

**COASTAL RESOURCES
MANAGEMENT COUNCIL**

**SEMI-MONTHLY
MEETING**

TUESDAY, APRIL 23, 2019

6:00 P.M.

AGENDA



State of Rhode Island and Providence Plantations
Coastal Resources Management Council
Oliver H. Stedman Government Center
4808 Tower Hill Road, Suite 116
Wakefield, RI 02879-1900

(401) 783-3370
Fax (401) 783-2069

AGENDA

**Semi-Monthly Meeting – Full Council
Tuesday, April 23, 2019; 6:00 p.m.
URI Bay Campus; Coastal Institute; Hazards Room
218 S Ferry Rd, Narragansett, RI 02882**

**Approval of the minutes of the previous meeting – April 9, 2019
Subcommittee Reports
Staff Reports**

APPLICATIONS REQUESTING EXTENSION OF ASSENT:

**B2001-12-018 DEPARTMENT OF TRANSPORTATION – Interstate 195 Relocation
Project, Providence**

APPLICATIONS WHICH HAVE BEEN OUT-TO-NOTICE AND ARE BEFORE THE FULL COUNCIL FOR DECISION:

2019-03-046 CAROL OLMSTEAD -- Construct and maintain an experimental coastal erosion control structure consisting of a dune/dike with an ELCORock geosynthetic sand container core. The core will be covered with sand and planted with American Beachgrass. Sand shall come from an upland source. The structure shall be monitored for three years after installation or event of failure. If the structure fails all geosynthetic components shall be removed and the sand distributed on the beach. Located at plat 175, lot 15; 33 Atlantic Avenue, Westerly, RI.



State of Rhode Island and Providence Plantations
 Coastal Resources Management Council
 Oliver H. Stedman Government Center
 4808 Tower Hill Road, Suite 3
 Wakefield, RI 02879-1900

(401) 783-3370
 Fax (401) 783-2069

REQUEST FOR ASSENT EXTENSION

Assent/Permit Number: B01-12-18	(including extensions)
Assent/Permit Number: 2001-12-018	Expiration Date: August 1, 2019
Name of Assent Holder: David Fish	
Location of Project: Interstate 195, Providence, RI /Gano St.	
City/Town: Providence, RI	Plat: _____
	Lot: _____

Name of Present Owner: Rhode Island Department of Transportation, David Fish	
Mailing Address: Two Capital Hill	
City/Town: Providence	State: RI
	Zip: 02903
Phone Number: 401-222-2468 x 4513	Contact Person: Peter DeSimone

Indicate reason for extension request: There are currently three I-195 Relocation projects underway - C-16 Providence River Pedestrian Bridge, C-17 Waterfront Parks and C-18 Gano St. It is anticipated that the completion of these projects will extend beyond the current expiration date of August 1, 2019.

Indicate what (if any) work has been done: The C-16 Providence River Bridge Project is nearing completion, the bridge structure has been completed, grading and construction of walkways, site features and plantings nearing completion. C-17 grading, installation of walkways, site features, drainage, lighting, well underway. Placement of loam/plantings to begin in spring. C-18 Gano St. has been bid and project awarded. Construction to begin April 2019. It is anticipated that the final completion of these projects will be Spring 2020.

Owner's Signature: David W. Fish 4-2-19

Note: The applicant acknowledges by evidence of their signature that they have reviewed the Rhode Island Coastal Resources Management Program, and have, where possible adhered to the policies and standards of the program. The applicant also acknowledges by evidence of their signature that to the best of their knowledge the information contained in the application is true and valid. The filing of false information can result in the Coastal Resources Management Council revoking State Assent. Applicant requires that as a condition to the granting of this assent, members of the CRMC or its staff shall be access to the applicant's property to make on-site inspections to insure compliance with the assent. This application is made under oath and subject to penalties of perjury. 5/00





Department of Transportation
Two Capitol Hill
Providence, RI 02903

Office 401-222-2450
Fax 401-222-3905

April 2, 2019

Mr. Jeffrey M. Willis, Deputy Director
Coastal Resources Management Council
4808 Tower Hill Road
Wakefield, Rhode Island 02879

Attention: Richard Lucia

Subject: Assent Stipulation Material
CRMC ASSENT # 2001-12-018
I-195 Relocation
GANO STREET Contracts 16, 17 & 18
Providence, Rhode Island
C 18 PTS: 0012T
R.I. Contract No. (Design): 84127G
R.I. Contract No. (Construction): 2018 CH 086
R.I.F.A.P No. (Construction): STP-RESF (375)

Dear Mr. Lucia:

Provided is one copy of the additional information request for your office as part of the Assent Amendment (No. B2001-12-018):

- CRMC Assent Extension Request due to expire 8/1/2019
- Approved project plans stamped by RI P.E.

Thank you for your time in reviewing these documents. Should you have any questions or require additional information please contact the Project Manager, Peter DeSimone at 222-2023 extension 4513, or this office.

Sincerely,

Peter DeSimone
Project Manager I
Rhode Island Department of Transportation

PAD/
Attachments
cc: file





State of Rhode Island and Providence Plantations
Coastal Resources Management Council
Oliver H. Stedman Government Center
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Fax (401) 783-3767

ASSENT AMENDMENT

March 14, 2019

RI Department of Transportation
Attn: Peter DeSimone, Project Manager
Two Capitol Hill
Providence, RI 02903

RE: Modification of CRMC Assent B 2001-12-018 – Relocation of I-195 Contracts 14 & 15: Realign intersection of India St. and Gano St. Connect existing sections of shared use/bicycle path along Seekonk River, provide gravel parking adjacent to bike path and mill/overlay Gano St. from Washington Bridge overpass to intersection with Trenton St.
Site Address: Interstate 195; Providence

Dear Mr. Healey:

The Rhode Island Coastal Resources Management Council has reviewed your request for modification of assent no. B2001-12-018 and approves the amendment with the following alterations to stipulations:

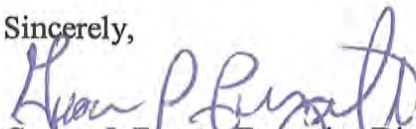
Stipulations of Approval:

- A. This Assent is hereby amended to include plans entitled “Department of Transportation...Improvements to Interstate Route I-195, Relocation-C18-Gano St...”, in 31 sheets, dated CRMC Submission 9/18/2018, by CDR/MAGUIRE.
- B. A set of approved plans bearing a Rhode Island Professional Engineer stamp shall be submitted prior to construction.
- C. All pertinent and required RIDEM approval shall be obtained prior to construction.
- D. The latest Assent Extension is to expire 8/1/2019. In cases where the approved work is not completed by this day, an Assent Extension Request Form must be submitted 60 days prior to expiration.

In addition, all conditions of the original and subsequently modified Assent B2001-12-018 shall remain in full force and effect.

Please contact this office should you have any questions (401-783-3370)

Sincerely,



Grover J. Fugate, Executive Director
Coastal Resources Management Council



/lat



Department of Transportation
Two Capitol Hill
Providence, RI 02903

Office 401-222-2450
Fax 401-222-3905

January 11, 2019

Mr. Jeffrey M. Willis, Deputy Director
Coastal Resources Management Council
4808 Tower Hill Road
Wakefield, Rhode Island 02879

Subject: **CRMC ASSENT # 2001-12-018**
I-195 Relocation
GANO STREET Contract 18
Providence, Rhode Island
PTS: 0012T
R.I. Contract No. (Design): 84127G
R.I. Contract No. (Construction): 2018 CH 086
R.I.F.A.P No. (Construction): STP-RESF (375)

Dear Mr. Willis:

An Assent extension was granted until August 1, 2019 for the original Assent No. 2001-12-018 on this project. One of the stipulations states plans for future contracts were to be submitted to CRMC for review. Please find one set of half-sized plans for Contract #18 Gano St, let me know if additional plans are needed. A brief narrative summary is included for your use.

Thank you for your time in reviewing these plans. Should you have any questions or require additional information please contact the Project Manager, Peter DeSimone at 222-2023 extension 4513, or this office.

Sincerely,

Peter DeSimone
Project Manager I
Rhode Island Department of Transportation

PAD/
Attachments
cc: file



SUPPLEMENTAL INFORMATION FOR CRMC ASSENT No. 2001-12-018
Improvements to Interstate Route 195: Contract 18
Gano Street Improvements

INTRODUCTION

This narrative provides supplemental information regarding the Improvements to I-195, Contract 18 – Gano Street Improvements project. The following project information and attached design plans are provided to facilitate review and approval of Contract 18 as required by Assent number B01-12-18, General Stipulation D Assent which required future Contract plans be submitted for written approval to the Coastal Resources Management Council (CRMC).

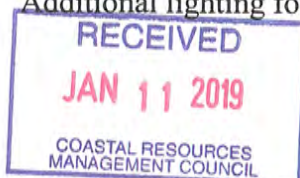
The following paragraphs briefly describe the proposed improvements;

The proposed improvements to Gano Street as it passes under the Washington Bridge have been part of the I-195 Relocation Project dating back to 1999 and is now Contract 18 of RIDOT's Improvements to I-195 project.

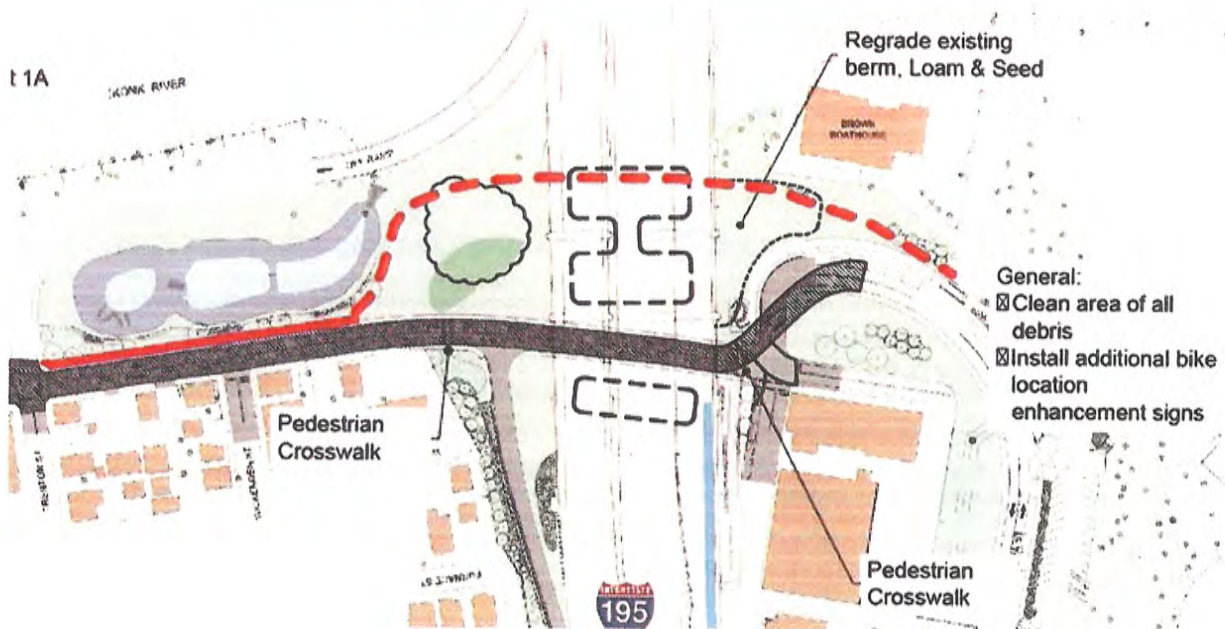


The proposed improvements include the following:

- The roadway will be realigned to connect India Street to existing Gano Street.
- Full depth reconstruction is planned for the new roadway section of Gano Street which will connect to India Street. The remaining section of Gano Street within the project limits will be milled and paved to the existing curbline.
- A level gravel area suitable for parking is proposed beneath the two eastern spans of the bridge.
- Revisions to NGrid lighting are proposed and will be coordinated with NGrid. Additional lighting for the unpaved parking areas under the bridge is also proposed.



- The proposed realignment of the roadway is expected to have minimal impact to the existing drainage for the area. Some catch basins may need to be relocated to follow the proposed curb line of the new connection. Existing catch basins along Gano Street will be reconstructed and adjusted as needed. No new connections are anticipated.
- A shared use path / bike path is proposed from the Brown Boat House driveway on India Street to Trenton Street which will connect to the existing bike paths.



RECEIVED
JAN 11 2019
COASTAL RESOURCES
MANAGEMENT COUNCIL

SUMMARY

The goal of Contract 18 is to complete the Gano Gateway which would solve the problems that currently exist for motorists, pedestrians and bicyclists at the intersection of India and Gano Streets. It is called the Gano Gateway because it is located at the convergence of the first I-195 entrance into the city from the east and a nexus of bike pathway systems. At this critical point, the Blackstone Bike Way, which will eventually connect to Woonsocket, joins the Washington Bridge Linear Park, the East Bay Bikeway system and India Point Park for access to other bikeways into Providence. The proposed design plan will provide widened sidewalks and traffic crossings, for cyclists, pedestrians, and dog walkers. Included in the RIDOT design is additional gravel lighted parking lots under the bridge for India Point Park.

The City of Providence and the State of Rhode Island believe the proposed roadway improvements and shared use path will provide safety and enhanced connectivity for pedestrians and cyclists in the area.

The following paragraphs provide additional detail for the applicable requirements of the Rhode Island Coastal Resources Management Program, which are directly applicable to Contract 18.

B. Filling, Removing, or Grading of Shoreline Features

Although a portion the work will be within the jurisdictional limits, disturbed areas subject to erosion will be ringed by compost filter socks (cfs) and /or cfs and silt fence combination similar to RIDOT Std. 9.3.0 to control sediment during and after construction. Erosion may take place during construction but the sediment will be contained within the ring of cfs or silt fence. The erosion controls will be maintained as per Section 212 of the RIDOT Specifications and Standards until the slope is stabilized.

C. Residential, Commercial, Industrial, and Recreational Structures

No structures meeting the definitions of this section are planned for the project.

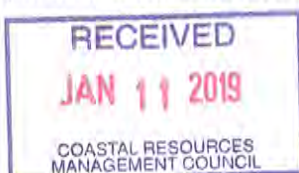
F. Treatment of Sewage and Stormwater

Sewage: There is no sanitary sewer system work proposed at par of this project.

Stormwater: The proposed realignment of the roadway is expected to have minimal impact to the existing drainage for the area. Some catch basins may need to be relocated to follow the proposed curb line of the new connection. Existing catch basins along Gano Street will be reconstructed and adjusted as needed. No new connections are anticipated.

G. Construction of Shoreline Protection Facilities

The entire project is located upstream of the Fox Point Hurricane Barrier and as such, is assumed to be protected from severe or catastrophic coastal storm events.



I. Dredging and Dredged Materials Disposal

No dredging is anticipated for this project.

J. Filling Tidal Waters

No filling of tidal water is anticipated for this project.

L. Coastal Wetland Mitigation

There are no existing coastal wetlands within the project limits.

M. Public Roadways, Bridges, Parking Lots, Railroad Lines and Airports

The project will include the reconstruction of Gano Street and construction of a gravel parking lot under the bridge.

Q. Wetland Walkover Structures

There are no wetland walkover structures proposed for this project.

1.3.5 Scenic Protection and Enhancement Guidelines***1.3.6 Protection and Enhancement of Public Access to the Shore***

The project includes a shared use path / bike path which will connect the East Bay Bikeway System and India Point Park to the Blackstone Bikeway system. The proposed project will provide enhanced safety and connectivity for pedestrians and cyclists. Lighted gravel parking lots are also proposed under the bridge to provide additional parking for India Point Park.





State of Rhode Island and Providence Plantations
Coastal Resources Management Council
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July 17, 2018

Department of Transportation
Attn: David Fish, PE, Project Management
Two Capitol Hill
Providence, RI 02903

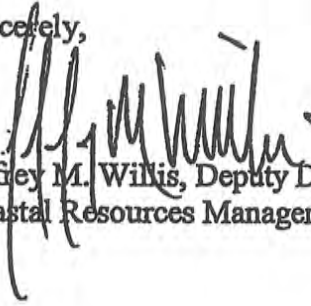
RE: Extension of CRMC Assent No. 2001-12-018
Site Location: Interstate 195, Providence, RI

Dear Mr. Fish:

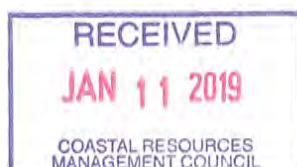
Coastal Resources Management Council Assent File Number B2001-12-018 is granted a one year extension from August 1, 2018 and will expire on August 1, 2019.

All future Assent Extensions will be subject to the provisions of Rhode Island Coastal Resources Management Council Management Procedures Section 5.12.

Sincerely,


Jeffrey M. Willis, Deputy Director
Coastal Resources Management Council

/lat





STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

COASTAL RESOURCES MANAGEMENT COUNCIL

Oliver H. Stedman Government Center
4808 Tower Hill Road, Suite 3
Wakefield, R.I. 02879-1900

(401) 783-3370
FAX: (401) 783-3767

ASSENT

File Number: 01-12-18

Assent Number: B01-12-18

Whereas, **Rhode Island Department of Transportation**
Two Capitol Hill; Room 230
of **Providence, RI 02903**

has applied to the Coastal Resources Management Council for assent to: Relocate Interstate Route I-195, and represents that they are the owners of the riparian rights attached to the property involved and submitted plans of the work to be done.

Now, said Council, having fully considered said application in accordance with all the regulations as set forth in the Administrative Procedures Act does hereby authorize said applicant, subject to the provisions of Title 46, Chapter 23 of the General Laws of Rhode Island, 1956, as amended, and all laws which are or may be in force applicable thereto: Relocation of I-195 from the Washington Bridge to I-95 in Providence along the Hurricane Barrier Alignment. The relocation includes a new fully directional interchange with I-95, new access and egress to Providence, improvements along I-95 from Thurbers Avenue to Broad Street, demolition of the existing facility, restoration of the city street pattern along the abandoned right-of-way, and completion of certain elements of the City's Old Harbor Plan. [Independent advanced construction on some of the Old Harbor elements were included under Contract 1 (assent B98-6-55) and Contract 3 (assent B00-5-72). Advanced construction on Water Quality Management elements, including a water quality pond at Gano Street and "Vortechinics" structures at Thurbers Avenue, were included under Contract 2, B97-9-74).]

Listed below are the major components of the I-195 relocation project that are included in this assent:

- New eight lane interstate highway from the west end of the Washington Bridge to a new interchange with I-95 east of the Rhode Island Hospital (1.5 miles).
- Reconstruction and modification of I-95 between Thurbers Avenue and Broad Street to accommodate new ramps and elimination of existing Hayward Park Interchange (2 miles).
- New full directional interchange between I-195 and I-95.
- New 900 foot long Providence River Bridge with a network arch feature span of 400 feet.
- Six new overpass bridges for city streets over/under the interstate.

The following urban design elements and components of the Old Harbor Plan are included with this assent:

- Right-of-Way landscaping
- India Point Park landscaping restoration and mitigation

- Fifty foot (50') wide landscaped Pedestrian Bridge across I-195
- New/restored riverwalls and riverwalks along the east side of the Providence River from James Street to Point Street, and along the west side from the limits of Contract 3 to Ship Street.

The relocation involves extensive utility impacts and relocations. The following is a list of major relocations that are considered a part of this assent:

- 3,600 feet of overhead Electric Transmission Lines
- 10,500 feet of underground Primary Electric Distribution
- 136,000 Barrel Oil Tank (assent applied for separately)
- 900 feet of 52" Combined Sewer Interceptor
- 9,000 feet of water mains
- 8,500 feet of gas mains
- 600 feet of telephone lines

Supplemental plan submissions will be made for each construction contract at the 90% benchmark.

This assent is granted in accordance with said plans submitted to this Council and approved by this Council. All work being permitted must be completed on or before **July 22, 2005** after which date this assent is null and void, (unless written application requesting an extension is received by CRMC sixty (60) days prior to expiration date).

Applicant agrees that as a condition to the granting of this assent, members of the Coastal Resources Management Council or its staff shall have access to applicant's property to make on-site inspections to insure compliance with the assent.

Licensee shall be fully and completely liable to State, and shall waive any claims against State for contribution or otherwise, and shall indemnify, defend, and save harmless State and its agencies, employees, officers, directors, and agents with respect to any and all liability, damages (including damages to land, aquatic life, and other natural resources), expenses, causes of action, suits, claims, costs (including testing, auditing, surveying, and investigating costs), fees (including attorneys' fees and costs), penalties (civil and criminal), and response, cleanup, or remediation costs assessed against or imposed upon Licensee, State, or the Property, as a result of Licensee's control of the Property, or Licensee's use, disposal, transportation, generation and/or sale of Hazardous Substances or that of Licensee's employees, agents, assigns, sublicensees, contractors, subcontractors, permittees, or invitees.

Nothing in this assent shall be construed to impair the legal rights of this granting authority or of any person. By this assent the granting authority by no manner, shape, or form assumes any liability or responsibility implied, or in fact, for the stability or permanence of said project; nor by this assent is there any liability implied or in fact assumed or imposed on the granting authority. Further, the granting authority by its representatives or duly authorized agents shall have the right to inspect said project at all times including, but not limited to, the construction, completion, and all times thereafter.

This Assent is granted with the specific proviso that the construction authorized therein will be maintained in good condition by the owner thereof, his heirs, successors, or assigns for a period of fifty (50) years from the date thereof, after which time this permission shall terminate necessitating either complete removal or a new application.

Permits issued by the CRMC are issued for a finite period of time, confer no property rights, and are valid only with the conditions and stipulations under which they are granted. Permits imply no guarantee of renewal, and may be subject to denial, revocation, or modification.

A copy of the legal decision from the full Council proceeding may be acquired by contacting the CRMC office in writing.

A copy of this Assent shall be kept on site during construction.

Application for future alteration of the shoreline or other construction or alteration within the CRMC jurisdiction shall be submitted to the CRMC for review prior to commencing such activity.

All applicable policies, prohibitions, and standards of the RICRMP shall be upheld.

All local, state or federal ordinances and regulations must be complied with.

Please be advised that as a further conditions of this Assent, it is hereby stipulated that you and/or your agents shall comply at all times with Federal and State Water Quality Standards and other State standards and regulations regarding water quality, and shall exercise such supervision over and control of these facilities to prevent the dumping or discarding or refuse, sanitary wastes and other pollutants in the tidal waters, either from vessels docked at said facilities or from land adjacent thereto.

No work that involves alteration to wetlands or waters of the United States, shall be done under this Assent until the required Federal Permit has been obtained.

Non-compliance with this assent shall result in legal action and/or revocation of this permit.

CAUTION:

The limits of authorized work shall be only for that which was approved by the CRMC. Any activities or alterations in which deviate from the approved plans will require a separate application and review. If the information provided to the CRMC for this review is inaccurate or did not reveal all necessary information or data, then this permit may be found to be null and void. Plans for any future alteration of the shoreline or construction or alteration within the 200' zone of CRMC jurisdiction or in coastal waters must be submitted for review to the CRMC prior to commencing such activity.

Permits, licenses or easements issued by the Council are valid only with the conditions and stipulation under which they are granted and imply no guarantee of renewal. The initial application or an application for renewal may be subject to denial or modification. If an application is granted, said permit, license and easement may be subject to revocation and/or modification for failure to comply with the conditions and stipulations under which the same was issued or for other good cause.

ATTENTION: ALL STRUCTURES AND FILLED AREAS IN THE TIDAL, COASTAL, OR NAVIGABLE WATERS OF THE STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS ARE SUBJECT TO:

1. The Superior Property Rights of the State of Rhode Island and Providence Plantations in the Submerged and Submersible Lands of the Coastal, Tidal, and Navigable Waters;
2. The Superior Navigation Servitude of the United States;
3. The Police Powers of the State of Rhode Island and the United States to regulate Structures in the Tidal, Coastal, or Navigable Waters.

THE SUBMERGED AND SUBMERSIBLE LANDS OF THE TIDAL, COASTAL, AND NAVIGABLE WATERS OF THE STATE ARE OWNED BY THE STATE AND HELD IN TRUST FOR THE PUBLIC. CONVEYANCE OF THESE LANDS IS ILLEGAL; TITLES PURPORTING TO TRANSFER SUCH LANDS ARE VOID. ASSENTS THAT INVOLVE THE FILLING OR USE OF THE STATES SUBMERGED LANDS ARE GRANTED WITH THE PROVISIO THAT IT IS SUBJECT TO THE IMPOSITION OF A USAGE FEE TO BE ESTABLISHED BY THE COASTAL RESOURCES MANAGEMENT COUNCIL.

SPECIFIC STIPULATIONS OF APPROVAL

General Stipulations

- A. For the purpose of this permit, the coastal feature shall be the river walls; and the inland edge of the coastal feature shall be the top of the river walls.
- B. The approved plans for "Contract 4" shall be those entitled "Plan, Profile, and Sections of Proposal Improvements to Interstate Route 195 Contract 4 Point Street Overpass, Volume 1 of 11: Highway Plans..." dated 12/19/01 ("Pre-PS&E submission"), in 72 sheets, by Maquire Group. The approved specifications shall be those entitled "Improvements to Interstate Route 195 Contract 4 - Point Street Overpass..." dated Dec. 2001, by Maguire Group Inc. All work shall strictly conform to these approved plans and specifications.
- C. The approved plans for "Contract 5" shall be those entitled "Improvements to I-195 Contract 5 Combined Sewer Interceptor Relocation, Advance Embankment Construction..." dated August, 2001. All work shall strictly conform to these-approved plans and specifications.



D. Per CRMC decision, future Contract plans (Contracts 6 and beyond) shall be submitted to CRMC for written approval when "90% Submission" detail is developed. CRMC shall be afforded adequate time to review said plans.

E. Prior to initiation of construction, the applicant is required to schedule a meeting between the contractor and the CRMC staff. This meeting will be held to clarify and stress the terms of the permit, and to discuss details of erosion and sedimentation controls, methods of construction, construction timing, dewatering, etc.

F. CRMC shall be provided contact information for appropriate environmental Project Managers when available, for purposes of CRMC permit monitoring.

Earthwork Stipulations

G. In general, the standards and specifications set forth in the most recent RI Soil Erosion and Sediment Control Handbook (RISESCH) shall be strictly adhered to.

H. All excess excavated materials, excess soils, excess construction materials, and debris shall be removed from the site and disposed of at an inland landfill or a suitable and legal upland location outside of CRMC jurisdiction. No unauthorized materials shall be deposited on the coastal feature, in coastal waters, or in any areas designated as a CRMC setback or coastal buffer zone.

I. All areas of exposed soil which are disturbed by construction and related activities shall be revegetated as immediately as is physically possible so as to minimize erosion and sedimentation. If the season is not conducive to immediate revegetation, all exposed soils shall be temporarily stabilized with hay mulch, jute mat netting or similar erosion control materials. Soil stabilization methods shall be employed during, as well as after, the construction phase to the maximum extent possible.

J. There shall be no discharge or disposal of hazardous wastes or hazardous materials which may be associated with construction machinery, etc. on the site or in the waterway. All used oil, lubricants, construction chemicals, etc. shall be disposed of in full compliance with applicable State and Federal regulations.

K. Turbidity from construction related activities shall be prevented and/or maintained at the absolute minimum levels. Should excessive turbidity occur within the Rivers, as determined by CRMC field staff, construction shall cease until such time as appropriate corrective measures are employed, and turbidity is reduced to acceptable levels.

In Witness Whereof, said Coastal Resources Management Council have hereto set their hands and seal this 22nd day of July in the year two-thousand-two.



Grover J. Fugate, Executive Director
Coastal Resources Management Council



State of Rhode Island and Providence Plantations
Coastal Resources Management Council
Oliver H. Stedman Government Center
4808 Tower Hill Road, Suite 116
Wakefield, RI 02879-1900

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Fax (401) 783-3767

ASSENT AMENDMENT

March 14, 2019

RI Department of Transportation
Attn: Peter DeSimone, Project Manager
Two Capitol Hill
Providence, RI 02903

RE: Modification of CRMC Assent B 2001-12-018 – Relocation of I-195 Contracts 14 & 15: Realign intersection of India St. and Gano St. Connect existing sections of shared use/bicycle path along Seekonk River, provide gravel parking adjacent to bike path and mill/overlay Gano St. from Washington Bridge overpass to intersection with Trenton St. Site Address: Interstate 195; Providence

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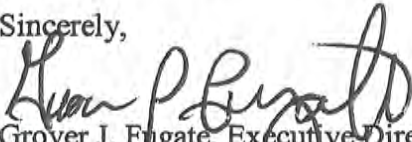
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Sincerely,


Grover J. Fugate, Executive Director
Coastal Resources Management Council

/lat



Department of Transportation
Two Capitol Hill
Providence, RI 02903

Office 401-222-2450
Fax 401-222-3905

March 13, 2019

Mr. Jeffrey M. Willis, Deputy Director
Coastal Resources Management Council
4808 Tower Hill Road
Wakefield, Rhode Island 02879

Attention: Richard Lucia

Subject: **Supplemental Information II**
CRMC ASSENT # 2001-12-018
I-195 Relocation
GANO STREET Contract 18
Providence, Rhode Island
PTS: 0012T
R.I. Contract No. (Design): 84127G
R.I. Contract No. (Construction): 2018 CH 086
R.I.F.A.P No. (Construction): STP-RESF (375)

Dear Mr. Lucia:

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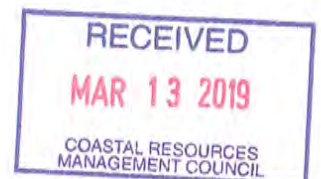
- CRMC Supplemental Information Narrative
- Original Improvements to I-195 Drainage Report
- Drainage Area Figure Map

Thank you for your time in reviewing these plans. Should you have any questions or require additional information please contact the Project Manager, Peter DeSimone at 222-2023 extension 4513, or this office.

Sincerely,

Peter DeSimone
Project Manager I
Rhode Island Department of Transportation

PAD/
Attachments
cc: file



Project Memo

I-195 Relocation - C - 18 - Gano St, RIC No. 2018-CH-086

Date: March 8, 2019

To: Richard Lucia

From: Jonathan Geary

Copies to: Peter DeSimoe

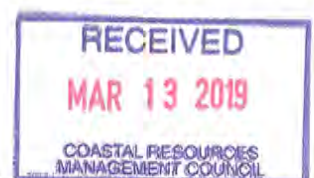
Subject: CRMC Permit Application – Stormwater/Water Quality

The purpose of this memo is to provide the State of Rhode Island Coastal Resources Management Council (CRMC) a summary of work performed under an earlier I-195 Relocation contract. This work is relevant because it accounted for stormwater and water quality requirements of future projects. The attached Drainage Report includes the analysis and design of the Gano Street water quality pond which is located adjacent to the Gano St project. Also attached is a drainage area figure that shows an approximate 2.6 acre overlap between the Gano Street pond's contributing drainage area and this project's disturbed area.

The Drainage Report describes the water quality pond's features which include a sediment forebay, a shallow marsh pool and a micro-pool. These features were designed to collectively remove a minimum of 80% of suspended solids. Submerged pipes pass flow from the forebay to the shallow marsh pool. Additionally, each of these structures are divided by riprap channels that pass flow from large storm events. The average depth of the shallow marsh pool is 12-inches which promotes wetland plant growth. These plants provide a means of biological uptake of contaminants such as phosphorus and nitrogen. The micro-pool is elongated to provide additional settlement. An outlet control structure passes low flows to a riprap channel and a riprap spillway passes high flows.

On page 3 of the Drainage Report it is noted that future improvements to Gano and India Streets were considered during the design of the water quality pond.

CDR Maguire, Inc. proposes that the water quality pond installed as part of an early I-195 Relocation project provides the I-195 Relocation - C - 18 - Gano St project with adequate treatment facilities to meet the requirements of the CRMC permit.



REV. NO.	DATE	BY	DESCRIPTION
1		R.L.	STP-RESF(375)



P18



RECEIVED
MAR 13 2019
 COASTAL RESOURCES
 MANAGEMENT COUNCIL



RHODE ISLAND
 DEPARTMENT OF TRANSPORTATION



DESIGNED BY PHD
 CHECKED: JG
 DATE: 9/16
 SHEET: MC-P18
 OF: V1_000

SCALE:		N.T.S.	
NO.	DATE	NO.	DATE

I-195 RELOCATION - C - 18 - GANO ST
 PROVIDENCE
 RHODE ISLAND
 GANO STREET PONDS
 DRAINAGE AREAS

CRMC DECISION WORKSHEET

2019-03-046

Carol Olmstead

Hearing Date:	
Approved as Recommended	
Approved w/additional Stipulations	
Approved but Modified	
Denied	Vote

APPLICATION INFORMATION						
File Number	Town	Project Location		Category	Special Exception	Variance
2019-03-046	Westerly	33 Atlantic Ave.		B	<input type="checkbox"/>	<input type="checkbox"/>
		Plat	175			
		Owner Name and Address				
Date Accepted	3-12-19	Carol Olmstead		Work at or Below MHW	<input type="checkbox"/>	
Date Completed	4-12-19	2 Old Farm Road		Lease Required	<input type="checkbox"/>	
		Norwood, MA 02062				

PROJECT DESCRIPTION

Install experimental erosion control technology consisting of sand filled geotextile bags (ElcoRock 2.5 meter GSC) as a dune/dike core. The bags will be covered with sand planted with beach grass (*Ammophila brevilgolata*). A three year monitoring plan will be done to determine the efficacy of the technology.

KEY PROGRAMMATIC ISSUES

- Coastal Feature:** Coastal beach and remnant dune/dike on a coastal headland
- Water Type:** Type 1,
- CRMP:** (650-RICR-20-00-1) 1.1.6 (F), 1.2.1 (B), 1.2.2 (A), 1.2.2 (D), 1.2.2 (G), 1.3.1 (A)
- SAMP:** Salt Pond Region SAMP (650-RICR-20-00-3), Experimental Coastal Erosion Control 3.4.12


Variances and/or Special Exception Details:

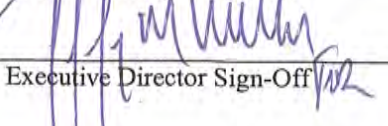
Additional Comments and/or Council Requirements: This project is located within the Misquamicut Headland experimental coastal erosion control (ECEC) designated area. The proposed ECEC technique was previously determined to be an acceptable technology by the Technical Review Panel.

Specific Staff Stipulations (beyond Standard stipulations): see report

STAFF RECOMMENDATION(S)

Engineer _____ Recommendation: _____
 Biologist _____ Recommendation: _____
 Other Staff **JHF** Recommendation: **approval**


 Coastal Geologist Sign-Off _____ date 4-15-19


 Executive Director Sign-Off _____ date 4/15/19

 Staff Sign off on Hearing Packet (Eng/Bio) _____ date

Rhode Island Coastal Resources Management Council
Geologist's Report

CRMC File No. 2019-03-046

Report Completion Date: 4-15-19

Owner: Carol Olmstead

Town: Westerly

Location: 33 Atlantic Ave.

Plat: 175 Lot: 15 Pole #:

Waterway: Block Island Sound

RICRMP Use Category: B

Project Description: Install experimental erosion control technology consisting of sand filled geotextile bags (ElcoRock 2.5 meter GSC) as a dune core. The bags will be covered with sand planted with beach grass (*Ammophila brevilgolata*). A three year monitoring plan will be done to determine the efficacy of the technology.

Timeline:

1995-05-096 – Beach and dune restoration following Hurricane Bob

2009-07-035 – Re-shingle existing dwelling

2013-02-155 – Sandy Emergency Assent for dune restoration

2016-09-116 – Construct and maintain dwelling and septic

2017-04-084 – Construct and maintain rear deck

2018-08-092 – Dune/dike restoration

2019-02-011 - Preliminary Determination for experimental coastal erosion control

2019-03-046 – Experimental coastal erosion control

Coastal Feature(s): Coastal beach on a coastal headland.

Backing Upland Feature (note elevations): Charlestown end moraine ~ 1 mile to the north (>100 feet NAVD88) and glacial delta plain sloping gradually to the coast.

Existing Upland Development (on site and surrounding): residential development in the immediate area, commercial and recreational development nearby. An undeveloped barrier is located to the west of the site.

Soils Information (Site or SCS Soil Survey of RI): Ba, HU

Flood Zone Information: FEMA BFE VE14, STORMTOOLS SDE 15+ at house location, 17.9 at proposed dune/dike location

Other Review Items Used: STORMTOOLS, Shoreline change maps, Coastal Hazard Application

Aerial Photos (date and scale): Google Earth 1992-2018

Staff Signature: _____

**Rhode Island Coastal Resources Management Council
Geologist's Report**

CRMC File No. 2019-03-046

Geologic comment regarding CRMC:

The property is located on a coastal headland adjacent to Type 1 waters. Beach and dune restoration have been the only options for erosion control at this location prior to the implementation of the Experimental Coastal Erosion Control regulations of the Salt Pond Region SAMP (650-RICR-20-00-3.4.12). There have been various permits issued for using natural systems for erosion control on this property including beach and dune restoration (1995-05-096), and dune restoration (2013-02-155 and 2017-04-084). The beach, and established vegetated dunes offer some protection in moderate storms, but the lot lacks the dimensions to accommodate a dune that would be sufficiently robust for erosion and flood protection in a major storm.

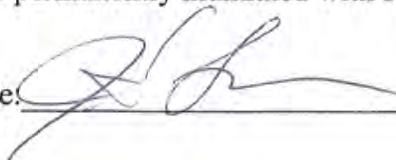
This property is located within the Misquamicut Headland area targeted for use of experimental coastal erosion control techniques (figure 1). The technique proposed by the applicant, dune/dike construction using ElcoRock 2.5 meter geosynthetic sand containers (GSCs) for the dune core, was approved by the Technical Review Panel (TRP) on November 24, 2015. The TRP determined that maintenance is very important to the integrity of this experimental coastal erosion control system. Maintenance recommended by the TRP includes monitoring for ripped bags, repair or replacement of any damaged bags, and keeping the ElcoRock dune core covered with sand to protect from UV exposure. In addition to maintenance, a three year monitoring program is required. Monitoring shall consist of three quarterly beach profiles surveys; one on each property boundary and one at 25 feet from the property boundaries in the center of the lot. Beach profiles shall be measured from the datum located landward of the experimental coastal erosion control system to MLLW if feasible. Quarterly reports which include beach profile survey results and site photos shall be submitted to CRMC for three years. A summary report shall be submitted to CRMC 30 days after the end of the 3 year monitoring study. The summary report shall detail whether the experimental coastal erosion control system was a success or failure and why. Datum locations are identified on the plans submitted with this application.

The proposed experimental coastal erosion control system will be within the footprint of the pre-Sandy dune/dike that was previously approved for restoration under Assent 2017-04-084. The system will tie into a stone structure on the western property boundary (figure 2) and align with an existing dune/dike on the eastern property boundary (figure 3). If there are adverse impacts from the experimental coastal erosion control system to the adjacent properties or to coastal resources the ElcoRock bags are easily slit, sand emptied from the bags and spread on the beach, and geotextile elements collected and removed to a suitable upland disposal area. This would require one or two days of work and cost would not exceed \$3,000 (email from David Lager 2-8-2019). The applicant has set up an escrow account for \$3,000 to be used for removal in the event of a failure of the system.

Sea level rise:

The access to the property will be compromised with three feet of sea level rise. With five feet of sea level rise Atlantic Ave. will flood daily in front of this property as far as Maplewood Ave. and more than 900 feet going north on Maplewood Ave. With seven feet of sea level rise Atlantic Ave. will be inundated along its entire length, with more than five feet of water in places. The applicant's house and septic system will be permanently inundated with seven feet of sea level rise. Coastal storms surges will increase

Staff Signature: _____



**Rhode Island Coastal Resources Management Council
Geologist's Report**

CRMC File No. 2019-03-046

in water depth, wave heights and destructive power as sea levels rise, resulting in more damages in lesser magnitude storms.

Erosion history:

The long-term erosion rates on this property average a little more than one foot per year (figure 4). This is lower than on the south shore barriers or low-lying headlands, like those in South Kingstown, that consist of fine grained loess. However, this area is very susceptible to washover processes during both tropical and extra-tropical storms. Sand and cobble from the beach, dune/dike, and back dune area are frequently eroded. The extent of erosion is dependent on the severity of the storm.

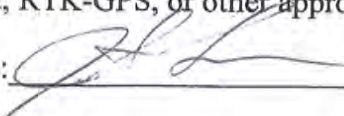
Several large coastal storms have impacted the property in the last decade or more. During the Patriot Day Nor'easter in 2007 (figures 5 and 6), storm surge and waves eroded sand and cobble from the beach and dune/dike, and deposited the sediment in the road and other low lying sections of the headland. These processes again eroded the beach, most of the dune/dike and the back dune area during Tropical Storm Irene in 2011. Figures 7 and 8 illustrate the damages to the coastal features in this section of the Misquamicut headland. A remnant section of the dune/dike survived the storm surge. Superstorm Sandy in 2012 was the most destructive storm to hit the area since the early 1990s and caused significant damage to the property (figures 9 and 10). The dune/dike was completely eroded and three houses, including the applicant's, were condemned and later demolished. Google Earth aerial photos show some success in restoring the vegetated dune/dike after Superstorm Sandy, until a 2017 nor'easter. The newly restored dune/dike was completely eroded from the adjacent properties and overwash sand transported into Atlantic Ave. (figures 11 and 12). The erosion was likely exacerbated by lack of a robust beach grass (*Ammophila breviflorata*) root system. With sea level rise, lower magnitude storms have the potential to be as damaging as the more intense past storms. This will increase the difficulty in establishing a dune system in this area.

Conclusion:

In summary, there is an erosion problem characterized by overwash processes at this property. The proposed dune/dike restoration using an ElcoRock 2.5 meter GSC core is an appropriate solution to limit erosion and sediment transport for the smaller and mid-sized storms. Therefore the coastal geologist recommends approval for experimental coastal erosion control using the proposed methods with a three year monitoring plan.

Recommendations: In addition to the standard stipulations I recommend the following:

Geo1. A monitoring report that includes site photos, three beach profiles cross sections, and accompanying survey data shall be submitted quarterly. A summary report shall be submitted to the CRMC within 30 days following the end of the 3-year period or when notified by the CRMC in the event of an apparent failure of the system. The quarterly reports shall include beach/experimental coastal erosion control system profiles (cross sections), beach profile data points and photographs. The beach profile data points shall measure the ground surface elevation from the profile datum to MLLW if possible and be reported in elevation relative to NAVD88. Profiles can be measured using a modified Emory Method, RTK-GPS, or other approved surveying method. The summary report shall detail whether

Staff Signature: 

**Rhode Island Coastal Resources Management Council
Geologist's Report**

CRMC File No. 2019-03-046

the experimental coastal erosion control was a success or failure and the reasons behind such success or failure.

Geo2. The experimental coastal erosion control system shall be regularly inspected for exposed or torn geotextile bags. Torn bags shall be repaired or replaced.

Geo3. The sand covering is important for habitat benefits and to protect the geotextile bags from UV exposure that may lead to degradation of the geotextile. If the bags are uncovered due to storm surge and waves they will need to be covered with sand as soon as feasible.

Geo4. The Permittee and the CRMC have executed an Escrow Agreement. Its terms and conditions are hereby incorporated into this Assent as additional stipulations.

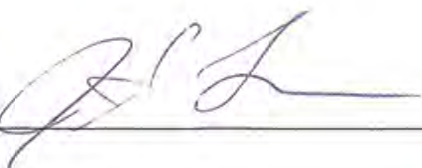
Geo5. If significant damage to adjacent properties or coastal resources occurs or the system fails the experimental erosion control system shall be removed. In such circumstances, the CRMC may order the Permittee to remove, and in some cases immediately, the failed experimental coastal erosion control system. In the event of immediate and significant adverse environmental impacts, i.e. geosynthetic elements are likely to be transported to tidal waters, the Permittee shall remove the experimental coastal erosion control system as soon as it is safe to do so.

Geo6. Removal shall include cutting open the ElcoRock bags, emptying sand from the bags, spreading the sand on the beach. The geotextile elements shall be collected and transported to a suitable upland disposal area. The CRMC may utilize the Escrow account to pay for the removal of structures and restoration of the beach.

Geo7. This Assent shall be valid for a three (3) year period, but may be renewable upon application. A Permittee must submit an application for renewal within sixty (60) days prior to the expiration of the Assent. Otherwise, the experimental coastal erosion control must be removed at the termination of the Assent and the site restored to pre-project conditions.

See Stipulations Sheets: JHF

Staff Signature: _____



Rhode Island Coastal Resources Management Council
Geologist's Report

CRMC File No. 2019-03-046

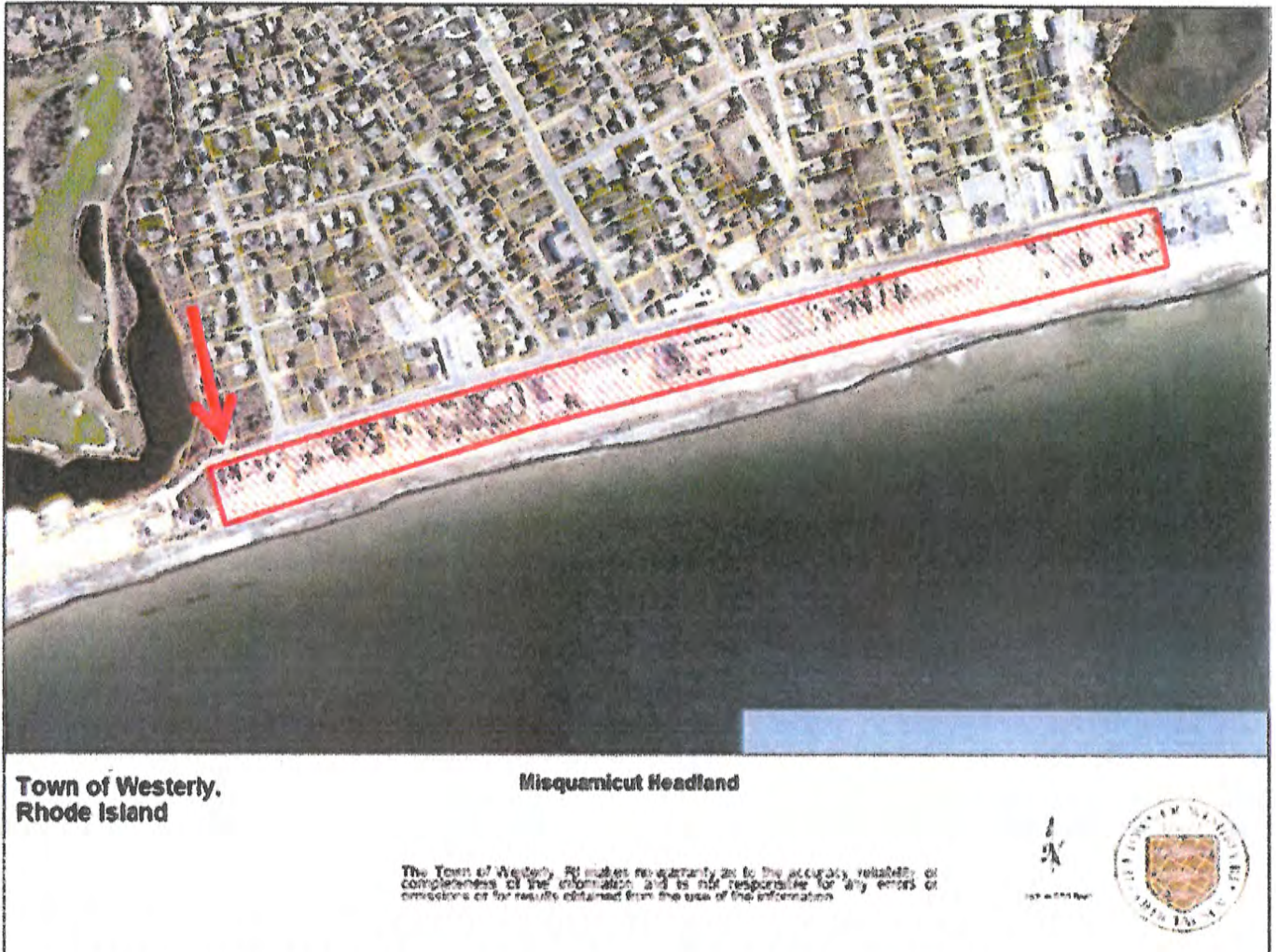


Figure 1. Misquamicut Headland area depicting the area identified for experimental coastal erosion control methods in the red hatched area. The red arrow points to the applicant's property.

Staff Signature: _____

Rhode Island Coastal Resources Management Council
Geologist's Report

CRMC File No. 2019-03-046



Figure 2. Stone structure on the property to the west of the proposed experimental coastal erosion control technique.

Staff Signature: _____

Rhode Island Coastal Resources Management Council
Geologist's Report

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Figure 3. The recently restored dune/dike on the property located east of the proposed experimental coastal erosion control technique. The proposed structure will tie into the rock structure and align with the dune/dike to the east.

Staff Signature: _____

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Rhode Island Coastal Resources Management Council
Geologist's Report

CRMC File No. 2019-03-046

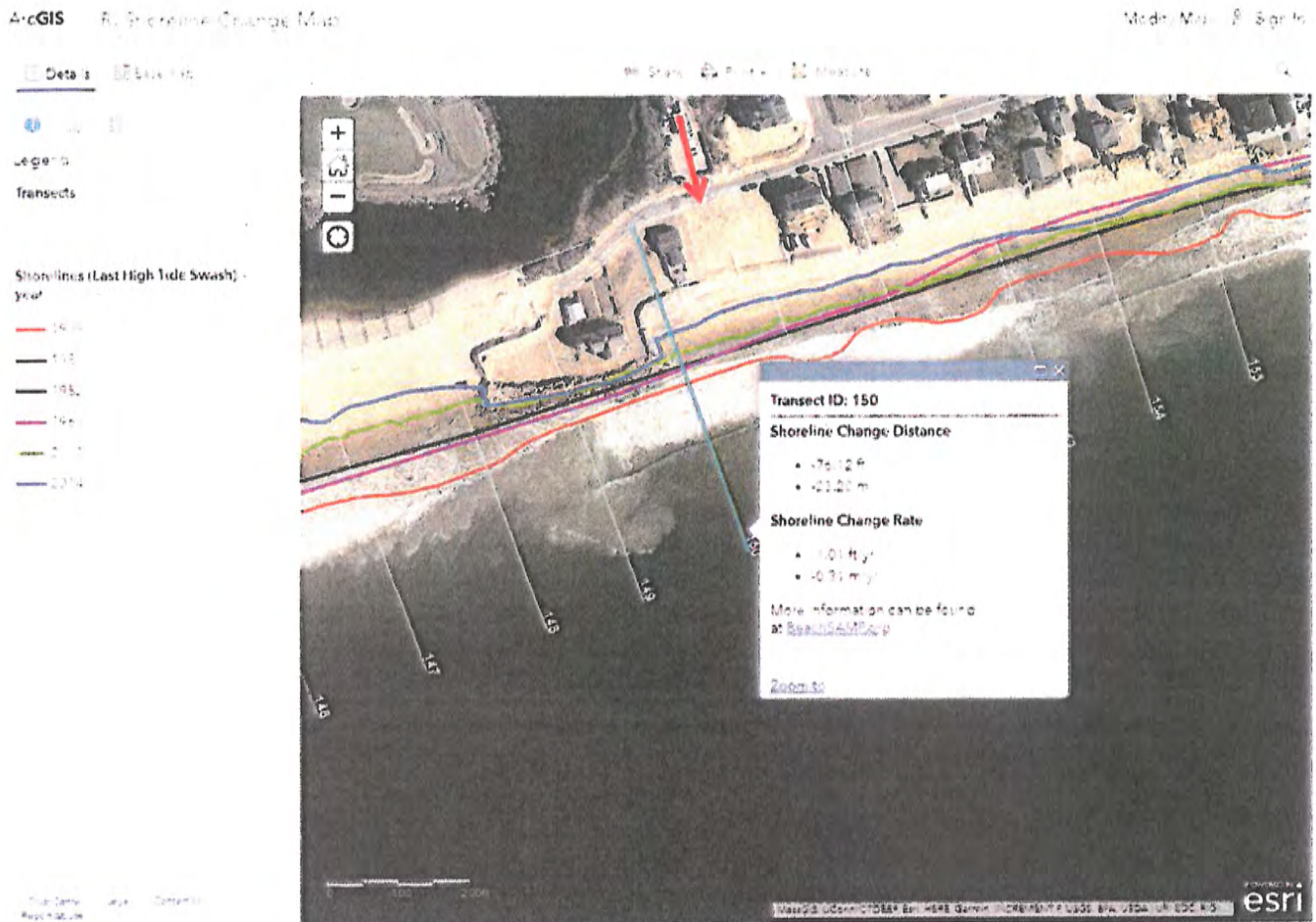
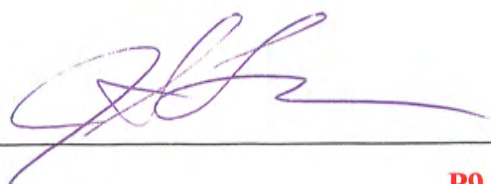


Figure 4. Shoreline change rates from 1939 to 2014 showing erosion averaging 1.01 feet per year. The arrow points to the applicant's property.

Staff Signature: 

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Geologist's Report

CRMC File No. 2019-03-046

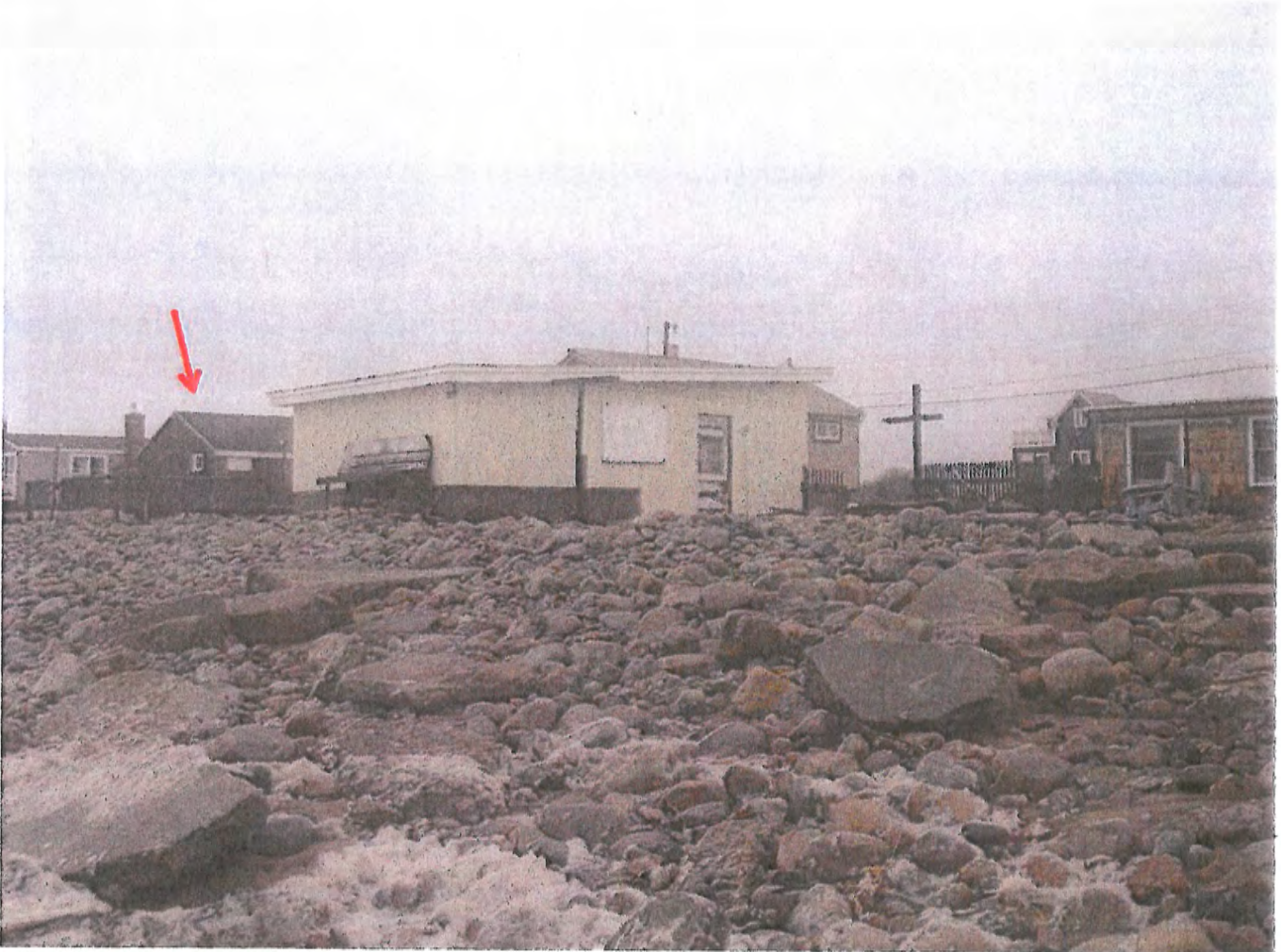


Figure 5. Storm surge and waves removed sand and cobble from the beach and moved it landward on the low lying headland. The red arrow identifies the applicant's property. The photo was taken after the Patriot Day Nor'easter in 2007.

Staff Signature: _____

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Rhode Island Coastal Resources Management Council
Geologist's Report

CRMC File No. 2019-03-046



Figure 6. Overwash sand is eroded from the beach and dune by storm surge and waves is deposited landward of the houses during the Patriot Day Nor'easter in 2007. The house on the right is next door to the applicant's property.

Staff Signature: _____

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P11

Rhode Island Coastal Resources Management Council
Geologist's Report

CRMC File No. 2019-03-046



Figure 7. Sand and cobble from the beach and dune was eroded during Tropical Storm Irene in 2011. The post-Irene beach was characterized by cobble and boulder. Remnants of the dune remained at the next door property, but the exposed base of the pilings indicate that there was erosion in the back dune area as well as on the beach.

Staff Signature: _____

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Rhode Island Coastal Resources Management Council
Geologist's Report

CRMC File No. 2019-03-046

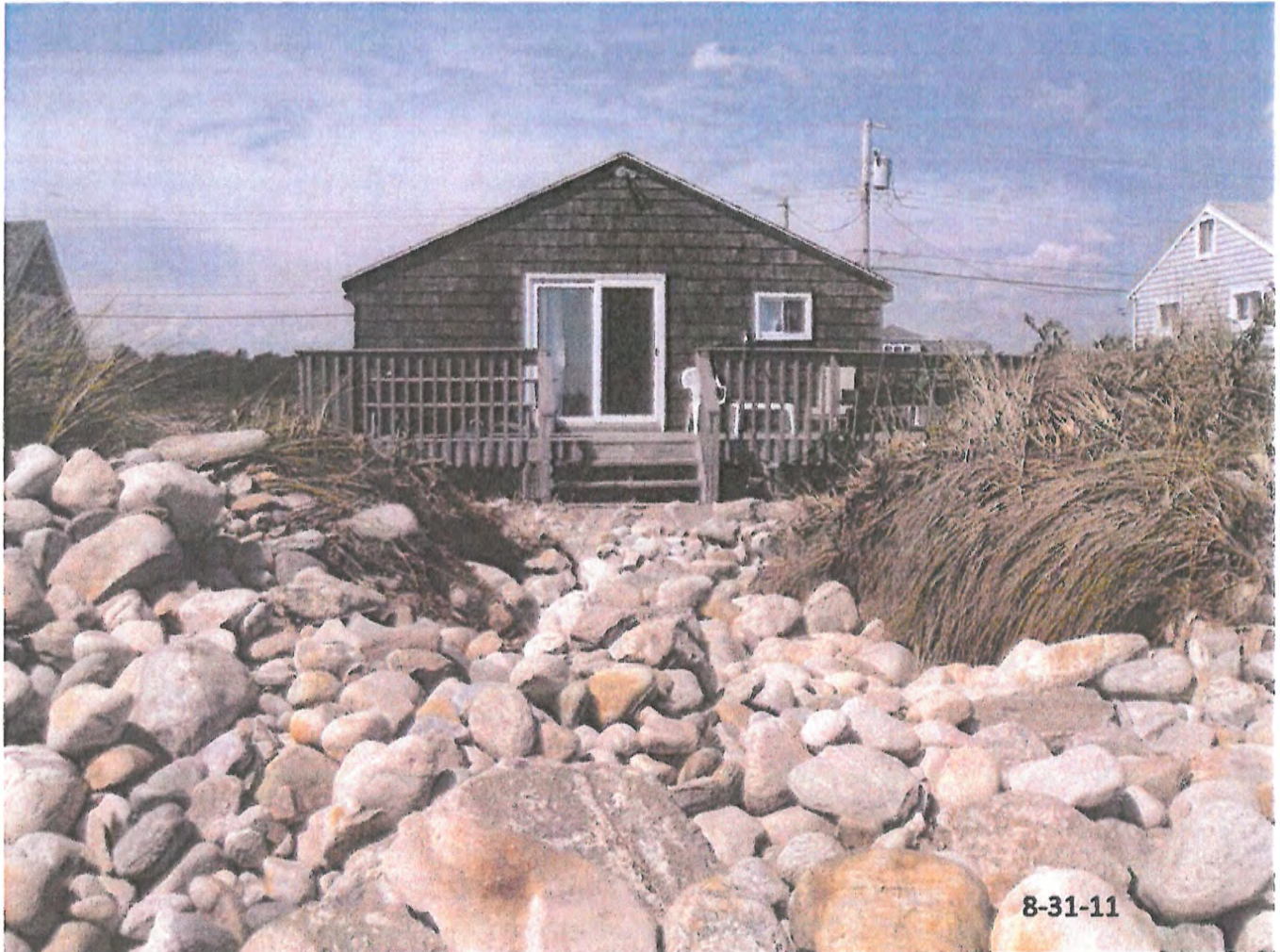


Figure 8. The former house at 33 Atlantic Ave. with remnant dune vegetation after Tropical Storm Irene.

Staff Signature: _____

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Rhode Island Coastal Resources Management Council
Geologist's Report

CRMC File No. 2019-03-046

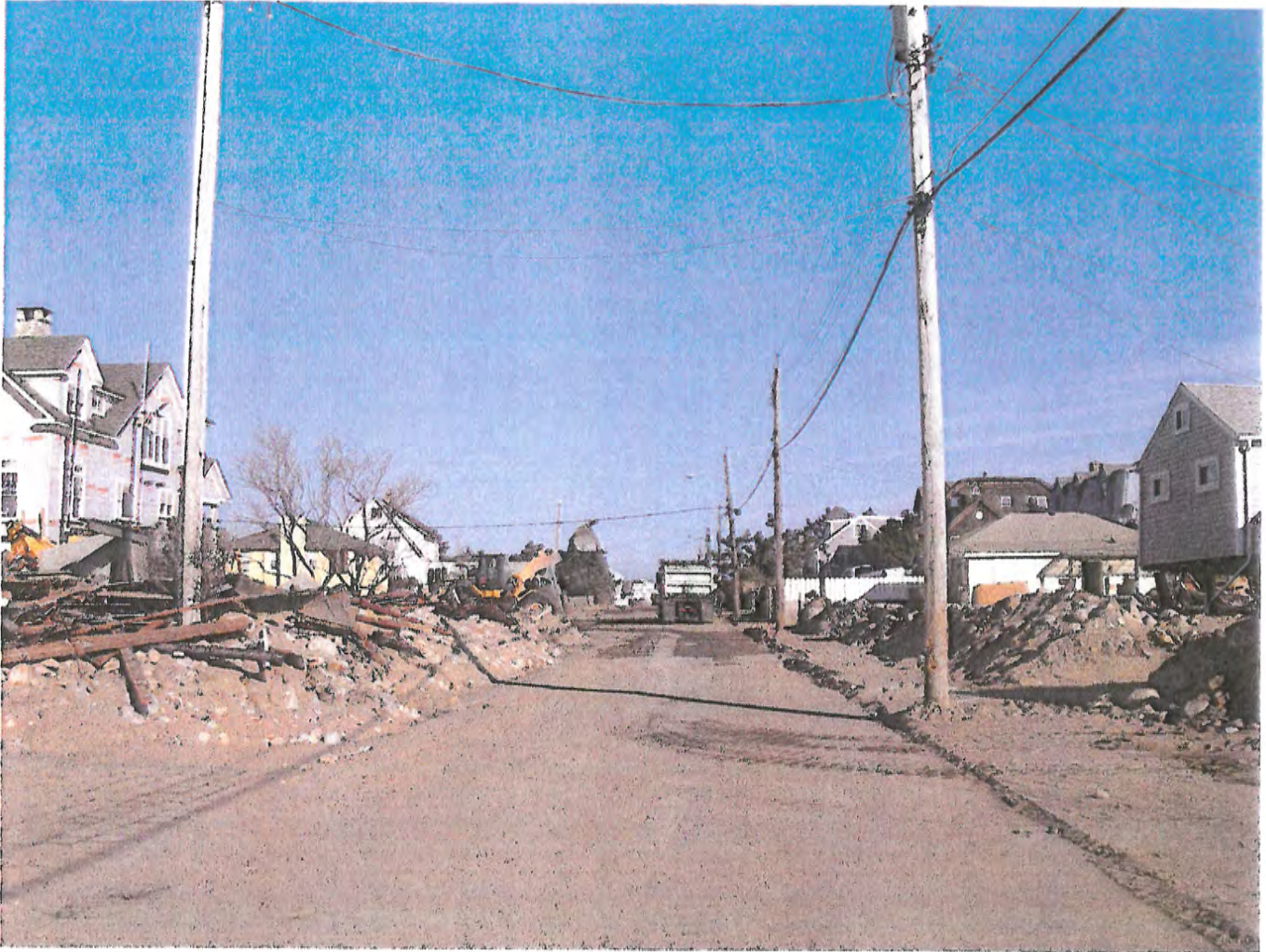


Figure 9. Superstorm Sandy storm surge and waves removed, cobble and structures from the beach and the low lying headland. Days after Sandy the overwash was removed from Atlantic Ave. Debris removal took longer.

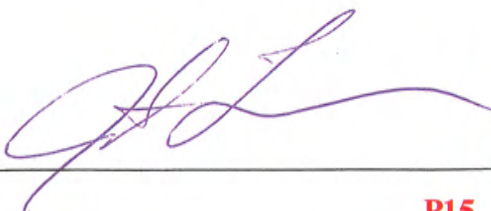
Staff Signature: _____

Rhode Island Coastal Resources Management Council
Geologist's Report

CRMC File No. 2019-03-046



Figure 10. The applicant's property prior to demolition several months after Sandy.

Staff Signature: 

Rhode Island Coastal Resources Management Council
Geologist's Report

CRMC File No. 2019-03-046



Figure 11. The applicant's property (c/m Assent 2016-09-116) after a nor'easter in October 2017.

Staff Signature: _____

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Rhode Island Coastal Resources Management Council
Geologist's Report

CRMC File No. 2019-03-046



Figure 12. Overwash sand plowed from Atlantic Ave. by the applicant's property after the October 2017 nor'easter. Without an established vegetation root system or other measure such as a dune/dike core, overwash processes will occur more frequently with lower magnitude storms.

Staff Signature: _____

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State of Rhode Island and Providence Plantations
Coastal Resources Management Council
 Oliver H. Stedman Government Center
 4808 Tower Hill Road, Suite 3
 Wakefield, RI 02879-1900

(401) 783-3370
 Fax (401) 783-2069

APPLICATION FOR STATE ASSENT

To perform work regulated by the provisions of Chapter 279 of the Public Laws of 1971 Amended.

Project Location <u>33 Atlantic Avenue Westerly</u> <small>No. Street City/Town</small>	File No. (CRMC USE ONLY) <u>2019-03-046</u>
Owner's Name <u>Carol Olmstead</u>	Plat: <u>175</u> Lot(s): <u>15</u>
Mailing Address <u>2 Old Farm Road</u> <small>City/Town Norwood State MA Zip Code 02062</small>	Contact No.: <u>Laylah Mohammed</u> <u>212-242-4945</u>
Contractor RI Lic. # <u>13400</u> Address <u>9 Warren Avenue, Tiverton, RI 02878</u>	Tel. No.
Designer PE <u>Sergio F. Cherenzia,</u> Address <u>PO Box 513, Westerly, RI 02891</u>	Tel. No. <u>860-629-6500</u>
Name of Waterway <u>Block Island Sound</u>	Estimated Project Cost (EPC): <u>\$50,000.00</u> Application Fee: <u>\$500.00</u>
Describe accurately the work proposed. (Use additional sheets of paper if necessary and attach this form.) <u>Proposed Dune Restoration</u>	

Have you or any previous owner filed an application for and/or received an assent for any activity on this property?
 (If so please provide the file and/or assent numbers): 2019-02-011, 2018-08-092, 2017-04-084, 2016-09-116, 2013-02-155,

Is this site within a designated historic district? YES NO 2009-07-035,

Is this application being submitted in response to a coastal violation? YES NO 1995-05-096

If YES, you must indicate NOV or C&D Number: _____

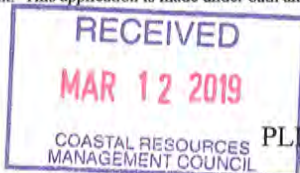
Name and Addresses of adjacent property owners whose property adjoins the project site. (Accurate addresses will insure proper notification. Improper addresses will result in an increase in review time.)

Piotrkowski Gail J Restated Tr Agrmt, c/o Samuel R Piotrkowski, 12 Willow St, Mystic, CT 06355 (31 Atlantic Ave)

Woods Patricia R Trustee & Pelczar Carol L, 7 Ann Drive, Tolland, CT 06084 (35 Atlantic Ave)

STORMTOOLS (<http://www.beachsamp.org/resources/stormtools/>) is a planning tool to help applicants evaluate the impacts of sea level rise and storm surge on their projects. The Council encourages applicants to use STORMTOOLS to help them understand the risk that may be present at their site and make appropriate adjustments to the project design.

NOTE: The applicant acknowledges by evidence of their signature that they have reviewed the Rhode Island Coastal Resources Management Program, and have, where possible, adhered to the policies and standards of the program. Where variances or special exceptions are requested by the applicant, the applicant will be prepared to meet and present testimony on the criteria and burdens of proof for each of these relief provisions. The applicant also acknowledges by evidence of their signature that to the best of their knowledge the information contained in the application is true and valid. If the information provided to the CRMC for this review is inaccurate or did not reveal all necessary information or data, then the permit granted under this application may be found to be null and void. Applicant requires that as a condition to the granting of this assent, members of the CRMC or its staff shall have access to the applicant's property to make on-site inspections to insure compliance with the assent. This application is made under oath and subject to the penalties of perjury. 08/04



 Owner's Signature (sign and print)

PLEASE REVIEW REVERSE SIDE OF APPLICATION FORM



Civil Engineers • Land Surveyors
Land Use Planners • Environmental Consultants

Raymond F. Cherenzia, P.E., L.S., Founder
Sergio F. Cherenzia, P.E., President

March 11, 2019

Applications Coordinator
Coastal Resources Management Council
Oliver Stedman Government Center
4808 Tower Hill Road; Suite 3
Wakefield, RI 02879

Subject: Coastal Resources Management Council Assent Application
Carol Olmstead
33 Atlantic Avenue (Plat 175 Lot 15)
Westerly, Rhode Island

To Whom It May Concern:

On behalf of the Applicant, Carol Olmstead, Cherenzia & Associates, Ltd. is pleased to submit the following Coastal Resources Management Council (CRMC) Assent Application materials to the Coastal Resources Management Council for the Proposed Dune Restoration at the above-referenced location. A Preliminary Determination was submitted to the CRMC and a Statement of Limitations dated February 21, 2019 issued for CRMC File No. D2019-02-011. The Statement of Limitations lists the following Staff Concerns/Comments/Information Requirements:

1. The Technical Review Panel (TRP) had previously determined that the proposed sand filled geotextile ags are an appropriate experimental control technology for this site (see CRMC Assent D2015-07-045). An Application for Assent may be submitted which addresses the programmatic requirements and staff concerns outlined below.
2. Application for Assent shall include:
 - a. Proof of ownership in the form of a current certified copy of the deed of the subject property or a letter from the local tax assessor certifying ownership;
 - b. A letter of authorization from abutting property owner if construction access is through their property;
 - c. A current list of the abutting property owners including names and current mailing addresses sufficient for public notice purposes;
 - d. An 8.5" x 11" copy of the site plan to be posted with the public notice;
 - e. A description of the experimental erosion control technique including materials (sand, cobble, gravel, etc.) to be used as fill and the source of those materials; the method of installation; and project site access for construction equipment and vehicles (see work plan);
 - f. An impact avoidance and minimization statement – essentially detailing what installation methods will be used and their timing to avoid and minimize impact to the beach and public access along the beach;
 - g. A site plan prepared by a Rhode Island-licensed surveyor or professional engineer shall be submitted showing plan view and profile of the experimental erosion control structure; beach profile locations perpendicular to the shoreline and located along the property boundaries and twenty-five feet within the property bounds for a total of three profiles. Beach profiles

Office Location: 99 Mechanic St. • Pawcatuck, CT 06379 • Tel (860) 629-6500 • Fax (860) 599-6090

Mailing Address: P.O. Box 513 • Westerly, RI 02891 • Tel (401) 596-7747



shall be marked with a physical datum point on the landward end of each profile. The top of each datum shall be surveyed and referenced to NAVD88. Profiles should begin at a point that will included the entire structure and extend seaward to MLLW, where possible. Datum should be placed deep enough so as to not erode and high enough so as not to be buried by storm overwash;

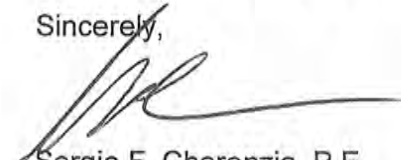
- h. Other Category B requirements listed in 1.3.1(A) of the CRMP 650-RICR-20-00-01.
3. The applicant will be required to post a performance bond or escrow account for removal in the event of failure of the structure. Estimates for removal of the structure is \$3000 for 1-2 days work to include cutting containers, placing sand on the beach and removal of the container materials to a suitable and legal upland disposal site.
4. Work Plan: A construction work plan shall be submitted with the Assent Application which includes the following:
 - a. Installation equipment to be used
 - b. Equipment access locations with applicable access agreement identified and documented
 - c. Potential impacts to abutting properties
5. Monitoring: A monitoring plan is required for three years at the site in accordance with Salt Ponds Region SAMP 650-20-00-3 Section 3.4.12 Experimental Erosion Control and shall include:
 - a. Documentation of current site conditions (beach profiles and photographs)
 - b. Quarterly reports (beach profiles, photographs, condition of sand containers and sand cover)
 - c. Summary report submitted within 30 days following the end of the 3 year period that details whether the experimental erosion control was a success or failure.

Four copies of the Application Package submitted for your review along with the filing fee of \$350.00 (\$500.00 fee less \$150 PD) consistent with the CRMC Fee Schedule and the required bond for \$3000.00 per item 3 above. Application Packages include the following items:

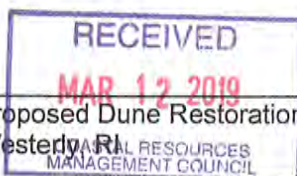
1. Completed Application Form;
2. Proof of Ownership Letter from the Town of Westerly Assessor's Office dated March 6, 2019;
3. Email from abutter authorizing use of driveway for construction access (Authorization letter to be provided separately by applicant);
4. List of Abutting Property Owners;
5. An 8.5" x 11" copy of the site plan;
6. Description of the experimental erosion control technique;
7. Impact Avoidance and Minimization Narrative;
8. Completed Building and Zoning Official Form;
9. Work Plan prepared by Netco;
10. Site Plan (24"x36") prepared by Cherenzia & Associates, Ltd. titled, "Dune Restoration Plan Olmstead Residence" dated August 27, 2019, latest revision January 23, 2019;

Should you have any questions regarding this submittal, please contact me directly.

Sincerely,



Sergio F. Cherenzia, P.E.
President



Teresa Transue

From: Carol Olmstead
Sent: Thursday, March 7, 2019 2:04 PM
To: teresa@cherenzia.com
Subject: Fwd: Letter for 33 Atlantic Avenue

FYI

Begin forwarded message:

From: Sammy Piotrkowski <SAMMY@SAMMYREPORT.COM>
Date: March 6, 2019 at 3:57:29 PM EST
To: Carol Olmstead <canvasbagmachine@icloud.com>
Subject: Re: Letter for 33 Atlantic Avenue

Thank you
Cheers

Sent from my Verizon, Samsung Galaxy smartphone

----- Original message -----

From: Carol Olmstead <canvasbagmachine@icloud.com>
Date: 3/6/19 3:56 PM (GMT-05:00)
To: Sammy Piotrkowski <SAMMY@SAMMYREPORT.COM>
Subject: Re: Letter for 33 Atlantic Avenue

Per your request...see attached.
Thank you.
Best
Carol

On Mar 6, 2019, at 10:04 AM, Sammy Piotrkowski
<SAMMY@sammyreport.com> wrote:

Carol,

You have my permission to stage materials and use of my driveway for construction access. However, I would require a Certificate of Liability adding Gail J Piotrkowski 2002 Intervivos Trust as additional insured.

If you have any questions, please feel free to contact me at your convenience.

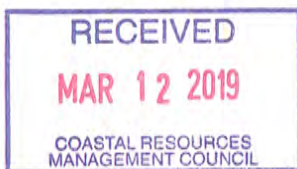


Sammy
860 884 2600

From: Carol Olmstead <canvasbagmachine@icloud.com>
Sent: Wednesday, March 6, 2019 8:47 AM
To: Sammy Piotrkowski <SAMMY@SAMMYREPORT.COM>
Subject: Letter for 33 Atlantic Avenue

Hi Sammy,
Attached is a letter asking permission from Gail J. Piotrkowski Trust and yourself.
Thank you very much.
Best
Carol Olmstead

781-467-8725





LOCATION MAP



PLAN REVISIONS

REV. NO.	DATE	DESCRIPTION	OWN BY	CHK BY
1	1/23/19	CRMC PD FOR DUNE RESTORATION	SAV	SFC

SCALE: 1"=10'
 CA JOB # 217010
 AUGUST 27, 2018

DRAWN BY: PPH
 CHECK BY: SFC

ISSUED FOR PERMITTING

DUNE RESTORATION PLAN

OLMSTEAD RESIDENCE
 33 ATLANTIC AVENUE
 WESTELY, RHODE ISLAND
 PLAT 175 LOT 15

PREPARED FOR
CAROL OLMSTEAD

C-1

SHEET 1 OF 1

CHERENZIA & ASSOCIATES, LTD.

DISTRICT DIMENSIONAL REGULATIONS

District	HR-10	Proposed
Use	Residential	Proposed
Min. Lot Size	10,000 Sq. Ft.	10,018 Square Feet, (Per Assessor)
Min. Lot Frontage	80 Feet	90 Feet
Min. St. Imperv. Surf.	30.0%	19%
Max. Hgt. Prev. Build.	35 Feet/23 Feet*	N/A
Min. Hgt. Assess. Bldg.	30 Feet	N/A
Min. Front Yard Depth	30 Feet	12.5 Feet
Min. Cur. Side Yard Depth	22.5 Feet	0.0'
Min. East Side Yard Depth	15 Feet	0.0 Feet
Min. West Side Yard Depth	15 Feet	18.0 Feet
Min. Rear Yard Depth	30 Feet	N/A
Min. Assess. Bldg. Side	15 Feet	N/A
Min. Assess. Bldg. Rear	20 Feet	N/A

- NOTES:**
- PROPOSED DEVELOPMENT IS PERMITTED UNDER CRMC ASSENT #2017-04-084 AND 2018-08-116. REFER TO APPROVED PERMIT PLAN PREPARED BY NATIONAL SURVEYORS-DEVELOPERS INC. PROPOSED CONSTRUCTION, JUNE 2018, REVISED ON OCTOBER 11, 2018.
 - THE SUBJECT PARCEL LIES WITHIN AN HR-10 ZONING DISTRICT AND IS SUBJECT TO THE RESTRICTIONS THEREOF.
 - BEARINGS AND NORTH ARROW ORIENTATION DEPICTED HEREON ARE ASSURED.
 - ELEVATIONS ARE REFERENCED TO THE NAVD-88 VERTICAL DATUM.
 - THE SUBJECT PARCEL LIES WITHIN THE FOLLOWING SPECIAL FLOOD HAZARD ZONES, AS WITHIN WFE OF 1% AND 1% WITH A LIFE OF 14 AS SHOWN ON THE FIRM FLOOD INSURANCE RATE MAP, WASHINGTON COUNTY, IS (ALL SUBSECTIONS), PARCEL 254 OF 358, MAP #400002844, MAP REVISED OCTOBER 2012.

- DUNE RESTORATION NOTES:**
- WESTELY DUNE RESTORATION SPECIFICATION:**
- SAND FOR THE DUNE RESTORATION SHALL BE SCREENED SAND.
 - THE RESTORED DUNE SHALL NOT EXCEED THE PROFILE AND DIMENSIONS OF THE PRE-STORM DUNE.
 - SAND MINING FROM THE BEACH IS PROHIBITED.
 - THERE SHALL BE NO OPERATION OF MACHINERY IN COASTAL WATERS.
 - CONSTRUCTION OF A NEW DUNE FEATURE DOES NOT NECESSARILY CONSTITUTE THE ESTABLISHMENT OF A REGULATORY/CONTROLLING COASTAL FEATURE FOR PURPOSES OF APPLYING SETBACKS, PER PERMIT SECTION 140. THE CONTROLLING COASTAL FEATURE SHALL BE DETERMINED AT THE TIME OF FUTURE APPLICATION.
 - THE SEAWARD TOE OF THE RESTORED DUNE SHALL NOT EXTEND FARTHER SEAWARD THAN THE PRE-STORM DUNE.

- SNOW FENCE SPECIFICATION:**
- SNOW FENCING IS ALLOWED ON THE BEACH FOR DUNE ENHANCEMENT/RESTORATION ONLY. SNOW FENCE SHALL EXTEND NO FURTHER SEAWARD THAN 15 FEET FROM THE EXISTING DUNE, IF THE BEACH ENDS AND THE FENCE BLOCKS LATERAL BEACH ACCESS, THE FENCE SHALL BE RELOCATED LANDWARD. IN CASES WHERE THE WIDTH OF THE BEACH CAN NOT SUPPORT SNOW FENCE 15' SEAWARD OF THE RESTORED DUNE WITHOUT IMPEDING LATERAL ACCESS, THE SEAWARD EXTENT OF THE SNOW FENCE SHALL REDUCED ACCORDINGLY.
 - SNOW FENCE INSTALLATION DOES NOT AUTHORIZE A PERMANENT STRUCTURE. THE INTENT OF SNOW FENCING IS TO PROVIDE A MECHANISM FOR DUNE ESTABLISHMENT AND ENHANCEMENT.
 - PLASTIC SNOW FENCING IS PROHIBITED ON BEACHES, BARRIERS, DUNES AND IN THE EROSION SETBACK.
 - SNOW FENCE CONFIGURATION SHOULD BE SHORT (<10 FEET), DISCONTINUOUS SEGMENTS PERPENDICULAR TO THE SHORELINE.
 - SNOW FENCING SHALL BE AT LEVEL WITH THE TOP OF THE POST (BUT FLUSH WITH THE FENCING) TO DISCOURAGE PITCHING. GALVANIZED FENCE POSTS OR USE OF CONCRETE FOR THE BASE OF THE POST ARE PROHIBITED. WOODEN FENCE POSTS ARE RECOMMENDED.
 - IF THE APPLICANT OR SUBSEQUENT OWNER CHOOSES NOT TO REPLY FOR FENCE INSTALLATION AT THE END OF THE THREE MAINTENANCE PERIOD, THE APPLICANT OR SUBSEQUENT OWNER SHALL REMOVE THE FENCE. AT THE END OF THE MAINTENANCE, THE APPLICANT OR SUBSEQUENT OWNER MAY REPLY FOR FENCE INSTALLATION AND THE PROJECT WILL BE REEVALUATED.

- VEGETATION PLANTING SPECIFICATION:**
- AMERICAN BEACH GRASS MAY BE PLANTED ON THE RESTORED DUNE BEFORE APRIL 15 OR AFTER OCTOBER 15.
 - MINERAL FERTILIZER MAY BE USED UTILIZING 0-0-0 MIXTURE.
- PLANTING NOTES:**
- BEACH GRASS (*AMPHIPHILA BREVILIGULATA*) CLIPS SHALL BE PLANTED THROUGHOUT THE ENTIRE DUNE. SPACING SHALL BE 12"-18" ON-CENTER.
 - BARRYBERRY (*OPTICA PENNYLANICA*) AND VIRGINIA ROSE (*ROSA VIRGINIANA*) SHALL BE PLANTED THROUGHOUT THE ENTIRE DUNE. EACH SPECIES SHALL BE 10"-14" HIGH AFTER PLANTING AND SPACED 5 FEET ON-CENTER. AN EQUAL DISTRIBUTION OF EACH SPECIES SHALL BE UTILIZED.
 - ALL PLANT MATERIAL SHALL BE WATERED AS REQUIRED THROUGHOUT THE FIRST GROWING SEASON TO ENSURE SURVIVAL.

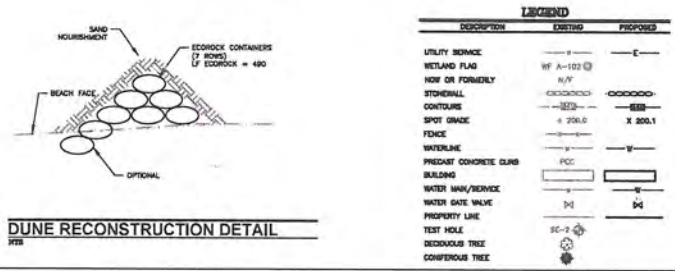
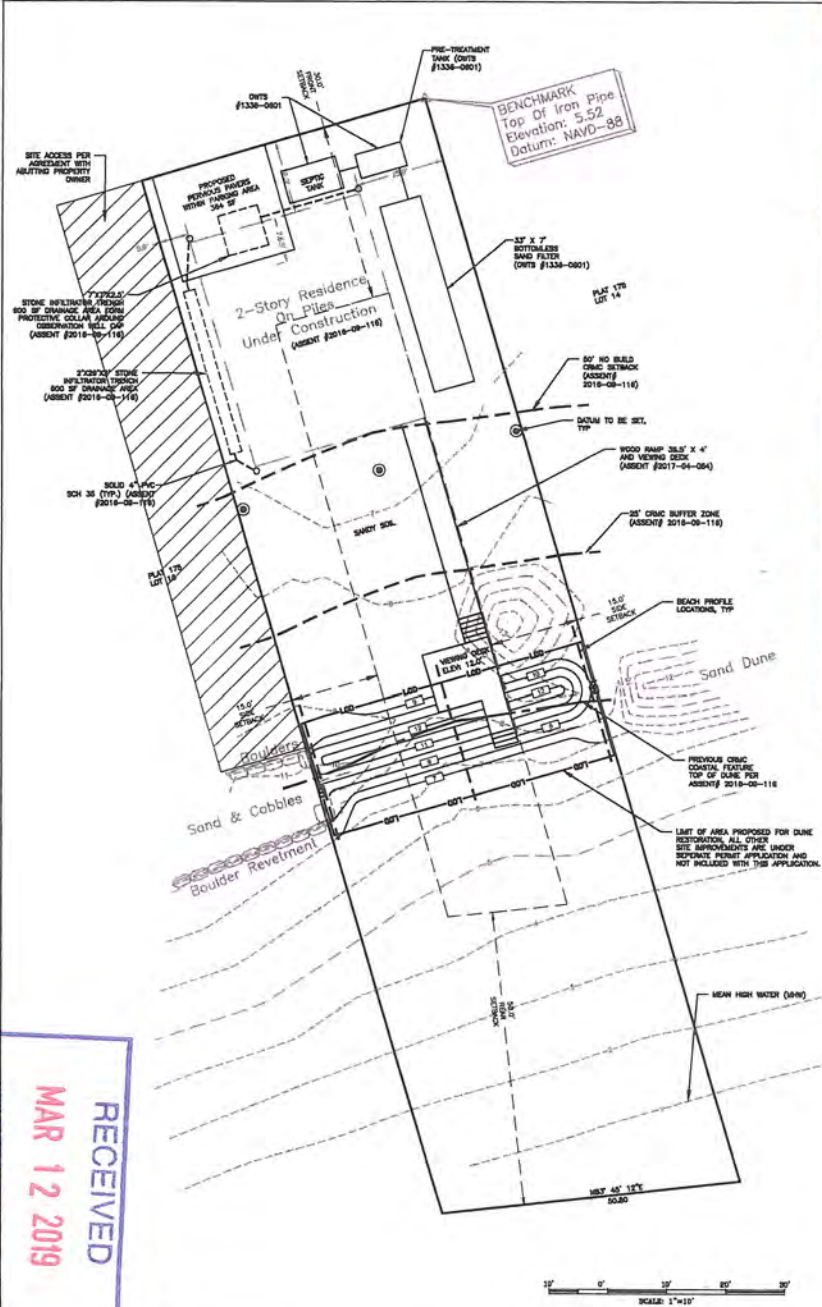


PHOTO 1



PHOTO 2



RECEIVED
MAR 12 2019
 COASTAL RESOURCES MANAGEMENT COUNCIL

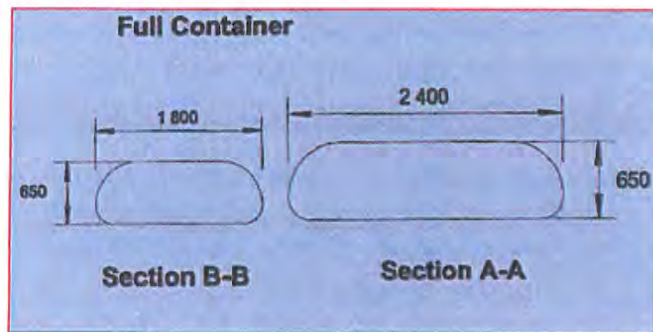
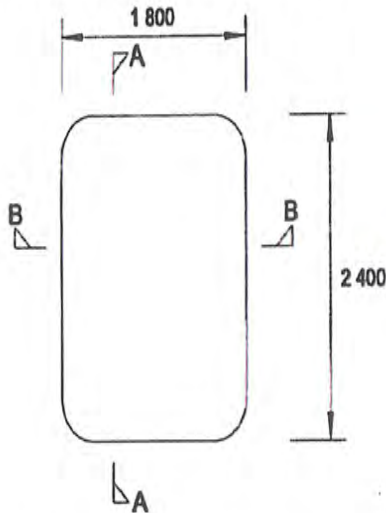
P24

Item 2E

The proposed system involves the installation of ElcoRock geotextile erosion containers. The ElcoRock is a sand filled geotextile container comprised of two layers of geotextile fabrics. The inner layer is polyester, and the outer layer is vandal deterrent UV stabilized polypropylene. The ElcoRock container is highly permeable allowing the uprush of waves and surf to flow through the container thus significantly reducing wave reflection.

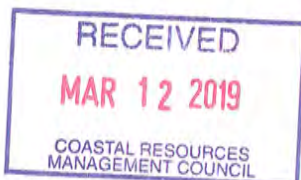
The proposed container size is 2.5 cubic meter in volume (3.27 cy) and holds approximately 5.75 tons of sand per container. The physical dimensions of the container are 2400 mm (7.87 feet) by 1800 mm (5.9 feet) x 650 mm (2.13 feet). The containers are laid end to end to form the coastal protection system. To reduce the potential for differential settlement a geotextile layer is place on the bottom of the installation (Mirafi 140N or equivalent).

2.5m³ ELCORock Dimensions



The ElcoRock container is filled with beach compatible sand (screened sand with less than 10% passing a no. 200 mesh sieve. Sand will be supplied from an off-site borrow source, and delivered by truck to the site. The container will be filled hydraulically from the front yard of the property (please see attached aerial of the site). Water will be supplied from a nearby fire hydrant or from the ocean using a pumping system. Water will flow to a sand water slurry mixing box with sand then added to the mixing box to create the sand water slurry. The sand water slurry will be then be pumped to the fill sleeve for each envelope at the installation location. Pipes and hoses will be laid from the mixing location to the ElcoRock container filling point.

Equipment for the work will involve a mini-excavator to excavate for the bottom terrace level, and a skid steer to feed the slurry mixing box located on a flatbed truck in the front yard/driveway area. We will coordinate with the Town of Westerly regarding delivery of the sand and use of the nearby fire hydrant.



33 Atlantic Ave.

Write a description for your map.

Legend

 33 Atlantic Ave

P26

Staging
Sunny Area

Atlantic Ave.

33 Atlantic Ave

Pipe
Hose Route

Equipment
Access

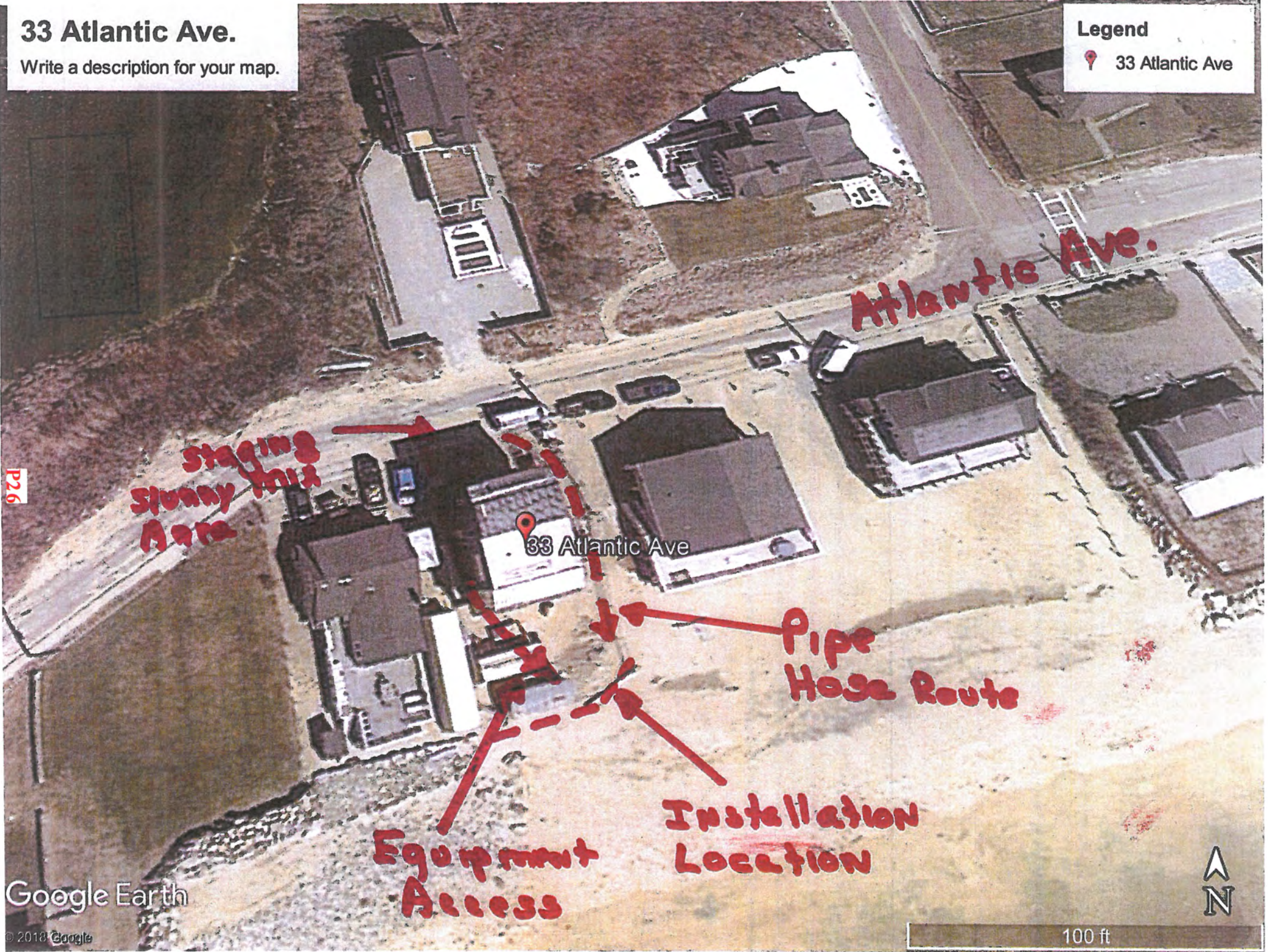
Installation
Location

Google Earth

© 2018 Google



100 ft



Item 4 – Work Plan

1. Contact Town of Westerly for permission to use hydrant water, install flow meter and back flow preventer on hydrant
2. Establish vertical benchmark to establish elevations for ElcoRock installation
3. Lay hose from hydrant to sand water slurry mixing location
4. Locate flatbed truck (29' length) in front yard area to for sand water slurry mixing box
5. Lay down and connect hoses from hydrant, and from slurry mixing box to ElcoRock installation location
6. Set-up booster pump for conveying sand water slurry to installation location (if needed, depends on water pressure from hydrant)
7. Deliver ElcoRock containers to site
8. Mobilize skid steer and mini excavator to job site, move excavator to installation location
9. Deliver initial load of sand to front yard staging area
10. Commence mixing of sand water slurry and filling of containers
11. Once all containers are installed, deliver sand to cover ElcoRock containers as per drawing. Sand will be delivered to front yard area and moved by skid steer unit or walk behind Dingo to cover installation

Installation equipment to be used will be the following –

12. Mini Excavator JD 26G
13. Skid Steer JD 323 E
14. Dingo 1000

Equipment Access Locations with Access Agreements

15. Access will be per the attached aerial photograph with all access through the Olmstead property

Potential Impact to Adjacent Properties

16. All construction work will be confined to the Olmstead property. The ElcoRock containers will be tied into the rock revetment on the south or east end. On the east end the ElcoRock will return back to the north at the property line.
17. We do not anticipate any adverse effects. We believe due to the permeability of the ElcoRock containers they may actually help to reduce wave reflection impacts from the rock revetment on the east side.



**IMPACT AVOIDANCE AND MINIMIZATION
REQUIREMENTS FOR
Carol Olmstead
AP 175 Lot 15
33 Atlantic Avenue
Westerly, Rhode Island
March 2019**

The subject parcel is a 0.23 Acre, residential lot located south of Atlantic Avenue in Westerly, Rhode Island. The Applicant, Carol Olmstead, is applying for a CRMC Assent Application for a proposed dune restoration

EXISTING CONDITIONS

The subject property is in an area vulnerable to wave action associated with the Type 1 waters of the Atlantic Ocean to the south. The former dune experienced significant damage during Superstorm Sand in 2012 and has severely eroded away. The feature was originally part of a dune system with the abutting residential lots.

PROJECT DESCRIPTION

The proposed dune restoration involves the installation of ElcoRock geotextile erosion containers. The containers are laid end to end to form the coastal protection system. (See plan titled "Dune Restoration Plan, Olmstead Residence, dated August 27, 2018, Latest Revision January 23, 2019"). Construction shall be approached from the landward side of the property with minimal work on the seaward side. Construction shall be completed by the end of May 2019.

IMPACT AVOIDANCE

Description of the primary purpose of the proposed project:

The applicant has identified the property as an area vulnerable to wave action associated with the Type 1 waters of the Atlantic Ocean to the south. The former dune as severely eroded due to wind and wave activity. This feature was originally part of a dune system with the abutting residential lots, a feature that experienced significant damage during Superstorm Sandy in 2012, as well as through the regular inundation of coastal storms. The absence of a dune significantly reduces the capacity of the beach to absorb storm energy and break up waves (Salmon et al. 1982). (Excerpt taken from "Project Narrative in Support of a CRMC Assent Application" prepared by Natural Resource Services, Inc., dated February 22, 2018, provided under previous CRMC Maintenance Application for the subject property).

- a. **Whether the primary proposed activity is water-dependent, or if it requires access to freshwater wetland, area(s) of land within 50', riverbanks, coastal features and flood plains as a central element of its primary purpose (e.g., a pier);**

The primary activity is not water-dependent and does not require access to the freshwater wetlands.

- b. **Whether there are any areas within the same property or other property owned or controlled by the applicant that could be used to achieve the same project purpose without altering the natural character of any freshwater wetland, area(s) of land within 50', riverbanks, coastal features, and flood plains;**



The dune restoration shall be in the same location as the original dune and consistent with the neighboring properties, therefore no other areas within the same property or other property owned or controlled by the applicant could be used to achieve the same project purpose.

- c. **Whether there are any other properties not currently owned or controlled by the applicant but which are reasonably available to the applicant that would not involve wetland, area(s) of land within 50', riverbanks, coastal features, and flood plain alterations and could be used to achieve the same project purpose;**

The dune restoration shall be in the same location as the original dune and consistent with the neighboring properties, therefore no other properties not currently owned or controlled by the applicant could be used to achieve the same project purpose.

- d. **Whether there are alternative designs, layouts, or technologies that could be used to avoid freshwater wetland, area(s) of land within 50', riverbanks, coastal features, and floodplains or impacts on wetland, area(s) of land within 50', riverbanks, coastal features, and floodplains functions and values on the subject property or reasonably available properties which would achieve the same project purpose, and whether these design alternatives are feasible;**

The Technical Review Panel (TRP) has determined that the proposed sand filled geotextile bags are an appropriate experimental control technology for this site (see CRMC Assent D2015-07-045).

- e. **Description of all attempts applicant has made to overcome or remove such constraints as zoning, infrastructure, parcel size, or other similar constraints in order to avoid wetland, area(s) of land within 50', riverbanks, coastal features, and flood plain alterations;**

The proposed site development meets all building and zoning requirements and signoff from the Town of Westerly Zoning Official and Building Official is provided within the Assent Application Submittal Package.

- f. **Whether the available alternatives which would not alter the natural character of any freshwater wetland, area(s) of land within 50', riverbanks, coastal features, and flood plains on the subject property or reasonably available properties, if incorporated in the proposed project, would result in significant adverse consequences to the public health and safety, and/or environment;**

The proposed dune restoration does not result in adverse consequences to the public health and safety, and/or environment and represents the least impactful design alternative that could have been employed to achieve the intended project purpose.

IMPACT MINIMIZATION

- g. **Whether the proposed project is necessary at the proposed scale and whether the scale of the alteration could be reduced and still achieves the same primary project purpose;**

The proposed dune restoration spans the width of the property in order to protect the property from Type 1 waters and wave action. The dune shall line up with the neighboring dunes.

- h. **Whether the proposed project is necessary at the proposed location or whether another location within the site could achieve the same primary project purpose while resulting in less impact to the wetland, area(s) of land within 50', riverbanks, coastal features, and flood plain;**

The dune restoration shall be in the same location as the original dune and consistent with the neighboring properties, therefore the project is necessary at the proposed location.



- i. **Whether there are alternative designs, layouts, densities, or technologies that are feasible, and which would result in less impact to the wetland, area(s) of land within 50', riverbanks, coastal features, and flood plains while still achieving the same project purpose;**

The Technical Review Panel (TRP) has determined that the proposed sand filled geotextile bags are an appropriate experimental control technology for this site (see CRMC Assent D2015-07-045).

- j. **Whether reduction in the scale of the proposed project or the relocation to minimize impact to the wetland, area(s) of land within 50', riverbanks, coastal features, and flood plains would result in significant adverse consequences to public health and safety and/or the environment:**

The proposed dune restoration spans the width of the property in order to protect the property from Type 1 waters and wave action. The dune shall line up with the neighboring dunes. The proposed construction will avoid and minimize impact to the beach and public access along the beach by limiting construction to the landward side of the dune and by completing construction by the end of May.

MITIGATION MEASURES

Measures, methods, or *best management practices* to avoid *alterations* of and minimize impacts to wetlands include, but are not limited to:

- a. *Preserving natural areas in and around wetlands;*
- b. *Minimizing the extent of disturbed areas and encouraging the preservation of land in its natural state;*
- c. *Designing dense plantings of shrubs and trees between the developed areas and the remaining natural areas (i) to "buffer" impacts from loss of wildlife habitat and loss of natural areas and (ii) to reduce the impacts of noise, lighting and other disturbances upon wildlife and the remaining natural areas;*
- d. *Maintaining unrestricted fish and wildlife passage;*

Natural areas are being preserved and the project maintains the existing environment for wildlife habitat and unrestricted wildlife passage.

- k. **Designing structures and *alterations* so that they are located outside of flood plain, floodway, areas subject to flooding, flowing bodies of water or other freshwater wetlands;**

The dune restoration shall be in the same location as the original dune and consistent with the neighboring properties, therefore the project is necessary at the proposed location.

- l. **Using *best management practices* for the stabilization of disturbed areas and the selection, use, and maintenance of temporary or permanent soil erosion and sediment controls in accordance with the latest version of the RI Soil Erosion and Sediment Control Handbook and the RI Stormwater Design and Installations Standards Manual;**

Soil Erosion Sediment Control Devices are not needed for the restoration of the dune as the dune acts as an Erosion Control Device for the beach.

- m. **Using *best management practice* selection and design criteria in accordance with the latest version of the RI Stormwater Design and Installation Standards Manual to reduce post-development stormwater flows and maximize the control, treatment and maintenance of systems that reduce stormwater impacts to acceptable levels;**



There is no proposed impervious surface associated with the proposed dune restoration and therefore stormwater best management practices are not needed.

n. Minimizing impervious surface areas such as roads, parking, paving or other surfaces;

There is no proposed impervious surface associated with the proposed dune restoration.

o. Incorporating compensatory flood storage area(s) where necessary and in compliance with these Rules;

Compensatory flood storage area is not needed as part of the proposed dune restoration.

p. Encouraging infiltration of non-contaminated run-off into uncontaminated soils;

There is no proposed impervious surfaces associated with the proposed dune restoration.

q. Preventing channelization or piping of run-off and encouraging sheet flow;

There is no proposed impervious surface associated with the proposed dune restoration therefore no piping of run-off.

r. Landscaping with gradual slopes to maximize sheet flow and infiltration while minimizing channelization;

There is no proposed landscaping associated with the proposed dune restoration. Grading shall be per the specifications of the Netco specifications.

s. Minimizing or eliminating the use or increase of any pollutants, fertilizers, pesticides, herbicides, or any other chemical or organic application which increase pollutant and nutrient loadings;

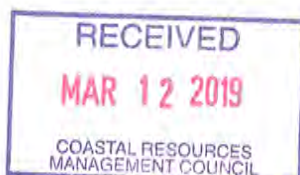
The Applicant will not increase the use of any pollutants, fertilizers, pesticides, herbicides, or any other chemical or organic application.

t. Maximizing setbacks of septic systems and other land disturbances from wetlands;

There is not a proposed septic system as part of the proposed dune restoration.

u. Minimizing the withdrawal of surface water or groundwater from wetlands or uplands adjacent to wetlands, especially during dry periods, and minimizing any reduction in river or stream flow.

Existing groundcover and grading and drainage patterns are being maintained.





State of Rhode Island and Providence Plantations
Coastal Resources Management Council
 Oliver H. Stedman Government Center
 4808 Tower Hill Road, Suite 3
 Wakefield, RI 02879-1900

(401) 783-3370
 Fax (401) 783-2069

PUBLIC NOTICE

File Number: 2019-03-046 Date: March 14, 2019

This office has under consideration the application of:

Carol Olmstead
 2 Old Farm Road
 Norwood, MA 02062

for a State of Rhode Island Assent to construct and maintain: an experimental coastal erosion control structure consisting of a dune/dike with an ELCORock geosynthetic sand container core. The core will be covered with sand and planted with American Beachgrass. Sand shall come from an upland source. The structure shall be monitored for three years after installation or event of failure. If the structure fails all geosynthetic components shall be removed and the sand distributed on the beach. See attached for more detail.

Project Location:	33 Atlantic Avenue
City/Town:	Westerly
Plat/Lot:	175 / 15
Waterway:	Block Island Sound

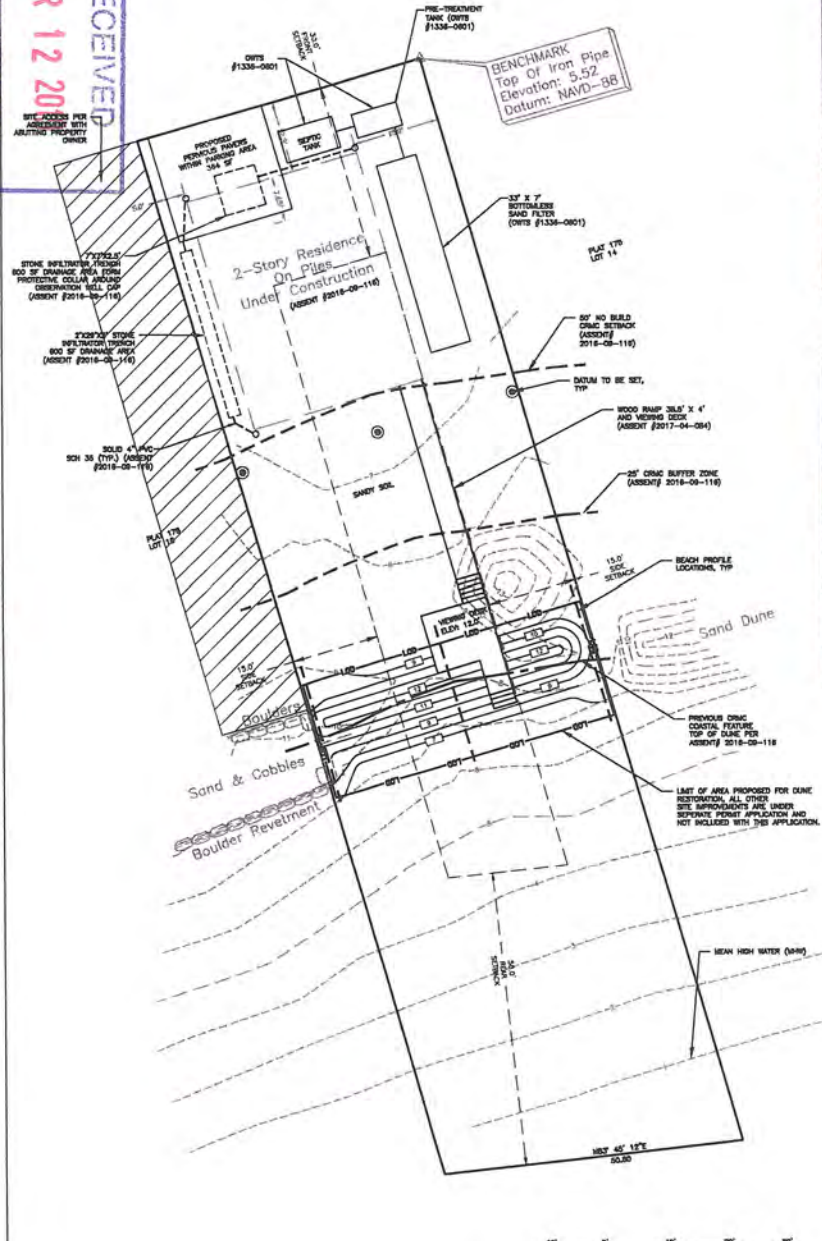
Plans of the proposed work may be seen at the CRMC office in Wakefield.

In accordance with the Administrative Procedures Act (Chapter 42-35 of the Rhode Island General Laws) you may request a hearing on this matter.

You are advised that if you have good reason to enter protests against the proposed work it is your privilege to do so. It is expected that objectors will review the application and plans thoroughly, visit site of proposed work if necessary, to familiarize themselves with the conditions and cite what law or laws, if any, would in their opinion be violated by the work proposed.

If you desire to protest, you must attend the scheduled hearing and give sworn testimony. A notice of the time and place of such hearing will be furnished you as soon as possible after receipt of your request for hearing. If you desire to request a hearing, to receive consideration, it should be in writing (**with your correct mailing address, e-mail address and valid contact number**) and be received at this office on or before April 15, 2019.

RECEIVED
 MAR 12 2018
 COASTAL RESOURCES
 MANAGEMENT COUNCIL



DISTRICT DIMENSIONAL REGULATIONS		
District	HR-10	
Use	Residential	Proposed
Min. Lot Size	10,000 Sq. Ft.	10,018 Square Feet, (Per Assessor)
Min. Lot Frontage	80 feet	80 feet
Min. # Incomes, Surt.	1.52	1.02
Max. Hgt. Pkcs. Bldg *	35 feet/25 feet	N/A
Min. Front Yard Depth	15 feet	12.3 feet
Min. Rear Yard Depth	22.5 feet	N/A
Min. Left Side Yard Depth	15 feet	8.0 feet
Min. Right Side Yard Depth	15 feet	18.0 feet
Min. Rear Yard Depth	30 feet	N/A
Min. Access, Bldg Side	15 feet	N/A
Min. Access, Bldg Rear	20 feet	N/A

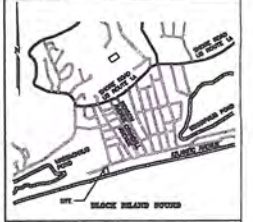
- NOTES:
- PROPOSED DEVELOPMENT IS PERMITTED UNDER CRAG ASSBT #2017-04-084 AND 2018-08-118. REFER TO APPROVED PERMIT PLAN PREPARED BY NATIONAL SURVEYORS-DEVELOPERS INC. PROPOSED CONDITIONS, JUNE 2018, REVISED ON OCTOBER 11, 2018.
 - THE SUBJECT PARCEL LIES WITHIN AN HR-10 ZONING DISTRICT AND IS SUBJECT TO THE RESTRICTIONS THEREOF.
 - BEARINGS AND NORTH ARROW ORIENTATION DEPICTED HEREIN ARE ASSURED.
 - ELEVATIONS ARE REFERENCED TO THE NAVD-88 VERTICAL DATUM.
 - THE SUBJECT PARCEL LIES WITHIN THE FOLLOWING SPECIAL FLOOD HAZARD ZONES, AS WITH BEY OF 11, AND VE WITH A BEY OF 14 AS SHOWN ON THE FIRM FLOOD INSURANCE RATE MAP, WASHINGTON COUNTY, IN ALL JURISDICTIONS, PANEL 254 OF 346, MAP #4400900254, MAP REVISED OCTOBER 18, 2013.

- DUNE RESTORATION NOTES:
- WETTERLY DUNE RESTORATION SPECIFICATION:**
- SAND FOR THE DUNE RESTORATION SHALL BE SCREENED SAND.
 - THE RESTORED DUNE SHALL NOT EXCEED THE PROFILE AND DIMENSIONS OF THE PRE-STORM DUNE.
 - SAND MINING FROM THE BEACH IS PROHIBITED.
 - THERE SHALL BE NO OPERATION OF MACHINERY IN COASTAL WATERS.
 - CONSTRUCTION OF A NEW DUNE FEATURE DOES NOT NECESSARILY CONSTITUTE THE ESTABLISHMENT OF A REGULATORY/CONTROLLING COASTAL FEATURE FOR PURPOSES OF APPLYING SETBACKS PER BEACH SECTION 140. THE CONTROLLING COASTAL FEATURE SHALL BE DETERMINED AT THE TIME OF FUTURE APPLICATION.
 - THE SEAWARD TOE OF THE RESTORED DUNE SHALL NOT EXTEND FURTHER SEAWARD THAN THE PRE-STORM DUNE.

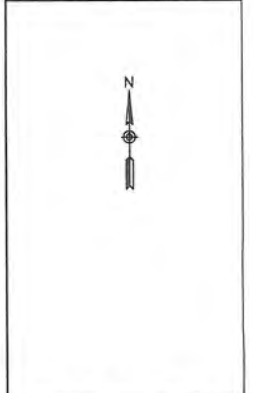
- SNOW FENCE SPECIFICATION:**
- SNOW FENCING IS ALLOWED ON THE BEACH FOR DUNE ENHANCEMENT/RESTORATION ONLY. SNOW FENCE SHALL EXTEND NO FURTHER SEAWARD THAN 10 FEET FROM THE EXISTING DUNE. IF THE BEACH BROOKS AND THE FENCE BLOCKS LATERAL BEACH ACCESS, THE FENCE SHALL BE RELOCATED LANDWARD. IN CASES WHERE THE WIDTH OF THE BEACH CAN NOT SUPPORT SNOW FENCE 10' SEAWARD OF THE RESTORED DUNE WITHOUT BLOCKING LATERAL ACCESS, THE SEAWARD EXTENT OF THE SNOW FENCE SHALL REDUCED ACCORDINGLY.
 - SNOW FENCE INSTALLATION DOES NOT AUTOMATICALLY A PERMANENT STRUCTURE. THE INTENT OF SNOW FENCING IS TO PROVIDE A MECHANISM FOR DUNE ESTABLISHMENT AND ENHANCEMENT.
 - SNOW FENCE INSTALLATION IS PROHIBITED ON BEACHES, BARRIERS, DUNES AND IN THE EROSION SETBACK.
 - SNOW FENCE CONFIGURATION SHOULD BE SHORT (<10 FEET), DISCONTINUOUS SEGMENTS PERPENDICULAR TO THE SHORELINE.
 - SNOW FENCING SHALL BE AT LEVEL WITH THE TOP OF THE POST (DO NOT FLUSH WITH THE FENCING) TO DISCOURAGE PERSONS FROM CLIMBING OR USE OF CONCRETE FOR THE BASE OF THE POST ARE PROHIBITED. WOODEN FENCE POSTS ARE RECOMMENDED.
 - IF THE APPLICANT OR SUBSEQUENT OWNER CHOOSES NOT TO REAPPLY FOR FENCE INSTALLATION AT THE END OF THE TREE FRAME MAINTENANCE PERIOD, THE APPLICANT OR SUBSEQUENT OWNER SHALL REMOVE THE FENCE AT THE END OF THE MAINTENANCE. THE APPLICANT OR SUBSEQUENT OWNER MAY REAPPLY FOR FENCE INSTALLATION AND THE PROJECT WILL BE REEVALUATED.

- VEGETATION PLANTING SPECIFICATION:**
- AMERICAN BEACH GRASS MAY BE PLANTED ON THE RESTORED DUNE BEFORE APRIL 15 OR AFTER OCTOBER 15.
 - MINERAL FERTILIZER MAY BE USED ULTIMATELY 0-0-8 MATURE.
- PLANTING NOTES:**
- BEACH GRASS (AMPHIPHILA BREVILIGULATA) COLLS SHALL BE PLANTED THROUGHOUT THE ENTIRE DUNE. SPACING SHALL BE 12"-18" ON-CENTER.
 - BARRIER (VIGNA PANDURIFORMIS) AND VIRGINIA RICE (TRINIA VIRGINICA) SHALL BE PLANTED THROUGHOUT THE ENTIRE DUNE. EACH SPECIES SHALL BE 18"-24" HIGH AFTER PLANTING AND SPACED 6 FEET ON-CENTER. AN EQUAL DISTRIBUTION OF EACH SPECIES SHALL BE UTILIZED.
 - ALL PLANT MATERIAL SHALL BE WATERED AS REQUIRED THROUGHOUT THE FIRST GROWING SEASON TO ENSURE SURVIVAL.

CHERENZIA & ASSOCIATES, LTD.
 95 Mainland St.
 Portland, ME 04101
 Tel: 603.633.6000
 Fax: 603.633.6000
 www.cherenzia.com



LOCATION MAP



PLAN REVISIONS				
REV. NO.	DATE	DESCRIPTION	OWN	CHK
1	1/23/18	CRAG PD FOR DUNE RESTORATION	RAY	SFC

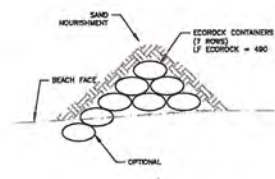
SCALE: 1"=10'
 CA JOB # 217910
 AUGUST 27, 2018

ISSUED FOR PERMITTING
 DUNE RESTORATION PLAN

OLMSTEAD RESIDENCE
 33 ATLANTIC AVENUE
 WESTERLY, RHODE ISLAND
 PLAT 175 LOT 15

PREPARED FOR
 CAROL OLMSTEAD

C-1
 SHEET 1 OF 1
 CHERENZIA & ASSOCIATES, LTD.



DUNE RECONSTRUCTION DETAIL

DESCRIPTION	LEGEND	
	EXISTING	PROPOSED
UTILITY SERVICE	---	---
WATERLINE FLAG	WF A-107	WF
NOV OR FORMERLY	N/F	N/F
STONEWALL	-----	-----
CONTOURS	---	---
SPOT GRADE	A 100.0	X 300.1
FENCE	---	---
WATERLINE	---	---
PRECAST CONCRETE CURB	PCO	---
BUILDING	---	---
WATER MAN/SERVICE	---	---
WATER GATE VALVE	WV	WV
PROPERTY LINE	---	---
TEXT HOLE	SE-2	---
DECIDUOUS TREE	---	---
CONIFEROUS TREE	---	---

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Item 4 – Work Plan

1. Contact Town of Westerly for permission to use hydrant water, install flow meter and back flow preventer on hydrant
2. Establish vertical benchmark to establish elevations for ElcoRock installation
3. Lay hose from hydrant to sand water slurry mixing location
4. Locate flatbed truck (29' length) in front yard area to for sand water slurry mixing box
5. Lay down and connect hoses from hydrant, and from slurry mixing box to ElcoRock installation location
6. Set-up booster pump for conveying sand water slurry to installation location (if needed, depends on water pressure from hydrant)
7. Deliver ElcoRock containers to site
8. Mobilize skid steer and mini excavator to job site, move excavator to installation location
9. Deliver initial load of sand to front yard staging area
10. Commence mixing of sand water slurry and filling of containers
11. Once all containers are installed, deliver sand to cover ElcoRock containers as per drawing. Sand will be delivered to front yard area and moved by skid steer unit or walk behind Dingo to cover installation

Installation equipment to be used will be the following –

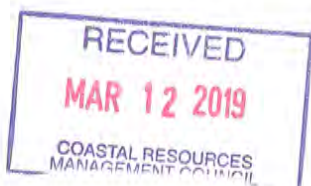
12. Mini Excavator JD 26G
13. Skid Steer JD 323 E
14. Dingo 1000

Equipment Access Locations with Access Agreements

15. Access will be per the attached aerial photograph with all access through the Olmstead property

Potential Impact to Adjacent Properties

16. All construction work will be confined to the Olmstead property. The ElcoRock containers will be tied into the rock revetment on the south or east end. On the east end the ElcoRock will return back to the north at the property line.
17. We do not anticipate any adverse effects. We believe due to the permeability of the ElcoRock containers they may actually help to reduce wave reflection impacts from the rock revetment on the east side.

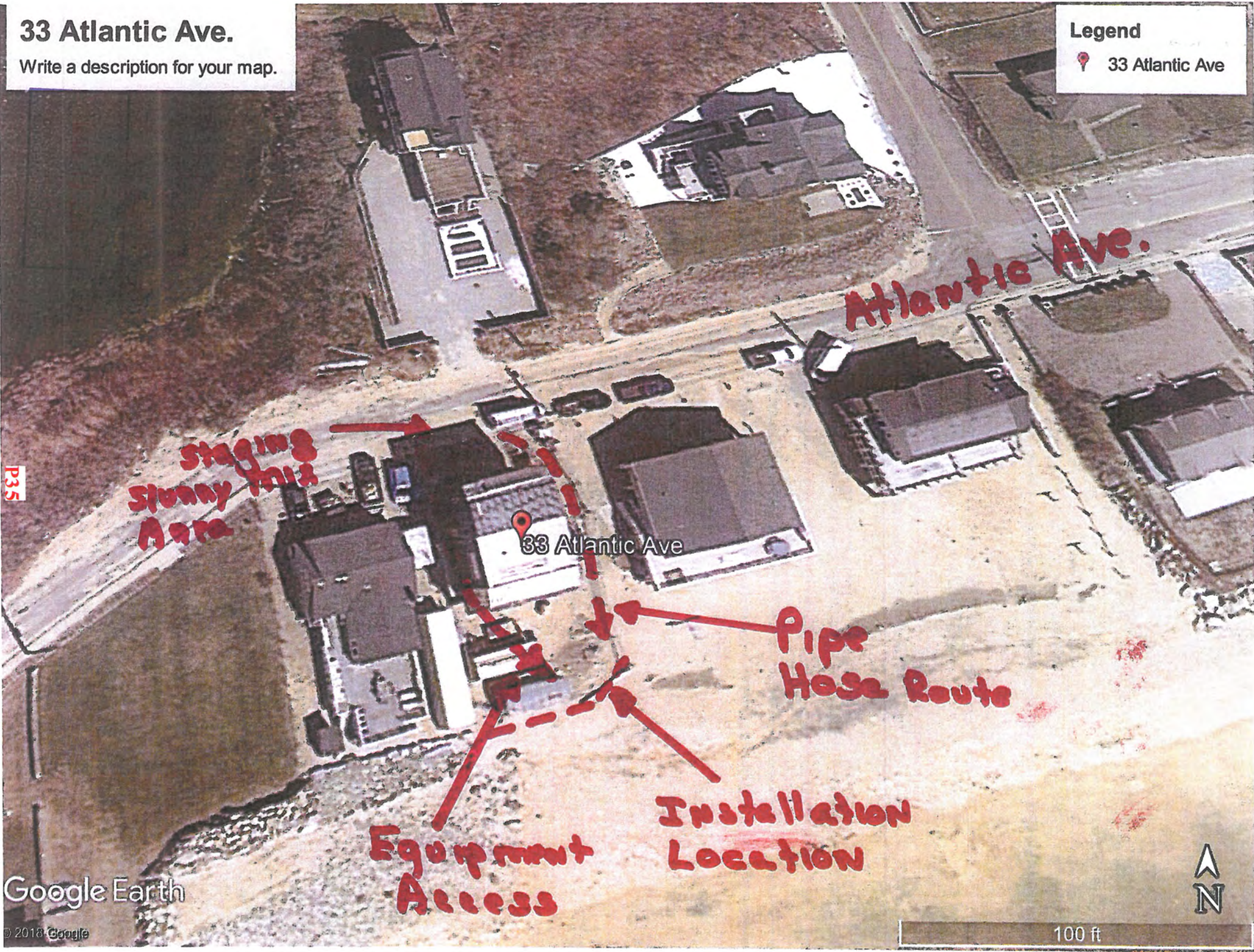


33 Atlantic Ave.

Write a description for your map.

Legend

 33 Atlantic Ave



P35

Google Earth

© 2018 Google

100 ft

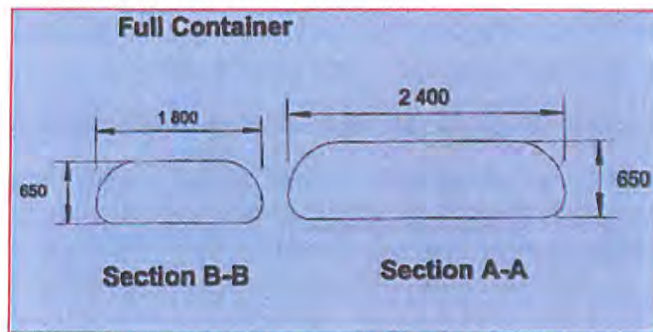
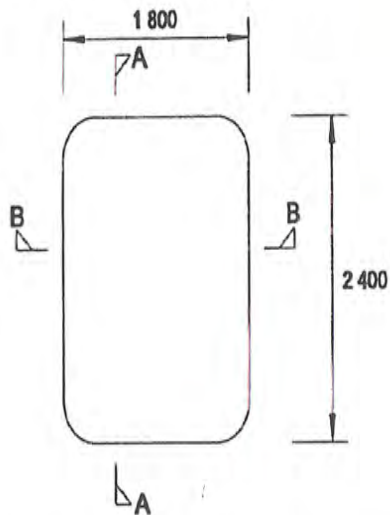


Item 2E

The proposed system involves the installation of ElcoRock geotextile erosion containers. The ElcoRock is a sand filled geotextile container comprised of two layers of geotextile fabrics. The inner layer is polyester, and the outer layer is vandal deterrent UV stabilized polypropylene. The ElcoRock container is highly permeable allowing the uprush of waves and surf to flow through the container thus significantly reducing wave reflection.

The proposed container size is 2.5 cubic meter in volume (3.27 cy) and holds approximately 5.75 tons of sand per container. The physical dimensions of the container are 2400 mm (7.87 feet) by 1800 mm (5.9 feet) x 650 mm (2.13 feet). The containers are laid end to end to form the coastal protection system. To reduce the potential for differential settlement a geotextile layer is place on the bottom of the installation (Mirafi 140N or equivalent).

2.5m³ ELCORock Dimensions



The ElcoRock container is filled with beach compatible sand (screened sand with less than 10% passing a no. 200 mesh sieve. Sand will be supplied from an off-site borrow source, and delivered by truck to the site. The container will be filled hydraulically from the front yard of the property (please see attached aerial of the site). Water will be supplied from a nearby fire hydrant or from the ocean using a pumping system. Water will flow to a sand water slurry mixing box with sand then added to the mixing box to create the sand water slurry. The sand water slurry will be then be pumped to the fill sleeve for each envelope at the installation location. Pipes and hoses will be laid from the mixing location to the ElcoRock container filling point.

Equipment for the work will involve a mini-excavator to excavate for the bottom terrace level, and a skid steer to feed the slurry mixing box located on a flatbed truck in the front yard/driveway area. We will coordinate with the Town of Westerly regarding delivery of the sand and use of the nearby fire hydrant.



Escrow Agreement

Agency	Rhode Island Coastal Resources Management Council (CRMC)
Applicant	Carol Olmstead, 2 Old Farm Road, Norwood, MA 02062
Application	CRMC File # 2019-03-046
Project	As detailed in the Application, Experimental Coastal Erosion Control pursuant to 3.4.12 of the CRMC Salt Pond Region SAMP.
Site	33 Atlantic Avenue, Westerly, RI
Escrow Amount	\$3,000
Escrow Purpose	Ensure removal of ECEC Materials and restoration of the Site to its natural condition if the permitted ECEC measures fail or an Event of Default occurs.
Expiration of Escrow	The satisfactory removal of the ECEC Materials and restoration of the Site to its natural condition by the Applicant or the permitting of the ECEC Materials pursuant to another CRMC Assent.
Event of Default	<p>Failure to comply with any term of the Assent for the Project.</p> <p>Failure to remove the ECEC Materials and restore the Site to its natural condition at the conclusion or expiration of the Assent for the Project.</p> <p>Failure to remove the ECEC Materials and restore the Site to its natural condition if the ECEC measures fail or the ECEC Materials otherwise become a hazard to, or pollutant of, the coastal environment.</p>

The Applicant has submitted the Application for the Project. As part of the Project, the Applicant will be introducing non-native materials (the ECEC Materials) to, and altering, the costal environment at the Site. As a condition of issuing an Assent for the Project, the Agency has required the Applicant to submit the Escrow Amount for the Escrow Purpose. The Agency will return the Escrow Amount to the Applicant upon the Expiration of Escrow. However, if the Agency determines an Event of Default has occurred, the Applicant will be deemed to have forfeited the Escrow Amount and the Agency may use the Escrow Amount to achieve the Escrow Purpose. The Applicant consents to entry onto the Site by the Agency or its designees for the purpose of fulfilling the Escrow Purpose.

Nothing in this Agreement limits the authority of the Agency to enforce its rules and regulations and nothing in this Agreement limits the liability of the Applicant for compliance with those rules and regulations or any other law or regulation. This Agreement shall be deemed to run with the Site and bind any successive owners of the Site.

I have read, understood and agree to abide by the terms and conditions of this Agreement:



 Applicant

3/14/19

 Date