

**THE CITY OF WARWICK
STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS**

RESOLUTION OF THE CITY COUNCIL

NO..... DATE.....

APPROVED.....MAYOR

**RESOLUTION AUTHORIZING DREDGING
AT HARBOR LIGHT MARINA**

Resolved that,

WHEREAS, the health, safety and welfare of the citizens of the City of Warwick are matters of paramount importance to the City Council; and

WHEREAS, Section 22-2 of the Warwick Code of Ordinances prohibits dumping of dredged material within the City of Warwick without first obtaining the approval of the City Council after public hearing and notice thereof; and

WHEREAS, Harbor Light Marina has filed an application for authorization to dredge at its location in the City of Warwick; and

WHEREAS, a public hearing was conducted on the dredging application of Harbor Light Marina by the Warwick City Council on May 15, 2016.

NOW, THEREFORE, BE IT RESOLVED, that, pursuant to Section 22-2 of the Code of Ordinances of the City of Warwick, the Warwick City Council hereby authorizes Harbor Light Marina to perform dredging at its present location in accordance with the application which it filed in the City Clerk's office requesting this authorization, subject to the conditions recommended by the Planning Department and subject to authorization from the Rhode Island Coastal Resources Management Council and the Rhode Island Department of Environmental Management. All material to be dredged shall be classified by the RI DEM based upon the approved analysis process which finds the dredge material suitable for upland disposal in a manner consistent with the Coastal Resources Management Program and the rules and regulations of the RI DEM.

The City Clerk is hereby directed to forward a copy of this Resolution to Harbor Light Marina, the Rhode Island Coastal Resources Management Council and the Rhode Island Department of Environmental Management.

This Resolution shall take effect upon passage.

SPONSORED BY: COUNCILMAN LADEUCEUR

COMMITTEE: LAND USE

William DePasquale, Jr., AICP
Planning Director



Scott Avedisian
Mayor

CITY OF WARWICK
Planning Department
3275 Post Road, Annex; Warwick, RI 02886
Tel. (401) 738-2000 Ext. 6289
T.D.D. (401) 739-9150

TO: Honorable President and Members of the Warwick City Council

FROM: William J DePasquale Jr, Planning Director

DATE: March 16, 2017

RE: **Application Review -**
Harbor Light Marina Inc. – 200 Gray St. Warwick, RI
AP 378 lot 1, 181, 2
CRMC Type 3

Honorable President and Members of the Warwick City Council:

In accordance with the Warwick Code of Ordinances Section 22-2 entitled; "Dumping Sludge or Dredge Material" this application must receive approval from the Warwick City Council. The statute reads as follows: "*No sludge or dredge material shall be dumped within the City without first obtaining the approval of the City Council after public hearing and notice thereon.*" Pursuant to the Code of Ordinance Section 22-2 the Warwick Planning Department has reviewed the petition to expand the aforementioned marina facility.

The petition before the Warwick City Council is to use dredge spoils from the marina basin permitted within assent modification CRMC Assent B 2005-06-151 to be used as fill material on the existing parking lot. Surplus dredge material not needed within the parking lot will be disposed of as alternative cover at the Central landfill as prescribed in CRMC Assent B 2005-06-151.

The requested modification originates from an original Assent from CRMC for maintenance dredging over a period of time. Based on review of the proposal as well as contact with the owner and CRMC we understand the owner is working with CRMC on a new assent that would request storage and use of the dredge spoils onsite.

I. Review -City State Policy/Regulations

In reviewing the request we turn to the *City Zoning Ordinance, Rhode Island Coastal Resources Management Program and the City's Comprehensive Plan*. In the instant case the marina property is zoned "Waterfront Business". The district as described within the Warwick Zoning Ordinance section 301.7. Entitled "Waterfront Business District (WB)" is "... **used primarily for businesses catering to marine activities.**" The abutting waters are classified by Rhode Island Coastal Resources Management Program (CRMP) as Type 3. In particular the CRMP Section 200.3 entitled *Type 3 High-Intensity Boating* reads "**This category includes 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-dependent businesses.**"

Review of the *Comprehensive Plan and Harbor Management Plan* finds the proposed beneficial reuse of dredge materials to be encouraged especially when joined with sustainability actions in response to sea level rise.

"The city also supports the development of comprehensive state-wide dredging plan that includes the beneficial reuse of dredged material."

CITY OF WARWICK COMPREHENSIVE PLAN 2013-2033 PART V | CHAPTER 9 TRANSPORTATION AND CIRCULATION Page 9-24

The Comprehensive Plan also recognizes "... **In recent years dredging projects have become increasingly complex due to the recognized need to dispose (or reuse) dredged material in an environmentally prudent manner consistent with state and federal regulations.**" *Comp Plan Page 9.23*

In furtherance of this objective is the Harbor Management Plan which seeks to;

"... To improve navigation by encouraging and supporting appropriate dredging projects; To promote and encourage the prudent use of coastal and marine resources in a manner that stimulates economic development and protects the coastal environment;..."

CITY OF WARWICK COMPREHENSIVE PLAN 2013-2033 Page 9.22

II. Analysis

The instant petition seeks to amend the current state assent to allow for the use of dredge spoils from the marina basin to be used on the existing parking area to raise the grade on the parking lot which was not authorized in the CRMC Assent B 2005-06-151. That assent requires the material to be disposed of at the Central Landfill in addition to the CAD cell in the Providence River.

To this end, review of the instant proposal is evaluated within two respects; *the use of clean or approved dredge material as beneficial fill within the existing parking area to raise the grade thereby minimizing impacts of sea level rise on the marina operations* and *an analysis of the dredge spoils and if they are suitable for said use.*

As for utilizing clean or approved dredge spoils at this location, Section I (above) clearly indicates the use of approved cover material within a marina parking lot within a waterfront business district in Type III waters is consistent with the City's zoning ordinance, Comprehensive Plan and the State CRMP with the condition that the material is tested and suitably approved for said use. As for the second consideration it is unclear as to the suitability of this material for use on the existing parking area.

III. Recommendation

Based on the aforementioned review and analysis, I find the proposal for the use of clean or approved dredge material as beneficial fill within the existing parking area to raise the grade of this long standing marina thereby minimizing impacts of sea level rise to be in keeping with the Policy's, Plans and Regulations of the City **conditioned on the following:**

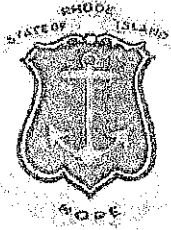
1. That Harbor Light Marina Inc. applies for a new Assent from the Coastal Resources Management Council and any other requisite agencies.
2. That CRMC and other applicable agencies determine the suitability of the material to be used on the parking area.
3. That Harbor Light Marina Inc. receives a new Assent from Coastal Resources Management Council and any other Agency determining the suitability of the material.
4. The new CRMC assent and approved site/grading plan shall be forwarded to the City's Planning Department, Building Department, Engineering Department (DPW) authorizing the use of the material onsite.
5. Coordination and approval from the Department of Public Works and Building Inspector as to the requirements and perimeters of grading, hours of operation dust/odor control and soil erosion measures.

Pursuant to the Code of Ordinance Section 22-2. - Dumping sludge or dredge material.

(a) *Approval required.* No sludge or dredge material shall be stored or dumped within the city which shall include but not be limited to the jurisdictional limits of the harbor boundary established in the city harbor management plan without first obtaining the approval of the city council after public hearing and notice thereon.

(b) *Recommendations; conditions.* Any request or application for approval of the storage or dumping of dredge materials shall be submitted in writing to the director of city planning who shall investigate the application as to feasibility and impact to the city and its residents. Upon completion of his or her review, the director of city planning shall submit a written recommendation to the city council as to the request or application, including but not limited to, the impact of the proposed, storage or dumping, the environmental consequences of any such storage or dumping, and the effect upon public health safety and welfare. The city council in granting approval, or reviewing any recommendation may set conditions on said approval or application, which it deems necessary to secure the public health, safety and welfare.

(Code 1971, § 8-1.1; Ord. No. O-01-4, § I, 4-9-01)



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

ASSENT MODIFICATION

January 8, 2016

Harbor Light Marina Inc.
200 Gray Street
Warwick, RI 02889

RE: Modification of CRMC Assent B 2005-06-151 -- Allow additional disposal location of Central Landfill and allow temporary dewatering of dredge material in parking area for 70-80 CY of material. Site Address: 200 Gray Street; Warwick; Plat: 378 Lot: 1, 181, 2

Dear Sirs:

The Rhode Island Coastal Resources Management Council has reviewed your request for modification of assent no. B2005-06-151 and approves the modification with the following alterations to stipulations:

Stipulations of Approval:

1. All stipulations and conditions of the original Assent remain in effect.
2. The Central Landfill may be utilized as a dredge material disposal location in addition to the CAD cell in the Providence River.
3. Material shall be dewatered in the parking area in a sufficiently sized containment area that is constructed of concrete block or jersey barrier with the seams covered in filter fabric and the entire dewatering basin surrounded by hay bales.
4. If odor becomes an issue in the opinion of the CRMC, lime or other suitable material shall be mixed into the dredge material to mitigate the problem.

In accordance with revisions to RIGL 46-23-6.3 Expiration Tolling Periods (as amended effective June 19, 2015), all work being permitted must be completed on or before July 1, 2019 after which date this assent is null and void, (unless written application requesting an extension is received by CRMC sixty (60) days prior to expiration date).

Sincerely,

Grover J. Fugate, Executive Director
Coastal Resources Management Council

/lat

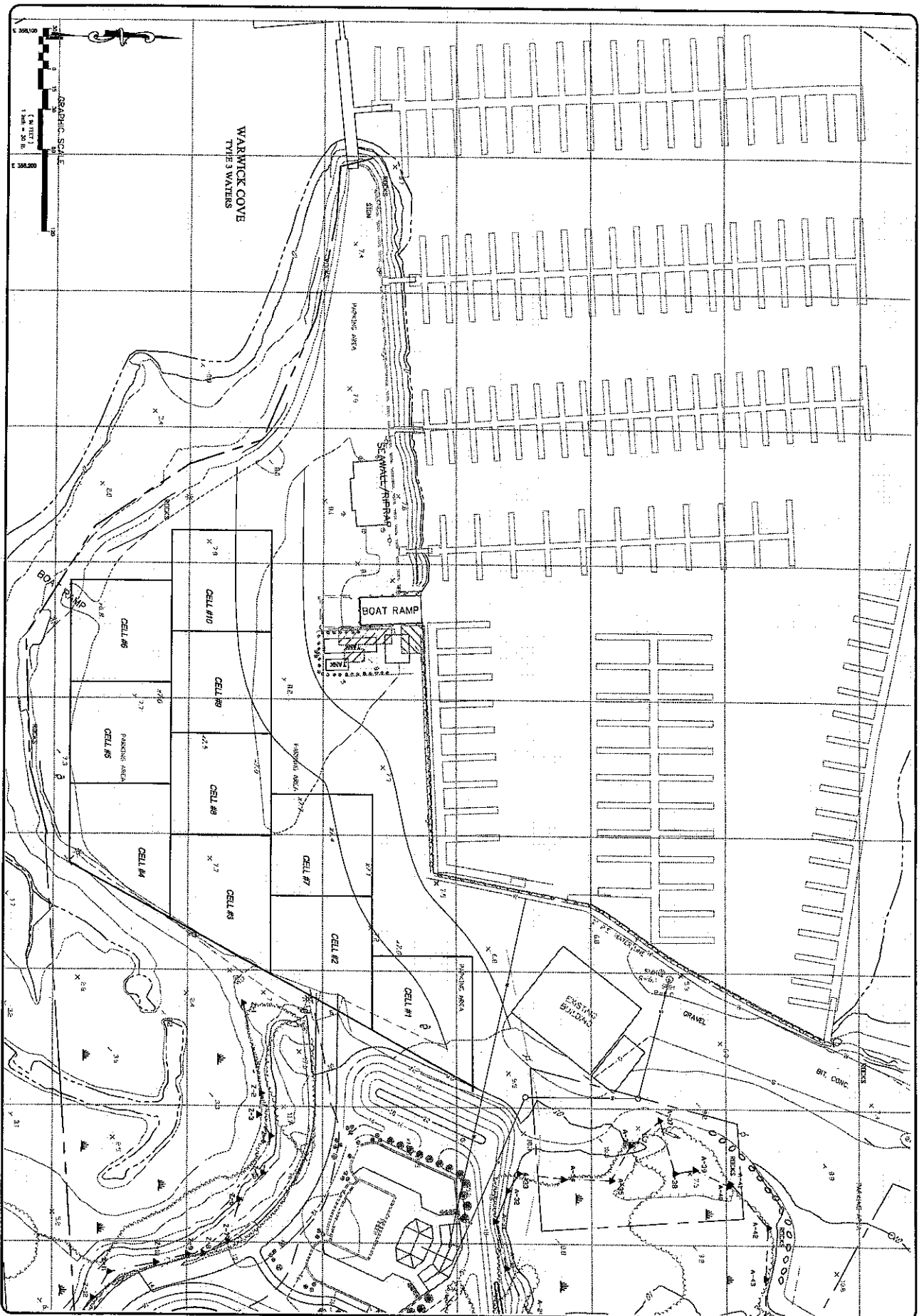
Harbor Lights Marina is seeking permission for the city of Warwick to use dredge spoils from the marina basin to increase the elevation of the existing parking lot over the next ten years.

1. The project will excavate over the next ten years approximately 200 yards of sediment per year.
2. Sediment will be excavated using a barge mounted excavator during normal daylight working hours up to seven days a week during permitted dredge windows established by Coastal Resources
3. The material will be stored on a site in the parking lot for dewatering (jersey barriers, hay bales)
4. Odor control in the past has not be necessary due to the minimal organic content of the material but if it becomes a problem will be addressed with the application of lime.
5. The material can be classified as sandy silt.
6. Once the dredge material has dried, to where it can be handled with a backhoe without free water dripping, an area within the parking lot will be selected and excavated to a depth of 1 foot or more, and a width and length suitable to hold the estimated amount dredged during the that calendar year.
7. The existing parking lot material will then be mixed with the dredge material and graded and compacted into the site chosen for that particular year.
8. All areas will be graded to minimize the disruption of parking and the winter storage of boats
9. In the event we have an excess of dredge spoils during a seasonal dredge window Harbor Lights will dispose of the material at the landfill as alternative cover

Thank You

Joseph Noel

Harbor Lights



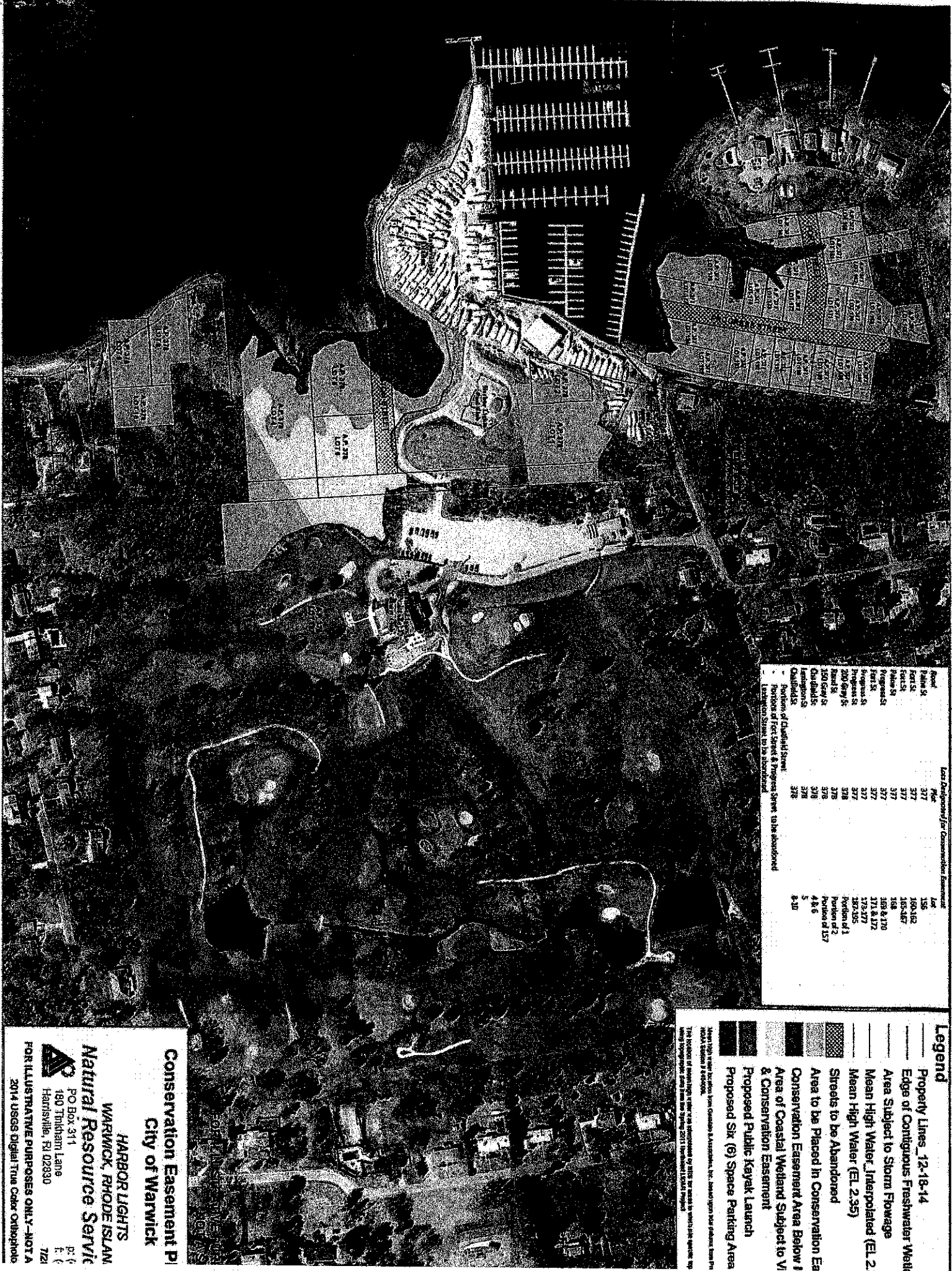
SHEET NO. **C1**
 OF 1

Harbor Light Marina
 200 Gray Street
 Warwick, Rhode Island 02889
DREDGE DISPOSAL CELLS

Drawn: R. ST. JEAN
 Checked:
 Scale: 1"=30'
 DATE: 01/20/17

ST. JEAN ENGINEERING, LLC
 CIVIL, MARINE AND STRUCTURAL
 CONSULTING ENGINEERING
 1145 Middle Road
 East Greenwich, RI 02818
 Phone: 401.338.2999
 stjeanengineering@stjean.com

Revisions:



Last Development/Use Conservation Easement

Parcel	File	Lot
Parcel 2A	377	156
Parcel 2B	377	159, 162
Parcel 2C	377	165, 167
Parcel 2D	377	168
Proposed 1	377	169, 170
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Proposed 98	378	363, 364
Proposed 99	378	365, 366
Proposed 100	378	367, 368

- Legend**
- Property Lines_12-18-14
 - Edge of Contiguous Freshwater Wetland
 - Area Subject to Storm Flowage
 - Mean High Water, Interpolated (EL 2.2)
 - Mean High Water (EL 2.35)
 - Streets to be Abandoned
 - Area to be Placed In Conservation Easement
 - Area of Coastal Wetland Subject to VI & Conservation Easement
 - Proposed Public Kayak Launch
 - Proposed Six (6) Space Parking Area

Conservation Easement Project
City of Warwick

HARBOR LIGHTS
WARWICK, RHODE ISLAND
Natural Resource Service

PO Box 311
 180 Thinkham Lane
 Harrisville, RI 02830

FOR ILLUSTRATIVE PURPOSES ONLY - NOT A
 2014 USGS Digital True Color Orthophoto

Transmittal

St. Jean Engineering, LLC
1145 Middle Road
East Greenwich, Rhode Island 02818
(401)398-0999, st.jean.engineering@verizon.net

TO: Beverly Hall, Council Clerk

City of Warwick, Rhode Island

3275 Post Road

Warwick, Rhode Island

Attention:	Beverly
Date:	4/28/2017
RE:	Harbor Lights Marina
	Warwick, Rhode Island
	Proposed Dredging Project

We are transmitting: herewith under separate cover by mail

 Originals Shop Drawings Specifications

Copies	Date	Description
12	4/24/17	Project Narrative
12	4/24/17	Project Plans, sections, location, locus, grading
12	4/27/17	200 ft. Radius Map with Names and Addresses
12	Varies	Certificate of Analysis for Dredge Spoil Samples
12	4/24/17	CRMC / RIDEM Dredge Application
12	4/24/17	Army Corps Application
12	10/20/16	Proof of Ownership
12	Varies	Pictures of Project Site

These items are transmitted as noted: for approval for your files

 As requested for your review

Dear Ms. Hall

As discussed, please find enclosed plans and the above documentation for maintenance dredging at Harbor Lights Marina. If you have any questions or need additional information please don't hesitate to call me at your earliest convenience.

Copy to: **Harbor Lights Marina**

Sincerely,
By: Rick St. Jean, P.E.

April 24, 2017

APPLICATION FOR MAINTENANCE DREDGING & ASSOCIATED ACTIVITIES

Owner: Harbor Light Marina, Inc.
Facility Name: Harbor Light Marina
LOCATION: 200 Gray Street, Warwick, Rhode Island

PROJECT NARRATIVE - Description of Work:

The site is an existing marina along the east shore of the Warwick Cove in Warwick, Rhode Island. The purpose of the dredging will be to remove material adjacent to the existing floating docks to provide adequate depth for recreation vessels. Area within a footprint of approximately 6.75 acres will be periodically dredged, as needed, to a depth of 6 feet below MLLW over a period of 10 years. The bottom of the dredging is within the marina perimeter lines extending to the limits of dredging previously approved by CRMC Assent No. 2005-06-151. A maximum slope of 3 horizontal to 1 vertical to provide a stable slope to the existing mud line. This is the minimum amount necessary to meet the stated purpose. The material will be dredged from the waterside by mechanical means, clamshell or excavator and be place on land within the marina for de-watering/drying. The existing parking lot/boat storage on the south side of the marina will be gridded in 10 - 75'x75' cells with the capacity of each accepting approximately 210 cy of materials, if filled to a height of 1 foot. After the material is dredged and de-watered 1 foot of existing gravel parking lot soil material within 1 or 2 cells will be excavated and mixed with the spoils dredged during the past dredge season. The mixed material will be placed and compacted in the excavated cells.

It is the intention of Harbor Light Marina to perform the maintenance dredging over a period of 10 years. No more than 2,000 yards will be dredged over the life of the permit, with a maximum of 500 cubic yards dredged during any one year. It is understood by the Applicant that the overall estimated quantity of dredge spoils computed in the application exceeds the amount that can be dredged during the 10-year time frame. The application dredge quantities are based on previously approved dredge depths. Dredging will occur as needed on a yearly basis in areas within the marina that have silted in. Dredge depths will extend to a maximum depth of 6 below MLLW. It is further requested that the dredging operations, which are expected to take approximately 6 weeks, be permitted between October 15th through January 31st. The dredge material has been sampled and the results are provided with the application for review.

No dredging will occur within 10 feet to the existing seawall or the toe of existing revetments. Dredging is proposed within the area and to the depths previously dredged. The dredging will not adversely impact the existing structures within the dredge footprint.

Project Specifics:

Water Use Category: Type 3 (East Greenwich Quad.)
Surface Water Classification: SB
Shoreline Feature: Manmade Shoreline (Stone Revetment/Steel Sheet Sea Wall)
Water Use Map: East Greenwich Quadrangle
Lot Area: 6.92 ± acres (Landside), 5.80± acres (within M.P.L.)
Section 140 B 1) water dependent activity
Alteration or Activity: (Table 1A), Commercial, Industrial, Recreational Structures
Project Footprint: 4.23± Acre Waterside
Base Flood Elevation: 14 (NAVD 1988 – FIRM Map No. 440030142H)
Flood Zone: VE
Project Base Elevation: 7.0 NAVD88
Fill to be Deposited: N/A
Dredging Proposed: 9,103 cubic yards
Variances Requested: None

Section 300.1 Criteria:

1. The proposed activity is required to provide safe dockage within the existing marina. The area was previously dredged during 1975 (CRMC Assent 1975-07-022) and 2008 (CRMC Assent 1983-03-028).
2. All work will comply with local, state and federal requirements. A RIDEM Water Quality Certification and a U.S. Army Corps of Engineers Permit will be required.
3. The work will be conducted in CRMC Type 3 waters on the east shore of Warwick Cove. The project is the site of an existing marina.
4. The dredging proposed is relatively shallow and is within the area previously dredged. No significant erosion or deposition will occur.
5. The area to be dredged is in an area where shell fishing is prohibited. The dredging will be confined to an approximate 6-week time frame. Finfish and shellfish habitat will return after dredging to its previous condition.
6. Public access will remain unchanged by the project. The property is located at 200 Gray Street. The use of tidal waters and adjacent shores will not be impacted by the project.
7. The in-water work will be surrounded at all times with a silt curtain only if required by CRMC to contain sediment plumes which may result from disturbance during dredging operations.
8. No change of water quality is expected as a result of the dredging. There will be no discharges associated with the work.

9. There will be no impact to historical or archeological areas. The areas to be dredged are within areas previously dredged and exposed to disturbance.

10. No change in use of the site is requested.

11. The site as seen from the shore and the water will remain unchanged.

The Applicant believes that the proposed activity poses little impact or threat to coastal resources, and is in line with the goals and policies of the Coastal Resource Management Council.

Section 300.2 Criteria: (Filling, Removing, or Grading of Shoreline Features)

D.1 Standards for filling, removal or grading

- a) Fill slopes are proposed at 1:20 (approximately 3 deg.) in the parking lot adjacent to disposal cells, and 1:6 (approximately 10 deg.) adjacent to the dewatering area.
- b) No excess material is anticipated. The on-site disposal cells have sufficient capacity to storage the anticipated dredge spoils. Fill material consists of accumulated sand and silt dredge from the marina. No debris is anticipated. Dredge spoils will not be re-deposited in tidal waters or on a coastal feature. The dredge spoils will be disposed of in the existing parking/boat storage areas.
- c) All disturbed upland areas will be graded in accordance with section D1.1 a) above. Dredge spoils mixed with gravel from the existing parking lot will be compacted and graded to prevent erosion. The surface will not be seeded, so no nutrients will be applied.
- d) No placement of sediments will occur along jetties or groins. Beach nourishment is not requested as part of the project's goals.
- e) All fill material will be taken from adjacent tidal waters as part of the project (dredging).
- f) Coastal banks will not be impacted.
- g) No toxic substances are associated with the proposed activity.

D.2.(a) Earthwork on Shoreline Features:

- 1) The contractor will meet with CRMC, prior to construction, as required by the Assent
- 2) No re-vegetation is proposed for the project. The dredge spoils will be mixed with the existing gravel in the parking lot and re-graded and compacted in the parking lot. The parking lot surface will remain a gravel surface.
- 3) Construction materials consists of dredge spoils from the adjacent tidal waters. All construction materials will be stored and graded on the existing parking/boat storage gravel surface (manmade shoreline).
- 4) See D.1 a) and D.2(a) 2) above.
- 5) Work will be carried out above slopes on coastal features. No work in coastal wetlands is proposed.
- 6) No work in areas considered coastal features, shoreline slope, buffer zone, or area of beach grass is proposed. The disturbed upland areas will be restored to their pre-disturbed condition.
- 7) No concrete structures are proposed.

D.2.(b) Upland earthwork, measures shall be taken to minimize erosion:

- 1) Concrete blocks and hay bales or silt fence will be placed around the entirety of the de-watering area. Hay bales or silt fence will be placed around a disposal cell(s) prior to excavating and mixing the gravel and the dredge spoils.
- 2) Final grades in the individual cells are intended to rise approximately 1 foot above existing grades. Areas extending beyond the edges of the cells will be graded to existing gravel surfaces at a rate of 1 ft. vertical to 20 ft. horizontal.
- 3) See D.1 a) and D.2(a) 2) above.
- 4) N/A
- 5) N/A
- 6) N/A

D.2.(c) Disturbance of steep slopes (over 15 percent):

N/A

Section 300.9 Criteria: (Dredging and Dredged Material Disposal)

E.1. The dredge spoils are proposed to be disposed of on site in the southern parking/boat storage lot of the marina. After disposal, the grade of the parking/boat storage lot will be raised by an average of 1 foot in the area of disposal. The soundings shown on the plans were compiled by Steele Associates Marine Consultants on 11/10/2016 and represent average water depths on that date.

E.2. The dredging will be accomplished from the water with a clamshell bucket mounted on a crane, sitting on a barge.

E.3. Sample results indicate that the material is mostly fine silt. Turbidity should not be a problem and the contractor will employ a silt curtain if required by the permits.

E.4. The Applicant requests that dredging be allowed during the approved dredge window (October 15th to January 31st).

E.5. The Applicant will be applying for a Maintenance Dredge permit with CRMC and the RIDEM. The full marina was last dredged approximate 10 years ago, and periodic maintenance dredging has occurred since under Assent 2005-06-151. It is expected that approximately 200 cubic yards will be maintenance dredged every year with a maximum 10-year total of 2,000 cy for the duration of the permit. The applicant requests that the duration of the permit extend a minimum of 10 years

E.6. Sampling has been conducted over the last 2 years, at the request of CRMC, for upland disposal of the dredge spoils under Assent 2005-06-151. The Applicant is submitting the last 2 years of sample results as part of the application.

E.7. N/A

F. 1. Standards for Dredging

- a. Bottoms of dredged areas will slope downward into waterways where applicable.
- b. Bottoms of dredged areas will slope downward at a minimum rate of 3 horizontal to 1 vertical. Dredged areas will not be deeper than the 6 ft (MLLW) depth of the adjacent federal channel
- c. No dredging will occur in close proximity to existing bulkheads/seawalls and/or revetments.
- d. Shellfish will not be harvested as part of the dredging. There is no shell fishing allowed in the area to be dredged and the dredge spoils will be mixed with existing gravel and disposed of in the existing parking/boat storage area of the marina.
- e. The toe of proposed dredging is within areas previously disturbed by dredging. Slopes will be carried to the north, south and west within areas previously dredged. There are no structures that will be impacted. The bottom of the dredge footprint is within the marina perimeter lines, sides slopes will be carried outside the perimeter line at a minimum slope of 3 horizontal to 1 vertical.

F.2. Open water disposal is not proposed for the project.

F.3. N/A

F.4. For Upland Disposal

- a) Dewatering of the dredge spoils will be conducted in gravel parking within the southeast corner of the marina property. The de-watering area will be surrounded by concrete blocks and hay bales or silt fence. Plans are provided showing the de-watering area and details.
- b) As previously mentioned the dredge spoils are to be mixed with 1 foot of gravel from the existing parking/boat storage lot and placed and compacted in approximately 75 foot square cells. The parking lot grades will be raised approximately 1 foot higher in each of the cells after placement. The sides of the cells will be graded to a 1 vertical to 20 horizontal slope blended to the existing grades.
- c) N/A
- d) Provided above.

F.5. N/A

WATER QUALITY REQUIREMENTS:

Impact Avoidance:

1. The primary purpose for dredging is to restore adequate water depth within the Harbor Light Marina facility (6 below MLW) for recreational boat(s). A marina first showed up in a 1972 aerial photo from RIGIS at the location of the Harbor Light Marina at 200 Gray Street. The Applicant is proposing to dredge around the existing docks and in the fairways in order to maintain permitted water depths and provide safe access to and within the existing marina.
2. The proposed activity is water dependant and requires access to coastal waters as a central element of its primary purpose (e.g. Boat Dockage). There are no freshwater wetlands associated with the proposed project.
3. There is no other area within the same property or other property owned or controlled by the applicant that could be used to achieve the same project purpose. The location of the proposed activity is in keeping with historical use of the Harbor Light Marina and is located in an area that was previously dredged thereby limiting its' impact.
4. There are no other areas not currently owned or controlled by the applicant which would not involve considerably more alteration to achieve the same objective.
5. There are no freshwater wetlands adjacent to the area to be dredged. Additionally, dredging somewhere else on the property would require significant disturbance and not achieve the project objective.
6. The Harbor Light Marina has been the site of a recreational marina for more than 44 years. The property is zoned properly for the activity. Furthermore, the infrastructure, parcel size, and landside facilities are adequate for the existing and intended use. The marina is adjacent to a federal navigation channel with a design depth of 6 feet below MLLW.
7. There are no freshwater wetlands on the site. There are no reasonable alternatives available to restore the required depth without dredging. The Applicant believes the proposed activity will not result in significant adverse consequences to the public health and safety, and/or the environment.

Impact Minimization:

1. The primary purpose of the proposed project is to restore water depths in the vicinity of the existing docks. The dredge footprint and depth are the minimum necessary to allow for safe dockage and access to the docks during mean low water (MLLW) and restore the area to it's previous depth. The applicant is requesting a dredge depth of minus six (-6) feet MLLW as the minimum necessary to maintain the future effectiveness of this resource.

2. The proposed location provides the minimum impact to the seaward resource and no impact to upland areas. It remains the best location to achieve the primary project purpose. Furthermore, since the area is an established recreational boating area, it represents an area where the least impact to coastal waters will occur due to the proposed activity.

3. As previously stated in item no. 5 above, the proposed design represents the least impact to the coastal system while still achieving the primary project purpose.

4. The applicant does not believe that the proposed activity, the removal of accumulated bottom sediments, will result in significant adverse consequences to public health and safety and/or long term adverse consequences to the environment.

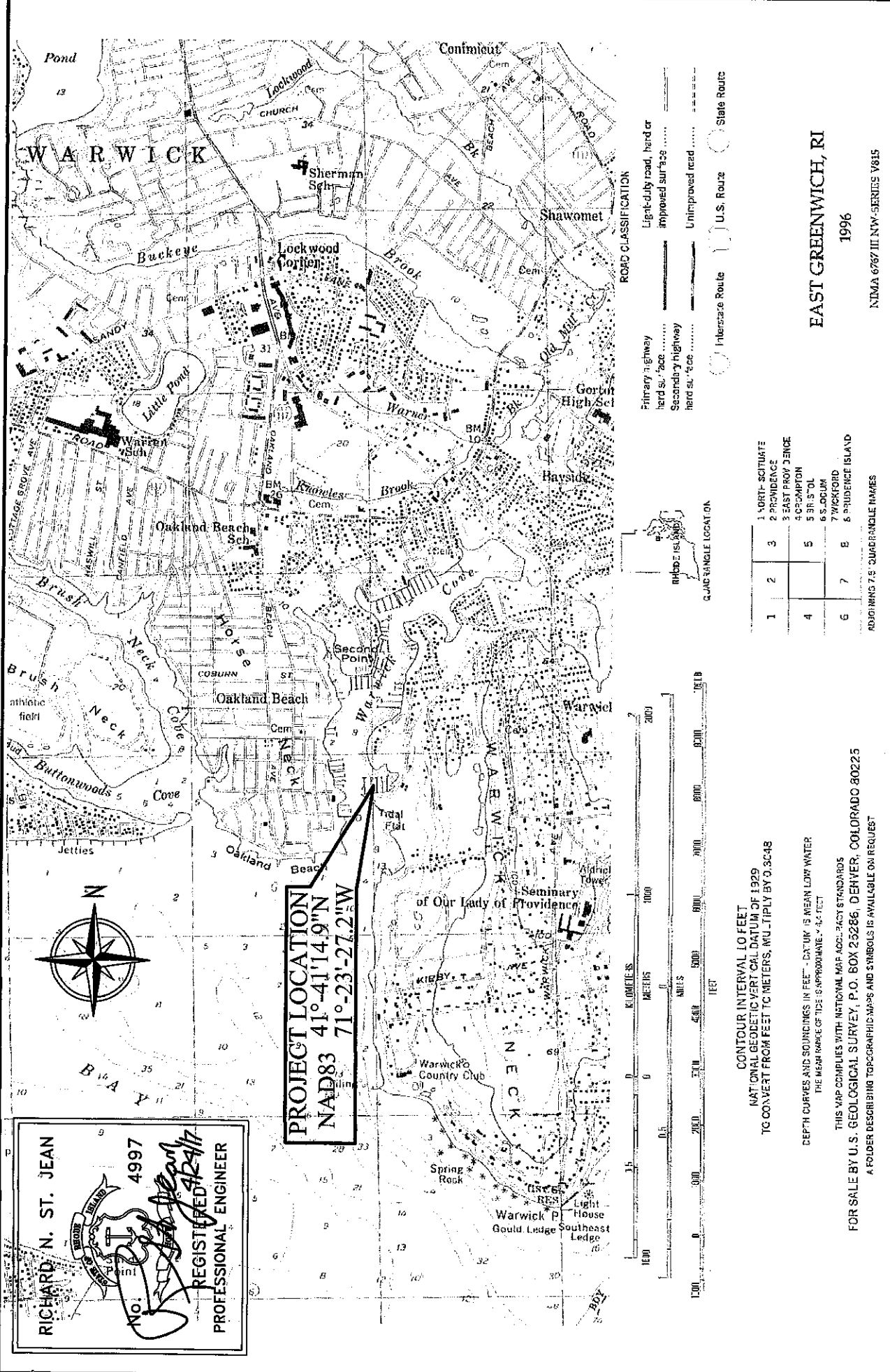
Project Contact Personnel:

The responsible contact persons for the Project who will be able to answer questions pertaining to this application and permit compliance during construction will be the following:

Owners Representative:	Joseph Noel Harbor Light Marina	Phone: (401)737-6353
------------------------	------------------------------------	----------------------

Engineer:	Richard St. Jean, P.E. St. Jean Engineering, LLC	Phone: (401)398-0999
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Application Prepared By: Richard St. Jean, P.E.



RICHARD N. ST. JEAN
 4997
Richard N. St. Jean
 REGISTERED PROFESSIONAL ENGINEER

PROJECT LOCATION
 NAD83 41°-41'14.9"N
 71°-23'-27.2"W

ROAD CLASSIFICATION

Primary highway
 Light-duty road, hard or hard surface
 Secondary highway
 Improved surface
 Unimproved road
 Interstate Route
 U.S. Route
 State Route

QUADRANGLE LOCATION

1	2	3	4	5	6	7	8
1 NORTH-SITUATE	2 PROVIDENCE	3 EAST PROVIDENCE	4 CORNHURST	5 BRISTOL	6 PROVIDENCE ISLAND	7 WICKFORD	8 PROVIDENCE ISLAND

ADJOINING 7.5' QUADRANGLE NAMES

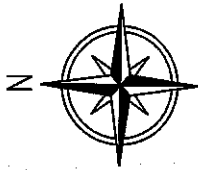
CONTOUR INTERVAL 10 FEET
 NATIONAL GEODETIC VERTICAL DATUM OF 1929
 TO CONVERT FROM FEET TO METERS, MULTIPLY BY 0.3048

DEPTH CURVES AND SOUNDINGS IN FEET - DATUM IS MEAN LOW WATER
 THE MEAN RANGE OF TIDE IS APPROXIMATELY 4.4 FEET

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
 FOR SALE BY U.S. GEOLOGICAL SURVEY, P.O. BOX 25286, DENVER, COLORADO 80225
 A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

EAST GREENWICH, RI
 1996
 NIMA 6767 III NW-SERIES V815

ST. JEAN ENGINEERING, LLC <i>Civil and Structural Engineering</i> 1145 Middle Rd., East Greenwich, RI 02818 Tel/Fax: (401)398-0999	LOCATION: WARWICK COVE A.P. 378 - LOT, 1 WARWICK, RHODE ISLAND 02889	APPLICATION BY: HARBOR LIGHT MARINA, INC. 200 GRAY STREET WARWICK, RHODE ISLAND 02889	DATE APRIL 24, 2017
	USGS MAP - HARBOR LIGHT MARINA	SHEET OF 1 12	1996



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

DATE	APRIL 24, 2017
SHEET OF	2 12

LOCUS - HARBOR LIGHT MARINA

APPLICATION BY: HARBOR LIGHT MARINA, INC.
 200 GRAY STREET
 WARWICK, RHODE ISLAND 02889

LOCATION: WARWICK COVE
 A.P. 378, LOT 1
 WARWICK, RHODE ISLAND 02889

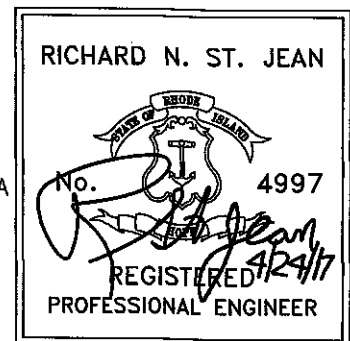
ST. JEAN ENGINEERING, LLC
 Civil and Structural Engineering
 1145 Middle Rd., East Greenwich, RI 02818
 Tel/Fax: (401)398-0999

GENERAL NOTES:

1. LOCATION OF BUILDINGS, PROPERTY LINES, EXISTING MARINA PERIMETER LINES TAKEN FROM PLAN ENTITLED "OVERALL SITE PLAN FOR HARBOR LIGHT MARINA, SITUATED ON GRAY STREET, WARWICK, RHODE ISLAND, PREPARED FOR HARBOR LIGHT MARINA". PLAN PREPARED BY GAROLFALO & ASSOCIATES, INC., 85 CORLISS STREET, P.O. BOX 6145, PROVIDENCE, RI. DATED OCTOBER 23, 2003 REV. 11 DATED 8/31/2005. BATHYMETRY WAS TAKEN FROM SURVEY BY STEELE ASSOCIATES MARINE CONSULTANTS, LLC TAKEN ON 11/10/2016 & IS BASED ON MLLW.
2. EXISTING MARINA CAPACITY IS 135 BOATS. NO INCREASE IN CAPACITY IS PROPOSED.
3. PROJECT COORDINATES BASED ON RHODE ISLAND STATE PLANE (NAD83).
4. ALL ELEVATIONS ARE BASED ON MEAN LOW LOW WATER (MLLW). CONTOURS & SPOT ELEVATIONS TAKEN FROM PLANS REFERENCED IN NOTE 1 WERE CONVERTED BY ADDING 1.49 FT. TO THE MSL ELEVATIONS PROVIDED.
5. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL, STATE, FEDERAL, AND UTILITY COMPANY REQUIREMENTS AS APPLICABLE AND AS DESCRIBED IN APPROVED PERMITS.
6. IT IS THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AS THEY RELATE TO THE WORK. THE CONTRACTOR SHALL REPORT TO THE ENGINEER OF RECORD ALL OBSERVATIONS & DISCREPANCIES BEFORE PROCEEDING WITH ANY WORK.
7. UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATION AS OBTAINED FROM DRAWINGS SUPPLIED BY THE OWNER. THE ENGINEER MAKES NO REPRESENTATION THAT ALL UTILITIES PRESENT ON AND BELOW THE SITE ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL NOTIFY DIG SAFE AND VERIFY EXACT LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER ASSUMES NO LIABILITY FOR DAMAGE IF THE CONTRACTOR BREACHES ANY UTILITY LINE. THE OWNER ASSUMES RESPONSIBILITY TO PROPERLY RE-LOCATE THEIR UTILITY LINES AND TO REPAIR/REPLACE ALL UTILITIES DAMAGED DUE TO THE WORK DESCRIBED ON THE ATTACHED DRAWINGS.
8. MAXIMUM DREDGE DEPTHS SHALL BE -6 FEET BELOW MLLW. MAXIMUM DREDGE QUANTITY OVER THE LIFE OF THE PERMIT SHALL BE 2,000 CUBIC YARDS.
9. THE CONTRACTOR/OWNER SHALL KEEP A COPY OF THE APPROVED PERMITS ON THE SITE AND SHALL CLOSELY ADHERE TO THE DATES, TIMES, AND CONSTRUCTION PROVISIONS AUTHORIZING THE WORK.
10. DREDGE SPOILS ARE TO BE DRIED ON SITE AND DISPOSED OF AT THE STATE LANDFILL AND USED FOR COVER MATERIAL.
11. THE MARINA OPERATOR IS INTENDING TO DREDGE UP TO 500 YARDS EACH YEAR AS REQUIRED TO MAINTAIN DESIGN WATER DEPTHS WITHIN THE MARINA.

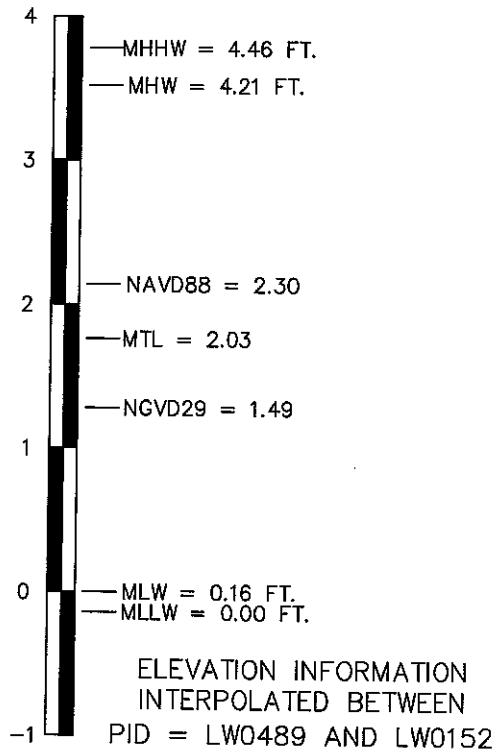
REVIEW OF THE FLOOD INSURANCE RATE MAP FOR THE CITY OF WARWICK, RHODE ISLAND, KENT COUNTY, MAP NUMBERS 44003C0134H, AND 44003C0142H REVISED SEPTEMBER 18, 2013 INDICATES THAT THE SEAWARD AREA WITHIN THE MARINA LIMITS IS DESIGNATED AS A VE ZONE WITH A BASE FLOOD ELEVATION OF 14. THE FIRM MAP IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988. SEE FIRM FOR OTHER ZONE DESIGNATIONS.

Richard St. Jean
 RICHARD ST. JEAN, P.E.



St. Jean Engineering LLC Civil and Structural Engineering 1145 Middle Rd., East Greenwich, RI 02818 Tel/Fax: (401)398-0999	HARBOR LIGHT MARINA – GENERAL NOTES DREDGING PLANS & NEW SEAWALL		DATE APRIL 24, 2017
	LOCATION: WARWICK COVE AP 378, LOT 1 WARWICK, RI, 02889	APPLICATION BY: HARBOR LIGHT MARINA, INC. 200 GRAY STREET WARWICK, RHODE ISLAND 02889	SHEET OF 3 12

LEGEND



	EXISTING CONTOUR
	PROPOSED CONTOUR
	EXISTING SEWER
	PROPOSED SEWER
	EXISTING WATER LINE
	PROPOSED WATER LINE
	EXISTING GAS LINE
	EXISTING MANHOLE
	PROPOSED MANHOLE
	EXISTING CATCH BASIN
	EXISTING BUILDING
	EXISTING SPOT GRADE
	PROPOSED SPOT GRADE
	EXISTING STONE WALL
	EXISTING FENCE LINE
	EXISTING HYDRANT
	EXISTING POLE #5
	SHORE LINE
	SITE LIGHTING
	PROPERTY LINE/M.P.L.
GB	GRANITE BOUND
IP	IRON PIN
STK	STAKE
	DREDGE SAMPLE LOCATION
	BORING LOCATION
	FLOOD ZONE

ABBREVIATIONS

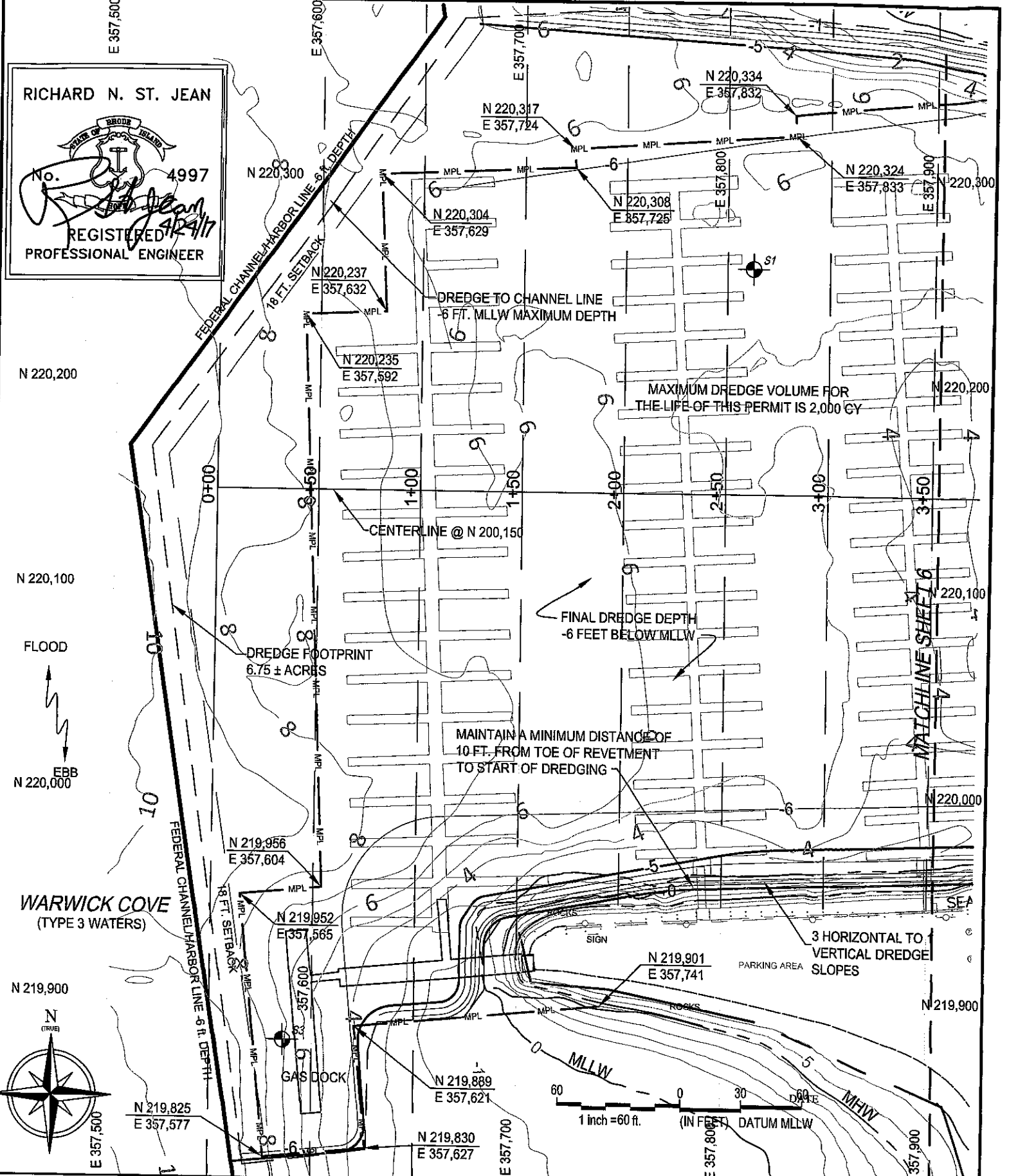
U. O. N.	UNLESS OTHERWISE NOTED
N. T. S.	NOT TO SCALE
I. A. W.	IN ACCORDANCE WITH
TYP.	TYPICAL
R & D	REMOVE AND DISPOSE
BIT.	BITUMINOUS CONCRETE
F. F.	FINISH FLOOR
T. O. F.	TOP OF FOUNDATION
M. P. L.	MARINA PERIMETER LINE
S.J.E.	ST. JEAN ENGINEERING LLC
S. F.	SQUARE FOOT
EXTG.	EXISTING
SMH	SEWER MANHOLE
DMH	DRAINAGE MANHOLE
MIN.	MINIMUM
HDG	HOT DIPPED GALVANIZED
SS	STAINLESS STEEL

RICHARD N. ST. JEAN
BORING LOCATION

No. 4997

Richard N. St. Jean
REGISTERED 4/24/17
PROFESSIONAL ENGINEER

ST. JEAN ENGINEERING, LLC	HARBOR LIGHT MARINA LEGEND & ABBREVIATIONS	DATE APRIL 24, 2017
Civil and Structural Engineering 1145 Middle Rd., East Greenwich, RI 02818 Tel/Fax: (401)398-0999	LOCATION: WARWICK COVE AP 378, LOT 1 WARWICK, RI, 02889	APPLICATION BY: HARBOR LIGHT MARINA 200 GRAY STREET WARWICK, RHODE ISLAND 02889
SHEET OF		4 12



RICHARD N. ST. JEAN
 No. 4997
 REGISTERED PROFESSIONAL ENGINEER
 4/24/17

N 220,200
 N 220,100
 FLOOD
 EBB
 N 220,000

WARWICK COVE
 (TYPE 3 WATERS)

N 219,900
 N 219,825
 E 357,577
 N 219,830
 E 357,627

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

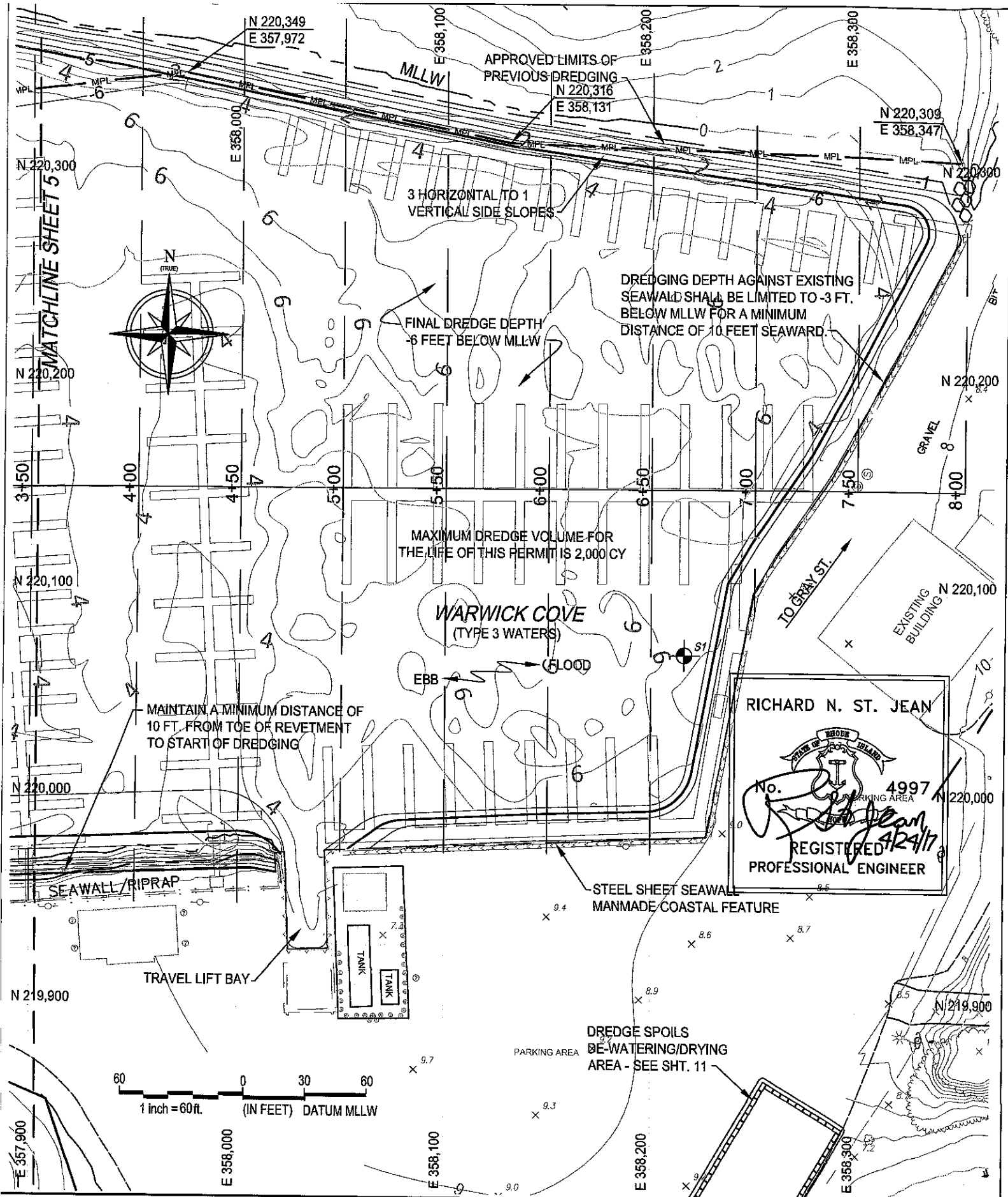
HARBOR LIGHT MARINA
MAINTENANCE DREDGING - SHT. 1 OF 2

LOCATION:
 WARWICK COVE
 AP 378, LOT 1,
 WARWICK, RI, 02889

APPLICATION BY:
 HARBOR LIGHT MARINA, INC.
 200 GRAY STREET
 WARWICK, RHODE ISLAND 02889

DATE
 APRIL 24, 2017

SHEET OF
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ST. JEAN ENGINEERING, LLC

Civil and Structural Engineering
 1145 Middle Rd., East Greenwich, RI 02818
 Tel/Fax: (401)398-0999

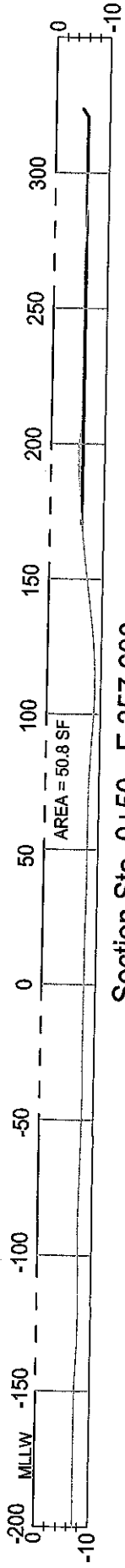
**HARBOR LIGHT MARINA
 MAINTENANCE DREDGING – SHT. 2 OF 2**

LOCATION:
 WARWICK COVE
 AP 378, LOT 1,
 WARWICK, RI, 02889

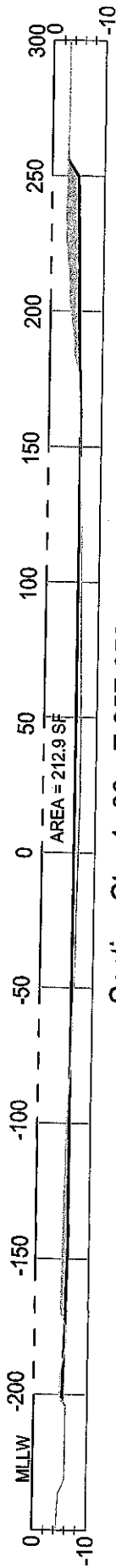
APPLICATION BY:
 HARBOR LIGHT MARINA, INC.
 200 GRAY STREET
 WARWICK, RHODE ISLAND 02889

DATE
 APRIL 24, 2017

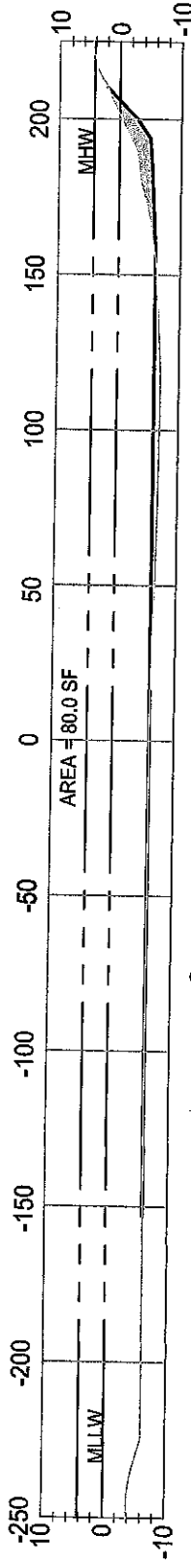
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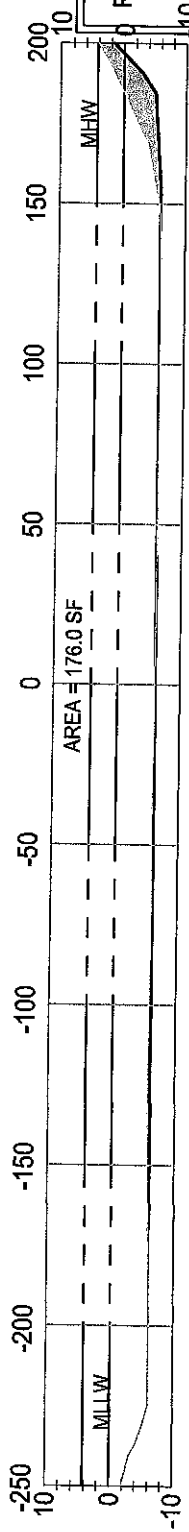
Section Sta. 0+50 - E 357,600



Section Sta. 1+00 - E 357,650



Section Sta. 1+50 - E 357,700



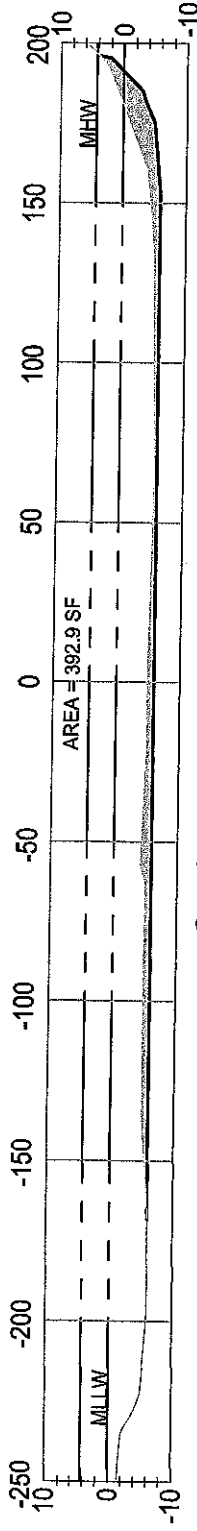
Section Sta. 2+00 - E 357,750

CROSS SECTIONS SHOWN ON THIS PLAN INDICATE THE MAXIMUM DEPTH AND LOCATION THAT DREDGING IS ALLOWED THROUGH THE LIFE OF THIS PERMIT. MAXIMUM VOLUME OF DREDGE SPOILS ALLOWED TO BE DREDGED OVER THE LIFE OF THIS PERMIT IS 2,000 CY DUE TO ON-SITE DISPOSAL CAPACITY AVAILABLE AT THIS TIME.

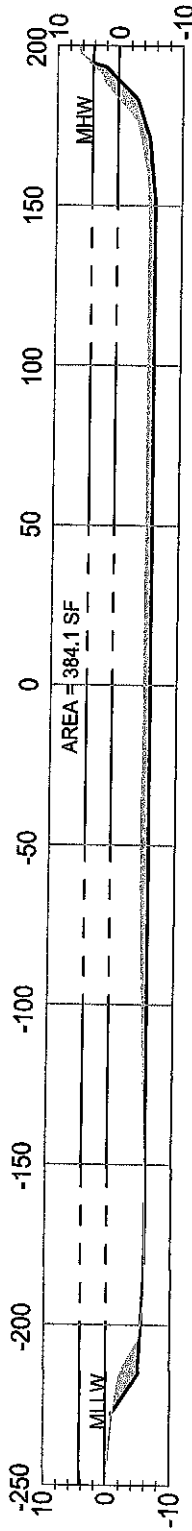
SCALE: 1" = 60 FT. HORIZ.
1" = 30 FT. VERT.

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

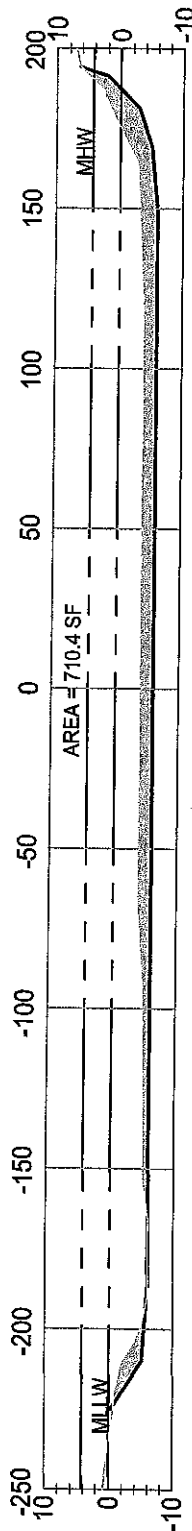
ST. JEAN ENGINEERING, LLC <i>Civil and Structural Engineering</i> 1145 Middle Rd., East Greenwich, RI 02818 Tel/Fax: (401)398-0999	LOCATION: WARWICK COVE AP 378, LOT 1, WARWICK, RI, 02889	APPLICATION BY: HARBOR LIGHT MARINA, INC. 200 GRAY STREET WARWICK, RHODE ISLAND 02889	REVISIONS:
	HARBOR LIGHT MARINA - DREDGE CROSS SECTIONS		
DATE APRIL 24, 2017		SHEET OF 7 12	



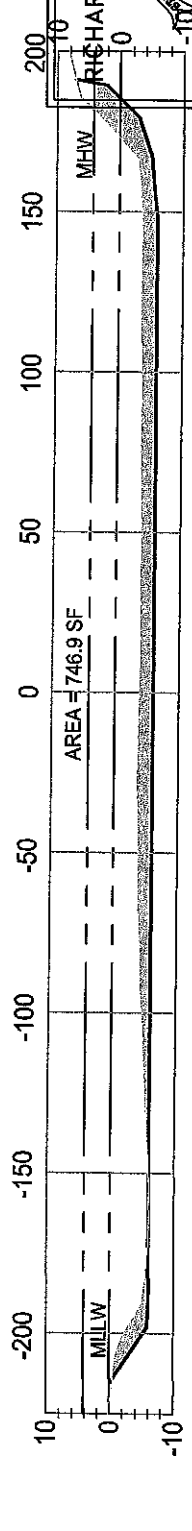
Section Sta. 2+50 - E 357,800



Section Sta. 3+00 - E 357,850



Section Sta. 3+50 - E 357,900



Section Sta. 4+00 - E 357,950

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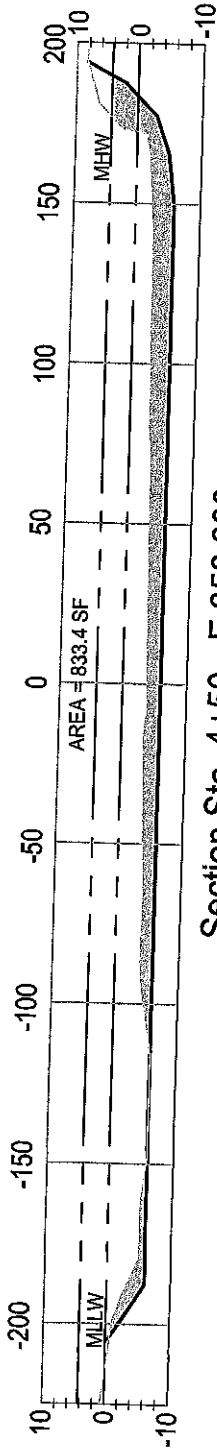
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1" = 30 FT. - VERT.

DATUM IS MLLW

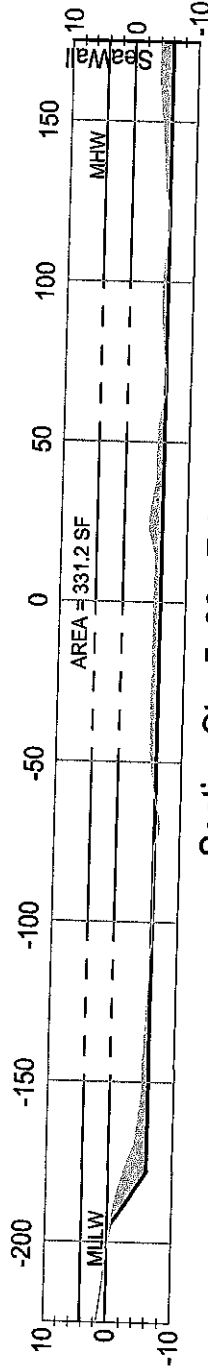
NO. 4997

 RICHARD N. ST. JEAN
 REGISTERED PROFESSIONAL ENGINEER

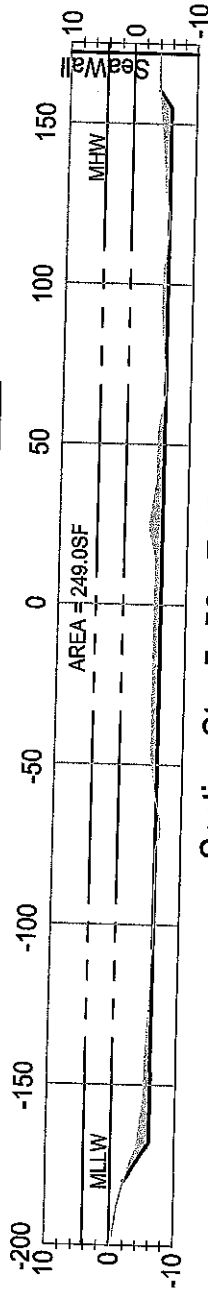
ST. JEAN ENGINEERING, LLC Civil and Structural Engineering 1145 Middle Rd., East Greenwich, RI 02818 Tel/Fax: (401)398-0999	LOCATION: WARWICK COVE AP 378, LOT 1, WARWICK, RI, 02889	APPLICATION BY: HARBOR LIGHT MARINA, INC. 200 GRAY STREET WARWICK, RHODE ISLAND 02889	REVISIONS: 8 OF 12
	HARBOR LIGHT MARINA - DREDGE CROSS SECTIONS		
DATE APRIL 24, 2017		SHEET OF 8 OF 12	



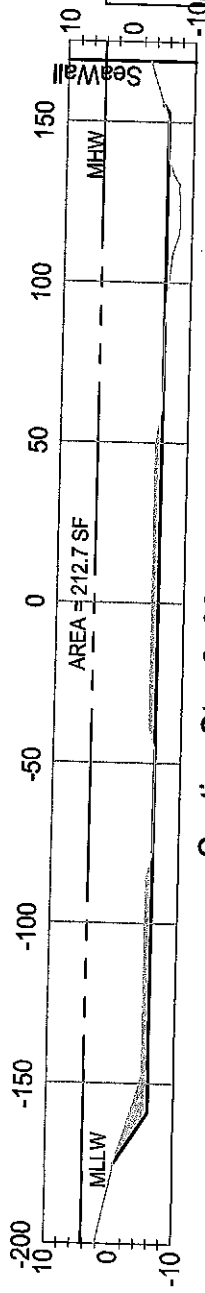
Section Sta. 4+50 - E 358,000



Section Sta. 5+00 - E 358,050



Section Sta. 5+50 - E 358,100



Section Sta. 6+00 - E 358,150

CROSS SECTIONS SHOWN ON THIS PLAN INDICATE THE MAXIMUM DEPTH AND LOCATION THAT DREDGING IS ALLOWED THROUGH THE LIFE OF THIS PERMIT. MAXIMUM VOLUME OF DREDGE SPOILS ALLOWED TO BE DREDGED OVER THE LIFE OF THIS PERMIT IS 2,000 CY DUE TO ON-SITE DISPOSAL CAPACITY AVAILABLE AT THIS TIME.

SCALE: 1" = 60 FT. HORIZ.
1" = 30 FT. VERT.

DATUM IS MLLW

RICHARD N. ST. JEAN



REGISTERED PROFESSIONAL ENGINEER

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

HARBOR LIGHT MARINA - DREDGE CROSS SECTIONS

LOCATION:
WARWICK COVE
AP 378, LOT 1,
WARWICK, RI, 02889

APPLICATION BY:
HARBOR LIGHT MARINA, INC.
200 GRAY STREET
WARWICK, RHODE ISLAND 02889

REVISIONS:

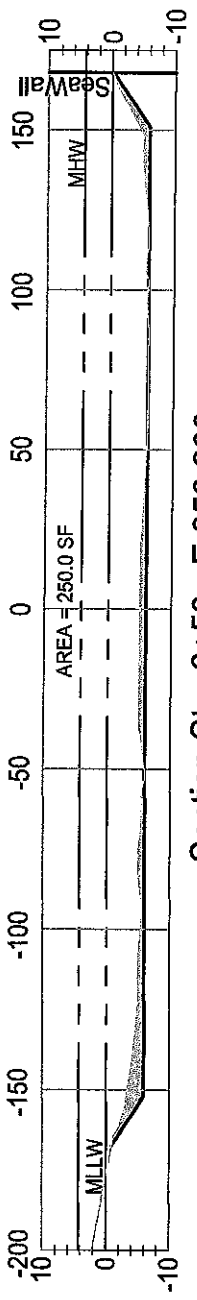
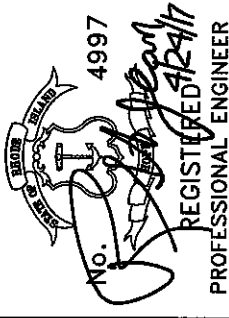
DATE

APRIL 24, 2017

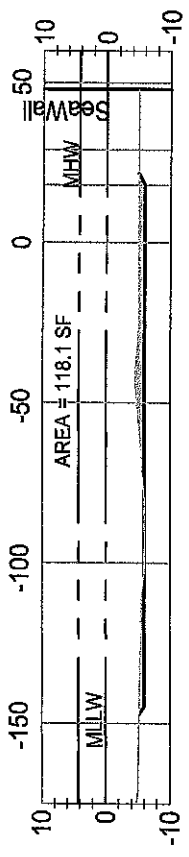
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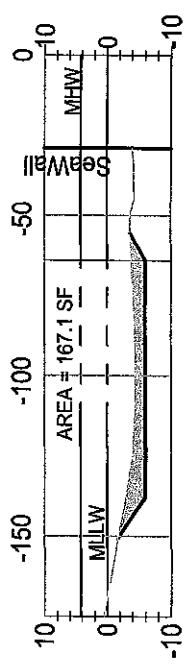
RICHARD N. ST. JEAN



Section Sta. 6+50 - E 358,200



Section Sta. 7+00 - E 358,250

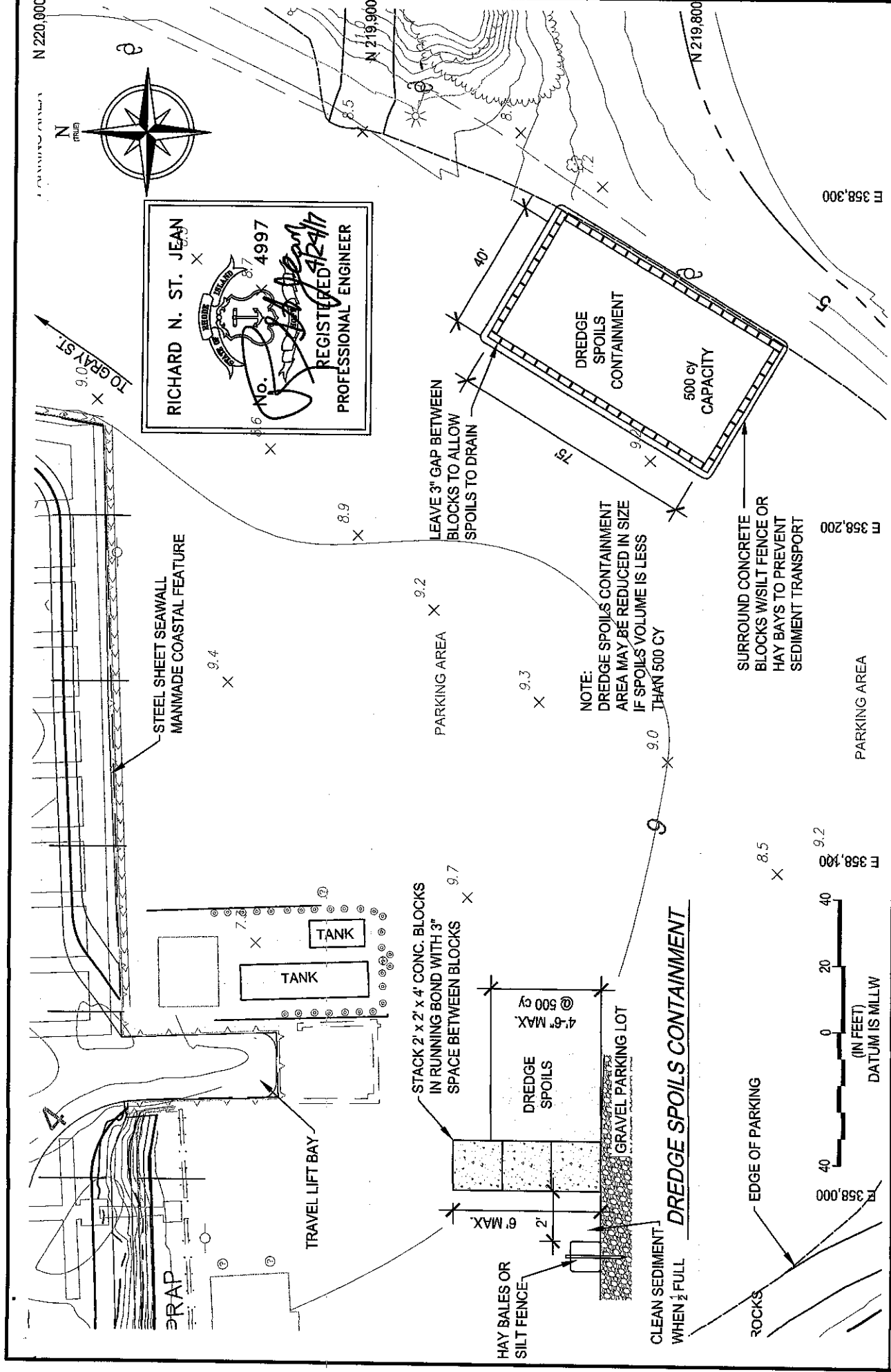


Section Sta. 7+50 - E 358,300

CROSS SECTIONS SHOWN ON THIS PLAN INDICATE THE MAXIMUM DEPTH AND LOCATION THAT DREDGING IS ALLOWED THROUGH THE LIVE OF THIS PERMIT. MAXIMUM VOLUME OF DREDGE SPOILS ALLOWED TO BE DREDGED OVER THE LIFE OF THIS PERMIT IS 2,000 CY DUE TO ON-SITE DISPOSAL CAPACITY AVAILABLE AT THIS TIME.

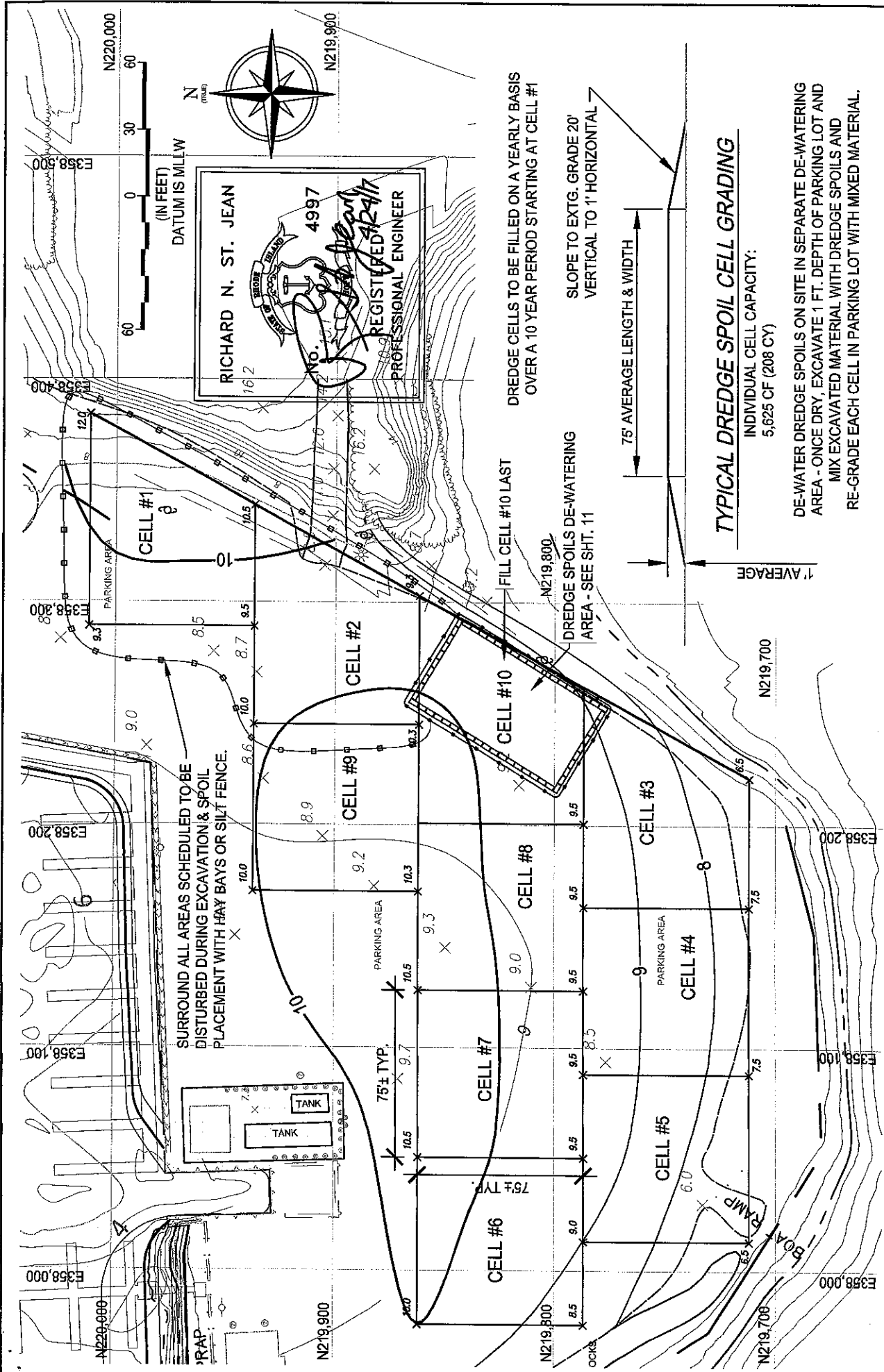
SCALE: 1" = 60 FT. HORIZ.
1" = 30 FT. VERT. DATUM IS MLLW

ST. JEAN ENGINEERING, LLC <i>Civil and Structural Engineering</i> 1145 Middle Rd., East Greenwich, RI 02818 Tel/Fax: (401)398-0999		APPLICATION BY: HARBOR LIGHT MARINA, INC. 200 GRAY STREET WARWICK, RHODE ISLAND 02889	
		LOCATION: WARWICK COVE AP 378, LOT 1, WARWICK, RI, 02889	REVISIONS:
HARBOR LIGHT MARINA - DREDGE CROSS SECTIONS		DATE APRIL 24, 2017	SHEET OF 10 12



RICHARD N. ST. JEAN
 No. 4997
Richard N. St. Jean
REGISTERED PROFESSIONAL ENGINEER

ST. JEAN ENGINEERING, LLC	HARBOR LIGHT MARINA - DREDGE SPOILS DE-WATERING		DATE APRIL 24, 2017
<i>Civil and Structural Engineering</i> 1145 Middle Rd., East Greenwich, RI 02816 Tel/Fax: (401)398-0999	LOCATION: WARWICK COVE AP 378, LOT 1, WARWICK, RI, 02889	APPLICATION BY: HARBOR LIGHT MARINA, INC. 200 GRAY STREET WARWICK, RHODE ISLAND 02889	SHEET OF 11 12
REVISIONS:			



ST. JEAN ENGINEERING, LLC Civil and Structural Engineering 1145 Middle Rd., East Greenwich, RI 02818 Tel/Fax: (401)398-0999	LOCATION: WARWICK COVE AP. 378, LOT 1, WARWICK, RI, 02889	APPLICATION BY: HARBOR LIGHT MARINA, INC. 200 GRAY STREET WARWICK, RHODE ISLAND 02889	REVISIONS:
	DATE APRIL 24, 2017	SHEET OF 12 OF 12	HARBOR LIGHT MARINA - ONSITE DISPOSAL CELL LOCATIONS

St. Jean Engineering, LLC

Licensed In: Rhode Island
Massachusetts
Connecticut
Maine
New Jersey
U.S. Virgin Islands

Structural, Marine & Civil Engineering

April 27, 2017

Beverly Hall
Council Clerk
City of Warwick, RI
3275 Post Road, Warwick, RI 02886

Re: Harbor Light Dredge Project
200 Gray Street, Warwick, Rhode Island 02889

Dear Beverly,

Please accept this letter as documentation for the 200-foot radius abutters list for the above referenced project. The parcel associated with the dredge project is owned by Harbor Light Marina, Inc. located at 200 Gray Street, Warwick, Rhode Island, Assessors Map 378, Lot 1.

Harbor Light Marina, Inc, with the mailing address of 200 Gray Street, Warwick, Rhode Island, 02889 owns the follow properties:

Assessors Plat	Lot No.	Name of Owners	Mailing Address
377	177	Harbor Light Marina, Inc.	200 Gray Street, Warwick, RI 02889
377	193	Harbor Light Marina, Inc.	200 Gray Street, Warwick, RI 02889
377	194	Harbor Light Marina, Inc.	200 Gray Street, Warwick, RI 02889
377	195	Harbor Light Marina, Inc.	200 Gray Street, Warwick, RI 02889
377	200	Harbor Light Marina, Inc.	200 Gray Street, Warwick, RI 02889
377	201	Harbor Light Marina, Inc.	200 Gray Street, Warwick, RI 02889
*378	*1	Harbor Light Marina, Inc.	200 Gray Street, Warwick, RI 02889
378	2	Harbor Light Marina, Inc.	200 Gray Street, Warwick, RI 02889
378	4	Harbor Light Marina, Inc.	200 Gray Street, Warwick, RI 02889
378	5	Harbor Light Marina, Inc.	200 Gray Street, Warwick, RI 02889
378	6	Harbor Light Marina, Inc.	200 Gray Street, Warwick, RI 02889
378	181	Harbor Light Marina, Inc.	200 Gray Street, Warwick, RI 02889

* A.P. 378, Lot 1 is the parcel where the dredge activity will occur.

Harbor View Holding Company, LLC owns the following property within the 200-foot project site radius:

Assessors Plat	Lot No.	Name of Owners	Mailing Address
378	157	Harbor View Holding Co, LLC	150 Gray Street, Warwick, RI 02889

Joseph M. and Deborah L. Rameaka own the following property within the 200-foot project site radius:

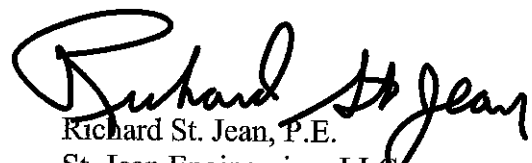
Assessors Plat	5	Name of Owners	Mailing Address
378	155	Rameaka, Joseph M. Rameaka, Deborah L.	160 Gray Street, Warwick, RI 02889

Larry F. and Sharon A. Defreitas own the following property within the 200-foot project site radius

Assessors Plat	Lot No.	Name of Owners	Mailing Address
378	156	Defreitas, Larry F. Defreitas, Sharon A.	136 Gray Street, Warwick, RI 02889

I trust this letter, and the accompanying radius map will be sufficient for your use going forward.

Sincerely,


 Richard St. Jean, P.E.
 St. Jean Engineering, LLC

Harbor Light Marina - 200 foot Abutters List

Plat	Lot	Owner	No.	Street	Mailing Address	Zoning	Description
378	1	Harbor Light Marina Inc.	200	Gray	Harbor Light Marina, Inc 200 Gray Street Warwick, RI 02889	333 WB - A40 PRD	Shipyard 4 Bldgs.
378	2	Harbor Light Marina Inc.		Rand Street	Harbor Light Marina, Inc 200 Gray Street Warwick, RI 02889	700 A40	Vacant Land
378	4	Harbor Light Marina Inc.		Chatfield Street	Harbor Light Marina, Inc 200 Gray Street Warwick, RI 02889	700 A40 PRD	Vacant Land
378	5	Harbor Light Marina Inc.		Lexington Street	Harbor Light Marina, Inc 200 Gray Street Warwick, RI 02889	700 A40	Vacant Land
378	6	Harbor Light Marina Inc.		Chatfield Street	Harbor Light Marina, Inc 200 Gray Street Warwick, RI 02889	700 A40 PRD	Vacant Land
378	157	Harbor View Holding Co, LLC	150	Gray	Harbor View Holding Co, LLC 200 Gray Street Warwick, RI 02889	333 A40 PRD	Golf Course 2 Bldgs.
378	155	Rameaka, Joseph M Rameaka, Deborah L	160	Gray Street	Joseph Rameaka Deborah Rameaka 160 Gray Street Warwick, RI 02889	101 A15	Single Family
378	156	Defreitas, Larry F	136	Gray Street	Larry Defreitas	101	Single Family

Harbor Light Marina - 200 foot Abutters List

Plat	Lot	Owner	No.	Street	Mailing Address	Zoning	Description
		Defreitas, Sharon A			Sharon Defreitas 136 Gray Street Warwick, RI 02889	A15	
378	181	Harbor Light Marina Inc.		Gray Street	Harbor Light Marina, Inc 200 Gray Street Warwick, RI 02889	113 A15	Vacant Land
377	177	Harbor Light Marina Inc.		Progress Street	Harbor Light Marina, Inc 200 Gray Street Warwick, RI 02889	700 A40	Vacant Land
377	193	Harbor Light Marina Inc.		Progress Street	Harbor Light Marina, Inc 200 Gray Street Warwick, RI 02889	700 A40	Vacant Land
377	194	Harbor Light Marina Inc.		Progress Street	Harbor Light Marina, Inc 200 Gray Street Warwick, RI 02889	700 A40	Vacant Land
377	195	Harbor Light Marina Inc.		Progress Street	Harbor Light Marina, Inc 200 Gray Street Warwick, RI 02889	700 A40	Vacant Land
377	200	Harbor Light Marina Inc.		Chatfield Street	Harbor Light Marina, Inc 200 Gray Street Warwick, RI 02889	100 A10	Vacant Land
377	201	Harbor Light Marina Inc.	179	Chatfield Street	Harbor Light Marina, Inc 200 Gray Street Warwick, RI 02889	101 A10	Single Family

7350 270 282
 7350 271
 7350 272
 7350 273
 274 275 276
 7486 7473 6968
 1875
 291

CHATFIELD

STREE

198
 5700
 199
 7050
 200
 290
 201
 9467

190 6250
 191 6350
 192 5800
 193 5860
 194 195
 172 5500
 173 5500
 174 5500
 175 5500
 176 177
 178 179
 180 181
 182 183
 184 185
 186 187

A.P. 377

163 5100
 164 5130
 165 5060
 166 5130
 167 5500
 172 5500
 173 5500
 174 5500
 175 5500
 176 177
 178 179
 180 181
 182 183
 184 185
 186 187

156
 29,45
 185,26
 160
 16900

GRAY
 181
 .607

157

ARWICK
 150'
 120'
 14250
 300
 1702
 150'
 120'

19210
 275
 153
 15,702



CERTIFICATE OF ANALYSIS

St. Jean Engineering, LLC
Attn: Mr. Rick St. Jean
1145 Middle Road
East Greenwich, RI 02818

Date Received: 11/4/2015
Date Reported: 11/18/2015
P.O. #:
Work Order #: 1511-23901

DESCRIPTION: HARBOR LIGHT MARINA, 200 GRAY ST. WARWICK, RI

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory and a subcontracted laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

Certification #: RI LAI0033, MA M-RI015, CT PH-0508, ME RI00015
NH 2537, NY 11726

If you have any questions regarding this work, or if we may be of further assistance, please contact us.

Approved by:

Data Reporting

enc: Chain of Custody

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

St. Jean Engineering, LLC
 Date Received: 11/4/2015
 Work Order #: 1511-23901

Sample # 001

SAMPLE DESCRIPTION: S1

SAMPLE TYPE: COMPOSITE

SAMPLE DATE/TIME: 11/04/2015

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Wet Sieve analysis	See Attached					
% Solids	51.0		%	ASTM	11/10/2015 0:00	*TH
pH	7.7		SU	SM2540G 18-21ed	11/9/2015 10:30	AK
Paint Filter	2.0		mls/100gms	SW-846 9045C	11/4/2015 22:40	PTT
Organic Content	2.7	0.1	%	SW-846 9095	11/11/2015 11:05	TAH
Total Cyanide	<18	18	mg/kg dry	ASTM D-2974-87	11/16/2015 7:24	KMH
Hexavalent Chromium	<1.6	1.6	mg/kg dry	SW-846 9012B	11/10/2015 7:05	KMH
				SW-846 7196A	11/5/2015 13:40	JDC
TPH						
TPH GC/FID	130	98	mg/kg dry	SW-846 8100M	11/10/2015 11:45	KS
Surrogate			RANGE	SW-846 8100M	11/10/2015 11:45	KS
2-Fluorobiphenyl	49		40-140%	SW-846 8100M	11/10/2015 11:45	KS
PCB						
Aroclor-1016	<0.2	0.2	mg/kg dry	SW-846 8082A	11/9/2015 16:51	JEB
Aroclor-1221	<0.2	0.2	mg/kg dry	SW-846 8082A	11/9/2015 16:51	JEB
Aroclor-1232	<0.2	0.2	mg/kg dry	SW-846 8082A	11/9/2015 16:51	JEB
Aroclor-1242	<0.2	0.2	mg/kg dry	SW-846 8082A	11/9/2015 16:51	JEB
Aroclor-1248	<0.2	0.2	mg/kg dry	SW-846 8082A	11/9/2015 16:51	JEB
Aroclor-1254	<0.2	0.2	mg/kg dry	SW-846 8082A	11/9/2015 16:51	JEB
Aroclor-1260	<0.2	0.2	mg/kg dry	SW-846 8082A	11/9/2015 16:51	JEB
Surrogate			RANGE	SW-846 8082A	11/9/2015 16:51	JEB
Tetrachloro-m-xylene (TCMX)	46		30-150%	SW-846 8082A	11/9/2015 16:51	JEB
Decachlorobiphenyl	49		30-150%	SW-846 8082A	11/9/2015 16:51	JEB
Extraction Date				SW-846 3546	11/9/2015 16:51	JEB
					11/5/2015 15:35	JM
Volatile Organic Compounds						
Benzene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
Bromobenzene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
Bromochloromethane	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
Bromodichloromethane	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
Bromoform	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
Bromomethane	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
n-Butylbenzene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
Sec-butylbenzene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
tert-Butylbenzene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
Carbon Tetrachloride	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
Chlorobenzene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
Chloroethane	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
Chloroform	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
Chloromethane	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF

R.I. Analytical Laboratories, Inc.
CERTIFICATE OF ANALYSIS

St. Jean Engineering, LLC
Date Received: 11/4/2015
Work Order #: 1511-23901

Sample # 001
SAMPLE DESCRIPTION: S1
SAMPLE TYPE: COMPOSITE

SAMPLE DATE/TIME: 11/04/2015

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
2-Chlorotoluene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
4-Chlorotoluene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
Dibromochloromethane	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
1,2-Dibromo-3-Chloropropane	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
1,2-Dibromoethane(EDB)	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
Dibromomethane	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
1,2-Dichlorobenzene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
1,3-Dichlorobenzene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
1,4-Dichlorobenzene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
Dichlorodifluoromethane	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
1,1-Dichloroethane	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
1,2-Dichloroethane	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
1,1-Dichloroethene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
cis-1,2-Dichloroethene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
trans-1,2-Dichloroethylene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
1,2-Dichloropropane	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
1,3-Dichloropropane	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
2,2-Dichloropropane	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
1,1-Dichloropropene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
Ethylbenzene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
Hexachlorobutadiene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
Isopropylbenzene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
p-Isopropyltoluene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
Methylene Chloride	<0.99	0.99	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
n-Propylbenzene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
Naphthalene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
Styrene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
1,1,1,2-Tetrachloroethane	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
1,1,2,2-Tetrachloroethane	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
Tetrachloroethene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
Toluene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
1,2,3-Trichlorobenzene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
1,2,4-Trichlorobenzene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
1,1,1-Trichloroethane	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
1,1,2-Trichloroethane	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
Trichloroethene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
Trichlorofluoromethane	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
1,2,3-Trichloropropane	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
1,2,4-Trimethylbenzene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
1,3,5-Trimethylbenzene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
Vinyl Chloride	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

St. Jean Engineering, LLC
 Date Received: 11/4/2015
 Work Order #: 1511-23901

Sample # 001
 SAMPLE DESCRIPTION: S1
 SAMPLE TYPE: COMPOSITE

SAMPLE DATE/TIME: 11/04/2015

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
o-Xylene	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
m,p-Xylene	<0.79	0.79	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
MTBE	<0.40	0.40	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
2-Butanone(MEK)	<4.0	4.0	mg/kg dry	SW-846 8260C	11/9/2015 18:46	KF
Surrogates			RANGE	SW-846 8260C	11/9/2015 18:46	KF
Dibromofluoromethane	77		70-130%	SW-846 8260C	11/9/2015 18:46	KF
Toluene-d8	82		70-130%	SW-846 8260C	11/9/2015 18:46	KF
4-Bromofluorobenzene	76		70-130%	SW-846 8260C	11/9/2015 18:46	KF
1,2 Dichloroethane-d4	79		70-130%	SW-846 8260C	11/9/2015 18:46	KF
Extraction Date				SW-846 5035	11/9/2015 18:46	KF
					11/4/2015 0:00	*CS
Semi-Volatile Organic Comp.						
Acenaphthene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Acenaphthylene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Anthracene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Benzidine	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Benzo(a)anthracene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Benzo(b)fluoranthene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Benzo(k)fluoranthene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Benzo(g,h,i)perylene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Benzo(a)pyrene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Bis(2-chloroethyl)ether	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Bis(2-Chloroethoxy)methane	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Bis(2-Chloroisopropyl)Ether	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Bis(2-ethylhexyl)phthalate	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
4-Bromophenyl phenyl ether	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Butylbenzyl phthalate	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
2-Chloronaphthalene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
4-Chlorophenyl phenyl ether	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Chrysene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Dibenzo(a,h)anthracene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Di-n-butyl phthalate	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
1,2-Dichlorobenzene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
1,3-Dichlorobenzene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
1,4-Dichlorobenzene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
3,3'-Dichlorobenzidine	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Diethyl phthalate	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Dimethyl phthalate	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
2,4-Dinitrotoluene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
2,6-Dinitrotoluene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Di-n-octyl phthalate	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

St. Jean Engineering, LLC
 Date Received: 11/4/2015
 Work Order #: 1511-23901

Sample # 001
 SAMPLE DESCRIPTION: S1
 SAMPLE TYPE: COMPOSITE

SAMPLE DATE/TIME: 11/04/2015

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,2-Diphenylhydrazine	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Fluoranthene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Fluorene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Hexachlorobenzene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Hexachlorobutadiene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Hexachlorocyclopentadiene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Hexachloroethane	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Indeno(1,2,3-cd)pyrene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Isophorone	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
2-Methylnaphthalene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Naphthalene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Nitrobenzene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
N-nitrosodimethylamine	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
N-nitrosodiphenylamine	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
N-nitrosodi-n-propylamine	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Phenanthrene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Pyrene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
1,2,4-Trichlorobenzene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
4-Chloro-3-methylphenol	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
2-Chlorophenol	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
2,4-Dichlorophenol	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
2,4-Dimethylphenol	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
2-Methyl-4,6-dinitrophenol	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
2,4-Dinitrophenol	<1.3	1.3	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
2-Nitrophenol	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
4-Nitrophenol	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Pentachlorophenol	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Phenol	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
2,4,5-Trichlorophenol	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
2,4,6-Trichlorophenol	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
4-Chloroaniline	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Dibenzofuran	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
2-Methyl Phenol	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
3 & 4-Methylphenols	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Aniline	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Acetophenone	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Azobenzene	<0.65	0.65	mg/kg dry	SW-846 8270D	11/10/2015 12:16	CM
Surrogates			RANGE	SW-846 8270D	11/10/2015 12:16	CM
Phenol-d5	28*		30-130%	SW-846 8270D	11/10/2015 12:16	CM
2-Fluorophenol	31		30-130%	SW-846 8270D	11/10/2015 12:16	CM
2,4,6-Tribromophenol	43		30-130%	SW-846 8270D	11/10/2015 12:16	CM

R.I. Analytical Laboratories, Inc.
CERTIFICATE OF ANALYSIS

St. Jean Engineering, LLC
Date Received: 11/4/2015
Work Order #: 1511-23901

Sample # 001

SAMPLE DESCRIPTION: S1

SAMPLE TYPE: COMPOSITE

SAMPLE DATE/TIME: 11/04/2015

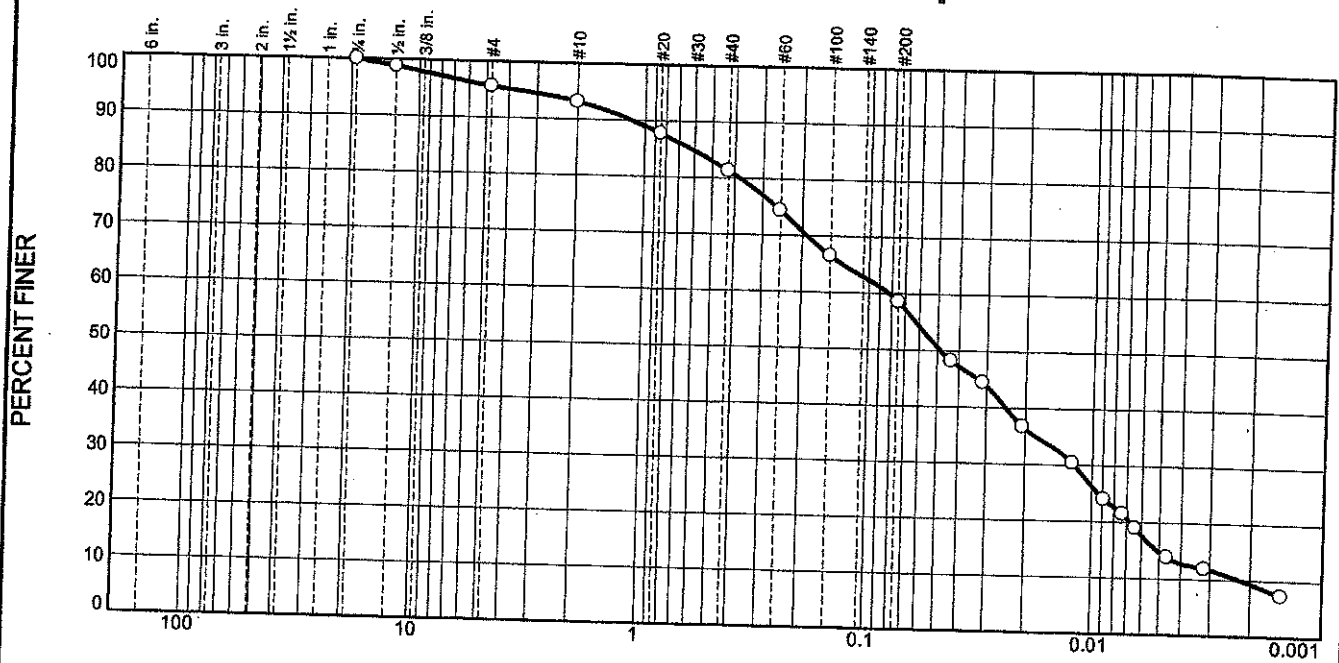
PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Nitrobenzene-d5	26*		30-130%	SW-846 8270D	11/10/2015 12:16	CM
2-Fluorobiphenyl	36		30-130%	SW-846 8270D	11/10/2015 12:16	CM
P-Terphenyl-d14	32		30-130%	SW-846 8270D	11/10/2015 12:16	CM
Semi Extraction date				SW-846 3546	11/6/2015 10:10	AK
Total Metals Analyzed by ICP						
Antimony	<9.76	9.76	mg/kg dry	SW-846 6010C	11/9/2015 15:06	JRW
Arsenic	5.2	4.9	mg/kg dry	SW-846 6010C	11/9/2015 15:06	JRW
Barium	35	0.98	mg/kg dry	SW-846 6010C	11/9/2015 15:06	JRW
Beryllium	<0.098	0.098	mg/kg dry	SW-846 6010C	11/9/2015 15:06	JRW
Cadmium	0.52	0.49	mg/kg dry	SW-846 6010C	11/9/2015 15:06	JRW
Chromium	26	2.9	mg/kg dry	SW-846 6010C	11/9/2015 15:06	JRW
Copper	100	4.9	mg/kg dry	SW-846 6010C	11/9/2015 15:06	JRW
Lead	46	3.9	mg/kg dry	SW-846 6010C	11/9/2015 15:06	JRW
Manganese	180	2.0	mg/kg dry	SW-846 6010C	11/9/2015 15:06	JRW
Mercury	0.31	0.19	mg/kg dry	SW-846 6010C	11/9/2015 15:06	JRW
Nickel	12	2.0	mg/kg dry	SW-846 7471B	11/6/2015 9:59	JRW
Selenium	<9.8	9.8	mg/kg dry	SW-846 6010C	11/9/2015 15:06	JRW
Silver	4.2	2.0	mg/kg dry	SW-846 6010C	11/9/2015 15:06	JRW
Thallium	<4.9	4.9	mg/kg dry	SW-846 6010C	11/9/2015 15:06	JRW
Vanadium	24	2.0	mg/kg dry	SW-846 6010C	11/9/2015 15:06	JRW
Zinc	120	3.9	mg/kg dry	SW-846 6010C	11/9/2015 15:06	JRW
Extraction date	Extracted			SW-846 6010C	11/9/2015 15:06	JRW
ICP Digestion				SW-846 3060A	11/5/2015 13:40	PTT
Mercury Digestion				SW-846 3050B	11/6/2015 18:26	CRC
Trivalent Chromium	26	2.9	mg/kg dry	SW-846 7471B	11/6/2015 9:02	RBR
				CALCULATION	11/18/2015 10:17	SB

The sample for 5035 volatile organics analysis was not received in a methanol preserved vial; the sample was transferred to a methanol preserved vial upon receipt at the laboratory.

Method 8270: * Surrogate outside the recommended range - Method allows for one acid and one base surrogate to be outside the recommended range.

*TH Wet Sieve analysis performed by Thielsch Engineering, Inc.

Particle Size Distribution Report



GRAIN SIZE - mm.

% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	4.4	2.4	11.9	22.8	49.1	9.4

TEST RESULTS (D422)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
.75"	100.0		
.5"	98.8		
#4	95.6		
#10	93.2		
#20	87.8		
#40	81.3		
#60	74.4		
#100	66.5		
#200	58.5		
0.0434 mm.	48.2		
0.0312 mm.	44.5		
0.0206 mm.	36.7		
0.0122 mm.	30.4		
0.0089 mm.	24.0		
0.0073 mm.	21.5		
0.0064 mm.	19.0		
0.0046 mm.	13.9		
0.0032 mm.	11.9		
0.0015 mm.	7.3		

* (no specification provided)

Material Description

Brown sandy silt

Atterberg Limits (ASTM D 4318)

PL= _____ LL= _____ PI= _____

Classification

USCS (D 2487)= ML AASHTO (M 145)= A-4(0)

Coefficients

D₉₀= 1.1414 D₈₅= 0.6147 D₆₀= 0.0825
D₅₀= 0.0486 D₃₀= 0.0120 D₁₅= 0.0051
D₁₀= 0.0022 C_u= 37.78 C_c= 0.80

Remarks

Date Received: 11/4/15 Date Tested: 11/10/15
Tested By: GG/JE
Checked By: Matthew Polsky
Title: Laboratory Manager

Source of Sample: 1511-23901 Depth: NR Date Sampled: 11/4/15
Sample Number: S1

Thielsch Engineering Inc. Cranston, RI	Client: R.I. Analytical Laboratories, Inc. Project: R.I. Analytical Laboratories, Inc. Warwick, RI Project No: 74-15-0002.129
Figure 15-S-1152	



CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
800-937-2580 • Fax: 401-738-1970

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
800-937-2580 • Fax: 978-568-0078

Date Collected	Time Collected	Field Sample Identification
11/4/15	8:00AM	S1

Grab or Composite	# of Containers & Type ^c	Preservation Code ^p	Matrix Code ^m
	C BAGUP		S
		ICE	

1) PROVIDE SIEVE ANALYSIS FOR SAMPLE
 RECALC. 11/4/15

(3)

Client Information		Project Information	
Company Name:	ST. JEAN EXPEDIENT, LLC	Project Name:	HARBOR LIGHT MARISA ZOOLOGY ST. WARWICK RI
Address:	1145 MIDDLE ROAD	P.O. Number:	
City / State / Zip:	EAST GREENWICH, RI 02818	Report To:	R. ST. JEAN
Telephone:	401-398-0999	Sampled By:	RSTJ
Contact Person:	RICHARD ST. JEAN	Quote No.:	
Relinquished By:	[Signature]	Phone:	401 398 0999
Signature:	[Signature]	Email report to these addresses:	ST. JEAN, ESJ@RIEXPEDIENT.COM
Date:	11/4/15		
Time:	9:30AM		
Date:	11-4-15		
Time:	9:30		

Turn Around Time	Normal	EMAIL Report
5 Business days. Possible surcharge		
Rush - Date Due:	/ /	

Lab Use Only	
Sample Pick-Up Only	
RIAL sampled; attach field hours	
Shipped on ice	X

Workorder No: 1511-23501
 SH=NaOH, T=Na2S2O4, SB=NaHSO4, Z=ZnOAc

Circle if applicable: GW-1, GW-2, GW-3, S-1, S-2, S-3 MCP Data Enhancement QC Package? Yes No

not Rec in VOA vials proceed - RECALC. 11/4/15

Temp. Upon Receipt 38 °C



LABORATORY REPORT

St. Jean Engineering, LLC
Attn: Mr. Rick St. Jean
1145 Middle Road
East Greenwich, RI 02818

Date Received: 10/14/2016
Date Reported: 10/25/2016
P.O. Number

Work Order #: 1610-24388

Project Name: HARBOR LIGHT MARINA - WARWICK

Enclosed are the analytical results and Chain of Custody for your project referenced above. The sample(s) were analyzed by our Warwick, RI laboratory unless noted otherwise. When applicable, indication of sample analysis at our Hudson, MA laboratory and/or subcontracted results are noted and subcontracted reports are enclosed in their entirety.

All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results or in a case narrative.

The Detection Limit is defined as the lowest level that can be reliably achieved during routine laboratory conditions.

These results only pertain to the samples submitted for this Work Order # and this report shall not be reproduced except in its entirety.

We certify that the following results are true and accurate to the best of our knowledge. If you have

Approved by:

Sharon Baker
MIS / Data Reporting

Laboratory Certification Numbers (as applicable to sample's origin state):

Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508, ME RI00015, NH 2070, NY 11726
Hudson MA * M-MA1117, RI LAO00319

R.I. Analytical Laboratories, Inc.

Laboratory Report

St. Jean Engineering, LLC

Work Order #: 1610-24388

Project Name: HARBOR LIGHT MARINA - WARWICK

Sample Number: 001
Sample Description: S3
Sample Type : COMPOSITE
Sample Date / Time : 10/14/2016 @ 13:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Wet Sieve with Silt & Clay	See Attached				10/20/2016 0:00	*TH
TPH						
TPH GC/FID	<17	17	mg/kg dry	SW-846 8100M	10/20/2016 12:22	KD
Surrogate			RANGE	SW-846 8100M	10/20/2016 12:22	KD
2-Fluorobiphenyl	73		40-140%	SW-846 8100M	10/20/2016 12:22	KD
Moisture	39.9		%	SM2540G 18-21ed	10/17/2016 10:15	NS
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082A	10/20/2016 15:03	JBW
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082A	10/20/2016 15:03	JBW
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082A	10/20/2016 15:03	JBW
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082A	10/20/2016 15:03	JBW
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082A	10/20/2016 15:03	JBW
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082A	10/20/2016 15:03	JBW
Aroclor-1260	<0.1	0.1	mg/kg dry	SW-846 8082A	10/20/2016 15:03	JBW
Surrogate			RANGE	SW-846 8082A	10/20/2016 15:03	JBW
Tetrachloro-m-xylene (TCMX)	83		30-150%	SW-846 8082A	10/20/2016 15:03	JBW
Decachlorobiphenyl	68		30-150%	SW-846 8082A	10/20/2016 15:03	JBW
Extraction Date				SW-846 3546	10/19/2016 18:30	SRM
Semi-Volatile Organic Comp.						
Acenaphthene	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Acenaphthylene	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Anthracene	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Benzdine	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Benzo(a)anthracene	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Benzo(b)fluoranthene	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Benzo(k)fluoranthene	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Benzo(g,h,i)perylene	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Benzo(a)pyrene	<0.40	0.40	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Bis(2-chloroethyl)ether	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Bis(2-Chloroethoxy)methane	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Bis(2-Chloroisopropyl)Ether	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Bis(2-ethylhexyl)phthalate	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
4-Bromophenyl phenyl ether	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Butylbenzyl phthalate	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
2-Chloronaphthalene	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
4-Chlorophenyl phenyl ether	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Chrysene	<0.40	0.40	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Dibenzo(a,h)anthracene	<0.40	0.40	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Di-n-butyl phthalate	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB

R.I. Analytical Laboratories, Inc.

Laboratory Report

St. Jean Engineering, LLC

Work Order #: 1610-24388

Project Name: HARBOR LIGHT MARINA - WARWICK

Sample Number: 001
Sample Description: S3
Sample Type : COMPOSITE
Sample Date / Time : 10/14/2016 @ 13:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
1,2-Dichlorobenzene	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
1,3-Dichlorobenzene	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
1,4-Dichlorobenzene	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
3,3'-Dichlorobenzidine	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Diethyl phthalate	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Dimethyl phthalate	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
2,4-Dinitrotoluene	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
2,6-Dinitrotoluene	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Di-n-octyl phthalate	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
1,2-Diphenylhydrazine	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Fluoranthene	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Fluorene	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Hexachlorobenzene	<0.40	0.40	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Hexachlorobutadiene	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Hexachlorocyclopentadiene	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Hexachloroethane	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Indeno(1,2,3-cd)pyrene	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Isophorone	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
2-Methylnaphthalene	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Naphthalene	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Nitrobenzene	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
N-nitrosodimethylamine	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
N-nitrosodiphenylamine	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
N-nitrosodi-n-propylamine	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Phenanthrene	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Pyrene	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
1,2,4-Trichlorobenzene	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
4-Chloro-3-methylphenol	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
2-Chlorophenol	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
2,4-Dichlorophenol	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
2,4-Dimethylphenol	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
2-Methyl-4,6-dinitrophenol	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
2,4-Dinitrophenol	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
2-Nitrophenol	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
4-Nitrophenol	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Pentachlorophenol	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Phenol	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
2,4,5-Trichlorophenol	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
2,4,6-Trichlorophenol	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
4-Chloroaniline	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB

R.I. Analytical Laboratories, Inc.

Laboratory Report

St. Jean Engineering, LLC

Work Order #: 1610-24388

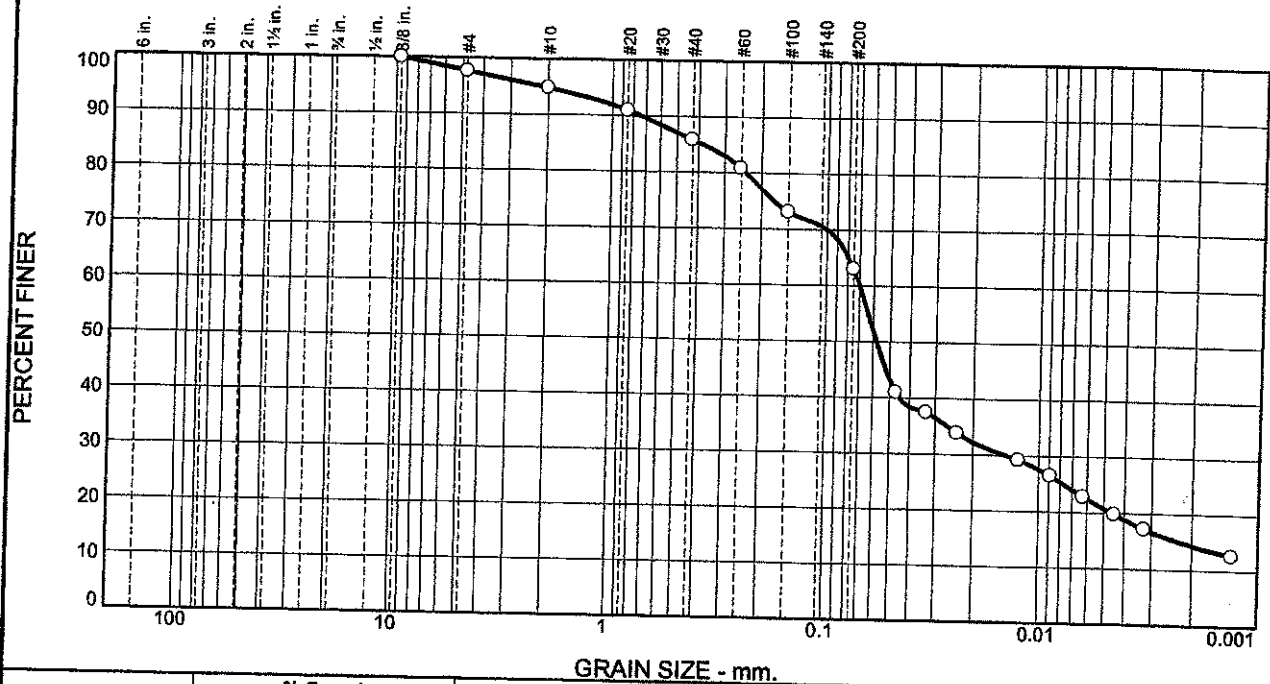
Project Name: HARBOR LIGHT MARINA - WARWICK

Sample Number: 001
Sample Description: S3
Sample Type : COMPOSITE
Sample Date / Time : 10/14/2016 @ 13:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Dibenzofuran	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
2-Methyl Phenol	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
3 & 4-Methylphenols	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Aniline	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Acetophenone	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Azobenzene	<0.55	0.55	mg/kg dry	SW-846 8270D	10/20/2016 20:33	JEB
Surrogates			RANGE	SW-846 8270D	10/20/2016 20:33	JEB
Phenol-d5	63		30-130%	SW-846 8270D	10/20/2016 20:33	JEB
2-Fluorophenol	68		30-130%	SW-846 8270D	10/20/2016 20:33	JEB
2,4,6-Tribromophenol	56		30-130%	SW-846 8270D	10/20/2016 20:33	JEB
Nitrobenzene-d5	68		30-130%	SW-846 8270D	10/20/2016 20:33	JEB
2-Fluorobiphenyl	73		30-130%	SW-846 8270D	10/20/2016 20:33	JEB
P-Terphenyl-d14	85		30-130%	SW-846 8270D	10/20/2016 20:33	JEB
Semi Extraction Date				SW-846 3546	10/19/2016 18:30	SRM
Total Metals Analyzed by ICP						
Arsenic	<4.1	4.1	mg/kg dry	SW-846 6010C	10/17/2016 20:02	RBR
Cadmium	1.1	0.41	mg/kg dry	SW-846 6010C	10/17/2016 20:02	RBR
Chromium	17	2.5	mg/kg dry	SW-846 6010C	10/17/2016 20:02	RBR
Copper	13	4.1	mg/kg dry	SW-846 6010C	10/17/2016 20:02	RBR
Lead	13	3.3	mg/kg dry	SW-846 6010C	10/17/2016 20:02	RBR
Nickel	8.3	1.6	mg/kg dry	SW-846 6010C	10/17/2016 20:02	RBR
Zinc	49	3.3	mg/kg dry	SW-846 6010C	10/17/2016 20:02	RBR
Percent Solids	60.1		%	SM2540G 18-21ed	10/17/2016 10:15	NS
TCLP Metals						
Barium	<0.50	0.50	mg/l	SW-846 6010C	10/20/2016 18:39	RBR
Selenium	<1.0	1.0	mg/l	SW-846 6010C	10/20/2016 18:39	RBR
Silver	<0.50	0.50	mg/l	SW-846 6010C	10/20/2016 18:39	RBR
ICP Digestion				SW-846 3010A	10/19/2016 23:17	RAT
TCLP Extraction	Extracted			SW-846 1311	10/18/2016 17:46	AJD
ICP Digestion				SW-846 3050B	10/17/2016 16:52	MYE
TOTAL METALS						
Mercury	<0.14	0.14	mg/kg dry	SW-846 7471B	10/21/2016 14:45	RAT
Mercury Digestion				SW-846 7471B	10/20/2016 13:37	RAT

*TH Wet Sieve with Silt & Clay analyzed by Thielsch Engineering Inc.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	2.3	2.9	9.0	22.8	48.6	14.4

TEST RESULTS (D422)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
.375	100.0		
#4	97.7		
#10	94.8		
#20	91.0		
#40	85.8		
#60	80.8		
#100	73.1		
#200	63.0		
0.0467 mm.	41.0		
0.0333 mm.	37.5		
0.0238 mm.	33.9		
0.0125 mm.	29.2		
0.0089 mm.	26.5		
0.0063 mm.	22.8		
0.0045 mm.	19.8		
0.0032 mm.	17.2		
0.0013 mm.	12.6		

* (no specification provided)

Material Description

Dark Grey sandy silt

Atterberg Limits (ASTM D 4318)

PL= NP LL= NV PI= NP

Classification

USCS (D 2487)= ML AASHTO (M 145)= A-4(0)

Coefficients

D₉₀= 0.7384 D₈₅= 0.3817 D₆₀= 0.0701
D₅₀= 0.0577 D₃₀= 0.0142 D₁₅= 0.0023
D₁₀= C_u= C_c=

Remarks

Date Received: 10/17/2016 Date Tested: 10/20/2016
Tested By: MS
Checked By: Matthew Colman, P.E.
Title: Laboratory Manager

Source of Sample: 1610-24388-001
Sample Number: S-3

Date Sampled: 10/14/2016

Thielsch Engineering Inc. Cranston, RI	Client: R.I. Analytical Laboratories, Inc. Project: Project No: 74-16-0002.129
---	--

Figure 16-S-1439

CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
800-937-2580 • Fax: 401-738-1970

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
800-937-2580 • Fax: 978-568-0078

Date Collected: 10/19/11
Time Collected: 1PM
Field Sample Identification: S3

Grab or Composite	# of Containers & Type	Preservation Code ^P	Matrix Code ^M
C	3	ACE	S

- 1) Provide Results of Sent Analysis for Samps
- 2) Analysis to Residential Deposition Requirements
Units - See Attached Sheet

Client Information

Company Name: ST. JEAN LABORATORY, LLC
Address: 1145 MIDDLE ROAD
City / State / Zip: EAST GREENWICH, RI 02812
Telephone: 401-398-0999 Fax:
Contact Person: RICK S. JONES

Project Information

Project Name: HARBOUR LIGHT MARINA - WARWICK
P.O. Number:
Report To: RICK S. JONES Phone: 398-0999 Fax:
Sampled By: RICK S. JONES Email report to these addresses: ST. JEAN LABORATORY
Quote No: C.V. 02020.1027

Relinquished By Signatures	Date	Time	Received By Signatures	Date	Time
<i>[Signature]</i>	10/19/11	2:27PM	<i>[Signature]</i>	10-14-16	14:27

Turn Around Time
Normal
5 Business days. Possible surcharge
Rush - Date Due: / /

Project Comments

Circle if applicable: GW-1, GW-2, GW-3, S-1, S-2, S-3 MCP Data Enhancement QC Package? Yes No

Temp. Upon Receipt 10 2.2 °C

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, S=Sterile Preservatives: A=Ascorbic Acid, NH4=NH4Cl, H=HCl, M=MeOH, N=HNO3, NP=None, S=H2SO4, SB=NaHSO4, SH=NaOH, T=Na2S2O3, Z=ZnOAC
Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=



Rhode Island Coastal Resources Management Council
 Oliver H. Stedman Government Center
 Wakefield, RI 02879
 (401) 783-3370



Rhode Island Department of Environmental Management
 235 Promenade Street
 Providence, RI 02908-5767
 (401) 222-6820

APPLICATION FOR MARINE DREDGING AND ASSOCIATED ACTIVITIES pursuant to the Marine Infrastructure Maintenance Act of 1996 and the Marine Waterways and Boating Facilities Act of 2001, Chapter 46-6.1 of the Rhode Island General Laws.

PURPOSE OF APPLICATION

- Application for Dredging and Disposal of Dredged Material
- Request Renewal of RIDEM Dredge Permit File # _____
- Request Renewal of CRMC Dredge Permit File # _____
- Request Modification of RIDEM Dredge Permit File # _____
- Request Modification of CRMC Dredge Permit File # _____

Agency Use Only File Number

Date Received

(Please Type or Print)

MAINTENANCE DREDGING REQUEST

APPLICANT INFORMATION

Applicant Name **Harbor Light Marina, Inc.**

(NOTE: Applicant must be the owner of the property on which the activity is proposed)

Applicant Address: **200 Gray Street**

Telephone No. **401-737-6353**

City/Town: **Warwick**

State: **Rhode Island** Zip: **02889**

PROJECT INFORMATION

Project Address: **200 Gray Street**

City/Town: **Warwick**

State: **Rhode Island** Zip: **02889**

Tax Assessor's Plat(s) and Lot Number(s): **Plat 378, Lot 1**

Project Consultant/Engineer Name: **St. Jean Engineering, LLC, Richard St. Jean P.E.**

Consultant/Engineer Address: **1145 Middle Road, East Greenwich, Rhode Island 02818**

Consultant/Engineer Telephone No.: **401-398-0999**

ACTIVITIES ASSOCIATED WITH THE PROPOSED DREDGE PROJECT (check all that apply)*

- Filling of Waters of the State
- Marinas – New construction or expansion
- Site Disturbances
 - ___ Residential Development: six (6) or more dwellings
 - ___ Commercial, Industrial, State or Municipal Development
 - ___ Any project \geq five (5) acres of disturbance
- Flow Alterations
- Point Source Discharge of Pollutants

GENERAL INFORMATION

Identify program and associated application number for any other RIDEM applications filed for this project

___ Freshwater Wetlands	Application Number _____
___ RIPDES	Application Number _____
___ Individual Sewage Disposal System	Application Number _____
___ Other (_____)	Application Number _____

If you have any questions, please contact the RIDEM at 222-7500 or CRMC at 783-3379.

CERTIFICATION OF APPLICANT

I hereby certify that I have requested and authorized the investigation, compilation, and submission of all the information, in whatever form, contained in this Application; that I have personally examined and am familiar with the information submitted herein; and that such information is true, accurate and complete to the best of my knowledge.

Signature of Applicant: _____ Date: _____
For: Harbor Light Marina, Inc.

Please return this completed application form and all supporting information, as indicated on the accompanying Submittal Checklist to:

Rhode Island Coastal Resources Management Council
Oliver H. Stedman Government Center
Wakefield, RI, 02879

and

Rhode Island Department of Environmental Management
Office of Technical & Customer Assistance
235 Promenade Street
Providence, RI 02908

* Water Quality Certification required for these activities pursuant to Section 401 of the CWA and the Rhode Island Water Quality Rules may be incorporated into an approval issued as part of this application.

Office Use Only:

Suitable for Public Notice _____ Date: _____

- Approved
- Denied
- Withdrawn
- Closed

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

Form Approved -
OMB No. 0710-0003
Expires: 31-AUGUST-2013

Public reporting for this collection of information is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of the collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters, Executive Services and Communications Directorate, Information Management Division and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

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

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE
--------------------	----------------------	------------------	------------------------------

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME First - Joseph Middle - Last - Noel Company - Harbor Light Marina, Inc. E-mail Address - joen@cescochem.com		8. AUTHORIZED AGENT'S NAME AND TITLE (agent is not required) First - Richard Middle - N Last - St. Jean Company - St. Jean Engineering, LLC E-mail Address - st.jean.engineering@verizon.net	
6. APPLICANT'S ADDRESS: Address- 200 Gray Street City - Warwick State - RI Zip - 02889 Country -USA		9. AGENT'S ADDRESS: Address- 1145 Middle Road City - East Greenwich State - RI Zip - 02818 Country -USA	
7. APPLICANT'S PHONE NOS. w/AREA CODE a. Residence b. Business c. Fax 401-737-6353	10. AGENTS PHONE NOS. w/AREA CODE a. Residence b. Business c. Fax 401-398-0999		

STATEMENT OF AUTHORIZATION

11. I hereby authorize, Richard N. St. Jean, P.E. to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

SIGNATURE OF APPLICANT DATE

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE (see instructions) Harbor Light Marina - Maintenance Dredging	
13. NAME OF WATERBODY, IF KNOWN (if applicable) Warwick Cove - Narragansett Bay	14. PROJECT STREET ADDRESS (if applicable) Address 200 Gray Street City - Warwick State- RI Zip- 02889
15. LOCATION OF PROJECT Latitude: °N 41-41"-14.9" Longitude: °W 71-23'-27.2"	
16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions) State Tax Parcel ID AP 378, Lot 1 Municipality Warwick, Rhode Island Section - Township - Range -	

17. DIRECTIONS TO THE SITE

From Boston take 95 south to Rhode Island, take RI-37, exit 14A-B toward US-1/Warwick/RI-2/Cranston, merge onto RI-37 via exit 14A on the left toward US-1/Warwick, merge onto Post Rd/US-1 via exit 5A, turn left onto Airport Road, turn right onto Warwick Ave., turn left onto West Shore Rd/ RT 117, turn right onto Warwick Neck Ave., turn right onto Meadow View Ave., turn left onto Leroy Ave., stay straight to go onto Clifton Ave., turn right onto Gray Street, 200 Gray Street is on the left.

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

The Applicant is seeking a permit to perform Maintenance Dredging within the 2007 approved dredge footprint for Harbor Light Marina. The Applicant proposes to dredge up to 2,000 cubic yards over a the life of the permit. Dredging will occur each year only in areas within the marina where water depths have become too shallow to maintain dockage. The maximum depth of dredging will be to -6 feet below MLLW to match the adjacent Federal Channel. Dredge spoils will be dried in the southeast section of the parking lot, within a contained area. The southern parking lot/boat storage area will be divided into 10 approximately 75 x 75 foot cells capable of receiving approximately 210 cy of dredge spoils per 1 ft. of height. When the material is suitably dry 1 ft. of the existing gravel parking lot surface (within 1 or 2 cells) will be excavated mixed with the dredge spoils. The mixed gravel and dredge spoils will then be placed and compacted within the cell(s) that were excavated for the season the dredge occurred.

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

Harbor Light Marina was expanded and dredged in 2007. The marina is located on the east side of the Warwick Cove Federal Channel in Warwick, Rhode Island. The current in the channel transports fine grain sediment, some of which is deposited in and around the slips within the marina. Periodic dredging is required to maintain proper depths for dockage.

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

20. Reason(s) for Discharge

No discharge associated with the project.

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

Type Amount in Cubic Yards	Type Amount in Cubic Yards	Type Amount in Cubic Yards
N/A	N/A	N/A

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

Acres N/A
or
Linear Feet N/A

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

N/A

24. Is Any Portion of the Work Already Complete? Yes No IF YES, DESCRIBE THE COMPLETED WORK

25. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (if more than can be entered here, please attach a supplemental list).

a. Address- City of Warwick, 3275 Post Road

City - Warwick State - Rhode Island Zip - 02886

b. Address-

City - State - Zip -

c. Address-

City - State - Zip -

d. Address-

City - State - Zip -

e. Address-

City - State - Zip -

26. List of Other Certificates or Approvals/Denials received from other Federal, State, or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED
CRMC	Assent		Concurrent		
RIDEM	401 WQC		Concurrent		

* Would include but is not restricted to zoning, building, and flood plain permits

27. Application is hereby made for permit or permits to authorize the work described in this application. I certify that this information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

SIGNATURE OF APPLICANT

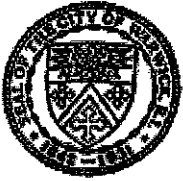
DATE

SIGNATURE OF AGENT

DATE

The Application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.



CHRISTOPHER CELESTE
TAX ASSESSOR

City of Warwick

FINANCE DEPARTMENT
OFFICE OF THE ASSESSOR

CITY HALL ANNEX
3275 POST ROAD
WARWICK, RI 02886
401-738-2000
TDD 739-9150

Date: October 20, 2016

TO WHOM IT MAY CONCERN:

Please be advised that records in the Office of City Assessor show that as of December 31, 2015, property located at:

200 Gray St. , Warwick, RI 02889

PLAT: 378

LOT: 0001

UNIT: 0000

Is owned by:

HARBOR LIGHT MARINA INC

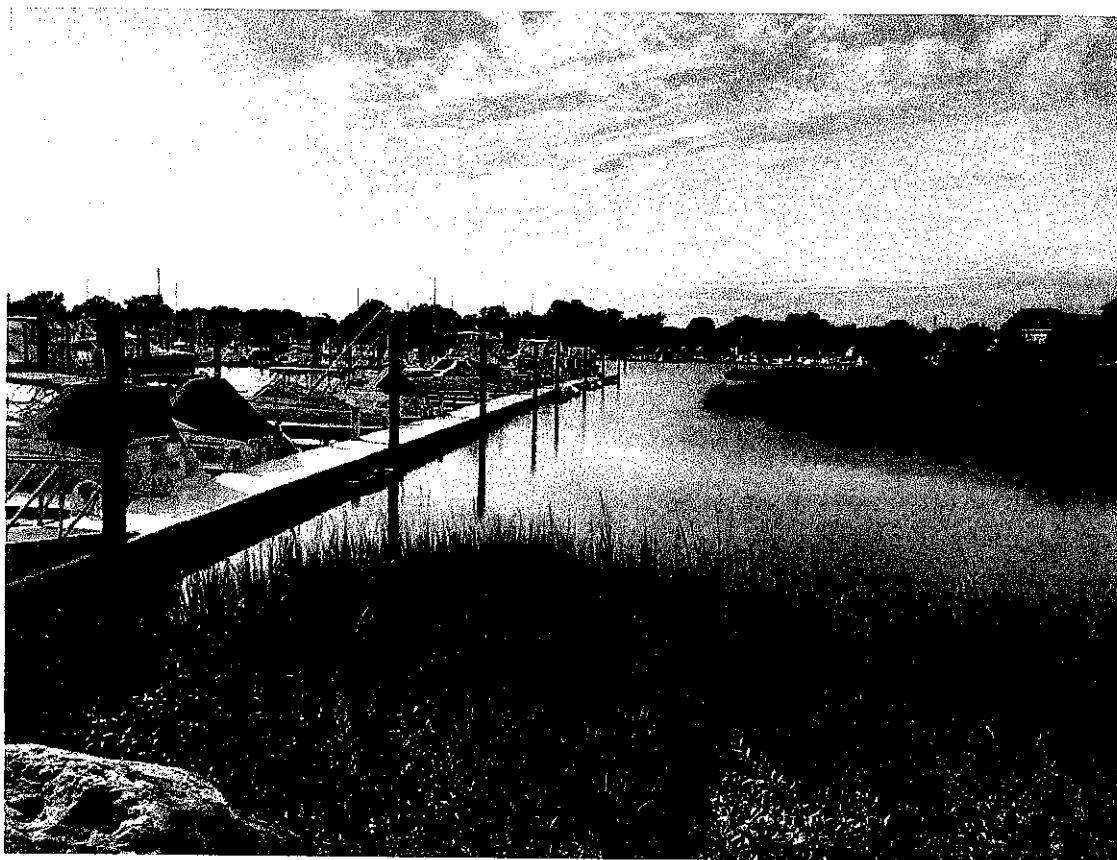
If you have any further questions you may reach me at 401-738-2000 extension 6016.



Tax Assessors Office



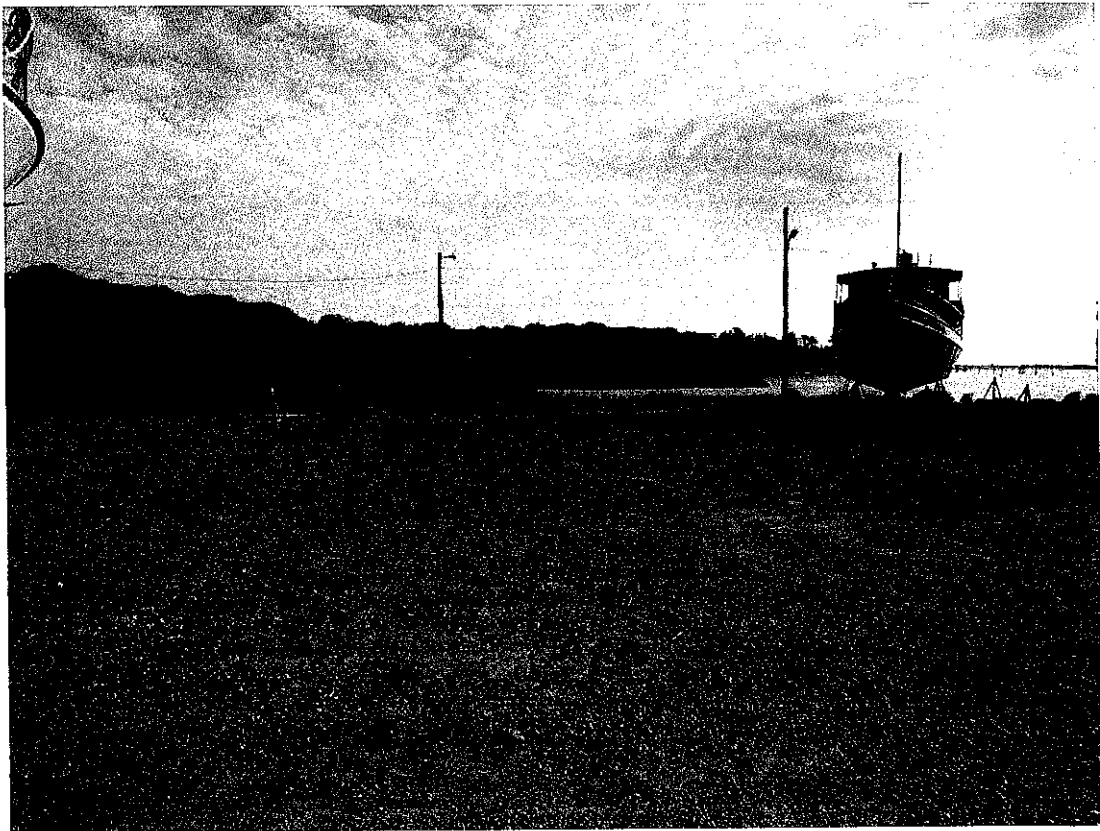
Aerial View of Harbor Light Marina



North Boundary of Harbor Light Marina



South Boundary of Harbor Light Marina – Gas Dock in Distance



Proposed Location of Dredge Spoil Dewatering Area



CITY OF WARWICK
OFFICE OF THE CITY CLERK
3275 POST ROAD
WARWICK, RHODE ISLAND 02886
TEL. (401) 738-2000, ext. 6214
FAX (401) 732-7640

SCOTT AVEDISIAN
MAYOR
JUDY WILD
CITY CLERK

TO: Susan Cabeceiras Harbor Management Commission
Kyla Jones - Tax Collector
Christopher Celeste - Tax Assessor
Eric Earls - DPW Engineering

FROM: Judy Wild City Clerk

Date: April 28, 2017

Subject: Dredging Application

Subject: Dredging of Harbor Light Marina

Name of Applicant: Harbor Light Marina Inc.

Plat: 378
Lot: 1, 181, 2
Address: 200 Gray Street

Please review and comment on the attached application and return to the Clerk's office no later than **May 5, 2017**. Your comments are required so that the City Council may consider this application on **May 15, 2017**. Should you have "no comment" on the attached plan, you are still required to sign off on this memo with a notation that your department does not have any concerns with the application.

Comments:

NO COMMENTS FROM ASSESSOR'S

Date:

4-28-17

Director's signature:

[Handwritten signature]

For use by Tax Assessor/Collector and Planning Director only (if applicable):

Assessed value of property: _____ Annual taxes: _____

Appraised value of property: _____



CITY OF WARWICK
OFFICE OF THE CITY CLERK
3275 POST ROAD
WARWICK, RHODE ISLAND 02886
TEL. (401) 738-2000, ext. 6214
FAX (401) 732-7640

SCOTT AVEDISIAN
MAYOR
JUDY WILD
CITY CLERK

TO: Susan Cabeceiras Harbor Management Commission
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Comments:

No Comments - Harbor Mgt. Comm.

Date: 5-1-17

Director's signature: Susan Cabeceiras

For use by Tax Assessor/Collector and Planning Director only (if applicable):

Assessed value of property: _____ Annual taxes: _____

Appraised value of property: _____



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SCOTT AVEDISIAN
MAYOR
JUDY WILD
CITY CLERK

TO: Susan Cabeceiras Harbor Management Commission
Kyla Jones - Tax Collector
Christopher Celeste - Tax Assessor
Eric Earls - DPW Engineering

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Comments:

- This package includes new applications to CRMC and Army Corps. The City's Approval should be contingent on their reviews.

Date: May 1, 2017

Director's signature: 

For use by Tax Assessor/Collector and Planning Director only (if applicable):

Assessed value of property: _____ Annual taxes: _____

Appraised value of property: _____



CITY OF WARWICK
OFFICE OF THE CITY CLERK
3275 POST ROAD
WARWICK, RHODE ISLAND 02886
TEL. (401) 738-2000, ext. 6214
FAX (401) 732-7640

SCOTT AVEDISIAN
MAYOR

JUDY WILD
CITY CLERK

TO: Susan Cabeceiras Harbor Management Commission
Kyla Jones - Tax Collector
Christopher Celeste - Tax Assessor
Eric Earls - DPW Engineering

FROM: Judy Wild City Clerk

Date: April 28, 2017

Subject: Dredging Application

Subject: Dredging of Harbor Light Marina

Name of Applicant: Harbor Light Marina Inc.

Plat: 378
Lot: 1, 181, 2
Address: 200 Gray Street

Please review and comment on the attached application and return to the Clerk's office no later than **May 5, 2017**. Your comments are required so that the City Council may consider this application on **May 15, 2017**. Should you have "no comment" on the attached plan, you are still required to sign off on this memo with a notation that your department does not have any concerns with the application.

Comments: Parcel 378-0181-0000 has taxes due
of \$ 722.15 as of today 5/3/17

Date: 5/3/17

Director's signature: Kyla Jones

For use by Tax Assessor/Collector and Planning Director only (if applicable):

Assessed value of property: _____ Annual taxes: _____

Appraised value of property: _____



CITY OF WARWICK
OFFICE OF THE CITY CLERK
3275 POST ROAD
WARWICK, RHODE ISLAND 02886
TEL. (401) 738-2000, ext. 6214
FAX (401) 732-7640

SCOTT AVEDISIAN
MAYOR

JUDY WILD
CITY CLERK

TO: Susan Cabeceiras Harbor Management Commission
Kyla Jones - Tax Collector
Christopher Celeste - Tax Assessor
Eric Earls - DPW Engineering
Janine Burke - Sewer

FROM: Judy Wild City Clerk

Date: April 28, 2017

Subject: Dredging Application

Subject: Dredging of Harbor Light Marina

Name of Applicant: Harbor Light Marina Inc.

Plat: 378
Lot: 1, 181, 2
Address: 200 Gray Street

Please review and comment on the attached application and return to the Clerk's office no later than **May 5, 2017**. Your comments are required so that the City Council may consider this application on **May 15, 2017**. Should you have "no comment" on the attached plan, you are still required to sign off on this memo with a notation that your department does not have any concerns with the application.

Comments: NO COMMENTS

Date:

5/4/17

Director's signature:

Janine Burke-Wells

For use by Tax Assessor/Collector and Planning Director only (if applicable):

Assessed value of property: _____ Annual taxes: _____

Appraised value of property: _____