COASTAL RESOURCES MANAGEMENT COUNCIL

SEMI-MONTHLY MEETING

TUESDAY, FEBRUARY 27, 2018

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) 783-3767

AGENDA

Semi-Monthly Meeting – Full Council
Tuesday, February 27, 2018; 6:00 p.m.
Administration Building; Conference Room A
One Capitol Hill, Providence, RI 02908

Approval of the minutes of the previous meeting – February 13, 2017
Subcommittee Reports
Staff Reports

Coastal Habitat Restoration Trust Fund Applications Before The Council For Review And Decision:

The RI Coastal Habitat Restoration Team's Technical Advisory Committee (TAC) convened on Tuesday, February 13, 2018 to rank the 9 final proposals submitted to CRMC for consideration of funding under the state's Coastal and Estuary Habitat Restoration Trust Fund. Of the proposals reviewed for the 2017-2018 funding cycle, nine are recommended for full funding.

The projects recommended for full funding are:

1. Taylor Point Restoration Project ($4,800)
2. Goosewing Beach Restoration ($8,500)
3. RIDEM Excavator ($10,000)
4. My Coast Marsh Resilience Feature ($10,000)
5. Shady Lea Dam Removal ($15,000)
6. Tunipus Pond Marsh Restoration Project ($13,000)
7. Restoration of Diamondback terrapin (*Malaclemys terrapin*) nesting habitat on the Potowomut River ($21,405)
8. Saugatucket Fish Passage ($50,000)
9. Marsh Elevation Enhancement in Quonochontaug Pond ($92,295)

2017-2018 Contingency List:

1. Marsh Elevation Enhancement in Quonochontaug Pond (remainder of match requirement)

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

2017-09-078 **IDA LEWIS YACHT CLUB** – Construct and maintain a 15' 6" x 69' 6" timber deck expansion to be constructed over the adjacent rocky shoreline and over tidal waters on the northeast side of the existing clubhouse with existing timber deck. The Council may determine a special exception is required in accordance with the review criteria contained in RICRMP section 1.3.1(C).3(f). Located at plat 42, lots 11, 12, 13; 170 Wellington Avenue, Newport, RI.

2017-11-054 **McINNIS USA, INC.** -- Construct and maintain a new 40,000 MT reinforced concrete containment/storage dome, a loadout structure, an electrical equipment building and utility work at various locations on the site. Located at plat 56, lots 350, 351, 352, 355; 39 New York Avenue, Providence, RI.

APPLICATIONS WHICH HAVE HAD A PUBLIC HEARING AND ARE BEFORE THE COUNCIL FOR FINAL DECISION:

2017-05-045 **TOWN OF WARREN – BRIDGE STREET ROW** -- Beginning at the northwesterly corner of North Water Street and Bridge Street, thence running westerly along the northerly boundary of Bridge Street one hundred and fifty-five and 25/100 (155.25') feet to the shore of the Warren River, thence running southerly along the shore of the Warren River for a distance of thirty (30') feet; thence turning and running easterly along the southerly boundary of Bridge Street two hundred twenty-eight (228') feet to a point in the southerly boundary of Bridge Street, thence turning northerly across Bridge Street to the point and place of beginning.

2017-05-046 **TOWN OF WARREN – BEACH STREET ROW** -- Beginning at the northwesterly corner of the East Bay Bicycle Path and Beach Street, thence running westerly along the northerly boundary of Beach Street three hundred and ninety-three and 20/100 (393.20') feet to the shore of the Warren River, thence running southerly along the shore of the Warren River for a distance of thirty-five (35') feet; thence turning and running easterly along the southerly boundary of Beach Street four hundred fifty-eight and 78/100 (458.78') feet to the southwesterly corner of the East Bay Bicycle Path and Beach Street, thence turning and running northerly along the westerly boundary of the East Bay Bicycle Path the point and place of beginning.

2017-05-047 **TOWN OF WARREN – BAKER STREET ROW** -- Beginning at the northwesterly corner of North Water Street and Baker Street, thence running westerly along the northerly boundary of Baker Street two hundred and eighty-two (282') feet to the shore of the Warren River, thence running southerly along the shore of the Warren River for a distance of forty (40') feet; thence turning and running easterly along the southerly boundary of Baker Street two hundred fifty-four (254') feet to the southwesterly corner of North Water Street and Baker Street, thence turning northerly across the intersection of North Water Street and Baker Street forty (40') feet to the point and place of beginning.

2017-05-048 **TOWN OF WARREN – RIVER VIEW STREET ROW** -- Beginning at the northeasterly corner of Barker Avenue and River View Street, thence running easterly along the northerly boundary of River View Street eighty (80') feet to the shore of the Kickemuit River, thence turning and running southerly along the shore of the Kickemuit River for a distance of thirty (30') feet; thence turning and running easterly along the southerly boundary of River View Street eighty (80') feet to a point on the southerly boundary of River View Street, thence turning northerly across River View Street thirty (30') feet to the point and place of beginning.

DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
696 VIRGINIA ROAD
CONCORD MA 01742-2751

February 8, 2018

Regulatory Division

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

Dear Mr. Willis:

The U.S. Army Corps of Engineers New England District, along with the U.S. Environmental Protection Agency Region 1, has been developing the New England Wetland Functional Assessment (NEWFA) method for use with our Regulatory Program. This project has benefited from interagency participation at the Federal and State levels by many skilled wetlands scientists covering the breadth of wetlands technical knowledge. This was especially helpful during field testing activities in 2017.

I would like to thank you for allowing Caitlin Chaffee of your staff to participate in this effort. Her knowledge, enthusiasm, and hard work has been essential to development of an effective and technically sound wetland functional assessment tool. In particular, Ms. Chaffee's knowledge and experience with New England wetlands was immensely helpful in the field testing of the NEWFA.

Interagency cooperation is one of the great strengths of our programs in New England. We look forward to future technical collaboration with you and your staff.

Sincerely,

Jennifer McCarthy
Chief, Regulatory Division

Coastal Habitat Restoration Trust Fund Applications Before The Council For Review And Decision:

C R M C

COASTAL RESOURCES MANAGEMENT COUNCIL

DATE: February 27, 2018

TO: Council Chair Jennifer R. Cervenka and members of the Council

Cc: Grover Fugate, Executive Director

FROM: Caitlin Chaffee, Coastal Policy Analyst, TAC Coordinator

Re: Projects Recommended for Funding Under the RI Coastal Habitat Restoration Trust Fund

The RI Coastal Habitat Restoration Team's Technical Advisory Committee (TAC) convened on Tuesday, February 13, 2018 to rank the 9 final proposals submitted to CRMC for consideration of funding under the state's Coastal and Estuary Habitat Restoration Trust Fund. Of the proposals reviewed for the 2017-2018 funding cycle, nine are recommended for full funding.

The projects recommended for full funding are:

1. Taylor Point Restoration Project ($4,800)
2. Goosewing Beach Restoration ($8,500)
3. RIDEM Excavator ($10,000)
4. My Coast Marsh Resilience Feature ($10,000)
5. Shady Lea Dam Removal ($15,000)
6. Tunipus Pond Marsh Restoration Project ($13,000)
7. Restoration of Diamondback terrapin (*Malaclemys terrapin*) nesting habitat on the Potowomut River ($21,405)
8. Saugatucket Fish Passage ($50,000)
9. Marsh Elevation Enhancement in Quonochontaug Pond ($92,295)

In addition, the committee has created a contingency list of projects to be funded in the event that a project recommended for funding is unable to go forward or the requested funds are not needed due to unforeseen circumstances.

2017-2018 Contingency List:

1. Marsh Elevation Enhancement in Quonochontaug Pond (remainder of match requirement)

All proposals are evaluated and ranked using standard criteria and an evaluation form developed by the TAC, available on the CRMC website at http://www.crmc.ri.gov/habitatrestoration.html.

Technical Advisory Committee Members:

Gary Casabona, USDA-Natural Resources Conservation Service
Caitlin Chaffee, RI CRMC
Philip Edwards, RI DEM Division of Fish and Wildlife
Wenley Ferguson, Save The Bay
Alan Gettman, RI DEM Mosquito Abatement Coordination Program
Suzanne Paton, US Fish and Wildlife Service
Margherita Pryor, US Environmental Protection Agency
Jim Turek, NOAA Fisheries Restoration Center

In this agenda package, you will find:

- A summary showing all proposals, matching fund amounts, and the funding amount recommended by the TAC.
- A map showing the geographic distribution of Habitat Trust Fund funded projects
- Narrative text of all proposals submitted to CRMC for consideration for fiscal year 2018.*

*Additional proposal support materials (photos, engineered plans, etc.) are available upon request.

Funding Recommendations for 2017-18 Trust Fund Monies

Projects recommended for funding

Project Name	City/Town	Award Amount	Match
Taylor Point Restoration Project	Jamestown	$4,800	$8,158
Goosewing Beach Restoration	Little Compton	$8,500	$3,500
RIDEM Excavator	Statewide	$10,000	$25,000
My Coast Marsh Resilience Feature	Statewide	$10,000	$6,930
Shady Lea Dam Removal	North Kingstown	$15,000	$55,000
Tunipus Pond Marsh Restoration Project	Little Compton	$13,000	$13,460
Restoration of Diamondback terrapin (Malaclemys terrapin) nesting habitat on the Potowomut River	Warwick	$21,405	$18,367
Saugatucket Fish Passage	South Kingstown	$50,000	$65,000
Marsh Elevation Enhancement in Quonochontaug Pond	Charlestown	$92,295	$1,621,553
	TOTAL	**$225,000**	**$1,816,968**

Habitat Restoration Team Technical Advisory Committee Members:

Member	Affiliation
Gary Casabona	USDA-Natural Resources Conservation Service
Caitlin Chaffee	CRMC
Phil Edwards	DEM Division of Fish and Wildlife
Wenley Ferguson	Save The Bay
Alan Gettman	DEM Mosquito Abatement Coordination Program
Suzanne Paton	US Fish and Wildlife Service
Margherita Pryor	US Environmental Protection Agency
Jim Turek	NOAA Fisheries Restoration Center


2018 Project Locations
Restoration of Diamondback Terrapin
Shady Lea Dam Removal
Goosewing Beach
Tunipus Pond
Saugatucket Fish Passage
Quonochontaug Marsh Restoration
Google Earth
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image Landsat / Copernicus
© 2018 Google
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Rhode Island Coastal and Estuary Habitat Restoration Fund
Full Proposal Form 2017/2018

**for planning projects please use Full Proposal Form for Planning Projects

I. PROJECT SUMMARY

1. **Project Title:** Taylor Point Restoration Project

2. **Project Location and coordinates** *(include map)*: Taylor Point Nature Preserve, Jamestown, RI N 41°30'14.2", W 071°21'34.7"

3. **Project type** *(Design, Construction or Other)*: Design and Construction

4. **If other, please specify:**

5. **Habitat type** *(River System, Salt Marsh, Seagrass, Shellfish Bed, other)*: Other

6. **If other, please specify:** Freshwater wetlands, beach, salt marsh, maritime woodland, maritime shrubland, thickets, rock cliffs

7. **Restoration technique** *(e.g. re-vegetation, tidal restoration, etc.)*: Re-vegetation for the construction portion of the project (Task 3). Undetermined for the design portions of the project (Tasks 1 and 2).

8. **Total acreage or miles(river systems) of habitat to be restored, or project area planning unit size:** 20 acres, for the entire project.

9. **Project benefits:** Establishment and maintenance of an ecologically robust coastal area and buffer zone of native species; creation of a valuable aesthetic and recreational resource accommodating well-planned, minimally intrusive access by the public, and offering appealing views of the Bay.

10. **Project partners** *(organizations providing financial or other support to the project)*: Town of Jamestown

11. **Is this is an ongoing project that has previously received funds from the CRMC Coastal and Estuarine Habitat Restoration Fund?** Yes **If yes, year(s) funding was awarded: 2016**

II. PROJECT MANAGER CONTACT INFORMATION

1. **Name:** Dennis Webster

2. **Organization:** Taylor Point Restoration Association

3. **Address:** P.O. Box 21

4. **City:** Jamestown **5. State:** RI **6. Zip:** 02835

7. **Phone:** 401-423-1808 **8. Email:** dennishwebster@hotmail.com

9. **Property Owner(s):** Town of Jamestown

Applicant must document ownership of project site or permission to perform all proposed restoration, maintenance and monitoring activities *(include appropriate documentation).*

III. BUDGET SUMMARY

(List individuals or organizations providing financial or in-kind support to the project under Project Partners)

	Amount Requested from Trust Fund	**$4,800**
Matching Funds	**Project Partner(s)**	**Amount of Match**
	Town of Jamestown	$500
	Taylor Point Restoration Assoc Volunteers (290 volunteer hours @ 24.34/hour)	$7,658
	TOTAL PROJECT COST	**$12,358**

IV. PROPOSAL NARRATIVE (five pages maximum)

1. Justification and Purpose

Describe the human impacts and previous restoration activities at the proposed project site. If multiple sites, please describe the impacts and previous restoration activities at each). Briefly describe the proposed project, its restoration goals, long-term and short-term outcomes.

Taylor Point Restoration Association (TPRA), a RI non-profit corporation, was formed in 2015 to restore 20 acres of Town-owned shorefront land in Jamestown. We received a CRMC Habitat Restoration Fund Planning Grant in February 2016, completed the Taylor Point Restoration Plan in May 2017, and received CRMC notice of Assent A2017-06-061 in September 2017 for Buffer Zone Management of specified areas at Taylor Point. The Jamestown Town Council re-named the area the Taylor Point Nature Preserve in May 2017.

Human activity has impacted Taylor Point since pre-colonial times. Newport Bridge construction and toll-booth area operation and management, Jamestown sewer treatment plant and Highway Department operations, roads running through the Nature Preserve, and heavy recreational use all influence our restoration options. Once cleared farmland, Taylor Point has grown into a mix of native and non-native plants over the past 150 years. 27 species listed on the Rhode Island Invasive Plant List grow at Taylor Point.

The Taylor Point Restoration Association has begun removing invasive plants under the CRMC Assent, and continues to do so, mostly with volunteer work parties.

The goals of the project, discussed in detail in the Restoration Plan, are to eliminate all invasive plant species and create a nature preserve with only native plants; to incorporate shoreline erosion control; to improve and maintain footpaths and views providing improved access to the shoreline in accordance with the RI Coastal Resources Management Program; and to provide minimum essential necessities to mitigate the impact of humans on the natural environment - trash receptacles, outhouses, parking, and signage.

The short-term outcome of this grant will be designs for footpath rehabilitation and restoration of the Phragmites Marsh/ Wooded Swamp. Both designs are necessary to apply for future CRMC Buffer Zone Management permission. The grant will also fund the purchase of native plants for restorative planting in areas where invasives have been removed.

The long-term outcome is the accomplishment of the Restoration Plan goals outlined above.

2. Project Activities, Schedule and Work Plan

Describe the planned on-the-ground project activities, and explain how each activity will help to restore ecosystem functions. List specific project activities and when they will occur (month and year). Indicate when annual and final project reports will be submitted.

Task 1. Design footpath rehabilitation from upper parking area to the the Taylor Point Cliffs. The existing 200 foot heavily-used path (with 4 side paths) is badly eroded. This task will include footpath design, including design of proper drainage to prevent future erosion, and the design of low-maintenance trailside meadows of native grasses and forbs along the sides of the path. Design work will be done between February and October 2018.

Task 2. Design restoration of the Phragmites Marsh, the Wooded Swamp, and the Back Beach subsections of Potter Cove Beach. Design work will be done between April and December 2018.

Task 3. Purchase of native Rhode Island plants for restorative planting in areas cleared of invasive vegetation under CRMC Buffer Zone Management Assent A2017-06-061, issued September 5, 2017 (Black Cherry Woodland, Taylor Point Cliffs, and specified areas on Potter Cove Beach.) This includes fencing supplies needed to protect new plantings from damage by deer and people. Planting will be done in spring and fall of 2018.

3. Minimization of Adverse Impacts

What are the potential impacts resulting from project activities (e.g. the disturbance of sensitive species by construction activities), and how will these impacts be minimized (e.g. scheduling construction to avoid disturbance of sensitive species).

Tasks 1 and 2 consist entirely of design efforts and will have no adverse impacts. Minimization of adverse impacts during the future construction of these tasks will be incorporated into the designs. Task 3 consists of re-vegetation with native plants and no adverse impacts will result from this activity.

4. Public Support

Demonstrate public support for the project by providing evidence of communication with adjacent landowners, community members and other stakeholders. Describe planned or completed community / stakeholder education and outreach efforts.

Communication with the community is through the local newspaper (The Jamestown Press) which prints articles about the project and biweekly notices of volunteer work projects, and through the TPRA website (taylorpoint.org) and Facebook page. Occasional educational walks are scheduled in the spring and summer. The Taylor Point Restoration Project is an approved URI Master Gardner Project, resulting in widespread awareness and participation among the Master Gardner community.

5. Economic and Educational Benefits

How will the proposed project provide direct economic and/or educational benefits to a community and/or the state?

TPRA Volunteers will be deeply involved in the design of Tasks 1 and 2 and will learn from the expert consultants hired to provide advice. They will use this knowledge during the future construction of these tasks (especially task 2) and pass their knowledge on to volunteers from the Jamestown and Master Gardner communities. The knowledge will also be used to develop future interpretive signage which will

educate visitors to Taylor Point. Volunteers and Master GArdners will be educated during implementation of Task 3.

6. Climate Change and Coastal Resiliency

How have the present and future impacts of climate change been considered during the project planning and design phases? What impact will the project have on resilience of coastal or estuarine habitat to climate change?

Rehabilitation of the degraded footpath will include drainage improvements that will accommodate increased runoff expected from future storms.

Restoration of the Phragmites Marsh and Wooded Swamp, both low-lying wetland areas, are complicated by future sea-level rise. This grant will allow consultation with experts to develop a design that will provide maximum resiliency with native plants over time as sea levels rise.

Restorative planting with native plants on Potter Cove Beach will help control beach erosion. Restorative planting in areas farther inland are necessary to prevent erosion and to prevent the return of invasive plants.

7. Planning Consistency and Restoration Priority

Is the proposed project consistent with the goals of a local, state or regional planning initiative? Please specify initiative and explain (see CRMC website for guidance). Does the proposed project involve a state, regional or federal priority habitat restoration need or special consideration? Please specify and explain (see CRMC website for guidance).

The TPRA project is within the Narragansett Bay Resource Protection Area, as described in the Rhode Island Resource Protection Project.TPRA's efforts are consistent with the goals of that project. Our plans also are consistent with the 2014 Jamestown Comprehensive Community Plan (CCP), adopted by Jamestown's Planning Commission and Town Council, and approved by the State of Rhode Island.

The CCP stipulates that all Jamestown land use decisions must be consistent with its provisions and explicitly directs the protection of coastal and freshwater wetlands, scenic views, and unique and rare habitats. The CCP calls out Taylor Point in Section I.E.1: Conservation and Open Space and in Section I.E. 3.f.3: Inventory of Important Recreational Assets. Further, Section II.C: Goals/Policy Implementation Action Plan calls for preserving and protecting unique, fragile, and scenic coastal areas and protecting public shoreline accessibility, encouraging land management that provides opportunities for public waterfront access, coastal water quality protection as well as planning for natural hazard vulnerability. TPRA goals are consistent with these objectives.

TPRA's program is consistent with the Rhode Island State Guide Plan's Goal 3: the protection and enhancement of scenic views, as well as Goal 4: preserving, developing, and where possible, restoring the resources of the coastal region. Our project goals are also consistent with the State Guide Plan's Land Use Element 121 which provides for protecting and enhancing those values of the coastal regions, including scenic values, which contribute to the State's quality of life. This element further provides for preserving and enhancing plant species diversity and stability through habitat protection, restoration, enhancement and prevention or mitigation of adverse impacts due to human activities. These directives are consistent with our restoration project.

TPRA's efforts are consistent with the State Coastal and Estuarine Habitat Restoration Strategy for coastal buffers which encourages efforts to establish the approximate biological, geological and physical conditions that existed in the indigenous ecosystem or habitat prior to human disturbance by, for example controlling non-native invasive species of plants and/or re-vegetating areas with native plants. Our plan to control and/or remove invasive species and manage to protect and encourage native species addresses special considerations of the aforementioned local and state planning guides.

8. Species of Concern

Will the project result in benefits to wildlife species listed as federally or state endangered, threatened, or species of concern within Rhode Island? Please specify which species will benefit and how. For a list of species, see the Rhode Island National Heritage Program's listing of animals at: http://www.rinhs.org/wp-content/uploads/ri_rare_animals_2006.pdf or *a listing of plants at:* http://www.rinhs.org/wp-content/uploads/ri_rare_plants_2007.pdf

Four species of concern occur at Taylor Point and will be protected as part of the restoration project. TPRA has consulted with RI DEM, RI Natural History Survey, and New England Wild Flower Society. Restrictions apply to disclosure of information about species of concern; please contact the Project Manager for more information.

9. Permitting

List any federal, state or local permits required to complete the project and the permit application status for each.

A. TPRA and the Town of Jamestown were issued **CRMC Assent A2017-06-061** for Buffer Zone Management in specified areas on September 5, 2017. Planting of native vegetation (Task 3) will be done under this assent.
B. Once Tasks 1 and 2 are designed, a **CRMC Buffer Zone Management Permit** application will be submitted for construction.
C. **A Fresh Water Wetlands Permit** from CRMC will be applied for when the design of the restoration in the wetlands behind Potter Cove Beach is complete. Funding for preparation of this permit application (but not for the design work) is available from the 2016 CEHRTF grant to the Taylor Point Restoration Association.
D. A **Tree Removal/Trimming/Planting Permit** from the Jamestown Tree Committee will be needed for tree planting under Task 3.

10. Capacity of Lead Organization (attach additional materials if necessary)

Demonstrate the capacity of the lead and/or partner organizations to successfully complete the proposed project by providing any or all of the following: a) a description of the organization(s) b) resume(s) or summary of qualifications of involved personnel c) evidence of successfully completed habitat restoration or conservation projects.

The TPRA Board of Directors includes 3 individuals who'd have been on the board since the organization began in 2015. They have spearheaded the development of the organization, prepared its mission statement, developed the Restoration Plan, recruited members, and led public outreach and volunteer work days. Two additional individuals joined the board in 2017. All five of these board members are certified Invasive Plant Managers.

Dennis Webster, Project Director, is a biologist and community environmental leader with more than 20 years of professional experience in environmental and engineering planning and contract management. As a member of the Jamestown Planning Commission, he was instrumental in the development of the Jamestown Community Comprehensive Plan, which provides key guidance for TPRA's proposed planning. Mr. Webster also served on the Jamestown Harbor Management Commission. He is a long-time Plant Conservation Volunteer for the New England Wildflower Society, the RI DEM Natural Heritage Program, and the RI Natural History Survey. Perhaps most illustrative of his value to the proposed effort is his leadership experience in the Conanicut Battery Historic Park Project in which the Friends of Conanicut Battery created a park from a 20-acre parcel of neglected Town-owned land - the site of a Revolutionary War earthwork. Mr. Webster chaired the Battery Planning Committee; sought and won grant funding; coordinated and led volunteer work days; supervised trail and park maintenance; and continues to involve and oversee Eagle Scouts conducting projects that enhance the Park. His leadership of this successful 19-year-long environmental restoration project and his high profile involvement in community

activities, make him an ideal leader for this project. Mr Webster has also taken a Wetlands Delineation short course and a RI DEM Pesticide Application course.

Lois Migneault, Secretary of the Taylor Point Restoration Association, is a computer scientist, educator, and amateur coastal landscaper. Active in Jamestown's civic organizations, she has served for 7 years on the Jamestown Tree Protection and Preservation Committee. A decade-long member of the American Conifer Society, with five-years experience on the RI Tree Council, Ms. Migneault has also earned her Invasive Plant Management Certification under the URI Invasive Plant Management Certification Program. Ms Migneault has been instrumental is launching the TPRA non-profit organization, has led numerous informational walks and meetings with stakeholders at Taylor Point, and has more than a decade of professional experience in project management and quality control. Her active role in the Jamestown Community and her leadership role in the founding of the TPRA, as well as her management acumen and knowledge of local plant communities and restoration priorities will enable her to enlist community support and keep a keen and practical project focus.

Ed Gromada, President of the Taylor Point Restoration Association, will serve as principal administrative liaison with CRMC. He served as Secretary of the Jamestown Charter Review Committee, is Chairman of the Jamestown Housing Authority Board of Commissioners, and is a member of the Jamestown Board of Zoning review. Mr. Gromada has more than 25 years of fiscal and program management experience directing multimillion dollar global marketing and business programs for Fortune 500 companies. Since retiring from corporate management, he has turned to local community enhancement opportunities. As Vice Chair of Rhode Island's SCORE Association, a nonprofit dedicated to helping small businesses get off the ground, grow and succeed, he has broad access to local resources. His understanding of organizational dynamics and community programs enhance his leadership of TPRA. Mr. Gromada also earned his Invasive Plant Management Certification.

Katherine Wineberg joined the board in mid-2017. She is a URI Master Gardner with many years of gardening experience and a long interest in wild plants. She has been instrumental in getting the Taylor Point Restoration Project approved as a Master Gardner project.

Nadine Mendelsohn joined the board in late-2017. She is also a URI Master Gardner with many years of gardening experience. Before she joined the board of directors, she helped in the effort to get Taylor Point approved as a Master Gardner project.

V. SUSTAINABILITY (one page maximum)

1. Maintenance

What is the estimated "lifespan" of each planned restoration activity? What are the anticipated short-term and long-term (beyond the funding period) operation and maintenance requirements of the project? Specify who will be responsible for funding and carrying out each O & M activity. Indicate when and with what frequency activities will occur.

The lifespan of the Footpath Rehabilitations (Task 1) and Restoration of the subsections at Potter Cove Beach (Task 2) will be determined during the design of those projects. The lifespan of the native restorative vegetation to be purchased and planted under task 3 (mostly trees and shrubs) will be many decades, depending on the species, and once established they should be self-sustaining, or should live until naturally replaced by other native species in then process of natural succession. The temporary fencing to protect the new planting has an expected life of two years (for bamboo fencing) and five years (for wire deer cages).

The new planting will require watering for one season. Weeding and removal of resprouting invasive vegetation will be required for from three to ten years, initially monthly, then with with decreasing frequency. Some maintenance, every one to five years, including removal of invasive vegetation, will be

required indefinitely. This work will be accomplished by the Taylor Point Restoration Association and the Town of Jamestown.

2. External Factors

Identify existing external (off-site) factors that could reduce the chances of achieving the project goals (e.g. stormwater inputs to the site from the surrounding drainage area). Explain how these external factors will be addressed. Describe any additional measures taken to help ensure long-term success of the project (e.g. installation of stormwater management practices or securing of conservation easements).What are the likely future effects of climate change and future sea level rise on the proposed project and how will these be addressed?

Footpath Rehabilitation (Task 1) will be affected by increased runoff from more severe storm events expected with climate change. This will be taken into account during the design phase.

Restoration of the marsh and other low areas behind Potter Cove Beach (Task 2) will be greatly affected by Sea Level Rise, and this will be a major factor in the design. Nevertheless, CRMC Stormtools maps show this area as completely inundated by 2100, so this task is expected to have a maximum life of 80 years.

The restorative planting (Task 3) will establish an all-native habitat that should persist indefinitely with some maintenance, although it is expected to undergo natural succession and, over time, consist of native species that may not grow there now. However, the unknowns of future climate change, such as altered rainfall and temperature, may affect the species that are now considered native. The CRMC forecast of 31 feet of sea level rise by 2200 would put most of Taylor Point under water.

VI. EVALUATING PROJECT SUCCESS (one page maximum)

1. Performance Measures

How will the success of the project be measured in relation to the restoration goals set forth in this proposal? List performance measures and how they will be recorded. Include a detailed monitoring plan; if applicable (see below).

Footpath Rehabilitation Design (Task 1) will consist of (1) surveying elevations of the existing footpath, (2) measuring cross sections at 25 foot intervals, (3) determining drainage requirements and designing drainage structures, (4) calculating required fill, (5) designing transitions from the footpath to the clifftop, (6) designing native-plant landscaping bordering the footpaths, (7) developing plans and specifications and (8) incorporating the stamped footpath design into a CRMC Buffer Zone Management Application.

Design of the restoration of the Phragmites Marsh, Wooded Swamp, and Back Beach (subsections 1D, 1E, and 1F) (Task 2) will consist of (1) selecting one or more consultants with the requisite background (2) Selecting a team of TPRA volunteers to participate in development of the restoration design (3) make site visit(s) with consultant(s) and volunteer design team (4) Determine invasive removal techniques (5) select native plant species for revegetation (6) determine a sequence of work and a schedule (7) develop a written restoration design (8) prepare a Wetland Permit Application (funds from the 2016 CEHRTF grant are available for preparation of this permit application) (9) incorporating the restoration design into a CRMC Buffer Zone Management Application.

Restorative planting in areas recently cleared of invasive will consist of (1) Ordering native planting material and associated supplies (2) Planting by volunteers at the appropriate time of year (3) Protecting the plantings with temporary bamboo fencing to protect form human trampling and with wire deer cages to protect from deer browse (4) watering as needed (5) follow-up care and maintenance by TPRA volunteers

2. Monitoring Plan

Describe any planned or completed pre- and post-project monitoring activities. For each monitoring activity list the frequency and month/year of start and end date and the parameters measured. List the entity or entities responsible for funding and carrying out each monitoring activity, and describe how results will be made available to CRMC and the public. If using an established monitoring protocol, please provide references (see CRMC website for information on established monitoring protocols).

Some restorative planting may take place in early spring 2018, but most will be done in the fall of 2018. Spring paintings will be watered as needed (probably every two days for the first 3 weeks, then tapering off, but continuing through dry weeks in the summer. Fall planting will be watered until fall rains and dormancy. Beyond watering, planting will be checked monthly and weeded, with any re-sprouting invasive removed from the restored area. Work will be done by TPRA volunteers with funding from the Town of Jamestown.

The public will be informed through *The Jamestown Press,* the TPRA Facebook page, and during occasional guided walks. CRMC will be sent an annual report.

This will be TPRA's first significant planting, and we aha not yet developed a formal monitoring protocol. The CRMC website will be consulted and we will develop one before planting.

Rhode Island Coastal and Estuary Habitat Restoration Fund
Full Proposal Form 2017/2018

**for planning projects please use Full Proposal Form for Planning Projects

I. PROJECT SUMMARY

1. **Project Title:** Goosewing Beach Salt Marsh Restoration

2. **Project Location and coordinates** *(include map)*: Goosewing Beach, Little Compton, RI 41°29'47.45"N, 71° 7'55.40"W

3. **Project type** *(Design, Construction or Other)*: Other

4. **If other, please specify:** Habitat Restoration

5. **Habitat type** *(River System, Salt Marsh, Seagrass, Shellfish Bed, other)*: Salt Marsh within Coastal Lagoon. The project area includes the entire shoreline of Quicksand Pond, Little Compton, where it joins with the barrier beach and dune community known as Goosewing Beach Preserve.

6. **If other, please specify:**

7. **Restoration technique** *(e.g. re-vegetation, tidal restoration, etc.)*: herbicide application to control *Phragmites* to promote restoration of native vegetation.

8. **Total acreage or miles(river systems) of habitat to be restored, or project area planning unit size:** 16 acres extending over 4,000' of shoreline at Quicksand Pond.

9. **Project benefits:** Sustained increase in native plant diversity and perpetuation of rare plant species, improved habitat conditions and forage quality of mudflats and native shoreline plant communities for migratory and breeding shorebirds, aquatic invertebrates and fishes, and other wildlife.

10. **Project partners** *(organizations providing financial or other support to the project)*: none

11. **Is this is an ongoing project that has previously received funds from the CRMC Coastal and Estuarine Habitat Restoration Fund?** YES **If yes, year(s) funding was awarded:** 2011 & 2015

II. PROJECT MANAGER CONTACT INFORMATION

1. **Name:** Cheryl Wiitala, Preserves Manager

2. **Organization:** The Nature Conservancy

3. **Address:** 159 Waterman St.

4. **City:** Providence **5. State:** RI **6. Zip:** 02906

7. **Phone:** 401-214-4525 **8. Email:** cwiitala@tnc.org

9. Property Owner(s): The Nature Conservancy

Applicant must document ownership of project site or permission to perform all proposed restoration, maintenance and monitoring activities *(include appropriate documentation).*

III. BUDGET SUMMARY

(List individuals or organizations providing financial or in-kind support to the project under Project Partners)

	Amount Requested from Trust Fund	**$8,500**
Matching Funds	**Project Partner(s)**	**Amount of Match**
Project Coordination	The Nature Conservancy (in kind)	$3,500
	TOTAL PROJECT COST	**$12,000**

IV. PROPOSAL NARRATIVE (five pages maximum)

1. Justification and Purpose

Describe the human impacts and previous restoration activities at the proposed project site. If multiple sites, please describe the impacts and previous restoration activities at each). Briefly describe the proposed project, its restoration goals, long-term and short-term outcomes.

The Nature Conservancy in Rhode Island has been managing invasive *Phragmites* since 2009 within its barrier beach preserve known as Goosewing Beach, for the stated goal of maintaining endemic plant communities and wildlife habitats along the shoreline of Quicksand Pond in this location.

The coastal lagoon ecosystem at Quicksand Pond is among the most pristine in Rhode Island, supporting migratory shorebirds, waterbirds and waterfowl, and a robust population of invertebrates, shellfish, and marine and anadromous fishes. A natural breach over Goosewing Beach provides Quicksand Pond with its only connection with the sea, but this passage is infrequently open, so this pond fluctuates widely in its water depths, its salinity, and its suitability for passage by marine creatures. In response to this, the communities of emergent plants found at Goosewing have been historically very diverse, and this location remains both notable for its rare plants and a resource for botanists who appreciate this diversity.

Initially protected in 1989 through outright acquisition by The Nature Conservancy for its importance as a nesting area to listed species Piping Plover and Least Tern, Goosewing has since become a destination nature preserve for visitors who care for an unspoiled environment, and who value the educational opportunities provided by Conservancy staff and volunteers from its recent Benjamin Family Environmental Center at Goosewing.

Its Piping Plovers threatened with loss of mudflat feeding areas in the mid-2000's to rampant invasion by *Phragmites*, and for concern highly diverse natural communities of the shoreline and emergent zone at

Quicksand Pond were being lost to this plant, the Conservancy launched into a careful but aggressive herbicide treatment program intent upon managing the advance of this plant.

To date, 16 acres of brackish and salt marsh at Goosewing have been released from invasion by *Phragmites*, the full variety of its endemic plant species have returned, and its bird-life, in particular, remains very diverse. This is an extremely vigorous invasive, however, and so even though conditions have been improved overall for the plants which are native to Goosewing, continued oversight and direct herbicide treatment is called for into the future.

The levels of intervention called for in the near future are minimal and limited in their scope, but attending to this work will be critical, or else there is risk of *Phragmites* re-invading the area where such gains have been made.

The Conservancy began restoring the Goosewing Salt Marsh with a controlled pilot project in 2009. Three acres of salt marsh infested with *Phragmites* were treated by contractors with herbicide applied with low volume backpack sprayers and hand wicking techniques. Pleased with the success of native plants becoming established in these tested areas, the Conservancy moved to a broad scale approach of managing *Phragmites* over the entire 16-acre salt marsh within the Conservancy's Goosewing Beach Preserve.

During 2011-2014 with funding from CRMC's CEHRTF program, control efforts were accomplished over the entire tract with herbicide applications that included low volume spraying via Argo Track Vehicle and backpack sprayers. The work during both the pilot and broad scale phases was performed by Aquatic Control Technology (now Solitude Lake Management).

The selected herbicide treatment formulation was specified by the Conservancy after diligent in-house review, with the goal of limiting harm to aquatic life by herbicide residue or wetting agent, and to desired woody vegetation by translocation of herbicides through root systems.

Results of this effort showed that *Phragmites* coverage and height has significantly decreased due to the cumulative herbicide treatments and that *Phragmites* has been replaced by a diversity of native grasses, rushes, forbs and shrubs. Concomitant losses of mature woody vegetation has been very minimal.

From 2015-2017, the Conservancy continued its *Phragmites* control efforts with support of CRMC's CEHRTF. Once-extensive stands of *Phragmites* became vastly reduced in size and vigor. The broad scale approach to management was completed and the movement toward a maintenance effort approach to controlling the re-establishment of *Phragmites* began. Follow up treatments were performed on re-sprouting *Phragmites* or missed stands. These treatment methods involved only low volume backpack spraying.

A new contractor, Land Stewardship, Inc., was selected by the Conservancy in 2017 to perform this low volume maintenance treatment. Its owner, Chris Polatin, specializes in managing invasives with a very targeted approach to treatment.

To date, this project has been extremely successful. Eight years of monitoring and continued follow up treatments have yielded a significant decrease in *Phragmites* density and coverage. Native plant diversity has increased dramatically throughout the marsh since the initial plant inventory in 2007, prior to herbicide treatment to *Phragmites*. Emergent areas that were formerly dominated by *Phragmites* are becoming well established with *Spartina patens*, with *Spartina alterniflora* at the pond edge, more diverse emergent communities in depressions, and woody plants interspersed with *panicum* where the marsh borders upland areas of dune. Mudflats required as feeding areas by shorebirds are now fully restored to this use.

Although *Phragmites* is still present in the project area, it is now confined to small isolated patches ranging from sparse to medium density. Persistent *Phragmites* is now most prevalent along high marsh and dune edge areas. The brackish and low marsh areas are no longer invaded with *Phragmites* and have become well established with a broad spectrum of native plants.

It is apparent, however, this native emergent marsh community is not able to compete with *Phragmites* without sustained attention. The Nature Conservancy had anticipated this need and remains committed to the long-term management of this salt marsh community and will implement targeted herbicide treatments to sustain the long term success of this restoration project. These follow up treatments to missed stands or re-sprouting areas will involve methods of treatment that can be applied on foot using backpack sprayers and hand wicking techniques.

Outcomes of this project include 1) improved habitat and forage quality of mudflats and native emergent shoreline plant communities for migratory and breeding shorebirds, aquatic invertebrates and other wildlife; 2) restoration of the natural structure, composition and function of the native shoreline plant community including its rare plants; and 3) the continued existence of an endemic coastal feature with all its attendant diversity of life as a resource for the Conservancy's purpose with nature education in this location.

2. Project Activities, Schedule and Work Plan

Describe the planned on-the-ground project activities, and explain how each activity will help to restore ecosystem functions. List specific project activities and when they will occur (month and year). Indicate when annual and final project reports will be submitted.

The Conservancy will contract with Land Stewardship, Inc to perform herbicide treatments to *Phragmites*. Since treatment areas are at a smaller scale due to prior management, methods need only include low volume backpack sprayer and hand wicking techniques. All methods will be performed on foot using a three-person crew. Documentation of the effectiveness of the herbicide treatments will continue the following growing seasons. Photo stations will continue to be utilized to document changes in vegetation structure. The control of *Phragmites* and the re-establishment or restoration of native vegetation will be carefully monitored, documented, and shared with the coastal restoration community as a potential model for future restoration projects.

2018:

- Spring: Obtain RIDEM Pesticide Permit and administer contract with Land Stewardship, Inc
- July/August: Monitor results of the 2017 herbicide treatment
- Early September: Conduct herbicide treatment of *Phragmites*

2019:

- Winter: Re-new CRMC Assent for this project (the current Assent for this project expires July 2019)
- April/May: Submit annual progress report to CRMC CEHRTF program
- Spring: Obtain RIDEM Pesticide Permit and administer contract with Land Stewardship, Inc
- July/August: Monitor results of the 2018 herbicide treatment
- Early September: Conduct herbicide treatment of *Phragmites*
- Evaluate project objectives and cost for future management

2020:

- April/May: Submit final report to CRMC CEHRTF program

3. Minimization of Adverse Impacts

What are the potential impacts resulting from project activities (e.g. the disturbance of sensitive species by construction activities), and how will these impacts be minimized (e.g. scheduling construction to avoid disturbance of sensitive species).

Because the initial phases of work intent upon eradicating *Phragmites* are complete, there is no longer a need to use an amphibious track vehicle for broadcast spraying. Herbicide application to *Phragmites* will be completed on foot using low volume backpack sprayers and hand wicking methods. There is therefore little likelihood of herbicide damage to non-targeted plants from overspray.

The Conservancy will pursue treatment methods that can be directly controlled at small scale, rather than broadcast. Herbicides selected will be permitted on the basis of their safety for use in aquatic conditions. A larger effort to preserve the band of woody shrubs (bayberry, red cedar, groundselbush) along the upper limit of the marsh will be undertaken to prevent herbicide from compromising the cover this edge provides to birds and other wildlife.

4. Public Support

Demonstrate public support for the project by providing evidence of communication with adjocent landowners, community members and other stakeholders. Describe planned or completed community / stakehalder education and outreach efforts.

As efforts to manage *Phragmites* at Goosewing Beach have shown success, the Conservancy has been offering guided tours of the project area to interested visitors. Some of these visitors have had an academic interest in the plant life of the emergent community at Goosewing, but most have been local residents seeking to learn what they might expect from engaging in efforts to manage *Phragmites* along the shorelines of coastal ponds and estuaries in their own neighborhoods.

Current efforts to restore the brackish marsh at Long Pond, Little Compton, and at Tunipus Pond, Little Compton, are the direct result of organized neighbors at those two coastal ponds becoming enthusiastic about the prospects for similar success.

Some public concern remains for the use of herbicides within outdoor environments like those presented by the coastal lagoon at Quicksand Pond. Conservancy staff remain current on this topic, and have taken to prescribing the use of only those products which have been shown to be safest.

There has also been concern among some that removal of *Phragmites* from coastal lagoon ecosystems means loss of capacity for water filtration and nutrient sequestration, with the result of compromised water quality in these closed systems. These concerns have been voiced by some at Quicksand Pond, but the water quality within its entire watershed is generally of higher quality than that found at many of Rhode Island's similar coastal ponds. As a safety measure, some neighbors at Quicksand Pond have organized with the Coalition for Buzzards' Bay in order to effect regular water quality testing of pond waters.

The topic of keeping invasive *Phragmites* from dominating coastal wetlands remains central in the coastal communities of Little Compton, but is of greatest interest to those who spend their days on property that is impacted by it. Those who appreciate coastal waters, whether from a grand beach house, seasonal trailer, tent or canoe all have strong opinions on the value of salt marsh views.

5. Economic and Educational Benefits

How will the proposed project provide direct economic and/or educational benefits to a community and/or the state?

The restoration project will continue to be used as a learning tool for education programs conducted by the Conservancy at Goosewing to educate visitors about native and invasive species, and to view an appropriately managed restoration project in the works and to observe its outcomes and benefits. It has been the Conservancy's experience that some marshfront landowners in Rhode Island have taken it upon themselves to manage *Phragmites* using over the counter herbicides and without regulatory oversight. Conducting this effort in a responsible manner is part of a broader message about the importance of preserving habitat function in these coastal wetlands.

The restoration of Goosewing's salt marsh has improved wildlife viewing opportunities for visitors to this preserve. Monolithic stands of *Phragmites* can permanently alter historic views and obstruct opportunities to observe water bodies and their dependent life. Reducing stands of *Phragmites* to allow shorter native marsh vegetation has increased visibility and accessibility to visitors to the marsh and pond edge. Continued management of invasive *Phragmites* will allow us to maintain these wildlife viewing opportunities. Removal of *Phragmites* should improve biodiversity within Rhode Island's coastal habitats by increasing regional plant species diversity and enhancing habitat conditions for invertebrate, fish, and wildlife communities.

According to the State Coastal and Estuarine Habitat Restoration Strategy (Updated: July 2008):

"Rhode Island is home to an array of coastal and estuarine habitats including salt marshes, seagrass beds, river systems, dunes and barrier beaches. These habitats contribute greatly to the state's biologicol integrity and diversity by supporting a wide variety of fish and wildlife species. Coastal and estuarine habitats provide economic benefits such as supparting finfish and shellfish stocks. These stocks contribute to the state commercial fishery valued at 75 million dollars, and a recreational fishery valued ot 150 million dollars. Coastal habitats also provide scenic beauty and recreational opportunities that are attractive to residents and visitors, as evidenced by a tourism and outdoor recreation industry valued at two billion dollars in Narragansett Bay alone.

The Conservancy with assistance from RIDEM is managing the breachway at Quicksand Pond by conducting manual breaching at Goosewing beach in the spring and fall to allow for fish passage if the breachway has not opened. This is important for river herring and blue crabs. Both of these species are critically dependent upon quality shoreline habitat containing emergent plant communities.

6. Climate Change and Coastal Resiliency

How have the present and future impacts of climate change been considered during the project planning and design phases? What impact will the project have on resilience of coastal or estuarine habitat to climate change?

The endemic plant communities which colonize the shoreline and emergent zones of the coastal lagoon along the barrier beach at Goosewing collectively represent the target habitat of this restoration effort. These communities are known for their high degree of biodiversity, in terms of plant species composition and in terms of other life forms which are supported by these plants. This is the result of specific adaptation to the wide ranges of hydrology, salinity, and soil types which exist in these shoreline areas. Various forbs, grasses and woody shrubs, some long-lived and some ephemeral, occupy niche positions along the water's edge. Conditions

along the barrier beach are dynamic, and so the plant communities which colonize this tract shift and modify over relatively short periods of time.

Rhode Island's coastal lagoon ecosystems have become increasingly susceptible to invasion by Common Reed and this threatens the patches of endemic shoreline or riparian plant communities which remain. Some causes of this invasion include outright removal of these native plant communities, disturbance of nearby soils associated with residential or recreational land uses, and nutrient loading into these hydrological systems. Regardless of agent, however, there is concern the plant communities which are endemic to these coastal lagoons, and therefore the habitat and support these provide to wildlife, will cease to exist if *Phragmites* is allowed to extend, unchecked, into the quality areas that remain. Conversely, if the conditions that promote rampant growth of invasives can be managed, these endemic plant communities may be rescued.

As possible further evidence of the inherent resilience in this native ecosystem, it has been our experience through this restoration effort the endemic species quickly recolonize areas freed of the suppressing effects of *Phragmites*. Controlling the spread of *Phragmites* at Goosewing will improve habitat conditions and increase natural defenses to the effects of sea-level rise. Restoration of the salt marsh will improve the long-term health of the marsh vegetative community, which may result in increased resistance to storm events.

7. Planning Consistency and Restoration Priority

Is the proposed project consistent with the goals of a local, state or regional planning initiative? Please specify initiative and explain (see CRMC website for guidance). Does the proposed project involve a state, regional or federal priority habitat restoration need or special consideration? Please specify and explain (see CRMC website for guidance).

The Rhode Island Coastal and Estuarine Habitat Restoration Program identifies salt marshes as a priority habitat for state restoration activities. According to the State Coastal and Estuarine Habitat Restoration Strategy (Updated: July 2008):

"Rhode Island salt marshes are found along the shores of salt ponds, the Narragansett Bay estuary, small embayments (such as Allin's Cove in Barrington), and estuarine rivers (such as the Narrow River estuary). Salt marshes provide nursery grounds and foraging habitat for hundreds of species of fish, shellfish, birds, and mammals. Fish of all sizes, from mummichogs to striped bass, feed in creeks and ponds. Quahogs and oysters live beneath the surface, while mussels, fiddler crabs, and snails occupy intertidal areas. Many kinds of birds including osprey, herons, ducks, and mosquito-eating sparrows visit the morsh to feed on the fish and invertebrates and in some cases use the marsh as nesting area. In addition to their habitat value, salt marshes serve as natural pollution treatment systems by filtering out pollutants from upland runoff. Salt marshes between developed coastal communities and coastal waters also provide stormwater storage capacity and absorption of wave energy, helping to mitigate flooding during storms."

Studies completed by the Nature Conservancy over the past 30 years consistently place Quicksand Pond among the top few of Rhode Island coastal lagoon ecosystems in terms of biological diversity and habitat quality. Deferring maintenance of this ecological treasure for future benefit is not an option for the Conservancy or for Rhode Island.

8. Species of Concern

Will the project result in benefits to wildlife species listed as federally or state endangered, threatened, or species of concern within Rhode Island? Please specify which species will benefit and how. For a list of species, see the Rhode Island National Heritage Program's listing of animals at: http://www.rinhs.org/wp-

content/uploads/ri_rare_animals_2006.pdf or *a listing of plants at:* http://www.rinhs.org/wp-content/uploads/ri_rare_plants_2007.pdf

There are a number of rare plant species present in the Goosewing Salt Marsh that have already benefited as a result from this ongoing restoration project. Continuing to control the spread of *Phragmites* will allow these species to flourish and to re-establish themselves in other areas dominated by *Phragmites.* Recently, four rare species were observed during 2017 site visits; all are listed as species of Concern in the State of Rhode Island:

Herbaceous Sea-blite (*Sueda maritima*)
Atlantic Mock Bishop's Weed (*Ptilimnium capillaceum*)
Sea-purslane (*Sesuvium maritimum*)
Saltmarsh Bulrush (*Bolboschoenis maritimus*)

Atlantic Mock Bishop's Weed, Annual Sea-purslane and Saltmarsh Bulrush were found throughout the survey area, all occurring in wet, brackish areas previously dominated by *Phragmites.*

In 2007, a baseline inventory of native plants of Goosewing was completed by Hope Leeson for TNC prior to the start of this restoration project:

Sea Purslane (*Sesuvium maritimum*) – rare, new record for RI
Saltmarsh Bulrush (*Scirpus maritimus, Schoenoplectus maritimus*) – state species of concern
Whorled Milkwort (*Polygala verticillata*) – state species of concern
Seabeach Knotweed (*Polygonum glaucum*) – state threatened
Mock Bishop's Weed (*Ptilimnium capillaceum*) – state threatened
Sea-beach Sandwort (Honckenya peploides) – state species of concern

In addition, two rare birds utilize the Goosewing salt marsh and its mudflats for foraging and occasionally nesting: Piping Plover (*Charadrius melodus*) – federally threatened, and Least Tern (*Sterna antillarum*) – state threatened. Reducing stands of *Phragmites* will reclaim exposed mudflat and washout areas near the Quicksand Pond breach channel to increase breeding and foraging habitat for these species.

Other avian species that will benefit from this restoration project include Great Blue Heron, Great Egret, Snowy Egret, and Seaside Sparrow. Each of these species are listed as Concern in Rhode Island.

9. Permitting
List any federal, state or local permits required to complete the project and the permit application status for each.

Immediately following the notice of a grant award, TNC will obtain a pesticide permit from RIDEM. Our current CRMC Assent for this project expires July 2019, so TNC will apply for modification of this Assent to continue the work. In addition, this project may be required to file for a federal National Pollutant Discharge Elimination System (NPDES) permit, as a recent US Circuit Court ruling has made aquatic pesticide applications subject to the Clean Water Act in addition to pesticide laws.

10. Capacity of Lead Organization (attach additional materials if necessary)
Demonstrate the capacity of the lead and/or partner organizations to successfully complete the proposed project by providing any or all of the following: a) a description of the organization(s) b) resume(s) or

summary of qualifications of involved personnel c) evidence of successfully completed habitat restoration or conservation projects.

Globally, The Nature Conservancy is working to prevent and control the spread of invasive species in all 50 states and across more than 30 countries around the world. Together with our partners, we are focusing on prevention and early detection as the most effective strategies to combat invasive species. TNC has more than two decades of experience controlling invasive species and lessening their impact on native plants and animals. In Rhode Island, TNC has experience in a number of habitat restoration projects in conservation areas and on its nature preserves:

- Our most recent projects include:
    - Completed a nine year (three phases) habitat restoration efforts of the Goosewing Salt Marsh to reduce *Phragmites* and restore its natural communities.
    - collaboration with, and technical assistance to The Group to Save Long Pond in their effort to manage *Phragmites* and restore a 55-acre wetland tract at Long Pond, Little Compton.
- We have conducted efforts since 2006 to restore oysters and other shellfish for their habitat functions, working with Save the Bay, Salt Ponds Coalition and a number of other partners.

TNC personnel involved in this project are Cheryl Wiitala, Preserves Manager who is the project manager and John Berg, Sakonnet Landscape Manager.

V. SUSTAINABILITY (one page maximum)

1. Maintenance

What is the estimated "lifespan" of each planned restoration activity? What are the anticipated short-term and long-term (beyond the funding period) operation and maintenance requirements of the project? Specify who will be responsible for funding and carrying out each O & M activity. Indicate when and with what frequency activities will occur.

Since controlling populations of a vigorous invasive like *Phragmites* takes several years of effort requiring follow up treatments, a sustained commitment is planned. Larger, widespread monotypic stands of *Phragmites* have been greatly reduced (and eliminated in most areas) since the start of the project. Follow up spot treatments on foot using backpack sprayers or hand wicking will be the method of treatment going forward. Some re-growth is expected so annual follow up treatments will continue in order to maintain the ecological integrity of the marsh.

The maintenance phase of this project will then be evaluated and decisions made as to its continuation into the future. TNC will seek funds from the CRMC CEHRTF or other funding opportunities to continue this work. Annual long term monitoring through photo stations and vegetation surveys will continue. This funding request by the Conservancy to CRMC's CEHRTF is for direct project costs only and there are no operating or maintenance costs included. With future funding from CRMC's CEHRTF, TNC will continue its maintenance of the Goosewing Salt Marsh to ensure the *Phragmites* does not expand.

2. External Factors

Identify existing external (off-site) factors that could reduce the chances of achieving the project goals (e.g. stormwater inputs to the site from the surrounding drainage area). Explain how these external factors will

be addressed. Describe any additional measures taken to help ensure long-term success of the project (e.g. installation of stormwater management practices or securing of conservation easements).What are the likely future effects of climate change and future sea level rise on the proposed project and how will these be addressed?

Aside from lack of adequate funding to undertake management actions needed to control invasive *Phragmites*, there are no existing external factors that could reduce the chances of achieving the project's goals.

TNC owns Goosewing Beach and its associated coastal marsh habitat outright, and manages the property as a nature preserve. Development along the shores of Quicksand Pond is limited and water quality in this coastal lagoon remains good. TNC and its partners have protected much of the shoreline outright and by means of conservation easements. To date, more than 800 watershed acres critical to the supply of fresh water to the coastal lagoon at Quicksand Pond have been protected. In addition, Goosewing Preserve and associated conservation lands along this barrier system account for an additional 180 acres protected.

The diversity of the endemic plant communities is the result of specific adaptations in wide ranges of hydrology, salinity and soil types. Conditions along the barrier beach are dynamic, and so the plant communities which colonize this tract shift and modify over relatively short periods of time. Ensuring these native plant communities can remain viable is the first step to ensuring this barrier ecosystem will remain vegetated, even as it may change over time, and move in space.

VI. EVALUATING PROJECT SUCCESS (one page maximum)

1. Performance Measures

How will the success of the project be measured in relation to the restoration goals set forth in this proposal? List performance measures and how they will be recorded. Include a detailed monitoring plan; if applicable (see below).

1. Percent of *Phragmites* reduced
2. Percent increase in native plant community in areas treated – native plants, rare plants
3. Viability or ability of successive native plant communities to thrive, as these become established
4. Increase in wildlife diversity - birds, aquatic life, wildlife
5. Number of acres of restored area (long term)

Performance measures will be recorded through photos documenting presence of native and rare plants in areas where *Phragmites* was removed, photos showing reduction of *Phragmites*, and native and rare plant surveys. In addition, bird surveys may be completed during the project period.

2. Monitoring Plan

Describe any planned or completed pre- and post-project monitoring activities. For each monitoring activity list the frequency and month/year of start and end date and the parameters measured. List the entity or entities responsible for funding and carrying out each monitoring activity, and describe how results will be made available to CRMC and the public. If using an established monitoring protocol, please provide references (see CRMC website for information on established monitoring protocols).

A baseline inventory of native and invasive plants was completed for TNC by botanist Hope Leeson in 2007, and TNC documented pre-treatment conditions of the entire Goosewing salt marsh in 2011. Recently, a

follow up comparison survey was completed in 2017 by Carol Lynn Trocki. This survey documented the current vegetative community structure and presence of rare plant species following eight years of *Phragmites* treatment.

Photo stations have been implemented so that changes in vegetation structure can be documented. Photos taken during each year of the project will document the condition of the vegetation structure, presence/absence of rare and native plants in areas where *Phragmites* has been treated.

Annual documentation of the effectiveness of the herbicide treatment will occur the following growing seasons during the spring/summer of 2018 and 2019 after herbicide treatment. Results will be shared among the landowners at Quicksand Pond and members of the community so TNC can propagate methods and successes of restoring native pond shore plant communities. Annual summary reports of the project will be sent to CRMC.

Rhode Island Coastal and Estuary Habitat Restoration Fund
Full Proposal Form 2017/2018

I. PROJECT SUMMARY

1. Project Title: **mini-excavator purchase**
2. Project Location: **state-wide**
3. Project type: **construction**
4. If other, please specify:
5. Habitat type: **saltmarsh**
6. If other, please specify:
7. Restoration technique: **water and veg. management for restoration**
8. Total acreage or miles(river systems) of habitat to be restored or project area planning unit size: **available for all projects statewide.**
9. Project benefits: **improved saltmarsh welfare, reduced mosquito production**

10. Project partners: **DEM divisions, Save The Bay, CRMC, USFWS, NOAA, community DPWs**
11. Is this is an ongoing project that has previously received funds from the CRMC Coastal and Estuarine Habitat Restoration Fund? If yes, year(s) funding was awarded:

During the 2005 – 2016 period, the CEHRT has provided some $52K towards the purchase and/or maintenance of 3 low ground pressure machines used for saltmarsh projects.

II. PROJECT MANAGER CONTACT INFORMATION

1. Name: **Al Gettman**
2. Organization: **DEM Mosquito Abatement Coordination Office**
3. Address: **Plant Sciences, Woodward Hall, URI**
4. City, State, Zip: **Kingston, RI 02881**

Phone: **401 789-6280** Email: agettman@etal.uri.edu
Property Owner(s): **not applicable**

Applicant must document ownership of project site or permission to perform all proposed restoration, maintenance and monitoring activities *(include appropriate documentation).*

III.BUDGET SUMMARY

(List individuals or organizations providing financial or in-kind support to the project under Project Partners)

	Amount Requested from Trust Fund	**$10,000.00**
Matching Funds	**Project Partner(s)**	**Amount of Match**
	DEM	**$25 – 30,000.00**
	TOTAL PROJECT COST	**$35 – 40,000.00**

IV. PROPOSAL NARRATIVE (five pages maximum)

1. Justification and Purpose

Describe the human impacts and previous restoration activities at the proposed project site. If multiple sites, please describe the impacts and previous restoration activities at each). Briefly describe the proposed project, its restoration goals, long-term and short-term outcomes.

Two DEM low-ground pressure (LGP) excavators (an 8,000 lb. IHI and a 4,000 lb. John Deere) have been used for numerous saltmarsh water management projects in RI (see below). The IHI ($40K) was purchased in 2004 with EPA settlement funds provided to DEM. The John Deere ($33K) was purchased in 2014 with funds provided to CRMC from NOAA's "coastal resiliency" program.

The Habitat Restoration Fund has granted $23.5K over the past 3 years to finance expensive repairs to both excavators, which suffer considerable damage from salt and sand when conducting saltmarsh water management projects. (For example, both machines have had all of the steel tracks replaced during that period.) The conditions of both machines are currently sufficient for use on saltmarsh projects, but corrosion will continue. Looking forward, it is prudent to have a new 4,000 lb. machine (modified for LGP) available for 2019 projects.

<u>IHI use during the 2006–2014 period:</u> Used in 12 communities at 17 saltmarshes: Allin's Cove, Walker Farm, RISD, Silver Creek, Stillhouse Cove, Rocky Hill School, Round Marsh, Sachuest, Narrow River, Brenton Cove, Cardi Cove, Island Park, Prudence Island, Card's Pond, Jacob's Pt., Winnapaug, and Avalon.

<u>John Deere use during the 2015-2017 period:</u> Used in 7 communities at 10 saltmarshes: RI Country Club, Jacob's Pt., Narrow River, Phillip's St. in Wickford, Sachuest, Ninigret, Dune's Club in Narr., Calf Pasture Pt., Winnapaug, and Fishing Cove.

2. Project Activities, Schedule and Work Plan

Describe the planned on-the-ground project activities, and explain how each activity will help to restore ecosystem functions. List specific project activities and when they will occur (month and year). Indicate when annual and final project reports will be submitted.

The machine will be acquired in 2018, and the tracks fitted with wide pads, so that it will be available for 2019 projects.

3. Minimization of Adverse Impacts

What are the potential impacts resulting from project activities (e.g. the disturbance of sensitive species by construction activities), and how will these impacts be minimized (e.g. scheduling construction to avoid disturbance of sensitive species). **Machines are modified for low-ground pressure, and activities do not occur during the growing season.**

4. Public Support

Demonstrate public support for the project by providing evidence of communication with adjacent landowners, community members and other stokeholders. Describe planned or completed community / stakeholder education and outreach efforts. **Improvements to saltmarsh habitats gain public support.**

5. Economic and Educational Benefits

How will the proposed project provide direct economic and/or educational benefits to a community and/or the state? **Saltmarsh improvements have indirect economic benefits.**

6. Climate Change and Coastal Resiliency

How have the present and future impacts of climate change been considered during the project planning and design phases? What impact will the project have on resilience of coastal or estuarine habitat to climate change? **Sea level rise is factored into saltmarsh restoration designs.**

7. Planning Consistency and Restoration Priority

Is the proposed project consistent with the goals of a local, state or regional planning initiative? Please specify initiative and explain (see CRMC website for guidance). Does the proposed project involve a state, regional or federal priority habitat restoration need or special consideration? Please specify and explain (see CRMC website for guidance). **Properly functioning saltmarshes aid coastal resiliency.**

8. Species of Concern

Will the project result in benefits to wildlife species listed as federally or state endangered, threatened, or species of concern within Rhode Island? Please specify which species will benefit and how. For a list of species, see the Rhode Island National Heritage Program's listing of animals at: http://www.rinhs.org/wp-content/uploads/ri_rare_animals_2006.pdf or *a listing of plants at:* http://www.rinhs.org/wp-content/uploads/ri_rare_plants_2007.pdf

Native flora and fauna benefit from properly functioning saltmarshes.

9. Permitting

List any federal, state or local permits required to complete the project and the permit application status for each. **Not appliicable**

10. Capacity of Lead Organization (attach additional materials if necessary)

Demonstrate the capacity of the lead and/or partner organizations to successfully complete the proposed project by providing any or all of the following: a) a description of the organizotion(s) b) resume(s) or summary of qualifications of involved personnel c) evidence of successfully completed habitat restoration or conservation projects. **The DEM low-ground-pressure excavators have been used successfully at some 28 saltmarshes in 16 communities since 1998.**

V. SUSTAINABILITY (one page maximum)

1. Maintenance

What is the estimated "lifespan" of each planned restoration activity? What are the anticipated short-term and long-term (beyond the funding period) operation and maintenance requirements of the project? Specify who will be responsible for funding and carrying out each O & M activity. Indicate when and with what frequency activities will occur. **The state's excavators have been used, and will continue to be used for maintaining and/or adjusting saltmarsh water regimes.**

2. External Factors

Identify existing external (off-site) factors that could reduce the chances of achieving the project goals (e.g. stormwater inputs to the site from the surrounding drainage area). Explain how these external factors will be addressed. Describe any additional measures taken to help ensure long-term success of the project (e.g. installation of stormwater management practices or securing of conservation easements).What are the likely future effects of climate change and future sea level rise on the proposed project and how will these be addressed? **Future sea level rise is considered when planning water management projects.**

VI. EVALUATING PROJECT SUCCESS (one page maximum)

1. Performance Measures

How will the success of the project be measured in relation to the restoration goals set forth in this proposal? List performance measures and how they will be recorded. Include a detailed monitoring plan; if applicable (see below).

The DEM excavators have been highly useful at forwarding the state's saltmarsh water management goals.

2. Monitoring Plan

Describe any planned or completed pre- and post-project monitoring activities. For each monitoring activity list the frequency and month/year of start and end date and the parameters measured. List the entity or entities responsible for funding and carrying out each monitoring activity, and describe how results will be made available to CRMC and the public. If using an established monitoring protocol, please provide references (see CRMC website for information on established monitoring protocols). **Not applicable.**

BUDGET TEMPLATE

BUDGET ITEM	CRMC REQUEST	MATCH	MATCH PENDING OR SECURED?	SOURCE OF MATCH	TOTAL
purchase excavator	$10,000.00	$25 – 30,000.00	secured	DEM	
TOTAL				TOTAL PROJECT COST	$35 – 40,000.00

VII. BUDGET NARRATIVE (one page maximum)

Please provide a description and justification for each line item included in the project budget form (e.g. for personnel costs, provide hourly and fringe rates, for travel specify rate and estimated number of miles). Please specify any match requirements for each source of funding. Please include costs associated with required annual and final reports to CRMC. Be sure to detail how CRMC funds will be used.

The current cost of 4,000 lb. mini-excavators is in the $35 -40,000 range, depending on some manufacturers' particulars. In addition to the budget above, some $3 – 4,000 will be needed to finance wide track pads to achieve the low-ground pressure necessary for saltmarsh work.

IX. ADDITIONAL MATERIALS

Please include the following with your application:

Maps, photographs, preliminary design drawings, engineering plans, pertinent physical, ecological, biological, and cultural / historical survey data, letters of support. **Not applicable.**

See the following tables that "...provide updated documentation of equipment use and personnel hours for restoration projects.", as requested by the CEHRF Technical Advisory Committee at its Nov. 30, 2017 meeting.

JOHN DEERE 17D EXCAVATOR LOG 2015 - 2017

date	location	machine hours
March 16 – 26, 2015	RI Country Club	8 - 28
March 30 – April 3	Jacob's Point	28 – 49
April 6	Warren DPW bike path culvert	49 – 57
April 13 – 16	Sprague Bridge (Narrow Riv.)	57 – 72
April 28 – May 1	Middlebridge (Narrow Riv.)	72 - 93
May 8	Middlebridge (Narrow Riv.)	93 – 98
May 14	Wickford (Phillips St.)	98 – 101
Summer – Oct. 20	Sachuest NWR	101 – 175
November	Ninigret	175-190
December 2015	Narrow River	190-200
December 2015	Sachuest NWR	200-232
March 2016	Jacob's Pt. (+ Warren DPW)	243-261
April 2016	Sachuest + Narrow	261-
late April 2016	Dunes Club (USFWS)	- 281
June 2016	East Farm (dig 5 research pits)	281-
October 2016	E.F. Demo Garden trench	-294
October 2016	Calf Pasture Pt.	294-303
November 2016	Sachuest (Norman Bird)	303-306
Nov – Dec 2016	Winnapaug	306-321

March-Apr. 2017	Ninigret	324-385
April 2017	Narrow River	385-397
Summer 2017	East Farm and DEM F&W	397-421
Sept-Oct 2017	Sachuest NWR	421-466
Oct 2017	Sachuest (Norman Bird)	466-469
Oct 2017	Calf Pasture Pt.	469-474
Nov 2017	CedarHurst (Fishing Cove)	474-481
Dec 2017	East Farm (bldg. 75 drainage)	481-498

DEM Mosquito Office personnel match 2015 - 2017

month / year	location	days
March 2015	RI Country Club	4
March –April 2015	Jacob's Point	5
April - May 2015	Narrow River	4
May 2015	Wickford (Phillips St.)	1
Oct. 2015	Sachuest NWR	1
Nov. 2015	Ninigret	4
Dec. 2015	Narrow River	2
March 2016	Jacob's Pt.	3
April 2016	Sachuest	1
Oct. 2016	Calf Pasture Pt.	2
Nov. 2016	Sachuest (Norman Bird)	1
Nov. – Dec. 2016	Winnapaug	2

March 2017	Ninigret	3
April 2017	Narrow River	3
Oct . 2017	Sachuest (Norman Bird)	1
Oct. 2017	Calf Pasture Pt.	1
Nov. 2017	Cedarhurst (Fishing Cove)	3

TOTAL: 41 days

41 days x $400 / day (in-kind match) = $16,400

This table represents partial or full days of operation of the John Deere 17D excavator by Al Gettman. Omitted are hours spent on machine transportation logistics, site visits, rinsing, changing track pads, and minor maintenance and repairs.

AUTHORIZED AGENT OF LEAD ORGANIZATION

Al Gettman, DEM Mosq. Abate. Coord.
Signature

Jan. 24, 2018
Date

Narrow River saltmarsh restoration project.

Wide pads fitted to 4,000 lb. John Deere excavator.

CRMC

COASTAL RESOURCES MANAGEMENT COUNCIL

Rhode Island Coastal and Estuary Habitat Restoration Fund
Full Proposal Form for Planning Projects 2017/2018

**for design or construction projects please use Full Proposal Form

I. PROJECT SUMMARY

1. **Project Title: STORMTOOLS** Analyses and Coastal Resilience using MyCoast tools

2. **Project Location and coordinates** *(include map)*: all of coastal Rhode Island that will be impacted by 1 to 7 feet of sea level rise, including the south coast salt ponds and Narragansett Bay coves (see attached).

3. **If other, please specify:**

4. **Habitat type** *(River System, Salt Marsh, Seagrass, Shellfish Bed, other)*: existing salt marsh and low lying areas for potential marsh migration.

5. **If other, please specify**: Upland areas, particularly roads and parking lots that are frequently flooded by extreme high tides causing pollutants to flow into tidal waters, impacting marshes and benthic habitat.

6. **Targeted restoration technique** *(e.g. re-vegetation, tidal restoration, etc.)*: This project will assess sea level rise impacts on the natural and built environment using photographs submitted by citizen scientists, with simultaneous tidal and weather data. This will be used to ground truth STORMTOOLS flood modeling. This project will also include a component for training citizen scientists on using the coastal resilience tool for documenting marsh condition and monitoring marsh migration.

7. **Potential future benefits resulting from proposed planning project:** Determining thresholds for nuisance flooding is important for assessing saltmarsh resiliency to sea level rise. Monitoring marsh condition and migration will help in accessing the SLAMM modeling. The ultimate goal is to increase confidence in the models for policy and planning initiatives to protect, adapt and restore coastal resources subjected to sea level rise impacts.

8. **Project partners** *(organizations providing financial or other support to the project)*: The Northeast Region Association of Coastal and Oceans Observation System (NERACOOS), Blue Urchin, LLC

9. **Is this is an ongoing project that has previously received funds from the CRMC Coastal and Estuarine Habitat Restoration Fund?** No **If yes, year(s) funding was awarded:**

II. PROJECT MANAGER CONTACT INFORMATION

1. **Name:** Janet Freedman
2. **Organization**: RI Coastal Resources Management Council
3. **Address**: 4808 Tower Hill Rd.
4. **City**: Wakefield **5. State**: RI **6. Zip**: 02879
7. **Phone**: 401-783-3370 **8. Email**: jfreedman@crmc.ri.gov
9. **Property Owner(s)**: generally publically owned property, some reporters may document their own property

The applicant must document ownership of project site or permission to perform all proposed project planning activities *(include appropriate documentation).*

III. BUDGET SUMMARY

(List individuals or organizations providing financial or in-kind support to the project under Project Partners)

Amount Requested from Trust Fund	**$10,000**	
Matching Funds	**Project Partner(s)**	**Amount of Match**
Janet Freedman	Coastal Resources Management Council	$6930
	TOTAL PROJECT COST	**$16930**

IV. PROPOSAL NARRATIVE

1. Justification and Purpose

Briefly describe the proposed planning project. What questions does it propose to answer? What are the restoration goals and anticipated long-term and short-term outcomes. Describe the human impacts and previous restoration activities within the proposed study area. If the project area includes multiple impacted sites, please describe the impacts and previous restoration activities at each.

MyCoast is a iphone or android phone application that has been used to document tidal flooding and storm surge in low lying coastal areas in RI. The app georeferences the photo location and links the time the photo was taken to weather and tide data from the closest NOAA tide gage automatically creating the metadata for download by MyCoast administrators. STORMTOOLS is an important tool for sea level rise and coastal adaptation planning. The tool maps future inundation areas under 1 foot to 7 foot sea level rise scenarios. STORMTOOLS is a robust model, but it is still a model.

This project proposes to use the existing MyCoast inventory of on-the-ground flood data to assess the accuracy of STORMTOOLS and to identify thresholds for nuisance flooding throughout Narragansett Bay and the RI south shore in order to determine how high and how often flooding occurs. Assessing the accuracy of STORMTOOLS flood levels is particularly important in the many ponds, embayments, and coves where there may be tidal restrictions and lags between the time of predicted high tide at the NOAA tide stations and the actual high tide at the location of interest. A second objective of this project is to use the MyCoast Coastal Resilience tool to identify areas where marshes are migrating into upland areas to support the SLAMM modeling. Both flood level mapping and marsh migration mapping will be conducted by enlisting the help of citizen scientist volunteers. There are currently 286 MyCoast subscribers, of which 125 have submitted at least 1 report since the app was developed in November 2014. More than 900 reports within Narragansett Bay and the RI south shore have been posted to the MyCoast website since that time.

Low lying coastal areas are important for coastal habitats both today and in the future. The goals of this project are to verify the flood extent of areas identified in the STORMTOOLS model and identify thresholds for nuisance coastal flooding for various location throughout the state; to identify areas with high risk of mobilization of pollutants onto critical and vulnerable habitat; and to document conditions of upland areas identified for marsh migration in SLAMM modeling. Ultimately the goal is to increase understanding and confidence of the inundation models for state and local planning initiatives to further coastal resilience, habitat preservation and habitat restoration.

2. Project Activities, Schedule and Work Plan

Describe the planned project activities, and explain how each activity will help to plan for restoration of ecosystem functions. List specific project activities and when they will occur (month and year). Indicate when annual and final project reports will be submitted.

This proposal requests funding for:
1) site maintenance in order to allow continued access to the photographs and metadata. Site maintenance will be done by Blue Urchin, LLC, the app developer, through the Northeastern Regional Coastal Ocean Observing Systems (NERACOOS). Maintenance will be continuous throughout the twelve month grant period.
2) analyzing the existing data for comparison to STORMTOOLS sea level rise modeling scenarios to assess the accuracy of STORMTOOLS flood modeling data. Photographs will be analyzed by location for flood levels onsite and events of interest will be selected. Metatdata for tide heights from the nearest tide gage and weather conditions, particularly wind will be used to determine threshold conditions for tidal flooding. RTK GPS may be used on selected sites to hindcast flood depths for comparison with STORMTOOLS. A preliminary report documenting the results will be completed by October 2018, with the final report due at the completion of this grant period.
3) continued data collection, particularly in low lying areas on restricted tidal water bodies and areas with conduits to tidal waters that are not necessarily apparent within the STORMTOOLS model; Low lying areas that have not yet been documented in MyCoast will be targeted with priority going to areas adjacent to tidally restricted water bodies. MyCoast monitoring will be continuous throughout the year with a potential for 10 King tides (extreme tides without storm surge) and possibly some additional storm tides. Documenting marsh plant migration will be done when targeted vegetation is visible.
4) conduct a trial investigation of the utility of using the MyCoast Coastal Resilience tool to document salt marsh migration as identified in SLAMM mapping. This will entail recruiting new reporters and training current reporters on how to use the MyCoast Coastal Resilience Tool during 4 training events held in 2018.

3. Coordination and Public Support

How will the project lead organization coordinate with other stakeholder groups, and which groups will be included? Describe planned or completed community / stakeholder education and outreach efforts.

CRMC will coordinate with the Coastal Resources Center/Sea Grant (CRC/Sea Grant) at the University of Rhode Island on developing the workshops. Education and outreach for training for using the MyCoast tools are currently included in their coastal resilience toolbox and education and outreach is part of the CRC/Sea Grant 4 year Omnibus. Potential Education and Outreach opportunities for training in use of the Coastal Resilience Tool to monitor shoreline change are RIFMA Twilight Seminar, for professionals and practitioners in in flood mitigation, Coastweeks walking tour for the general public, and the Land and Water Summit, for resource managers and volunteer groups. Several coastal communities have expressed interest in the tool and have offered to help in recruiting volunteers. The Towns of Warren and North Kingstown in particular are potential partners for training workshops.

4. Planning Consistency and Restoration Priority

Is the proposed project consistent with the goals of a local, state or regional planning initiative? Please specify initiative and explain (see CRMC website for guidance). Does the proposed project involve a state, regional or federal priority habitat restoration need or special consideration? Please specify and explain (see CRMC website for guidance).

The **State Guide Plan** policy is to preserve and enhance wildlife, fish, and plant species diversity and stability through habitat protection, restoration, enhancement, and prevention or mitigation of adverse impacts due to human activities. This project documents the impacts of sea level rise on coastal habitat and can be used in conjunction with STORMTOOLS to plan for mitigation to these impacts.

The **Coastal Resources Management Council** has a legislative mandate to preserve, protect, and where possible, restore the coastal resources of the state through comprehensive and coordinated long-range planning. The **Coastal Resources Management Program (CRMP)** identifies climate change and sea level rise as important policy issues and further states that in order to proactively plan for and adopt to climate change and sea level rise will integrate climate change and sea level rise scenarios into its programs in order to create coastal resilience under changing conditions (Section 1.1.10). In addition, the CRMP adopts the use of STORMTOOLS to evaluate the flood extent and inundation from sea level rise and storm surge. **Shoreline Change Special Area Management Plan** (BeachSAMP) developed STORMTOOLS as one of the resilience tools for climate change and sea level rise planning. The BeachSAMP website is one platform that is used to notify the public about upcoming King Tides.

The **Narragansett Bay Estuary Program** identifies nuisance flooding thresholds and field research for marsh migration sites identified in SLAMM as data gaps in ***State of Narragansett Bay and Its Watershed 2017 Technical Report.***

5. Species of Concern

Does the planning project address threats to wildlife species listed as federally or state endangered, threatened, or species of concern within Rhode Island? Please specify which species will benefit and how. For a list of species, see the Rhode Island National Heritage Program's listing of animals at: http://ww.rinhs.org/wp-content/uploads/ri_rare_animals_2006.pdf *or a listing of plants at:* http://www.rinhs.org/wp-content/uploads/ri_rare_plants_2007.pdf

NA

6. Climate Change and Coastal Resiliency
How will present and future impacts of climate change be considered during the project planning and design phases? What impact will the final project have on resilience of coastal or estuarine habitat to climate change?

The goal of MyCoast is to increase awareness of climate change using visual documentation of coastal flooding in areas that are familiar to communities members. This promotes understanding of what the blue polygons mapped in STORMTOOLS actually means on the ground and how it will impact natural resources and the built environment in the future as flooding becomes more and more frequent. Understanding of the issue is an important step for policy makers and planners to work towards creating more resilient communities and protecting valuable coastal resources.

7. Permitting
List any federal, state or local permits required to complete the project and the permit application status for each.

NA

8. Capacity of Lead Organization (attach additional materials if necessary)
Demonstrate the capacity of the lead and/or partner organizations to successfully complete the proposed project by providing any or all of the following: a) a description of the organization(s) b) resume(s) or summary of qualifications of involved personnel c) evidence of successfully completed habitat restoration or conservation planning projects.

The Coastal Resources Management Council policy is "...to preserve, protect, develop, and where possible, restore the coastal resources of the state for this and succeeding generations through comprehensive and coordinated long-range planning and management designed to produce the maximum benefit for society from such coastal resources; and that the preservation and restoration of ecological systems shall be the primary guiding principal upon which environmental alteration of coastal resources shall be measured, judged and regulated." CRMC has managed and continues to manage many habitat restoration projects in the state. CRMC also created the Shoreline Change Special Area Management Plan (BeachSAMP) which includes several tools for determining risk for climate change impacts including STORMTOOLS and CERI. Janet Freedman is the state administrator for the MyCoast project. She has also worked on various habitat restoration projects (Allin's Cove wetlands restoration, Ninigret Pond eelgrass restoration) and coastal resilience projects.

NERACOOS is part of the National Integrated Oceans Observing System (IOOS). They produce, integrate and disseminate data ranging from real-time tide and wave data, ocean forecasts, nutrient and sentinel monitoring, in the northeast region. They have the capacity to host the MyCoast site.

9. External Factors and Climate Change
Identify existing external (off-site) factors that may be affecting habitat within the study area. How will external factors be considered? What are the likely effects of climate change and sea level rise within the study area and how will these be considered?

One goal of the project is to further understand how sea level rise will likely effect coastal habitats.

V. EVALUATING PROJECT SUCCESS (one page maximum)

1. Performance Measures and Deliverables

How will the success of the project be measured in relation to the restoration goals set forth in this proposal? List all deliverables (e.g. reports, updates, websites, etc.) associated with the project..

A report of results of the data analysis will be delivered in October 2018. Four workshops will be held for training on the MyCoast Coastal Resiliency Tool. Website maintenance will allow for the continued use of the MyCoast app and website (https://mycoast.org/ri) for submitting reports and downloading photographs and metadata.

2. Monitoring Plan

Describe any monitoring activities that are part of the planning project. For each monitoring activity list the frequency and month/year of start and end date and the parameters measured. List the entity or entities responsible for funding and carrying out each monitoring activity, and describe how results will be made available to CRMC and the public. If using an established monitoring protocol, please provide references (see CRMC website for information on established monitoring protocols).

The monitoring will be done by MyCoast reporters through the app for extreme high tide flooding. Photographs are available for download for stakeholders. The metadata will be made available to interested parties by contacting the RI site administrator.

Simple monitoring parameters are incorporated into the Coastal Resiliency Tool. These include dropdown menus for physical site characteristics, site stability, vegetation percent and vegetation cover, and structural integrity from human and natural impacts. The monitoring locations and protocol will be developed as part of the training workshops for the Coastal Resiliency Tool. Ongoing work by the URI Coastal Resource Center/Sea Grant to secure multi-year funding for site maintenance will insure that citizen scientists will be able to continue monitoring marsh migration sites after the completion of this grant.

Rhode Island Coastal and Estuary Habitat Restoration Fund
Full Proposal Form 2017/2018

****for planning projects please use Full Proposal Form for Planning Projects**

I. PROJECT SUMMARY

1. **Project Title: Shady Lea Dam Removal**
2. **Project Location and coordinates** *(include map)*: **215 Shady Lea Road, North Kingstown**
3. **Project type** *(Design, Construction or Other)*: **Construction**
4. **If other, please specify:**
5. **Habitat type** *(River System, Salt Marsh, Seagrass, Shellfish Bed, other)*: **River**
6. **If other, please specify**:
7. **Restoration technique** *(e.g. re-vegetation, tidal restoration, etc.)*: **Dam Removal**
8. **Total acreage or miles(river systems) of habitat to be restored, or project area planning unit size: 2 acres riverfront area restored, ½ mile of stream corridor.**
9. **Project benefits: Riparian area restoration, fish passage increased**
10. **Project partners** *(organizations providing financial or other support to the project)*: **US Fish and Wildlife Service, Save The Bay, NOAA, DEM**
11. **Is this is an ongoing project that has previously received funds from the CRMC Coastal and Estuarine Habitat Restoration Fund? Yes If yes, year(s) funding was awarded: 2011, 2013, 2015**

II. PROJECT MANAGER CONTACT INFORMATION

1. **Name:** Rachel Calabro
2. **Organization**: Save The Bay
3. **Address**: 100 Save The Bay Drive
4. **City**: Providence **5. State**: RI **6. Zip**: 02905
7. **Phone**: 401-272-3540 x107 **8. Email**: rcalabro@savebay.org
9. **Property Owner(s)**: Lynn Krim, Reisert Realty

Applicant must document ownership of project site or permission to perform all proposed restoration, maintenance and monitoring activities *(include appropriate documentation).*

III. BUDGET SUMMARY

(List individuals or organizations providing financial or in-kind support to the project under Project Partners)

	Amount Requested from Trust Fund	**$15,000**
Matching Funds	**Project Partner(s)**	**Amount of Match**
US Fish and Wildlife Service	***$30,000***	***Cash***
Patagonia	***$5,000***	***Cash***
Bafflin Foundation	***$20,000***	***Cash***
	TOTAL PROJECT COST	

IV. PROPOSAL NARRATIVE (five pages maximum)

1. Justification and Purpose

Describe the human impacts and previous restoration activities at the proposed project site. If multiple sites, please describe the impacts and previous restoration activities at each). Briefly describe the proposed project, its restoration goals, long-term and short-term outcomes.

Save The Bay is partnering with RI DEM, NOAA and the US Fish & Wildlife Service to implement a dam removal and river restoration project on the Mattatuxet River in North Kingstown. The dam at Shady Lea Mill is located on the Mattatuxet River about 1.5 miles above the fish ladder at the Gilbert Stuart Birthplace on Carrs Pond. Removing the dam at Shady Lea would provide fish passage to .5 miles of river up to the Silver Spring Lake Dam.

Shady Lea dam was upgraded from significant hazard to high hazard after the 2010 floods. The project as designed will remove of most of the spillway but not the earthen embankment or abutments. This will preserve historic elements of the raceway and hydro turbine. The design includes small stone weir structures below the dam to assure fish passage during low flow.

The project has begun construction and the Section 106 historic preservation work has been completed. A final report will be submitted to Save The Bay and the RI Historic Preservation and Heritage Commission along with the archival photographs and other material. The US Fish and Wildlife Service was the lead federal agency on this project. The dam has been notched and water levels were lowered within the impoundment. Some sediment was removed and placed in the raceway next to the dam. The dam removal will be completed in July and remaining sediment will be transported off site. Stones from the dam will be reused as weirs in the channel.

2. Project Activities, Schedule and Work Plan

Describe the plonned on-the-ground project activities, ond explain how each activity will help to restore ecosystem functions. List specific project activities and when they will occur (month and year). Indicate when annual and finol project reports will be submitted.

During phase one of the project, the dam was lowered by removing a 4 foot by 2 foot section and allowing the impoundment to drain. Some sediment from behind the dam was removed and placed in the adjoining raceway. Public Archaeology Labs has been out to document the dam and associated mill works for Section 106 of the Historic Preservation Act. Archival photographs and a report will be provided to the Rhode Island Historic Preservation and Heritage Commission. The impoundment will continue to drain over the winter and we will be back in July to fully remove the spillway and to remove more sediment from directly behind the dam. The impoundment will be allowed to naturally revegetate. Stone weirs will be installed below the dam to assist with fish passage. Stones from the dam will be reused in the weirs. Sediment will be trucked over to state property on Route 1 for disposal. Some additional modeling and survey will need to be done to satisfy the DEM Dam Safety program's requirements for downgrading the dam to low hazard. Post construction monitoring of fish passage and habitat restoration will also be completed. We will continue to work with DEM fisheries staff to ensure that the project meets fish passage goals. We will be able to file a final project report by December, 2018.

3. Minimization of Adverse Impacts

What are the potential impacts resulting from project activities (e.g. the disturbonce of sensitive species by construction activities), and how will these impocts be minimized (e.g. scheduling construction to avoid disturbance of sensitive species).

Our DEM wetlands permit required that no work be done in the stream from October 31, 2017 to July 1, 2018. We have phased the project appropriately to avoid this construction window and to allow revegetation of flood plain before construction begins in the summer. This will stabilize the sides of the impoundment. The wetlands permit also provides requirements for erosion control and dewatering at the construction site. All construction areas will be restored after the project.

4. Public Support

Demonstrate public support for the project by praviding evidence of communicotion with adjacent landowners, community members and ather stakeholders. Describe planned or completed community / stakeholder education and outreach efforts.

We have provided outreach to the mill tenants, the Shady Lea Woods neighborhood association, and the Narrow River Preservation Association. There has been interest in the project with the neighbors, and many have been down to view the construction activities. While they don't all want to see the pond go away, they do understand the necessity of the project and are looking forward to seeing its completion.

5. Economic and Educational Benefits

How will the proposed project provide direct economic and/or educational benefits to a community and/or the state?

The Shady Lea Mill is leased to many artists and small businesses. The mill owner wants to keep rents affordable and to create a community of artists and businesses. This project will directly help her and all the mill businesses by lowering liability and flood risk. As an educational tool, the dam removal will show habitat restoration in action and will be an area where folks should be able to view fish migrating through

the weirs in the spring migration. Trout also use this area, and have already been observed moving through the system. Fishing will likely improve and the neighbors area already looking forward to trying out their favorite fishing spots.

6. Climate Change and Coastal Resiliency

How have the present and future impacts of climate change been considered during the project planning and design phases? What impact will the project have on resilience of coastal or estuarine habitat to climate change?

This project will improve the resiliency of this stream habitat by recreating a natural river corridor from a formerly impounded area. The stream is suitable trout habitat and restoration will remove a potential for thermal contamination from warm water in the mill pond. Trout have already been observed trying to leap into the impoundment through the new notch in the dam. It will also restore upstream passage and the ability for trout to move upstream for thermal refuge. It will allow migratory herring the ability to continue upstream and will increase their spawning area. As the climate warms and floods become more frequent, removal of this dam will also remove a failure hazard.

7. Planning Consistency and Restoration Priority

Is the proposed project consistent with the goals of a local, state or regional plonning initiative? Please specify initiative and explain (see CRMC website for guidance). Does the proposed project involve a state, regional or federal priority habitat restoration need or special consideration? Please specify and explain (see CRMC website for guidonce).

This river system is listed in the DEM Strategic Plan for the Restoration of Anadromous Fishes to Rhode Island Coastal Streams, prepared in 2002. The Shady Lea Mill dam is listed as a removal candidate with a potential for a fish ladder at Silver Spring Lake. This project will support the goals of river restoration and fish passage within the Narrow River watershed. The National Fish and Wildlife Foundation created a river herring habitat restoration needs strategy for the Narrow River, and this project was identified as an important next step in increasing river herring habitat in the Narrow River watershed.

8. Species of Concern

Will the project result in benefits to wildlife species listed as federally or state endangered, threatened, or species of concern within Rhode Island? Please specify which species will benefit and how. For a list of species, see the Rhode Island National Heritage Program's listing of animals at: http://www.rinhs.org/wp-content/uploads/ri_rare_animals_2006.pdf or *a listing of plants at:* http://www.rinhs.org/wp-content/uploads/ri_rare_plants_2007.pdf

This project does not directly benefit any threatened or listed species, but it does support habitat for both river herring and American eel, both of which have declined in Rhode Island. National Marine Fisheries Service (NMFS) lists alewives and blueback herring as species of concern. Currently there is a moratorium on the taking of river herring and American shad in RI fresh and marine waters. American eel are not listed, but they are an ASMFC managed species.

9. Permitting

List any federal, state or local permits required to complete the project and the permit application status for each.

All permits have been received and work has begun. An extension of the DEM wetlands permit was recently granted, so the permit is extended for another year.

10. Capacity of Lead Organization (attach additional materials if necessary)

Demonstrate the capacity of the lead and/or partner organizations to successfully complete the proposed project by providing any or all of the following: a) a description of the organization(s) b) resume(s) or summary of qualifications of involved personnel c) evidence of successfully completed habitat restoration or conservation projects.

Save The Bay has a long track record of successful restoration projects funded through the Trust Fund. We have been project proponents as well as partner supporters. We have been partners on dam removal and fish passage projects on the Pawcatuck, Pawtuxet, Ten Mile, Kickemuit and Blackstone Rivers. We have also successfully completed salt marsh restoration and riparian restoration projects throughout the watershed. Rachel Calabro and Wenley Ferguson will be the project leads on the completion of this project. Our project engineer, EA Science Engineering and Technology also has a long track record of successful projects in Rhode Island.

V. SUSTAINABILITY (one page maximum)

1. Maintenance

What is the estimated "lifespan" of eoch plonned restoration activity? What are the anticipated short-term and long-term (beyond the funding period) operation and maintenance requirements of the project? Specify who will be responsible for funding and carrying out each O & M activity. Indicate when and with what frequency activities will occur.

This project is designed to provide fish passage into the future with little maintenance required. The dam will be reclassified as low hazard and most of the spillway will be removed. The dam owner will potentially need to remove wood or other debris that gets caught in the weirs, and she will need to continue to mow and maintain the earthen embankment. The channel walls and abutments will remain. Save The Bay in partnership with DEM Fish and Wildlife will continue to monitor the fish passage at this location and make adjustments as needed.

2. External Factors

Identify existing external (off-site) factors that could reduce the chances of achieving the project goals (e.g. stormwater inputs to the site from the surrounding drainage area). Explain how these external factors will be addressed. Describe any additional measures taken to help ensure long-term success of the project (e.g. installation of stormwater management practices or securing of conservation easements).What are the likely future effects of climate change and future sea level rise on the proposed project and how will these be addressed?

This site is not directly impacted by stormwater drainage, and there are stormwater swales located next to the mill that infiltrate and contain road drainage. The driveways and parking areas are not paved. There is a stormwater input from Route 1, but it is above the project area. There should not be any factors that affect the project goals.

VI. EVALUATING PROJECT SUCCESS (one page maximum)

1. Performance Measures

How will the success of the project be measured in relation to the restoration goals set forth in this proposal? List performance measures and how they will be recorded. Include a detailed monitoring plan; if applicable (see below).

This project will be evaluated based on the success of fish passage and the shape of the low flow channel. Evaluation of fish passage will be conducted in coordination with DEM Fish and Wildlife. Hydraulic modeling will be used to determine flood risk and to change the dam classification.

2. Monitoring Plan

Describe any planned or completed pre- and post-project monitoring activities. For each monitoring activity list the frequency and month/year of start and end date and the parameters measured. List the entity or entities responsible for funding and carrying out each monitoring activity, and describe how results will be made available to CRMC and the public. If using an established monitoring protocol, please provide references (see CRMC website for information on established monitoring protocols).

RI DEM Division of Fish and Wildlife monitors diadromous fish runs throughout the state by various methods. Adult anadromous fish returns are monitored during the spring migration and out migrating juveniles are monitored throughout the summer and fall. These results are available from RI DEM. The results from monitoring are used to set harvest regulations, determine the overall condition of the anadromous stocks, and to determine the efficiency of fish passage structures. The fish run will be monitored qualitatively on an annual basis for presence/absence of fish passing the mill property. As-built plans will be used to determine the amount of new river channel and riparian area, and vegetation monitoring will take place for invasive species and habitat regrowth.

Rhode Island Coastal and Estuary Habitat Restoration Fund
Full Proposal Form 2017/2018

****for planning projects please use Full Proposal Form for Planning Projects**

I. PROJECT SUMMARY

1. **Project Title: Tunipus Pond Marsh Restoration Project**

2. **Project Location and coordinates** *(include map)*: Tunipus Pond is located in Little Compton south of John Sisson Road, east of Pond View Drive, and north of The Town of Little Compton's South Shore Beach on the Tunipus Pond barrier.

3. **Project type** *(Design, Construction or Other)*: This project includes Planning, Design, Construction, Monitoring and Assessment, and Other.

4. **If other, please specify:** Additionally, native shrub plantings will be planted on the north side of the South Shore Beach barrier and to create buffer zones. Some of the plantings will include those attractive to native pollinators. Once the *Phragmites* is eliminated on the back barrier, these plantings will provide a buffer and help to stabilize soils on the pond side of the barrier shoreline. The Nature Conservancy anticipates educational opportunities stemming from this effort, and will incorporate this marsh restoration project into programs at its Benjamin Family Center facility at Goosewing Beach.

5. **Habitat type** *(River System, Salt Marsh, Seagrass, Shellfish Bed, other)*: Tunipus Pond is a Coastal Pond. The target habitat is its shoreline plant communities which comprise patches of upland and emergent vegetation. Brackish and Freshwater Wetland encircle portions of the pond shoreline. Much of the upland shoreline is wooded, some Wooded Swamp. The Coastal Barrier is comprised of beach and a gravel parking area for Little Compton's South Shore Beach with a very narrow back dune area. This barrier is subject to a CRMC Maintenance Assent (under Assent #2010-05-026 and issued as recently as 10/24/16) which provides for the Town of Little Compton to manage the barrier as a recreational area and bathing beach.

6. **If other, please specify**: Native plant communities on the eastern shore of Tunipus Pond have been protected with Conservation Easements and outright conservation interests associated with Goosewing Beach and Goosewing Farm. This was a recommended action in the RI Resource Protection Project that described this area as an important natural resource in East Bay and an area in good ecological health.

7. **Restoration technique** *(e.g. re-vegetation, tidal restoration, etc.)*: Initial removal of tall reed (*Phragmites australis)* and purple loosestrife (*Lythrum salicaria)* by herbicide treatment to initiate native marsh restoration around much of the circumference of Tunipus Pond. This practice has already been employed successfully since 2009 at a number of coastal ponds in Little Compton. Native plantings will be proposed if future monitoring of the project success indicates that some wetland areas do not revegetate naturally with wetland plant species.

8. **Total acreage or miles(river systems) of habitat to be restored, or project area planning unit size:** 3-3.5 acres of the total 50+ acre pond

9. **Project benefits**: Protection of existing shoreline plant communities at Tunipus Pond from invasion by tall reed (*Phragmites australis*); re-introduction of native plant communities, thus creating habitat diversity in areas that are presently a monoculture of *Phragmites*; restoration of open water areas within Tunipus Pond; establishment of a buffer along the back dune area of Little Compton's South Shore Beach (a recreational area receiving season heavy use by vehicles and beach-goers); establishment of a single access on the barrier to Tunipus Pond; and improved visual access of Tunipus Pond for the public using South Shore Beach.

10. **Project partners** *(organizations providing financial or other support to the project)*: The Friends of Tunipus Pond, Little Compton Agricultural Conservancy Trust, The Nature Conservancy in Rhode Island, Sakonnet Preservation Association, and the Town of Little Compton Beach Commission

11. **Is this is an ongoing project that has previously received funds from the CRMC Coastal and Estuarine Habitat Restoration Fund?** No **If yes, year(s) funding was awarded:**

II. PROJECT MANAGER CONTACT INFORMATION

1. **Name:** Linda A. Steere

2. **Organization**: Applied Bio-Systems, Inc.

3. **Address**: 42 North Road (Mailing: PO Box 985; West Kingston, RI 02892)

4. **City**: Wakefield **5. State**: RI **6. Zip**: 02879

7. **Phone**: 401-783-6740 **8. Email**: wetlands@absinc.necoxmail.com

12. **Property Owner(s)**: The Friends of Tunipus Pond, Little Compton Agricultural Conservancy Trust, The Nature Conservancy in Rhode Island, Sakonnet Preservation Association, and the Town of Little Compton Beach Commission (Documentation attached in Appendix B)

Applicant must document ownership of project site or permission to perform all proposed restoration, maintenance and monitoring activities *(include appropriate documentation).*

III. BUDGET SUMMARY

(List individuals or organizations providing financial or in-kind support to the project under Project Partners)

1. **Amount Requested from Trust Fund: $13,000.00**

Source of Match	Amount	Cash or In-Kind?
NRCS EQIP Funding	$5000	Cash
Town of L.C. Beach Commission**	$2500	Cash/In-Kind
Friends of Tunipus Pond**	$1440	Cash/In-Kind
The Nature Conservancy**	$3000	Cash/In-Kind
L.C. Agricultural Trust**	$ 480	In-Kind
Sakonnet Preservation Association**	$ 480	In-Kind
Applied Bio-Systems, Inc.	$ 560	In-Kind
Total Match Amount	$13,460.	
** Project Partner		

3. **Total Project Cost: $26,460.00**

IV. PROPOSAL NARRATIVE (five pages maximum)

1. Justification and Purpose

Describe the human impacts and previous restoration activities at the proposed project site. If multiple sites, please describe the impacts and previous restoration activities at each). Briefly describe the proposed project, its restoration goals, long-term and short-term outcomes.

Similar Marsh Restoration projects have occurred at numerous coastal ponds in Little Compton. To date, successful projects are on-going or concluded in Round Pond, Briggs Marsh, Long Pond and both the northern and southern ends of Quicksand Pond. Each of these ponds is hydrologically independent, but they function as one ecological system of coastal lagoons along the shores of Buzzards Bay (USFWS). All have excellent water quality and each is being monitored in order to make informed management decisions. The Friends of Tunipus Pond have already had a habitat study and water quality testing completed for the pond in preparation for this restoration project. The reports from these studies are available for review upon request.

In Tunipus Pond the growth of the invasives, common reed (*Phragmites australis*) and purple loosestrife (*Lythrum salicaria*), is slowly gaining a foothold along the shoreline of the pond. Beginning at the south end at the barrier beach they are overtaking freshwater and brackish wetland as the populations increase and move northward. Presently, the pockets of both plants along the shoreline are small, but restoring native wetlands will be easier now rather than after colonies of the invasives have completely encircled the pond. The Friends of Tunipus Pond and Partners propose to Design and carry out a Restoration Plan that would include a three-step process. In the short-term, the first step is a foliar herbicide treatment specific to the *Phragmites* by professionals. Second is the removal of the dead stalks, and finally, monitoring and assessment of the success of the regrowth of native wetland vegetation over a five-year period. After evaluation, the planting of native shrubs would be proposed in areas where native regrowth is lacking or where a native shrub buffer could be planted to improve wildlife habitat and aid in improving water quality by filtering stormwater flow to the pond. The pond side of the Tunipus barrier beach would be one location for the shrub plantings to replace the *Phragmites* and provide native wildlife habitat and some stabilization of the barrier. It is hoped that future dollars from the NRCS Native Pollinators program will help to fund some of the shrub plantings.

In the long-term, monitoring of the project area will continue, both for spot treatment of *Phragmites* as it occurs, as well as the successful revegetation of the freshwater/brackish wetland and barrier with native vegetation and/or planted natives. Finally, this effort will provide an improved one-point public access to the pond from the barrier beach at South Shore for public carry-in boating, fishing and bird watching. This is particularly significant as Tunipus Pond is one of the few coastal ponds in Little Compton with appreciable public access available.

2. Project Activities, Schedule and Work Plan

Describe the planned on-the-ground project activities, and explain how each activity will help to restore ecosystem functions. List specific project activities and when they will occur (month and year). Indicate when annual and final project reports will be submitted.

Year 1: Goal to treat and remove 90+% of the Invasive plants
Obtain CRMC Assent for Tunipus Pond Marsh Restoration Project
- Obtain RIDEM Herbicide Permit (April-May)
- Conduct Herbicide Treatment of *Phragmites* between August 15 and September 30

Year 2: Cut and mulch/remove dead *Phragmites* stalks resulting from Year 1
- Begin Monitoring and Assessment of Year 1 treatment during growing season by ABS
- Annual Monitoring Reports submitted to CRMC (December- Year 2)
- Spot treat *Phragmites* regrowth between August 15 and September 30

Year 3: Cut and mulch/remove dead *Phragmites* stalks from Year 2, as necessary
- Monitor and Assessment of Year 3 by ABS, evaluating native wetland plant growth and areas needing planting of native wetland plants or shrub buffers to stabilize and provide wildlife habitat
- Training of Partners by ABS to continue monitoring and Assessment in future years
- Spot treat *Phragmites* regrowth between August 15 and September 30, as needed

Year 4 and forward:
- Continue Monitoring and Assessment by Partners (Annual Submission to CRMC – December)
- Spot treat *Phragmites* regrowth between August 15 and September 30, as needed
- Monitor success of native plantings

3. Minimization of Adverse Impacts

What are the potential impacts resulting from project activities (e.g. the disturbance of sensitive species by construction activities), and how will these impacts be minimized (e.g. scheduling construction to avoid disturbance of sensitive species).

The potential impact of herbicide damage from treatment of non-targeted species will be managed by enlisting the services of an experienced professional contractor who has access to appropriate equipment, formulation standards, and who will respect weather conditions during treatment periods. Selected herbicides will be chosen for their known safety in aquatic environments.

Herbicide treatment in the initial treatment year can be applied as a broadcast foliar treatment without concern for harm to native plants that may be embedded within the invasives. In later years, spot treatment of the invasives will be required to avoid harming the revegetating native plants.

Removal of tall reed from coastal ponds has been associated with loss of nutrient sequestration and is therefore identified as a potential cause of water quality impairment. Managing this plant and replacing its function before it comes to dominate the shoreline will be important to minimizing future water impairment associated with significant removal of this plant at a later date.

Finally, given the public nature of Little Compton's South Shore Beach, herbicide treatment will be scheduled just after Labor Day.

4. Public Support

Demonstrate public support for the project by providing evidence of communication with adjacent landowners, community members and other stakeholders. Describe planned or completed community / stakeholder education and outreach efforts.

A meeting was held with the Friends of Tunipus Pond on May 14, 2016 and a second field meeting was held with the Partners and the NRCS on September 2016 and again in October 2017 to review the project and the applicability for EQIP funds. (Also, see Appendix B--Letters of Support from landowner's belonging to the Friends of Tunipus Pond). Several discussions were held during the Town of Little Compton Beach Commission's regular meetings and subsequently, the Beach Commission became a Partner.

5. Economic and Educational Benefits

How will the proposed project provide direct economic and/or educational benefits to a community and/or the state?

The Tunipus coastal barrier is the site of Little Compton's Town Beach. Removal of the *Phragmites* on the back of the barrier will greatly improve the aesthetics for people from the community using the beach, giving them a better view of Tunipus Pond. The later introduction of native shrubs and grasses are intended to improve the stability of the barrier contributing to better coastal resiliency, as well as to provide vegetation suitable for native pollinators.

The Nature Conservancy owns the adjacent barrier beach at Quicksand Pond as part of its Goosewing Beach Preserve, and has been attentive to managing and restoring shoreline areas of all the coastal ponds in Little Compton. TNC manages its Goosewing Beach preserve as a refuge for the Piping Plover and other threatened shorebirds; for its top quality beach, dune, and coastal habitats; and as a resource for providing visitors with nature education, especially as this relates to coastal ecology. TNC plans to use the restoration effort underway at Tunipus Pond as an opportunity to share goals, methods and outcomes among its Benjamin Center visitors who want to know more and seek out its nature center programs.

6. Climate Change and Coastal Resiliency

How have the present and future impacts of climate change been considered during the project planning and design phases? What impact will the project have on resilience of coastal or estuarine habitat to climate change?

Rhode Island's coastal lagoon ecosystems have become increasingly susceptible to invasion by common reed and this threatens the patches of endemic shoreline or riparian plant communities which remain. Some causes of this invasion include outright removal of these native plant communities, disturbance of nearby soils associated with residential or recreational land uses, and nutrient loading into these hydrological systems. That this plant is now even invading alpine systems in northern New England may be a sign this plant prefers warmer weather associated with climate change. Regardless of agent, however, there is concern the plant communities which are endemic to these coastal lagoons, and therefore the habitat and support these provide to wildlife, will cease to exist if *Phragmites* is allowed to extend, unchecked, into the quality areas that remain. There is no evidence known to this writer that the plant species which are endemic to these coastal pond borders are indeed threatened by a warming climate or by sea level rise, and so if the conditions that promote rampant growth of invasives can be managed, these plant communities may be rescued.

Common Reed (*Phragmites australis*) has its proponents. It benefits coastal waters by effectively sequestering nutrients, and it provides by virtue of its sheer mass, an effective buffer to storm-driven waves in some areas. Managing Common Reed and restoring shoreline plant communities is a relatively recent practice and the science associated with its practices and benefits continues to evolve.

The Tunipus Pond Marsh Restoration project will be implemented amid the unit of coastal ponds in Little Compton where this restoration work has been proceeding since 2009. Monitoring and management actions will consider the results obtained at these other ponds and elsewhere along the Rhode Island shoreline.

It is hoped the early start anticipated by this effort at Tunipus Pond might supply effective means to ensure the persistence of native shoreline plant communities in this location. Finally, addressing the habitat condition of the barrier beach at South Shore may provide an opportunity to create a dune or to introduce plants to foster dune development where none has existed in recent memory and to therefore provide the pond and its shoreline with some additional protection from storm surges.

7. Planning Consistency and Restoration Priority

Is the proposed project consistent with the goals of a local, state or regional planning initiative? Please specify initiative and explain (see CRMC website for guidance). Does the proposed project involve a state, regional or federal priority habitat restoration need or special consideration? Please specify and explain (see CRMC website for guidance).

One of the *Statewide Guide Plan*, "Element 715 "Comprehensive Conservation and Management Plan for Narragansett Bay, as amended", goals is to "prevent further degradation and incrementally improve water quality in developing coastal areas with deteriorating water quality." Element 715 also has a goal to ' "Protect diminishing high quality critical resources throughout the Bay basin." This project proposes to restore a small high quality salt marsh as well as critical larval fisheries and wading bird feeding habitat. It also meets the policy goal of the Coastal Resources Management Council which is to "preserve, protect, develop, and where possible, restore the coastal resources of the state for this and succeeding generations..."

In the *Ocean State Outdoors: State Comprehensive Outdoor Recreation Plan (SCORP)*, revised in 2009, Policy RCOS-2 reads, "Maintain natural diversity by preserving the integrity of Rhode Island ecosystems. Increase high quality habitat through protection and restoring fresh and saltwater wetlands, fish runs, sea grass beds, river shoreline, forests, and other natural areas, and by acquiring land for habitat protection." Tunipus Pond is listed in Table 152-B(3) as a Special Resource Protection Water.

All Salt Marsh and Freshwater Wetlands are identified as a critical habitat type by the Rhode Island Natural Heritage Program currently administered by the RI Natural History Survey.

Tunipus Pond is one within a series of coastal lagoons which follow the shore of Rhode Island Sound from Sakonnet Point to Buzzards Bay. Taken as a unit, these lagoons were first identified in the 1990's as a Significant Habitat Complex by the United States Fish & Wildlife Service. Managing this entire unit of coastal ponds to maintain endemic plant communities, water quality, and species diversity has been and remains a goal for The Nature Conservancy in Rhode Island.

8. Species of Concern

Will the project result in benefits to wildlife species listed as federally or state endangered, threatened, or species of concern within Rhode Island? Please specify which species will benefit and how. For a list of species, see the Rhode Island National Heritage Program's listing of animals at: http://www.rinhs.org/wp-content/uploads/ri_rare_animals_2006.pdf or *a listing of plants at:* http://www.rinhs.org/wp-content/uploads/ri_rare_plants_2007.pdf

There is a long list of state Species of Concern as well as Federally listed migratory shorebirds that this project will benefit by re-establishing native marsh and back barrier habitat. This list includes: black-crowned night heron, great blue heron, great egret, little blue heron, snowy egret, osprey, and piping plover. The piping plover nest on the adjacent Goosewing barrier and their feeding habitat extends into Tunipus Pond, as does the osprey. The wading birds feed at the edges of the vegetation and native marshes will provide greater food productivity at those marsh/water edges. Also included are waterfowl such as the green-winged teal and black duck.

9. Permitting

List any federal, state or local permits required to complete the project and the permit application status for eoch.

Two state permits are required for the initiation of this project. The first is a Category A Application to the Coastal Resources Management Program for an Assent for the total marsh restoration project. This is permitted concurrently by the U.S. Army Corps of Engineers under the General Permitting, Level I. Following that Assent, an application is required to the RIDEM-Division of Agriculture, Herbicide Licensing Program to allow the selected Contractor to apply herbicide as described.

10. Capacity of Lead Organization (attach additional materials if necessary)
Demonstrate the capacity of the lead and/ar partner organizations to successfully complete the proposed project by providing any or all of the following: a) a description of the organization(s) b) resume(s) or summary of qualifications of involved personnel c) evidence of successfully completed habitat restoration or conservation projects.

The Sakonnet Preservation Association and the Little Compton Agricultural Trust will be the lead organizations and will be the financial managers for the project. Their EIN and Incorporation information is attached in Appendix A. Both the L.C. Agricultural Conservancy Trust (Incorporated in 1985) and the Sakonnet Preservation Association (Incorporated in 1972) are land conservation organizations. Managing 1100 acres and 460 acres in Little Compton respectively.

The Nature Conservancy in Rhode island is also a Partner as owner of the Goosewing Preserve abutting the southeastern end of Tunipus Pond. TNC has previously received funds from the CEHRTF and from the US Fish & Wildlife Service to continue restoration work at Goosewing.

All three conservation groups are 501(c)3 organizations.

V. SUSTAINABILITY (one page maximum)

1. Maintenance
What is the estimated "lifespan" of each planned restoration activity? What are the anticipated short-term and long-term (beyond the funding period) operation and maintenance requirements of the project? Specify who will be responsible for funding and carrying out each O & M activity. Indicate when and with what frequency activities will occur.

Deliverables: Annual monitoring reports to CRMC for five years during restoration of the project
Please see previous IV, 2 – Project Activities, Schedule and Work Plan

Outcomes: A short-term outcome (6 months to 1 year) will be the removal of the *Phragmites* and the ability for native marsh plants to begin revegetation in the following growing season. Concurrently, there will be an adverse impact upon *Phragmites* growth after herbicide spraying by Solitude Lake Management and there may be a reduction in mosquito larval habitat that was created within the dense *Phragmites* stands.

Long-term outcome (2 years +) will be elimination of the *Phragmites* and return of native marsh plant communities along the shoreline of Tunipus Pond. On-site monitoring will document the revegetation of native plant species. The result will be an improvement of habitat for avian Species of Concern (wading birds) and opening of scenic viewscapes. Preventing loss of species diversity to invasion by tall reed within this Significant Habitat Complex is paramount. Finally, the Tunipus barrier will be better stabilized by native plants which will also provide native pollinator habitat. Invasive management this early in the on-going colonization of tall reed and purple loosestrife will allow the partners to more easily control future small infestations of the plants.

2. External Factors

Identify existing external (off-site) factors that could reduce the chances of achieving the project goals (e.g. stormwater inputs to the site from the surrounding drainage area). Explain how these external factors will be addressed. Describe any additional measures taken to help ensure long-term success of the project (e.g. installation of stormwater management practices or securing of conservation easements).What are the likely future effects of climate change and future sea level rise on the proposed project and how will these be addressed?

The most significant interruption to achieving the project goals within the anticipated time is that of a coastal storm or hurricane, bringing with it extreme tides and a storm surge that causes overwash of the coastal barrier. Such an action is not likely to affect establishment or success of endemic plant communities along the eastern and western shores of Tunipus Pond, as these plants have become adapted specifically to this niche. Redistribution of soils and stones which comprise the barrier beach may cause tranlocation or loss of certain plants from the planned buffer area. It may be worth installing temporary barriers such as snow fencing initially until the new plantings can assimilate to their surroundings.
It is anticipated that this barrier will continue its northward migration. If plant establishment is unsuccessful, then exposed flats may be less visually appealing but no less important as feeding areas for migratory shorebirds.

Stormwater on the west side of Tunipus is primarily transported to the pond via sheetflow through residential yards and shrub buffers bordering the pond. The amount of stormwater entering the pond will not increase, and may lessen with the introduction of buffers on any properties that do not already have one. The east shore is bordered by the Goosewing Preserve and Goosewing Farm, both of which have vegetated borders along the pond shore. Direct stormwater imput from developed roadways is not an issue in this case.

VI. EVALUATING PROJECT SUCCESS (one page maximum)

1. Performance Measures

How will the success of the project be measured in relation to the restoration goals set forth in this proposal? List performance measures and how they will be recorded. Include a detailed monitoring plan; if applicable (see below).

The marsh restoration will be monitored for a minimum three (3) year period by ABS after the completion of Year 1 of the herbicide treatment phase. The evaluation will be documented by photographs plus traverse lines will be setup and vegetative growth will be evaluated using the point intercept method. Expected is more wading bird feeding habitat; restoration of native wetlands; better stability of the Tunipus barrier; reduction of mosquito breeding areas; and the ability for future increased habitat for native pollinators.

2. Monitoring Plan

Describe any planned or completed pre- and post-project monitoring activities. For each monitoring activity list the frequency and month/year of start and end date and the parameters measured. List the entity or entities responsible for funding and carrying out each monitoring activity, and describe how results will be made available to CRMC and the public. If using an established monitoring protocol, please provide references (see CRMC website for information on established monitoring protocols).

Pre-Construction Monitoring Year 1 (2018)

ABS has been involved with the Tunipus Pond marsh restoration project since January, 2016. A baseline vegetative survey will be performed during the growing season by ABS in Year 1 (2018) prior to herbicide treatment. A suitable number of transect lines will be established along the pond and marsh borders and the Point Intercept Method will be used to evaluate the current vegetative cover of the *Phragmites* areas. Designated Photo Points will also be staked in the field. Then comparisons to the revegetation of the marsh after the *Phragmites* treatment and elimination will be possible during the post-construction phase from Year 2 (2019) – Year 5 (2022).

Post-Construction Monitoring Year 2 (2019) – Year 5 (2022)

The Tunipus Pond Marsh Restoration Monitoring will be performed by ABS for at least two growing seasons after the completion of the initial construction portion of the project and additional years by ABS and other Partners. Protocol will have already been established for this monitoring program. Once a year, during the growing season, photographs will be taken from designated photo points in the marsh and on the Pond.

Transects will have already been set up in the pond and marsh and a vegetative baseline established in Year 1. The vegetative monitoring will follow the *Vegetation Monitoring Protocol* set up by the U.S. Department of Agriculture and recommended by the Natural Resources Conservation Service. The Point Intercept Method will be used to evaluate vegetation in the sample plots. ABS has used this method successfully on the Long Pond Marsh restoration project in Little Compton; in a 9 acre *Phragmites* control project for the Westerly Land Trust and in a 4 acre salt marsh restoration project in Newport.

All Monitoring Reports will be available to the CEHRTF administrator and submitted as part of the reporting requirements of a CRMC Assent in December of each year.

Rhode Island Coastal and Estuary Habitat Restoration Fund
Full Proposal Form 2017/2018

****for planning projects please use Full Proposal Form for Planning Projects**

I. PROJECT SUMMARY

1. **Project Title:** *Restoration of diamondback terrapin (Malaclemys terrapin) nesting habitat on the Potowomut River*

2. **Project Location** *(include map)*: Potowomut River, East Greenwich, RI (maps and photos attached, Appendix I)

3. **Project type** *(Planning, Design, Construction, Monitoring and Assessment or Other):* Planning Grant

4. **If other, please specify:**

5. **Habitat type** *(River System, Salt Marsh, Seagrass Bed, Shellfish Bed, Coastal Upland or Other):* Salt Marsh system and River System

6. **If other, please specify:**

7. **Total acreage of habitat to be restored:** ~38.8 -acres
8. **X This is an ongoing project that has previously received funds from the CRMC Coastal and Estuarine Habitat Restoration Fund. If yes, year(s) funding was awarded: 2016-17**

II. PROJECT MANAGER CONTACT INFORMATION

1. **Name:** Dr. Laura A. Meyerson

2. **Organization:** University of Rhode Island

3. **Address:** Coastal Institute, 9 East Alumni Avenue, Woodward 133

4. **City:** Kingston **5. State:** RI **6. Zip:** 02881

7. **Phone:** 401-874-7058 **8. Email:** lameyerson@uri.edu

9. **Property Owner(s):** Rocky Hill School

X The applicant can document ownership of project site or permission to perform all proposed restoration, maintenance and monitoring activities (Please see attached, Appendix II.)

III. BUDGET SUMMARY

Amount Requested from Trust Fund		**21,405.00**
Matching Funds	**Project Partner(s)**	**Amount of Match**
In-kind match	Rocky Hill School	18,367.50
	TOTAL PROJECT COST	**39,772.50**

IV. PROPOSAL NARRATIVE

1. Justification and Purpose

This proposal supports the goals of the RI Coastal and Estuarine Habitat Strategy by focusing on priority saltmarsh and tidal river system habitats, by proposing activities to improve habitat value by re-establishing and improve physical substrate conditions for terrapins and native plants, by developing and implementing long-term resilience strategies for diamondback terrapins (*Malaclemys terrapin*) and native salt marsh habitat, and by planting local native *Spartina alterniflora*, a critical salt marsh foundation species. In 2015, URI and Rocky Hill School faculty and students documented a newly identified population of diamondback terrapins inhabiting the Potowomut River and nesting on the beach and saltmarsh habitat along the river. This turtle species is RI state-listed and the Potowomut River is only the third documented population of terrapins in RI (the others are a large population in Barrington and a small, recently discovered small population in Westerly, RI). As part of the planning grant awarded by CRMC in 2017, we monitored and protected terrapin nests, piloted kayak transect surveys to estimate terrapin population size (includes males unlike nesting surveys), completed vegetation surveys, completed *S. alterniflora* genotyping, used camera trap surveys identify predators, Scott Rasmussen (URI EDC) completed a tidal elevation survey, and we worked with NRCS to refine the state soil survey for the site (should be uploaded to RIGIS by late January 2018). Locally sourced *S. alterniflora* seed is currently being propagated for planting at the Potowomut site. We engaged Rocky Hill School students and faculty and began establishing outreach efforts with the Warwick Neck community. A significant outcome is that the school agreed to the removal of the old seawall that restricting flow.

As noted by the Rhode Island Coastal Restoration Strategy (Kutcher et al. 2018), sites prioritized for restoration include "highly-valued ecosystem functions and services, vulnerability to sea-level rise, feasibility and sustainability of the restoration, landward migration potential of coastal wetlands." The marsh at Rocky Hill School is a high priority site. The marsh is in poor condition for reasons including the presence of an historic seawall that runs parallel to the river that prevents sediment inputs to the marsh and prevents migration of dunes landward. The wall also constricts marsh drainage in multiple locations, and this restriction, coupled with sea-level rise, contributes to marsh subsidence. The *S. alterniflora* is mostly short-form and submerged much of the time, and the marsh edge is rapidly eroding. However, because there is no shoreline armoring or development on the landward side on school property, there is opportunity for marsh migration as sea level rises. This marsh is also high priority because it protects local residents from flooding and storms and because the state-listed diamond back terrapin uses it as a nesting site. Our intensive monitoring during 2017 made clear the necessity to undertake an additional planning season to develop a two-pronged restoration plan to (1) enhance marsh health and resilience to climate change induced disturbance (i.e., sea-level rise) and to (2) conduct a diamondback terrapin nesting habitat restoration. This project is part of a long-term vision to restore/conserve marsh function and sustainability.

To accomplish this, the following steps are proposed:

1. Assemble a Technical Advisory Committee (biosketches Appendix VI) to develop a full restoration plan.
2. Collect new hydrology and subaqueous soil grain size data (Appendix V). Model the effects of full *or* partial seawall removal on tidal flow over the marsh using new data and those data collected under the 2017 CRMC planning grant. This is necessary to optimize marsh health, resilience and terrapin nest sites, to avoid negatively affecting terrapin habitat, and to ensure marsh accretion rather than subsidence results when the sea wall is removed.
3. Engage URI undergraduate interns in local community outreach.
4. Develop a plan with Rocky Hill school to manage human impacts of dog walking, boating and driving on the marsh during the nesting and hatching seasons.

5. Design and deploy educational signage on marsh health and terrapins and plan deployment.
6. Plant 2017 stratified *S. alterniflora* seed at URI greenhouse for future restoration.
7. Develop a habitat suitability index (HSI) to identify high quality nesting habitat on the marsh and explore feasibility for expanding nesting habitat for terrapins via soft substrate nourishment and *Phragmites australis* removal.
8. Develop pilot for living shoreline in concert with planting to mitigate erosion at marsh edge.
9. Redesign blinds for less intrusive monitoring of natal activity.
10. Monitor and protect terrapin nests during nesting season (mid-June to mid-July) and expand nesting female monitoring to the adjacent residential community. Engage community in monitoring and protection. Informal interviews with local residents indicated substantial nesting on lawns and fields;
11. Monitor predation using camera traps.
12. Conduct kayak surveys to estimate total male and female terrapin population size.
13. Conduct GIS analysis, finalize of models, develop a full restoration plan in conjunction with the advisory committee.
14. Continue community outreach, education, and establishing citizen science to effectively accomplish and sustain restoration of terrapins and salt marsh habitat.

Based on the plan outlined above, the following outcomes for this proposal are planned:

- Establish and engage advisory committee for planning and future implementation of marsh restoration.
- Develop a detailed model to guide salt marsh restoration plan for Potowomut Marsh.
- Protect and enhance terrapin nesting habitat.
- Engage Rocky Hill School and surrounding community in restoration plan to foster long-term success.
- Develop full Potowomut marsh restoration plan.

2. Project Activities, Schedule and Work Plan

Date	*Planned Activity*	*How activity will help restore ecosystem function*
Mar '18	• First Advisory Committee Meeting. • Planning/ organizational activities. • Begin modeling. • Engage interns to initiate outreach. • Design educational signage.	• Advisory committee will develop restoration plan based on site visits, data, model outcomes, soil surveys, nest monitoring and terrapin activity. • Interns and signs will engage and educate community.
Apr - June'18	• Plant 2017 *S. alterniflora* seeds in greenhouse for future restoration. • Deploy educational signage. • Establish restricted areas for walkers and dogs. • Schedule advisory committee field visit. • Begin developing HSI. • Develop pilot for living shoreline to mitigate erosion of marsh edge.	• Locally sourced seed will be propagated and later outplanted for restoration. • Signage will educate students and community and help to protect the nests. • HSI will facilitate protection of current nesting sites, identify other areas with nesting potential, and plan for restoration of nesting habitat that meet HSI criteria. • Living shoreline will reduce marsh erosion.
Apr – Aug '18	• Continue modeling effects of wall removal. • Redesign of blinds for natal activity monitoring. • Tend *S. alterniflora* plugs in greenhouse. • Engage community members.	• Modeling results will provide direction for full restoration activities. • Propagated seed will be used to plant locally sourced *S. alterniflora* at the site.
June – July '18	• **Terrapin nesting season:** Nest location marking and protection with exclosures. • Nest site monitoring and mapping.	• Protecting and monitoring terrapin population.
Aug – Sept '18	• Nest monitoring hatchling emergence; kayak transect surveys to estimate total population size.	• Document successful nest and estimating total terrapin population size.

Sept '18-Feb '19	• Data analysis. • GIS mapping, report writing, preparation of educational materials.	• Final report will include full restoration plan developed in conjunction with the advisory committee.

3. Minimization of Adverse Impacts

Site visits by the advisory team, deployment of signage, marsh surveys and other activities will be scheduled outside of nesting (mid-June to mid-July). Nest monitoring and nest protection will necessarily occur during nesting season. However, interference will be minimized by maintaining at least 25-yard distance from terrapins coming ashore to nest, observing from behind a blind, and waiting until nesting is complete before approaching nest and terrapin.

4. Public Support

Meyerson has been working closely with the Rocky Hill School faculty and students for the last three years on this project and Rocky Hill School students and faculty are fully engaged. Two faculty members, science teachers Michael Jedrey and Rochelle Devault were funded under Meyerson's past National Science Foundation grant to study *P. australis* at Rocky Hill and to monitor the terrapin populations for a summer. Rocky Hill School students and volunteer interns have helped with the project by volunteering time and helping to construct nest protection cages to prevent nest predation. Two Rocky Hill High School students, Jenna O'Del (2016) and Reese Jennings (2017), served as summer interns on the project. The Rocky Hill School Interact Club (~20 students) has also been active in supporting this project. The Interact Club carries out two service projects a year: one that helps their school or community and one that promotes international understanding. Last year the Club supported work being done on the School's waterfront with students from URI on the terrapin salt marsh restoration project and will continue efforts to support the Terrapins in 2018-2019. The Rocky Hill School Art Department produced Diamondback terrapin mugs this year to raise awareness in the school community and families that included educational materials about the terrapins (See Figure 5 in Appendix I). The Rocky Hill 5th grade is currently designing a sign to educate the school community about the terrapins.

During the summer of 2017, Meyerson began establishing outreach efforts with the public living on Warwick Neck and has contact information for multiple residents that live near and use the beach owned by Rocky Hill School along the Potowomut River. The project has also garnered attention from the Rocky Hill School newsletter (*eCurrents*), the URI CELS website, the local Warwick Neck community newsletter, EcoRI, and newspapers such The East Greenwich Pendulum and The Westerly Sun.

Meyerson will recruit URI interns and work with Rocky Hill School faculty to recruit K-12 students to participate in the planning process and data collection during the summer of 2018. Meyerson will work with a URI intern to conduct outreach to the local community – adjacent property owners to the Rocky Hill School and other property owners on both sides of the river and to plan an outreach event hosted by the school. This outreach will provide information to the community as well as seek input from neighbors on their priorities, ideas and concerns. Additional meetings for additional community input will be planned if the proposal is funded and the restoration is planned. In addition, I will seek expert input from stakeholders (some on the advisory commnittee) such as Save the Bay, CRMC, DEM, The Nature Conservancy, the Barrington terrapin group, and the Rhode Island Natural History Survey.

5. Economic and Educational Benefits

Meyerson has given multiple lectures to students at the school and regularly bring URI classes to Rocky Hill School to learn about the terrapin population. In addition, Meyerson has recently engaged with the conservation genetics lab of Professor Tyler Katzinal at Brown University to explore the possibility of future collaborations to investigate the genetic structure of the terrapin populations at the Potowomut site as well as at the Barrington and Westerly sites. These strong relationships will continue and provides

excellent experiential learning and internship opportunities for Rocky Hill, URI and other students. Finally, the activities on the Potowomut marsh provide an excellent case study and the data that this project produces will be shared with my URI class – Conservation Biology, Restoration Ecology and Invasive Species Ecology, Policy and Management.

6. Climate Change and Coastal Resiliency

The major effect of climate change on the Potowomut marsh is sea-level rise. Rising seas and human alteration of the marsh surface (ditching, concrete wall at seaward edge of marsh, see Appendix 1) have apparently led to marsh subsidence. The data collected from the documentation of tide elevations and wetland surface elevations at the Potowomut marsh in 2017 gave us a better understanding of the future of the Potowomut marsh under sea level rise and global climate change and a particularly good understanding of the areas of the marsh that are under threat. Rocky Hill School owns the entire marsh and has recently given permission to remove the seawall that impounds and restricts tidal flow into the marsh. Additional data collection and modeling will be needed to determine what restoration actions will best improve marsh resiliency and ensure that there will be no net loss of terrapin habitat.

The land adjacent to the marsh is not armored in any way – it is one of the few marshes in Rhode Island that has the opportunity to migrate landward as sea level rises. If funded, this second planning project and the follow-up design/implementation phase can provide useful guidance for marsh restoration efforts at other areas throughout RI, particularly where diamond back terrapins are found.

In addition, the Technical Advisory Committee that is part of this planning project will identify appropriate techniques for restoring the marsh hydrology, elevation and vegetation to increase resiliency to sea-level rise. Potential approaches include removal of the perimeter stone wall, thin layer deposition, dredging a channel mouth that is partially blocked by a sediment sill at the eastern end of the marsh to enhance drainage, and *S. alterniflora* and the use of living shoreline to reduce erosion at the marsh edge where *S. alterniflora* is becoming increasingly fragmented.

The land across the river from the Rocky Hill School terrapin nesting site and marshes throughout the Potowomut system have significant populations of *P. australis*, which decreases terrapin habitat value Therefore, managing known high-quality terrapin nesting sites is critical. As described above, sea-level rise will force the landward migration of the marsh, and likely the landward migration of *P. australis*. This project will assess all restoration and conservation actions that can be taken to ensure long-term, quality nesting sites within the restoration areas, surrounding uplands, and throughout the Potowomut River system. We believe that the topography of this site holds great potential. The other significant terrapin nesting site in Barrington has a much different terrain with much steeper upland grades and there may be decreasing nesting site availability as sea-level rises (Pers. Comm. Charlotte Sornborger).

7. Planning Consistency and Restoration Priority

This proposal supports the goals of the RI Coastal and Estuarine Habitat Strategy by focusing on priority saltmarsh and tidal river system habitats, by collecting data that will lead to activities to improve habitat value for terrapins, by developing a long-term management and to facilitate *S. alterniflora* growth, health and resilience at the marsh edges and in the marsh interior, and by collecting and propagating local *S. alterniflora* seeds in the URI greenhouse to re-vegetate native *S. alterniflora* habitat, an overwintering habitat for juvenile diamondback terrapin. All aspects of this project will involve the faculty and students of the Rocky Hill School and the local community. The school owns the property and is excited to incorporate restoration of this site and stewardship of the diamondback terrapins into their curriculum (please see attached letters of support Appendix II).

8. Species of Concern

This planning project addresses multiple threats to a Rhode Island state-listed wildlife species, the diamondback terrapin. This is only the third documented population of terrapins in Rhode Island. Currently, the population at Potowomut Marsh faces multiple threats: loss of nesting habitat due to sea level rise, invasion by *P. australis* that densely colonizes and makes impenetrable the substrate where the terrapins lay their eggs; diamondback terrapin nest predation by a suite of predators including raccoon, fox, crows, coyote, and local dogs; predation when hatchlings emerge from the nests; loss of *S. alterniflora* habitat where the hatchlings overwinter in the *S. alterniflora* wrack. This project will address all of these threats by developing plans to enhance salt marsh resilience to sea level rise by identifying appropriate restoration techniques, assessing the value of removing *P. australis*, excluding the predators from nests, and restore salt marsh habitat.

9. Permitting

List any federal, state or local permits required to complete the project and the permit application status for each.

- Peter Paton has IACUC permit for terrapin monitoring and Meyerson is listed on this permit. Meyerson has a scientific collector's permit from the Rhode Island Department of Environmental Management (Permit # AN1415-013)
- Other permits will be necessary for Stage 3 – the implementation phase of this project, but these will not be needed for the second half of the planning stage of this project. All necessary permits needed for Stage 3 will be determined under the planning grant.

10. Capacity of Lead Organization (attach additional materials if necessary)

a) Description of the organization

A description of the facilities available at the University of Rhode Island can be found here: http://web.uri.edu/catalog/campus_facilities/.

b) *Qualifications of involved personnel*

The technical advisory committee is comprised of the following people: Laura Meyerson, project manager (URI NRS), Charles Roman (URI NRS, Coastal Institute), Peter Paton (URI NRS), Mark Stolt (NRS), Scott Rasmussen (URI EDC), Randy Chambers (College of William and Mary), David Burdick (University of New Hampshire), Scott Warren (CT College, retired), Cathy Wigand (US EPA) Annette Grilli (URI Ocean Engineering), Mark Buckley (Rocky Hill School), Wenley Ferguson (Save the Bay), Caitlin Chaffee (CRMC), Tom Kutcher (RINHS), Kenny Raposa (NERRs) and Al Gettman (DEM). Please see attached biosketches in Appendix VI.

c) *Evidence of successfully completed habitat restoration or conservation planning projects.*

The technical advisory committee for this project represents a wealth of knowledge and experience (See Appendix VI). Many of the members have led or participated in salt marsh restorations and that experience will be invaluable for this project. Specific to the Potowomut Marsh, we monitored terrapin nesting and protected successful nest attempts during the 2017 breeding season, resulting in 13 hatchlings in September 2017. We also piloted kayak transect surveys to estimate terrapin population size (includes males unlike nesting) and primary river habitat in the Potowomut River, conducted systematic vegetation surveys and *S. alterniflora* genotyping, conducted camera trap surveys to monitor predators, did a detailed tidal elevation survey across the marsh (Scott Rasmussen, URI), worked with NRCS to refine the soil survey for the site, and are propagating *S. alterniflora* seed at Meyerson's URI greenhouse for future planting. In addition, we extensively engaged with the students and faculty of Rocky Hill School and began establishing outreach efforts with the public living on Warwick Neck. One significant outcome is that the school has agreed to remove an old stonewall on its property that blocks tidal flow to the marsh and starves it of sediments. The results of this first year of planning will be submitted to CRMC in a final

report in February 2018. In addition, the following documentation is submitted as evidence of successfully completed habitat restoration projects:

- *Please see resumes of Advisory council (Attached in Appendix VI)*
- *Two poster Presentations at URI of results (Attached in Appendix IV)*

V. SUSTAINABILITY

Maintenance

The lifespan of each activity proposed for this project is one year in preparation for developing and implementing a full-site restoration plan. The data and information generated for this project will be used for the future planned restoration. Meyerson will be responsible for all funding, coordinating the advisory committee and coordinating between Rocky Hill School and URI interns. The operation and maintenance requirements for this project will be met by Rocky Hill School volunteers and URI interns. These include maintenance and deployment of nest protectors as well as monitoring nests for predation and disturbance However, Meyerson is committed to protecting the nesting populations of Diamondback terrapins on the Potowomut Marsh and will continue to work with the Rocky Hill School community and URI interns to accomplish this for the foreseeable future.

External Factors

External factors that could affect the success of this project include sea-level rise and human activity on the marsh. This project is evaluating different approaches to marsh restoration beginning with assessing removal of a sea wall and will consider different restoration approaches including thin-layer deposition to make the marsh more resilient to sea-level rise and planting of locally-sourced *S. alterniflora*. The effects of human activities will be addressed by engaging with the local community, designing and deploying signs to educate the community about the marsh and the services that it provides, and developing recommendations to prevent activities on the marsh such as driving and mowing that has occurred in the past by some local community members.

VI. EVALUATING PROJECT SUCCESS

I. Performance Measures

The success of this project will be determined by meeting the following goals:

Goal	Evaluation of success
• Assemble Advisory Committee for planning meetings and site visits.	• Reports from meetings and site visits that result in defensible marsh restoration activities.
• Model the effects of full or partial seawall removal.	• Model Development of with defensible recommendations on seawall removal.
• Engage URI undergraduate interns in local outreach.	• URI undergraduate internships resulting in community meetings and outreach and a written plan for long-term community engagement.
• Plan to manage human impact via dog walking, boating and driving on the marsh during the nesting and hatching seasons.	• A written plan developed in conjunction with the school. This plan will be implemented the following year.
• Design educational signage and plan deployment.	• Signs will be designed and deployed during 2018.
• Plant 2017 *S. alterniflora* seed at URI greenhouse.	• Plants will be germinated and cultivated for implementation of full restoration in 2019.
• Develop habitat suitability index (HSI) to identify high quality nesting habitat on the marsh and explore feasibility for expanding nesting habitat for terrapins.	• HSI will be developed and tested. Results will be reported in CRMC final report to planning grant and incorporated into full restoration plan.
• Develop pilot for living shoreline to mitigate erosion of *S. alterniflora* at marsh edge.	• Coir log deployment and pilot *S. alterniflora* planting at marsh edges during 2018 season. Assess results over 2019 growing season.
• Redesign blinds for less intrusive monitoring of natal activity.	• Determine whether successful nesting activity is increased as a result of redesigned blinds.
• Monitor and protect nests during nesting season, expand nesting female monitoring to the residential community.	• Determine whether successful nesting activity is increased.
• Monitor predation using camera traps.	• Identify and monitor predator presence frequency.
• Conduct kayak surveys to estimate total terrapin population.	• Complete population size surveys.
• Conduct GIS analysis, finalization of models, development of full restoration plan.	• Synthesis of data development resulting in a full restoration plan for the Potowomut marsh.
• Report on results to CRMC.	• Final report submitted to CRMC.

2. Monitoring Plan

Under the 2017 planning grant awarded by CRMC, we monitored and protected terrapin nests (daily mid-June to October 2017, resulting in 13 hatchlings in summer 2017), piloted kayak transect surveys to estimate terrapin population size (August 2017) in preparation for full survey and analysis in 2018, completed vegetation surveys (July 2017), completed *S. alterniflora* genotyping, used camera trap surveys to identify predators, completed a tidal elevation survey (March - October 2017), and worked with NRCS to refine the state soil survey for the site (uploaded to RIGIS by late January 2018). *S. alterniflora* seed is currently being propagated at URI for future planting at the Potowomut site. We also engaged with the students and faculty of Rocky Hill School and began establishing outreach efforts with the public living on Warwick Neck. These same protocols will be used for this current project. Results of these activities will be reported to CRMC in a final report in February 2018. Protocols used are include in the Appendix V of this application. Meyerson is responsible for all of these activities.

Rhode Island Coastal and Estuary Habitat Restoration Fund
Full Proposal Form 2017/2018

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I. PROJECT SUMMARY

1. **Project Title:** Improving Fish Passage on the Saugatucket River
2. **Project Location** *(include map)*: Wakefield
3. **Project type** *(Design, Construction or Other)*: Construction
4. **If other, please specify:**
5. **Habitat type** *(River System, Salt Marsh, Seagrass, Shellfish Bed, other)*: River system
6. **If other, please specify:**
7. **Restoration technique:** Fish passage improvement
8. **Total acreage or miles(river systems) of habitat to be restored, or project area planning unit size** Improve diadromous fish access to 300 acres of spawning and rearing habitat
9. **Project Benefits:** Improve upstream and downstream passage for the diadromous fish runs in the Saugatucket River. Increase the size of the sustainable population and eventual supply of forage species to recreational and commercial fish in the coastal stream, Point Judith Pond, and Block Island Sound.
10. **Project Partners:** Rhode Island Department of Environmental Management, Division of Fish and Wildlife, USFWS Coastal Program, and NOAA Coastal Restoration Center.
11. **Is this is an ongoing project that has previously received funds from the CRMC Coastal and Estuarine Habitat Restoration Fund?** yes **If yes, year(s) funding was awarded:** 2010 and 2012

II. PROJECT MANAGER CONTACT INFORMATION

1. **Name:** John F. O'Brien
2. **Organization:** The Nature Conservancy In Rhode Island
3. **Address:** 159 Waterman Street
4. **City:** Providence **5. State:** RI **6. Zip:** 02906
7. **Phone:** 401-331-7110 x4526 **8. Email:** jobrien@tnc.org

Property Owner(s):

Applicant must document ownership of project site or permission to perform all proposed restoration, maintenance and monitoring activities *(include appropriate documentation)*

III. BUDGET SUMMARY

(List individuals or organizations providing financial or in-kind support to the project under Project Partners)

Amount Requested from Trust Fund		$50,000
Matching Funds	**Project Partner(s)**	**Amount of Match**
	TNC (Inkind)	$25,000
	DEM/Fish and Wildlife (Inkind)	$10,000
	TNC	$30,000
	TOTAL PROJECT COST	$115,000

IV. PROPOSAL NARRATIVE (five pages maximum)

1. Justification and Purpose

Describe the human impacts and previous restoration activities at the proposed project site. If multiple sites, please describe the impacts and previous restoration activities at each). Briefly describe the proposed project, its restoration goals, long-term and short-term outcomes.

The Saugatucket River is located in southern Rhode Island in the Town of South Kingstown. This small coastal watershed (11,018 acres) flows into the northern end of Pt. Judith Pond. It is actually the largest fluvial system contributing to Block Island Sound. Historic references report that runs of diadromous fish (alewife, blueback herring, and American eel) were once very plentiful in the Saugatucket River but disappeared from the watershed with the construction of mill dams in the 1800's. Efforts to restore diadromous fish to the watershed began in the 1970's with the construction of the first fish ladder at the Main Street Dam in Wakefield. Shortly after a second fish ladder was constructed at the Palisades Mill in Peacedale providing access for spawning fish into Peacedale Pond. A third ladder was eventually

constructed at the outflow of Indian Lake in 2003. The DEM Division of Fish and Wildlife has executed easements with the Main Street and Indian Lake landowners in order to maintain and operate each of the ladders. A letter was received from the owner of the Palisades Mill Dam granting permission for the improvement project.

Figure 1 shows the location of each of these fish ladders in the watershed. A healthy Saugatucket River diadromous fish population will provide important ecological services to Pt. Judith Pond, other South Shore Coastal Ponds, and Rhode Island waters. Diadromous fish provide an important forage base to support sustainable populations of recreational and commercial fish. Based on the extent of the spawning and nursery habitat in the Saugatucket River watershed, this system has the potential to support river herring populations of over 200,000 spawning adults. As part of the ongoing restoration program, the monitoring of up and down stream fish passage through the existing fish ladders continues during each year's annual run.

Most recent observations and assessments by RIDEM, NOAA, and USFWS fish passage engineers have identified several problems as well as options to improve fish passage at both the Palisades Mill and the Indian Lake fish ladders. The Nature Conservancy is working closely with the DEM Division of Fish and Wildlife and is planning to schedule these modifications for improving fish passage at the Palisades Mill ladder and the Indian Lake ladder during the fall of 2018.

2. Project Activities, Schedule and Work Plan

Describe the planned on-the-ground project activities, and explain how each activity will help to restore ecosystem functions. List specific project activities and when they will occur (month and year). Indicate when annual and final project reports will be submitted.

The USFWS Fish Passage Engineering Group is under contract with The Nature Conservancy and has surveyed both the Palisades Mill and the Indian Lake fish ladders. Based on the survey work, a number of modifications to each ladder have been recommended. The following are short paragraphs of the proposed work. A detailed scope of work, design recommendations, engineering drawings, plans, and specifications have been prepared by USFWS and are included as Attachment A, "Survey and Design Recommendations to Improve Fish Passage at the Indian Lake and Palisades Mill Fish Ladders". The modifications to each of these ladders will be scheduled for late summer or early fall of 2018. A final report of the work accomplished will be submitted one year after receiving the letter of award.

<u>Indian Lake Fish Ladder</u>

Each spring, the upstream movement of herring has been delayed. Fish have been observed stacking up in the ladder pools and have had to be manually netted out and released into the head pond (Indian Lake). Based on current USFWS Engineering criteria, modifications (design changes) will be made to the ladder to revise hydraulic conditions and improve the upstream passage of fish through the ladder. These improvements will include increasing the number of concrete weirs in the ladder and revising the orientation of the low flow notches.

<u>Palisades Mill Fish Ladder</u>

Modifications are necessary to improve attraction to the entrance to the ladder as well as decreasing velocities in the fishway to meet acceptable levels for the passage of river herring. Modifications to the ladder will include revising and installing a new baffle system (48 new wooden baffles) to create a false 1:8

slope and installing a steep pass at the fishway entrance to hydraulically connect the water within the entrance channel to the tail water.

3. Minimization of Adverse Impacts

What are the potential impacts resulting from project activities (e.g. the disturbance of sensitive species by construction activities), and how will these impacts be minimized (e.g. scheduling construction to avoid disturbance of sensitive species).

These activities are modifications to existing concrete fish ladders. No instream work will be done. All construction will occur after the spring spawning run.

4. Public Support

Demonstrate public support for the project by providing evidence of communication with adjacent landowners, community members and other stakeholders. Describe planned or completed community / stakeholder education and outreach efforts.

Support: This project, as well as other projects improving fish passage, is strongly supported by both commercial and recreational anglers.

Education and Outreach: Both the Nature Conservancy and the Department of Environmental management will carry a link on their web site that outlines the project and the conservation/habitat restoration outcomes. RIDEM/Fish & Wildlife also conducts educational fishway tours to area schools and clubs and with the owner's permission these sites provide options in the South Kingstown area.

5. Economic and Educational Benefits

How will the proposed project provide direct economic and/or educational benefits to a community and/or the state?

Recreational fishing in Rhode Island is an extremely popular and important outdoor recreation activity. Based on the 2011 National Survey, fishing-related expenses in Rhode Island totaled $130 million. Stream restoration, improving connectivity, provides a direct benefit to this important recreational activity both in fresh and salt water. Both adult and juvenile river herring provide an important forage base for freshwater and saltwater game fish such as largemouth bass, chain pickerel, striped bass and bluefish. Increasing the diadromous spawning populations in the Saugatucket River will substantially enrich the main river as well as the lower river estuary leading into Point Judith Pond.

6. Climate Change and Coastal Resiliency

How have the present and future impacts of climate change been considered during the project planning and design phases? What impact will the project have on resilience of coastal or estuarine habitat to climate change?

Fish ladders provide passage around dams and other obstacles to spawning and nursery grounds for Diadromous fish. Fish ladders are designed to operate over a specific stream flow range. Climate change

2.Monitoring Plan

Describe any planned or completed pre- and post-project monitoring activities. For each monitoring activity list the frequency and month/year of start and end date and the parameters measured. List the entity or entities responsible for funding and carrying out each monitoring activity, and describe how results will be made available to CRMC and the public. If using an established monitoring protocol, please provide references (see CRMC website for information on established monitoring protocols).

An increase in the abundance of the targeted diadromous species will serve as the metrics for performance of the proposed restoration project. These results will be measured through monitoring of the pre-spawned adult returns conducted by the Rhode Island DEM, Division of Fish and Wildlife at each ladder throughout the spring run. In addition, the Division will also be sampling for juveniles in the late summer and early fall, both in the river and in Point Judith Pond . The long term goal of the project is to improve fish passage on the Saugatuck River increasing the population of self-sustaining populations of diadromous fish.

Rhode Island Coastal and Estuary Habitat Restoration Fund
Full Proposal Form 2017/2018

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I. PROJECT SUMMARY

1. **Project Title:** Salt Marsh Restoration and Enhancement in Quonochontaug Pond
2. **Project Location and coordinates** *(include map)*: Quonochontaug Pond, Charlestown RI
3. **Project type** *(Design, Construction or Other)*: Construction
4. **If other, please specify:**
5. **Habitat type** *(River System, Salt Marsh, Seagrass, Shellfish Bed, other)*: Salt Marsh and Seagrass
6. **If other, please specify**:
7. **Restoration technique** *(e.g. re-vegetation, tidal restoration, etc.)*: Marsh elevation enhancement with dredged material
8. **Total acreage or miles(river systems) of habitat to be restored, or project area planning unit size:** Approximately 30 acres of salt marsh and eelgrass habitat.
9. **Project benefits:**
10. **Project partners** *(organizations providing financial or other support to the project)*:
11. **Is this is an ongoing project that has previously received funds from the CRMC Coastal and Estuarine Habitat Restoration Fund?** No **If yes, year(s) funding was awarded:**

II. PROJECT MANAGER CONTACT INFORMATION

1. **Name:** Caitlin Chaffee
2. **Organization**: RI Coastal Resources Management Council
3. **Address**: 4808 Tower Hill Road
4. **City**: Wakefield **5. State**: RI **6. Zip**: 02879
7. **Phone**: 401-783-7350 **8. Email**: cchaffee@crmc.ri.gov

9. **Property Owner(s)**: RI Department of Environmental Management, Town of Charlestown, Audubon Society of RI

III. BUDGET SUMMARY

(List individuals or organizations providing financial or in-kind support to the project under Project Partners)

	Amount Requested from Trust Fund	**$90,000**
Matching Funds	**Project Partner(s)**	**Amount of Match**
	NOAA	$980,000
	CRMC / Town of Charlestown / Save The Bay	$641,553
	TOTAL PROJECT COST	**$1,711,553**

IV. PROPOSAL NARRATIVE

1. Justification and Purpose

Multiple lines of evidence point to sea-level rise as a key driver of degradation in New England coastal marshes, as the rate of increase in relative sea-level rise in southern New England is significantly higher than the global average, nearly doubling over the last two decades (Watson et al. 2016). Raposa et al. (2016) found that from 1999 to 2015, high-marsh accretion rates at Rhode Island salt marshes averaged 1.40mm per year while the rate of sea-level rise in Newport, RI averaged 5.26mm per year, indicating that salt marshes are no longer accreting plant biomass and/or inorganic soils at a rate fast enough to sustain elevations relative to the tidal amplitude. A nation-wide study found that the salt marshes of southern New England are among the most vulnerable to sea-level rise in the U.S. (Raposa et al. 2016). Warren and Niering (1993) suggested that changes in marsh vegetation proportions favoring the more flood and salt-tolerant *S. alterniflora* over high marsh species may be a result of increased inundation associated with sea-level rise. Loss of high marsh vegetation communities as well as salt marsh ponding, die-off, and drowning have been documented throughout Narragansett Bay and coastal Rhode Island, indicating a widespread accretion deficit (Raposa et al. 2015, 2016, Watson et al. 2016), and the growth, health and sustainability of the majority of southern New England salt marshes is now thought to be limited by inundation (Watson et al. 2014).

A statewide assessment of 39 salt marshes throughout Rhode Island based on metrics designed to document impacts of sea level rise (vegetation loss, vegetation community composition and marsh substrate stability) classified the back-barrier marshes in the Salt Ponds Region as being in poor condition relative to many other marshes in the state (Cole Ekberg, 2014). Further analysis of average marsh surface elevation revealed that the Salt Ponds Region marshes have the lowest median marsh surface elevations statewide (relative to NAVD88 and Mean High Water). Results of the Sea Levels Affecting Marshes Model (SLAMM) for Rhode Island, which have been verified using historic rates of loss, show high rates of marsh loss for the Salt Ponds Region marshes under future sea level rise scenarios (CRMC 2014). Because of their location on back barriers adjacent to coastal lagoons, there is little potential for these marsh complexes to migrate to higher ground.

In addition to these traits, the marshes of the Quonochontaug back barrier have been observed to have increased density of fiddler crab burrows along creek edges and in the marsh interior. This has been observed elsewhere in Rhode Island, particularly within the Estuarine Research Reserve marshes on Prudence Island and other marshes in Narragansett Bay where crab burrows have been documented as increasing in density and contributing to accelerated marsh edge erosion. It is thought that increased inundation and subsequent vegetation die off due to sea level rise may be a driver of this phenomenon. These biological modifications have been observed and documented in marshes throughout New England.

The CRMC is in the process of updating its statewide restoration strategy, which recognizes the multiple threats to coastal wetland ecosystems and identifies several management actions for preserving wetland functions and values. These range from hydrological reconnection improvements to the conservation of low-lying, low-sloped coastal uplands and removal of barriers to marsh migration. One of the management actions considered has been marsh surface elevation enhancement using dredged sub-aqueous soils, also referred to as thin layer placement (TLP). This technique has been applied successfully in the south and mid-Atlantic regions of the US to increase the "elevation capital" of marshes with net subsidence. The technique has been determined by marsh restoration experts as having potential application in the Salt Ponds Region marshes given their relatively high vulnerability to sea level rise, their lack of migration potential and recent proposals for dredging activities related to eelgrass habitat enhancement, which have been identified as a potential source of material for TLP.

In 2014, the CRMC was awarded $3.25 million from the National Fish and Wildlife Foundation's Hurricane Sandy Coastal Resiliency grant program to design and permit TLP projects in Ninigret, Quonnie and Winnapaug Ponds, and to implement a TLP project in Ninigret Pond (www.crmc.ri.gov/habitatrestoration/npsaltmarsh.html). This effort involves a range of federal, state, local and non-governmental partners including US Fish and Wildlife Service, EPA, RI Department of Environmental Management, the towns of Charlestown and Westerly, the Salt Ponds Coalition and Save The Bay. Dredging and sediment placement has been completed for the marsh restoration effort in Ninigret Pond. Design and permitting are in progress under the NFWF award. A NOAA Coastal Resiliency Grant was awarded to CRMC in 2017 for project construction in Quonochontaug Pond. Funds from this request would provide non-federal match for the NOAA award.

2. Project Activities, Schedule and Work Plan

The funds requested in this proposal would be used as non-federal match for a NOAA Coastal Resiliency award for construction of a TLP project in Quonochontaug (Quonnie) Pond. Marsh surface elevations will be increased on approximately 30 acres of the degraded marsh areas of the Quonnie back-barrier marsh complex via the placement of subaqueous soil. Depths of deposition will depend upon final project design and target elevations, and are expected to average 0.5 to 1.2 feet. Areas receiving thicker depths of material will be planted with native salt marsh plant species in order to enhance natural recolonization. Soil will also be used to fill man-made mosquito ditches within the marsh so that a more natural creek and pool hydrology will be restored. The soil will also be used to restore eroded tidal flat areas and the adjacent breachway public access point and boat launch, which are heavily used by the public for activities such as recreational shellfishing.

The material needed for the marsh and public access enhancements will be obtained via hydraulic dredge from shoaled areas within the pond. Dredging will be done to depths suitable for eelgrass growth (based on light extinction depth), and to reestablish and deepen the channel that enters the pond from the breachway. Project funds will be used only to obtain that material which is necessary to enhance salt marsh and public access areas.

The expected outcomes of the project are:

- An increase in the area and lifespan of healthy vegetated high and low marsh within the Quonnie back-barrier marsh complex
- An increase in the area of eelgrass habitat within the pond
- Improvement in the condition and resilience of existing marsh areas
- Restoration of natural marsh hydrology
- Improved resilience of the back barrier marsh complex to sea level rise and more frequent coastal storms
- Increased nekton abundance and diversity within the pond-marsh complex, particularly species of management concern such as summer and winter flounder, black sea bass, scup, river herring, American shad, American eel, striped bass and bluefish
- Improved recreational opportunities for the public, such as fishing, kayaking and birdwatching.
- Improved protection of the surrounding community from coastal flooding and storm events

3. Minimization of Adverse Impacts

During the Ninigret TLP project, the CRMC worked extensively with the contractor to fine-tune the project approach in order to minimize adverse impacts to the sensitive habitats within the project area. Important lessons learned from the Ninigret, Narrow River NWR and Sachuest NWR TLP projects that will be applied

to the project in Quonnie include:

- Pre-restoration topographic surveys will be required by the contractor to verify project design and controls.
- Use of an amphibious excavator for pipe management will be specified to avoid the need for installation of marsh channel crossings
- RTK-enabled low ground pressure equipment will be specified for in-marsh grading work.

Construction access and staging will be from the RIDEM public boat ramp and parking area adjacent to the Quonnie breachway. Time-of-year restrictions on dredging activities ensure that dredging would be completed during the winter months to minimize impacts to sensitive species such as winter flounder. This is also the time of year when public use of the area is at its lowest. However, all necessary precautions will be taken to ensure that the dredging and restoration operation does not present a public safety hazard, and that the public is well-informed of any restrictions to access to the pond. The CRMC and selected contractor will coordinate with the town harbormaster, local police, and RI DEM Enforcement staff to keep them apprised of any issues that may arise. These working partnerships are well-established and greatly aided communications during the first phase of the Ninigret marsh TLP project.

The potential risks associated with this project are well understood. The material to be dredged is uncontaminated sand deposited within the pond by longshore currents. Placement locations will be selected to address existing degradation in the marsh restoration areas. Pre-and post-restoration topographic surveys will be performed to ensure target elevations have been met. Additional factors such as load bearing and settlement of deposited material will be accounted for through laboratory analysis of existing peat cores. The project partners have committed to implementing post-restoration adaptive management measures such as adjustments to grades, management of invasive plant species, additional planting or seeding or improvements to marsh drainage. Sea Level Affecting Marshes Model (SLAMM) results clearly indicate that the no action alternative for this project will result in a significant ongoing loss in salt marsh area to open water (see Supplemental Materials for SLAMM results).

4. Public Support

The CRMC has partnered with the Salt Ponds Coalition (SPC) to enhance its outreach and public education efforts related to the project, and to document local support. The SPC has engaged their membership through their newsletter and public meetings and has provided the CRMC with letters of support from residents and local business owners (See Supplemental Materials). The CRMC has also been in contact with other local groups such as the Shelter Harbor Conservation Society, which has expressed support for the project.

Project information will be disseminated through various media outlets in the form of press releases, website and social media postings from the CRMC and partner organizations. Our coastal wetland resiliency efforts in Ninigret Pond have been highly publicized and the subject of several state and local newspaper articles. In addition, CRMC staff will present project information to the Charlestown Town Council and Salt Ponds Coalition. CRMC and our partners have also highlighted our efforts at events and conferences such as the Metcalf Institute's Science Immersion Workshop for journalists, the Restore America's Estuaries Summit, the Society of Wetland Scientists Annual Meeting and local and regional conferences. The CRMC's close partnership with the University of Rhode Island Sea Grant program and Coastal Resources Center will afford many additional opportunities for outreach and education. Signage describing the project, its benefits and partners involved will be permanently installed at the adjacent public access site.

5. Economic and Educational Benefits

There are several sources that estimate valuation of key ecosystem services provided by salt marsh habitats, including coastal protection, erosion control, water purification, maintenance of fisheries, carbon sequestration, tourism, recreation, education and research. Barbier et al. (2011) estimate a value of $3,334/acre/year in reduced hurricane damages, up to $15,000 /acre/year in water purification services, and $30.50 /hectare / year in carbon sequestration services. If these valuations were applied to the proposed Quonnie project, assuming a minimum area restored of 30 acres and project lifespan of at least 30 years, the return on investment from ecosystem services would be over $15 million. This figure does not include benefits to fisheries, wildlife habitat, recreation and tourism or property values. When the value of protected services to humans is added to the intrinsic value of the marsh as habitat for fish and wildlife, as well as the potential for the restoration methodologies developed to be used in other locations, this project represents a significant return on investment. Preserving and enhancing the water quality improvement and nutrient uptake function of the marsh is of particular importance as nutrient loading from increased residential and commercial development has been identified as a primary water quality problem in the salt ponds (RICRMC 1999).

Opportunities for community engagement and education during this project include assistance from volunteers with project tasks such as replanting salt marsh vegetation, installing goose exclosure fencing and adaptive management measures such as excavating marsh creeks by hand. Volunteers will be coordinated by Save The Bay and Salt Ponds Coalition, both of whom have established volunteer programs. In addition to our collaboration with the New England Wildflower Society, we will use the existing partnership created by Save The Bay with local agricultural high schools called the "Grasses In Classes" program to collect seed and propagate salt marsh plant species for use in the restoration effort. These students will later plant their nursery-grown plants at the restoration area.

6. Climate Change and Coastal Resiliency

The goal of this project is to increase the surface elevation of the Quonochontaug back barrier marsh in order to make it more resilient to the increased rate of sea level rise. The exposed vulnerability of the Salt Ponds Region to coastal storm events has underscored the need to maintain the natural protection of its population centers provided by the barrier salt marsh complex. By stabilizing sediment, increasing the intertidal height, and providing baffling vertical structures (grass), salt marshes reduce impacts of incoming waves by reducing their velocity, height and duration (Morgan et al. 2009). Marshes are also likely to reduce storm surge duration and height by providing extra water uptake and holding capacity in comparison to the sediments of unvegetated mudflats (Barbier et al. 2011). Eelgrass also functions to increase coastal storm protection by dampening wave energy and stabilizing marine sediments. Narayan et al. (2016) found that on average, census tracts in the Northeast US that contained wetlands had an average of 10% reduction in damages from Hurricane Sandy when compared to those without wetlands, and that coastal wetlands were predicted to have reduced wave heights during the storm across 80% of the Northeastern coastal floodplain. They also found that over 17km of roads were protected by coastal wetlands within Rhode Island. Improving the condition and resiliency of the wetlands within Quonnie Pond would provide increased protection for Charlestown and Westerly communities, particularly the in the areas of Shady Harbor, Shelter Harbor and Weekapaug.

7. Planning Consistency and Restoration Priority

Is the proposed project consistent with the goals of a local, state or regional planning initiative? Please specify initiative and explain (see CRMC website for guidance). Does the proposed project involve a state, regional or federal priority habitat restoration need or special consideration? Please specify and explain (see CRMC website for guidance).

The proposed project will build upon years of ecosystem-scale planning and millions of dollars of investment by federal, state and local entities to improve habitat quality, diversity and community benefits in the Salt Ponds Region. It addresses potential

8. Species of Concern

Rhode Island's coastal ponds provide habitat for over 100 species of finfish, cephalopods and crustaceans (CRMC, 1984). The salt marshes within the ponds provide habitat for forage fish species such as mummichog (Fundulus heteroclitus), Atlantic silverside (Menidia menidia), striped killifish (Fundulus majalis) and sheepshead minnow (Cyprinodon variegatus). Other finfish species found within the ponds include winter flounder (Psuedopleuronectes americanus), summer flounder (Paralichthys dentatus), striped bass (Morone saxatilis), river herring (Alosa aestivalis, A. pseudoharengus), menhaden (Brevoortia tyrannus), tautog (Tautoga onitis), American eel (Anguilla rostrata), bluefish (Pomatomus saltatrix) and scup (Stenotomus chrysops). The marshes of the coastal ponds provide important habitat particularly for species such as mummichog, which have been shown to utilize the marsh surface for at least a portion of their energy intake, as food sources in subtidal areas are insufficient for fish at natural densities to grow at a normal rate (Weisberg, 1982). Eelgrass provides important habitat for bay scallops, winter flounder, several crab species, as well as many of the finfish species listed above.

Finfish surveys are conducted annually in Quonnie Pond by the RI Department of Environmental Management's Division of Fish and Wildlife to forecast recruitment in relation to the spawning stock biomass of winter flounder and other recreationally important species. These surveys have documented overall declines in the ponds of the more abundant species such as mummichog, striped killifish, and sheepshead minnow. Also observed has been a slight downward trend in winter flounder populations in recent years and slight upward trends in bluefish, black sea bass and scup populations (RIDEM, 2013). The proposed project will complement the RI Department of Environmental Management's recently approved plan to enhance fish habitat via the creation of oyster reefs within shellfish spawner sanctuaries in the pond, a project that is being supported by the NOAA Restoration Center. The proposed project would benefit numerous commercial and recreational finfish species by improving eelgrass and salt marsh essential fish habitat, and is therefore consistent with federal planning efforts such as NOAA Fisheries Management Plans for summer flounder, black sea bass and scup, and the Atlantic Coastal Fisheries Cooperative Management Act and Atlantic Striped Bass Conservation Act for its benefits to river herring, American shad, American eel, striped bass and bluefish.

The salt marshes of the coastal ponds also provide breeding and foraging habitat for important migratory bird species including salt marsh sparrow, which has been ranked by the US Fish and Wildlife Service as a bird of conservation concern. Saltmarsh sparrows are particularly susceptible to anthropogenic impacts such as sea level rise, coastal development, alterations in marsh tidal flows, and habitat degradation from invasions of non-native Phragmites australis (Field, 2016). In the absence of intervention and restoration efforts, it is predicted that a reduction in the Long Island Sound saltmarsh sparrow population may drop below 100 individuals as soon as 2040 and reproduction in Long Island Sound will become impossible between 2045 and 2065 (Field, 2016). Seaside sparrows and willets also nest in salt marsh habitat, making them vulnerable to salt marsh degradation resulting in habitat loss.

9. Permitting

Anticipated required permits include:

- US Army Corps of Engineers Section 404 Category II General Permit, including NMFS EFH consultation and recommendations

- RI DEM Dredging permit (includes Section 401 Water Quality Certification)
- CRMC Dredging Permit / Coastal Assent
- NEPA compliance through NOAA Restoration Center's Programmatic EIS and collaboration with and processing by NOAA RC regional staff (J. Turek)
- Section 106 SHPO and THPO consultations

Permit applications will be submitted to the RI CRMC, US Army Corps of Engineers and RI Department of Environmental Management. The permitting agencies have been involved during the project planning and design of the adjacent Ninigret salt marsh elevation enhancement project and will be similarly involved during the planning and design of the Quonnie project. The CRMC will continue to coordinate with the appropriate permitting agencies as the project design is finalized. In addition, CRMC will coordinate with EPA and NOAA National Marine Fisheries Service through the USACE General Permit review process and plans to conduct a site visit with interested federal and state permit staff in the spring of 2017. The CRMC will closely coordinate with staff at the NOAA Restoration Center in Narragansett, RI, to provide the information necessary to complete NEPA compliance review. In particular, information listed within Appendix A of the NOAA Restoration Centers Programmatic Environmental Impact Statement will be compiled during the design and permitting phases of the project and provided to NOAA. We anticipate working closely with Jim Turek at the NOAA RC during all phases of the project.

10. Capacity of Lead Organization (attach additional materials if necessary)
Project Manager: Caitlin Chaffee, *Policy Analyst, RI CRMC;* Technical Advisor and Construction Oversight: Dan Goulet, *Marine Infrastructure Coordinator, RI CRMC;* Post-Restoration Planting and Monitoring: Wenley Ferguson, *Restoration Coordinator, Save The Bay*

The applicant, RI Coastal Resources Management Council, is the state coastal zone management agency and lead coordinating agency for coastal habitat restoration within the State of RI. Caitlin Chaffee has over eleven years of experience managing the RI Coastal and Estuarine Habitat Restoration Trust Fund, which has supported over 100 projects leveraging over $20 million to restore coastal habitats such as salt marsh, eelgrass beds and passage for anadromous fish species. The CRMC was the local sponsor for the $2.7 million US Army Corps of Engineers RI South Coast Restoration Project that restored over 40 acres of eelgrass habitat in Ninigret Pond in 2007. In 2009, the RI CRMC was awarded over $3.5 million in American Recovery and Reinvestment Act habitat restoration funding through the NOAA Restoration Center that was allocated to six different fish passage restoration projects, which were successfully completed in 2015. The CRMC received a $1 million appropriation for habitat restoration in 2009 and Caitlin Chaffee worked in close partnership with Save The Bay to develop and implement a Shoreline Adaptation program. This program resulted in the completion of sixteen shoreline projects in seven communities, including habitat enhancement of a barrier beach and dune complex at Napatree Point in Westerly, RI, and multiple projects that removed damaged infrastructure and restored vegetation in the coastal zone. Most recently the CRMC received $3.25M in funding from the National Fish and Wildlife Foundation for its RI South Coast Habitat and Community Resilience Project, which included implementation of a thin layer placement project in Ninigret marsh and planning and design for the project described here in Quonnie Pond. Caitlin Chaffee and Dan Goulet have successfully managed the design, permitting, bidding, dredging and material placement phases of the Ninigret project, which were completed on schedule and significantly under-budget. Dan Goulet is a registered engineer with 29 years of professional marine and coastal engineering experience, including 15 years permitting and managing all dredging activities within Rhode Island. CRMC's grant management staff--as well as the state's Division of Purchases—were instrumental in ensuring smooth procurement processes for all phases of the Ninigret TLP project.

Save The Bay staff has nearly 30 years of combined experience in salt marsh assessment, monitoring and restoration. STB coordinated the first assessment of salt marshes in Narragansett Bay in 1996 (i.e., the Narragansett Bay Method). That assessment was the basis for the state salt marsh restoration strategy. Since then, STB has helped to restore over 270 acres of salt marsh in Narragansett Bay and the salt ponds. Wenley Ferguson has over 17 years' experience coordinating numerous salt marsh restoration projects and restoration monitoring associated with those projects as well as fish passage, eelgrass, and coastal buffer restoration projects. Save The Bay has an extensive network of volunteers and has coordinated and mobilized volunteers for many salt marsh restoration efforts, including planting for the TLP projects in the Sachuest National Wildlife Refuge and Ninigret Pond.

V. SUSTAINABILITY (one page maximum)

1. Maintenance

The time it will take for the project to create functional salt marsh habitat will be dependent upon the depth of sediment applied and growth of vegetation. If restored marsh areas are planted with plugs of marsh vegetation or seeded, it would be expected that the replanted vegetation would enhance natural recolonization and within 3 to 4 years' time, a coalesced dense, healthy vegetation community will be present. Benefits of the restored marsh would increase over time as organic matter accumulates and a peat layer develops. The benefit of increased area of eelgrass beds will likely be realized within the growing season immediately post-dredging, as was observed in Ninigret Pond after dredging for eelgrass restoration was completed in 2007.

Careful project design that accounts for future increased rates of sea level rise will bring the restored marsh areas back to a condition that is relatively self-sustaining. The project team will follow guidance for wetland restoration planning developed by the NOAA Restoration Center (NOAA Restoration Center, Northeast Region 2011), which recommends using the Army Corps of Engineers sea level rise prediction methodology (USACE 2011) to predict future water elevations/tidal datums at the project site, keeping in mind updated NOAA's updated projections of Global mean sea level (GMSL) rise of 0.3 to 2.5 meters by the year 2100 (NOAA 2017). In addition, high resolution elevation data will be combined with vegetation survey data to develop elevation growth ranges for target vegetation species. This information will be incorporated into the project design, and target elevations set at the higher end of the targeted vegetation community's range. This will increase the "elevation capital" of restored areas and ensure sustained benefits of the project. This approach was used in developing a design for the sediment placement project in Ninigret Pond.

Because the habitat type to be restored is one that is historically highly adaptive and resilient to ecosystem shifts, there should be minimal additional expenditure for project maintenance in the future. It is expected that with future increases in sea levels, the restored marsh will persist for a period of time while accretion rates are high enough to maintain marsh surface elevations. Without additional interventions, the marsh will transition to unvegetated intertidal flat then open water. However, the marsh may be targeted as a beneficial reuse site for future dredging efforts. Future project maintenance or adaptive management costs are expected to be addressed by the state and the towns.

A robust post-restoration monitoring program that includes detailed elevation and sedimentation measurements over time will be necessary to showcase the project as effective in increasing resiliency to sea level rise. Such a plan has been developed in cooperation with project partner, and closely mirrors the monitoring program already established for the Ninigret marsh restoration project. A robust partnership with the URI Environmental Data center has been established by the project team, and will result in

comprehensive online mapping and data sharing products. We believe that a successful project in Quonnie Pond will facilitate the use of this methodology elsewhere in the state where there are similarly degraded marshes and available sources of material for restoration. Current modeling of marsh response to sea level rise using SLAMM has identified many opportunities for future restoration efforts throughout the state.

2. External Factors

The targeted marsh areas are within conservation lands owned by the RI Department of Environmental Management and the Audubon Society of RI, and are therefore protected from future development. Modeling indicates that the no action alternative for this project will result in a significant future loss of salt marsh area to open water. Without additional interventions, the marsh will transition to unvegetated intertidal flat then open water over time. However, the marsh may be targeted as a beneficial reuse site for future dredging efforts.

VI. EVALUATING PROJECT SUCCESS (one page maximum)

1. Performance Measures

Short-term performance measures will include area of dredged material placement, post-restoration marsh surface elevations and tidal inundation frequency. A post-construction survey will be conducted to determine the accuracy of the sediment placement with respect to target elevation and post-construction elevation maps produced. Water-level data loggers will be deployed to monitor marsh surface inundation frequency relative to Block Island Sound hydrology. Planted material will be monitored for survival and areas of vegetation regrowth documented to determine acres of salt marsh restored.

Pre and post-restoration monitoring will occur according to a Before / After, Control / Impact (BACI) design to assess long-term performance measures related to function. A reference site on a similar back barrier marsh has been established within the Ninigret National Wildlife Refuge and will be used as the reference site for the Quonnie project. The monitoring plan developed for Quonnie will follow the plan developed for the project in Ninigret Pond in cooperation with Save The Bay, US EPA and the Narragansett Bay National Estuarine Research Reserve. These groups comprise the project technical advisory team, which NOAA staff would be invited to join, and which serves to collect, process and analyze data, and make adaptive management recommendations based on monitoring results. The monitoring plan has been finalized and approved along with a corresponding quality assurance plan. Parameters and methodologies will be consistent between Ninigret and Quonnie Pond, allowing for comparison of results. In addition, the technical advisory team will work to ensure that the included parameters adequately address NOAA's Tier 1 and 2 evaluation metrics for tidal marsh restoration in the Northeast Region. To this end, monitoring parameters will include acreage and community type of SAV, salt marsh vegetation restored and abundance and diversity of avian and nekton species. In-marsh nekton sampling will occur in addition to the yearly finfish surveys conducted by the RI Department of Environmental Management to document measures such as abundance, diversity and recruitment success. Traditional marsh vegetation monitoring protocols and eelgrass dive surveys will be used to evaluate vegetative cover in the short-term along with innovative monitoring techniques such as spectral analysis of aerial imagery to assess landscape-scale changes. Concurrently, additional parameters indicative of marsh health such as above and below ground biomass production, will be assessed using clip plots and soil core analysis. Sediment accretion and subsidence rates will be monitored using feldspar marker horizons, sediment tiles and surface elevation tables (SETs) referenced to surveyed elevation benchmarks. Geochemical parameters such as salinity and sulfide levels will also be monitored.

2. **Monitoring Plan**

Pre and post-restoration monitoring will occur according to a Before / After, Control / Impact (BACI) design to assess long-term performance measures related to function. A reference site on a similar back barrier marsh has been established within the Ninigret National Wildlife Refuge and will be used as the reference site for the Quonnie project. The monitoring plan developed for Quonnie will follow the plan developed for the project in Ninigret Pond in cooperation with Save The Bay, US EPA, Narragansett Bay National Estuarine Research Reserve and the NOAA Restoration Center. These groups comprise the project technical advisory team, which serves to collect, process and analyze data, and make adaptive management recommendations based on monitoring results. The monitoring plan has been finalized and approved along with a corresponding quality assurance plan. Parameters and methodologies will be consistent between Ninigret and Quonnie Pond, allowing for comparison of results. The included parameters adequately address NOAA's Tier 1 and 2 evaluation metrics for tidal marsh restoration in the Northeast Region. To this end, monitoring parameters will include acreage and community type of SAV, salt marsh vegetation restored and abundance and diversity of avian and nekton species. In-marsh nekton sampling will occur in addition to the yearly finfish surveys conducted by the RI Department of Environmental Management to document measures such as abundance, diversity and recruitment success. Traditional marsh vegetation monitoring protocols and eelgrass dive surveys will be used to evaluate vegetative cover in the short-term along with innovative monitoring techniques such as spectral analysis of aerial imagery to assess landscape-scale changes. Concurrently, additional parameters indicative of marsh health such as above and below ground biomass production, will be assessed using clip plots and soil core analysis. Sediment accretion and subsidence rates will be monitored using feldspar marker horizons, sediment tiles and surface elevation tables (SETs) referenced to surveyed elevation benchmarks. Geochemical parameters such as salinity and sulfide levels will also be monitored. All pre-restoration monitoring efforts will be funded through an existing NFWF Resilience grant awarded to CRMC. Post-restoration monitoring efforts in 2019 will be funded through the NOAA resilience award, with in-kind match provided by CRMC, US EPA and Save The Bay. The project team will likely request additional funds from the state for future monitoring efforts beyond 2019.

CRMC DECISION WORKSHEET
File No. 2017-09-078
Ida Lewis Yacht Club

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**
2017-09-078	Newport	170 Wellington Ave.			B	☐	☐
		Plat 42	**Lot**	11, 12, 13			
		Owner Name and Address					
Date Accepted	9/26/17	Ida Lewis Yacht Club c/o Turner Scott 122 Touro Street Newport, RI 02840			Work at or **Below MHW**	☒
Date Completed	2/21/18				Lease Required	☐

PROJECT DESCRIPTION

Construct a 15' 6" x 69' 5" timber deck expansion to be constructed over the adjacent rocky shoreline and over tidal waters on the northeast side of the existing clubhouse thereby expanding the existing timber deck. The Council may determine a special exception is required in accordance with the review criteria contained in RICRMP section 1.3.1(C).3(f).

KEY PROGRAMMATIC ISSUES

Coastal Feature(s) Rocky Shoreline

Water Type Type 3

CRMP 1.2.1(C), 1.2.2(E), 1.3.1(C), 1.3.6

Variances and/or Special Exception Details: No variances required. CRMC Staff offer and opinion that a special exception is not required. The Council must affirm this opinion to avoid the need for a special exception.

Additional Comments and/or Council Requirements:

STAFF RECOMMENDATION(S)

Engineer **RL** Recommendation: **No objection - approve**

Biologist **DR** Recommendation: **No objection - approve**

Other Staff _____ Recommendation: _____

Engineering Supervisor Sign-Off date

David Ren 2/20/18
Supervising Biologist Sign-off date

2/20/2018
Executive Director Sign-Off date

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

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
COASTAL RESOURCES MANAGEMENT COUNCIL
STAFF BIOLOGIST'S REPORT

TO: Grover J. Fugate
DEPT: CRMC Executive Director
FROM: David S. Reis
DEPT: CRMC Biology/Permitting Section

DATE: February 20, 2017
PAGE: 1 of 3

RE: **CRMC File No.** 2017-09-078
Applicant's Name: Ida Lewis Yacht Club
Project: Construct a 15' 6" x 69' 5" timber deck expansion to be constructed over the adjacent rocky shoreline and over tidal waters on the northeast side of the existing clubhouse thereby expanding the existing timber deck. The Council may determine a special exception is required in accordance with the review criteria contained in RICRMP section 1.3.1(C).3(f).
Location: 170 Wellington Avenue
Water Type/Name: Type 3 Waters, High Intensity Boating, Newport Harbor
Coastal Feature: Rocky shoreline
Freshwater Wetlands: Not applicable

A. Staff Summary: CRMC Staff offers an opinion that the proposed project meets the review criteria for commercial structures constructed over rocky shorelines and Type 3 tidal waters and on that basis, a special exception would not be required. The Council must affirm this opinion to avoid the need for a special exception. A public access plan has been provided, as required. No objections were submitted during the public notice period. Accordingly, CRMC Staff recommends approval of the project subject to the Council determining a special exception is not required.

B. Plans Reviewed:

1. "Ida Lewis Yacht Club Outside Deck Extension…", in 6 sheets by St. Jean Engineering, LLC, dated 11-8-2017
2. "Ida Lewis Yacht Club, Wellington Avenue, Newport, RI 02840…", in 3 sheets, by Christopher Arner, Architect, dated 09.20.17

C. Staff Analysis:

The proposed project will result in the construction of a 1075 sq. ft. (+/-) timber deck expansion to an existing timber deck connecting two of three existing buildings comprising the Ida Lewis Yacht Club at Lime Rock in Newport Harbor. Under current definitions, the entirety of Lime Rock would be considered a coastal feature and defined as "rocky shoreline". However, CRMC records indicate the main pier connecting Lime Rock to the mainland and associated finger piers were approved "as-built" along with additional finger pier expansions approved by the CRMC in 1974 (ref. CRMC File No. 1974-03-019). Plans in the 1974 file also indicate a yacht club building existed on Lime Rock at that time. Other information contained in the 1974 file indicates the facility had been operating for 45 years prior to the 1974 CRMC application. There are also 11 other application files for Ida Lewis yacht club in CRMC records. However, these files were not reviewed for purposes of this application. The principal point is the yacht club facility has existed on the coastal feature since prior to CRMC's jurisdiction.

Signed: David S. Reis **Supervising Environmental Scientist**

Under existing regulations, the proposed deck extension is considered a "commercial structure" pursuant to RICRMP Section 1.3.1(C) which is to be constructed over a rocky shoreline and Type 3 tidal waters. **The following RICRMP policies and requirements are central to this review:**

1. For Rocky Shorelines (Ref. RICRMP Section 1.2.1(E).2.d): The construction of alterations to rocky shores adjacent to Type 3, 4, 5, and 6 waters may be permitted if:

(1) the construction is undertaken to accommodate a designated priority use for the abutting water area;

(2) the applicant has examined all reasonable alternatives and the Council has determined that the selected alternative is the most reasonable; and

(3) only the minimum alteration necessary to support the designated priority use is made.

2. For Commercial Structures (Ref. RICRMP Section 1.3.1(C)3.f): Decks associated with commercial properties are **prohibited** in or over Type 3, 4, 5, and 6 waters **unless:**

(1) the deck is to accommodate a designated priority use for that water area;

(2) the applicant has examined all reasonable alternatives and the council has determined that the selected alternative is the most reasonable; and

(3) the deck is the minimum necessary to support the priority use.

The applicant has provided responses to the above criteria (which are identical for decks/commercial structures over tidal waters and rocky shorelines). The applicant's responses are contained in the Council's agenda packet. In summary, the applicant indicates the proposed deck is intended to accommodate a sailing program which is a designated priority use for Type 3 waters. And, there are no reasonable alternatives considering existing site constraints while attempting to accommodate an expanding sailing program. The applicant further claims the proposed deck is the minimum necessary considering the location and limitations of the existing facilities. In consideration of these responses, CRMC Staff agrees that the activity does serve a designated priority use (that is policies associated with high intensity boating) and the expansion proposed does seem reasonable considering site restrictions. **On this basis, it is recommended that the project is NOT prohibited and is therefore NOT subject to a special exception.**

3. Category B Requirements: The applicant has submitted the necessary responses to the Category B requirements. (Category B requirements are a series of 11 evaluation criteria which forms the basis for a brief environmental assessment.) The applicant's Category B responses are included in the Council's agenda package. CRMC Staff believes the responses to be reasonable and appropriate. There are no staff objections. The Staff Environmental scientist further offers that the affected environment is primarily an intertidal rocky shoreline containing an attached macro-algae

Signed: _____ **Supervising Environmental Scientist**

community. While this habitat is valuable, it is not considered to be unique for this area and no submerged aquatic vegetation such as eelgrass will be impacted. Furthermore, staff experience is that there have been very few projects such as Ida Lewis project that meet the criteria contained in RICRMP Section 1.2.1(E).2.d) which is intended to protect Rocky Shorelines. This is primarily due to the fact that the facility predates CRMC regulation and it is located on a rocky island surrounded by tidal waters. On this basis, cumulative impacts associated with additional projects of this type are not expected.

D. Public Access Plan Requirement: Pursuant to RICRMP Sections 1.3.1(C).2.b and 1.3.6.B.2.a, a public access plan is required for commercial development particularly where such development specifically impacts coastal resources. In this case a deck is being constructed over a rocky shoreline and tidal waters thereby having direct impacts to coastal resources. Pursuant to discussions with Yacht Club representatives (Mr. Gary Lash), it was determined that providing public access within the private yacht club facility was not practical. On that basis, CRMC Staff suggested that off-site public access be enhanced as allowed by RICRMP Sections 1.3.6.C.3 and 1.3.6.D (Guidelines for the development of public access plans). The public access plan proposed to satisfy these requirements consist of providing a kayak/small boat rack on City of Newport property to be turned over to the City. The proposed rack will accommodate approximately 30 kayaks or other small watercraft. (See the proposed public access plan contained in the Council's agenda package stamped CRMC approved dated February 20, 2018).

E. Public Notice: A 30 day public notice for the project was issued on January 8, 2018 and it expired on February 8, 2018. The City of Newport requested an extension until February 16, 2018 which was administratively granted by the CRMC. No objections were received during the public notice period. After requesting an extension to the public notice period to allow review by the planning board, waterfront commission and the City Council, the City of Newport a provided a letter of no objection dated February 15, 2018.

F. Recommendation: Based on the review contained herein CRMC Staff concludes that the project is not prohibited since it appears to satisfy the criteria contained in RICRMP Section**1**.3.1(C)3.f . The Council must affirm this opinion to avoid the need for a special exception. The project further appears to meet the Category B requirements and has provided an off-site public access plan enhancement consistent with RICRMP Sections 1.3.1(C).2.b and 1.3.6.B.2.a. Furthermore, there were no objections received during the public notice period and City of Newport provided a letter of no objection. Accordingly, CRMC Staff recommends approval of the project subject to the Council determining a special exception is not required. The following stipulations are recommended:

G. Recommended Stipulations:

1. Consistent with the proposed public access plan, the proposed kayak/small watercraft rack shall be constructed by Memorial Day 2018. Prior to construction, a site plan showing the rack location shall be provided to the CRMC and City of Newport for approval. The rack shall be adequately anchored to resist displacement during a storm. If required, construction/building plans shall be approved by the City of Newport Building official.

Signed: _____ **Supervising Environmental Scientist**

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
COASTAL RESOURCES MANAGEMENT COUNCIL
STAFF ENGINEER'S REPORT

TO: **Grover J. Fugate** **DATE: 2/16/18**
DEPT: **CRMC Executive Director** **PAGE: 1 of 2**
FROM: **Richard M. Lucia, P.E.**
DEPT: **CRMC Engineering/Permitting Section**

RE: **CRMC File No.** 2017-09-078
Applicant's Name: Ida Lewis Yacht Club
Project: Construct a 15' 6" x 69' 5" timber deck expansion to be constructed over the adjacent rocky shoreline and over tidal waters on the northeast side of the existing clubhouse thereby expanding the existing timber deck. The Council may determine a special exception is required in accordance with the review criteria contained in RICRMP section 1.3.1(C).3(f).

Location: 170 Wellington Avenue
Water Type/Name: Type 3 Waters, High Intensity Boating, Newport Harbor
Coastal Feature: Rocky shoreline
Freshwater Wetlands: Not applicable

A. Plans Reviewed:

1. "Ida Lewis Yacht Club Outside Deck Extension…", in 6 sheets by St. Jean Engineering, LLC, dated 11-8-2017
2. "Ida Lewis Yacht Club, Wellington Avenue, Newport, RI 02840…", in 3 sheets, by Christopher Arner, Architect, dated 09.20.17

B. Staff Analysis:

This staff's analysis is limited to engineering review. Please refer to Supervising Environmental Scientist report regarding Biological impacts and RICRMP Policies/Requirements.

The proposed deck is located seaward of Mean High Water into tidal waters and in an area designated by FEMA as V-Zone, area subject to wave action (Base Flood Elevation 13' NAVD88)[1]. Furthermore, FEMA Flood Insurance Study, indicates a nearby transect having a Maximum Wave Crest at Elevation 16.1', during a 1 percent annual chance storm[2]. The top of deck will be set at 9.52' to match the existing deck and therefore will therefore be inundated in a storm event. In order to insure the integrity of the proposed structure, staff engineer recommends an additional stipulation added to the assent that states prior to construction the applicants engineer submit design calculations that address the loads from wave and tidal action and any necessary revisions to the plans.. Additionally, since the structure is in tidal waters, CRMC staff has contacted Daniel R. DeDentro of State of RI Building Official Office and he has stated that a review by their office may be required in lieu of the City of Newport Building Official review. The Staff engineer recommends a stipulation requiring the State Building Official review be attached to this Assent.

Signed: _____ **Supervising Civil Engineer**

With regard to RICRMP Section 1.1.10 **Climate Change and Sea Level Rise,** a review of the on-line mapping tool "STORMTOOLS" indicates that the structure will not be inundated with a 7 foot Sea Level Rise above Mean Higher High Water without an episodically storm event (i.e. 100 year, 50 year, 25 year, and 10 year reoccurrence). However, discussions with Teresa A. Crean (URI Coastal Community Planner, Coastal Resources Center) of the mapping of this site, it appears that this is an anomaly and most likely the proposed deck will be flooded in case of the sea level rise of 6' (deck is at 9.52' (MLW) or 6.06' (MHW). Which depending on the model used this could occur by 2070 which gives a design life for the deck of approximately 52 years.[3]

1. FEMA map 44005C0177J, effective on 09/04/2013
2. FEMA Flood Insurance Study, Newport County, September 4, 2013, transect #41
3. US Army Corp of Engineers sea level calculator (http://corpsclimate.us/ccaceslcurves.cfm.)

Recommendations and Conclusion:

Based on the above, there are no engineering objections to the proposed project. Additionally staff engineer concurs with Supervising Environmental Scientist report. On this basis, CRMC Staff recommends approval subject to Staff stipulations:

Recommended Additional Stipulations:

(RL) A design analysis of hydrodynamic and debris loads and any necessary revisions to the building structure shall be submitted to CRMC staff for approval prior to construction.

(RL) The applicant shall contact the State of Rhode Island Building Commission to determine if a Rhode Island State Building Permit (from their office) in addition to the Town Of Newport Building Permit is required prior to construction. If a RI State Building Permit is required, a copy of the Building official letter showing evidence that the State Building Official has seen the project and granted (or will grant) approval of the construction project permit shall be submitted to the CRMC prior to construction.

Signed: _____ **Supervising Civil Engineer**

National Flood Hazard Layer FIRMette

FEMA

41°28'48.95"N

71°19'10.56"W

41°28'21.99"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth
- Regulatory Floodway *Zone AE, AO, AH, VE, AR*

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The base map shown complies with FEMA's base map accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/15/2018 at 11:05:32 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: base map imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

STORMTOOLS for Beginners

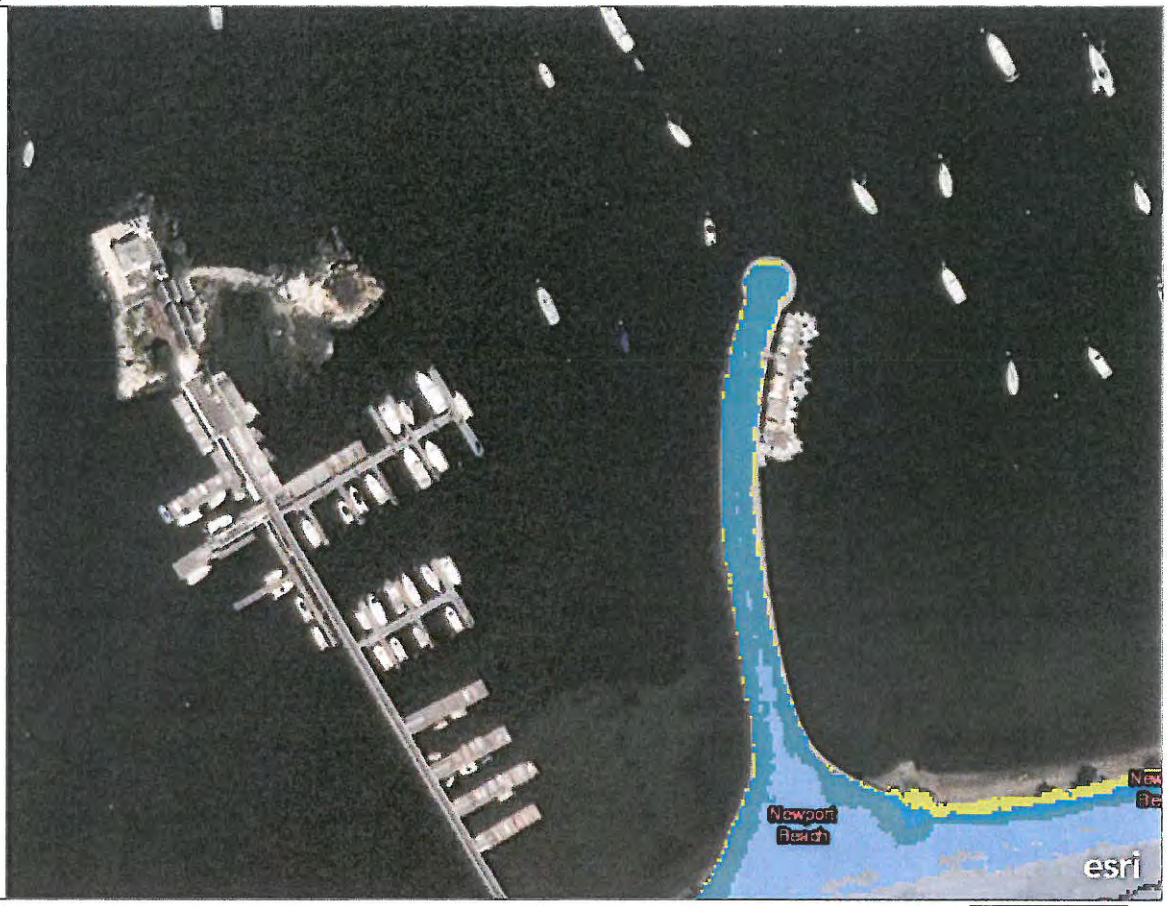
Will 1-FOOT of SEA LEVEL RISE affect my property?

Will 2-FEET of SEA LEVEL RISE affect my property?

Will 3-FEET of SEA LEVEL RISE affect my property?

Will 5-FEET of SEA LEVEL RISE affect my property?

Will 7-FEET of SEA LEVEL RISE affect my property?



Use these maps to turn on/off individual layers to visualize the potential impacts from storm events and sea level rise.

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Latest News
Adaptation Policy/Plan
Responses to Climate Change Program
Climate Preparedness and Resilience
Public Tools Developed by USACE
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Info on Climate Change Impacts
Interagency Activities
International Activities
District Activities
About the Program
Contacts
History of Climate Change at USACE

Climate Change Adaptation

Comprehensive Evaluation of Projects with Respect to Sea-Level Change

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Respect to Sea-Level Change | Update Drought Contingency Plans | Update Reservoir Sediment Information

Sea-Level Change Curve Calculator (2017.55)

Version 2017.55 employs the same computations as previous versions, yielding the same projections along with some additional functionality, the 2014 NOAA rates, and several a versions include Version 2015.46 and its manual (*pdf, 1.4MB*); 2014.88 and its manual (*pdf, 4.5 MB*); and the original superseded calculator.

EC 1165-2-212 (*pdf, 845 KB*) and its successor ER 1100-2-8162 *(pdf, 317 KB)* were developed with the assistance of coastal scientists from the NOAA National Ocean Service an Their participation on the USACE team allows rapid infusion of science into engineering guidance. ETL 1100-2-1 (*pdf, 9.87 MB*) , Procedures to Evaluate Sea Level Change: Impa Adaptation.

EC 1165-2-212 (*pdf, 845 KB*) and its successor ER 1100-2-8162 *(pdf, 317 KB)* use the historic rate of sea-level change as the rate for the "USACE Low Curve". ETL 1100-2-1 (*pdf,* Evaluate Sea Level Change: Impacts, Responses, and Adaptation.

The rate for the "USACE Intermediate Curve" is computed from the modified NRC Curve I considering both the most recent IPCC projections and modified NRC projections with th movement added.

The rate for the "USACE High Curve" is computed from the modified NRC Curve III considering both the most recent IPCC projections and modified NRC projections with the local added.

The three scenarios proposed by the NRC result in global eustatic sea-level rise values, by the year 2100, of 0.5 meters, 1.0 meters, and 1.5 meters. Adjusting the equation to incl rate of 1.7 mm/year and the start date of 1992 (which corresponds to the midpoint of the current National Tidal Datum Epoch of 1983-2001), instead of 1986 (the start date used b values for the coefficients (b) being equal to 2.71E-5 for modified NRC Curve I, 7.00E-5 for modified NRC Curve II, and 1.13E-4 for modified NRC Curve III.

The three local relative sea level change scenarios updated from EC 1165-2-212 (*pdf, 845 KB*) (and and its successor ER 1100-2-8162), Equation 2 are depicted in the Figure to t 2-1 (*pdf, 9.87 MB*) , Procedures to Evaluate Sea Level Change: Impacts, Responses, and Adaptation.

EC 1165-2-212, Equation 2: $E(t) = 0.0017t + bt^2$

This on-line Sea Level Change Calculator has several added features which are detailed in the User's Manual. The superseded calculator is available here... You can plot both the feet or meters relative to either NAVD88 or LMSL.

Alternate Projections:

- The West Coast National Research Council 2012 West Coast projections are available when a west coast gauge is selected.
- The New York State Department of Environmental Conservation Proposed Regulation 6 NYCRR Part 490 projections for New York City and Long Island are available when Battery" or "Montauk Point" is selected.
- The New York City Panel on Climate Change 2013/2015 projections are available for The Battery (8518750) for New York City.
- The Maryland Climate Change Commission 2013 Projections are available when selecting a gauge in Maryland.
- The CARSWG REGIONAL SEA LEVEL SCENARIOS FOR COASTAL RISK MANAGEMENT Report 2016
- The US Global Change Research Program 2017 (NOAA et al. 2017)

This calculator also develops the SLC curves between the user entered dates using equation #3 in ER 1100-2-8162.

USACE Sea Level Change Curve Calculator (2017.55)

Project Name:	Enter Project Name
Select Gauge:	NEWPORT ▼ PSMSL
Scenarios Source:	NOAA et al. 2017 ▼
Output Units:	Feet Meters
Critical Elevation #1 (ft) : 0	NAVD88 - Description:
Critical Elevation #2 (ft) : 0	NAVD88 - Description:

NOAA et al. 2017 options

Show Grid Points	
Show USACE 2013 Curves	
Show 2100 to 2200	
Adjust to MSL(83-01) Datum: ?	
Lines Type:	None Interpolated Polynomial Trend
Point Shape:	Circle Square Triangle
Vertical Land Movement (ft/yr) :	0.00322
Plot 66 Percentile Confidence Band:	None ▼

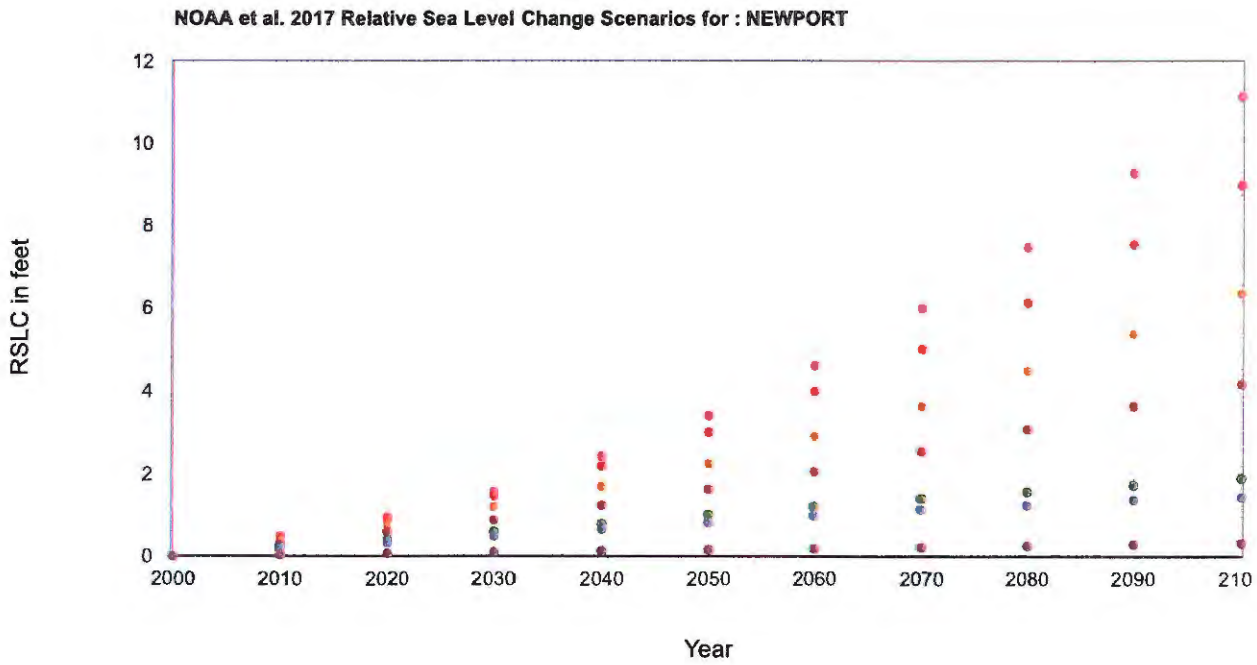
Click on project area. The nearest gauge/grid point wil based on the selected Scenar

Clicked 0 miles from closest gaug

*** note - there may be factors other than proximity to ***

Compliant
Non-Compliant
Inactive

Gauge/Grid Selected: NEWPORT
NOAA2017 VLM: 0.00322 feet/yr
All values expressed in feet



Enter Project Name
Scenarios for NEWPORT
NOAA2017 VLM: 0.00322 feet/yr
All values are expressed in feet

Year	NOAA2017 VLM	NOAA2017 Low	NOAA2017 Int-Low	NOAA2017 Intermediate	NOAA2017 Int-High	NOAA2017 High	NOAA2017 Extreme
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010	0.03	0.16	0.20	0.30	0.39	0.46	0.49
2020	0.06	0.33	0.39	0.59	0.75	0.95	0.92
2030	0.10	0.49	0.59	0.89	1.21	1.48	1.57
2040	0.13	0.66	0.79	1.25	1.71	2.20	2.43
2050	0.16	0.82	1.02	1.64	2.26	3.02	3.41
2060	0.19	0.98	1.21	2.07	2.92	4.00	4.63
2070	0.23	1.15	1.41	2.56	3.64	5.02	6.00
2080	0.26	1.25	1.57	3.08	4.49	6.14	7.48
2090	0.29	1.38	1.74	3.64	5.38	7.55	9.28
2100	0.32	1.44	1.90	4.17	6.36	8.99	11.15

back to Comprehensive Evaluation of Projects with Respect to Sea-Level Change page

Revised 18 July 2017

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
COASTAL RESOURCES MANAGEMENT COUNCIL
Oliver Stedman Government Center
4808 Tower Hill Road, Wakefield, RI 02879

PUBLIC NOTICE

File Number: 2017-09-078 Date: January 8, 2018

This office has under consideration the application of:

Ida Lewis Yacht Club
c/o Turner C. Scott
122 Touro Street
Newport, RI 02840

for a State of Rhode Island Assent to construct and maintain:

a 15' 6" x 69' 6" timber deck expansion to be constructed over the adjacent rocky shoreline and over tidal waters on the northeast side of the existing clubhouse with existing timber deck. The Council may determine a special exception is required in accordance with the review criteria contained in RICRMP section 1.3.1(C).3(f).

Project Location: Ida Lewis Yacht Club
Street & Number: 170 Wellington Avenue
Pole Number: City/Town: Newport
Plat Number: 42 Lot Number(s): 11, 12, 13
Waterway: Newport Harbor – Type 3 Waters

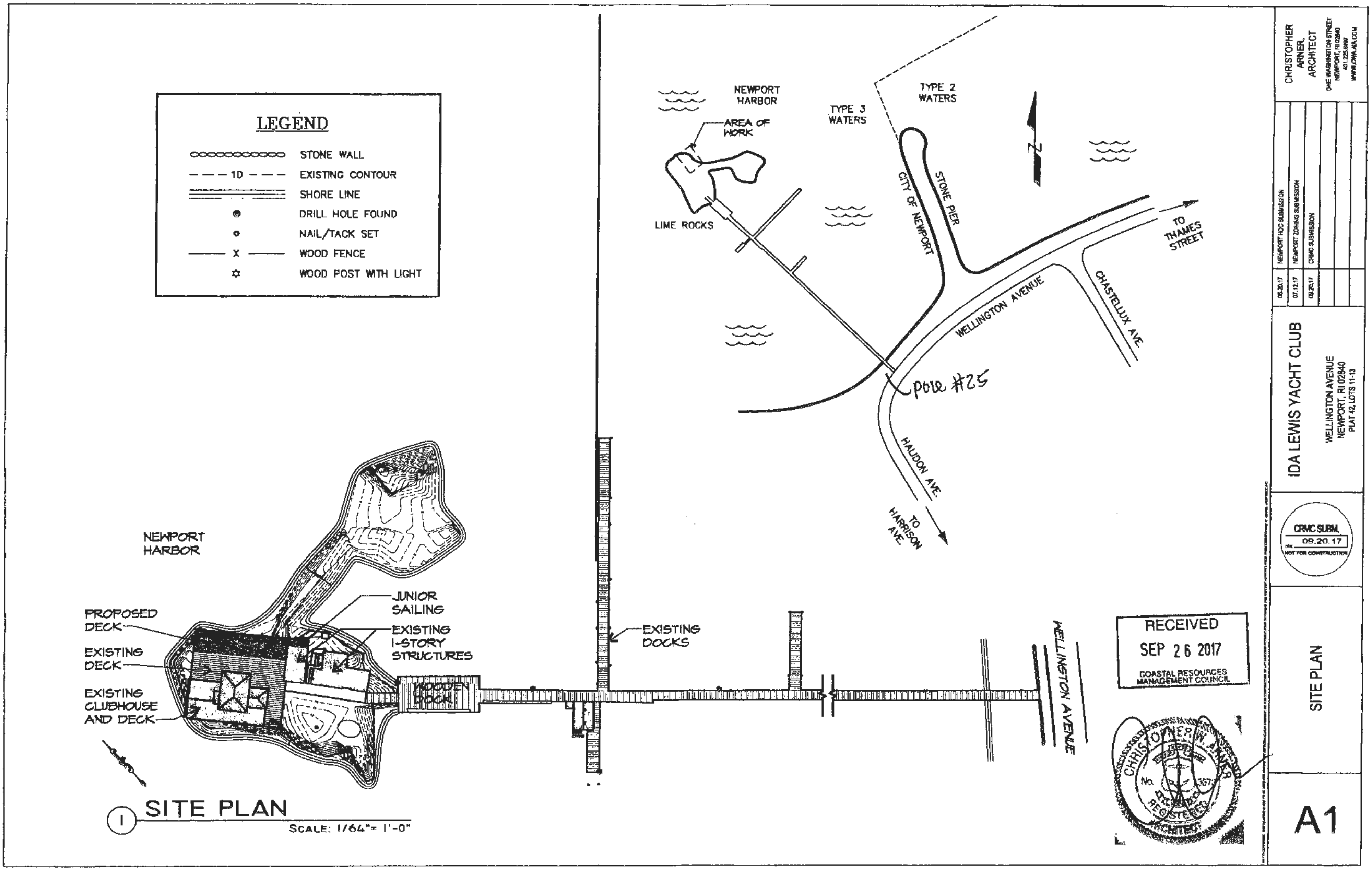
Plans of the proposed work may be seen at the CRMC office in Wakefield.

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

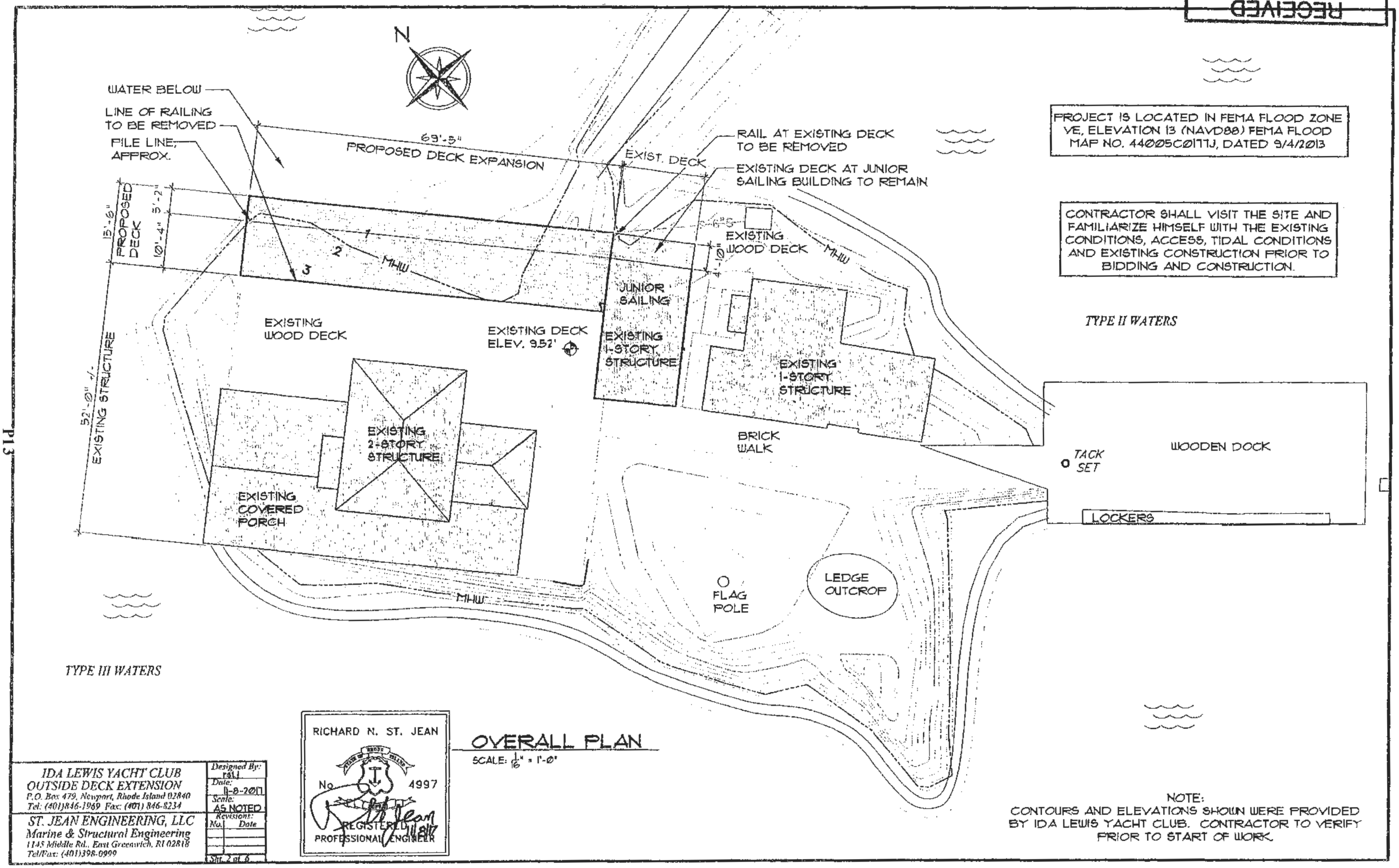
You are advised that if you have good reason to enter protests against the proposed work it is your privilege to do so. It is expected that objectors will review the application and plans thoroughly, visit site of proposed work if necessary, to familiarize themselves with the conditions and cite what 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 and be received at this office on or before February 8, 2018.

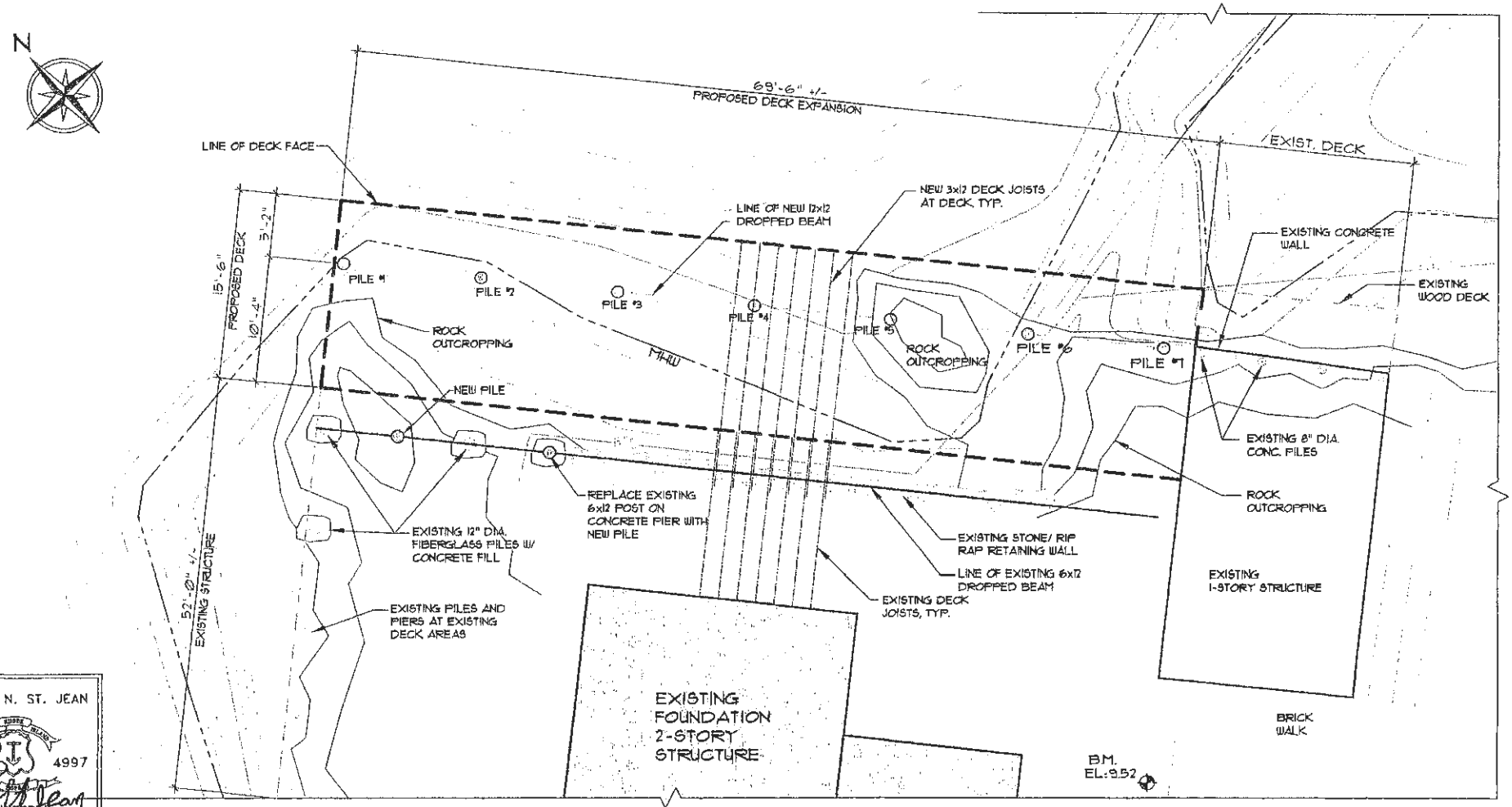
P12


LEGEND
STONE WALL
— — — 10 — — — EXISTING CONTOUR
SHORE LINE
DRILL HOLE FOUND
NAIL/TACK SET
WOOD FENCE
WOOD POST WITH LIGHT
NEWPORT HARBOR
AREA OF WORK
TYPE 3 WATERS
TYPE 2 WATERS
N
LIME ROCKS
CITY OF NEWPORT
STONE PIER
TO THAMES STREET
WELLINGTON AVENUE
CHASTELLUX AVE.
Pole #25
HALIDON AVE.
TO HARRISON AVE.
NEWPORT HARBOR
PROPOSED DECK
EXISTING DECK
EXISTING CLUBHOUSE AND DECK
JUNIOR SAILING
EXISTING 1-STORY STRUCTURES
WOODEN DOCK
EXISTING DOCKS
WELLINGTON AVENUE
SITE PLAN
SCALE: 1/64" = 1'-0"
RECEIVED
SEP 26 2017
COASTAL RESOURCES MANAGEMENT COUNCIL
CHRISTOPHER ARNER
REGISTERED ARCHITECT
CRMC SUBM.
09.20.17
NOT FOR CONSTRUCTION
CHRISTOPHER ARNER, ARCHITECT
ONE WASHINGTON STREET
NEWPORT, RI 02840
06.20.17 NEWPORT HDC SUBMISSION
07.12.17 NEWPORT ZONING SUBMISSION
09.20.17 CRMC SUBMISSION
IDA LEWIS YACHT CLUB
WELLINGTON AVENUE
NEWPORT, RI 02840
PLAT 42, LOTS 11-13
SITE PLAN
A1

RECEIVED
DEC 18 2017
COASTAL RESOURCES MANAGEMENT COUNCIL



P13



RICHARD N. ST. JEAN
No. 4997
REGISTERED PROFESSIONAL ENGINEER

PILE PLAN

SCALE: 1/8" = 1'-0"

IDA LEWIS YACHT CLUB OUTSIDE DECK EXTENSION P.O. Box 479, Newport, Rhode Island 02840 Tel: (401)846-1969 Fax: (401) 846-8234	Designed By: RSJ Date: 11-8-2017 Scale: AS NOTED Revisions: No. Date
ST. JEAN ENGINEERING, LLC Marine & Structural Engineering 1145 Middle Rd., East Greenwich, RI 02818 Tel/Fax: (401)398-0999	Sht. 3 of 4

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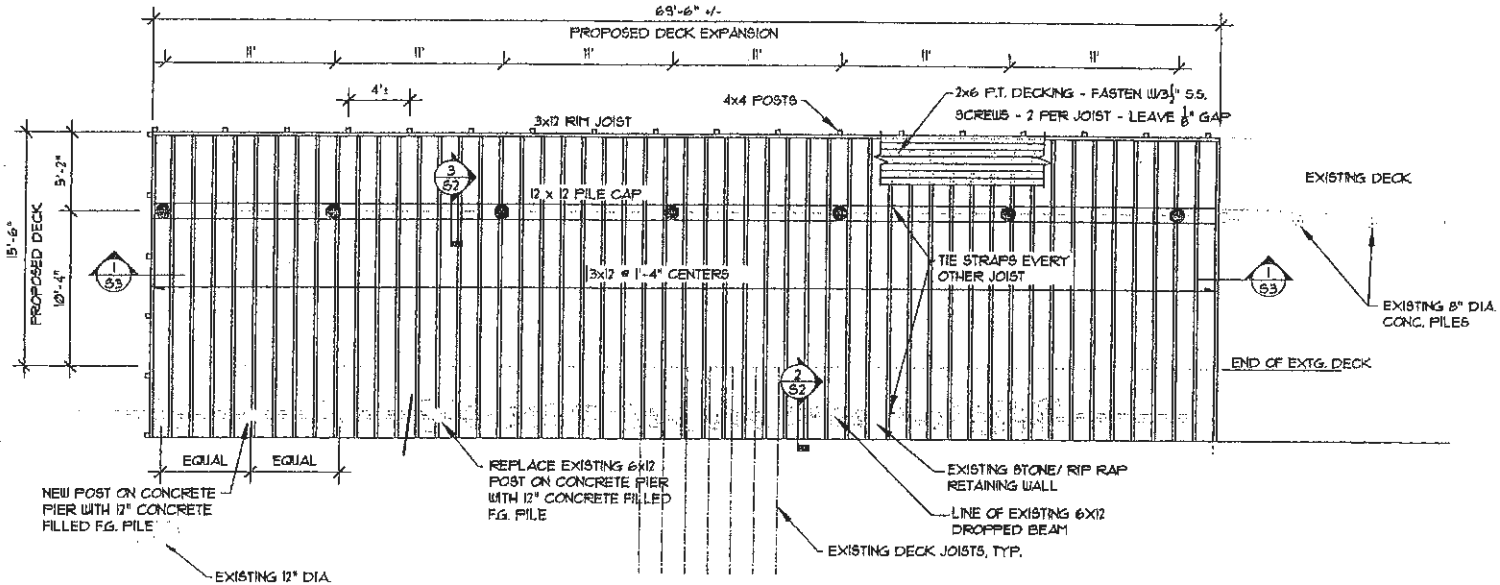
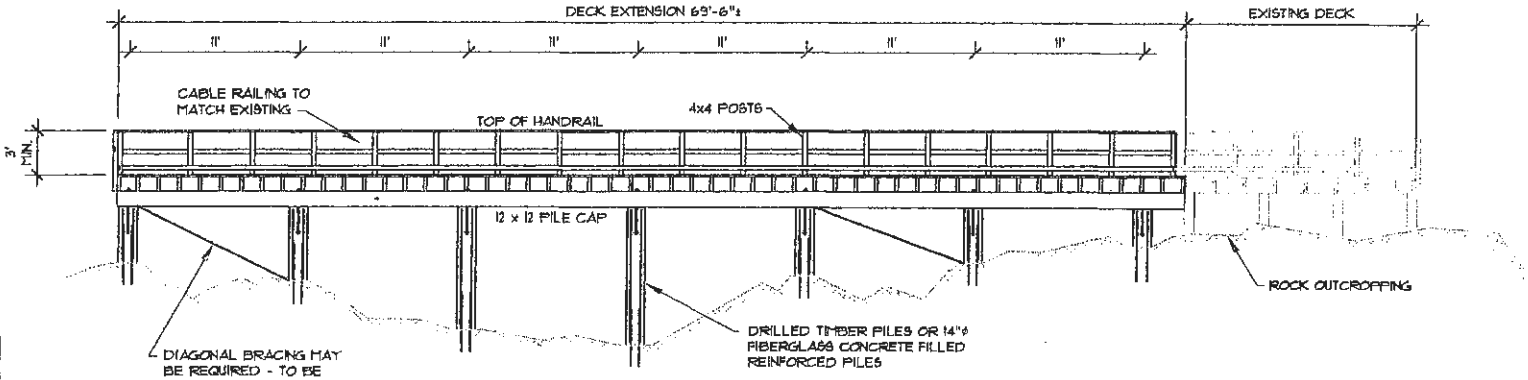


FRAMING PLAN

SCALE: ⅛" = 1'-0"



SECTION 1-1

SCALE: ⅛" = 1'-0"

RICHARD N. ST. JEAN
No. 4997
REGISTERED PROFESSIONAL ENGINEER

IDA LEWIS YACHT CLUB OUTSIDE DECK EXTENSION P.O. Box 479, Newport, Rhode Island 02840 Tel: (401)846-1969 Fax: (401) 846-8234	Designed By: rsj Date: 11-8-2017 Scale: AS NOTED Revisions: No. / Date Sht. 1 of 1
ST. JEAN ENGINEERING, LLC Marine & Structural Engineering 1145 Middle Rd., East Greenwich, RI 02818 Tel/Fax: (401)398-0999	

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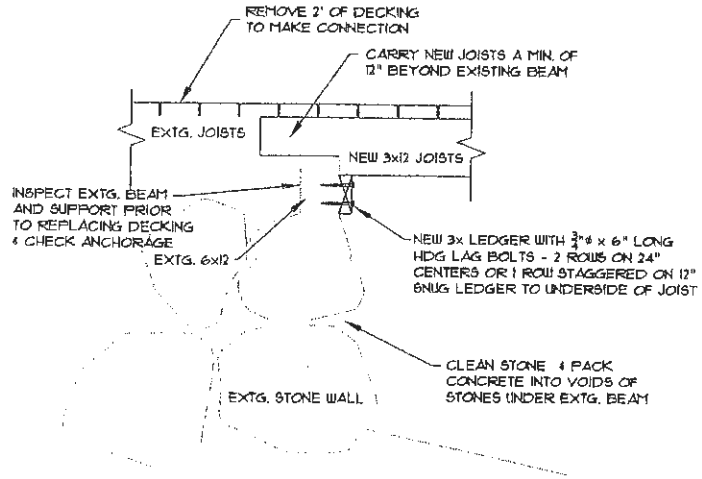
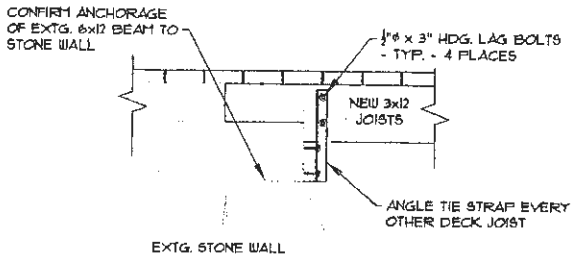


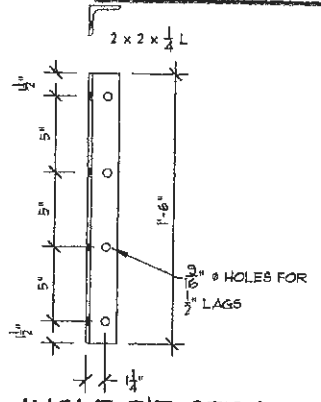
SECTION - 2

SCALE: ½" = 1'-Ø"



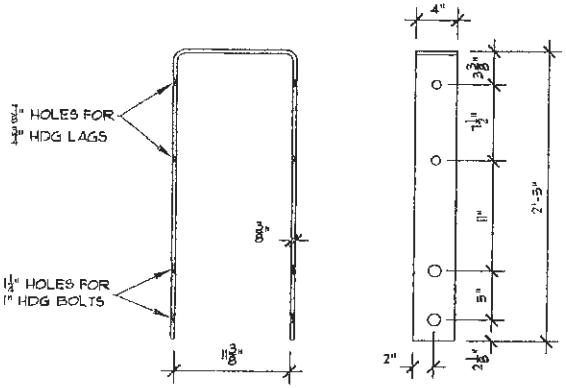
NEW DECK JOISTS TO EXTG. 6x12 BEAM CONNECTION DETAIL

SCALE: ½" = 1'-Ø"



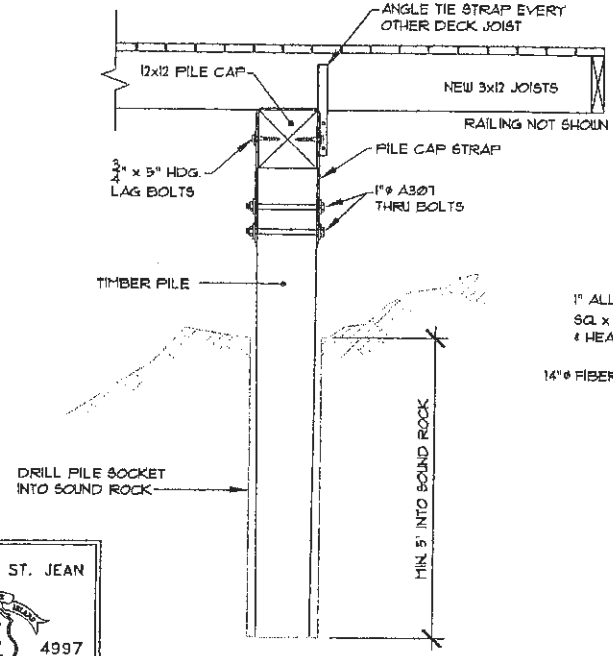
TYP. ANGLE TIE STRAP

SCALE: 1½" = 1'-Ø"



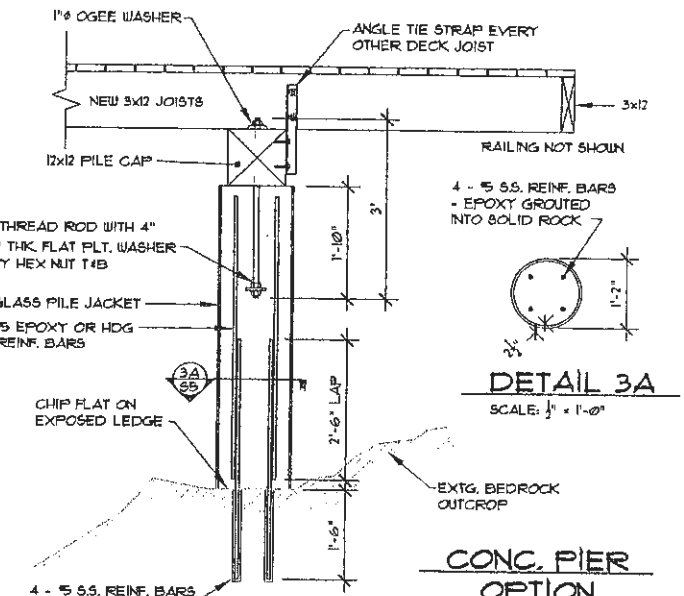
PILE CAP STRAP

SCALE: 1" = 1'-Ø"



SECTION - 3

SCALE: ½" = 1'-Ø"



ALT. SECTION - 3

SCALE: ½" = 1'-Ø"

DETAIL 3A

SCALE: ½" = 1'-Ø"

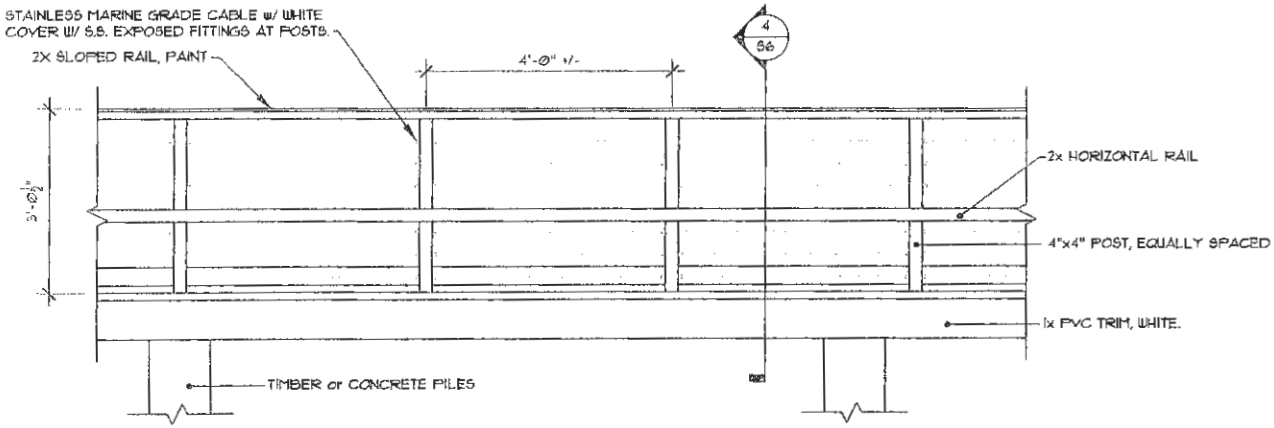
CONC. PIER OPTION

RICHARD N. ST. JEAN
No. 4997
REGISTERED PROFESSIONAL ENGINEER

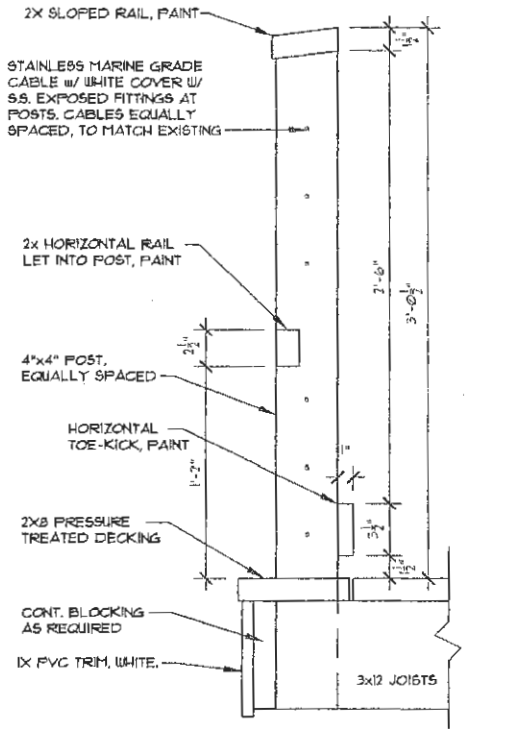
IDA LEWIS YACHT CLUB
OUTSIDE DECK EXTENSION
P.O. Box 479, Newport, Rhode Island 02840
Tel: (401)846-1969 Fax: (401) 846-8234

ST. JEAN ENGINEERING, LLC
Marine & Structural Engineering
1145 Middle Rd., East Greenwich, RI 02818
Tel/Fax: (401)398-0999

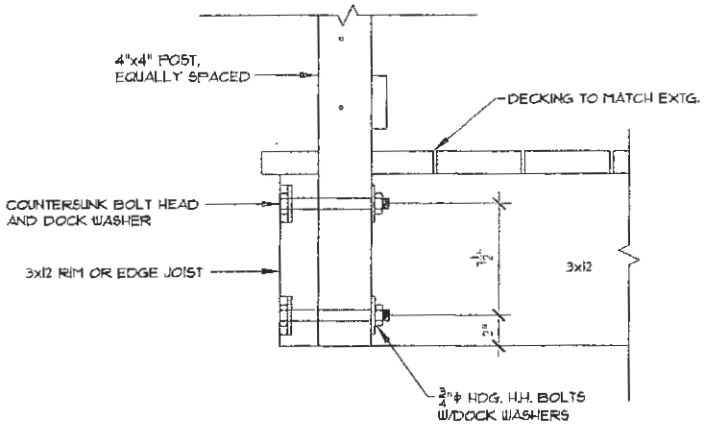
Designed By: RSJ
Date: 11-8-2017
Scale: AS NOTED
Revisions: No. Date
Sht. 3 of 4



RAIL ELEVATION
SCALE: ½" = 1'-Ø"



SECTION 4 TYP. DECK RAIL
SCALE: ½" = 1'-Ø"



DECK POST TO FRAMING
SCALE: 1½" = 1'-Ø"

RICHARD N. ST. JEAN
No. 4997
REGISTERED PROFESSIONAL ENGINEER

IDA LEWIS YACHT CLUB OUTSIDE DECK EXTENSION P.O. Box 479, Newport, Rhode Island 02840 Tel: (401)846-1969 Fax: (401) 846-8234	Designed By: RSJ Date: 11-8-2017 Scale: AS NOTED Revisions: No. / Date
ST. JEAN ENGINEERING, LLC Marine & Structural Engineering 1145 Middle Rd., East Greenwich, RI 02818 Tel/Fax: (401)398-0999	Sht. 6 of 6

P17

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

February 2, 2018

Mr. Joseph J. Nicholson, Jr.
City Manager
City Hall 43 Broadway
Newport, RI 02840

Re: CRMC File No. 2017-09-078 -- Request for Public Notice Extension end date.

Dear Mr. Nicholson:

Your request to extend the Public Notice Period End Date from February 8, 2018 to February 16, 2018 has been granted.

If you require additional information, please do not hesitate to contact me. Thank you.

Sincerely,

Jeffrey M. Willis, Deputy Director
Coastal Resources Management Council

/ajt

cc: T. Scott, Esq.

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.

File No. (CRMC use only): 2017-09-078

Project Location: 170 Wellington Avenue Newport
Number Street City/Town

Owner's Name: Ida Lewis Yacht Club
Plat: 42
Lot(s): 11, 12 & 13

Mailing Address: c/o Turner C. Scott 122 Touro Street Newport RI
Res. Tel. #: 4018477500
Bus. Tel. #: 4018625003

Contractor RI Lic. # unk Address:
Tel. No.

Designer: C. Arner Address: 1 Washington St Newport
Tel. No. 4012256497

Waterway: Est. Project Cost: $100,000
Fee/Costs: $750.00

Description of work proposed (a brief description of all elements of work MUST be included here, additional sheets may be attached):
Deck addition to Yacht Club facility to accomodate sailing related activity.

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): See Exhibit A

Is this site within a designated historic district? ☒ YES ☐ NO

Is this application being submitted in response to a coastal violation? ☐ YES ☒ NO

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.)
See Exhibit B

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

RECEIVED
SEP 26 2017
COASTAL RESOURCES MANAGEMENT COUNCIL

Turner C. Scott
Owner's Signature (sign and print) Attorney for applicant

PLEASE REVIEW REVERSE SIDE OF APPLICATION FORM

01-2017 - ajt

STATEMENT OF DISCLOSURE AND APPLICANT AGREEMENT AS TO FEES

The fees which must be submitted to the Coastal Resources Management Council are based upon representations made to the Coastal Resources Management Council by the applicant. If after submission of this fee the Coastal Resources Management Council determines that an error has been made either in the applicant's submission or in determining the fee to be paid, the applicant understands that additional fees may be assessed by the Coastal Resources Management Council. These fees must be paid prior to the issuance of any assent by the Coastal Resources Management Council.

The applicant understands the above conditions and agrees to comply with them.

[signature] 9/21/17

Signature Date

Turner C. Scott 122 Touro St

Print Name and Mailing Address Newport RI 02840

RECEIVED
SEP 26 2017
COASTAL RESOURCES MANAGEMENT COUNCIL

01-2017 – ajt

TO: **Coastal Resources Management Council**
4808 Tower Hill Road Suite 3
Wakefield, RI 02879
Phone: (401) 783-3370

CRMC

FROM: Building Official DATE: 9/21/17

SUBJ: Application of: Ida Lewis Yacht Club

Location: 170 Wellington Ave Newport RI 02840

Address: 170 Wellington Ave Plat No. 42 Lot No. 11, 12 & 13

To Construct: deck addition to yacht club facility to accomodate sailing related activity

I hereby certify that I have reviewed _____ foundation plan(s).
✓ plan(s) for entire structure
✓ site plans
Titled: site plan, Proposed plan/rail details/ Proposed pile plan

Date of Plan (last revision): 9/20/17

___ and find that the issuance of a local building permit is not required as in accordance with Section _____ of the Rhode Island State Building Code.

✓ and find that the issuance of a local building permit is required. I hereby certify that this permit shall be issued once the applicant demonstrates that the proposed construction/activity fully conforms to the applicable requirements of the RISBC.

___ and find that a Septic System Suitability Determination (SSD) must be obtained from the RI Dept. of Environmental Management.

✓ and find that a Septic System Suitability Determination (SSD) need not be obtained from the RI Dept. of Environmental Management.

___ and find that said plans conform with all elements of the zoning ordinance, and that if said plans require zoning board approval, that the applicant has secured such approval and that the requisite appeal period has passed with no appeal filed or appeal is final. The Zoning Board approval shall expire on _____.

William Falvey II 9/21/17
Building Official's Signature Date

✓ and find that said plans conform with all elements of the zoning ordinance, and that if said plans require zoning board approval, that the applicant has secured such approval and that the requisite appeal period has passed with no appeal filed or appeal is final.

RECEIVED
SEP 26 2017
COASTAL RESOURCES MANAGEMENT COUNCIL

E. Cox 9/21/17
Zoning Officer's Signature Date

rev. 5/11/2001

Dave Reis

From: Dave Reis <dreis@crmc.ri.gov>
Sent: Thursday, September 28, 2017 2:54 PM
To: 'tscott@millerscott.com'
Cc: 'rlucia@crmc.ri.gov'
Subject: 2017-09-078 - Ida Lewis Yacht Club

Hi Turner,

I have accepted Ida Lewis but it is "technically deficient". We need:

1. Reduced plans for public notice.
2. 300.1 (Cat. B) responses.
3. Please address 300.3.D.5(b) as best you can so we can make a recommendation to the Council. (An explanation specific to those criteria is needed.)

Thanks,
Dave

David S. Reis
Supervising Environmental Scientist
Coastal Resources Management Council
Phone: 401 783-3370
Web: www.crmc.ri.gov

MILLER SCOTT & HOLBROOK

Attorneys and Counselors at Law

MICHAEL W. MILLER
TURNER C. SCOTT
FRANCIS S. HOLBROOK II*

Of Counsel
ROLAND F. CHASE

**also admitted in Connecticut*

December 15, 2017

David Reis
Coastal Resources Management Council
Oliver H. Stedman Government Center
4808 Tower Hill Road, Suite 3
Wakefield, RI 02879-1900

via First Class Mail

Re: CRMC Application 2017-09-078
Ida Lewis Yacht Club

Dear Dave,

Enclosed are four packages of supplemental information regarding the above-captioned pending CRMC Petition No. 2017-09-078 for Ida Lewis Yacht Club. Included are:

1. A narrative addressing Section 300.1 Category B Requirements and backup information and explanation for the need for the extended yachting facility at Ida Lewis Yacht Club as required by Section 300.3 B5(b);

2. An engineered set of drawings by Rick St. Jean, detailing the extended deck at the yachting facility at Ida Lewis Yacht Club.

Thank you very much for your patience in waiting for this information. Hopefully this information completes the necessary documents for appropriate staff review.

With best wishes, I remain

Cordially yours,

MILLER SCOTT & HOLBROOK

Turner C. Scott
enc.

S:\TScott\CLIENTS\Ida Lewis\D.Reis Ltr. w Packages.wpd

Ida Lewis Yacht Club Deck Extension

The Ida Lewis Yacht Club would like to extend it's outdoor deck for two reasons, first to better accommodate a large and growing junior sailing program and second, so that the Club can continue to attract and service major sailing regattas as it has been doing for over 80 years.

Ida Lewis has one of the most competitive junior sailing programs in New England. In addition to general instruction for ages 8 – 17, the Club is host to the Brenton Cove 420 Racing Program, a cooperative effort with Sail Newport. The 110 member junior sailing program is currently run out of a 20 X 20 foot room. More space is needed for instruction and to provide more space for the annual Narragansett Bay Yachting Association Optimist Dinghy Regatta that regularly attracts 90 competitors from throughout Southeast New England.

Ida Lewis has a worldwide reputation for excellence in regatta management. About on fifth of our 400 members are actively involved in race committee and organizing sailing events. It is important to the vitality of the Club to be able to continue to host major sailing regattas. It is also important to the City of Newport and the State of Rhode Island.

Newport and Rhode Island are well aware of the huge economic impact sailing events have upon our community. Since 1970 the State has had a Yachting Committee and in 2013 Governor Chaffee signed an Executive Order creating the RI Sailing Events Commission, both with the goal of attracting regattas to the State. The State has spent millions on infrastructure improvements at Ft. Adams in order to create a venue for staging these events.

Sailing regattas are run by volunteers and historically have been organized by recognized yacht clubs. There are administrative and social aspects, duties and obligations to all sailing events and this is where Ida Lewis is finding it more and more difficult to manage and conduct regattas. For larger regattas the Club used to be able to rent outside venues for the various administrative requirements and social events. The cost and ready availability of these venues now makes it virtually prohibitive to effectively and properly manage a regatta and to build this expense into a regatta entrance fee. This unavailability of resources limits the Club's ability to continue to attract major sailing events to Rhode Island. An expansion of the eastern deck at Ida Lewis will allow the Club to accommodate the administrative and social requirements on site thereby helping it to continue to bring quality sailing regattas to Newport as it has for so many years.

Ida Lewis has a cap on membership and will not expand the membership core. Even with it's small size the Club is recognized as one of the foremost sailing clubs in the country. The goal of the deck expansion is to allow it to continue to serve it's members, the Newport and sailing communities and maintain it's well deserved reputation.

December 13, 2017

Coastal Resources Management Council
Oliver Stedman Government Center
Wakefield, RI 02879-1900

Re: Ida Lewis Yacht Club; Proposed Deck Expansion, Newport
Plat 42, Lot 11, 12 and 13.

Dear Mr. Reis,

Please accept this revised letter as part of the Ida Lewis Deck Expansion Project. We received the engineering drawings after the initial submittal. In these drawings the engineer suggested drilling into the rock 5'-0" if required to place piles. The intent is to only drill 24" and pin the piles, in a few areas this may not be feasible. I have revised the "Description of Work" below.

The lighthouse at Lime Rocks was built in 1853 and incorporated as the Ida Lewis Yacht Club in 1928. Throughout the course of its history Ida Lewis Yacht Club (ILYC) has taught and developed young sailors and has hosted major sailing regattas. The intent of the proposed deck expansion is to provide much needed areas for the Junior Program and regattas hosted by ILYC.

ILYC is located in Newport Harbor, the Club and surrounding waters are designated by CRMC as Type 3, High Intensity Boating waters. Due to the nature of the location there are limited locations for a deck expansion. Due to the topography, expanding to the North or South presents problems as the water depth is much greater. Because of this depth, it's not uncommon for tour boats or other mariners to come within 20-25 feet of the existing decks. Expanding on either of these sides pose constructability and safety issues.
Locating the new deck on the Northeast side is preferred as it abuts the Junior Sailing Building, the area of land below this deck is accessible during low tides. A small deck extends 4'-10" from the NE side of the junior sailing building. The proposed new deck will align with the face of this existing deck, this allows for additional access into and out of the building. Currently, the existing deck is only accessible from the interior of the building. Creating this connection between the two allows for better utilization of this space and will improve young sailors movements into an out of the building. The new deck will extend 69'-5" in the East/West direction, the same length as the existing. Expanding at this location allows for a single larger area that will accommodate groups of sailors who attend regattas.

Description of Work:

The existing decks on the North, West and South of the Club are typical deck construction, consisting of 2x8 deck boards supported by 2x10 joists and beams that span between piers. The proposed deck will be of the same construction and materials. The method for installing the piles will be to drill, using powered coring drills, 24" or 60" deep holes into solid rock. The location for these piles allow for work to be performed during low tide cycles. It is anticipated the drilling of these holes may take two weeks. Once drilled, a solid 2" diameter steel rod will be inserted and grouted into in place. Pearson fiberglass pile covers will be installed over the rods, reinforcing bars installed and the hollow fiberglass column filled with concrete. The alternate method is to drill a 60" deep hole into the rock and install a timber pile.
Once this work is complete, beams, joists, decking and rails can be installed. ILYC is a season club and is open from May until October. As to not disrupt activities for members and those using Newport Harbor, the work will take place in the offseason, before Memorial Day or after Labor Day. The proposed method for

CHRISTOPHER W. ARNER, ARCHITECT 1 Washington Street, Newport, RI 02840 t 401.225.6497

installing these piles will have the least impact on the surroundings. The work will have no impact on the public or navigable waters, equipment will be brought in by land and disassembled at the end of the day. It anticipated that this project to take 2 months.

Thank you for taking the time review this application for the proposed deck expansion at Ida Lewis Yacht Club.

Please let me know if you have any questions.

Sincerely,

Christopher W. Arner, Architect, AIA

SECTION 300.1 CATEGORY B and
SECTION 300.3 B5(b) REQUIREMENTS FOR IDA LEWIS YACHT CLUB
CRMC FILE # 2017-09-078

1. The proposed project is an extension to the deck and sailing facility to Ida Lewis Yacht Club. Attached as Appendix A is an explanation prepared and approved by the Ida Lewis Yacht Club Board of Directors detailing the need for the proposed project.

2. The local building official has reviewed the proposed plans and signed the Building Official's form as attached to the application. The Newport Zoning Board of Review and the Newport Historic District Commission have reviewed and unanimously approved the proposed project. The Zoning Officer's signature appears on the Building Official's form detailing that the plans conform with all elements of the zoning ordinance, that the Yacht Club secured approval from the Zoning Board of Review and Historic District Commission and the records and appeal period has passed with no appeal filed.

3. The proposed project is in Newport Harbor in an area designated as Type 3 Water, which area is identified as including intensely utilized water areas where recreational boating activities dominate and where the adjacent shorelines are developed as marinas, boatyards, and associated water-enhanced and water-dependant businesses.

4. The proposed activity will result in some minor temporary disturbance of the solid rock upon which the Ida Lewis Yacht Club clubhouse and sailing facility is already secured. The temporary disturbance due to drilling five feet into solid rock will be temporary. Shortly after the project is completed, the bottom, which is partially in the tidal flow area and partially outside of the tidal flow area will restore itself to the present conditions, which will not change the erosion or disposition process along the shore or in tidal waters.

5. Again, there will be some minor disturbance during construction, but the plant and wildlife will re-colonize shortly after construction is complete.

6. There is no public access to this location as the Ida Lewis Yacht Club owns Lime Rocks as the small island and adjoining rocks are commonly and historically known. The expansion of the deck area will greatly improve the Club's ability to host and attract sailing events and promote its junior sailing and yacht racing activities. Please see explanation in Appendix A.

7. The proposed deck will have 14" diameter piles spaced 11' on center. This insignificant displacement will not impede the natural flushing, sedimentation, turbidity, or water circulation characteristics in the area. Four (4) of the seven (7) proposed piles will be placed outside the mean highwater mark.

8. All of the materials and construction processes to be used during the project have been used throughout the state and have not caused any deterioration of the water quality elsewhere, therefore the water quality in this area will remain unchanged.

9. There are no known areas of architectural significance other than the historic Ida Lewis Lighthouse on or adjacent to the site. The lighthouse at Lime Rocks was built in 1853 and incorporated as the Ida Lewis Yacht Club in 1928. The proposed dock extension does not impact the lighthouse structure, which the club has routinely maintained in excellent condition.

10. The proposed deck extension will be adjacent to an existing east side deck expanding briefly over the tidal waters at high tide. Due to rock outcroppings and the shallow depth at this location, there is no impact on or conflicts with water-dependant uses and activities such as recreational boating, fishing, swimming, navigation, and commerce.

11. The proposed deck is a minor addition to an existing deck which surrounds the lighthouse. The historic lighthouse will remain the focal point from the water and shore. Neither the existing deck, nor the proposed expansion, will impact or interfere with the familiar and pleasant massing and scale of the iconic Ida Lewis Lighthouse.

SECTION 300.3D5(b)

Requirements are addressed in Appendix A and a revised letter dated December 13, 2017 from the project architect and attached as Appendix B.

S:\TScott\CLIENTS\Ida Lewis\CRMC cat B.wpd

Ida Lewis Yacht Club CRMC File # 2017-09-078

CRMC Section 300.3 D 5(b)

(i) The deck is to accommodate a designated priority use for the water area.

The deck extension will abut an existing 20' X 20' junior sailing building and will align with the small deck off this building allowing for far better utilization of this area for junior sailing instruction. The additional space will also accommodate the administrative and social requirements on site for the numerous sailing regattas the Club hosts.

(ii) The applicant has examined all reasonable alternatives and the council has determined that the selected alternative is the most reasonable.

The Ida Lewis Yacht Club is located on a small rock island in Newport Harbor. If the Club is to continue to have a strong junior sailing program and continue an eighty year history of hosting major sailing regattas there is no alternative except to expand its existing deck that surrounds the club house on three sides. Water depth off the west and north decks drops off quickly. The expansion of the deck on the east side is preferable as it will be over gravel and rock that is accessible at low tide and removed from any boating activity. It will also provide additional direct access to the junior sailing building.

(iii) The deck is the minimum necessary to support the priority use.

The width of the proposed deck extension is designed to tie in with the existing deck on the junior sailing building. The length is the same as the existing deck on the east side on the main club house.

Public Access Plan Proposal for the Ida Lewis Deck Extension

The Ida Lewis yacht Club, working with the Newport Harbor Master, Tim Mills, has an agreement with the City of Newport to pay for the construction of a kayak rack in the Southeast corner of Newport Harbor. The location of the rack will be the very east end of Kings Park, on the Newport Harbor Walk, adjacent to the Wellington Resort. The rack will be the same as the existing rack maintained by the City in the area of the Stone Pier, measuring approximately 36 feet in length and hold approximately 30 kayaks or other simple watercraft. The rack will be owned and maintained by the City of Newport. Construction is expected to be completed by Memorial Day this year.

GENERAL NOTES:

1. PROPERTY LINES ARE NOT SHOWN. REFER TO TOWN LAND EVIDENCE RECORDS FOR INFORMATION.

2. EXISTING CONDITIONS PLAN INFORMATION WAS PROVIDED BY IDA LEWIS YACHT CLUB AND MAY NOT INCLUDE ALL UTILITIES AND SITE FEATURES. HYDROGRAPHIC INFORMATION SHOWN IS APPROXIMATE. PRIOR TO START OF WORK IN ORDER FOR THE CONTRACTOR TO ESTABLISH THE PROPER ELEVATIONS.

3. THIS PLAN WAS PRODUCED FOR PURPOSES OF EXTENDING AN EXISTING DDECK STRUCTURE.

4. ANY UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS. IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES, GRADES, AND DIMENSIONS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY DIG SAFE AND VERIFY EXACT LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO START OF ANY CONSTRUCTION. REPORT TO THE ENGINEER ALL OBSERVATIONS AND DISCREPANCIES BEFORE PROCEEDING WITH ANY WORK.

5. ALL WORK SHALL COMPLY WITH LOCAL LAWS AND STATUTES AND THE REQUIREMENTS AND CONDITIONS OF ALL REGULATORY PERMITS ISSUED FOR THE WORK.

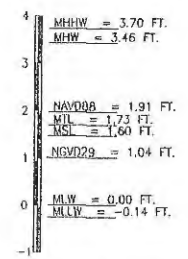
6. THESE DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE PROJECT REGULATORY PERMITS AND ALL CONDITIONS OF THOSE PERMITS. THE CONTRACTOR IS ADVISED THAT THE REGULATORY PERMITS FOR THIS PROJECT MAY CONTAIN ADDITIONAL REQUIREMENTS THAT SUPERSEDE THE DRAWING NOTES. THE CONTRACTOR IS FURTHER ADVISED THAT IN THE CASE OF ANY DISCREPANCIES WITHIN THE CONTRACT DOCUMENTS FOUND BEFORE CONSTRUCTION, THE FINAL DECISION AS TO WHAT INFORMATION TAKES PRECEDENCE WILL BE MADE BY THE ENGINEER OF RECORD ON THE BASIS OF THAT INTENT.

7. ALL EXISTING CONDITIONS AND DIMENSIONS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION AND FABRICATION OR ORDERING OF ANY CONSTRUCTION MATERIALS.

8. ALL SECTIONS AND DETAILS APPLY TO SAME AND SIMILAR CONDITIONS UNLESS SPECIFICALLY NOTED OTHERWISE HEREIN.

9. THE CONTRACTOR SHALL SAFEGUARD AND PROTECT ALL EXCAVATIONS. DAMAGE TO ANY PROPERTY, PRIVATE OR OF PUBLIC TRUST, OCCURRING DURING THE CONSTRUCTION BY THE CONTRACTOR, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AT THE EXPENSE OF THE CONTRACTOR.

10. ALL ELECTRICAL WORK SHALL BE PERFORMED BE A RI. LICENSED ELECTRICIAN LAW. WITH THE NATIONAL ELECTRIC CODE AND RI. BUILDING CODE.



NEWPORT TIDAL DATUM

ABBREVIATIONS

N. I. C.	NOT IN CONTRACT
U. O. N.	UNLESS OTHERWISE NOTED
N. T. S.	NOT TO SCALE
I. A. W.	IN ACCORDANCE WITH
TYP.	TYPICAL
R & D	REMOVE AND DISPOSE
BIT.	BITUMINOUS CONCRETE
T. O. F.	TOP OF FOUNDATION
T.B.D.	TO BE DETERMINED
EXTG.	EXISTING
HDG	HOT DIPPED GALVANIZED
S.S.	STAINLESS STEEL
H.H.	HEAVY HEX

RICHARD N. ST. JEAN
STATE OF RHODE ISLAND
No. 4997
REGISTERED PROFESSIONAL ENGINEER
11/8/17

IDA LEWIS YACHT CLUB OUTSIDE DECK EXTENSION P.O. Box 479, Newport, Rhode Island 02840 Tel: (401)846-1969 Fax: (401) 846-8234	Designed By: RBJ Date: 11/8/2017 Scale: AS NOTED Revisions: No. / Date
ST. JEAN ENGINEERING, LLC Marine & Structural Engineering 1145 Middle Rd., East Greenwich, RI 02818 Tel/Fax: (401)398-0999	Sht. 1 of 6

TIMBER PILES:

1. ALL NEW PILES SHALL CONFORM WITH THE FOLLOWING :
   - TIMBER, TREATED WITH CHROMATED COPPER ARSENATE (MINIMUM RETENTION OF 2.5 CCA)
   - ALL HOLES OR CUTS MADE IN PILES SHALL BE DRESSED WITH CCA.
   - SOUTHERN YELLOW PINE CONFORMING TO THE FOLLOWING MINIMUM

ALLOWABLE STRESSES AS DETERMINED IN ACCORDANCE WITH ASTM D-2899
COMPRESSION PARALLEL TO THE GRAIN, Fc - 1250 PSI
EXTREME FIBER STRESS IN BENDING Fb - 2,450 PSI
HORIZONTAL SHEAR Fv - 115 PSI
COMPRESSION PERPENDICULAR TO THE GRAIN Fc - 230 PSI

2. PILES SHALL CONFORM TO THE PHYSICAL CHARACTERISTICS OF ROUND TIMBER PILES AS DESCRIBED IN ASTM D-25. MINIMUM BUTT DIAMETER SHALL BE 12" MINIMUM (10" TIP). SPECIES SHALL BE SOUTHERN YELLOW PINE .

   - SEE PLANS FOR CUT OFF ELEVATIONS.
   - DESIGN PILE CAPACITY IS 6 TONS UNDER THE CENTER PILE CAPS, 4 TONS UNDER OUTBOARD PIER PILES.

3. PILE TOLERANCES:
   - BUTT MUST BE WITHIN 2" OF HORIZONTAL LOCATION.

4. CONTRACTOR SHALL NOTIFY THE ENGINEER A MINIMUM OF 48 HOURS IN ADVANCE PRIOR TO DRILLING PILE SOCKETS. PILE SOCKETS SHALL BE DRILLED IN SOUND BEDROCK.

5. IF CONTRACTOR MAY INSTALL FIBERGLASS JACKETED PIERS SHOWN ON SHEET 5 OF 6 IN LIEU OR TIMBER PILES IN ROCK SOCKETS.

6. ALL THE HARDWARE BEING USED SHALL BE HOT DIPPED GALVANIZED (HDG) FOR EXTERIOR, HIGH HUMIDITY (MIN. 4 MIL THICKNESS FOR MARINE ENVIRONMENT), AND TREATED WOOD LOCATIONS. CLIPS, HANGERS, ANGLES AND OTHER HARDWARE REQUIRING FABRICATION SHALL BE FABRICATED COMPLETE WITH HOLES AND WELDING PRIOR TO HOT DIP GALVANIZING. HOT DIPPED GALVANIZING SHALL BE IN ACCORDANCE WITH ASTM A123 FOR PLATES AND FABRICATIONS AND ASTM A153 FOR BOLTS AND BOLTING HARDWARE. SEE PLANS FOR ADDITIONAL INFORMATION.

TIMBER FRAMING:

1. ALL TIMBER WORK SHALL BE IN ACCORDANCE WITH THE NATIONAL FOREST PRODUCTS ASSOCIATION NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION.

2. ALL TIMBER FRAMING SHALL BE STRESS GRADED LUMBER HAVE THE FOLLOWING STRUCTURAL PROPERTIES (U.O.N.):

   - SOUTHERN YELLOW PINE: (#1 OR SELECT STRUCTURAL)
     Fb = 1,400 PSI
     Fv = 110 PSI

3. ALL FRAMING MEMBERS AND DECKING SHALL BE TREATED WITH WOOD PRESERVATIVE (PRESSURE TREATMENT): FS TT-W-571 AWPA TREATMENT C2 USING CHROMATED COPPER ARSENATE (0.6 CCA MINIMUM RETENTION) OR A.C.Q. ALL HOLES AND CUTS SHALL BE DRESSED WITH CCA. CROSS BRACING SHALL BE TREATED USING WITH A 2.5 CCA MINIMUM RETENTION.

4. ALL THREADED FASTENERS AND ANCHORS SHALL BE HOT DIPPED GALVANIZED STEEL FOR EXTERIOR, HIGH HUMIDITY (4 MILS FOR MARINE ENVIRONMENT) TO ASTM 123 AND TREATED WOOD LOCATIONS. BOLTS SHALL CONFORM TO A307 GRADE A W/HEAVY HEX NUTS AND HOT DIPPED GALVANIZED (HDG) OGEE OR DOCK STEEL WASHERS AS SPECIFIED ON DRAWINGS. BOLT HOLES SHALL BE A MAXIMUM OF $\frac{1}{8}$" LARGER THAN BOLT DIAMETER SPECIFIED.

5. ALL NAILS & SCREWS SHALL BE AS SPECIFIED ON DRAWINGS (4 GAUGE SILICON BRONZE OR STAINLESS STEEL GRADE 316 UNLESS OTHERWISE SPECIFIED). PRE-DRILL UNDERSIZE HOLES FOR NAILS THROUGH TOP PLY ONLY.

6. ALL TIMBER SIZES ARE NOMINAL UNLESS OTHERWISE NOTED.

7. PILE CAPS SHALL SIT SQUARELY INTO BEARING PILES OR CONCRETE PIERS.

8. ALL TIMBER FRAMING USED IN THE PROJECT SHALL BE STRAIGHT IN BOTH LONGITUDINAL PLANES WITH NO OR MINIMAL TWIST. TIMBER SHALL BE INSPECTED FOR CROWN PRIOR TO INSTALLATION BY THE CONTRACTOR AND INSTALLED CROWN UP WHERE SLIGHT CROWN EXISTS. JOINTS SHALL BE SAW CUT AND ACCURATELY AND TIGHTLY FITTED. THE ENGINEER RESERVES THE RIGHT TO REJECT TIMBER MEMBERS AND FINISH CONSTRUCTION OF TIMBER ASSEMBLIES WHERE IN THE OPINION OF THE ENGINEER THE DESIGN INTENT OF THE STRUCTURE WOULD BE COMPROMISED DUE TO THE FAULTY TIMBER, JOINTING, AND OR CONSTRUCTION PRACTICES.

CAST-IN-PLACE CONCRETE

1. CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 301 AND ACI 350/350R, LATEST EDITION.

2. 28 DAY COMPRESSIVE STRENGTH OF STRUCTURAL CONCRETE SHALL BE 5000 PSI.

3. PORTLAND CEMENT: ASTM C150, TYPE II

4. AIR ENTRAIN ALL CONCRETE FROM 5 TO 7%.

5. NO CHLORIDES SHOULD INTENTIONALLY BE ADDED. TOTAL WATER SOLUBLE CHLORIDE ION (CI) CONTENT OF THE CONCRETE PRIOR TO EXPOSURE SHOULD NOT EXCEED 0.10 PERCENT BY WEIGHT OF THE CEMENT FOR NORMAL REINFORCED CONCRETE AND 0.06 PERCENT BY WEIGHT FOR PRESTRESSED CONCRETE.

6. WATER-CEMENT RATIOS AND COMPRESSIVE STRENGTHS FOR STRUCTURAL CONCRETE SHALL BE AS FOLLOWS:

ZONE	MAX W/C RATIO	MIN. 28 DAY CYLINDER COMPRESSIVE STRENGTH
SPLASH	0.40	5000 PSI

MAXIMUM SLUMP SHALL BE 4".

7. REINFORCING STEEL SHALL BE ASTM A615 GR 60 AND SHALL BE HOT DIPPED GALVANIZED. RECOMMENDED NOMINAL CONCRETE COVER OVER REINFORCEMENT SHALL BE AS FOLLOWS:

ZONE	COVER OVER REINFORCING STEEL	COVER OVER ELECTRIC DUCTS
*SPLASH	2.5 In. (65 mm)	3 In. (90 mm)

*NOTE: SPLASH ZONE INCLUDES ATMOSPHERIC ZONE SUBJECT TO SALT SPRAY.

8. REINFORCING STEEL DRILLED AND EPOXY GROUTED INTO BEDROCK SHALL BE STAINLESS STEEL A955 GRADE 60.

9. IN HOT WEATHER CONCRETE SHALL BE PROTECTED IN ACCORDANCE WITH ACI 305R. IN COLD WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 306.

10. THE REPAIRING OF DAMAGED OR ABRADED SURFACES OF THE EPOXY COATING SHALL BE DONE WITH THE EPOXY MATERIAL OF THE SAME TYPE USED FOR THE INITIAL APPLICATION; OR OTHER MATERIAL RECOMMENDED FOR THIS PURPOSE BY THE MANUFACTURER OF THE COATING MATERIALS AND APPROVED BY THE OWNER. REPAIR COATINGS SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS AND DIRECTIONS.

STEEL FABRICATIONS

ALL WELDING SHALL CONFORM TO THE "STRUCTURAL WELDING CODE FOR STEEL" LATEST EDITION, AS ADOPTED BY THE AMERICAN WELDING SOCIETY (AWS). ALL WELDING SHALL BE PERFORMED BY A CERTIFIED WELDER IN ACCORDANCE WITH AWS STANDARDS.

STRUCTURAL STEEL MATERIALS SHALL MEET THE FOLLOWING REQUIREMENTS:

STEEL SECTIONS AND MISC: ASTM A572 GRADE 50 UNLESS OTHERWISE NOTED

BOLTS: ASTM A307 GRADE A WITH HEAVY HEXAGONAL HEADS

NUTS: ASTM A307 GRADE A WITH HEAVY HEXAGONAL HEADS

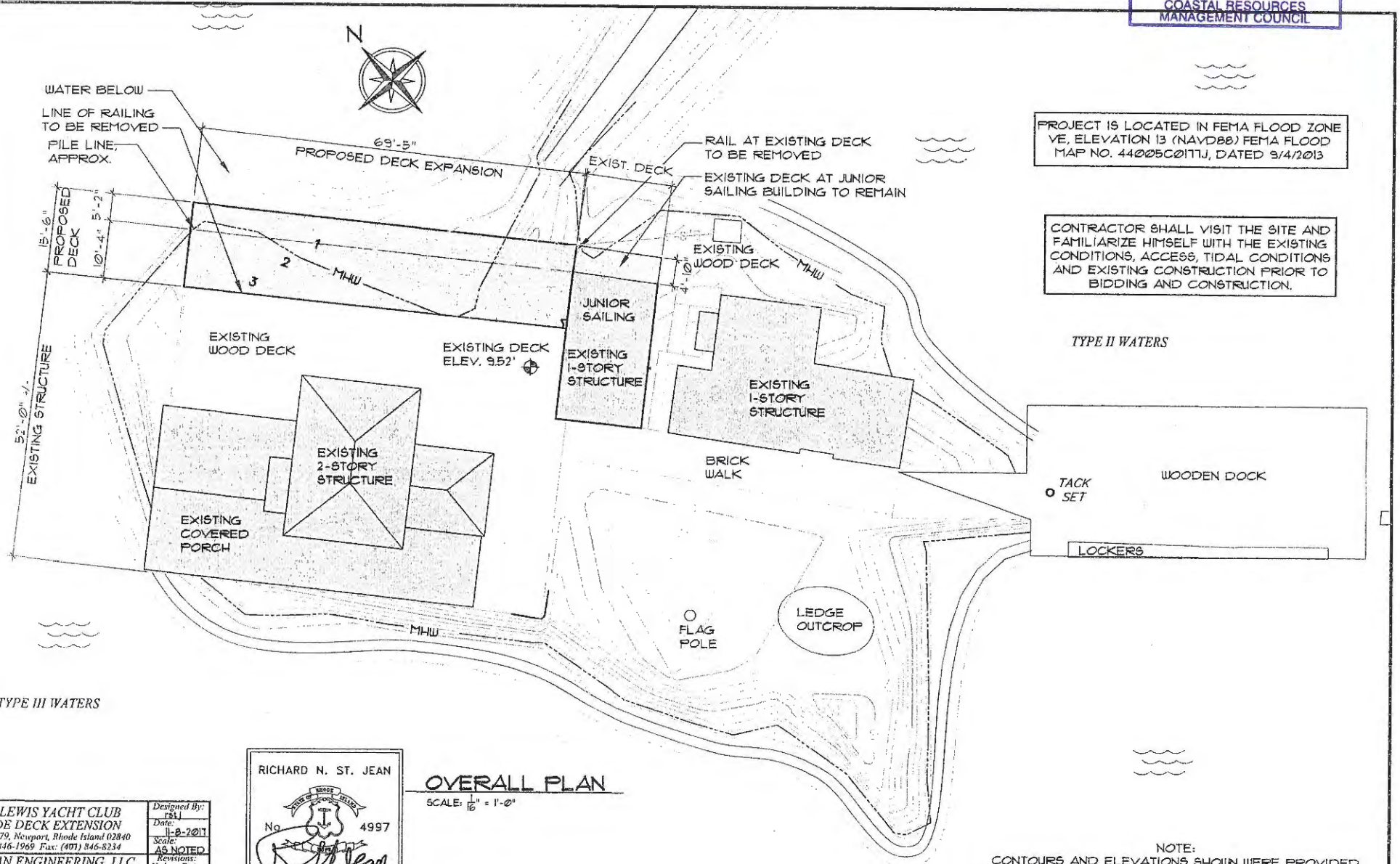
WASHERS: ASTM F436 OVERSIZED DOCK WASHERS OR OGEE WASHERS AS INDICATED ON THE PLANS

WELD RODS: ASTM A233, E70XX SERIES ELECTRODES AS REQ'D FOR CONDITIONS OF INTENDED USE

BOLTS, NUTS, & WASHERS: ALL BOLTS, NUTS, AND WASHERS SHALL BE HOT DIPPED GALVANIZED FOR EXTREME SERVICE (4 MILS THICKNESS) IN ACCORDANCE WITH ASTM A153 AND MEET MINIMUM TESTS OF ASTM A239.

CLIPS, HANGERS, ANGLES AND OTHER HARDWARE REQUIRING FABRICATION SHALL BE FABRICATED COMPLETE WITH HOLES AND WELDING PRIOR TO HOT DIP GALVANIZING. HOT DIPPED GALVANIZING SHALL BE IN ACCORDANCE WITH ASTM A123 FOR PLATES AND FABRICATIONS AND ASTM A153 FOR BOLTS AND BOLTING HARDWARE. SEE PLANS FOR ADDITIONAL INFORMATION.

P31



PROJECT IS LOCATED IN FEMA FLOOD ZONE VE, ELEVATION 13 (NAVD88) FEMA FLOOD MAP NO. 44005C0177J, DATED 9/4/2013

CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS, ACCESS, TIDAL CONDITIONS AND EXISTING CONSTRUCTION PRIOR TO BIDDING AND CONSTRUCTION.

OVERALL PLAN

SCALE: 1/16" = 1'-0"

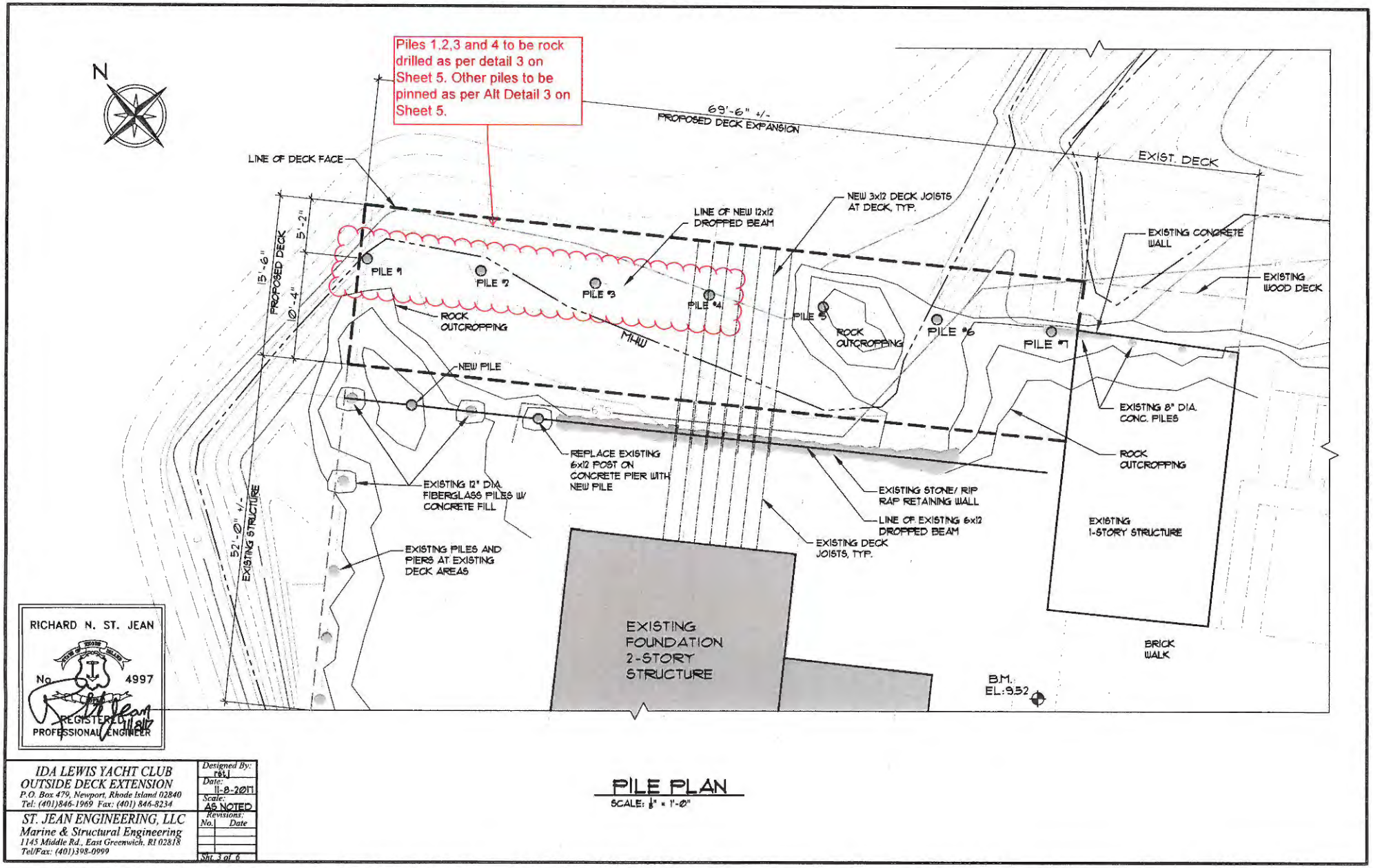
NOTE:
CONTOURS AND ELEVATIONS SHOWN WERE PROVIDED BY IDA LEWIS YACHT CLUB. CONTRACTOR TO VERIFY PRIOR TO START OF WORK.

IDA LEWIS YACHT CLUB
OUTSIDE DECK EXTENSION
P.O. Box 479, Newport, Rhode Island 02840
Tel: (401)846-1969 Fax: (401) 846-8234

ST. JEAN ENGINEERING, LLC
Marine & Structural Engineering
1145 Middle Rd., East Greenwich, RI 02818
Tel/Fax: (401)398-0999

Designed By: RSJ
Date: 11-8-2017
Scale: AS NOTED
Revisions: No. | Date
Sht. 2 of 6

RICHARD N. ST. JEAN
No. 4997
REGISTERED PROFESSIONAL ENGINEER
11/8/17



RICHARD N. ST. JEAN
No. 4997
REGISTERED PROFESSIONAL ENGINEER
11/8/11

IDA LEWIS YACHT CLUB
OUTSIDE DECK EXTENSION
P.O. Box 479, Newport, Rhode Island 02840
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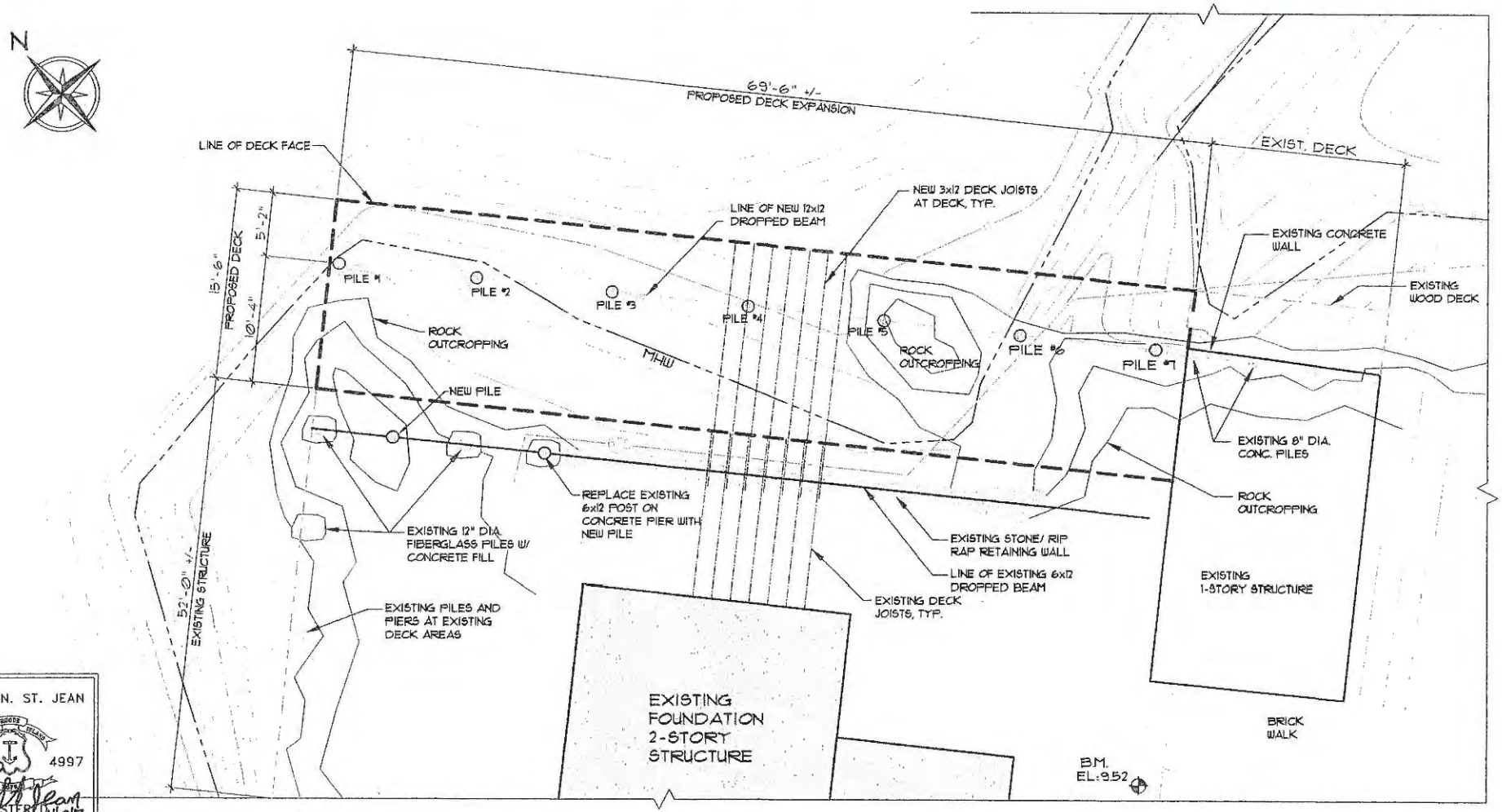
Tel/Fax: (401)398-0999

Designed By:	
Date:	11-8-2011
Scale:	AS NOTED
Revisions: No.	Date
Sht. 3 of 6	

PILE PLAN
SCALE: 1/8" = 1'-0"



RICHARD N. ST. JEAN
No. 4997
REGISTERED
PROFESSIONAL ENGINEER
11/8/17

IDA LEWIS YACHT CLUB
OUTSIDE DECK EXTENSION
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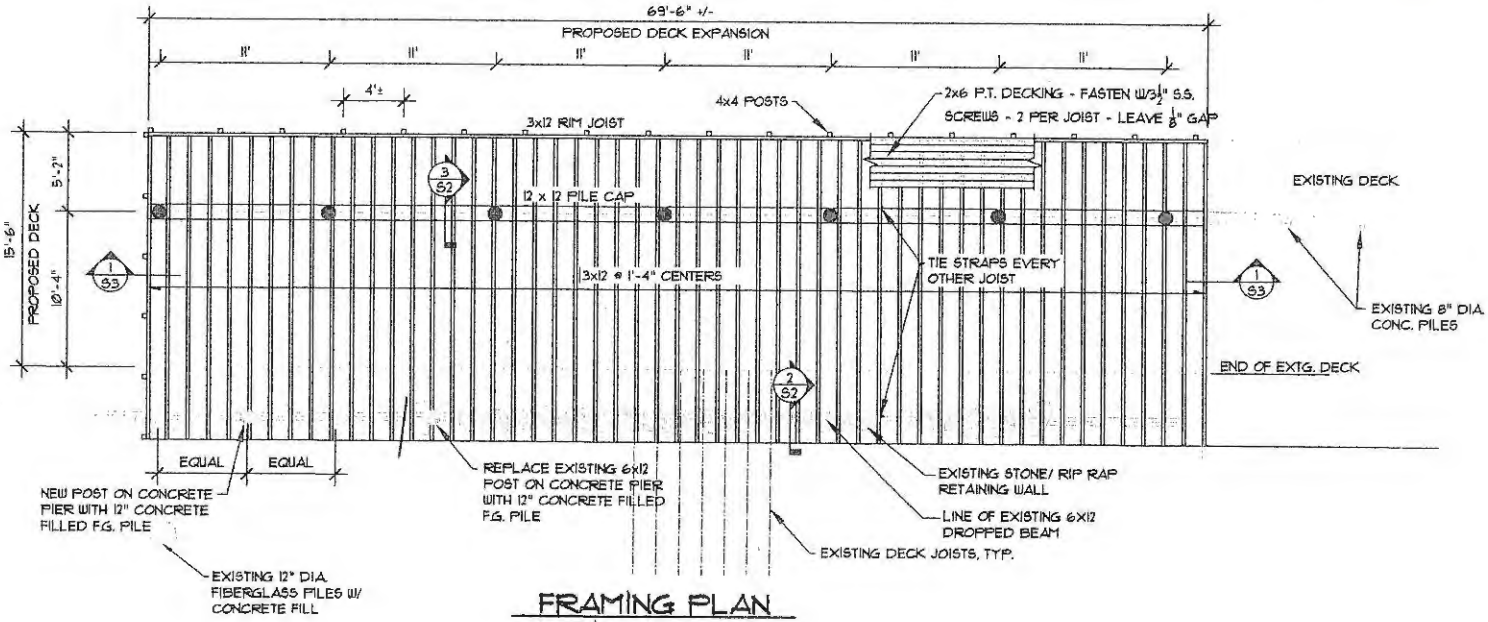
Designed By: RSJ
Date: 11-8-2017
Scale: AS NOTED
Revisions:
No. | Date
Sht. 1 of 6

PILE PLAN

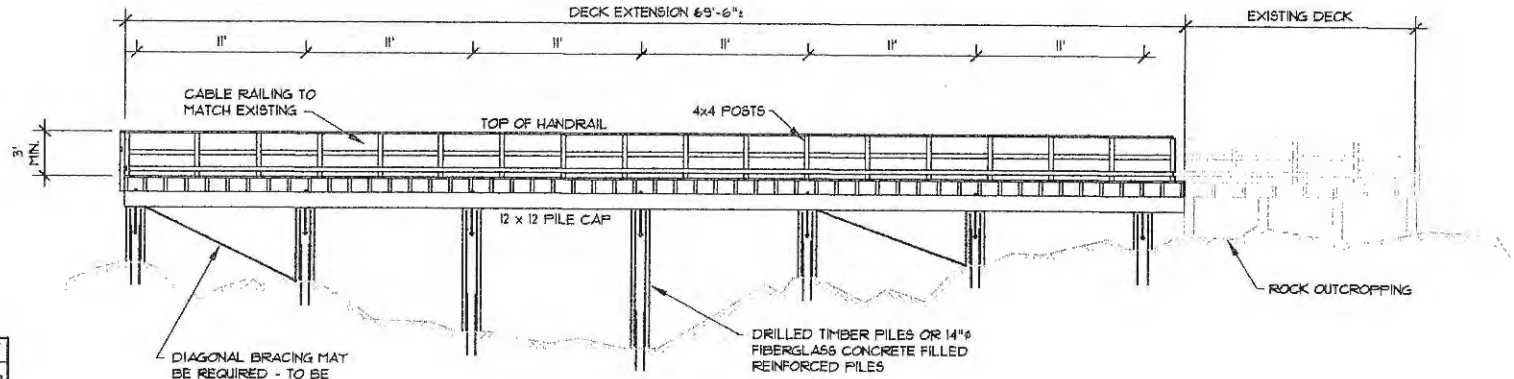
SCALE: 1/8" = 1'-0"

P34



FRAMING PLAN

SCALE: ⅛" = 1'-0"

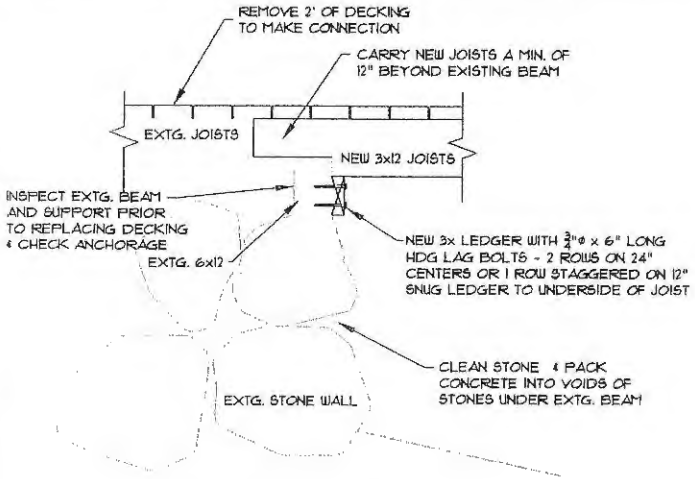


SECTION 1-1

SCALE: ⅛" = 1'-0"

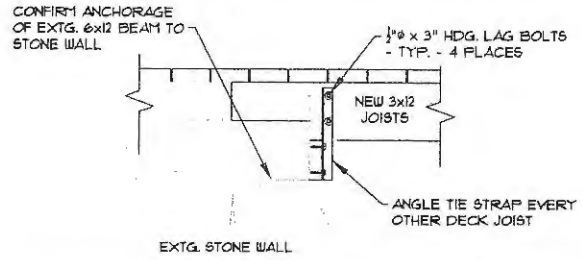
RICHARD N. ST. JEAN
No. 4997
REGISTERED PROFESSIONAL ENGINEER
11/8/17

IDA LEWIS YACHT CLUB OUTSIDE DECK EXTENSION P.O. Box 479, Newport, Rhode Island 02840 Tel: (401)846-1969 Fax: (401) 846-8234	Designed By: rstj Date: 11-8-2017 Scale: AS NOTED Revisions: No. / Date Sht. 1 of 5
ST. JEAN ENGINEERING, LLC Marine & Structural Engineering 1145 Middle Rd., East Greenwich, RI 02818 Tel/Fax: (401)398-0999	



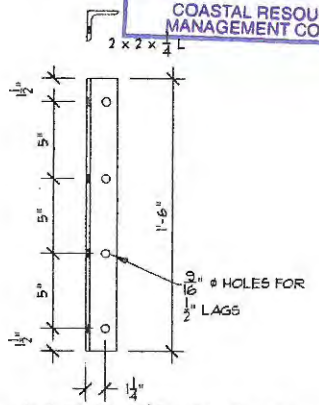
SECTION - 2

SCALE: ½" = 1'-Ø"



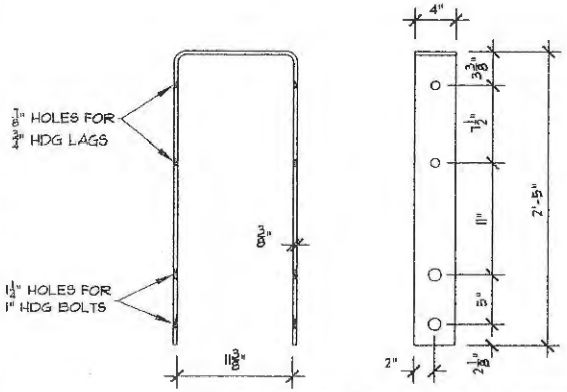
NEW DECK JOISTS TO EXTG. 6x12 BEAM CONNECTION DETAIL

SCALE: ½" = 1'-Ø"



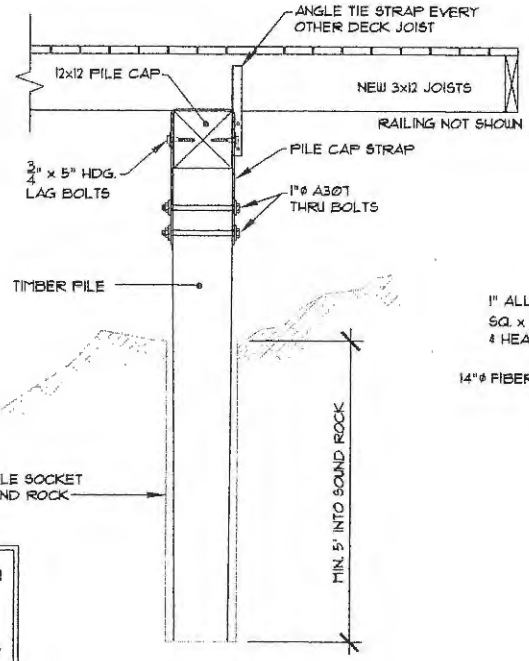
TYP. ANGLE TIE STRAP

SCALE: 1½" = 1'-Ø"



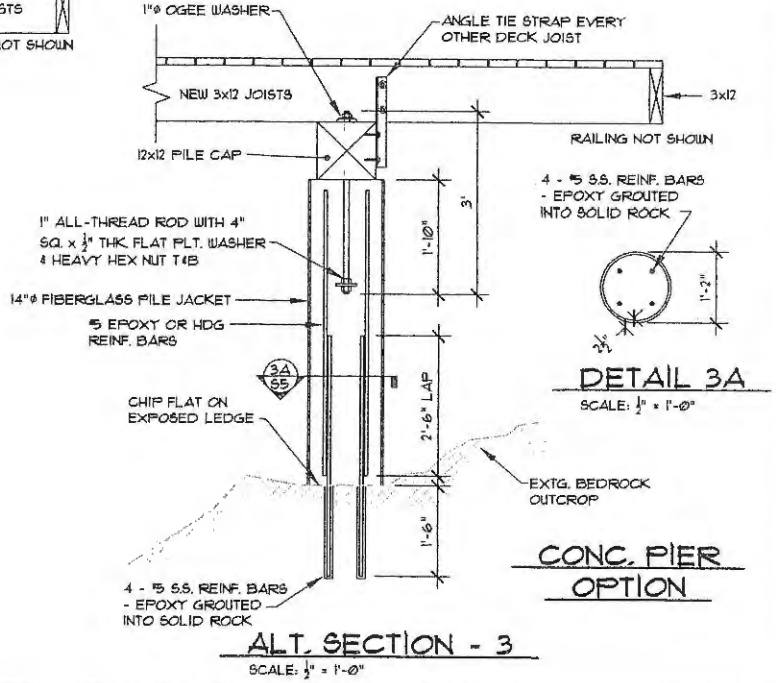
PILE CAP STRAP

SCALE: 1" = 1'-Ø"



SECTION - 3

SCALE: ½" = 1'-Ø"



DETAIL 3A

SCALE: ½" = 1'-Ø"

CONC. PIER OPTION

ALT. SECTION - 3

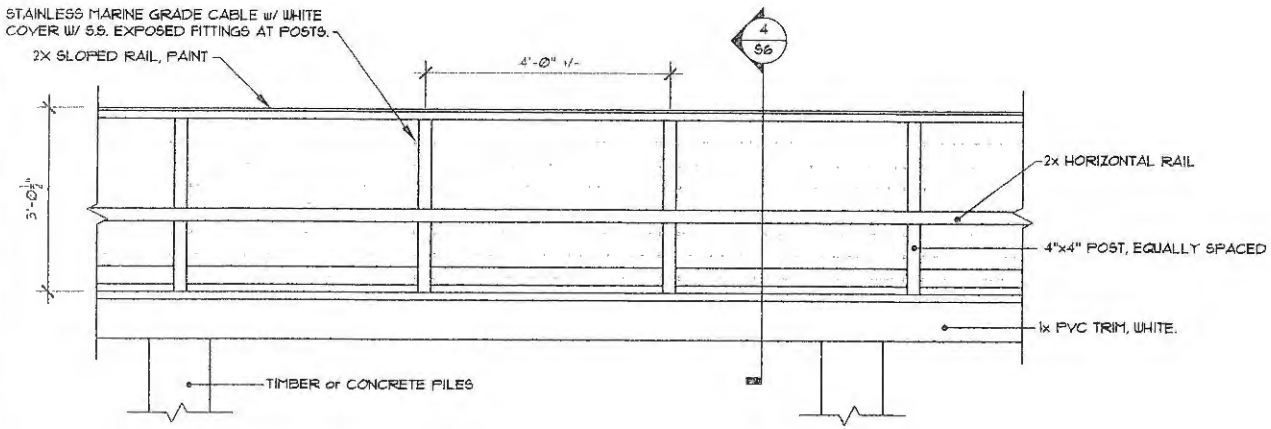
SCALE: ½" = 1'-Ø"

IDA LEWIS YACHT CLUB
OUTSIDE DECK EXTENSION
P.O. Box 479, Newport, Rhode Island 02840
Tel: (401)846-1969 Fax: (401) 846-8234

ST. JEAN ENGINEERING, LLC
Marine & Structural Engineering
1145 Middle Rd., East Greenwich, RI 02818
Tel/Fax: (401)398-0999

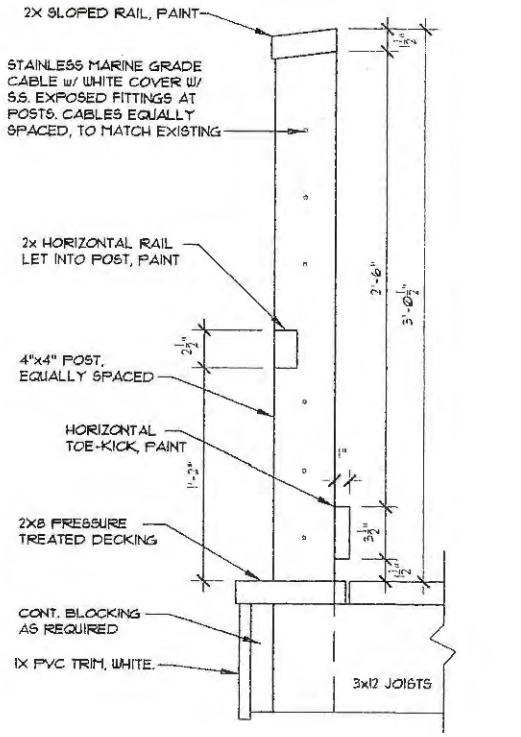
Designed By: rsj
Date: 11-8-2017
Scale: AS NOTED
Revisions: No. | Date
Sht. 3 of 6

RICHARD N. ST. JEAN
No. 4997
REGISTERED PROFESSIONAL ENGINEER



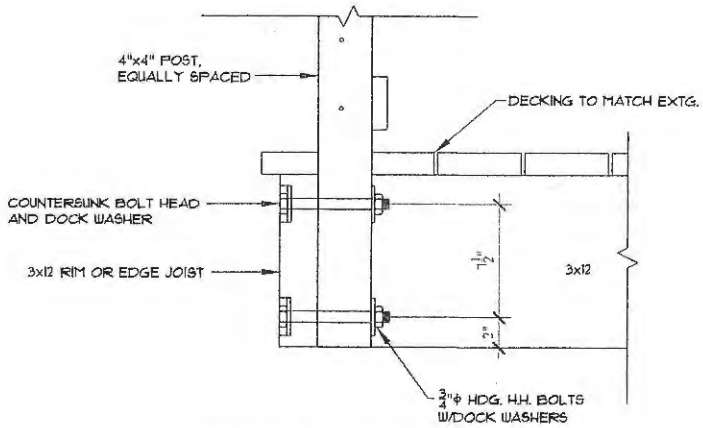
RAIL ELEVATION

SCALE: ½" = 1'-Ø"



SECTION 4 TYP. DECK RAIL

SCALE: ½" = 1'-Ø"



DECK POST TO FRAMING

SCALE: ½" = 1'-Ø"

RICHARD N. ST. JEAN
No. 4997
REGISTERED PROFESSIONAL ENGINEER

IDA LEWIS YACHT CLUB OUTSIDE DECK EXTENSION P.O. Box 479, Newport, Rhode Island 02840 Tel: (401)846-1969 Fax: (401) 846-8234	Designed By: RSLJ Date: 11-8-2017 Scale: AS NOTED
ST. JEAN ENGINEERING, LLC Marine & Structural Engineering 1145 Middle Rd., East Greenwich, RI 02818 Tel/Fax: (401)398-0999	Revisions: No. Date Sht. 6 of 6

Dave Reis

From: gary.h.lash@wellsfargoadvisors.com
Sent: Wednesday, February 07, 2018 8:34 AM
To: dreis@crmc.ri.gov
Cc: tscott@millerscott.com
Subject: Ida Lewis Yacht Club Deck Extension
Attachments: Ida Lewis Yacht ClubCRMC File.docx

Hi Dave,
Attached are responses to the specific criteria requested in CRMC section 300.3 D 5(b). Hopefully this is the format that you need. If not, please let me know and I will redo it or add to it. I tried to keep this brief as the need for the extension and reasons for the location have been addressed in additional correspondence that has been provided to you.
Gary

Gary H. Lash
First Vice President - Investment Officer
The Yalanis/Lash Wealth Management Group of Wells Fargo Advisors
Gary.Lash@wellsfargoadvisors.com
21 John Clarke Road
Middletown RI 02842
Office: 401-848-9949
Toll Free: 888-848-9738
Fax: 401-847-0329

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) 783-3767

MEETING NOTICE

February 16, 2018

Site Address: 170 Wellington Avenue; plat 42; lots 11,12,13
Site Town: Newport
Proj. Desc: Expand existing deck at Ida Lewis Yacht Club

The application for State Assent of **Ida Lewis Yacht Club** CRMC File Number **2017-09-078** will be reviewed at the next meeting of the Coastal Resources Management Council. If you are the applicant, it is necessary that you be present at the meeting to answer any questions that may arise. Please be advised that a copy of the CRMC staff engineer and biologist reports may be obtained from the CRMC offices in Wakefield for the applicant or his/her attorney. Interested parties may attend and present evidence for or against, or for informational purposes in accordance with CRMC rules. Parties interested in this matter are encouraged to review the latest information contained in this file and also should refer to Management Procedures 5.3(8) among others for additional information.

The meeting is to be held at **6:00 p.m.** ***(please be advised that the CRMC Educational series begins at 6:00 p.m.)*** on **Tuesday, February 27, 2018** in **Conference Room A, at the Administrative Building, One Capitol Hill, Providence, RI**. Evidence or testimony regarding this case may be submitted at the time of the meeting (see CRMC Management Procedures). The CRMC office policy for public review of files scheduled for review by the full Council states that they are available to the public until 12:00 p.m. on the day of the meeting. **Please confirm application's hearing status via CRMC website (www.crmc.ri.gov) or by calling 401-783-3370.**

Parties interested in/or concerned with the above mentioned matter are invited to be present and/or represented by counsel at the above mentioned time and place. This meeting place is accessible to individuals with disabilities. The meeting location is accessible to handicapped persons. Any individual requiring a reasonable accommodation in order to participate in this meeting should contact CRMC offices at least 72 hours prior to the meeting.

Sincerely yours,

Lisa Turner

Lisa A. Turner, Office Manager
Coastal Resources Management Council

/lat

Mailing List for CRMC File No. 2017-09-078
Ida Lewis Yacht Club

Ida Lewis Yacht Club
c/o Turner Scott
122 Touro Street
Newport, RI 02840

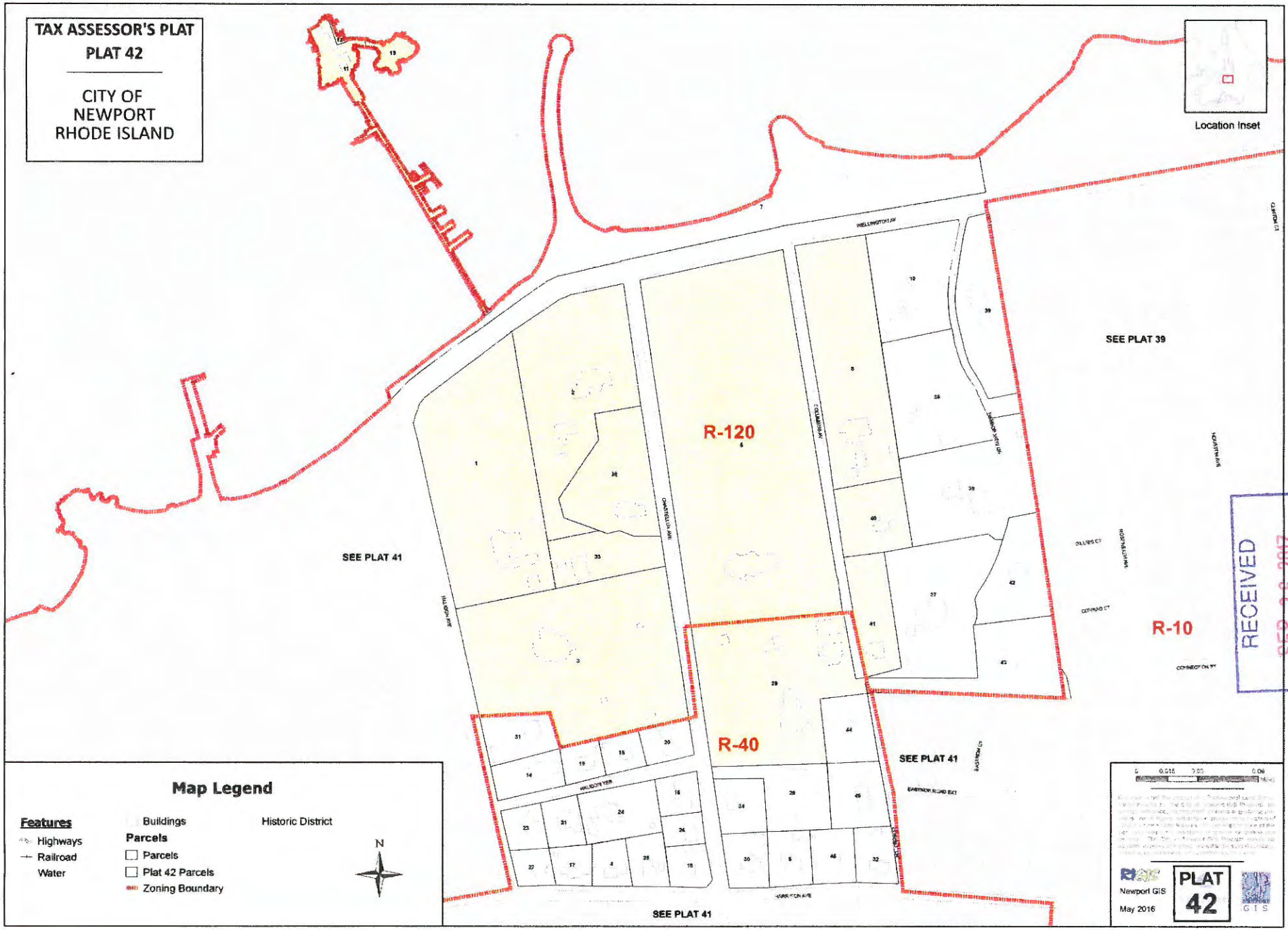
Ida Lewis Yacht Club
170 Wellington Ave
Newport, RI 02840

Halidon House Partners, LLC
c/o Compass Management
P O Box 684
Newport, RI 02840

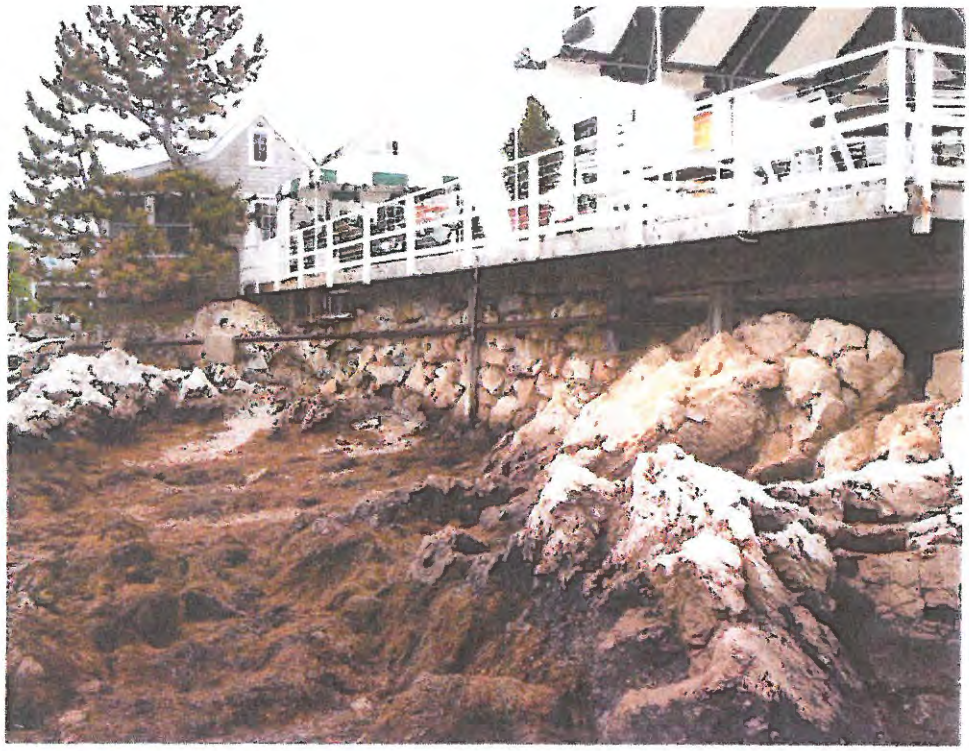
Harbor Watch LLC
P O Box 682
Newport, RI 02840

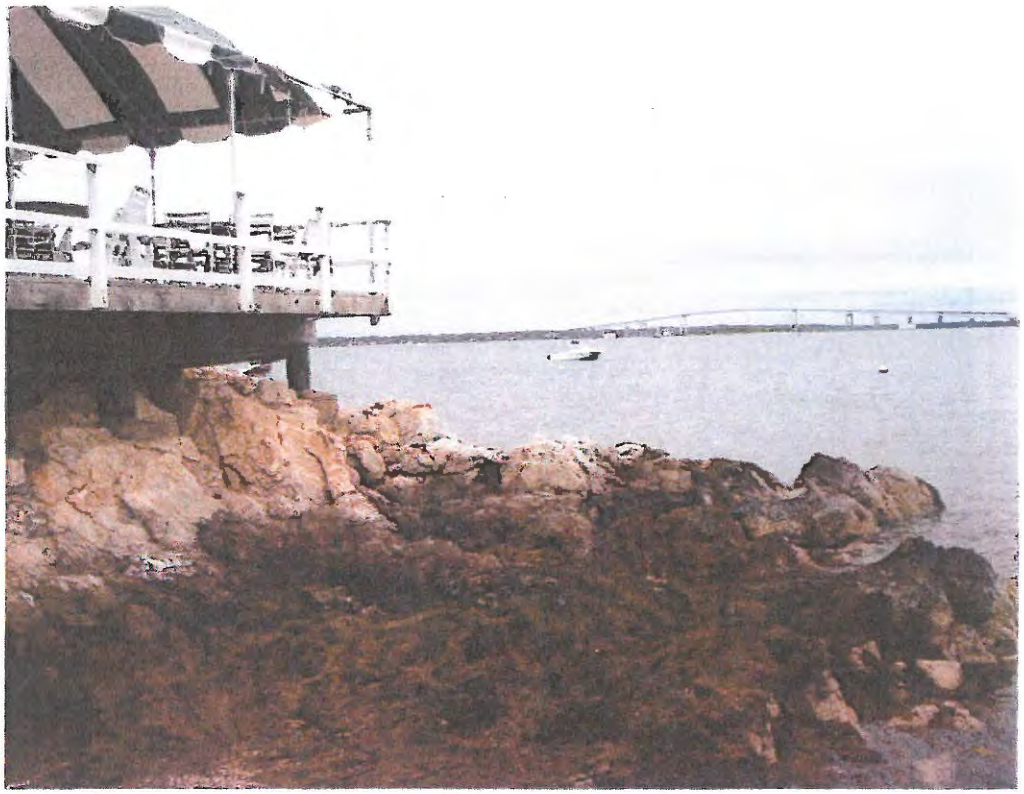
City of Newport
Newport City Hall
43 Broadway
Newport, RI 02840

CRMC (2017-09-078)
O. S. Government Center
4808 Tower Hill Road, Rm 116
Wakefield, RI 02879



IDA LEWIS YACHT CLUB
9/20/17





IDA LEWIS YACHT CLUB
9/20/17

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
HISTORICAL PRESERVATION & HERITAGE COMMISSION
Old State House • 150 Benefit Street • Providence, R.I. 02903-1209
TEL (401) 222-2678 FAX (401) 222-2968
TTY / Relay 711 Website www.preservation.ri.gov

17 October 2017

Jennifer R. Cervenka, Chair
Coastal Resources Management Council
Oliver H. Stedman Government Center
4808 Tower Hill Road
Wakefield, Rhode Island 02879

Re: CRMC File Number 2017-09-078
Ida Lewis Yacht Club
170 Wellington Avenue
Newport, Rhode Island

Dear Ms. Cervenka:

The Rhode Island Historical Preservation and Heritage Commission (RIHPHC) staff has reviewed the Application for State Assent for the referenced project. The subject property includes the Ida Lewis Lighthouse Keeper's residence, which is listed on the National Register of Historic Places.

The project consists of constructing an addition to the existing eastern deck. New construction will not physically impact the Lighthouse Keeper's residence.

It is the RIHPHC's conclusion that the project will have no adverse effect on historic properties; therefore, we have no objections to the project.

These comments are provided in accordance with Section 220 of the Coastal Resources Management Council. If you have any questions, please contact Glenn Modica, Project Review Coordinator, or Charlotte Taylor, Staff Archaeologist of this office.

Very truly yours,

for Jeffrey D. Emidy
Acting Executive Director
Deputy State Historic Preservation Officer

171017.02grm

RECEIVED
OCT 25 2017
COASTAL RESOURCES MANAGEMENT COUNCIL

CITY OF NEWPORT
CITY MANAGER
Joseph J. Nicholson, Jr., Esq.

February 15, 2018

Grover Fugate, Executive Director
Coastal Resources Management Council
Oliver H. Stedman Government Center
4808 Tower Hill Road
Wakefield, RI 02879

Re: CRMC File No: 2017-09-078
Application of Ida Lewis Yacht Club
c/o Turner Scott, 122 Touro Street, Newport, RI 02840

Dear Mr. Fugate:

The Newport City Council, at its regular meeting of February 14, 2018 considered the above referenced, enclosed communication, as well as the comments of the Newport Planning Board and Waterfront Commission.

The City Council voted not to object to the project as submitted.

We thank you for extending the comment period to provide the Council an opportunity to review the recommendations of the Planning Board and the Waterfront Commission and comment.

Sincerely,

Joseph J. Nicholson, Jr.
City Manager

/paf
Enclosure
By fax: 783-3767

cc: City Planner
Harbormaster
Chairman, Waterfront Commission
Chairman, Planning Board
T. Scott, Esq., Attorney for Applicant

CRMC DECISION WORKSHEET
2017-11-054
McInnis USA, Inc.

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
2017-11-054	Providence	39 New York Avenue Plat 56 Lot 350,351,352,355	B	☐	☐

Owner Name and Address		
Date Accepted	McInnis USA, Inc. Attn: Mark Newhart 850 Canal Street; 3rd floor Stamford, CT 06902	Work at or Below MHW ☐
Date Completed		Lease Required ☐

PROJECT DESCRIPTION

expansion of existing cement plant

KEY PROGRAMMATIC ISSUES

Coastal Feature:

Water Type: Type 6 , Commercial & Industrial Waters
CRMP: 1.2.1(F), 1.3.1.(A), 1.3.1(B), 1.3.1(C), 1.3.1(F)
SAMP: MetroBay SAMP - exempt

Variances and/or Special Exception Details:

Additional Comments and/or Council Requirements:

Specific Staff Stipulations (beyond Standard stipulations):

STAFF RECOMMENDATION(S)

Engineer **DRG** Recommendation: **Approval**
Biologist _____ Recommendation: _____
Other Staff _____ Recommendation: _____

Engineering Supervisor Sign-Off 2/5/2018 date

Supervising Biologist Sign-off date

Executive Director Sign-Off Feb 12 2018 date

Staff Sign-off on Hearing Packet (Eng/Bio) 2/4/2018 date

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
COASTAL RESOURCES MANAGEMENT COUNCIL
ENGINEERING REVIEW

TO: Grover J. Fugate, Executive Director Date: February 12, 2018
DEPT: Coastal Resources Management Council
FROM: Danni Goulet, PE
DEPT: CRMC Engineering Section

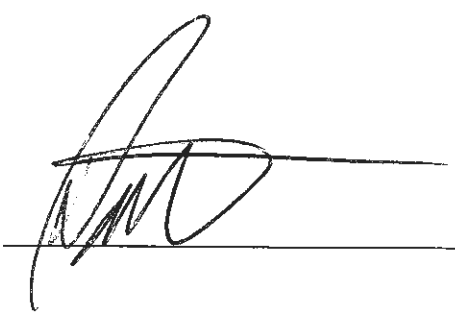
SUBJ: **CRMC File No.**: A2017-11-054
Owner: McInnis USA, Inc. McInnis USA, Inc.
Site Address: 39 New York Avenue Plat: 56 Lot: 350,351,352,355
Site Town: Providence
Project: Construction of a new 40,000MT Cement Storage dome and loadout structure

Water Type/Name: Type 6, Commercial and Industrial Waterfronts

Coastal Feature: Manmade Shoreline

Staff Comments/Recommendation:
The proposal includes the expansion of an existing cement importing facility. The work includes a 40,000 MT cement storage dome, a new truck loadout structure and a new electrical equipment building. There will also be work on existing pneumatic cement transfer pipes to allow filling of the new dome along with the existing storage facility. All of the work proposed is on previously developed impervious surfaces in the secure portion of ProvPort. This parcel/area is exempt from the Urban Coastal Geenway in the Metro Bay SAMP under section 140.4 which states that the rules shall not be applied to commercial port activities including bulk material or any area subject to MARSEC. This site/proposal has both of those elements and is therefore exempt.

The Councils goals for Type 6 waters among other things are to encourage modernization and increased commercial activity related to shipping. This project will allow an increase in cement transfer and storage from marine vessels as well as increase the throughput capability with more truck load out capacity. This proposal meets the goals and policies for Type 6 waters. The following table contains the Staff review of the remaining portions of the RICRMP.

Signed  **Staff Engineer**

Section Number	Section Title	Staff Review Comments
1.1.10	Climate Change and Sea Level Rise	The proposed structures are above the FEMA flood zone. The structures are lower than 1954 huricane Carol water surface elevations, however the structures will be impacted with 1'-2' feet of water. The proposed structures appear to be able to resume operations quickly after this modest level of flooding of non-critical portions. The proposal is for cement handling and loading, not a volatile material. It is staffs opinion that the proposal is appropriate for this area and meets the polices for this section of the RICRMP.
1.2.1(F)	Type 6 Industrial Waterfronts and Commercial Navigation Channels	This proposed expansion of an existing bulk cement marine terminal meets the policies for Type 6 water which is to support modernization and increased commercial activity related to shipping.
1.3.1(A)	Category B Requirements	The applicant provided complete responses for this section of the RICRMP. It is the opinion of Staff that the responses provided meet the requirements of the program.
1.3.1(B)	Filling, Removing, or Grading of Shoreline Features	The work proposed is set back form coastal feature more than 200 feet. There is earthwork that will require excavation and import of fill material but according to the information provided the total volume of material is less than 10,000 cubic yards.
1.3.1(C)	Residential, Commercial, Industrial, and Recreational Structures	The proposal is to expand an existing load out facility for the cement import terminal. This will allow for increased load out capacity. The facility has been designed to have critical elements be above the FEMA flood elevation for this location. It is the opinion of staff that this proposed facility and the applicants response to the policies and standards of this section of the RICRMP has been met.
1.3.1(F)	Treatment of Sewage and Stormwater	The applicant is working with RIDEM Offices of Waste Management and Water Resources to insure that the proposed stormwater system meets the requirements of the stormwater manual but in also in compliance with the land use restrictions of this industrial site. At the time of the report, the final plan was not yet determined, however a stipulation requiring this permit will satisfy the RICRMP and is in keeping with past practices for sites similar to this.

It is the opinion of the staff engineer that the proposal meets the requirements of the RICRMP and approval is recommended with the typical stipulations and a specific stipulation requiring RIDEM approval of the stormwater plan prior to any work.

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: 2017-11-054 Date: December 11, 2017

This office has under consideration the application of:

McInnis USA, Inc.
Attn: Mark Newhart
850 Canal Street; 3rd floor
Stamford, CT 06902

for a State of Rhode Island Assent to construct and maintain: A new 40,000 MT reinforced concrete containment/storage dome, a loadout structure, an electrical equipment building and utility work at various locations on the site.

Project Location:	39 New York Avenue
City/Town:	Providence
Plat/Lot:	56 / 350,351,352,355
Waterway:	Providence River

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 January 11, 2018.

/lat

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
HISTORICAL PRESERVATION & HERITAGE COMMISSION
Old State House • 150 Benefit Street • Providence, R.I. 02903-1209
TEL (401) 222-2678 FAX (401) 222-2968
TTY / Relay 711 Website www.preservation.ri.gov

Jennifer R. Cervenka, Chair
Coastal Resources Management Council
Oliver H. Stedman Government Center
4808 Tower Hill Road
Wakefield, Rhode Island 02879

CRMC File Number: 2017-11-054

Applicant: Mclaris USA

Town: Providence

Response Date: 12/1/17

Dear Ms. Cervenka:

The Rhode Island Historical Preservation and Heritage Commission (RIHPHC) staff has reviewed the above-referenced project. It is our conclusion that this project will have no effect on any significant cultural resources (those listed on or eligible for listing on the National Register of Historic Places).

These comments are provided in accordance with Section 220 of the Coastal Resources Management Council. If you have any questions, please contact Glenn Modica, Project Review Coordinator, or Charlotte Taylor, archaeologist, at this office.

Very truly yours,

Jeffrey Emidy
Acting Executive Director, RIHPHC

FUSS & O'NEILL

February 6, 2018

Mr. Dan Goulet, PE
Coastal Resources Management Council
4808 Tower Hill Road
Wakefield, RI 02879

RE: Assent Application – Response to Comments
McInnis USA Terminal Expansion
Plat 56, Lots 350, 351, 352, and 355
Providence, RI 02905

Dear Mr. Goulet:

On behalf of McInnis USA, Fuss & O'Neill has prepared this response to comments letter in support of the Assent application for site improvements at the above referenced property. The responses in this letter reference the 2017 edition of the RICRMC Red Book, as you requested, while the original Assent Narrative references the 2012 edition that was in effect at the time of the application submission. Our responses are detailed below.

1. *Please specifically address Section 1.3.1(A) – Category B Requirements.*

   Response: In accordance with Table 1A, for an Industrial Activity in the 200-foot Area Contiguous to Shoreline Features, meeting the requirements of Footnote 3, a Category "A" review may be permitted. We believed the proposed project and application met the Table 1A requirements and did not specifically address each topic outlined in Section 1.3.1(A). As requested, Section 1.3.1(A) Category B requirements are addressed below:

   a. Demonstrate the need for the proposed activity or alteration;

   The proposed project is an expansion of a water-dependent, receiving and distribution cement terminal facility operated by McInnis USA for which Assent A2015-12-050 was granted.

317 Iron Horse Way
Suite 204
Providence, RI
02908
t 401.861.3070
800.286.2469
f 401.861.3076

www.fando.com

Connecticut
Massachusetts
Rhode Island
South Carolina

b. Demonstrate that all applicable local zoning ordinances, building codes, flood hazard standards, and all safety codes, fire codes, and environmental requirements have or will be met; local approvals are required for activities as specifically prescribed for nontidal portions of a project in §§ 1.3.1(B), (C), (F), (H), (I), (K), (M), (O) and (Q) of this Part; for projects on state and, the state building official, for the purposes of this section, is the building official;

The proposed project has been, or is in the process of being reviewed by, the Department of Inspections and Standards, Planning and Development, Public Works, Environmental Management, and Waste Management. The project has received Master Plan and Preliminary Plan approval by the Providence City Plan Commission on October 17, 2017 (application #17-046). Application for Final Plan approval, which will be issued administratively by the Planning Department, may not be issued until state permits are issued by CRMC and RIDEM. The building permit may not be issued until state permits are issued by CRMC and RIDEM. The requirements of Sections 1.3.1(B), (C), and (F) are addressed below.

c. Describe the boundaries of the coastal waters and land area that is anticipated to be affected;

The 3.1 acre limit of work is located entirely within previously developed, impervious areas of the Port of Providence. The area currently consists of bituminous concrete pavement and a loadout structure. No work is proposed within the adjacent coastal waters.

d. Demonstrate that the alteration or activity will not result in significant impacts on erosion and/or deposition processes along the shore and in tidal waters;

The limit of disturbance is located entirely within previously developed, impervious areas of the Port of Providence. Erodible soils will not be exposed within the 200-foot contiguous area of the receiving waters, and the existing coastal feature (i.e. bulkhead) will not be disturbed. A Soil Erosion and Sediment Control Plan has been prepared to mitigate the potential of erosion and sediment deposition during construction. The site will be permanently stabilized as a result of building construction, pavement reconstruction, stone pervious areas, and the installation of a surface stormwater treatment system.

e. Demonstrate that the alteration or activity will not result in significant impacts on the abundance and diversity of plant and animal life;

The limit of disturbance is located entirely within previously developed, impervious areas of the Port of Providence. There is currently no vegetation or habitat within or adjacent to the project area.

f. Demonstrate that the alteration will not unreasonably interfere with, impair, or significantly impact existing public access to, or use of, tidal waters and/or the shore;

The limit of disturbance is located entirely within the Port of Providence, an area where there is no open public access due to U.S. Homeland Security and Coast Guard safety and security requirements. No work is proposed that would alter or restrict public access to tidal waters.

g. Demonstrate that the alteration will not result in significant impacts to water circulation, flushing, turbidity, and sedimentation;

No work is proposed within tidal waters or to the coastal feature. Erosion and sediment controls will be implemented in accordance with the General Permit for the Rhode Island Discharge Elimination System (RIPDES) Stormwater Discharge Associated with Construction Activity, and site-specific Soil Erosion and Sediment Control Plan, in order to mitigate the risk of impacts to receiving waters. In addition, the project will incorporate stormwater treatment measures and a reduction in overall imperviousness focused on improving water quality in stormwater discharges to the Providence River.

h. Demonstrate that there will be no significant deterioration in the quality of the water in the immediate vicinity as defined by DEM;

Structural stormwater management practices are proposed to provide treatment of stormwater runoff, and low-impact development strategies are utilized to reduce pollutant loads discharged from the site, including reducing the site's imperviousness. The stormwater management approach has been designed in accordance with the Rhode Island Stormwater Design and Installation Standards Manual.

i. Demonstrate that the alteration or activity will not result in significant impacts to areas of historic and archaeological significance;

The site is not located within the vicinity of any areas of historic or archaeological significance.

j. Demonstrate that the alteration or activity will not result in significant conflicts with water dependent uses and activities such as recreational boating, fishing, swimming, navigation, and commerce, and;

The proposed use is water-dependent and relies upon access to the navigation channel in the Providence River for the transport of the applicant's bulk products. Alterations to the coastal feature or tidal waters are not proposed as part of this project. The applicant will continue to utilize the existing berth for unloading cargo, which is consistent with primary uses of Type 6 waters.

k. Demonstrate that measures have been taken to minimize any adverse scenic impact (see §1.3.5 of this Part).

The limit of disturbance is located entirely within the Port of Providence, an industrial, artificial waterfront bordering a Type 6 water. In accordance with Section 1.3.5, proposed site improvements, including containment storage dome, loadout structure, and accessory utility improvements, are consistent with uses of surrounding sites and Type 6 waters. No work is proposed within tidal waters or to the coastal feature.

2. *Please specifically address Section 1.3.1(B) – Filling, removing, or grading of shoreline features.*

Response: The proposal is consistent with Section 1.3.1(B) with respect to excavation and grading activities. The Port of Providence within the vicinity of the project is a manmade bulkhead, which defines the shoreline feature. The property leased by McInnis USA, located on Lots 350, 351, 352, and 355, is within the 200-foot area contiguous to the shoreline feature. However, no grading is proposed within 250 feet of the bulkhead. Proposed grading within the limit of disturbance will result in minor changes in finish grade elevation (approximately 0.5 feet) to promote drainage towards storm drain inlets and stormwater treatment areas. In accordance with Section 1.3.1(B)(1), all grading and earthwork activities will be conducted in accordance with the Rhode Island Soil Erosion and Sediment Control Handbook, site-specific Soil Erosion and Sediment Control Plan, and Section 1.3.1(B)(3)a.

While earthwork activities (excavation, filling, grading) will be conducted on site, total import and export of soil materials from the site will be less than 10,000 cubic yards. Excavated soil will be reused as fill within the containment storage dome to the maximum extent practicable. Although the limit of work is 3.1 acres, only 1.4 acres will be disturbed to expose erodible surfaces. The remaining 1.7 acres consists of staging areas and pavement that will be milled and overlaid with asphalt pavement. The project limit of disturbance is not located within or adjacent to an area of historic or archaeological significance (Section 1.3.1(B)(1)f).

3. *Please specifically address Section 1.3.1(C) – Residential, Commercial, Industrial, and Recreational Structures.*

Response: As required by Sections 1.3.1(C)(a), (b) and (e), a letter from the building official has been included in Appendix C of the Assent Narrative. The project is currently under review by the Department of Inspections and Standards. We understand the building permit is ready to be issued upon receipt of state permits from RIDEM and CRMC.

Public access, which is a requirement of the Metro Bay SAMP and Urban Coastal Greenway standards, is not permitted within the Port of Providence due to U.S. Department of Homeland Security and Coast Guard safety and security requirements.

The latest FEMA FIRM was also included with the application. Portions of the project's limit of disturbance are within Flood Zone AE, special flood hazard area inundated by the 1-percent-annual-chance flood event, with base flood elevation 12 feet (NAVD 1988). As required by Section 1.3.1(C)(6), proposed structures have been designed in accordance with the Rhode Island State Building Code. The lowest floor of the dome and electrical building structures are above elevation 12, as depicted on the Grading and Drainage Plan, Sheet 160.00. Additionally, the lowest floor of the loadout structure will be elevated above the flood elevation.

Existing sanitary sewer and water services will continue to be utilized for the proposed structures. There is no existing or proposed on-site water withdrawal or sewage disposal (Section 1.3.1(C)(c) and (d)). As required by Sections 1.3.1(C)(f) and (g), a copy of the proposed permitting documents was submitted to the Department of Public Works for their review.

None of the activities listed in Section 1.3.1(C)(3) are proposed.

4. *Please specifically address Section 1.3.1(F) -- Treatment of Sewage and Stormwater*

Response: The proposal is consistent with Section 1.3.1(F) respect to the implementation of stormwater treatment. A combination of impervious area reduction and structural Best Management Practices (BMPs) is proposed as outlined in the Stormwater Management Plan submitted to the Rhode Island Department of Environmental Management (RIDEM) as part of the Construction Stormwater Permit application.

No onsite wastewater treatment or modifications to the existing sanitary sewer service are proposed.

Please contact me at (401) 861-3070 ext. 4540 if you have any additional questions.

Sincerely,

Andy Glines, PE
Civil Engineer

c: Mark T. Newhart, Vice President, McInnis USA

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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.

File No. (CRMC use only): 2017 - 11 - 054

Project Location: McInnis USA Terminal Expansion
Number 39 Street New York Avenue City/Town Providence

Owner's Name: McInnis USA, Inc. c/o Mark Newhart	Plat: 56 Lot(s): 350, 351, 352, & 355
Mailing Address: 850 Canal Street, Stamford, CT 06902	Res. Tel. #: Bus. Tel. #: 703-932-2420
Contractor RI Lic. # TBD Address: TBD	Tel. No. TBD
Designer: Fuss & O'Neill, Inc. Address: 317 Iron Horse Way, Suite 204 Providence, RI 02908	Tel. No. 401-861-3070 ext 4540
Waterway: Providence River Est. Project Cost: >$500,000 (Brownfield)	Fee/Costs: $5,000

Description of work proposed (a brief description of all elements of work MUST be included here, additional sheets may be attached):
The proposed project is an expansion of the receiving and distribution cement terminal facility. Improvements will include accessory utility alterations, the construction of a containment storage dome, a loadout structure to transfer cement to trucks, and an electrical equipment building.

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): Assent Nos. 2000-11-060, 2004-08017, 2006-08-053, and 2015-12-050

Is this site within a designated historic district? ☐ **YES** ☒ **NO**

Is this application being submitted in response to a coastal violation? ☐ **YES** ☒ **NO**

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.)

See CRMC Application for State Assent Narrative Appendix D - Abutters List

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.

RECEIVED
NOV 17 2017
COASTAL RESOURCES MANAGEMENT COUNCIL

NOTE: The applicant acknowledges by evidence of their signature that they have reviewed the Rhode Island Coastal Resources Management Program, and have, where possible, addressed 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 agrees 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

Mark T. Newhart
Owner's Signature (sign and print)

PLEASE REVIEW REVERSE SIDE OF APPLICATION FORM

01-2017 – ajl

STATEMENT OF DISCLOSURE AND APPLICANT AGREEMENT AS TO FEES

The fees which must be submitted to the Coastal Resources Management Council are based upon representations made to the Coastal Resources Management Council by the applicant. If after submission of this fee the Coastal Resources Management Council determines that an error has been made either in the applicant's submission or in determining the fee to be paid, the applicant understands that additional fees may be assessed by the Coastal Resources Management Council. These fees must be paid prior to the issuance of any assent by the Coastal Resources Management Council.

The applicant understands the above conditions and agrees to comply with them.

Signature

11/1/17
Date

Mark T. Newhart

Print Name and Mailing Address

850 Canal Street
Stamford, CT 06902

01-2017 – ajt

LEGEND

EXIST	PROP	
		PROPERTY LINE/RIGHT-OF-WAY
		LIMIT OF DISTURBANCE
		EDGE OF PAVEMENT
		ASPHALT BERM
		GUARD RAIL
		CHAIN LINK FENCE
		RAILROAD TRACKS
		MINOR CONTOUR
		MAJOR CONTOUR
		BUILDING
		BOLLARD
		SIGN
	21.79 TC / 21.21 BC	TOP & BOTTOM ELEVATION
		SPOT ELEVATION
		DRAINAGE LINE
		SEWER LINE
		WATER LINE
		GAS LINE
		UNDERGROUND ELECTRIC
	ETC	ELECTRIC, TELEPHONE & CABLE TV LINES
		CATCH BASIN
	DMH	DRAIN MANHOLE
		SEWER MANHOLE
		CLEAN OUT
		WATER GATE
		FIRE HYDRANT
		UTILITY POLE
		FILTER SOCK BARRIER
		WATTLES

ABBREVIATIONS:

GENERAL	
APPROX	APPROXIMATE
BIT	BITUMINOUS PAVEMENT
BW	BOTTOM OF WALL
CC	CONCRETE CURB
CCB	CAPE CODE BERM
ELEV	ELEVATION
EXIST	EXISTING
GC	GRANITE CURB
MAX	MAXIMUM
MIN	MINIMUM
NTS	NOT TO SCALE
PCC	PRECAST CONCRETE CURB
PROP	PROPOSED
R&D	REMOVE AND DISPOSE
R&R	REMOVE AND RESET
R&S	REMOVE AND STACK
TOS	TOP OF SLOPE
TW	TOP OF WALL
TYP	TYPICAL
VGC	VERTICAL GRANITE CURB

UTILITY	
CB	CATCH BASIN
CMP	CORRUGATED METAL PIPE
CPP	CORRUGATED POLYETHYLENE PIPE
DCB	DOUBLE CATCH BASIN
DI	DUCTILE IRON PIPE
F&G	FRAME AND GRATE
F&C	FRAME AND COVER
HDPE	HIGH DENSITY POLYETHYLENE
HYD	HYDRANT
INV	INVERT ELEVATION
PVC	POLYVINYL CHLORINE PIPE
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
SMH	SEWER MANHOLE
TSV	TAPPING SLEEVE, VALVE AND BOX
UP	UTILITY POLE

GENERAL NOTES:

1. EXISTING CONDITIONS:
   A. SURVEY:
   PROPERTY BOUNDARY AND TOPOGRAPHICAL INFORMATION WERE OBTAINED FROM A PLAN BY NATIONAL LAND SURVEYORS-DEVELOPERS, INC., DATED SEPTEMBER 8, 2017.
   B. FLOOD ZONE:
   THE SUBJECT SITE LIES WITHIN ZONE AE, ELEVATION 12.0, NAVD 1988, AREA OF 1% ANNUAL CHANCE OF FLOOD HAZARD, PER FLOOD INSURANCE RATE MAP (FIRM) PROVIDENCE COUNTY PANEL NO. 44007C0317J, REVISED SEPTEMBER 18, 2013.
   C. UTILITIES:
   THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE ONLY AND HAVE NOT YET BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR IS TO CONTACT 'DIG SAFE' AT 1-888-344-7233, 72-HOURS PRIOR, EXCLUDING WEEKENDS AND HOLIDAYS, TO ANY EXCAVATION PERFORMED ON SITE.
2. MATERIAL:
   A. CURBING:
   CURBING SHALL BE BITUMINOUS CONCRETE BERM (R.I. STD. 7.5.1).
   B. BITUMINOUS CONCRETE PAVEMENT:
   BITUMINOUS PAVEMENTS SHALL MEET REQUIREMENTS OF PART 400 OF THE STATE OF RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2013 EDITION, REVISIONS AND ALL CURRENT ADDENDA.
3. UTILITIES:
   A. STORM DRAINAGES:
   STORM DRAIN PIPING SHALL BE SMOOTH LINED DOUBLE-WALL HIGH DENSITY POLYETHYLENE PIPE, (N=0.012) WITH WATER TIGHT JOINTS UNLESS OTHERWISE NOTED. THE SIZES OF ALL PIPES ARE NOTED ON THE PLAN.
   ALL DRAIN MANHOLES AND CATCH BASINS SHALL BE PRECAST CONCRETE, AS SPECIFIED ON THE DETAIL SHEETS.
   B. SEWER:
   ALL SEWER PIPE, UNLESS OTHERWISE SPECIFIED, SHALL BE POLYVINYL CHLORIDE (SDR 35).
   CLEAN OUTS SHALL BE INSTALLED WHERE THE DISTANCE FROM THE BUILDING TO THE MAIN SEWER IS GREATER THAN 100 FEET OR WHERE BENDS GREATER THAN 45' ARE PROPOSED. CLEAN OUTS SHALL BE MADE BY INSTALLING 'Y' AND ONE-EIGTH BENDS OF THE SAME DIAMETER AS THE BUILDING SEWER, OR A MAXIMUM OF FOUR INCHES. THE CLEAN OUT SHALL BE BROUGHT UP FROM THE BUILDING SEWER TO FINISHED GRADE WITH A ROADWAY BOX.
   SEWER INSTALLATION PRACTICES AND APPURTENANCES SHALL BE IN ACCORDANCE WITH CITY DPW AND THE NARRAGANSETT BAY COMMISSION STANDARDS.
   C. GAS AND ELECTRIC:
   THE CONTRACTOR SHALL COORDINATE AND INSTALL GAS, ELECTRIC, AND COMMUNICATIONS UTILITIES IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE APPROPRIATE UTILITY COMPANIES.
   D. WATER:
   WATER MAINS SHALL BE CEMENT LINED DUCTILE IRON. DUCTILE IRON SHALL BE CLASS 52 AND CONFORM TO AWWA C151. CEMENT LINING SHALL CONFORM TO AWWA C104 AND HAVE DOUBLE THICKNESS. JOINTS AT FITTINGS, VALVES, AND HYDRANT LATERALS SHALL BE MECHANICAL JOINTS, AWWA C111, WITH NEOPRENE GASKETS. JOINTS AT OTHER LOCATIONS SHALL BE PUSH-ON TYPE, AWWA C111, WITH NEOPRENE OR SYNTHETIC RUBBER GASKETS. FITTINGS SHALL BE CEMENT-LINED, DUCTILE IRON, AWWA C110, WITH A 250 PSI MINIMUM.
   WATER SERVICES, 2-INCH OR SMALLER DIAMETER, SHALL CONSIST OF PE PIPE CONFORMING TO AWWA C906, DR NO. 7.3, 9, OR 9.3; WITH PE COMPOUND NUMBER REQUIRED TO GIVE PRESSURE RATING NOT LESS THAN 160 PSIG. ALL FITTINGS SHALL CONFORM TO AWWA C906, SOCKET- OR BUTT-FUSION TYPE, WITH DR NUMBER MATCHING PIPE AND PE COMPOUND NUMBER REQUIRED TO GIVE PRESSURE RATING NOT LESS THAN 160 PSIG.
   CURB STOP BOXES SHALL BE IN CONFORMANCE WITH PROVIDENCE WATER STANDARDS.
   ALL WATER GATES AND VALVES SHALL BE NRS, MEET AWWA C500 AND C509 STANDARDS, AND OPEN TO THE LEFT. ALL WATER LINES SHALL HAVE A MINIMUM OF 4.5 FEET OF GROUND COVER AND A MINIMUM OF 10 FOOT HORIZONTAL SEPARATION FROM THE SEWER SYSTEM. WHERE THE WATER MAIN CROSSES ANY UTILITY A VERTICAL CLEARANCE OF 18 INCHES MUST BE MAINTAINED. AT CROSSINGS BETWEEN WATER AND SEWER LINES, THE SEWER LINE SHALL BE SLEEVED AND ENCASED IN CONCRETE FOR A DISTANCE OF AT LEAST 10-FEET IN EACH DIRECTION OF THE CROSSING.
4. PARKING STALLS SHALL BE FOLLOWS:
   STANDARD PARKING: 8.5' X 18' MINIMUM.
   HANDICAP PARKING: 8.5' X 18' MINIMUM W/5' STRIPED ACCESS AREA (8' STRIPED VAN ACCESSIBLE PER RIGBC)

GENERAL CONSTRUCTION REQUIREMENTS:

1. THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING PERMITS:
   A. RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (RIDEM) WATER QUALITY CERTIFICATION.
   B. RIDEM RIPDES GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH RHODE ISLAND COASTAL RESOURCE MANAGEMENT COUNCIL (CRMC) ASSENT.
   C. NARRAGANSETT BAY COMMISSION SEWER CONNECTION PERMIT AND STORMWATER CONNECTION PERMIT.
2. THE PORT IS REGULATED BY AN ENVIRONMENTAL LAND USEAGE RESTRICTION (ELUR) AND SOIL MANAGEMENT PLAN (SMP) CONTRACTOR SHALL COMPLY WITH THE ELUR, RAMP, AND RIDEM OFFICE OF WASTE MANAGEMENT REQUIREMENTS FOR ALL LAND DISTURBANCE ACTIVITIES AND CONSTRUCTION.
3. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES OF MATERIALS TO ENGINEER FOR REVIEW.
4. THE CONTRACTOR SHALL VERIFY THE PROPOSED LAYOUT WITH ITS RELATIONSHIP TO THE EXISTING SITE SURVEY. THE CONTRACTOR SHALL ALSO VERIFY ALL DIMENSIONS, SITE CONDITIONS, AND MATERIAL SPECIFICATIONS AND SHALL NOTIFY THE OWNER AND ENGINEER OF ANY ERRORS, OMISSIONS OR DISCREPANCIES BEFORE COMMENCING OR PROCEEDING WITH WORK.
5. THE OWNER AND/OR CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, INSPECTIONS, BONDS, ETC. AND OTHER APPROVAL RELATED ITEMS WITH THE CITY OF PROVIDENCE. NO CONSTRUCTION SHALL COMMENCE UNTIL SUCH PERMITS HAVE BEEN SECURED.
6. METHODS AND MATERIALS USED IN THE CONSTRUCTION OF IMPROVEMENTS FOR THIS PROJECT SHALL CONFORM TO THE CURRENT CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE CITY OF PROVIDENCE AND THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION.
7. DEVIATIONS OR CHANGES FROM THESE PLANS WILL NOT BE ALLOWED UNLESS APPROVED BY THE ENGINEER/OWNER.
8. THE CONTRACTOR SHALL MAKE EXPLORATORY EXCAVATIONS AND LOCATE ANY EXISTING UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF NECESSARY. THE EXISTENCE AND/OR LOCATION OF UTILITIES SHOWN ON THESE PLANS MAY BE ONLY APPROXIMATELY CORRECT AND THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN HEREON AND ANY OTHER EXISTING UTILITIES NOT OF RECORD OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING, AT ITS EXPENSE, ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION.
9. RELOCATION OF ANY UTILITIES SHALL BE AT THE OWNERS EXPENSE AND COMPLETED WITH THE UTILITY WORK. THE OWNER SHALL BE NOTIFIED AS TO THE RELOCATIONS REQUIRED PRIOR TO THE START OF CONSTRUCTION.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING, WITH MATCHING MATERIALS, ANY PAVEMENT, WALKS, CURBS, ETC. THAT MUST BE CUT OR THAT ARE DAMAGED DURING CONSTRUCTION. THE CONTRACTOR SHALL RESTORE DISTURBED AREAS TO ORIGINAL CONDITION.
11. AN APPROVED SET OF PLANS AND ALL APPLICABLE PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE.
12. CONTRACTOR AGREES THAT HE/SHE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL AND ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM "THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER."
13. THE STATE OF RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2013 EDITION, REVISIONS AND ALL CURRENT ADDENDA, AND THE RHODE ISLAND STANDARD DETAILS ARE MADE A PART HEREOF, AS IF ATTACHED HERETO.
14. CONTRACTOR SHALL IDENTIFY TREES TO BE REMOVED PRIOR TO CONSTRUCTION AND MARK THEM WITH CONSTRUCTION TAPE FOR REVIEW BY THE OWNER. CONTRACTOR SHALL NOT REMOVE TREES UNTIL REVIEWED AND APPROVED BY THE OWNER.
15. ALL EXCESS EXCAVATED MATERIALS, EXCESS FILL, EXCESS CONSTRUCTION MATERIALS, AND DEBRIS SHALL BE REMOVED FROM THE SITE AND SHALL BE DISPOSED OF IN ACCORDANCE WITH APPLICABLE LAWS, ENVIRONMENTAL LAND USEAGE RESTRICTION, AND SOIL MANAGEMENT PLAN.
16. PERFORM EXCAVATION OPERATIONS IN ACCORDANCE WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS 1926.651 AND 1926.652.

EROSION CONTROL NOTES:

1. THE CONTRACTOR SHALL COMPLY WITH THE RIDEM APPROVED SOIL EROSION AND SEDIMENT CONTROL PLAN (SESC PLAN) IN ORDER TO REMAIN IN COMPLIANCE WITH THE RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY (RIPDES CONSTRUCTION GENERAL PERMIT).
2. THE CONTRACTOR SHALL COMPLETE WEEKLY INSPECTIONS, IMPLEMENT AND DOCUMENT CORRECTIVE ACTIONS, AND RECORD AMENDMENTS TO THE SESC PLAN.
3. DISTURBANCE OF SOIL SURFACES IS REGULATED BY STATE LAW AND LOCAL ORDINANCE. ALL WORK SHALL COMPLY WITH THE FOLLOWING CRITERIA TO PREVENT OR MINIMIZE SOIL EROSION.
4. THE INSTALLATION, MAINTENANCE, AND/OR REPLACEMENT OF EROSION CONTROL DEVICES TO ENSURE PROPER OPERATION THROUGHOUT CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL INSTALL ALL EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE PLAN, OR AS DIRECTED BY THE RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT AND THE CITY OF PROVIDENCE. ALL EROSION CONTROL DEVICES SHALL BE MAINTAINED IN EFFECTIVE CONDITION DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF PERMANENT MEASURES UNTIL CONSTRUCTION OF THE PROJECT IS COMPLETED OR UNTIL IT IS ACCEPTED BY THE OWNER. THE OWNER IS RESPONSIBLE THEREAFTER.
5. THE CONTRACTOR SHALL USE THE LATEST EDITION OF THE "STATE OF RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK" IN CONSTRUCTING THE EROSION AND SEDIMENT CONTROLS INDICATED ON THE PLANS. ALL EROSION AND SEDIMENT CONTROL MEASURES OR WORKS AND REHABILITATION MEASURES MUST CONFORM TO OR EXCEED THE SPECIFICATIONS OR STANDARDS SET OUT IN THIS HANDBOOK.
6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CLEAN ROADS, CONTROL DUST, AND TAKE ALL NECESSARY MEASURES TO ENSURE THAT THE SITE AND ALL ROADS BE MAINTAINED IN A MUD- AND DUST-FREE CONDITION AT ALL TIMES THROUGHOUT THE LIFE OF THE CONTRACT. DUST CONTROL SHALL INCLUDE, BUT IS NOT LIMITED TO, WATER AND/OR CRUSHED STONE OR COARSE GRAVEL, SUBJECT TO THE APPROVAL OF THE ENGINEER.
7. THE PROPOSED CONSTRUCTION ENTRANCE(S) SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS AND DETAILS. ALL VEHICLE TRAFFIC ENTERING OR EXITING THE PROJECT SITE SHALL PASS OVER THE CONSTRUCTION ENTRANCE(S) TO REDUCE THE TRACKING OR FLOWING OF SEDIMENT ONTO THE SURROUNDING ROADWAYS. THE CONSTRUCTION ENTRANCE(S) SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO THE SURROUNDING ROADWAYS. THIS WILL REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO THE SURROUNDING ROADWAYS MUST BE REMOVED IMMEDIATELY. ADDITIONAL ENTRANCES FOR CONSTRUCTION PHASING SHALL BE INSTALLED AS REQUIRED TO PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO ROADWAYS.
8. THE CONTRACTOR SHALL INSTALL ALL PERIMETER SEDIMENT CONTROL BARRIERS AS SHOWN ON THE SITE PLANS OR AS MAY BE REQUIRED TO PREVENT SEDIMENT FLOW TO STORM DRAINS OR SURFACE WATERS. A ROW OF STAKED SANDBAGS SHALL ALSO BE INSTALLED AROUND ANY SOIL STOCKPILE AREAS. CLEANOUT OF ACCUMULATED SEDIMENT BEHIND PERIMETER SEDIMENT CONTROL BARRIER IS NECESSARY IF ONE-HALF THE ORIGINAL HEIGHT OF THE BARRIER BECOMES FILLED WITH SEDIMENT. REPLACE BARRIER IMMEDIATELY IF BARRIER DECOMPOSED OR BECOMES INEFFECTIVE.
9. SOIL STOCKPILES SHALL BE PLACED ON POLYETHYLENE SHEETING, AND SHALL BE COVERED BY POLYETHYLENE SHEETING AT THE END OF EACH WORK DAY. SHEETING SHALL BE MAINTAINED AND REPLACED AS NEEDED FOR THE DURATION OF CONSTRUCTION.
10. ANY EXISTING OR PROPOSED STORMWATER DRAINAGE STRUCTURES THAT MAY BE SUBJECT TO SEDIMENTATION SHALL BE PROTECTED WITH SILT SACKS OR OTHER APPROVED MEASURES THROUGHOUT THE ENTIRE CONSTRUCTION PERIOD.
11. WASTE DISPOSAL: MATERIALS WHICH COULD BE A POTENTIAL SOURCE OF STORMWATER POLLUTION SUCH AS GASOLINE, DIESEL FUEL, HYDRAULIC OIL, ETC., SHALL BE STORED AT THE END OF EACH DAY IN A STORAGE TRAILER OR COVERED LOCATION AND TAKEN OFF-SITE AND PROPERLY DISPOSED OF. ALL TYPES OF WASTE GENERATED AT THIS SITE SHALL BE DISPOSED OF IN A MANNER CONSISTENT WITH STATE LAW AND/OR REGULATIONS.
12. CONTROL OF ALLOWABLE NON-STORMWATER DISCHARGES: IF ALLOWABLE NON-STORM WATER DISCHARGES ARE OCCURRING AT THE SITE, SUCH DISCHARGES SHALL BE VISUALLY OBSERVED AND RECORDED AS OUTLINED BELOW AND IN ACCORDANCE WITH PART II OF THE RIPDES GENERAL PERMIT. THE LIST OF EXPECTED SOURCES OF ALLOWABLE NON-STORM WATER DISCHARGES FOR THIS PROJECT ARE AS FOLLOWS: (1) DISCHARGE FROM VEHICLE WASHDOWN WHERE NO DETERGENTS ARE USED, (2) EXTERNAL BUILDING WASHDOWN WHERE NO DETERGENTS ARE USED, (3) THE USE OF WATER TO CONTROL DUST, (4) FIRE HYDRANT FLUSHINGS, (5) LAWN WATERING, (6) POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS, (8) IRRIGATION DRAINAGE, (9) PAVEMENT WASHWATERS WHERE SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED (UNLESS ALL SPILLED MATERIALS HAVE BEEN REMOVED) AND WHERE NO DETERGENTS ARE USED, AND (10) FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH PROCESS SUCH AS SOLVENTS OR CONTAMINATED BY CONTACT WITH SOILS WHERE SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAS OCCURRED.
13. GOOD HOUSEKEEPING: THE PROJECT SITE SHALL PROVIDE FOR THE MINIMIZATION OF EXPOSURE OF CONSTRUCTION DEBRIS (INCLUDING, BUT NOT LIMITED TO, INSULATION, WIRING, PAINTS AND PAINT CANS, SOLVENTS, WALL BOARD, ETC.) TO PRECIPITATION BY MEANS OF DISPOSAL AND/OR PROPER SHELTER OR COVER. CONSTRUCTION WASTE MUST BE PROPERLY DISPOSED OF IN ORDER TO AVOID EXPOSURE TO PRECIPITATION AT THE END OF EACH WORKING DAY.

STORMWATER MAINTENANCE PROGRAM:

1. THE OWNER SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE STORMWATER MANAGEMENT SYSTEM ONCE CONSTRUCTION IS COMPLETE.
2. THE FOLLOWING MAINTENANCE IS REQUIRED FOR THE CRUSHED STONE AREA:
   A. SEDIMENTS SHOULD BE REMOVED IMMEDIATELY FOLLOWING SITE STABILIZATION AND THEREAFTER ONCE EVERY TEN (10) YEARS PER THE RHODE ISLAND STORMWATER STANDARDS AND INSTALLATION MANUAL. DURING THE FIRST YEAR OF OPERATION, IT MAY BE NECESSARY TO REMOVE ACCUMULATED SEDIMENTS MORE OFTEN. ROUTINE INSPECTIONS ARE REQUIRED AFTER SITE STABILIZATION TO ENSURE PROPER FUNCTIONING. ACCUMULATED SEDIMENT MAY HAVE TO BE REMOVED MORE FREQUENTLY IF THE INFILTRATION RATE IS SIGNIFICANTLY REDUCED.
   B. ALL TRASH AND LITTER SHALL BE REMOVED FROM THE STONE AT LEAST TWICE PER YEAR.
3. THE FOLLOWING MAINTENANCE IS REQUIRED FOR THE SAND FILTERS:
   A. THE CATCH BASIN OVERFLOW STRUCTURE SHALL BE INSPECTED ANNUALLY. INSPECTIONS SHALL BE ACCOMPLISHED SEVERAL TIMES DURING THE FIRST SIX MONTHS OF OPERATION, ESPECIALLY AFTER RAINFALL EVENTS TO CHECK FOR CLOGGING. IF BLOCKAGE OF STRUCTURE OCCURS, IT MAY BE NECESSARY TO DEWATER THE POND FOR ACCESS TO THE BLOCKAGE. THE DEWATERING FLOW MUST BE ADEQUATELY FILTERED PRIOR TO DISCHARGE INTO A RECEIVING WATER BODY OR DRAINAGE SYSTEM.
   B. POOLS OF STAGNANT WATER WITHIN THE SAND FILTER MAY INDICATE FAILURE DUE TO SEDIMENTATION OF THE FILTER MEDIA, PARTICULARLY NEAR AN INLET DEVICE. THIS DEFICIENCY SHOULD BE CORRECTED IMMEDIATELY TO PREVENT A NUISANCE HABITAT FOR INSECTS, ESPECIALLY MOSQUITOES. ACCUMULATED SEDIMENTS MUST BE REMOVED AND CRUSHED STONE CLEANED. DISPOSAL OF THE ACCUMULATED SEDIMENT AND HYDROCARBONS MUST BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL GUIDELINES AND REGULATIONS.
   C. ALL TRASH AND LITTER SHALL BE REMOVED FROM THE CATCH BASIN OVERFLOW STRUCTURE AND SAND FILTERS AT LEAST TWICE PER YEAR.
4. THE FOLLOWING MAINTENANCE IS REQUIRED FOR ALL PROPOSED DRAINAGE STRUCTURES:
   ONCE CONSTRUCTION IS COMPLETE AND HAS BEEN ACCEPTED BY THE OWNER, INSPECTIONS OF ALL DRAIN MANHOLES, CATCH BASINS, AND YARD DRAINS ON-SITE BY THE OWNER SHOULD OCCUR AT LEAST QUARTERLY TO CHECK FOR DEBRIS REMOVAL (SEDIMENT AND HYDROCARBONS) AND STRUCTURAL INTEGRITY OR DAMAGE, AND CLEANED TWICE A YEAR, AT MINIMUM. SUCH DEFICIENCIES MUST BE CORRECTED IMMEDIATELY. DISPOSAL OF THE ACCUMULATED SEDIMENT AND HYDROCARBONS MUST BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL GUIDELINES AND REGULATIONS.
5. THE SITE IS SUBJECT TO THE RIPDES MULTI-SECTOR GENERAL PERMIT, WHICH REGULATES STORMWATER DISCHARGES FROM INDUSTRIAL ACTIVITIES. THE OWNER SHALL OBTAIN RIPDES PERMIT COVERAGE AND COMPLY WITH THE TERMS AND CONDITIONS OF THE PERMIT.

CONSTRUCTION RUNOFF INSPECTION:

1. SITE DISCHARGES FROM CONSTRUCTION SITES ARE REGULATED BY THE RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT RHODE ISLAND POLLUTANT DISCHARGE SYSTEM ELIMINATION (RIPDES) PROGRAM. THE PROJECT SHALL COMPLY WITH THE CONDITIONS OF THE RIPDES GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION SITE RUNOFF, AND THE CITY OF PROVIDENCE CODE OF ORDINANCES, CHAPTER V ARTICLE VI "SOIL EROSION AND SEDIMENT CONTROL.
2. STORMWATER CONTROL MEASURES, DISTURBED AREAS, AREAS USED FOR THE STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION (INCLUDING SOIL STOCKPILES), DISCHARGE LOCATIONS, AND LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE, MUST BE INSPECTED BY OR UNDER THE SUPERVISION OF THE PERMITTEE AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN TWENTY-FOUR (24) HOURS AFTER ANY STORM EVENT WHICH GENERATES AT LEAST 0.25 INCHES OF RAINFALL PER TWENTY-FOUR (24) HOUR PERIOD AND/OR AFTER A SIGNIFICANT AMOUNT OF RUNOFF. SUCH AREAS SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE WATERS OF THE STATE OR A SEPARATE STORM SEWER SYSTEM. ALL BEST MANAGEMENT PRACTICES (BMPS) SHALL BE MAINTAINED TO PREVENT UNCONTROLLED RELEASES OF MEASURABLE AMOUNTS OF SEDIMENT OR SEDIMENT LADEN WATER FROM TRAVELING BEYOND THE LIMITS OF DISTURBANCE.
3. IF AN INSPECTION REVEALS A DISCHARGE OF SEDIMENTS TO THE WATERS OF THE STATE OR A SEPARATE STORM SEWER SYSTEM, THE PERMITTEE MUST NOTIFY THIS OFFICE OF THE NATURE OF THE DISCHARGE, THE MEASURES TAKEN TO CLEAN UP THE DISCHARGE, AND THE MEASURES TAKEN TO PREVENT FUTURE RELEASES. BASED ON THE RESULTS OF THE INSPECTIONS, THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) MUST BE REVISED AS APPROPRIATE, BUT IN NO CASE LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING THE INSPECTION. SUCH MODIFICATIONS MUST PROVIDE FOR IMPLEMENTATION OF ANY CHANGES TO THE SWPPP WITHIN SEVEN (7) CALENDAR DAYS FOLLOWING THE INSPECTION.
4. A REPORT SUMMARIZING THE SCOPE OF THE INSPECTION, NAME(S), AND TITLES OF PERSONNEL MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTION, MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE SOIL EROSION AND SEDIMENT CONTROL PLAN (SESC PLAN) AND ACTIONS MUST BE MADE AND RETAINED AS PART OF THE SESC PLAN FOR AT LEAST FIVE (5) YEARS FROM THE DATE THAT THE SITE HAS UNDERGONE FINAL STABILIZATION. SUCH REPORTS MUST IDENTIFY ANY INCIDENTS OF NONCOMPLIANCE. WHERE A REPORT DOES NOT IDENTIFY ANY INCIDENTS OF NONCOMPLIANCE, THE REPORT MUST CONTAIN A CERTIFICATION THAT THE SITE IS IN COMPLIANCE WITH THE SESC PLAN. THE REPORT MUST BE SIGNED IN ACCORDANCE WITH PART V.G. OF THE RIPDES GENERAL PERMIT.

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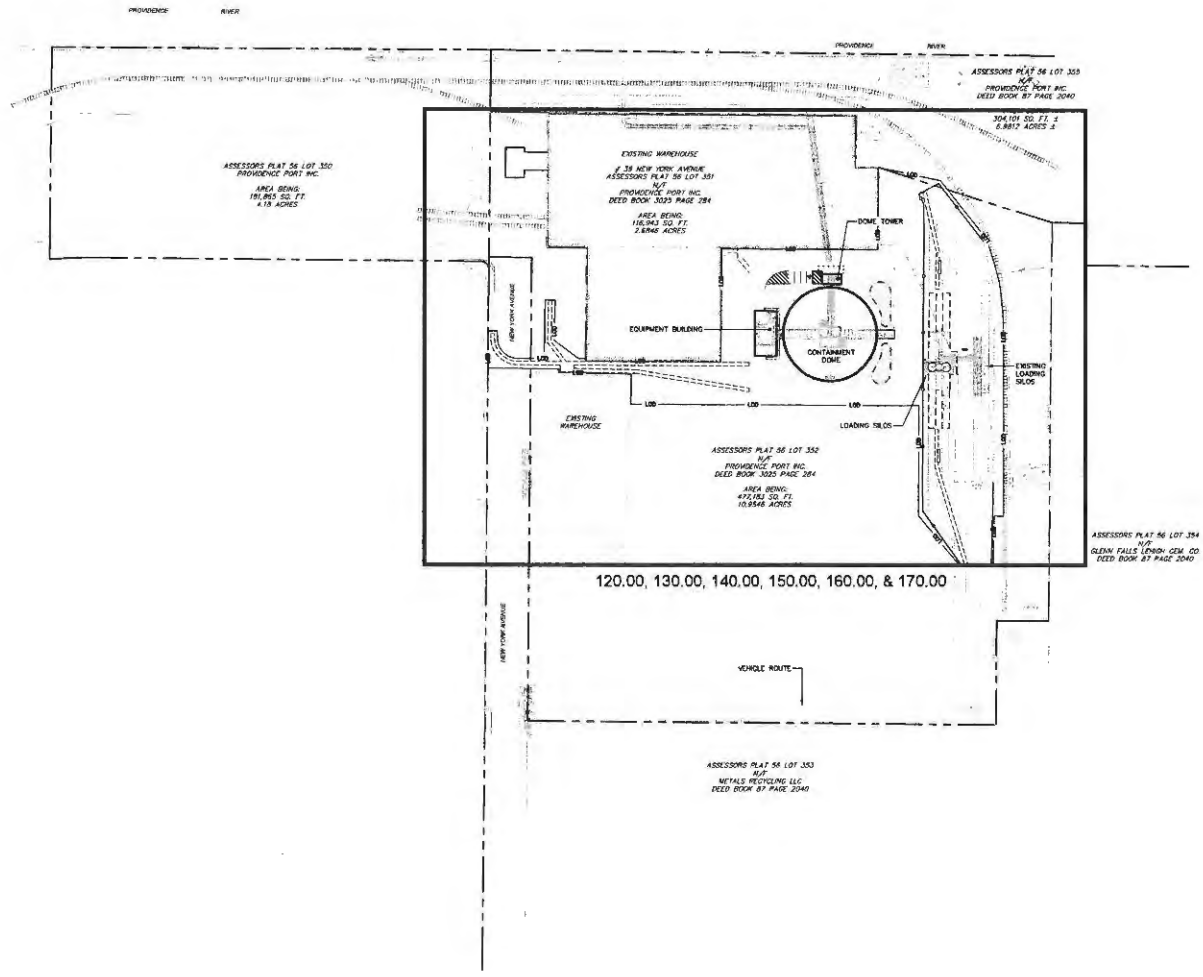
PROJECT: McINNIS CEMENT TERMINAL EXPANSION
LOCATION: 39 NEW YORK AVENUE, PROVIDENCE, RI 02905

REV	REVISION NOTE	DATE YY.MM.DD
0	ISSUED FOR BID	17.11.02
1	ISSUED FOR PERMIT	17.11.08

DESIGNED	DRAWN	CHECKED	APPROVED
AGG	AGG	SMM	SMM

SHEET TITLE: GENERAL NOTES AND LEGEND
REF NUMBER: 17140-100.00-REV 1-17.11.10
DATE: MAY 17, 2017
SCALE: NOT TO SCALE
100.00

P14



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PROJECT: McINNIS CEMENT TERMINAL EXPANSION

LOCATION: 39 NEW YORK AVENUE, PROVIDENCE, RI 02905

REV.	REVISION NOTE	DATE YY.MM.DD	REVISION DESCRIPTION	REV.
0	ISSUED FOR BID	17.11.02		
1	ISSUED FOR PERMIT	17.11.06		

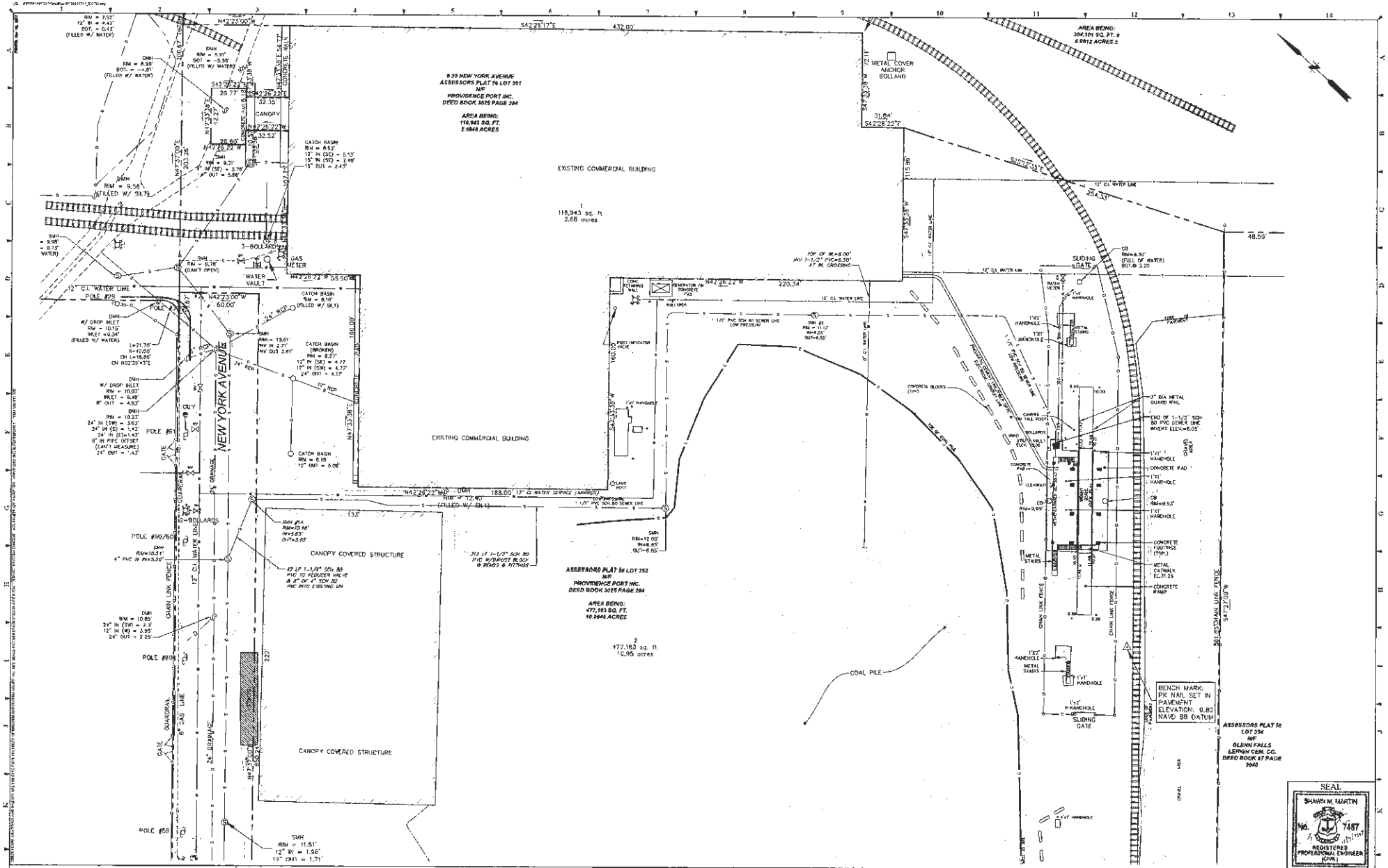
DESIGNED	DRAWN	CHECKED	APPROVED
AGG	AGG	SMM	SMM

SHEET TITLE: INDEX PLAN

REF. NUMBER: 17140 -110.00-REV 1 - 17.11.10

START DATE: MAY 17, 2017
PROJECT NUMBER: IND17140
SCALE: 1"= 80'
SHEET NUMBER: 110.00

P15



FUSS & O'NEILL

PROJECT: McINNIS CEMENT TERMINAL EXPANSION

LOCATION: 39 NEW YORK AVENUE, PROVIDENCE, RI 02905

REV	REVISION NOTE	DATE YY.MM.DD	REVISION DESCRIPTION	REV.
0	ISSUED FOR BID	17.11.02		
1	ISSUED FOR PERMIT	17.11.09		

DESIGNED	DRAWN	CHECKED	APPROVED
AOO	AOO	SMM	SMM

SHEET TITLE: EXISTING CONDITIONS PLAN

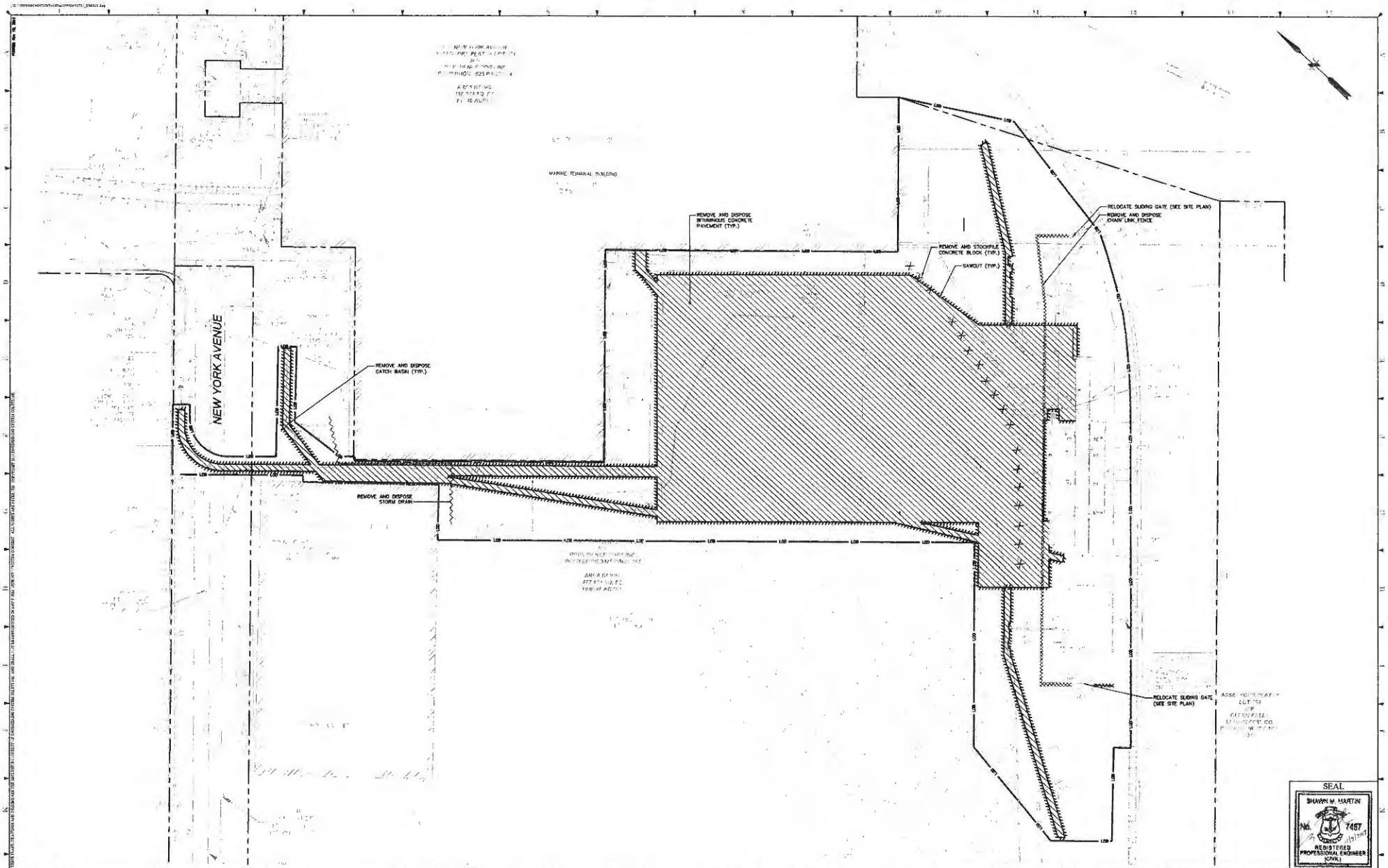
REF NUMBER: 17140 -120.00-REV 1 - 17.11.10

START DATE: MAY 15, 2017

PROJECT #/TASK#: 17140

SCALE: 1"=30'

SHEET NUMBER: 120.00



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PROJECT: McINNIS CEMENT TERMINAL EXPANSION

LOCATION: 39 NEW YORK AVENUE, PROVIDENCE, RI 02905

REV	REVISION NOTE	DATE (YY.MM.DD)
0	ISSUED FOR BID	17.11.02
1	ISSUED FOR PERMIT	17.11.06

REVISION DESCRIPTION | REV

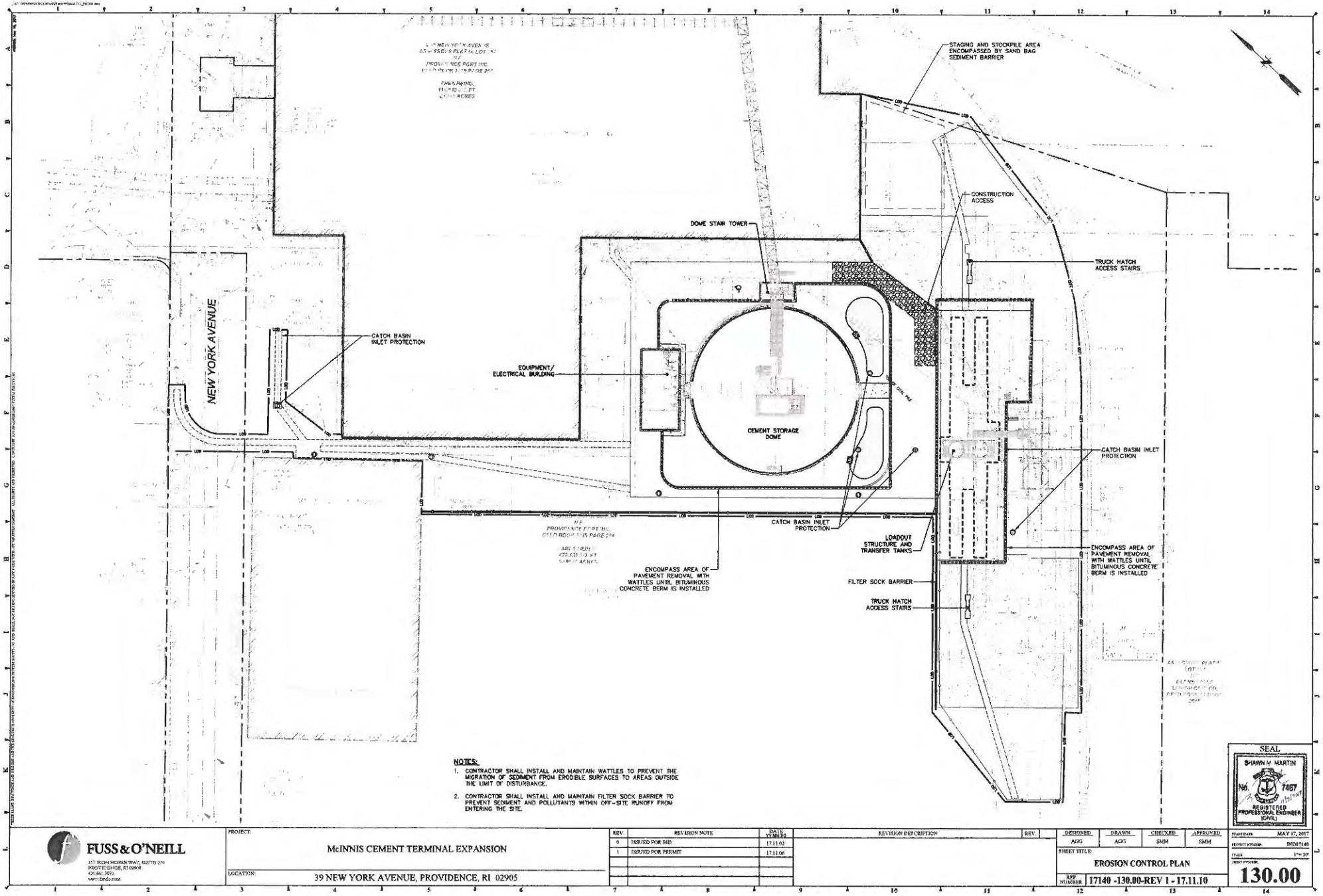
DESIGNED	DRAWN	CHECKED	APPROVED
AGG	AGG	SMM	SMM

START DATE: MAY 17, 2017
PROJECT NUMBER: DND17140
SCALE: 1" = 30'

SHEET TITLE: SITE DEMOLITION PLAN

REF NUMBER: 17140 -140.00-REV 1 - 17.11.10

SHEET NUMBER: 140.00



NOTES:

1. CONTRACTOR SHALL INSTALL AND MAINTAIN WATTLES TO PREVENT THE MIGRATION OF SEDIMENT FROM ERODIBLE SURFACES TO AREAS OUTSIDE THE LIMIT OF DISTURBANCE.
2. CONTRACTOR SHALL INSTALL AND MAINTAIN FILTER SOCK BARRIER TO PREVENT SEDIMENT AND POLLUTANTS WITHIN OFF-SITE RUNOFF FROM ENTERING THE SITE.

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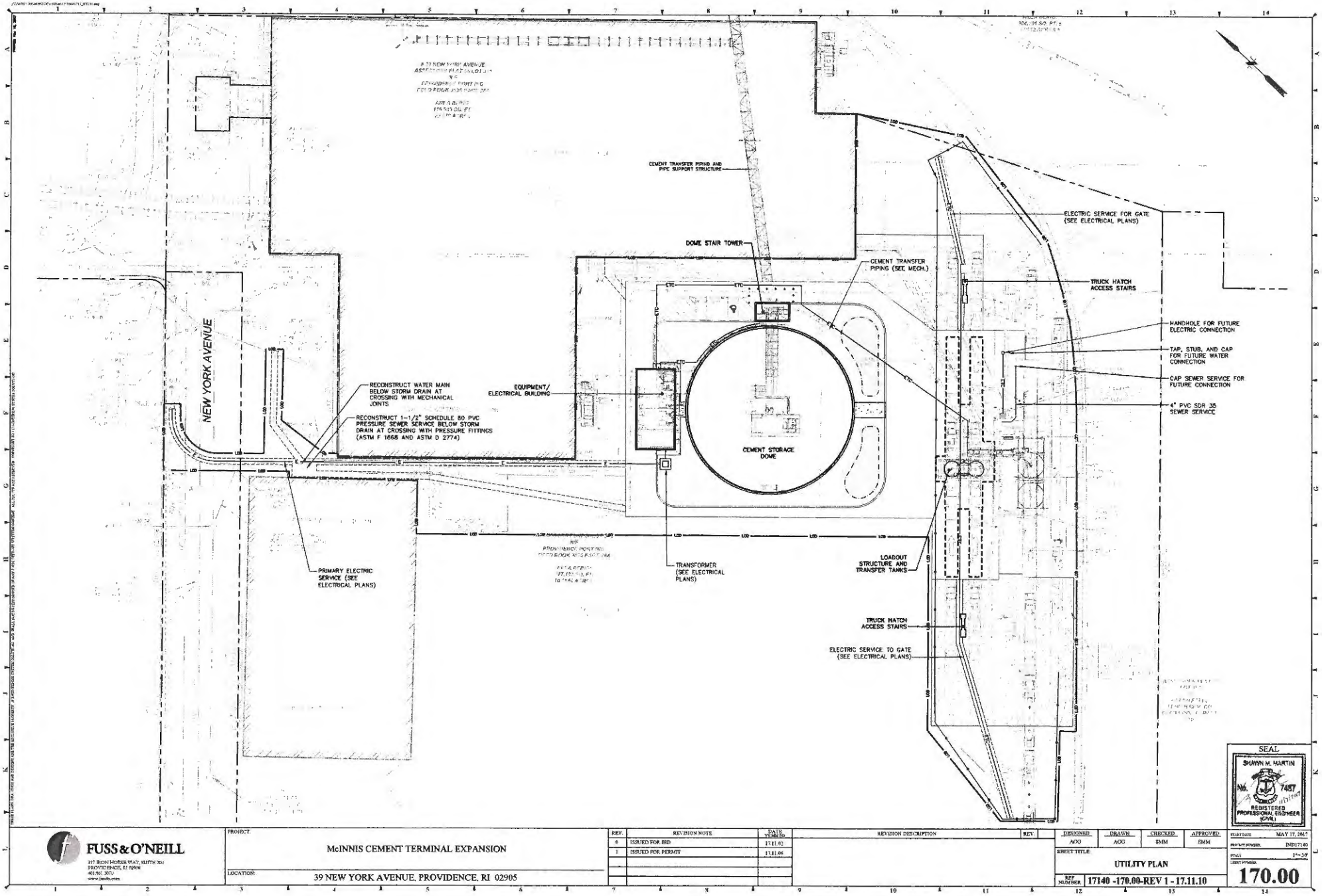
PROJECT: McINNIS CEMENT TERMINAL EXPANSION
LOCATION: 39 NEW YORK AVENUE, PROVIDENCE, RI 02905

REV.	REVISION NOTE	DATE YY.MM.DD	REVISION DESCRIPTION	REV.
0	ISSUED FOR BID	17.11.02		
1	ISSUED FOR PERMIT	17.11.06		

DESIGNED	DRAWN	CHECKED	APPROVED
AGG	AGG	SMM	SMM

SHEET TITLE: EROSION CONTROL PLAN
REF NUMBER: 17140 -130.00-REV 1 - 17.11.10

ISSUE DATE: MAY 17, 2017
PROJECT NUMBER: END17140
SCALE: 1"= 20'
SHEET NUMBER: 130.00



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PROJECT: McINNIS CEMENT TERMINAL EXPANSION

LOCATION: 39 NEW YORK AVENUE, PROVIDENCE, RI 02905

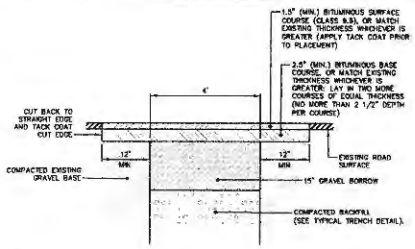
REV.	REVISION NOTE	DATE YY.MM.DD	REVISION DESCRIPTION	REV.
0	ISSUED FOR BID	17.11.02		
1	ISSUED FOR PERMIT	17.11.06		

DESIGNED	DRAWN	CHECKED	APPROVED
AGO	AGG	SMM	SMM

SHEET TITLE: UTILITY PLAN

REF. NUMBER: 17140 -170.00-REV 1 - 17.11.10

START DATE	MAY 17, 2017
PROJECT NUMBER	IND17140
SCALE	1"=30'
SHEET NUMBER	170.00

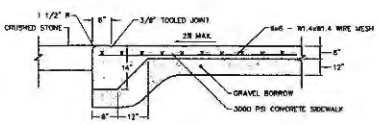


NOTES:

1. ALL PAVEMENT MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH SECTIONS 401 AND M.03 OF RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (AUGUST 2013).
2. GRAVEL BORROW BASE SHALL BE WELL GRADED AND MEET THE GRADATION REQUIREMENTS SPECIFIED IN COLUMN 1, TABLE 1 IN SUBSECTION M.01.09 OF RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (AUGUST 2013).
3. GRAVEL BORROW SHALL BE INSTALLED IN 6-INCH LIFTS AND COMPACTED TO 95-PERCENT MODIFIED PROCTOR.
4. UNSUITABLE MATERIAL WITHIN SUBGRADE SHALL BE REMOVED AND REPLACED WITH GRAVEL BORROW.

TRENCH PAVEMENT REPAIR (FOR UTILITY CONNECTION)

SCALE: N.T.S.

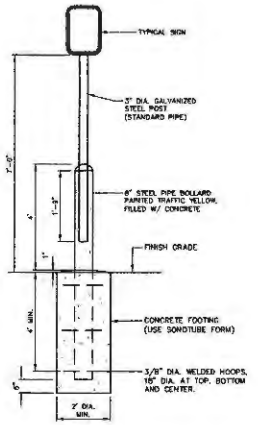


NOTES:

1. SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE R.I. STANDARD SPECIFICATIONS

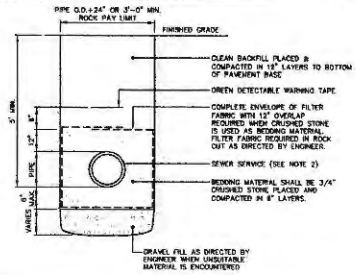
CONCRETE PAVEMENT

SCALE: N.T.S.



HANDICAP SIGN BASE

SCALE: N.T.S.

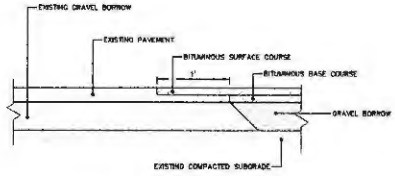


NOTE:

1. SEWER TO BE INSULATED WITH 2" RIGID FOAM WHEN LESS THAN 4' COVER IS PROVIDED.
2. SEE UTILITY PLAN FOR PIPE MATERIAL.
3. BACKFILL: SHALL BE FREE OF DEBRIS, WASTE, FROZEN MATERIALS, VEGETATION, CLAY AND OTHER DELETERIOUS MATTER, ADEQUATELY GRADED FOR SATISFACTORY COMPACTION, AND MEET THE FOLLOWING REQUIREMENTS:
   1. ON-SITE MATERIAL: NATIVE SOIL ADDITIONALLY FREE OF ORGANIC MATTER, ROOTS, AND STONES LARGER THAN 3 INCHES IN ANY DIMENSION, SUBJECT TO APPROVAL BY THE ENGINEER.
   2. IMPORTED: FREE OF ROCK OR GRAVEL LARGER THAN 3 INCHES IN ANY DIMENSION; AND MEETING STANDARD SPECIFICATION SECTION M.01.01.

SEWER TRENCH

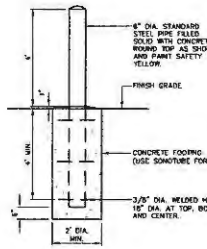
SCALE: N.T.S.



NOTE:
SEE BITUMINOUS CONCRETE PAVEMENT DETAIL.

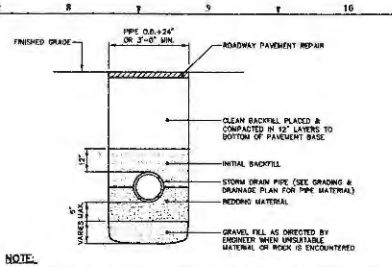
SAWCUT AND MATCH PAVEMENT

SCALE: N.T.S.



BOLLARD

SCALE: N.T.S.

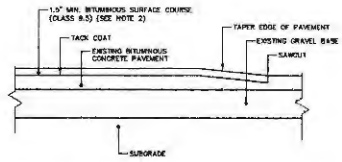


NOTE:

1. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III AND INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION. UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4".
2. INITIAL BACKFILL: SHALL BE WELL-GRADED AND MEET THE GRADATION REQUIREMENTS SPECIFIED IN COLUMN 1, TABLE 1 IN SUBSECTION M.01.09 OF RIDOT'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (2004 EDITION).
3. FINAL BACKFILL: SHALL BE FREE OF DEBRIS, WASTE, FROZEN MATERIALS, VEGETATION, CLAY AND OTHER DELETERIOUS MATTER, ADEQUATELY GRADED FOR SATISFACTORY COMPACTION, AND MEET THE FOLLOWING REQUIREMENTS:
   1. ON-SITE MATERIAL: NATIVE SOIL ADDITIONALLY FREE OF ORGANIC MATTER, ROOTS, AND STONES LARGER THAN 3 INCHES IN ANY DIMENSION, SUBJECT TO APPROVAL BY THE ENGINEER.
   2. IMPORTED: FREE OF ROCK OR GRAVEL LARGER THAN 3 INCHES IN ANY DIMENSION; AND MEETING STANDARD SPECIFICATION SECTION M.01.01.

STORM DRAIN TRENCH

SCALE: N.T.S.

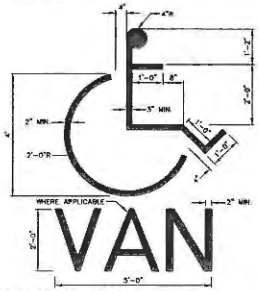


NOTES:

1. ALL PAVEMENT MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH SECTIONS 401 AND M.03 OF RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (AUGUST 2013).
2. DEPTH OF BITUMINOUS SURFACE COURSE VARIES. OVERLAY DEPTH AS REQUIRED FOR MINIMUM 0.5"/FT SLOPE TOWARDS STORM DRAIN INLETS. SEE GRADING AND DRAINAGE PLAN.

BITUMINOUS PAVEMENT MILL AND OVERLAY

SCALE: N.T.S.

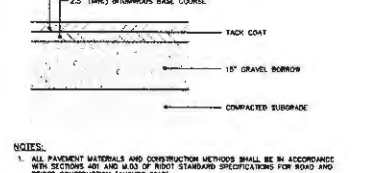


NOTES:

1. SYMBOL SHALL BE CENTERED IN THE PARKING STALL.
2. PAVEMENT MARKINGS SHALL CONFORM TO SUBSECTION M.17.04; EPOXY RESIN PAVEMENT MARKINGS OF THE STANDARD SPECIFICATIONS.
3. PROCEED WITH PAVEMENT MARKING ONLY ON CLEAN, DRY SURFACES AND AT A MINIMUM AMBIENT OR SURFACE TEMPERATURE OF 50 DEG F AND NOT EXCEEDING 95 DEG F.
4. EPOXY RESIN PAVEMENT MARKINGS SHALL NOT BE APPLIED TO NEW PAVEMENT UNTIL AT LEAST 14 DAYS, BUT NO MORE THAN 28 DAYS, HAVE ELAPSED FROM PAVEMENT PLACEMENT.

VAN ACCESSIBLE HANDICAP PARKING STALL SYMBOL

SCALE: N.T.S.



CONSTRUCTION METHOD A

BITUMINOUS CONCRETE BERM (R.I. STD. 7.5.1)

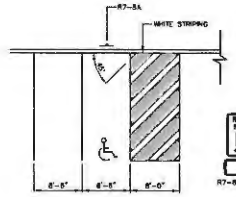
SCALE: N.T.S.

NOTES:

1. ALL PAVEMENT MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH SECTIONS 401 AND M.03 OF RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (AUGUST 2013).
2. GRAVEL BORROW SHALL BE WELL GRADED AND MEET THE GRADATION REQUIREMENTS SPECIFIED IN COLUMN 1, TABLE 1 IN SUBSECTION M.01.09 OF RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (AUGUST 2013).
3. GRAVEL BORROW SHALL BE INSTALLED IN 6-INCH LIFTS AND COMPACTED TO 95-PERCENT MODIFIED PROCTOR.
4. UNSUITABLE MATERIAL WITHIN SUBGRADE SHALL BE REMOVED AND REPLACED WITH GRAVEL BORROW.

BITUMINOUS CONCRETE PAVEMENT

SCALE: N.T.S.



NOTES:

1. PAVEMENT MARKINGS SHALL CONFORM TO SUBSECTION M.17.04; EPOXY RESIN PAVEMENT MARKINGS OF THE STANDARD SPECIFICATIONS.
2. PROCEED WITH PAVEMENT MARKING ONLY ON CLEAN, DRY SURFACES AND AT A MINIMUM AMBIENT OR SURFACE TEMPERATURE OF 50 DEG F AND NOT EXCEEDING 95 DEG F.
3. EPOXY RESIN PAVEMENT MARKINGS SHALL NOT BE APPLIED TO NEW PAVEMENT UNTIL AT LEAST 14 DAYS, BUT NO MORE THAN 28 DAYS, HAVE ELAPSED FROM PAVEMENT PLACEMENT.
4. PAVEMENT MARKING WIDTH TOLERANCE: 1/4 INCH

HANDICAP PARKING STALL LAYOUT

SCALE: N.T.S.

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PROJECT: McINNIS CEMENT TERMINAL EXPANSION

LOCATION: 39 NEW YORK AVENUE, PROVIDENCE, RI 02905

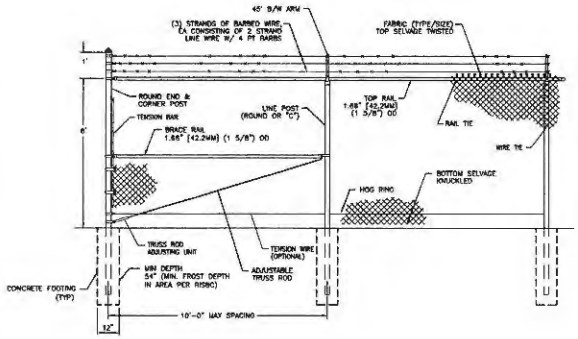
REV.	REVISION NOTE	DATE (YY.MM.DD)	REVISION DESCRIPTION	REV
0	ISSUED FOR BID	17.11.02		
1	ISSUED FOR PERMIT	17.11.06		

DESIGNED	DRAWN	CHECKED	APPROVED
AGG	AGG	SMM	SMM

SHEET TITLE: DETAILS

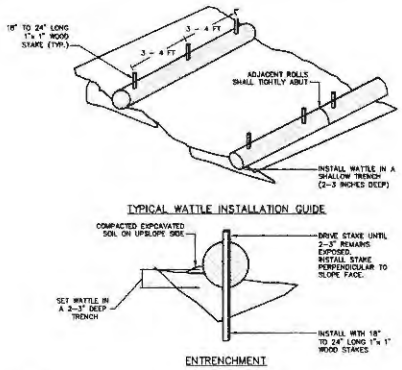
REF NUMBER: 17140 -180.00-REV 1 - 17.11.10

ISSUE DATE	MAY 17, 2017
PROJECT NUMBER	FND17140
SCALE	1"= 30'
SHEET NUMBER	180.00



CHAIN LINK FENCE

SCALE: N.T.S.

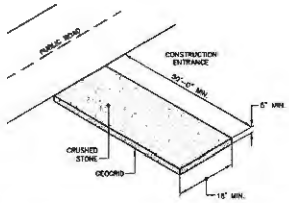


NOTES:

1. WATTLES SHALL BE INSTALLED AT LOCATIONS AS INDICATED ON THE DRAWINGS.
2. WATTLES SHALL BE TRENCHED APPROXIMATE 2-3 INCHES AND STAKED SUCH THAT WATTLES DIRECTLY CONTACT SOIL AND PRECLUDE UNDERMINING OR BLOWOUTS. THE TRENCH SHALL BE APPROXIMATELY 8 INCHES WIDE. STAKES SHALL BE DRIVEN THROUGH THE CENTER OF THE WATTLE AT A SPACING OF 3-4 FEET ON CENTER AND NO GREATER THAN 6" FROM THE EACH END OF THE WATTLE. COMPACT SOIL EXCAVATED TO CREATE TRENCH ON UPHILL SIDE.
3. ENDS OF ADJACENT WATTLES SHALL BE TIGHTLY BUTTED OR OVERLAPPED SO THAT NO OPENING EXISTS FOR WATER TO PASS THROUGH. WATTLES SHALL BE FREE OF DAMAGE OR DEFECTS WHEN DELIVERED TO THE SHIPPER. NO VEHICLES SHALL BE DRIVEN OVER WATTLES.
4. WATTLES SHALL BE 9-INCH SEDMAX-SWB™ MANUFACTURED BY NORTH AMERICAN GREEN, OR APPROVED EQUAL.

WATTLES

SCALE: N.T.S.

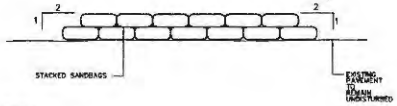


NOTES:

1. SHALL BE IN ACCORDANCE WITH SECTION 211 OF THE R.I. STANDARD SPECIFICATIONS.
2. STONE SHALL CONFORM TO M.01.09, TABLE 1, COLUMN B OF THE STANDARD SPECIFICATIONS.
3. FILTER FABRIC SHALL CONFRIM TO SECTION 205.02.3 OF THE STANDARD SPECIFICATIONS.

CONSTRUCTION ACCESS (R.I. STD. 9.9.0)

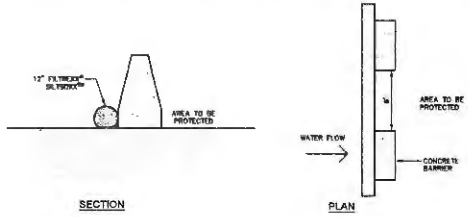
SCALE: N.T.S.



NOTE:
REMOVE ALL SANDBAGS AND ACCUMULATED SEDIMENT AFTER CONSTRUCTION IS COMPLETE.

SAND BAG SEDIMENT BARRIER

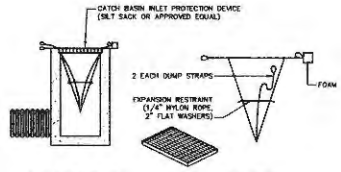
SCALE: N.T.S.

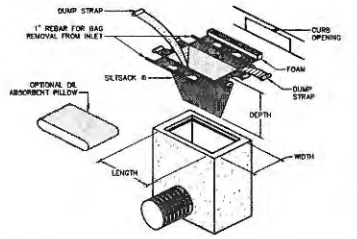


NOTE:
ENDS OF ADJACENT FILTER SOCKS SHALL BE OVERLAPPED SO THAT NO OPENING EXISTS FOR WATER TO PASS THROUGH. NO VEHICLES SHALL BE DRIVEN OVER FILTER SOCKS.

FILTER SOCK BARRIER

SCALE: N.T.S.



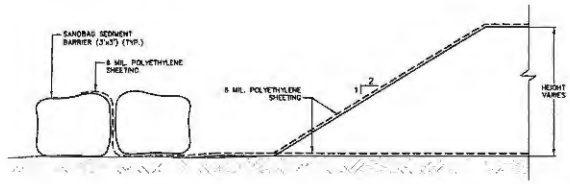


NOTES:

1. INLET PROTECTION SHALL BE SILTSACK, MANUFACTURED BY ACF ENVIRONMENTAL, OR APPROVED EQUAL.
2. CONTRACTOR SHALL MEASURE CATCH BASIN DIMENSIONS AND PROVIDE APPROPRIATELY-SIZED DEVICES PER MANUFACTURER'S REQUIREMENTS.
3. INSTALL INLET PROTECTION IN CATCH BASIN BEFORE COMMENCING ANY SITE WORK.
4. GRATE TO BE PLACED OVER INLET PROTECTION.
5. INLET PROTECTION SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS. CLEANING OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED. MAINTAIN UNTIL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED WITH TOPSOIL AND GRASS.

CATCH BASIN INLET PROTECTION

SCALE: N.T.S.



NOTE:
REMOVE AND DISPOSE ALL SANDBAGS AND ACCUMULATED SEDIMENT AFTER CONSTRUCTION IS COMPLETE.

SOIL STOCKPILE

SCALE: N.T.S.

SEAL
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PROJECT: McINNIS CEMENT TERMINAL EXPANSION
LOCATION: 39 NEW YORK AVENUE, PROVIDENCE, RI 02905

REV.	REVISION NOTE	DATE (YY.MM.DD)
0	ISSUED FOR BID	17.11.02
1	ISSUED FOR PERMIT	17.11.06

REVISION DESCRIPTION | REV.

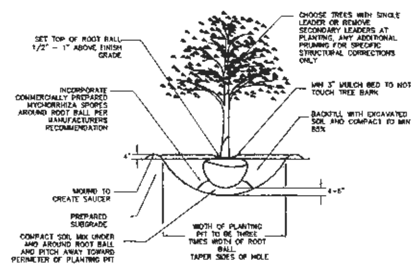
DESIGNED	DRAWN	CHECKED	APPROVED
AGG	AGG	SMM	SMM

SHEET TITLE: DETAILS

REF. NUMBER: 17140 -180.01-REV 1 - 17.11.10

START DATE: MAY 17, 2017
PROJECT NUMBER: IND17140
SCALE: 1"=10'
SHEET NUMBER: 180.01

P22

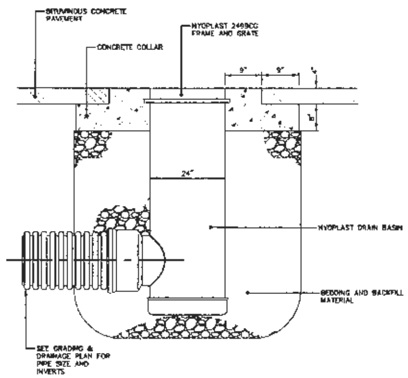


NOTES:

1. REMOVE TREE WRAP, WIRE, STAKES, ANY SYNTHETIC MATERIAL. CUT AWAY MINIMUM OF TOP HALF OF BURLAP &/OR WIRE BASKET. SCARIFY ALL PLANT PITS PRIOR TO PLANTING
2. SPRAY WITH ANTIDESICCANT IN ACCORDANCE WITH MFG'S INSTRUCTIONS IF FOLIAGE IS PRESENT.
3. TREE CALIPERS SHALL BE MEASURED ACCORDING TO ANSI Z60.1, 6 INCHES ABOVE GROUND FOR TREES UP TO 4-INCHES, AND 12-INCHES ABOVE GROUND FOR LARGER SIZES.
4. NOTIFY OWNER AND ENGINEER OF SOURCES OF PLANTING MATERIALS SEVEN DAYS IN ADVANCE OF DELIVERY TO SITE.
5. MAINTENANCE PERIOD: 1 YEAR FROM ACCEPTANCE BY ENGINEER/ OWNER.
6. WARRANTY PERIOD: 1 YEAR FROM SUBSTANTIAL COMPLETION.
7. PROVIDE NURSERY-GROWN TREES COMPLYING WITH ANSI Z60.1 WITH HEALTHY ROOT SYSTEMS. FULLY BRANCHED, HEALTHY STOCK FREE OF DISEASE, INSECTS, EGGS, AND DEFECTS.
8. COMPOST MULCH: WELL COMPOSTED, STABLE, WEED FREE ORGANIC MATTER, PH OF 5.5 TO 8, MOISTURE CONTENT 35 TO 55 PERCENT BY WEIGHT, 100 EPRCENT PASSING A 1-INCH SIEVE, 50 TO 60 PERCENT ORGANIC MATTER CONTENT, FREE FROM NOXIOUS WEEDS, MOLD, PESTICIDES, AND DELETERIOUS MATERIAL.

TREE PLANTING (OFF-SITE)

SCALE: N.T.S.

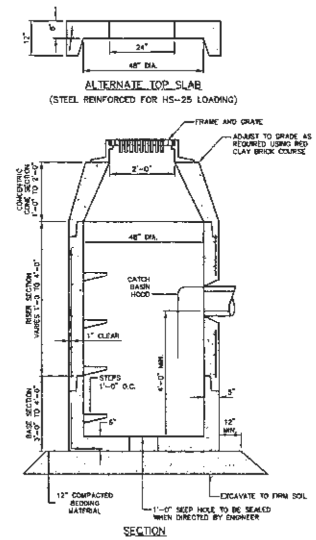


NOTES:

1. YARD DRAIN SHALL BE NYLOPLAST DRAIN BASIN MANUFACTURED BY ADS, INC.
2. FRAME AND GRADE SHALL BE INTEGRATED DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
3. PIPE INVERTS MAY CHANGE IN RESPONSE TO FIELD VERIFIED UTILITY DEPTHS. UTILIZE NYLOPLAST INSERTA TEE FOR PIPE CONNECTIONS REQUIRING FIELD ADJUSTMENTS.
4. BEDDING AND BACKFILL MATERIAL SHALL BE CLASS I, II, OR III MATERIAL COMPACTED IN ACCORDANCE WITH ASTM D2321.

YARD DRAIN

SCALE: N.T.S.

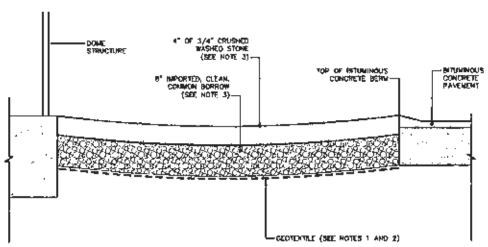


NOTES:

1. FRAME AND GRATE SHALL BE R.I. STD. 6.3.0 OR APPROVED EQUAL.
2. FRAMES SHALL BE SET IN FULL BED OF MORTAR. ADJUST TO GRADE WITH RED CLAY BRICKS AND MORTAR.
3. 8-INCH DEEP FRAMES PREFERRED, BUT 4-INCH DEEP FRAMES MAY BE REQUIRED ON STRUCTURES WITH SHALLOW PIPE INVERTS.
4. REINFORCING STEEL SHALL CONFORM TO ASTM A-185:
   - 0.12 SQ. IN./LIN. FT. CIRCUMFERENTIAL
   - 0.18 SQ. IN./FT. (BOTH WAYS) BASE BOTTOM
5. CONCRETE SHALL BE COMPRESSIVE STRENGTH 4,000 PSI TYPE II CEMENT.
6. ONE POUR MONOLITHIC BASE SECTION.
7. PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
8. JOINT SEALANT SHALL BE PREFORMED BUTYL RUBBER MASTIC TYPE SEAL THAT COMPLIES WITH AASHTO M198 OR SYNTHETIC RUBBER GASKET THAT COMPLIES WITH ASTM C-443 OR C-361.
9. CATCH BASIN DESIGN SHALL CONFORM TO ASTM C-478 FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTION.
10. CATCH BASIN STEPS SHALL BE ASTM A 615/A615M, DEFORMED, 1/2-INCH STEEL REINFORCED RODS ENCASED IN ASTM D 4101, POLYPROPYLENE PLASTIC. THE CENTERLINE OF OPENING MUST BE WITHIN 2'-0" FROM STEPS.
11. ANY NECESSARY ADJUSTMENTS DURING CONSTRUCTION WILL BE DONE BY SAW-CUTTING AND/OR CORING ONLY. NO JACKHAMMERS, HAMMERS AND CHISELS OR PNEUMATIC TOOLS WILL BE ALLOWED.

CATCH BASIN

SCALE: N.T.S.

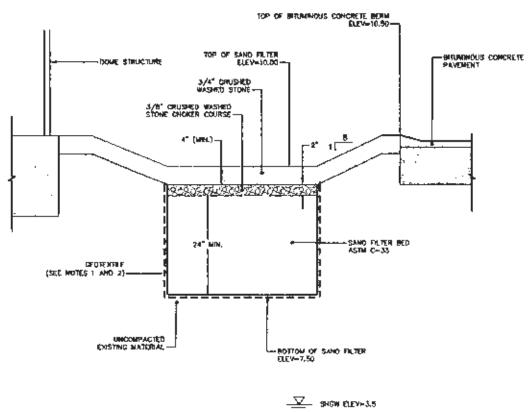


NOTES:

1. OVERLAP SEAMS OF GEOTEXTILE FABRIC A MINIMUM OF 12 INCHES AT ALL LONGITUDINAL AND TRANSVERSE JOINTS.
2. WHERE NECESSARY, HOLES MAY BE CUT IN GEOTEXTILE FABRIC FOR INSTALLATION OF POSTS OR STRUCTURES. HOLE SHALL ONLY BF AS LARGE AS NECESSARY TO COMPLETE THE INSTALLATION.
3. PITCH STONE AND COMMON BORROW AWAY FROM DOME AT A MINIMUM OF 0.02 FT/FT.

CRUSHED STONE DETAIL AROUND THE DOME

SCALE: N.T.S.

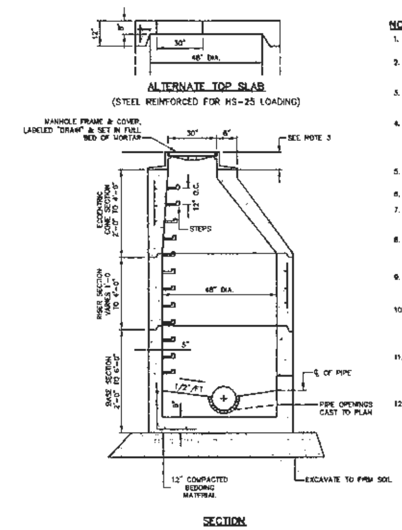


NOTES:

1. OVERLAP SEAMS OF GEOTEXTILE FABRIC A MINIMUM OF 12 INCHES AT ALL LONGITUDINAL AND TRANSVERSE JOINTS.
2. WHERE NECESSARY, HOLES MAY BE CUT IN GEOTEXTILE FABRIC FOR INSTALLATION OF POSTS OR STRUCTURES. HOLE SHALL ONLY BE AS LARGE AS NECESSARY TO COMPLETE THE INSTALLATION.

SAND FILTER

SCALE: N.T.S.



NOTES:

1. FRAME AND COVER TO BE R.I. STD. 6.2.1 OR APPROVED EQUAL. LETTERING: "DRAIN"
2. FRAMES SHALL BE SET IN FULL BED OF MORTAR. ADJUST TO GRADE WITH RED CLAY BRICKS AND MORTAR.
3. 8-INCH DEEP FRAMES PREFERRED, BUT 4-INCH DEEP FRAMES MAY BE REQUIRED ON STRUCTURES WITH SHALLOW PIPE INVERTS.
4. REINFORCING STEEL SHALL CONFORM TO ASTM A-185:
   - 0.12 SQ. IN./LIN. FT. CIRCUMFERENTIAL
   - 0.18 SQ. IN./FT. (BOTH WAYS) BASE BOTTOM
5. CONCRETE SHALL BE COMPRESSIVE STRENGTH 4,000 PSI TYPE II CEMENT.
6. ONE POUR MONOLITHIC BASE SECTION.
7. PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
8. JOINT SEALANT SHALL BE PREFORMED BUTYL RUBBER MASTIC TYPE SEAL THAT COMPLIES WITH AASHTO M198 OR SYNTHETIC RUBBER GASKET THAT COMPLIES WITH ASTM C-443 OR C-361.
9. MANHOLE DESIGN SHALL CONFORM TO ASTM C-478 FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS."
10. MANHOLE STEPS SHALL BE ASTM A 615/A615M, DEFORMED, 1/2-INCH STEEL REINFORCED RODS ENCASED IN ASTM D 4101, POLYPROPYLENE PLASTIC. THE CENTERLINE OF OPENING MUST BE WITHIN 2'-0" FROM STEPS.
11. ANY NECESSARY ADJUSTMENTS DURING CONSTRUCTION WILL BE DONE BY SAW-CUTTING AND/OR CORING ONLY. NO JACKHAMMERS, HAMMERS AND CHISELS OR PNEUMATIC TOOLS WILL BE ALLOWED.
12. INVERT CONSTRUCTED OF BRICK OR CEMENT CONCRETE, CLASS D.

DRAIN MANHOLE

SCALE: N.T.S.

SEAL
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PROJECT: McINNIS CEMENT TERMINAL EXPANSION

LOCATION: 39 NEW YORK AVENUE, PROVIDENCE, RI 02905

REV	REVISION NOTE	DATE (YY.MM.DD)
0	ISSUED FOR BID	17.11.02
1	ISSUED FOR PERMIT	17.11.06

DESIGNED	DRAWN	CHECKED	APPROVED
AGO	AGO	SMM	SMM

SHEET TITLE: DETAILS

REF NUMBER: 17140 -180.02-REV 1 - 17.11.10

MAY 17, 2017

180.02

2017-05-045 Bridge Street

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) 783-3767

ROW SUBCOMMITTEE MEETING

Department of Administration
Conference Room A
One Capitol Hill
Providence, RI
5:45 p.m.

TUESDAY, JANUARY 23, 2018

AGENDA

1. Discussion of status and possible action on Rights-of-Way Designation for Warren, Rhode Island

    - Baker Street
    - Beach Street
    - Bridge Street
    - Riverview Drive

RI CRMC
PUBLIC HEARING
Rights of Way

TOWN OF WARREN

2017-05-045 Bridge Street
2017-05-046 Beach Street
2017-05-047 Baker Street
2017-05-048 Riverview Street

Monday, June 19, 2017
7:00 p.m.
Warren Town Hall, Council Chambers
514 Main Street, Warren

Subcommittee Members:
Anne Livingston
Ron Gagnon
Paul Beaudette
Patricia Reynolds
Anthony DeSisto, Legal Counsel

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

May 16, 2017

NOTICE OF PUBLIC HEARING

In accordance with and pursuant to the provisions of the "Administrative Procedures Act", (Chapter 42-35 et. seq. of the General Laws of Rhode Island), and the Rules and Regulations of the Coastal Resources Management Council, a hearing will be held relative to Title 46, Chapter 23, of Section 6 A, B, C, D, E, Title 46 Chapter 23 Section 18(b), Title 46, Chapter 6, Section 1, Title 46, Chapter 6, Section 2 of the Rhode Island General Laws of 1956, as amended, for a State of Rhode Island Assent on potential Rights-of-Way located in the Town of Warren.

The Proposed Right-of-Way (ROW) CRMC File No. 2017-05-045
Description: Bridge Street Right of Way, Warren, Rhode Island

Beginning at the northwesterly corner of North Water Street and Bridge Street, thence running westerly along the northerly boundary of Bridge Street one hundred and fifty-five and 25/100 (155.25') feet to the shore of the Warren River, thence running southerly along the shore of the Warren River for a distance of thirty (30') feet; thence turning and running easterly along the southerly boundary of Bridge Street two hundred twenty-eight (228') feet to a point in the southerly boundary of Bridge Street, thence turning northerly across Bridge Street to the point and place of beginning.

The Proposed Right-of-Way (ROW) CRMC File No. 2017-05-046
Description: Beach Street Right of Way, Warren, Rhode Island

Beginning at the northwesterly corner of the East Bay Bicycle Path and Beach Street, thence running westerly along the northerly boundary of Beach Street three hundred and ninety-three and 20/100 (393.20') feet to the shore of the Warren River, thence running southerly along the shore of the Warren River for a distance of thirty-five (35') feet; thence turning and running easterly along the southerly boundary of Beach Street four hundred fifty-eight and 78/100 (458.78') feet to the southwesterly corner of the East Bay Bicycle Path and Beach Street, thence turning and running northerly along the westerly boundary of the East Bay Bicycle Path the point and place of beginning.

The Proposed Right-of-Way (ROW) CRMC File No. 2017-05-047
Description: Baker Street Right of Way, Warren, Rhode Island

Beginning at the northwesterly corner of North Water Street and Baker Street, thence running westerly along the northerly boundary of Baker Street two hundred and eighty-two (282') feet to the shore of the Warren River, thence running southerly along the shore of the Warren River for a distance of forty (40') feet; thence turning and running easterly along the southerly boundary of Baker Street two hundred fifty-four (254') feet to the southwesterly

corner of North Water Street and Baker Street, thence turning northerly across the intersection of North Water Street and Baker Street forty (40') feet to the point and place of beginning.

The Proposed Right-of-Way (ROW) CRMC File No. 2017-05-048
Description: River View Street Right of Way, Warren, Rhode Island

Beginning at the northeasterly corner of Barker Avenue and River View Street, thence running easterly along the northerly boundary of River View Street eighty (80') feet to the shore of the Kickemuit River, thence turning and running southerly along the shore of the Kickemuit River for a distance of thirty (30') feet; thence turning and running easterly along the southerly boundary of River View Street eighty (80') feet to a point on the southerly boundary of River View Street, thence turning northerly across River View Street thirty (30') feet to the point and place of beginning.

The hearing will be held at 7:00 p.m. on Monday, June 19th, 2017 in the Warren Town Hall, Council Chambers, 514 Main Street, Warren, RI.

Parties interested in/or concerned with the above mentioned matter are invited to be present and/or represented by counsel at the above mentioned time and place. This meeting place is accessible to individuals with disabilities. The meeting location is accessible to handicapped persons. Any individual requiring a reasonable accommodation in order to participate in this meeting should contact CRMC offices at 401-783-3370 at least 72 hours prior to the meeting.

Plans of the proposed work may be seen in the office of the Coastal Resources Management Council, Oliver H. Stedman Government Center, 4808 Tower Hill Road, Wakefield, Rhode Island, between the hours of 8:30 a.m. and 3:30 p.m., Monday through Friday.

Oral statements will be heard and recorded and statements may be submitted to the hearing officers at the time of hearing.

Signed this 16th day of May, 2017.

Grover J. Fugate, Executive Director
Coastal Resources Management Council

/lat

Mailing List for 2017-05-045
Bridge Street ROW – Warren

Town of Warren
Warren Town Hall
514 Main Street
Warren, RI 02885

Andrew and Esther Scott
74 Bridge Street
Warren, RI 02885

Robert and Helen Hawkinson, Trustees
72 Bridge Street
Warren, RI 02885

John and Rosemary Lyons
65 Bridge Street
Warren, RI 02885

Michael and Jane Swift
71 Bridge Street
Warren, RI 02885

CRMC (2017-05-045, 046, 047, 048)
O. S. Government Center
4808 Tower Hill Road
Wakefield, RI 02879

NOTICE OF PUBLIC HEARING

In accordance with and pursuant to the provisions of the "Administrative Procedures Act", (Chapter 42-35 et. seq. of the General Laws of Rhode Island), and the Rules and Regulations of the Coastal Resources Management Council, a hearing will be held relative to Title 46, Chapter 23, of Section 6 A, B, C, D, E, Title 46 Chapter 23 Section 18(b), Title 46, Chapter 6, Section 1, Title 46, Chapter 6, Section 2 of the Rhode Island General Laws of 1956, as amended, for a State of Rhode Island Assent on potential Rights-of-Way located in the Town of Warren.

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The Proposed Right-of-Way (ROW) CRMC File No. 2017-05-046 Description: Beach Street Right of Way, Warren, Rhode Island

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The Proposed Right-of-Way (ROW) CRMC File No. 2017-05-047 Description: Baker Street Right of Way, Warren, Rhode Island

Beginning at the northwesterly corner of North Water Street and Baker Street, thence running westerly along the northerly boundary of Baker Street two hundred and eighty-two (282') feet to the shore of the Warren River, thence running southerly along the shore of the Warren River for a distance of forty (40') feet; thence turning and running easterly along the southerly boundary of Baker Street two hundred fifty-four (254') feet to the southwesterly corner of North Water Street and Baker Street, thence turning northerly across the intersection of North Water Street and Baker Street forty (40') feet to the point and place of beginning.

The Proposed Right-of-Way (ROW) CRMC File No. 2017-05-048 Description: River View Street Right of Way, Warren, Rhode Island

Beginning at the northeasterly corner of Barker Avenue and River View Street, thence running easterly along the northerly boundary of River View Street eighty (80') feet to the shore of the Kickemuit River, thence turning and running southerly along the shore of the Kickemuit River for a distance of thirty (30') feet; thence turning and running easterly along the southerly boundary of River View Street eighty (80') feet to a point on the southerly boundary of River View Street, thence turning northerly across River View Street thirty (30') feet to the point and place of beginning.

The hearing will be held at 7:00 p.m. on Monday, June 19th, 2017 in the Warren Town Hall, Council Chambers, 514 Main Street, Warren, RI.

Parties interested in/or concerned with the above mentioned matter are invited to be present and/or represented by counsel at the above mentioned time and place. This meeting place is accessible to individuals with disabilities. The meeting location is accessible to handicapped persons. Any individual requiring a reasonable accommodation in order to participate in this meeting should contact CRMC offices at 401-783-3370 at least 72 hours prior to the meeting.

Plans of the proposed work may be seen in the office of the Coastal Resources Management Council, Oliver H. Stedman Government Center, 4808 Tower Hill Road, Wakefield, Rhode Island, between the hours of 8:30 a.m. and 3:30 p.m., Monday through Friday.

Oral statements will be heard and recorded and statements may be submitted to the hearing officers at the time of hearing.

Signed this 16th day of May, 2017.

Grover J. Fugate,
Executive Director
Coastal Resources
Management Council

The Providence Journal

Monday, May 22, 2017

The Providence Journal

Monday, May 22, 2017

Ad Number: 11096715
Insertion Number: N/A
Size: 1.13 in x 18.83 in
Color Type: 0
Advertiser: Rhode Island Coastal Resources Ma...
Agency: N/A
Section-Page-Zone(s): C-2-All
Description:

LEGALS

LEGAL ADVERTISEMENT INVITATION TO BID

PROJECT: 2016-06 Central Falls School Projects Captain Hunt Elementary School, Calcutt Middle School and Central Falls High School.

OWNER: Central Falls School District 949 Dexter Street, Central Falls, RI 02863

ARCHITECT: Torrado Architects 35 Greenwich Street, Providence, Rhode Island 02907 T (401) 781-0633 F (401) 781-0661 E la.torrado@verizon.net

Sealed Bids are invited on a General Contract for the above referenced project by the 2016-06 Central Falls School Projects. All Bids must be on a Lump Sum Basis.

Monday, May 22, 2017: A CD of the Contract Documents can be picked up by contractors at Torrado Architects, 35 Greenwich Street, Providence, RI after 1:00pm.

Tuesday, May 30, 2017 A mandatory Pre-Bid Conference for this Project will be held starting at the Captain Hunt Elementary School, 12 Kendall Street, Central Falls, RI 02863 starting at 3:30 p.m. and subsequently proceeding to the other school sites. Contractors shall visit the job sites and be completely familiar with all existing conditions as they relate to the Project.

Monday, June 12, 2017: All Bids must be submitted in a sealed envelope plainly marked on the exterior of the envelope "2016-06 Central Falls School Projects", addressed to the Central Falls School District no later than 2:30 p.m. at the Administration Office, 949 Dexter Street, Central Falls, RI 02863. Bids will be opened publicly at that time. No bid will be accepted after that date and time specified.

Bid is expected to be awarded to the selected contractor by Wednesday, June 21, 2017. Construction shall be started immediately after school ends on June 27, 2017. Substantial Completion shall be achieved by December 31, 2017 along with specific completion milestones, by school location, as further noted in the Contract Documents.

The successful Bidder must furnish a Labor and Material Bond and a Performance Bond equal to 100% of the total Bid Price and a Certificate of Insurance naming the Central Falls School District as the additional insured on the policy and so noted on the certificate. The Contractor must include with their bid a bid bond equal to 5% of their bid. The Performance Bond and Certificate of Insurance must be provided to the Central Falls School District within 21 calendar days after notification of award or the Owner reserves the right to cancel said award. The successful Bidder will be required to provide Contractor's Liability Insurance and all other required insurance in the amounts and limits in accordance with the Supplementary General Conditions.

The Contractor shall obtain and pay for all Permits required from the Central Falls Building and Fire Departments and the State of Rhode Island. The Fire Department permits must be obtained from the designated Fire Department for each individual school. The project will be exempt from R.I. State sales taxes; the Owner's tax number will be available for the Contractor's usage in conjunction with this project. This project is subject to prevailing wage provisions of the Davis Bacon Act.

The Contractor must submit letter along with Bid Form outlining qualifications, prior construction and compliance with NE CHPS requirements and must include references with telephone numbers.

The Contract will be awarded to the General Contractor who has the capability and experience in school construction during summer interims and who is familiar with CHPS requirements and submitting the lowest proposal complying with the conditions of the Invitation to Bid provided the Bid is reasonable and it is in the interest of the Owner to accept it. The Bidder to whom the award is made will be notified at the earliest practicable date. The Owner reserves the right to reject any and all Bids and to waive any informality in Bids received whenever such rejection or waiver is in the interest of the Owner. No Bidder may withdraw its bid within sixty (60) calendar days after the actual date of opening thereof. One CD of bidding documents will be distributed to a General Contractor; additional copies may be purchased and paid for by the Contractor or subcontractor.

INVITATION TO BID

Wanskuck Library, 233 Veazie St., Prov. 02908. Repair and Replace Exterior Fencing. Specifications available in person as of 5/17/17 from Sue Gibbs, PCL, Business Office, at 265 Oxford, Prov. 02905 between 9AM and 5PM. 401-467-2700 x6 or x7 or sgibbs@provcomlib.org. Sealed bids received until 6/9/17 at 4 pm.

INVITATION TO BID

Wanskuck Library, 233 Veazie St., Prov. 02908. Install Security Cameras. Specifications available in person as of 5/17/17 from Sue Gibbs, PCL, Business Office, at 265 Oxford, Prov. 02905 between 9AM and 5PM. 401-467-2700 x6 or x7 or sgibbs@provcomlib.org. Sealed bids received until 6/9/17 at 3 pm.

INVITATION TO BID CITY OF WOONSOCKET, RI REHABILITATION OF WATER SYSTEM FIRE HYDRANT EXTERIOR COATING SYSTEMS

Sealed Bids shall be received by the City of Woonsocket at City Hall, Office of Purchasing located at 169 Main Street, Woonsocket, Rhode Island 02895 until 2:00 P.M., Friday, June 9, 2017 and at that time and place shall be publicly opened and read aloud.

The work of this project generally involves the inspection, information/data gathering, collecting and recording, exterior cleaning, exterior coatings refurbishment and hydrant component maintenance addressing certain functional defects of the 1,952 fire hydrants installed at various locations across the City of Woonsocket's water system within the City of Woonsocket, Cumberland and North Smithfield, Rhode Island and Blackstone, Massachusetts.

Specifications may be obtained at the offices of C&E Engineering Partners, Inc., 342 Park Avenue, Woonsocket, Rhode Island between the hours of 8:30 A.M. and 4:00 P.M., Monday through Friday on or after Monday, May 22, 2017, upon payment of $100.00 for each set (check to be made payable to "C&E Engineering Partners, Inc."). Such deposit will be non-refundable. Bidders requesting Contract Documents by mail shall forward a non-refundable check (payable to "C&E Engineering Partners, Inc.") in the amount of $100.00 per set to cover for Contract Documents and an additional $20.00 to cover costs of handling and postage. Only General Contract Bidders may obtain Contract Documents. Only one set of Contract Documents per Contractor will be provided.

Bids must be enclosed in an opaque envelope addressed to "City of Woonsocket, Office of Purchasing, 169 Main Street, Woonsocket, Rhode Island 02895" bearing the name and address of the Bidder. All Bids must be submitted on the form in the Contract Documents and clearly marked:

REHABILITATION OF WATER SYSTEM FIRE HYDRANT EXTERIOR COATING SYSTEMS

Bidders are invited to attend a pre-bid conference to be held on Wednesday, May 24, 2017 at 10:00 A.M. at the Woonsocket City Hall located at 169 Main Street, Woonsocket, Rhode Island 02895 after which a site visit will be conducted.

Each Bid shall be submitted in accordance with the Instructions to Bidders and be accompanied by a Bid Security in the designated form in the amount of five (5) percent of the Bid Price. Bid Security shall be refunded to all bidders following award and execution of the contract.

The successful Bidder must furnish 100-percent Construction Performance Bond and 100-percent Construction Labor and Material Payment Bond with Rhode Island licensed Surety Company acceptable to the Owner along with required insurance certificates, within ten (10) calendar days after the Notice of Award.

No bidder may withdraw their Bid for a period of ninety (90) days, excluding Saturdays, Sundays and legal holidays, after the date of the opening of the Bids.

The successful Bidder must commence work by the date established in the written Notice to Proceed, and complete the construction project within Seven Hundred Thirty (730) calendar days thereafter. Complete instructions for filing Bids are included in the Instructions to Bidders located in the Contract Documents.

The City of Woonsocket reserves the right to reject any and all Bids or parts thereof, to waive any irregularity in the Bids received, and to accept the Bid or parts thereof deemed to be most favorable to the best interest of the City of Woonsocket.

Individuals requesting interpreter services for the hearing impaired should contact the Finance Director at 401-762-6400 a minimum of seventy two (72) hours in advance of the opening.

Christine Chamberland
Finance Director

MORTGAGEE'S SALE
12 Spears Path
Foster, RI

The premises described in the mortgage will be sold subject to all encumbrances and prior liens on June 1, 2017 at 10:00 a.m. on the premises, by virtue of the power of sale contained in a mortgage by Julie A. Ferrazzano dated October 31, 2006 and recorded in the Foster Land Evidence Records in Book 149, Page 24 excepting that parcel of land described in Deed recorded with said Registry in Book 85, Page 195, as affected by a loan modification agreement dated May 17, 2013, and recorded with said Registry in Book 181, Page 55, and as further affected by a loan modification agreement dated August 11, 2015 and recorded in Book 187, Page 742, the conditions of said mortgage having been broken.

$10,000.00 in cash, certified or bank check is required to bid. Other terms will be announced at the sale.

HARMON LAW OFFICES, P.C.
Attorney for the Holder of the Mortgage
150 California Street
Newton, MA 02458
(617) 558-0500
201703-0419 - TEA

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS SUPERIOR COURT SUMMONS

Civil Action File Number PM-2017-0625

Plaintiff
U.S. Bank National Association, As Trustee
v.
Defendant
Evelyn Lizotte

Attorney for the Plaintiff or the Plaintiff
Paul G. Manning Jr.
Address of the Plaintiff's Attorney or the Plaintiff
900 CHELMSFORD STREET SUITE 3102
LOWELL MA 01851
Licht Judicial Complex
Providence/Bristol County
250 Benefit Street
Providence RI 02903
(401) 222-3250
Address of the Defendant
116-118 Arnold Street
Lincoln RI 02865

TO THE DEFENDANT
Bryan J. Lizotte

The above-named Plaintiff has brought an action against you in said Superior Court in the county indicated above. You are hereby summoned and required to serve upon the Plaintiff's attorney, whose address is listed above, an answer to the complaint which is herewith served upon you within twenty (20) days after service of this Summons upon you, exclusive of the day of service.

If you fail to do so, judgment by default will be taken against you for the relief demanded in the complaint. Your answer must also be filed with the court.

As provided in Rule 13(a) of the Superior Court Rules of Civil Procedure, unless the relief demanded in the complaint is for damage arising out of your ownership, maintenance, operation, or control of a motor vehicle, or unless otherwise provided in Rule 13(a), your answer must state as a counterclaim any related claim which you may have against the Plaintiff, or you will thereafter be barred from making such claim in any other action.

This Summons was generated on 2/17/2017.

/s/ Henry Kinch
Clerk

INVITATION TO BID

Wanskuck Library, 233 Veazie St., Prov. 02908, Install Carpeting. Specifications available in person as of 5/17/17 from Sue Gibbs, PCL, Business Office, at 265 Oxford, Prov. 02905 between 9AM and 5PM. 401-467-2700 x6 or x7 or sgibbs@provcomlib.org. Sealed bids received until 6/9/17 at 3 pm.

Foster-Glocester Regional School District
Request for Proposals
Request for Auditing and Agreed-Upon Procedures Services

The School Committee of the Foster-Glocester Regional School District is soliciting bids for an independent audit of the books, accounts and other evidence of financial transactions of the School Department for three fiscal years ending June 30, 2017, June 30, 2018, and June 30, 2019.

The Foster-Glocester Regional School Department implemented the Uniform Chart of Accounts (UCOA). The auditors engaged to perform the annual audit of the School Department shall also be engaged to report on their tests of compliance with the School UCOA requirements in an agreed-upon procedures compliance attestation format.

Specifications may be obtained on the School Department web site http://www.fgsk12.ri.us

Sealed bids are to be submitted to the Business Manager, 91 Anan Wade Rd, N. Scituate, RI 02857 by June 2, 2017 at 10AM and will be opened at that time in the Business Office. The contract will be awarded at the June 6, 2017 School Committee Meeting.

Bids are to be sealed and identified as "Audit and Agreed-Upon Procedures Bids" on the outside of the envelope.

The School Committee reserves the right to reject any bidder if it deems that it does not possess the personnel, experience and other resources to complete the audit and agreed-upon procedures in accordance with the specifications herein.

REQUEST FOR PROPOSALS LEGAL SERVICES

Cumberland Housing Authority (CHA) is requesting competitive proposals from qualified licensed and reputable entities to serve as Legal Counsel to the Authority for one three (3) year term. The Authority administers the following:

- 176 units of Public Housing for the Elderly and Disabled.
- 384 Leased Housing Vouchers.

This Request for Proposal (RFP) contains specific submission requirements, general scope of service requirements, terms, conditions and other pertinent information necessary for submitting a proposal. Interested parties may obtain the RFP package from the CHA by email request to smonaghan@cumberlandha.org or at the main office of the CHA at 573 Mendon Road, Suite 4, Cumberland, RI 02864 beginning May 22, 2017. Proposals are requested no later than 3:00 PM June 19, 2017. Questions regarding the RFP or the selection process may be directed to Susan Monaghan at: 401-475-5282.

Susan Monaghan
Executive Director
An Equal Employment Opportunity/ Affirmative Action Employer

NOTICE OF PUBLIC HEARING

In accordance with and pursuant to the provisions of the "Administrative Procedure Act", (Chapter 42-35 et. seq. of the General Laws of Rhode Island), and the Rules and Regulations of the Coastal Resources Management Council, a hearing will be held relative to Title 46, Chapter 23, of Section 6 A, B, C, D, E, Title 46 Chapter 23 Section 18(b), Title 46, Chapter 6, Section 1, Title 46, Chapter 6, Section 2 of the Rhode Island General Laws of 1956, as amended, for a State of Rhode Island Assent on potential Rights-of-Way located in the Town of Warren.

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The Proposed Right-of-Way (ROW) CRMC File No. 2017-05-046 Description: Beach Street Right of Way, Warren, Rhode Island

Beginning at the northwesterly corner of the East Bay Bicycle Path and Beach Street, thence running westerly along the northerly boundary of Beach Street three hundred and ninety- three and 20/100 (393.29') feet to the shore of the Warren River, thence running northerly along the shore of the Warren River for a distance of thirty-five (35') feet, thence turning and running easterly along the southerly boundary of Beach Street four hundred fifty-eight and 78/100 (458.78') feet to the southwesterly corner of the East Bay Bicycle Path and Beach Street, thence turning and running northerly along the westerly boundary of the East Bay Bicycle Path the point and place of beginning.

The Proposed Right-of-Way (ROW) CRMC File No. 2017-05-047 Description: Baker Street Right of Way, Warren, Rhode Island

Beginning at the northwesterly corner of North Water Street and Baker Street, thence running westerly along the northerly boundary of Baker Street two hundred and eighty-two (282') feet to the shore of the Warren River, thence running southerly along the shore of the Warren River for a distance of forty (40') feet, thence turning and running easterly along the southerly boundary of Baker Street two hundred fifty-four (254') feet to the southwesterly corner of North Water Street and Baker Street, thence turning northerly across the intersection of North Water Street and Baker Street forty (40') feet to the point and place of beginning.

The Proposed Right-of-Way (ROW) CRMC File No. 2017-05-048 Description: River View Street Right of Way, Warren, Rhode Island

Beginning at the northeasterly corner of Barker Avenue and River View Street, thence running easterly along the northerly boundary of River View Street eighty (80') feet to the shore of the Kickemuit River, thence turning and running southerly along the shore of the Kickemuit River for a distance of thirty (30') feet, thence turning and running westerly along the southerly boundary of River View Street eighty (80') feet to a point on the southerly boundary of River View Street, thence turning northerly across River View Street thirty (30') feet to the point and place of beginning.

The hearing will be held at 7:00 p.m. on Monday, June 19th, 2017 in the Warren Town Hall, Council Chambers, 514 Main Street, Warren, RI.

Parties interested in/or concerned with the above mentioned matter are invited to be present and/or represented by counsel at the above mentioned time and place. This meeting place is accessible to individuals with disabilities. The meeting location is accessible to handicapped persons. Any individual requiring a reasonable accommodation in order to participate in this meeting should contact CRMC offices at 401-783-3370 at least 72 hours prior to the meeting.

Plans of the proposed work may be seen in the office of the Coastal Resources Management Council, Oliver H. Stedman Government Center, 4808 Tower Hill Road, Wakefield, Rhode Island, between the hours of 8:30 a.m. and 3:30 p.m., Monday through Friday.

Oral statements will be heard and recorded and statements may be submitted to the hearing officers at the time of hearing.

Signed this 16th day of May, 2017.

Grover J. Fugate,
Executive Director
Coastal Resources
Management Council

MORTGAGEE'S NOTICE OF SALE OF REAL ESTATE
168 LAKE GARDEN DRIVE, CRANSTON, RI 02920

The premises described in the mortgage will be sold subject to all encumbrances and prior liens on May 15, 2017 at 10:00 AM on the premises, by virtue of the power of sale contained in a mortgage by Aaron P. Lemay and Amy L. Lemay dated November 17, 2011 and recorded in the Cranston Land Evidence Records in Book 4452, Page 185, the conditions of said mortgage having been broken.

TERMS OF SALE:

A deposit of FIVE THOUSAND DOLLARS AND 00 CENTS ($5,000.00) in the form of a certified check, bank treasurer's check or money order will be required to be delivered at or before the time the bid is offered. The description of the premises contained in said mortgage shall control in the event of an error in this publication. Other terms will be announced at the sale.

The public foreclosure auction scheduled for May 15, 2017 at 10:00 AM on the premises has been postponed to June 28, 2017 at 10:00 AM on the premises.

ORLANS PC
Attorney for the Present Holder of the Mortgage
PO Box 540540
Waltham, MA 02454
Phone: (781) 790-7800
15-019423

MORTGAGEE'S NOTICE OF SALE OF REAL ESTATE
966 HARTFORD AVENUE, JOHNSTON, RI 02919

The premises described in the mortgage will be sold subject to all encumbrances and prior liens on May 15, 2017 at 2:00 PM on the premises, by virtue of the power of sale contained in a mortgage by John F. McGovern and Tamara A. McGovern dated October 27, 2006 and recorded in the Johnston Land Evidence Records in Book 1770, Page 197, the conditions of said mortgage having been broken.

TERMS OF SALE: A deposit of FIVE THOUSAND DOLLARS AND 00 CENTS ($5,000.00) in the form of a certified check, bank treasurer's check or money order will be required to be delivered at or before the time the bid is offered. The description of the premises contained in said mortgage shall control in the event of an error in this publication. Other terms will be announced at the sale.

The public foreclosure auction scheduled for May 15, 2017 at 2:00 PM on the premises has been postponed to July 14, 2017 at 2:00 PM on the premises.

ORLANS PC
Attorney for the Present Holder of the Mortgage
PO Box 540540
Waltham, MA 02454
Phone: (781) 790-7800
16-009769

MORTGAGEE'S SALE
56 Halleck Avenue
East Providence, RI
Map 312, Block 68, Parcel 8

The premises described in the mortgage will be sold subject to all encumbrances and prior liens on May 31, 2017 at 11:00 a.m. on the premises, by virtue of the power of sale contained in a mortgage by Lynn M. Murray and John H. Dunne dated June 30, 2005 and recorded in the East Providence Land Evidence Records in Book 2492, Page 139, the conditions of said mortgage having been broken.

$5,000.00 in cash, certified or bank check is required to bid. Other terms will be announced at the sale.

HARMON LAW OFFICES, P.C.
Attorney for the Holder of the Mortgage
150 California Street
Newton, MA 02458
(617) 558-0500
201510-0448 - TEA

REQUEST FOR PROPOSAL
Invitation to Bid

Newport County Regional Special Education Program (NCRSEP) acting on behalf of the following school districts is requesting proposals for MEDICAID BILLING SERVICES for Barrington Public Schools, Bristol Warren Regional Schools, and Newport County Regional Special Education Program (serving the towns of Little Compton, Middletown, and Tiverton)

Detailed bid specifications are available by downloading from NCRSEP's website: http://www.ncrsep.org/ or by contacting the NCRSEP office at (401) 847-3916.

Deadline for proposal submission is 10:00 am on June 2, 2017

MORTGAGEE'S SALE
599 Phenix Avenue
Cranston, RI
Plat 20, Lot 18

The premises described in the mortgage will be sold subject to all encumbrances and prior liens on June 14, 2017 at 10:00 a.m. on the premises, by virtue of the power of sale contained in a mortgage by Louis Gauthier and Brenda Gauthier dated February 3, 2006 and recorded in the Cranston Land Evidence Records in Book 3279, Page 243, the conditions of said mortgage having been broken.

$15,000.00 in cash, certified or bank check is required to bid. Other terms will be announced at the sale.

HARMON LAW OFFICES, P.C.
Attorney for the Holder of the Mortgage
150 California Street
Newton, MA 02458
(617) 558-0500
201008-2408 - YEL

NOTICE OF MORTGAGEE'S SALE
181 (aka 185) Narragansett Avenue, Providence, RI 02907

The property described in the mortgage listed below will be sold, subject to all encumbrances, prior liens and such matters which may constitute valid liens or encumbrances after sale, at public auction on June 12, 2017 at 02:00PM on the premises by virtue of the Power of Sale contained in a Mortgage made by Ralph F. Lane, Jr. dated July 27, 2006, and recorded in Book 8191, Page 140 et seq. with the Land Evidence Records of the City/Town of Providence, RI, the conditions of said mortgage having been broken.

A deposit of $10,000.00 via certified check or bank check (dated no more than ninety days before the date of sale) will be required to be delivered at the time and place of sale in order to bid. The successful bidder will be required to execute the mortgage holder's form of Memorandum of Sale immediately after the close of bidding. Other terms and conditions will be announced at the sale.

MICHIENZIE & SAWIN, LLC
Attorneys for Holder of the Mortgage
745 Boylston Street
Boston, MA 02116

MORTGAGEE'S SALE
309 Switch Road
Richmond, Rhode Island

Will be sold at public auction on June 13, 2017 at 10:00 a.m. local time on the premises by virtue of the power of sale contained in a mortgage made and executed by Elizabeth E. Rita, dated October 2, 2013 and recorded in Book 287 at Page 342 of the Records of Land Evidence in the Town of Richmond, State of Rhode Island, the conditions of said mortgage having been broken.

The above premises will be sold subject to any and all valid superior or prior liens or encumbrances on the premises.

TERMS: Five Thousand Dollars ($5,000) down payment in cash, certified check or bank check at time of sale; other terms will be announced at the time of sale.

By order of the holder of the mortgage which gives notice of its intention to bid at sale or any adjournment thereof.

ROBERTS, CARROLL, FELDSTEIN & PEIRCE INCORPORATED
Edward G. Avila, Esquire
Attorneys for the holder of the mortgage
Ten Weybosset Street
Providence, Rhode Island 02903

MORTGAGEE'S NOTICE OF SALE OF REAL ESTATE
96 PARNELL STREET, PROVIDENCE, RI 02909

The premises described in the mortgage will be sold subject to all encumbrances and prior liens on June 12, 2017 at 11:00 AM on the premises, by virtue of the power of sale contained in a mortgage by Jeffrey J. Nobile and Dawn Nobile dated March 16, 2012 and recorded in the Providence Land Evidence Records in Book 10224 Page 108, the conditions of said mortgage having been broken.

TERMS OF SALE:

A deposit of FIVE THOUSAND DOLLARS AND 00 CENTS ($5,000.00) in the form of a certified check, bank treasurer's check or money order will be required to be delivered at or before the time the bid is offered. The description of the premises contained in said mortgage shall control in the event of an error in this publication. Other terms will be announced at the sale.

ORLANS PC
Attorney for the Present Holder of the Mortgage
PO Box 540540
Waltham, MA 02454
Phone: (781) 790-7800
17-002087

MORTGAGEE'S SALE
11 HOUGHTON STREET BARRINGTON, RI

The premises described in the mortgage will be sold subject to all encumbrances and prior liens on May 31, 2017 at 12:00 p.m. on the premises, by virtue of the power of sale contained in a mortgage by Robin G. Rizzitelli dated February 13, 2007 and recorded in the BARRINGTON Land Evidence Records in Book 1024, Page 125, the conditions of said mortgage having been broken.

$10,000.00 in cash, certified or bank check is required to bid. Other terms will be announced at the sale.

HARMON LAW OFFICES, P.C.
Attorney for the Holder of the Mortgage
150 California Street
Newton, MA 02458
(617) 558-0500
201610-0220 - YEL

MORTGAGEE'S SALE
115 Harris Avenue, Providence, RI
Assessor's Plat 26, Lot 26

Will be sold, subject to any and all prior liens and encumbrances, at public auction on June 5, 2017 at 10:00 A.M. on the premises by exercise of the power of sale in a mortgage executed by Harris Holdings, LLC, dated May 14, 2007 and recorded in the City of Providence, RI Land Evidence Records in Book 8676 at Page 1.

Cash, certified or bank check of $5,000.00 required to bid. Other terms and conditions will be announced at the sale.

TAFT & McSALLY LLP
Attorneys for the Present Holder of the Mortgage
21 Garden City Drive
Cranston, RI 02920

MORTGAGEE'S SALE
ASSESSOR'S PLAT# 48 AND LOT# 284
70 Potters Avenue
Providence, Rhode Island

The premises described in the mortgage will be sold subject to all encumbrances and prior liens on May 10, 2017 at 12:00 PM on the premises by virtue of the Power of Sale in said mortgage made by Gladys M. Garcia, dated December 30, 2005, and recorded in Book 9615 at Page 69, et seq. of the Providence Land Evidence Records, the conditions of said mortgage having been broken.

$5,000.00 in cash, bank check or certified check at time of sale is required to bid; other terms will be announced at time of sale.

Bendett & McHugh, P.C.
270 Farmington Avenue, Ste. 151
Farmington, CT 06032
Attorney for the present Holder of the Mortgage

At the above time and place the sale was continued to June 13, 2017 at 12:00 PM at the local premise.

Bendett & McHugh, P.C.
270 Farmington Avenue, Ste. 151
Farmington, CT 06032
Attorney for the present Holder of the Mortgage

NOTICE OF MORTGAGEE'S SALE
75 Voluntown Street
North Providence, Rhode Island
Assessor's Map/Lot: 1-138

Will be sold, subject to any and all prior liens and encumbrances, at public auction on June 12, 2017 at 3:00 PM Local Time, on the premises by virtue of the Power of Sale contained in the certain Mortgage Deed made and executed by Thomas J. Turner dated February 13, 2007 and recorded in Book 2378 at Page 24, et seq. with the Records of Land Evidence of the Town of North Providence, County of Providence, State of Rhode Island, the conditions of said Mortgage Deed having been broken.

TEN THOUSAND DOLLARS ($10,000.00) down payment in cash, bank check or certified check at time of sale; other terms will be announced at time of sale.

Marinosci Law Group, P.C.
275 West Natick Road, Suite 500
Warwick, RI 02886
Attorney for the present Holder of the Mortgage
MLG File # MLG 17-00190
A-4617776 05/22/2017, 05/30/2017, 06/06/2017

NOTICE OF MORTGAGEE'S SALE
164 Ashaway Road
Hopkinton, Rhode Island
Assessor's Parcel ID: 023/ 000/ 00115/ /

Will be sold, subject to any and all prior liens and encumbrances, at public auction on June 5, 2017 at 11:00 AM Local Time, on the premises by virtue of the Power of Sale contained in the certain Mortgage Deed made and executed by Victoria M. Kennedy dated August 29, 2014 and recorded in Book 526 at Page 533, et seq. with the Records of Land Evidence of the Town of Hopkinton, County of Washington, State of Rhode Island, the conditions of said Mortgage Deed having been broken.

TEN THOUSAND DOLLARS ($10,000.00) down payment in cash, bank check or certified check at time of sale; other terms will be announced at time of sale.

Marinosci Law Group, P.C.
275 West Natick Road, Suite 500
Warwick, RI 02886
Attorney for the present Holder of the Mortgage
MLG File # MLG 17-06000
A-4616955 05/15/2017, 05/22/2017, 05/29/2017

NOTICE OF MORTGAGEE'S SALE
108 Cornell Street
Cranston, Rhode Island
Assessor's Plat 12/4 / 1004/ /

Will be sold, subject to any and all prior liens and encumbrances, at public auction on June 5, 2017 at 1:00 PM Local Time, on the premises by virtue of the Power of Sale contained in the certain Mortgage Deed made and executed by Leo F. Brophy and William H. Brophy dated November 28, 2008 and recorded in Book 3544 at Page 274, et seq. with the Records of Land Evidence of the City of Cranston, County of Providence, State of Rhode Island, the conditions of said Mortgage Deed having been broken.

TEN THOUSAND DOLLARS ($10,000.00) down payment in cash, bank check or certified check at time of sale; other terms will be announced at time of sale.

Marinosci Law Group, P.C.
275 West Natick Road, Suite 500
Warwick, RI 02886
Attorney for the present Holder of the Mortgage
MLG File # MLG 16-09463
A-4616958 05/15/2017, 05/22/2017, 05/29/2017

MORTGAGEE'S SALE
113 DeWolf Avenue
Bristol, RI 02809

The premises described in the mortgage will be sold subject to all prior encumbrances on June 6, 2017, at 12:00 p.m., on the premises, by virtue of the power of sale in the mortgage granted by Joseph C. Benevides, recorded April 27, 2010, in the Town of Bristol, RI Land Records Book 1533 Page 155, the conditions of said mortgage having been broken.

$10,000.00 in cash, certified or bank check required to bid. Other terms will be announced at the sale.

ALEXANDER J. RAHEB
Attorney for the Mortgagee
650 George Washington Hwy.
Lincoln, RI 02865
401-333-3377

MORTGAGEE'S SALE
ASSESSOR'S PLAT# 375 AND LOT# 160
54 Hazard Avenue
Warwick, Rhode Island

The premises described in the mortgage will be sold subject to all encumbrances and prior liens on June 5, 2017 at 1:00 PM on the premises by virtue of the Power of Sale in said mortgage made by Jonathan P. Higgins, dated March 8, 2010, and recorded in Book 7257 at Page 113, et seq. of the Warwick Land Evidence Records, the conditions of said mortgage having been broken.

$5,000.00 in cash, bank check or certified check at time of sale is required to bid; other terms will be announced at time of sale.

Bendett & McHugh, P.C.
270 Farmington Avenue, Ste. 151
Farmington, CT 06032
Attorney for the present Holder of the Mortgage

MORTGAGEE'S SALE
153 Second Street
East Providence, RI
Map 17, Block 5, Parcel 7

The premises described in the mortgage will be sold subject to all encumbrances and prior liens on June 7, 2017 at 11:00 a.m. on the premises, by virtue of the power of sale contained in a mortgage by Maria G. Rocha dated April 23, 2004 and recorded in the East Providence Land Evidence Records in Book 2241, Page 253, the conditions of said mortgage having been broken.

$5,000.00 in cash, certified or bank check is required to bid. Other terms will be announced at the sale.

HARMON LAW OFFICES, P.C.
Attorney for the Holder of the Mortgage
150 California Street
Newton, MA 02458
(617) 558-0500
201404-1180 - TEA

MORTGAGEE'S SALE
ASSESSOR'S PLAT# 342 AND LOT# 447
190 Pinnery Avenue
Warwick, Rhode Island

The premises described in the mortgage will be sold subject to all encumbrances and prior liens on June 5, 2017 at 2:00 PM on the premises by virtue of the Power of Sale in said mortgage made by Bonnie L. Yates and John C. Manchester dated March 11, 2009, and recorded in Book 7017 at Page 97, et seq. of the Warwick Land Evidence Records, the conditions of said mortgage having been broken.

$5,000.00 in cash, bank check or certified check at time of sale is required to bid; other terms will be announced at time of sale. If the sale is set aside for any reason, the Purchaser at the sale shall be entitled only to a return of the deposit paid. The Purchaser shall have no further recourse against the Mortgagor, the Mortgagee or the Mortgagee's attorney.

Bendett & McHugh, P.C.
270 Farmington Avenue, Ste. 151
Farmington, CT 06032
Attorney for the present Holder of the Mortgage

MORTGAGEE'S SALE
27 Middle Street
Warren, RI
Plat 13B, Lot 51

The premises described in the mortgage will be sold subject to all encumbrances and prior liens on June 7, 2017 at 10:00 a.m. on the premises, by virtue of the power of sale contained in a mortgage by Luigi Donadio and Valeria V. Donadio dated November 4, 2005 and recorded in the Warren Land Evidence Records in Book 604, Page 299, the conditions of said mortgage having been broken.

$5,000.00 in cash, certified or bank check is required to bid. Other terms will be announced at the sale.

HARMON LAW OFFICES, P.C.
Attorney for the Holder of the Mortgage
150 California Street
Newton, MA 02458
(617) 558-0500
201403-0542 - TEA

MORTGAGEE'S SALE
14-16 Simon Street
Warren, RI 02885

The premises described in the mortgage will be sold subject to all prior encumbrances on June 6, 2017, at 11:00 a.m., on the premises, by virtue of the power of sale in the mortgage granted by Joseph C. Benevides, recorded April 27, 2010, in the Town of Warren, RI Land Records Book 750 Page 208, the conditions of said mortgage having been broken. $10,000.00 in cash, certified or bank check required to bid. Other terms will be announced at the sale.

ALEXANDER J. RAHEB
Attorney for the Mortgagee
650 George Washington Hwy.
Lincoln, RI 02865
401-333-3377

MORTGAGEE'S SALE
90 Enfield Street
Johnston, RI

The premises described in the mortgage will be sold subject to all encumbrances and prior liens on June 2, 2017 at 10:00 a.m. on the premises, by virtue of the power of sale contained in a mortgage by Debbie Wetherbee dated October 26, 2005 and recorded in the Johnston Land Evidence Records in Book 1637, Page 217, the conditions of said mortgage having been broken.

$5,000.00 in cash, certified or bank check is required to bid. Other terms will be announced at the sale.

HARMON LAW OFFICES, P.C.
Attorney for the Holder of the Mortgage
150 California Street
Newton, MA 02458
(617) 558-0500
201609-0672 - TEA

MORTGAGEE'S SALE
40 Oakland Avenue
Cranston, RI
Map 9 Lot 921

The premises described in the mortgage will be sold subject to all encumbrances and prior liens on May 10, 2017 at 1:00 p.m. on the premises, by virtue of the power of sale contained in a mortgage to Andrew Bussman dated February 6, 1998 and recorded in the Cranston Land Evidence Records in Book 1009, Page 166, the conditions of said mortgage having been broken.

$5,000.00 in cash, certified or bank check is required to bid. Other terms will be announced at the sale.

By order of the holder of the mortgage, the sale originally scheduled for May 10, 2017 and postponed to May 17, 2017 has been further postponed to May 31, 2017 at 1:00 p.m.

HARMON LAW OFFICES, P.C.
Attorney for the Holder of the Mortgage
150 California Street
Newton, MA 02458
(617) 558-0500
201505-0015 - TEA

MORTGAGEE'S SALE
ASSESSOR'S PLAT# 340 AND LOT# 360
33 Euclid Avenue
Warwick, Rhode Island

The premises described in the mortgage will be sold subject to all encumbrances and prior liens on June 5, 2017 at 3:00 PM on the premises by virtue of the Power of Sale in said mortgage made by Tracy L. Garvin, dated December 12, 2008, and recorded in Book 6965 at Page 239, et seq. of the Warwick Land Evidence Records, the conditions of said mortgage having been broken.

$5,000.00 in cash, bank check or certified check at time of sale is required to bid; other terms will be announced at time of sale.

Bendett & McHugh, P.C.
270 Farmington Avenue, Ste. 151
Farmington, CT 06032
Attorney for the present Holder of the Mortgage

MORTGAGEE'S SALE
ASSESSOR'S PLAT# 53 AND LOT# 330
15-17 Sumter Street
Providence, Rhode Island

The premises described in the mortgage will be sold subject to all encumbrances and prior liens on May 30, 2017 at 12:00 PM on the premises by virtue of the Power of Sale in said mortgage made by Alvin Burdue f/k/a Omekin B. Richardson dated September 19, 2008, and recorded in Book 9214 at Page 100, et seq. of the Providence Land Evidence Records, the conditions of said mortgage having been broken.

$5,000.00 in cash, bank check or certified check at time of sale is required to bid; other terms will be announced at time of sale.

Bendett & McHugh, P.C.
270 Farmington Avenue, Ste. 151
Farmington, CT 06032
Attorney for the present Holder of the Mortgage

CITY OF NEWPORT, RHODE ISLAND PURCHASING DIVISION NOTICE TO BIDDERS SEALED BIDS
Bid# 17-073

Sealed bids for furnishing the City of Newport, Rhode Island with a Lawton Valley Reservoir Dam Repairs, in accordance with all terms and specifications contained herein, will be received in the Purchasing Office, City Hall, 43 Broadway, Newport, R.I., until-

Two (2:00) O'clock p.m. Local Time June 8, 2017

A Mandatory pre-bid meeting will be held on Thursday, May 25, 2017, 10:00 AM at the Lawton Valley Water Treatment Plant, 2154 West Main Road, Portsmouth, RI 02871. If additional information is needed, please email the Technical POC listed in the package. Proposals must be submitted in sealed envelopes addressed to the Purchasing Office, City Hall, 43 Broadway, Newport, R. I. 02840, and must be plainly marked in the lower left hand corner, "Lawton Valley Reservoir Dam Repairs -Bid#17-073".

Erin Mulligan
Purchasing Agent

Note: You must register on the e-Procurement System at www.cityofnewport.com

PAWTUCKET SCHOOL DEPARTMENT REQUEST FOR PROPOSALS

The Pawtucket School Department is seeking proposals for the following services:

1. Maintenance and Custodial Uniform Shirts
2. Automatic Floor Scrubbers

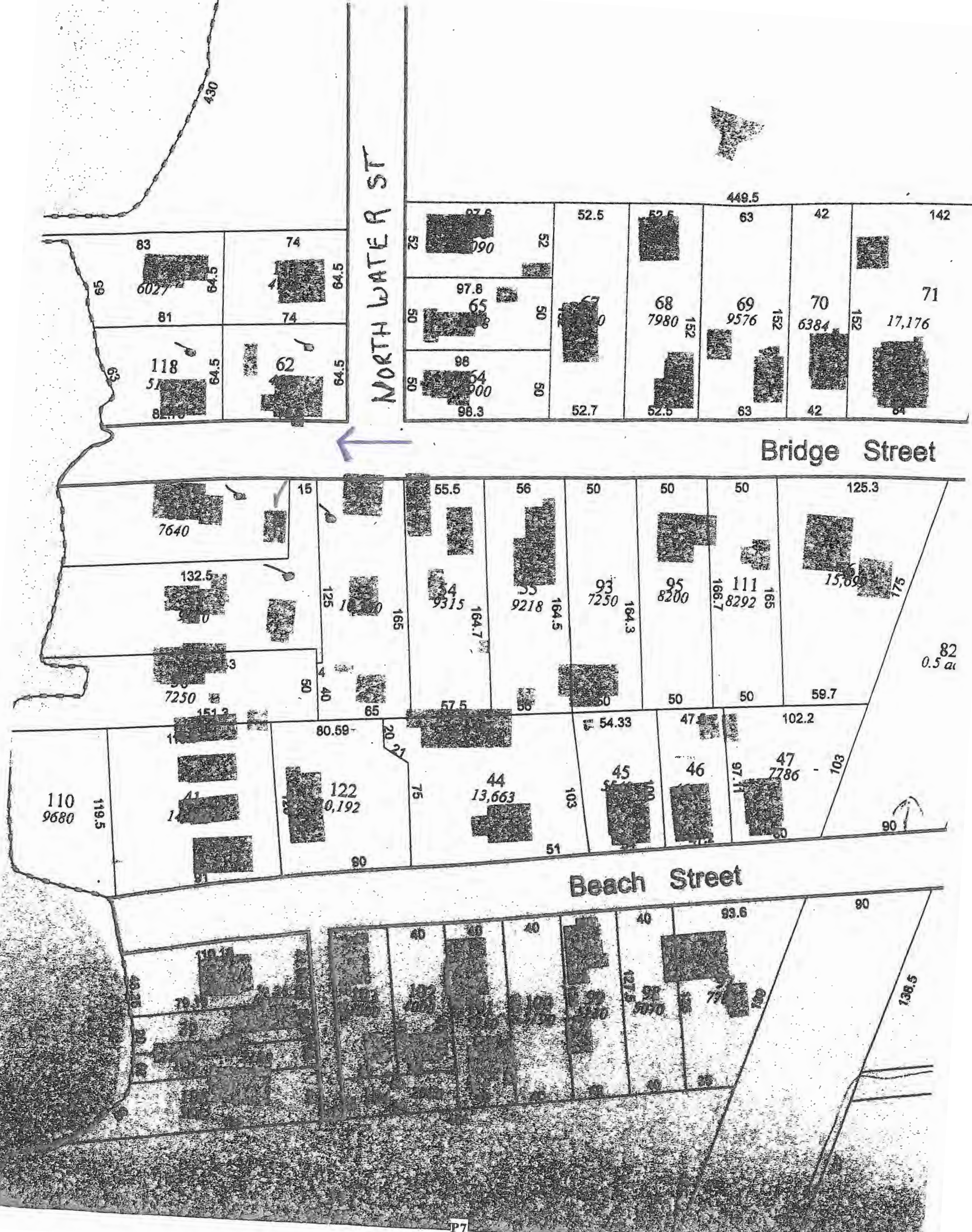
Specifications can be obtained in person from the office of the Facilities Director, Pawtucket School Department, PO Box 388, 286 Main Street, Pawtucket RI 02862. Obtained also by calling (401)729-6350, or email (preferred) beatyl@psdri.net.

All proposals will be received at the Office of the Facilities Director at the physical address listed above until 10:00 AM Monday June 5, 2017 at which time they will be publicly opened.

No proposal will be considered unless submitted in a sealed envelope marked with its appropriate title.

Description Bridge Street Right of Way
Warren, Rhode Island

Beginning at the northwesterly corner of North Water Street and Bridge Street, thence running westerly along the northerly boundary of Bridge Street one hundred and fifty-five and 25/100 (155.25') feet to the shore of the Warren River, thence running southerly along the shore of the Warren River for a distance of thirty (30') feet; thence turning and running easterly along the southerly boundary of Bridge Street two hundred twenty-eight (228') feet to a point in the southerly boundary of Bridge Street, thence turning northerly across Bridge Street to the point and place of beginning.


NORTH WATER ST
Bridge Street
Beach Street
430
449.5
68
7980
69
9576
70
6384
71
17,176
118
62
7640
132.5
93
7250
95
8200
111
8292
125.3
82
0.5 ac
110
9680
122
44
13,663
45
46
47
7786
80.59
102.2
93.6

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2017-05-046 Beach Street

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

May 16, 2017

NOTICE OF PUBLIC HEARING

In accordance with and pursuant to the provisions of the "Administrative Procedures Act", (Chapter 42-35 et. seq. of the General Laws of Rhode Island), and the Rules and Regulations of the Coastal Resources Management Council, a hearing will be held relative to Title 46, Chapter 23, of Section 6 A, B, C, D, E, Title 46 Chapter 23 Section 18(b), Title 46, Chapter 6, Section 1, Title 46, Chapter 6, Section 2 of the Rhode Island General Laws of 1956, as amended, for a State of Rhode Island Assent on potential Rights-of-Way located in the Town of Warren.

The Proposed Right-of-Way (ROW) CRMC File No. 2017-05-045
Description: Bridge Street Right of Way, Warren, Rhode Island

Beginning at the northwesterly corner of North Water Street and Bridge Street, thence running westerly along the northerly boundary of Bridge Street one hundred and fifty-five and 25/100 (155.25') feet to the shore of the Warren River, thence running southerly along the shore of the Warren River for a distance of thirty (30') feet; thence turning and running easterly along the southerly boundary of Bridge Street two hundred twenty-eight (228') feet to a point in the southerly boundary of Bridge Street, thence turning northerly across Bridge Street to the point and place of beginning.

The Proposed Right-of-Way (ROW) CRMC File No. 2017-05-046
Description: Beach Street Right of Way, Warren, Rhode Island

Beginning at the northwesterly corner of the East Bay Bicycle Path and Beach Street, thence running westerly along the northerly boundary of Beach Street three hundred and ninety-three and 20/100 (393.20') feet to the shore of the Warren River, thence running southerly along the shore of the Warren River for a distance of thirty-five (35') feet; thence turning and running easterly along the southerly boundary of Beach Street four hundred fifty-eight and 78/100 (458.78') feet to the southwesterly corner of the East Bay Bicycle Path and Beach Street, thence turning and running northerly along the westerly boundary of the East Bay Bicycle Path the point and place of beginning.

The Proposed Right-of-Way (ROW) CRMC File No. 2017-05-047
Description: Baker Street Right of Way, Warren, Rhode Island

Beginning at the northwesterly corner of North Water Street and Baker Street, thence running westerly along the northerly boundary of Baker Street two hundred and eighty-two (282') feet to the shore of the Warren River, thence running southerly along the shore of the Warren River for a distance of forty (40') feet; thence turning and running easterly along the southerly boundary of Baker Street two hundred fifty-four (254') feet to the southwesterly

P1

corner of North Water Street and Baker Street, thence turning northerly across the intersection of North Water Street and Baker Street forty (40') feet to the point and place of beginning.

The Proposed Right-of-Way (ROW) CRMC File No. 2017-05-048
Description: River View Street Right of Way, Warren, Rhode Island

Beginning at the northeasterly corner of Barker Avenue and River View Street, thence running easterly along the northerly boundary of River View Street eighty (80') feet to the shore of the Kickemuit River, thence turning and running southerly along the shore of the Kickemuit River for a distance of thirty (30') feet; thence turning and running easterly along the southerly boundary of River View Street eighty (80') feet to a point on the southerly boundary of River View Street, thence turning northerly across River View Street thirty (30') feet to the point and place of beginning.

The hearing will be held at 7:00 p.m. on Monday, June 19th, 2017 in the Warren Town Hall, Council Chambers, 514 Main Street, Warren, RI.

Parties interested in/or concerned with the above mentioned matter are invited to be present and/or represented by counsel at the above mentioned time and place. This meeting place is accessible to individuals with disabilities. The meeting location is accessible to handicapped persons. Any individual requiring a reasonable accommodation in order to participate in this meeting should contact CRMC offices at 401-783-3370 at least 72 hours prior to the meeting.

Plans of the proposed work may be seen in the office of the Coastal Resources Management Council, Oliver H. Stedman Government Center, 4808 Tower Hill Road, Wakefield, Rhode Island, between the hours of 8:30 a.m. and 3:30 p.m., Monday through Friday.

Oral statements will be heard and recorded and statements may be submitted to the hearing officers at the time of hearing.

Signed this 16th day of May, 2017.

Grover J. Fugate, Executive Director
Coastal Resources Management Council

/lat

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CRMC Mailing list for 2017-05-046
Beach Street ROW – Warren

Town of Warren
Warren Town Hall
514 Main Street
Warren, RI 02885

Christine Rodrigues
61 Beach Street
Warren, RI 02883

Ronald Strickland
Robert Strickland
123 Willow Road
East Kingston, NH 03827

Donna Crowell
45 Beach Street
Warren, RI 02885

Marilyn & Scott Mathison
41 Beach Street
Warren, RI 02885

Matthew Vanschalkwyk
37 Beach Street
Warren, RI 02885

Tammy and Steven Botelho
44 Beach Street
Warren, RI 02885

CRMC (2017-05-045, 046, 047, 048)
O. S. Government Center
4808 Tower Hill Road
Wakefield, RI 02879

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Description Beach Street Right of Way
Warren, Rhode Island

Beginning at the northwesterly corner of the East Bay Bicycle Path and Beach Street, thence running westerly along the northerly boundary of Beach Street three hundred and ninety-three and 20/100 (393.20') feet to the shore of the Warren River, thence running southerly along the shore of the Warren River for a distance of thirty-five (35') feet; thence turning and running easterly along the southerly boundary of Beach Street four hundred fifty-eight and 78/100 (458.78') feet to the southwesterly corner of the East Bay Bicycle Path and Beach Street, thence turning and running northerly along the westerly boundary of the East Bay Bicycle Path the point and place of beginning.

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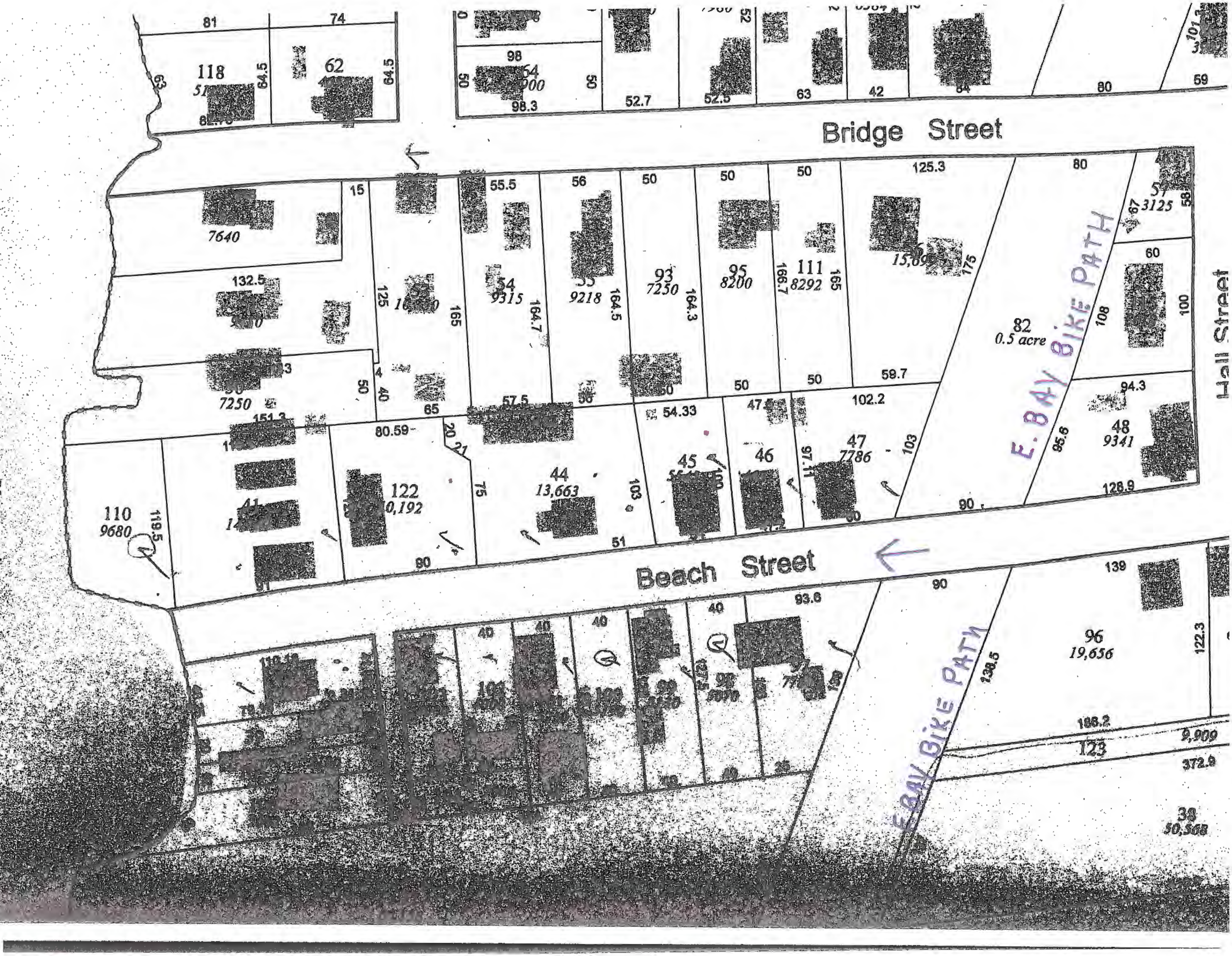
Bridge Street
Beach Street
Hall Street
E. BAY BIKE PATH
E BAY BIKE PATH
118
62
7640
54
9315
9218
93
7250
95
8200
111
8292
82
0.5 acre
48
9341
110
9680
122
10,192
44
13,663
45
46
47
7786
96
19,656
123
9,909
38
50,568

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N.E.03
Notice
Beach Is A Public
Right Of Way
Boats Of Any Kind
May Be Stowed On It
NO
TRESPASSING

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2017-05-047 Baker Street

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

May 16, 2017

NOTICE OF PUBLIC HEARING

In accordance with and pursuant to the provisions of the "Administrative Procedures Act", (Chapter 42-35 et. seq. of the General Laws of Rhode Island), and the Rules and Regulations of the Coastal Resources Management Council, a hearing will be held relative to Title 46, Chapter 23, of Section 6 A, B, C, D, E, Title 46 Chapter 23 Section 18(b), Title 46, Chapter 6, Section 1, Title 46, Chapter 6, Section 2 of the Rhode Island General Laws of 1956, as amended, for a State of Rhode Island Assent on potential Rights-of-Way located in the Town of Warren.

The Proposed Right-of-Way (ROW) CRMC File No. 2017-05-045
Description: Bridge Street Right of Way, Warren, Rhode Island

Beginning at the northwesterly corner of North Water Street and Bridge Street, thence running westerly along the northerly boundary of Bridge Street one hundred and fifty-five and 25/100 (155.25') feet to the shore of the Warren River, thence running southerly along the shore of the Warren River for a distance of thirty (30') feet; thence turning and running easterly along the southerly boundary of Bridge Street two hundred twenty-eight (228') feet to a point in the southerly boundary of Bridge Street, thence turning northerly across Bridge Street to the point and place of beginning.

The Proposed Right-of-Way (ROW) CRMC File No. 2017-05-046
Description: Beach Street Right of Way, Warren, Rhode Island

Beginning at the northwesterly corner of the East Bay Bicycle Path and Beach Street, thence running westerly along the northerly boundary of Beach Street three hundred and ninety-three and 20/100 (393.20') feet to the shore of the Warren River, thence running southerly along the shore of the Warren River for a distance of thirty-five (35') feet; thence turning and running easterly along the southerly boundary of Beach Street four hundred fifty-eight and 78/100 (458.78') feet to the southwesterly corner of the East Bay Bicycle Path and Beach Street, thence turning and running northerly along the westerly boundary of the East Bay Bicycle Path the point and place of beginning.

The Proposed Right-of-Way (ROW) CRMC File No. 2017-05-047
Description: Baker Street Right of Way, Warren, Rhode Island

Beginning at the northwesterly corner of North Water Street and Baker Street, thence running westerly along the northerly boundary of Baker Street two hundred and eighty-two (282') feet to the shore of the Warren River, thence running southerly along the shore of the Warren River for a distance of forty (40') feet; thence turning and running easterly along the southerly boundary of Baker Street two hundred fifty-four (254') feet to the southwesterly

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corner of North Water Street and Baker Street, thence turning northerly across the intersection of North Water Street and Baker Street forty (40') feet to the point and place of beginning.

The Proposed Right-of-Way (ROW) CRMC File No. 2017-05-048
Description: River View Street Right of Way, Warren, Rhode Island

Beginning at the northeasterly corner of Barker Avenue and River View Street, thence running easterly along the northerly boundary of River View Street eighty (80') feet to the shore of the Kickemuit River, thence turning and running southerly along the shore of the Kickemuit River for a distance of thirty (30') feet; thence turning and running easterly along the southerly boundary of River View Street eighty (80') feet to a point on the southerly boundary of River View Street, thence turning northerly across River View Street thirty (30') feet to the point and place of beginning.

The hearing will be held at 7:00 p.m. on Monday, June 19th, 2017 in the Warren Town Hall, Council Chambers, 514 Main Street, Warren, RI.

Parties interested in/or concerned with the above mentioned matter are invited to be present and/or represented by counsel at the above mentioned time and place. This meeting place is accessible to individuals with disabilities. The meeting location is accessible to handicapped persons. Any individual requiring a reasonable accommodation in order to participate in this meeting should contact CRMC offices at 401-783-3370 at least 72 hours prior to the meeting.

Plans of the proposed work may be seen in the office of the Coastal Resources Management Council, Oliver H. Stedman Government Center, 4808 Tower Hill Road, Wakefield, Rhode Island, between the hours of 8:30 a.m. and 3:30 p.m., Monday through Friday.

Oral statements will be heard and recorded and statements may be submitted to the hearing officers at the time of hearing.

Signed this 16th day of May, 2017.

Grover J. Fugate, Executive Director
Coastal Resources Management Council

/lat

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Mailing List for CRMC File Number 2017-05-047
Town of Warren ROW – Baker Street

Town of Warren
Warren Town Hall
514 Main Street
Warren, RI 02885

Lawrence Dario
91 Baker Street
Warren, RI 02885

Mark and Diane Greenbaum
81 Baker Street
Warren, RI 02885

Dockside Properties LLC
73 Ferry Lane
Barrington, RI 02806

Spencer Morris and Allison Newsome
100 Child Street
Warren, RI 02885

CRMC (2017-05-047)
O. S. Government Center
4808 Tower Hill Road
Wakefield, RI 02879

P3

Baker

Description Baker Street Right of Way
Warren, Rhode Island

Beginning at the northwesterly corner of North Water Street and Baker Street, thence running westerly along the northerly boundary of Baker Street two hundred and eighty-two (282') feet to the shore of the Warren River, thence running southerly along the shore of the Warren River for a distance of forty (40') feet; thence turning and running easterly along the southerly boundary of Baker Street two hundred fifty-four (254') feet to the southwesterly corner of North Water Street and Baker Street, thence turning northerly across the intersection of North Water Street and Baker Street forty (40') feet to the point and place of beginning.

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Plat 2
Plat 4
Miller Street
North Water Street
Narragansett Way
Baker Street
BAKER
Church Street
1
28,301
2
12,440
3
12,397
4
8,712
6
6,786
8
2,400
14
4,386
16,734
139
10,667
41
7,259
42
5,276
70
25,894
71

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2017-05-048 Riverview Street

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

May 16, 2017

NOTICE OF PUBLIC HEARING

In accordance with and pursuant to the provisions of the "Administrative Procedures Act", (Chapter 42-35 et. seq. of the General Laws of Rhode Island), and the Rules and Regulations of the Coastal Resources Management Council, a hearing will be held relative to Title 46, Chapter 23, of Section 6 A, B, C, D, E, Title 46 Chapter 23 Section 18(b), Title 46, Chapter 6, Section 1, Title 46, Chapter 6, Section 2 of the Rhode Island General Laws of 1956, as amended, for a State of Rhode Island Assent on potential Rights-of-Way located in the Town of Warren.

The Proposed Right-of-Way (ROW) CRMC File No. 2017-05-045
Description: Bridge Street Right of Way, Warren, Rhode Island

Beginning at the northwesterly corner of North Water Street and Bridge Street, thence running westerly along the northerly boundary of Bridge Street one hundred and fifty-five and 25/100 (155.25') feet to the shore of the Warren River, thence running southerly along the shore of the Warren River for a distance of thirty (30') feet; thence turning and running easterly along the southerly boundary of Bridge Street two hundred twenty-eight (228') feet to a point in the southerly boundary of Bridge Street, thence turning northerly across Bridge Street to the point and place of beginning.

The Proposed Right-of-Way (ROW) CRMC File No. 2017-05-046
Description: Beach Street Right of Way, Warren, Rhode Island

Beginning at the northwesterly corner of the East Bay Bicycle Path and Beach Street, thence running westerly along the northerly boundary of Beach Street three hundred and ninety-three and 20/100 (393.20') feet to the shore of the Warren River, thence running southerly along the shore of the Warren River for a distance of thirty-five (35') feet; thence turning and running easterly along the southerly boundary of Beach Street four hundred fifty-eight and 78/100 (458.78') feet to the southwesterly corner of the East Bay Bicycle Path and Beach Street, thence turning and running northerly along the westerly boundary of the East Bay Bicycle Path the point and place of beginning.

The Proposed Right-of-Way (ROW) CRMC File No. 2017-05-047
Description: Baker Street Right of Way, Warren, Rhode Island

Beginning at the northwesterly corner of North Water Street and Baker Street, thence running westerly along the northerly boundary of Baker Street two hundred and eighty-two (282') feet to the shore of the Warren River, thence running southerly along the shore of the Warren River for a distance of forty (40') feet; thence turning and running easterly along the southerly boundary of Baker Street two hundred fifty-four (254') feet to the southwesterly

P1

corner of North Water Street and Baker Street, thence turning northerly across the intersection of North Water Street and Baker Street forty (40') feet to the point and place of beginning.

The Proposed Right-of-Way (ROW) CRMC File No. 2017-05-048
Description: River View Street Right of Way, Warren, Rhode Island

Beginning at the northeasterly corner of Barker Avenue and River View Street, thence running easterly along the northerly boundary of River View Street eighty (80') feet to the shore of the Kickemuit River, thence turning and running southerly along the shore of the Kickemuit River for a distance of thirty (30') feet; thence turning and running easterly along the southerly boundary of River View Street eighty (80') feet to a point on the southerly boundary of River View Street, thence turning northerly across River View Street thirty (30') feet to the point and place of beginning.

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Oral statements will be heard and recorded and statements may be submitted to the hearing officers at the time of hearing.

Signed this 16th day of May, 2017.

Grover J. Fugate, Executive Director
Coastal Resources Management Council

/lat

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Mailing List for CRMC File Number 2017-05-048
Town of Warren ROW – River View Street

Town of Warren
Warren Town Hall
514 Main Street
Warren, RI 02885

CRMC (2017-05-048)
O. S. Government Center
4808 Tower Hill Road
Wakefield, RI 02879

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Description River View Street Right of Way
Warren, Rhode Island

Beginning at the northeasterly corner of Barker Avenue and River View Street, thence running easterly along the northerly boundary of River View Street eighty (80') feet to the shore of the Kickemuit River, thence turning and running southerly along the shore of the Kickemuit River for a distance of thirty (30') feet; thence turning and running easterly along the southerly boundary of River View Street eighty (80') feet to a point on the southerly boundary of River View Street, thence turning northerly across River View Street thirty (30') feet to the point and place of beginning.

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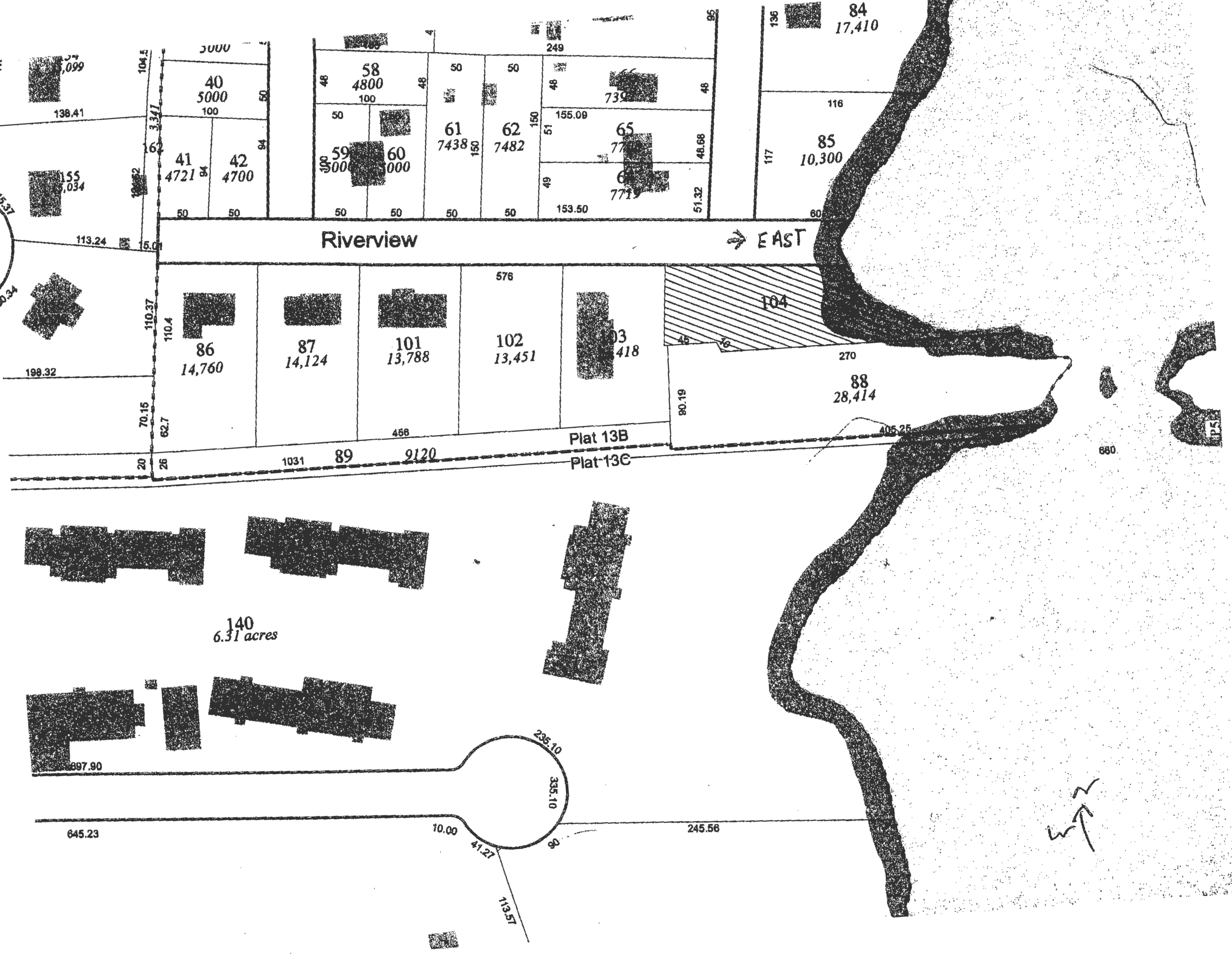

Riverview
EAST
40
5000
41
4721
42
4700
58
4800
61
7438
62
7482
84
17,410
85
10,300
86
14,760
87
14,124
101
13,788
102
13,451
104
88
28,414
89
9120
Plat 13B
Plat 13C
140
6.31 acres


Serpentine Rd
Child St
Orchard Ave
Kickemuit
103
Barker Ave
Middle St
West St
Barker Ave
West St
Grace Barker
Nursing Home
West St
River View St

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Google Maps Barker Ave & River View St

Barker Ave & River View St

Warren, RI 02885

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STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

COASTAL RESOURCES MANAGEMENT COUNCIL

* * * * * * * * * * * *

IN RE: RIGHTS-OF-WAY
TOWN OF WARREN
2017-05-045 Bridge Street
2017-05-046 Beach Street
2017-05-047 Baker Street
2017-05-048 River View Street

* * * * * * * * * * * *

Date: June 19, 2017
Time: 7:00 p.m.
Place: Warren Town Hall
Council Chambers
514 Main Street
Warren, Rhode Island

MEMBERS PRESENT
Anne Maxwell Livingston, Chairwoman
Patricia Reynolds
Paul Beaudette
Anthony Desisto, Esquire, Legal Counsel

STAFF PRESENT
Willie Mosunic

ORIGINAL

IRONS & ASSOCIATES
CERTIFIED PROFESSIONAL STENOGRAPHERS
33 Rollingwood Drive
Johnston, Rhode Island 02919
(401) 764-0108

I N D E X

(COMMENCED AT 7:00 P.M.)

CHAIRWOMAN LIVINGSTON: Good evening, everyone. I am going to call this meeting to order. I'm Anne Livingston. I am Chair of the CRMC. This is Paul Beaudette and Patricia Reynolds, and we're here to designate these rights-of-way in the Town of Warren.

I'm going to read this statement first, which will explain what we're doing today and how this all works and then we will look at each right-of-way one at a time.

This public hearing is being conducted under the rules and regulations of the Coastal Resources Management Council and the Administrative Procedures Act. This means that the subcommittee will be acting as a quasi judicial body and will be taking evidence. We are present to hear whatever comments for or against the designation of the rights-of-way that are the subject of this public hearing. There will be no decision at this time.

After hearing all of your comments the subcommittee will, on a separate date, deliberate on the evidence and make written recommendations to the full Coastal Resources Management Council. The full Council will then vote on the subcommittee findings of fact and

recommendations, taking into account the testimony received tonight.

For tonight the subcommittee will not answer any questions except of a procedural nature. We are present to hear testimony from the public, and we have a stenographer here, so this will all be recorded, to hear testimony from the public, and this is your opportunity to be heard on the issue.

Anyone who wishes to be placed on the mailing list to receive notification of the full Council hearing may do so when this hearing is over, although no testimony will be taken at the full Council meeting. Tonight is the only chance for testimony about these rights-of-way.

The subcommittee will also take any written statements that are provided tonight and they will be made part of the record for these proceedings.

Four proposed rights-of-way are the subject of tonight's public hearing. Each proposed right-of-way will be heard individually. A description of the right-of-way will be read aloud and then public comment will be taken on that right-of-way. After all interested persons have testified, the hearing on the right-of-way will be closed and the hearing on the next right-of-way will be open.

When speaking, please identify yourself and give your address. You will then be sworn in prior to your testimony.

On behalf of this subcommittee I want to thank you all for coming out tonight.

So, that's the rules. Tony is going to read the legal description of the first right-of-way, and then if anybody wants to speak we will welcome that.

MR. DESISTO: First, the first proposed right-of-way, CRMC File Number 2017-05-045, is Bridge Street. Beginning at the northwesterly corner of North Water Street and Bridge Street, thence running westerly along the northerly boundary of Bridge Street 155 feet, 155.25 feet to the shore of the Warren River, thence running southerly along the shore of the Warren River for a distance of 30 feet, thence turning and running easterly along the southerly boundary of Bridge Street 228 feet to a point in the southerly boundary of Bridge Street, thence turning northerly across Bridge Street to the point and place of beginning.

CHAIRWOMAN LIVINGSTON: Okay. That's it.

MR. DEPASQUALE: Good evening, Madam Chair, members the committee. My name is Joseph

DePasquale. I am the President of the Warren Town Council. I am here to speak in support of this public right-of-way. It's a street that dead ends at the Warren River, it's extremely accessible, and the beauty of this right-of-way is its proximity to the Warren beach, as well as the public parking there, and it's an asset to all, and if it wasn't for that right-of-way many people would not be able to access the mooring field that is located right there. The Town Council voted unanimously to support this petition to the committee as well as the recommendations from the Harbor Commission, and I am speaking on behalf of the Town and voice our support. Are there any questions?

CHAIRWOMAN LIVINGSTON: Thank you.

MR. DESISTO: Madam Chair, may I actually ask a question?

CHAIRWOMAN LIVINGSTON: Sure.

MR. DESISTO: Joe, is it proper in the description to refer to Water Street in this area as North Water Street.

MR. DEPASQUALE: No. That would be if you were not from this planet.

MR. DESISTO: That would be Water Street or South Water?

MR. DEPASQUALE: If you wanted to use an actual geographical delineation, that's south, so.

MR. DESISTO: Thank you.

MR. DEPASQUALE: I always knew left field is out there waiting to throw something at me.

MS. REYNOLDS: Mr. Chairman, I heard your testimony that there's public parking in the area?

MR. DEPASQUALE: Yes.

MS. REYNOLDS: I can't see any on the map that we have. How long of a distance is it from this?

MR. DEPASQUALE: It's 175 feet, 200 feet away. If you're familiar at all with this building you're in today as you came here, it would be in proximity to the back parking lot where you -- did you enter the front of the building or the back?

MS. REYNOLDS: The front.

MR. DEPASQUALE: So if you're here and you see the top of the George Hill Library, it would be about that distance.

MS. REYNOLDS: Yes.

MR. DEPASQUALE: It's very close.

CHAIRWOMAN LIVINGSTON: Thank you.

MR. DEPASQUALE: You're welcome. Thank

you.

CHAIRWOMAN LIVINGSTON: Is there anybody else who wanted to come forward in regards to this Bridge Street right-of-way? This gentleman here. Welcome.

MR. BLADE: My name is Henry Blade. I'm a resident at 80 Baker Street, which we'll be discussing in a moment. A friend of mine has a boat moored right off of this location, and that's, as was said, it is a perfect place and designating it makes a lot of sense. Hopefully, something can be done to kind of clean it up a little bit, make it a little bit easier to access, but it's a perfect place. I just want to support that.

CHAIRWOMAN LIVINGSTON: Thank you.

MR. BLADE: Thank you. Any questions at all? All set.

CHAIRWOMAN LIVINGSTON: Okay. Yes. Kendra Beaver.

MS. BEAVER: Kendra Beaver. I am here on behalf of Save the Bay. I am just here to say we support the creation of additional lateral access to the shoreline to preserve it for now and in the future, and to support your efforts in going forward with designating these rights-of-way.

CHAIRWOMAN LIVINGSTON: Thank you. Anybody else?

(NO RESPONSE)

CHAIRWOMAN LIVINGSTON: So, do I close? I never opened the public hearing. Should I close the public hearing?

MR. DESISTO: Well, it's actually a public hearing goes straight through.

CHAIRWOMAN LIVINGSTON: We could do them one at a time?

MR. DESISTO: No.

CHAIRWOMAN LIVINGSTON: Moving on to the second one.

MR. DESISTO: That is proposed right-of-way CRMC File Number 2017-05-046 Beach Street. Beginning at the northwesterly corner of the East Bay Bicycle Path and Beach Street, thence running westerly along the northerly boundary of Beach Street 393.20 feet to the shore of the Warren River, thence running southerly along the shore of the Warren River for a distance of 35 feet, thence turning and running easterly along the southerly boundary of Beach Street 458.78 feet to the southwesterly corner of the East Bay Bicycle Path at Beach Street, thence turning and running northerly

along the westerly boundary of the East Bay Bicycle Path to the point and place of beginning.

CHAIRWOMAN LIVINGSTON: That's really long.

MR. DESISTO: Yes, it is.

CHAIRWOMAN LIVINGSTON: Yes, sir.

MR. DEPASQUALE: Good evening, Madam Chair and members of the committee. The beauty of Rhode Island's law is its access from the water to the shoreline, and when you look at Beach Street, you really get a great perspective on not only accessing this location from the water, because it is, indeed, a beach, it's a natural beach at the bottom, and what has happened over the years is a berm has been built up, and it's been very strategically blocked to the land access world, and, again, this is also a dead end street that dead ends on the Warren River, and it's a beautiful spot, and we also support access to the public from the land, as well as we know access from the shore and water is legal up to the high tide, median high tide mark, and this spot, once again, as well as Bridge, I err to tell you at high tide is inundated. So these areas are, in my opinion, doubly secured in regards to public access by land as well as by sea, because the high tide mark is

so high and the access is so literal that if you were to stand there at moon tide you would be in the water. So, again, we support this for numerous reasons, but also to roll back the amount of blockage that has been put up, and this was a State approved location years ago. There was a sign there and it was vandalized, so these efforts are to --

CHAIRWOMAN LIVINGSTON: You mean you think it was designated before?

MR. DESISTO: It may have been, but I'm not positive. I do know that as a young lad I did see a sign, because one day I was chastised and told to leave and I pointed out and said, oh, yeah, well, what about that. So, that's on the record.

CHAIRWOMAN LIVINGSTON: Okay. Thank you.

MR. DEPASQUALE: You're welcome.

CHAIRWOMAN LIVINGSTON: What I don't understand is why the whole street for so far, there are many houses along there.

MR. DEPASQUALE: The street is probably only 22 to 25 feet wide.

CHAIRWOMAN LIVINGSTON: Yeah.

MR. DEPASQUALE: I am not sure. I

didn't -- I'm sorry, I didn't pay as close attention as I should have when you read the dimensions.

MR. DESISTO: May I ask the Council president a question. The East Bay Bicycle Path is really the closest public access to the shore on Beach Street, isn't that correct?

MR. DEPASQUALE: Oh, no. Oh, no.

MR. DESISTO: It isn't?

MR. DEPASQUALE: It's interesting. When you said that I thought you were just denoting, once again, a geographical location where the bike path was and the distance where the bike path west which would delineate where this public access began, when you referenced the bike path, that's what I thought you were talking about because --

MR. DESISTO: That's the start point of this public right-of-way for CRMC purposes.

MR. DEPASQUALE: Well, that would be going one, two, three, you would be including 20 houses.

MR. DESISTO: Yes.

MR. DEPASQUALE: I mean, that's the whole street. Basically, you're starting in a geographical location of the bike path and just calling the entire west side of the street.

CHAIRWOMAN LIVINGSTON: Yes, I hadn't noticed that when I first looked this over. I'm surprised that we didn't, usually it's just the end, you know, that's closest to the water.

MR. DEPASQUALE: It would make sense to me to double that. That may be a human input error. Because the street dead ends at the bay.

MR. DESISTO: Do you mind coming forward and taking a look at the assessor's map?

MR. DEPASQUALE: Yes, that's accurate.

CHAIRWOMAN LIVINGSTON: From here all the way to there.

MR. DEPASQUALE: Yes, this is where it begins. This is where it ends, obviously. That's I thought we were referring to, because when we looked at Bridge Street, this is what I thought you were referring to.

MR. DESISTO: It goes Water Street is right here.

MR. DEPASQUALE: We wouldn't be able to access Water unless you call Dennis to go into the zone. The same thing here. So, I mean, Bridge Street is the bridge and you can go through the park and then down the street, so that doesn't make sense to me, but I'm just a

lonely public servant.

CHAIRWOMAN LIVINGSTON: I think that, I think that there's no specific -- that these have to be, and I think if it is contiguous with a town street, that's okay. All right. So, anybody want to come forward?

MR. HUNT: Good evening. My name is William Hunt. I live at 7 Beechwood Court in Warren. I am a member of the Harbor Commission and also the Town's representative to the CRMC. In formulating these proposals to the CRMC, the Harbor Commission employed, or got a volunteer, a law fellow from the Roger Williams College to actually do the title research on all these rights-of-ways, and the unique situation in Warren is that when they did the title for the streets they ran them all the way down to the water, they didn't block a dead end with, you know, a deeded way beyond the street. So, Bridge Street and Beach Street and a few others that are already established right-of-ways are there because of the way that the properties and the streets were delineated back in, you know, when the Town was first chartered.

CHAIRWOMAN LIVINGSTON: A long time ago.

MR. HUNT: A long time ago. Thank you.

MR. DEPASQUALE: Actually, that sparks a memory. Thank you. I do believe, and this may be good for you to know, that this was an oystering community, and, interestingly enough, Carl Dennis' house, the person that I mentioned, when he bought his house he had a deed restriction to the bottom of Green's Landing, which is what is now the bottom of Beach Street, and I believe it was because you were able to professionally not be denied access to your boat and your livelihood and the oyster industry. So, that is interesting, because my memory was refreshed.

CHAIRWOMAN LIVINGSTON: That makes sense.

MR. DEPASQUALE: Thank you.

CHAIRWOMAN LIVINGSTON: That's good to have on the record.

MR. DEPASQUALE: And the Greens owned all of this area that we're talking about, Charlotte Green.

CHAIRWOMAN LIVINGSTON: Okay. Thank you.

MR. DEPASQUALE: Oyster magnate.

CHAIRWOMAN LIVINGSTON: Anybody else want to go on the record to support this right-of-way or

oppose it?

MR. DESISTO: Can we ask Kendra for your comments from Save the Bay?

MS. BEAVER: They will, and I will also have some written testimony that I can give you that applies to all four of them.

MR. DESISTO: We'll make it so Kendra does have to keep coming back and forth.

CHAIRWOMAN LIVINGSTON: Thank you very much. Nobody else?

(NO RESPONSE)

CHAIRWOMAN LIVINGSTON: Okay. Thank you. We'll move on to the next one, which is Baker Street.

MR. DESISTO: 2017-05-047, Baker Street. Beginning at the northwesterly corner of North Water Street and Baker Street, thence running westerly along the northerly boundary of Baker Street 282 feet to the shore of the Warren River, thence running southerly along the shore of the Warren River for a distance of 40 feet, thence turning and running easterly along the southerly boundary of Baker Street 254 feet to the southwesterly corner of North Water Street and Baker Street, thence turning northerly across the intersection

of North Water Street and Baker Street 40 feet to the point and place of beginning.

MR. DEPASQUALE: Good evening. Baker Street is a unique location. It is higher than sea level, and currently we maintain -- the Conservation Commission maintains it as a public scenic overlook with a bench and a nice area for rest and relaxation. It is probably about maybe eight to ten -- eight feet higher than sea level, and it is also a spot that the East Bay pipeline from Barrington to -- the Warren/Bristol County Water Authority had a pipe that was there, under there, and that is, I believe, what raised the elevation, ordinarily it probably would have gone down over the years, but it's been that way my whole life, and this would be a great opportunity as well to have it State recognized, the Council supports all of these as well, and I want you to know that this is a great spot, and it is in the location that allows access not, again, just so you know, at the sea level, access at the higher level and possibly with approval or creative thinking maybe there could be an actual egress point.

MR. BEAUDETTE: So there is no access from the edge of the road down to the shoreline?

MR. DEPASQUALE: It dead ends, but it's

higher than all of the others. All of the others actually are equal in elevation.

CHAIRWOMAN LIVINGSTON: That's up to the Town, as to whether you want to put some steps in or whatever.

MR. DEPASQUALE: That's what I like to hear.

CHAIRWOMAN LIVINGSTON: We're just assuring that it's open to the water.

MR. DEPASQUALE: I appreciate that input. Thank you.

MR. BEAUDETTE: Excuse me?

MR. DEPASQUALE: Oh, sorry.

MR. BEAUDETTE: The map I'm looking at has a house lot that extends to Baker Street?

MR. DEPASQUALE: It does. It was originally the Oyster House as well as The Wharf Tavern and that is a private residence that is due north. It jets right out into the water. It's built on a stone pier.

CHAIRWOMAN LIVINGSTON: Is that what you're talking about?

MR. BEAUDETTE: No.

MR. DEPASQUALE: Could I approach?

MR. BEAUDETTE: That's a house lot. It belongs to, the way I read it, it belongs to this 139, 10,667 square foot lot, it goes along Baker Street, but then has this little jog to the middle of the street. This is from the Town Council's plot maps.

MR. DEPASQUALE: I am not sure of the accuracy. I do know that at the end of the street there is a drop and there's water. Maybe Mr. Hunt can approach.

MR. HUNT: I have a map that we have from the Town assessor. I'm not sure if it's the same that you have there.

CHAIRWOMAN LIVINGSTON: Paul, do you have any other question about this?

MR. DESISTO: No, but I could address that.

CHAIRWOMAN LIVINGSTON: Yes.

MR. DESISTO: As a matter of law, the assessor's maps are used for taxing purposes, but they're not conclusively legal, and I think what Mr. Hunt is trying to say and what Council President DePasquale was trying to say is that this map is not reflective of the conditions on site, which has the road going to the end. I know there is a gentleman here that

actually lives on Baker and can probably address it, too. We took a look at that anomaly in the maps, but I'm not so sure that it's entirely accurate, given the circumstances, and, again, these are assessor's maps and they're used for taxing purposes, and, of course, they're helpful but not conclusively.

MR. BEAUDETTE: My concern is that if either of the homeowners say, well, I own that land, then that would inhibit access to the shore from the end of the street, and that's derivative of why I'm asking the question.

MR. DESISTO: That's correct. What I'm saying, I am not so sure, I will let the public know that, but I'm not so sure that there is intervening land between the Warren River and the end of Baker Street. I will let these gentlemen address it because they're more conversant.

MR. HUNT: If I may, just like the past two right-of-ways, this right-of-way was researched by a law fellow that did the title research, and his conclusion that was reviewed and approved by the Harbor Commission was that the right-of-way went all the way down to the harbor, and that's my recollection at least of what the situation is with that.

MR. BEAUDETTE: Okay.

CHAIRWOMAN LIVINGSTON: Thank you. Anybody else want to speak about Baker Street? Okay.

MR. BLADE: William Henry Blade, 80 Baker Street. I can't really add much. I do believe that you had it correct, in that the maps don't necessarily reflect a surveyor's map. Sometimes the projections are too much. I fully support this initiative.

CHAIRWOMAN LIVINGSTON: Okay. Thank you. Thank you.

MR. HUNT: We have a copy of the quitclaim deed for the property. And, if I may, and I won't read the whole thing, but it goes, northerly direction bounding westerly on the Warren River 29 and one-tenth feet, thence in a westerly direction bounding southerly on the Warren River 127 and three-tenths feet in the northerly direction. So, in the legal description itself they're using the Warren River as the boundary for the property. I'm happy to share this with you.

MR. BEAUDETTE: No, that's fine.

MR. DESISTO: Actually, could you give it to Mr. Mosunic so it could be made part of the record

of tonight's proceedings.

MR. LIPPMAN: Craig Lippman, 25 Shore Drive. I'm the secretary of the Harbor Commission in Town, and this information was provided as part of the original application to the CRMC, the maps and the deed.

CHAIRWOMAN LIVINGSTON: Thank you. Thank you for providing them. Thank you for your input. Anybody else?

(NO RESPONSE)

CHAIRWOMAN LIVINGSTON: Then we will move onto the fourth one, which is River View Street, which is different from the first three that all went down to the Warren River. This one goes to the Kickemuit River.

MR. DESISTO: This is CRMC File Number 2017-05-048, River View Street, beginning at the northeasterly corner of Barker Avenue and River View Street, thence running easterly along the northerly boundary of River View Street 80 feet to the shore of the Kickemuit River, thence turning and running southerly along the shore of the Kickemuit River for a distance of 30 feet, thence turning and running easterly along the southerly boundary of River View Street 80 feet to a point on the southerly boundary of River

View Street, thence turning northerly across River View Street 30 feet to the point and place of beginning.

CHAIRWOMAN LIVINGSTON: So that's Barker Avenue right there?

MR. DEPASQUALE: Correct, yes.

CHAIRWOMAN LIVINGSTON: Anybody want to speak up?

MR. DEPASQUALE: Of course, Madam Chair.

CHAIRWOMAN LIVINGSTON: Welcome. Thank you.

MR. DEPASQUALE: River View is a very important location in Warren with our interest in renewing the original railway bed. The bridge there was blown out in the '38 Hurricane, and we're in the process of putting a new bike path bridge over that, and the area that we're talking about here is northwest of the bike path, the location, and this would allow access from Barker Avenue, and it's a perfect spot, once again, it's on the inward side of the Kickemuit River, and what I mean by that is the delineation would be what we refer to as the broken bridge, it was a train trestle, which will now be the new bike path bridge will be connecting the East Bay bike path to Touisset in Massachusetts, so it's a green, and it is safe for the school. So this,

again, is supported by the Council, the commission, and we look forward to being able to claim this as a public right-of-way.

CHAIRWOMAN LIVINGSTON: It appears from the pictures that we have here that the other ones, the concrete went just about down to the water, but this one, there's a patch of --

MR. DEPASQUALE: It is a vegetated buffer that over the years with the development that encroached on the western side, there was a drainage swale allowed to be put in for that development, and over the years, as you may hear in other public right-of-way testimony, there have been some vegetated nuisances that were allowed, or not sanctioned, and an area of, I don't know how to say it, overgrowth, and with the lack of actual titled right-of-way we did the best we could from the Town's perspective and it's one of the reasons why we're seeking this recognition.

CHAIRWOMAN LIVINGSTON: So you foresee that the Town will clear out at least some of that to make it?

MR. DEPASQUALE: Absolutely, absolutely. It's just undergrowth, and once we, especially with the bike path, and it will be the positive connection that

that dead end street needs to the water as well as cleaning itself up as not just ending in a mess of briars.

CHAIRWOMAN LIVINGSTON: Okay. Thank you.

MR. DEPASQUALE: You're welcome.

CHAIRWOMAN LIVINGSTON: No questions. Does anybody want to come forward to talk about this River View Street?

(NO RESPONSE)

CHAIRWOMAN LIVINGSTON: Okay. We're considering Kendra already here. Nobody?

MR. HUNT: Just as a younger resident of the Town, someone who's looking to start a family, I think it's very important, the vision of the bike path, the incompleted over the broken bridge. It will provide very important access for children that are trying to attend the Kickemuit Middle School to be able to, and the parks and the other facilities that the Town has over in that section of town, to access via that bike path, along with the Town's ultimate vision to connect that part of the bike path with the remaining sections of the East Bay Bike Path.

MR. DESISTO: May I ask Mr. Hunt a

question. Actually, just to let the members of the subcommittee know, the Kickemuit Middle School is on the eastern bank of the Kickemuit River, so this connection would allow for bike access to the middle school.

MR. HUNT: Okay. Thank you.

MR. DEPASQUALE: I'm sure you would like to hear more from me. When you look at the geographics and the soil conditions there, this is the more solid side, the opposite side is full of silt, and when you look at an access point for kayaks or rowboats, not -- I wouldn't look at that location as, I don't want a boat ramp, but what would be great, there is the ability to launch person powered, people powered craft, because that side is hard so it gives a safe footing, and we also have Hugh Cole as well as the Kickemuit Middle School, as well as our elementary school, and that would be a kind of great connectivity, not only on a bike but also to the water.

CHAIRWOMAN LIVINGSTON: I don't quite understand. I have pictures that show, I guess what used to be the bridge?

MR. DEPASQUALE: Yes.

CHAIRWOMAN LIVINGSTON: And it's down a little. I mean, they would have to -- how does the

right-of-way connect with the bridge?

MR. DEPASQUALE: It doesn't. It is an indirect connection. The street basically dead ends to what used to be the railway, so what you're looking at is, when you look at the eastern side, that's the access point which is right along the river.

CHAIRWOMAN LIVINGSTON: Oh, I see.

MR. DESISTO: This property is immediately adjacent to the broken bridge property.

MR. DEPASQUALE: Correct. Like, the other rights-of-ways went, the road went directly into the river, this road dead ends into the bike path, which used to be the rail spur, and the access point would be to your left if you were driving down the street. And, more importantly, let me add, that our senior center is right on the other side of this, of the rail spur, so when you're looking, if that delineates the bike path, the opposite side of this is our senior center, and 80 is the new 60, so -- or 60 is the new 80, so we're looking forward to getting as many people as possible into the accessible points of our waterfront.

CHAIRWOMAN LIVINGSTON: Okay.

MR. DEPASQUALE: Thank you.

MR. BEAUDETTE: So, in general, somewhat

specific to this right-of-way, but to some extent, as the Chair has asked, is the Town either, A, waiting for this designation of right-of-way or needs it, or does the Town have plans to cleanup, open up, remove vegetation? Some of the photos we have for this site, I would literally -- are we bush whacking through?

MR. DEPASQUALE: No. There are well worn paths through the years of use that are still there, and I would always defer to our planner, Ms. Michaud, for her expert opinion on where we're going, but what we're trying to do is create a five-year plan and understand the fiscal needs as well as our vision, and I wouldn't want to say that we're completely waiting on this, but also by having it a deemed right-of-way it would allow us to move forward with confidence as well as to continue to ask your support and approval for our interactions with the coastline. So, it's just one more, it's one more part of our positive plan forward.

CHAIRWOMAN LIVINGSTON: Okay.

MR. DEPASQUALE: Thank you.

CHAIRWOMAN LIVINGSTON: Anybody else?

MR. DESISTO: You can close the public hearing.

CHAIRWOMAN LIVINGSTON: All right. I hereby close the public hearing. I don't think I ever officially opened it. Do I have a motion to adjourn?

MR. BEAUDETTE: So moved.

MS. REYNOLDS: Second.

CHAIRWOMAN LIVINGSTON: Thank you very much.

(VOICE VOTE TAKEN)

(UNANIMOUS)

(HEARING CONCLUDED AT 7:41 P.M.)

C E R T I F I C A T E

I, Rebecca J. Forte, a Notary Public in and for the State of Rhode Island, hereby certify that the foregoing pages are a true and accurate record of my stenographic notes that were reduced to print through computer-aided transcription.

In witness whereof, I hereunto set my hand this 20th day of June, 2017.

REBECCA J. FORTE, NOTARY PUBLIC

My Commission (RI) Expires on 7/15/17
My Commission (MA) Expires on 1/26/18