGHOUT THE PROJECT. ALL RESIDENTS MUST HAVE ACCESS TO THEIR DRIVEWAYS AND HOMES EACH DAY, IN PARTICULAR

MATERIAL. AS INDICATED IN NOTE #43, THERE IS NO SEPARATE PIAYMENT FOR GRADING OF BEACH SAND, ALL COSTS SHALL BE

NJ LICENSED LAND SURVEYOR AND SHALL LOCATE ALL STRUCTURES WITHIN THE PROJECT AREA. THE SURVEY SHALL ALSO IDENTIFY THE ELEVATION OF ALL STRUCTURES. INCLUDED IN THE SURVEY SHALL BE THE ROADWAYS, MARSH SILL, STONE BREAKWATER, BEACH AREA, NEW

SHORELINE PLANTINGS WILL REQUIRE A LONG LEAD TIME BECAUSE THEY NEED TO BE ACCLIMATED TO THE SALINITY OF THE ENVIRONMENT OF THE PROJECT AREA BEFORE BEING DELIVERED AND PLANTED ON

58. SHORELINE PLANTINGS SHALL BE PLANTED BETWEEN APRIL 1ST AND

SHORELINE BETWEEN DECEMBER AND APRIL (WHEN PLANTING OCCURS). THE CONTRACTOR SHALL EMPLOY METHODS TO PREVENT EROSION OF PLACED SAND, INCLUDING BUT NOT LIMITED TO, EROSION CONTROL MATTING, ADDITIONAL STONE ALONG THE SILL (TO BE

60.1. SAND SHALL BE PACKED FIRMLY AROUND THE PLANTS AFTER

60.2. SAND PLACED BY EARTH MOVING EQUIPMENT SHALL BE ALLOWED

ADVERSE WEATHER OR SOIL CONDITIONS, SUCH AS FROZEN SAND, AS DETERMINED BY THE ENGINEER.

VED. THE COPYING OR REUSE	THAN THE ORIGINAL PROJECT	RITTEN PERMISSION OF T&M	
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A O F O

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AVD 88.		
DATUM	MLLW	NAVD 88
HTL	3.81	2.10
MHHW	3.71	2.00
MHW	3.34	1.63
MTL	1.73	0.02
NAVD 88	1.71	0.00
MLW	0.12	-1.59
MITW	0.00	-1.71



CONSTRUCT TIMBER PILE WITH WARNING SIGNAGE -TOP OF PILE ELEV. 11.00 (SEE DETAIL) • 9 UNITS - TIMBER PILINGS, 10" TIP, NATURAL TAPER, 30' LONG (RENDERED NON-POLLUTING) WITH SIGNAGE

**CONSTRUCT MARSH RESTORATION -**• 2,665 CY - CLEAN BEACH SAND FILL

• 0.877 ACRES (38,185 S.F) AREA TO BE PLANTED WITH SALT MEADOW CORDGRASS (ABOVE MHWL) & SALT MARSH GRASS (BELOW MHWL) (SEE LANDSCAPING PLAN)

Survey Notes:

Vertical Datum (N.A.V.D. 1988)).

, en t

LEGEND		
	LOT LINES	
	1977 TIDELANDS CLAIM LINE	
	HIGH TIDE LINE (ELEV ±2.10)	
	MEAN HIGH WATER LINE (ELEV ±1.63)	
	1970 NJDEP WETLANDS LINE	
	TOP OF BANK	
	EXISTING ROADWAY BANK (ELEV. ±2.20)	
	PROPOSED PROJECT AREA LIMIT	
0.5	PROPOSED MINOR CONTOUR	
2.5	PROPOSED MAJOR CONTOUR	
	PROPOSED HEAVY DUTY SILT FENCE	
	PROPOSED GOOSE EXCLUSION FENCE	
•	TIMBER WARNING PILE WITH SIGNAGE	
	BROKEN STONE & CONCRETE BLOCK REMOVAL AREA	
	PROPOSED MARSHSILL	
	RIP-RAP SCOUR PROTECTION AT	

1) Planimetric and topographic features shown hereon have been drawn in accordance

with field survey performed by GTS Consultants in March 2016 (Horizontal System is New

Jersey State Plan Coordinate System (N.A.D. 1983) and Verticual Datum is North American

DATUM INFORMATION OSBORN ISLAND; ROSE CREEK; MYSTIC ISLAND NORTHWEST: AND MYSTIC ISLAND SOUTHWEST

TIDAL DATUMS DETERMINED BY NJDEP BUREAU OF COASTAL ENGINEERING USING NOAA VDATUM 3.4 SOFTWARE. ALSO USED AS A REFERENCE WAS TIDAL DATUM 853-4244 GRAVELING POINT, NJ BENCHMARK CONTROL STATION 855-7380 LEWES, FORT MILES, DE.

ALL DREDGE PLAN ELEVATIONS ARE BASED ON DEPTH BELOW MLW.

ALL MARSH RESTORATION PLANS ARE BASED ON NAVD 88.

DATUM	MLLW	NAVD 88
HTL	3.81	2.10
MHHW	3.71	2.00
MHW	3.34	1.63
MTL	1.73	0.02
NAVD 88	1.71	0.00
MLW	0.12	-1.59
MLLW	0.00	-1.71







SCALE: 1"=20'







![](_page_68_Figure_0.jpeg)

PRO. FILE LAST LAST LAST

![](_page_69_Figure_0.jpeg)

# TIDAL DATUMS DETERMINE BY NJDEP BUREAU

OF COASTAL ENGINEERING USING NOAA VDATUM 3.4 SOFTWARE. ALSO USED AS A REFERENCE WAS TIDAL DATUM 853-4080 TUCKERTON CREEK, NJ BENCHMARK CONTROL STATION 855-7380 LEWES, FORT MILES, DE

ALL PLAN ELEVATIONS ARE IN NAVD 88.

DATUM	MLLW	NAVD 88
HTL	2.62	1.45
MHHWL	2.52	1.35
MHWL	2.25	1.08
NAVD 88	1.17	0.00
MTL	0.23	-0.94
MLWL	0.09	-1.08
MLLWL	0.00	-1.17
	. = 0	

-0.05	CUT (FEET BELOW EXISTING GRADE)
1.25	FILL (FEET ABOVE EXISTING GRADE)
	CUT ZONE (0.50' MAXIMUM CUT)
	FILL ZONE (2.50' MAXIMUM FILL)
00	PERMANENTRIP-RAP STONE STABILIZATION
000	PERMANENT STONE BREAKWATER
0	PROPOSED TIMBER PILE (RENDERED NON-POLLUTING)
i (,)	MHWL (NAVD 1988) EXISTING GRADING
	MHHWL (NAVD 1988) EXISTING GRADING
	MLWL (NAVD 1988) EXISTING GRADING
	MLLWL (NAVD 1988) EXISTING GRADING
	HTL (NAVD 1988) EXISTING GRADING HIGHEST OBSERVED TIDE LINE DURING 201
_	1977 TIDELANDS HISTORIC SHORELINE
	APPROXIMATE SHELLFISH LEASE AREA

![](_page_69_Figure_7.jpeg)

![](_page_70_Figure_0.jpeg)

CREEN CREEN 2018, 26 26 PATH NAMI SAVI PROJ FILE FILE LAST LAST

> REUSE ROJECT T&M A P P THE

![](_page_71_Figure_0.jpeg)

PROJECT INFORMATION: FILE PATH: G:\Projects\LEHT\01730\Plans\ FILE NAME: LEHT-01730\_CI\_SHT03\_GREEN STREET\_CSP 7-12-1 LAST SAVED DATE AND TIME: 26 Jul 2018, 5:53PM LAST SAVE BY: ccunliffe

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![](_page_71_Figure_3.jpeg)

CROSS SECTIONS SOUTH GREEN STREET SCALE: 1"=20'

![](_page_71_Figure_5.jpeg)






18, 18, 20.20 PATH: NAME: SAVE PROJ FILE FILE LAST LAST

PF



Provides temporary protection against the impacts of wind and rain, slows the over land movement of stormwater runoff, increases infiltration and retains

Where Applicable On exposed soils that have the potential for causing off-site environmental damage.

not scheduled for permanent seeding within 60 days

- Methods and Materials 1. Site Preparation A. Grade as needed and feasible to permit the use of conventional equipment for seedbed preparation, seeding, mulch application, and mulch anchoring. All grading should be done in accordance with Standards for Land Grading, pg. 19-1. B. Install needed erosion control practices or facilities such as diversions, grade stabilization structures, channel stabilization measures, sediment b. install needed ersion control practices of ractines such as oversions, grade stabilization structures, channel stabilization measures, securited basins, and waterways. See Standards 11 through 42.
   c. Immediately prior to seeding, the surface should be scarified 6" to 12" where there has been soil compaction. This practice is permissible only where there is no danger to underground utilities (cables, irrigation systems, etc.).
- 2. Seedbed Preparation A. Apply around limestone and fertilizer according to soil test recommendations such as offered by Rutgers Co-operative Extension. Soil sample Apply ground intersione and retinized according to solitiest recommendations such as offered by hutgers co-operative Extension of frides. Fertilizer shall be applied at the rate of 500 pounds per acre or 11 pounds per 1,000 square feet of 10-20-10 or equivalent with 50% water insoluble nitrogen unless a soil test indicates otherwise. Apply
- B. Work lime and fertilizer into the soil as nearly as practical to a depth of 4 inches with a disc, springtooth harrow, or other suitable equipment.
- The final harrowing or disking operation should be on the general contour. Continue tillage until a reasonable uniform seedbed is prepared. Inspect seedbed just before seeding. If traffic has left the soil compacted, the area must be retilled in accordance with the above. D. Soils high in sulfides or having a pH of 4 or less refer to Standard for Management of High Acid Producing Soils, pg. 1-1.

3. Seeding A. Select seed from recommendations in Table 7-2.

	SEED F (pou	RATE (1) Inds)		OPTIMUN SEED		
SEED SELECTIONS	Per Per Acre 1000 s.f.		ZONE 5b, 6s	ZONE 6b	ZONE 7a, b	DEPTH ( (inches)
	C	OOL SEASO	IN GRASSES			
1. Perennial ryegrass	100	1.0	3/15 - 6/1 8/1 - 9/15	3/15 - 5/15 8/15 - 10/1	2/15 - 5/1 8/15 - 10/15	0.5
2. Spring oats	86	2.0	3/15 - 6/1 8/1 - 9/15	3/15 - 5/15 8/15 - 10/1	2/15 - 5/1 8/15 - 10/15	1.0
3. Winter Barley	96	2.2	8/1 - 9/15	8/15 - 10/1	8/15 - 10/15	1.0
4. Annual Ryegrass	100	1.0	3/15 - 6/1 8/1 - 9/15	3/15 - 6/1 8/1 - 9/15	2/15 - 5/1 8/15 - 10/15	0.5
5. Winter Cereal Rye	112	2.8	8/1 - 11/1	8/1 - 11/15	8/1 - 12/15	1.0
	W	ARM SEAS	ON GRASSES			
6. Pearl millet	20	0.5	6/1 - 8/1	5/15 - 8/15	5/1 - 9/1	1.0
7. Millet (German or Hungarian)	30	0.7	6/1 - 8/1	5/15 - 8/15	5/1 - 9/1	1.0

Plant Hardiness Zone (see figure 7-1, pg. 7-4.) Twice the depth for sandy soils

B. Conventional Seeding. Apply seed uniformly by hand, cyclone (centrifugal) seeder, drop seeder, drill or cultipacker seeder. Except for drilled, hydroseeded or cultipacked seedings, seed shall be incorporated into the soil, to a depth of 1/4 to 1/2 inch, by raking or dragging. Depth of seed placement may be 1/4 inch deeper on coarse textured soil. C. Hydroseeding is a broadcast seeding method usually involving a truck or trailer mounted tank, with an agitation system and hydraulic pump for mixing seed, water and fertilizer and spraying the mix onto the prepared seedbed. Mulch **shall not** be included in the tank with seed. Short fibered mulch may be applied with a hydroseeder following seeding. (also see Section IV Mulching) Hydroseeding is not a preferred seeding method because seed and fertilizer are applied to the surface and not incorporated into the soil. Poor seed to soil contact occurs reducing seed germination and growth. Hydroseeding may be used for areas too steep for conventional equipment to traverse or too obstructed with rocks D. After seeding, firming the soil with a corrugated roller will assure good seed-to-soil contact, restore capillarity, and improve seedling

mergence. This is the preferred method. When performed on the contour, sheet erosion will be minimized and water conservation on site will be maximized. 4. Mulching Mulching is required on all seeding. Mulch will insure against erosion before grass is established and will promote faster and earlier establishment. The existence of vegetation sufficient to control soil erosion shall be deemed compliance with this mulching requiremen A. Straw or Hay. Unnrotted small grain straw, hay free of seeds, applied at the rate of 1-1/2 to 2 tons per acre (70 to 90 pounds per 1,000 square feet), except that where a crimper is used instead of a liquid mulch-binder (tackifying or adhesive agent), the rate of application is 3 tons per acre. Mulch chopper-blowers must not grind the mulch. Hay mulch is not recommended for establishing fine turf or lawns due to the presence

- of weed seed. Application. Spread mulch uniformly by hand or mechanically so that approximately 95% of the soil surface will be covered. For uniform istribution of hand-spread mulch, divide area into approximately 1,000 square feet sections and distribute 70 to 90 pounds within each Anchoring shall be accomplished immediately after placement to minimize loss by wind or water. This may be done by one of the following nethods, depending upon the size of the area, steepness of slopes, and costs. 1. Peo and Twine. Drive 8 to 10 inch wooden peos to within 2 to 3 inches of the soil surface every 4 feet in all directions. Stakes may be ven before or after applying mulch. Secure mulch to soil surface by stretching twine between pegs in a cris-cross and a square pattern.
- Secure twine around each peg with two or more round turns. 2. Mulch Nettings. Staple paper, jute, cotton, or plastic nettings to the soil surface. Use a degradable netting in areas to be mowed. 3. Crimper (mulch anchoring tool). A tractor-drawn implement, somewhat like a disc harrow, especially designed to push or cut some of the to the product and the product of th agent is required
- 4. Liquid Mulch-Binders. May be used to anchor hay or straw mulch. a. Applications should be heavier at edges where wind may catch the mulch, in valleys, and at crests of banks. The remainder of the area should be uniform in appearance. b. Use one of the following: ) Organic and Vegetable Based Binders - Naturally occurring, powder based, hydrophilic materials when mixed with water
- formulates a get and when applied to mulch under satisfactory curing conditions will form membraned networks of insoluble polymers. The vegetable get shall be physiologically harmless and not result in a phytotoxic effect or impede growth of turfgrass. Use at rates and weather conditions as recommended by the manufacturer to anchor mulch materials. Many new products are available, some of which may need further evaluation for use in this state. and curing shall no longer be soluble or dispersible in water. It shall be applied at rates recommended by the manufacturer and remain tacky until germination of grass.
- Note: All names give above are registered trade names. This does not constitute a commendation of these products to the exclusion of B. Wood-fiber or paper-fiber mulch. Shall be made from wood, plant fibers or paper containing no growth or germination inhibiting materials, used at the rate of 1,500 ponds per acre (or as recommended by the project manufacturer) and may be applied by a hydroseeder. This mulch shall not be mixed in the tank with seed. Use is limited to flatter slopes and during optimum seeding periods in spring and fall. C. Pelletized mulch. Compressed and extruded paper and/or wood fiber product, which may contain co-polymers, tackifiers, fertilizers and coloring agents. The dry pellets, when applied to a seeded area and watered, forma mulch mat. Pelletized mulch shall be applies in accordance with the manufacturers recommendations. Mulch may be applied by hand or mechanical spreader at the rate of 60-75 lbs./1,000 square feet and activated with 0.2 to 0.4 inches of water. This material has bee found to be beneficial for use on small lawn or renovation areas, seeded reas where weed-seed free mulch is desired or on sites where straw mulch and tackifier agent are not practical or desirable.

Applying the full 0.2 to 0.4 inches of water after spreading pelletized mulch on the seed bed is extremely important for sufficient activation and expansion of the mulch to provide soil coverage. **STANDARD FOR** 





On new development sites with existing trees.

Where Applicable

- Methods and Material Reconnaissance should be performed before land clearing begins to identify dead and weak trees to be removed and healthy trees to remain, to create aesthetically pleasing development site with vegetation rather than the presence of dead or dying trees. Inventory the site and clearly mark the trees and stands of trees to be saved. Consider relocating streets, houses, or other structures if necessary and feasible. Once clearing begins and damage to the trees occurs, valuable specimens may be lost. A. Characteristics of trees to be protected and saved. The following lists characteristics that should be evaluated before deciding to remove or protect a tree. 1. Tree Vigor
- Tree health is the overall condition of the tree. A tree of low vigor is more susceptible to damage by environmental changes than healthy trees and is more usceptible to insect and disease attacks. Indications of poor vigor include the dying of the tips of branches and entire limbs, small annual twig growth, stunted leaf size, sparse foliage, and poor foliage color. Avoid saving hollow or rotten trees, trees cracked, split, leaning or crooked, oozing sap, or with broken tops. Use woodchips generated from removal of trees of poor health and spread them around the root zones to help protect the trees that remain 2. Tree Age Large, picturesque trees may be more aesthetically valuable than smaller, young trees, but also require more extensive protection measures. If leaving an older tree, be sure it is sound and healthy.
- 3. Species (the right trees for the right locations) Many species of trees found in New Jersey woodlands are not suitable for shade tree uses around buildings. Avoid protecting trees that are short-lived, brittle, which do not adapt well to cuts and fills may not be a suitable alternative. The following are severely affected by compacted construction fills: Aspen, Beech Paper birch, Eastern red cedar, Black cherry, Dogwood, Katsura tree, Linden, Paperbark maple, Sugar maple, Black oak, Pin oak, Red oak, White oak, Pines, and Tuliptree. See Table 9-1 for a more complete list of construction impacts to individual tree species. 4. Resistant to Insects and Diseases
- void leaving trees in highly visible areas or specimens that are frequent targets of insects and diseases. American Elm, for example, could be lost due to Dutch Im Disease. Wild Cherry, another example, is a favorite host of the tent caterpilar, which causes defoliation of the trees in early summer. The following are susceptible to insects (I) and disease (D): White Ash(D), Birch (I), Butternut (D), Crabapples (D), some Elms (D), Hawthorn (D), Hemlock (I), Linden (I), Sugar Maple (D), Mountain Ash (D), Sassafras (I), Scholartree (D), Redbud (D) 5. Tree Aesthetics hoose trees that are aesthetically pleasing, exhibiting good shape and form. Avoid leaning, crooked, and misshapen trees. Occasionally, an odd-shaped tree or one of unusual form may add interest to the landscape if strategically located. Be sure the tree is structurally sound and vigorous. 6. Spring and Autumn Coloration
- Species differ in fall color. Some are bright red, others orange and yellow. Other species exhibit no autumn color, such as walnut, locust, and sycamore. 7. Wildlife Benefits avor trees that are preferred by wildlife for food, cover, and nesting. A mixture of evergreens and hardwoods is beneficial. Evergreen trees are important for cover during the winter months. The hardwoods are more valuable for food.
- 8. Air Pollution Susceptibility Tree species vary greatly to susceptibility to air pollution. Symptoms vary from browning on the edges of the leaves and needles, to stunting of growth, to death of the tree. The following show tolerance to urban stress and are less likely to present problems with sidewalks: Baldcypress, Corktree, Amur maple, Kentucky coffee ee, Crabapple, Dawn redwood, Ginkgo (male), Goldenraintree, Hackberry, Hawthorn, Honeylocust, European hornbeam, Horsechestnut, Lindens, Oaks (excluding pin), Pear, Scholartree, Sourgum (tupelo), Sweetgum, Yews, Zelkova.
- 9. Species Longevity Favor trees whose life span is long, such as oak, beech, and tulip poplar. Short-lived trees; (Black locust, Gray birch, Aspen) should be avoided for use as shade, lawn or specimen trees. Although some short-lived trees have an attractive form or pleasing coloration in the spring or fall, such trees may not live for a long time and thus may not be worth preserving. B. Criteria for protecting remaining trees: General mechanical damage - see Figure 9.3 for correct root zone calculation and placement of tree protection. 2. Box trees within 25 feet of a building site to prevent mechanical injury. Fencing or other barrier should be installed beyond the Critical Root Radius See Figure 9.3.
- Tree root systems commonly extend well beyond the drip line. 3. Boards will not be nailed to trees during building operations. 4. Feeder roots should not be cut in an area inside the Protected Root Zone (PRZ). 5. Damaged trunks or exposed roots should have damaged bark removed immediately and no paint shall be applied. Exposed roots should be covered with topsoil immediately after excavation is complete. Roots shall be pruned to give a clean, sharp surface amenable to healing. Roots exposed during hot weather should be irrigated to prevent permanent tree injury. Care for serious injury should be prescribed by a professional forester or licensed tree expert. 6. Tree line brenoval, where necessary, will be done as natural target pruning to remove the desired branch as close as possible to the branch collar. There should be NO flush cuts. Flush cuts destroy a major defense system of the tree. See Figure 9-1. No tree paint shall be applied. All cuts shall be made at the outside edge of the
- the near bala restricts destroy and by an end to far beyond the branch colar may lead to excess sprouting, cracks and rot. Removal of a "V" crotch should be considered for free standing specimen trees (see Figure 9-2) to avoid future splitting damage. Note: For more specific data on certain tree characteristics by species, see Table 9.1, Tree Characteristics or consult with a Licensed Professional Tree Expert, Soil



Water Quality Enhancement Slows the over-land movement of stormwater runoff, increases infiltration and retains soil and nutrients on site, protecting streams or other stormwater

conveyances.

Where Applicable

On exposed soils that have a potential for causing off-site environmental damage

- The final harrowing or disking operation should be on the general contour. Continue tillage until a reasonable uniform seedbed is prepared. C. High acid producing soil. Soils having a pH of 4 or less or containing iron sulfide shall be covered with a minimum of 12 inches of soil having a pH of 5 or more before initiating seedbed reparation. See Standard for Management of High Acid-Producing Soils for specific requirements.
- 3. Seeding A. Select a mixture from Table 4-3 or use a mixture recommended by Rutgers Cooperative Extension or Natural Resources Conservation Service which is approved by the Soil Conservation District. Seed germination shall have been tested within 12 months of the planting date. No seed shall be accepted with a germination test date more than 12 months old unless retested. 1. Seeding rates specified are required when a report of compliance is requested prior to actual establishment of permanent vegetation. Up to 50% reduction in rates may be used when permanent vegetation is established prior to a report of compliance inspection. These rates apply to all methods of seeding. Establishing permanent vegetation means 80% vegetative coverage with the specified seed mixture for the seeded area and mowed once. 2. Warm-season mixtures are grasses and legumes which maximize growth at high temperatures, generally 85° F and above. See Table 4-3 mixtures 1 to 7. Planting rates for warm-season grasses shall be the amount of Pure Live Seed (PLS) as determined by germination
- testing results. Cool-season mixtures are grasses and legumes which maximize growth at temperatures below 85° F. Many grasses become active at 65° F. See Table 4-3, mixtures 8-20. Adjustment of planting rates to compensate for the amount of PLS is not required for cool seasor grasses. B. Conventional Seeding is performed by applying seed uniformly by hand, cyclone (centrifugal) seeder, drop seeder, drill or cultipacker seeder. Except for drilled, hydroseeded or cultipacked seedings, seed shall be incorporated into the soil within 24 hours of seedbed preparation to a
- depth of 1/4 to 1/2 iot, by raking or dragging. Depth of seed placement may be 1/4 inch deeper on coarse-textured soil. C. After seeding, firming the soil with a corrugated roller will assure good seed-to-soil contact, restore capillarity, and improve seedling emergence. This is the preferred method. When performed on the contour, sheet erosion will be minimized and water conservation on site will be maximized. D. Hydroseeding is a broadcast seeding method usually involving a truck, or trailer-mounted tank, with an agitation system and hydraulic pump for
- mixing seed, water and fertilizer and soraving the mix onto the prepared seedbed. Mulch shall not be included in the tank with seed. Shortfibered much may be applied with a hydroseed rollowing seeding. (also see Section 4-Muching below). Hydroseeding is not a preferred seeding method because seed and fertilizer are applied to the surface and not incorporated into the soil. When poor seed to soil contact occurs, there is a reduced seed germination and growth.
- 4. <u>Mulching</u> Mulching is required on all seeding. Mulch will protect against erosion before grass is established and will promote faster and earlier establishment. The existence of vegetation sufficient to control soil erosion shall be demed compliance with this mulching requirement. A. Straw or Hay. Unrotted small grain straw, hay free of seeds, to be applied at the rate of 1-1/2 to 2 tons per acre (70 to 90 pounds per 1,000 square feet), except that where a crimper is used instead of a liquid mulch-binder (tackifying or adhesive agent), the rate of application is 3 ton per acre. Mulch chopper-blowers must not grind the mulch. Hay mulch is not recommended for establishing fine turf or lawns due to the
- Application Spread mulch uniformly by hand or mechanically so that at least 85% of the soil surface is covered. For uniform distribution of hand-spread mulch, divide area into approximately 1,000 square feet sections and distribute 70 to 90 pounds within each section Anchoring shall be accomplished immediately after placement to minimize loss by wind or water. This may be done by one of the following methods, depending upon the size of the area, steepness of slopes, and costs. 1. Peg and Twine. Drive 8 to 10 inch wooden pegs to within 2 to 3 inches of the soil surface every 4 feet in all directions. Stakes may be
- driven before or after applying mulch. Secure mulch to soil surface by stretching twine between pegs in a criss-cross and a square pattern. Secure twine around each peg with two or more round turns. 2. Mulch Netting - Staple paper, jute, cotton, or plastic nettings to the soil surface. Use a degradable netting in areas to be mowed.
   3. Crimper (mulch anchoring coulter tool) - A tractor-drawn implement, somewhat like a disc harrow, especially designed to push or cut some of the broadcast long fiber mulch 3 to 4 inches into the soil so as to anchor it and leave part standing upright. This technique is limited to areas traversable by a tractor, which must operate on the contour of slopes. Straw mulch rate must be 3 tons per acre. No tackifying or adhesive agent is required.
- 4. Liquid Mulch-Binders May be used to anchor salt hay, hay or straw mulch.
   a. Applications should be heavier at edges where wind may catch the mulch, in valleys, and at crests of banks. The remainder of the area should be uniform in appearance. b. Use one of the following: (1) Organic and Vegetable Based Binders - Naturally occurring, powder-based, hydrophilic materials when mixed with water formulates a gel and when applied to mulch under satisfactory curing conditions will form membraned networks of insoluble polymers. The vegetable gel shall be physiologically harmless and not result in a phytotoxic effect or impede
- growth of turf grass. Use at rates and weather conditions as recommended by the manufacturer to anchor mulch materials. any new products are available, some of which may need further evaluation for use in this state. (2) Synthetic Binders - High polymer synthetic emulsion, miscible with water when diluted and, following application of mulch, drying and curing, shall no longer be soluble or dispersible in water. Binder shall be applied at rates recommended by the manufacturer and remain tacky until germination of grass. Note: All names given above are registered trade names. This does not constitute a recommendation of these products to the exclusion of other
- B. Wood-fiber or paper-fiber mulch shall be made from wood, plant fibers or paper containing no growth or germination inhibiting materials, use at the rate of 1,500 pounds per acre (or as recommended by the product manufacturer) and may be applied by a hydroseeder. Mulch shall not be mixed in the tank with seed. Use is limited to flatter slopes and during optimum seeding periods in spring and fall. C. Pelletized mulch - compressed and extruded paper and/or wood fiber product, which may contain co-polymers, tackfifers, fertilizers, and coloring agents. The dry pellets, when applied to a seeded area and watered, form a mulch mat. Pelletized mulch shall be applied in accordance with the manufacturer's recommendations. Mulch may be applied by hand or mechanical spreader at the rate of 60-75 lbs/1,000 square feet and activated with 0.2 to 0.4 inches of water. This material has been found to be beneficial for use on small lawn or renovation areas, seeded areas
- where weedseed free mulch is desired, or on sites where straw mulch and tackfiler agent are not practical or desirable. Applying the full 0.2 to 0.4 inches of water after spreading pelletized mulch on the seed bed is extremely important for sufficient activation and expansion of the mulch to provide soil coverage. 5. Irrigation (where feasible) If soil moisture is deficient supply new seeding with adequate water (a minimum of 1/4 inch applied up to twice a day until vegetation is well established). This is especially t s are made in abnormally dry or hot weather o
- <u>5. Topdressing</u> Since soil organic matter content and slow release nitrogen fertilizer (water insoluble) are prescribed in Section 2A Seedbed Preparation in this since soil organic matter content and slow release nitrogen fertilizer (water insoluble) are prescribed in Section 2A Seedbed Preparation in this section and section 2A Seedbed Preparation in this section 2A Seedbed Preparation 2A Seedbed Prepara Standard, no follow-up of topdressing is mandatory. An exception may be made where gross nitrogen deficiency exists in the soil to the extent that turf failure may develop. In that instance, topdress with 10-10-10 or equivalent at 300 pounds per acre or 7 pounds per 1,000 square feet every 3 to 5 weeks until the gross nitrogen deficiency in the turf is ameliorated.
- Establishing Permanent Vegetative Stabilization The quality of permanent vegetation rests with the contractor. The timing of seeding, preparing the seedbed, applying nutrients, mulch and other management are essential. The seed application rates in Table 4-3 are required when a Report of Compliance is requested prior to actual establishment of permanent vegetation. Up to 50% reduction in application rates may be used when permanent vegetation is established prior to requesting a Report of Compliance from the district. These rates apply to all methods of seeding. Establishing permanent vegetation means 80% vegetative cover (of the seeded species) and mowed once. Note this designation of mowed once does not guarantee the permanency of the turf should other maintenance factors be neglected or otherwise mismanaged.

8. Select s	eed from reccomendations in Table 4	<u>-3</u>	TABL	E 4-3										
	PERMANENT VEGET	TATIVE MI	XTURES, P	LANTI	IG RA	res an	D PLAN	TING	DATES					
	SEED MIXTURE *2	PLANTING RATE *3		PLANTING DATES 0 = Optimal Planting Period A = Acceptable Planting Period							MAINTENANCE			
		lbs/ lbs/ Acre 1000		ZONE 5b, 6a		ZONE 6b			ZONE 7a, 7b			LEVEL *4	REMARKS	
			sq.ft.	3/15 - 5/31	6/1- 7/31	8/1- 10/1	3/1 - 4/30	5/1- 8/14	8/15- 10/15	2/1- 4/30	5/1- 8/14	8/15 - 10/30		
	14. Tall fescue Ky. bluegrass (blend) Perennial ryegrass (blend)	265 20 20	6 0.50 0.50	A	A *5	0	A	A *5	0	A	A *5	0	A-B	ATHLETIC FIELD/. CULTIVAR MIX OF KENTUCKY BLUEGRASS
noff. ater	15. Hard fescue Chewings fescue Strong Creeping red fescue Perennial ryegrass	130 45 45 10	3 1 1 0.25	A	A *5	0	A	A *5	0	A	A *5	0	C-D	LOW MAINTENANCE FINE FESCUE LAWN MIX

1. See Appendix B for descriptions of turf grass mixtures and cultivars. The actual amount of warm-season grass mixture used in Table 3 (seed mix 1-7) shall be adjusted to reflect the amount of PLS as determined by germination testing results. No adjustment is required for cool-season grasses (seed mixtures 8-20). , Seeding mixtures and/or rates not listed above may be used if recommended by the local Soil Conservation District, Natural Resources Conservation Service; recommendations of Rutgers cooperative Extension may be used if approved by the Soil Conservation District. Legumes (white clover, flatpea, lespedeza) should be mixed with proper innoculant prior to planting 3. Seeding rates specified are required when a report of compliance is requested prior to actual establishment of permanent vegetation. Up to 50% reduction in rates may be used when permanent

vegetation is established prior to a report of compliance inspection. These rates apply to all methods of seeding. Establishing permanent vegetation means 80% vegetative coverage of the seeded area and moved once. Grass seed mixture checked by the State Seed Analyst. New Jersey Department of Agriculture, Trenton, New Jersey, will assure the purchaser that the mixture obtained is the mixture ordered, prussant to the VJ. State Seed and NLSA. 43-071.24 et .seq. 0 = optimal planting period A = acceptable planting perio

A: Intensive mowing, (2-4 days), fertilization, lime, pest control and irrigation (Examples - high-maintenance lawns, commercial and recreation areas, public facilities). B. Frequent mowing. (4-7 days), occasional fertilization, lime and weed control (Examples - home lawns, commercial sites, school sites). C: Periodic mowing (7-14 days), occasional fertilization and lime (Examples - home lawns, parks). (Examples - roadsides, recreation areas, public open spaces) Summer seedings should only be conducted when the site is irrigated. Mixes including white clover require that at least six weeks of growing season remain after seeding to ensure establ fore freezing conditions.



SLOPE APPLICATION

# AST AST AST



Planning Criteria Early recognition and burial, removal or disposal of high acid-producing soils is essential for limiting the amount of acidic material produced.

Marshalltown

Navesink

reddish, yellowish or light to medium brown soil materials are usually free of high acid-producing depos

Definition Stabilizing exposed soils with non-vegetative materials exposed for periods longer than 14 davs

ization is needed for a short period until more suitable protection can be applied.

wash them into an inlet and plug it.

D. Liquid Mulch-Binders

Methods and Materials 1. Site Preparation

To protect exposed soil surfaces from erosion damage and to reduce offsite environmental damage.

Limit the excavation area and exposure time when high acid-producing soils are encountered. Topsoil stripped from the site shall be stored separately from temporarily stockpiled high acid-producing soils.

Raritan

Merchantville

deposits. The geologic formations are as follows:

Englishtown Sand

nows areas where these deposits may be presen

presence on a site may be significant or limited in the soil profile.

Hornerstown

Kirkwood

Magothy

leview a surface geology map for the proposed site to investigate the presence of geologic formations which commonly contain high acid-producing

Contact the local Soil Conservation District to determine the historical presence of high acid-producing soils in the vicinity of the proposed development site.

High acid-producing soils may be present in undisturbed soils at varying depths, including near the soil surface to excavations or deep disturbances. Its

High acid producing soils are commonly black, dark brown, gray or greenish with silvery pyrite or marcasite nuggets or flakes. Alternatively, sandy soils or

Methods and Materials

Stockpiles of high acid-producing soil should be located on level land to minimize its movement, especially when this material has a high clay content.

remporarily stockpiled high acid-producing soil material to be stored more than 48 hours should be covered with properly anchored, heavy grade sheets

of polyethylene where possible. If not possible, stockpiles shall be covered with a minimum of 3 to 6 inches of wood chips to minimize erosion of the

b) yet yet where possible, in the possible, stockples state be covered with a minimum of s to 5 inches of wood chips to minimuze elosion of the stockpile. Sill fence shall be installed at the toe of the slope to contain movement of the stockpile material. Topsoil shall not be applied to the stockpiles to prevent topsoil contamination with high acid-producing soil.
5. High acid-producing soils with a pH of 4.0 or less or containing iron sulfide (including borrow from cuts or dredged sediment) shall be ultimately placed or buried with limestone applied at the rate of 10 tons per acre (or 450 pounds per 1,000 square feet of surface area) and covered with a minimum of 12 inches of estimate of the sole of the sole.

inches of settled soil with a pH of 5.0 or more except as follows:
a. Areas where trees or shrubs are to be planted shall be covered with a minimum of 24 inches of soil with a pH or 5 or more.
b. Disposal areas shall not be located within 24 inches of any surface of a slope or bank, such as berms, stream banks, ditches, and others, to

materials to other parts of the site, into streams or stormwater conveyances, and to protect machinery from accelerated rusting. Non-vegetative erosion control practices (stone tracking pads, strategically placed limestone check dam, sediment barrier, wood chips) should be installed to limit the movement of high acid-producing soils from, around, or off the site.

Permanent Vegetative Cover for Soil Stabilization, and Topsoling), monitoring must continue for a minimum of 6 months to ensure there is adequate stabilization and that no high acid-producing soil problems emerge. If problems still exist, the affected area must be treated as indicated above to correct

STANDARD FOR

**STABILIZATION WITH MULCH ONLY** 

<u>Where Applicable</u> This practice is applicable to areas subject to erosion, where the season and other conditions may not be suitable for growing an erosion-resistant cover or where

<u>Water Quality Enhancement</u> Provides temporary mechanical protection against wind or rainfall induced soil erosion until permanent vegetative cover may be established.

Following burial or removal of high acid-producing soil, tossiling and seeding of the site (see Temporary Vegetative Cover for Soil Stabilization

prevent potential lateral leaching damages. nent used for movement of high acid-producing soils should be cleaned at the end of each day to prevent spreading of high acid-producing soil

Shark River Tinton

Woodbury Clay

Red Bank, Sandy Hook Membe

- 5. For droughty sites, a sod of turf-type tall fescue or turf-type tall fescue mixed with Kentucky bluegrass is preferred over a 100% Kentucky bluegrass sod. On druging sites, a sou of the source in the source in the source interest with remacky binegrass is prefered over a roux remacky binegrass source Afthough not widely available, a sou of fine fescue is also acceptable for droughty sites.
   Only moist, fresh, unheated sod should be used. Sod should be harvested, delivered, and installed within a period of 24 hours or less during summer
- 1. Site Preparation A. Grade as needed and feasible to permit the use of conventional equipment for liming, fertilizing, incorporation of organic matter, and other soil preparation procedures. All grading should be done in accordance with Standard for Land Grading. B. Topsoil should be handled only when it is dry enough to work without damaging the soil structure. A uniform application to a depth of 6 inches (unsetted) is required on all sites. See the Standard for Topsoiling of the position and the standard of the standard for Topsoiling of the standard to a standard standard of the standard for Topsoiling of the standard for the standard for Topsoiling of the standard for the sta
- 2. Soil Preparation A. Uniformly apply ground limestone, and fertilizer according to soil test recommendations such as offered by Rutgers Co-operative Extension. Soil sample mailers are available from the local Rutgers Cooperative Extension offices (<u>http://njaes.rutgers.edu/county</u>). Fertilizer shall be applied at the rate of 500 pounds per acre or 11 pounds per 1,000 square feet using 10-10-10 or equivalent with 50% water insoluble nitrogen unless a soil test ndicates otherwise and incorporated into the surface 4 inches. If fertilizer is not incorporated, apply 1/2 the rate described above during seedbed preparation and repeat another 1/2 rate application of the same fertilizer within 3 to 5 weeks after seeding. Apply limestone at the rate of 2 tons/acre unless soil testing indicates otherwise. Calcium carbonate is the equivalent and standard for measuring the ability of liming materials to neutralize soil acidity and supply calcium and magnesium to grasses and legumes. Table 6-1 is a general guideline for limestone application rates.



- B. Work lime, and fertilizer into the topsoil as nearly as practical to a depth of 4 inches with a disc, springtooth harrow, or other suitable equipment. The final harrowing or disking operation should be on the general contour. Continue tillage until a reasonably uniform, fine seedbed is prepared. . Remove from the surface all objects that would prevent good sod to topsoil contact and remove all other debris, such as wire, cable, tree roots, pieces of concrete, clods, lumps, or other unsuitable material. D. Inspect site just before sodding. If traffic has left the soil compacted, the area must be retilled and firmed in accordance with the above.
- 3. Sod Placement A. Sod strips should be laid on the contour, never up and down the slope, starting at the bottom of the slope and working up. On steep slopes, the use
- of ladders will facilitate the work and prevent damage to the sod. During periods of high temperature, lightly irrigate the soil immediately prior to aying the sod. 3. Place sod strips with snug, even joints (seams) that are staggered. Open spaces invite erosion.
- C. Lightly role tamps of immediately following placement to insure solid contact of root mat and soil surface. Do not overlap sod. All joints should be butted tightly to prevent voids which would cause drying of the roots and invasion of weeds. D. On slopes greater than 3 to 1, secure sod to surface soil with wood pegs, wire staples biodegradable plastic spikes, or split shingles (8 to 10 inches long by 3/4 inch wide).
- E Surface water cannot always be diverted from flowing over the face of the slope, but a capping strip of heavy jute or plastic petting, properly secured along the crown of the slope and edges will provide extra protection against lifting and undercutting of sod. The same technique can be used to anchor sod in water-carrying channels and other critical areas. Wire staples must be used to anchor netting in channel work. Immediately following installation, sod should be watered until water penetrates the soil layer beneath sod to a depth of 1 inch. Maintain optimum
- water for at least two weeks. 4. <u>Topdressing</u> Since soil organic matter and slow release nitrogen fertilizer (water insoluble) are prescribed in Sections 1 and 2in this Standard, a follow-up topdressing since soil organic matter and slow release nitrogen fertilizer (water insoluble) are prescribed in Sections 1 and 2in this Standard, a follow-up topdressing shall then be apolied.



the turf is ameliorated.

PUMP

















6.0 in

-

Dig 6 in deep wench, bury bottom flap, tamp in place







Figure 9-5: Tree Protection in Cut Areas

a relativity will protects a teni from a lowered grow

### STANDARD FOR TOPSOILING

## Definition Topsoiling entails the distribution of suitable quality soil on areas to be vegetated.

# Where Applicable Topsoil shall be used where soils are to be disturbed and will be revegetated. Methods and Materials of 2.75 percent. Organic matter content may be raised by additives. Friable means easily crumbles in the fingers, as defined in most soils texts. defined in the Glossary of Soil Science Terms, 1996, Soil Science Society of America.

- soluble salts and pH level. 2. Stripping and Stockpiling A. Field exploration should be made to determine whether quantity and or quality of surface soil justifies stripping.
- see line rate guide in seedbed preparation for Permanent Vegetative Cover for Soil Stabilization, pg. 4-1 A 4-6 inch stripping depth is common, but may vary depending on the particular soil. Stockpiles of topsoil should be situated so as not to obstruct natural drainage or cause off-site environmental damage
- (pg.7-1) Vegetative Cover for Soil Stabilization. Weeds should not be allowed to grow on stockpiles.
- maintenance. See the Standard for Land Grading, pg. 19-1.
- approximately 6.5 and incorporated into the soil as nearly as practical to a depth of 4 inches.
- and waterways. See Standards 11 through 42.
- 4. Applying Topsoil A. Topsoil should be handled only when it is dry enough to work without damaging soil structure; i.e., less than field capacity (see glossary). B. A uniform application to a depth of 5 inches (unsettled) is recommended. Soils with a pH of 4.0 or less or containing iron sulfide shall be covered (pg. 1-1).

### PROJECT SEEDING SCHEDULE

- TEMPORARY VEGETATIVE STABILIZATION A. SEEDING TEMPORARY SEEDING SHALL CONSISTS OF SPRING OATS APPLIED AT A RATE OF 2.0 POUNDS PER 1,000 SQUARE FEET. SEEDING TEMPORARY SEEDING SHALL CONSISTS OF SPRING OATS APPLIED AT A RATE OF 2.0 POUNDS PER 1,000 SQUARE FEET.
- FERTILIZER TEMPORARY VEGETATED AREAS SHALL BE FERTILIZED WITH 10-10-10 APPLIED AT A RATE OF 11 POUNDS PER 1,000 SQUARE FEET, OR AS DETERMINED BY A SOIL TEST.
- PERMANENT VEGETATIVE STABILIZATION A. SEEDING PERMANENT SEEDING (IN AREAS NOT TO BE SODDED) SHALL CONSISTS OF THE FOLLOWING:
- KENTUCKY BLUEGBASS(BLEND) PERENNIAL RYEGRASS(BLEND)
- PLANTING PERIOD BEING AUGUST 15 THROUGH OCTOBER 30.
- OF 70-90 POUNDS PER 1,000 SQUARE FEET.
- SOD SHALL BE CERTIFIED, HIGH QUALITY CULTIVATED SOD, FREE OF WEEDS AND UNDESIRABLE GRASSES
- LIMESTONE LIMESTONE FOR SOD SHALL BE APPLIED AT RATE OF 90 POUNDS PER 1,000 SQUARE FEET

- a tree's Protected Root Zone (PRZ) by calculating the Critica easure the dbh (diameter of tree at breast height, 4.5 feet above ground on the uphill side of tree) in inches. Multiply measured dbh by 1.5 or 1.0. Express the result in feet. Dbh x 1.5: Critical root radius for older, unhealthy, or sensitive

\* Note: Individual for access points may require stabilization Tridem densities any mercula among ob (tg).



Red Bank, Kn = Navesink, K2 = Wenonah, Kmt=Marshalltown, Ket=Englishtown, Kwb=Woodbury, Kmv=Merchantville, Kcq=Cheesequake, Kmg=Magothy, and Kr=Raritan Formations. Credit: NJ Geological Survey, http://www.state.nj.us/dep/njgs/geodata/dgs09-2.htm

Tkl=Kirkwood, Tsr=Shark River, Tmg=Manasquan, Tht=Hornerstown, Kt=Tinton, Krbsh=Sandy Hook Member of the

ATLANTIC

CUMBERLAND

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SCALE

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DRAWING

SHEET

10.1/1

NTS

LEHT-01730

SESC-1

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