The District Engineer has received a permit application to conduct work in waters of the United States from Endicott College. This work is proposed in Salem Sound at 375 and 413 Hale Street in Beverly, Massachusetts. The site coordinates are: Latitude 42.551388 Longitude -70.836111.

The proposed work involves bank stabilization consisting of the following: 1) Replacement of 150 linear feet of grouted stone revetment that was destroyed during several storms in 2018. 2) Removal of approximately 923 linear feet of existing concrete seawall installed prior to 1939 and replacement with an armored stone revetment. The new revetment work would be performed differently in four areas due to variable site conditions, including bedrock and bank slopes.

1) Area A: 150 LF
Replace existing destroyed stone revetment. The new armored stone revetment would have the toe stones pinned to the exposed/shallow bedrock that exists within this area. The revetment crest would be raised from El. 12-16 feet to El. 22 feet NAVD88 to ensure future storm protection to one (1) foot above the 100-year FEMA BFE. The proposed seaward limit of the new structure would not extend further than the pre-storm limits of the existing revetment and there would be no site grading landward of the new structure.

2) Area B1: 161 LF
Replace existing vertical seawall with an armored stone revetment. Due to the exposed bedrock in this area, a concrete knee wall would be utilized to anchor the toe of the revetment, as a buried toe stone is not possible. This design would provide protection from the 100-year storm event. The proposed design represents a partial retreat as the armored stone revetment’s seaward limit would coincide with the existing seawall alignment.

3) Area B2: 159 LF
Replace the existing vertical seawall with a new armored stone revetment to a crest elevation of 24.0’ NAVD88. This revetment section is unique in that it would require both a higher crest elevation and reduced foreslope of 1.5H:1V. This would reduce wave overtopping volumes and protect the Carriage House which is located 6 ft landward of the existing seawall.

4) Area C: 603 LF
Replace the existing vertical seawall with an armored stone revetment. Consideration was first given to placement of the toe stone of the proposed revetment along the alignment of the existing wall in an effort to minimize resource area impacts; however, due to the high bank that exists in this area (approximately 30+ feet above beach elevation), it wouldn’t be possible to excavate at the toe of the existing wall without destabilizing the entire bank. Therefore the proposed revetment design would span the existing wall so that toe stones could
be installed as close to the existing structure as possible. The new revetment would be constructed to El. 22.0 feet NAVD88 to ensure future storm protection to 1 foot above the 100-year flood elevation. The revetment stone would be set at a maximum slope of 1H:1V which is the upper limit to which a stable structure could be constructed. By maximizing the revetment foreslope, seaward encroachment would be minimized.

The project sections with buried toe stones would require the excavation of approximately 1,953 cubic yards of material, which would be placed below the armor stone and beneath the geotextile fabric.

In order to limit impacts, work would be done utilizing machinery from the beach during periods of low tide.

The total proposed project impacts include 37,686 square feet of intertidal zone, which is comprised of 27,154 square feet of temporary impacts and 10,532 square feet of permanent impacts.

The proposed work is shown on the enclosed plans entitled “Proposed Seawall Rehabilitation: Adjacent to Salem Sound: At Endicott College, Beverly County of: Essex, MA Application by: Endicott College” on eleven sheets and dated “October 11, 2021.”

The applicant has attempted to avoid and minimize project impacts to the maximum extent practicable and no mitigation is proposed for the project impacts.

**AUTHORITY**

Permits are required pursuant to:

_X_ Section 10 of the Rivers and Harbors Act of 1899

_X_ Section 404 of the Clean Water Act

___ Section 103 of the Marine Protection, Research and Sanctuaries Act.

___ Section 14 of the Rivers and Harbors Act of 1899 (33 USC 408)

The decision whether to issue a permit will be based on an evaluation of the probable impact of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which may reasonably accrue from the proposal must be balanced against its reasonably foreseeable detriment. All factors which may be relevant to the proposal will be considered, including the cumulative effects therefrom; among those are: conservation, economics, aesthetics, general environmental concerns, wetlands, cultural value, fish and wildlife values, flood hazards, flood plain value, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people.

The U.S. Army Corps of Engineers, New England District (USACE), is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. The USACE will consider all comments received to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.
Where the activity involves the discharge of dredged or fill material into waters of the United States or the transportation of dredged material for the purpose of disposing it in ocean waters, the evaluation of the impact of the activity in the public interest will also include application of the guidelines promulgated by the Administrator, U.S Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act, and/or Section 103 of the Marine Protection Research and Sanctuaries Act of 1972, as amended.

ESSENTIAL FISH HABITAT

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), requires all federal agencies to consult with the National Marine Fisheries Service on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH). Essential Fish Habitat describes waters and substrate necessary for fish for spawning, breeding, feeding or growth to maturity.

This project will impact 0.86 acres of EFH habitat overall, consisting of 0.75 acre of sandy habitat and 0.11 acre of rocky intertidal habitat. Of this amount, approximately 0.23 acre of sandy habitat and .01 acre of rocky habitat would be permanently impacted by the project. Loss of this habitat may adversely affect species that use these waters and substrate. However, the District Engineer has made a preliminary determination that the site-specific adverse effect will not be substantial. Further consultation with the National Marine Fisheries Service regarding EFH conservation recommendations is being conducted and will be concluded prior to the final decision.

NATIONAL HISTORIC PRESERVATION ACT

Based on his initial review, the District Engineer has determined that little likelihood exists for the proposed work to impinge upon properties with cultural or Native American significance, or listed in, or eligible for listing in, the National Register of Historic Places. Therefore, no further consideration of the requirements of Section 106 of the National Historic Preservation Act of 1966, as amended, is necessary. This determination is based upon one or more of the following:

a. The permit area has been extensively modified by previous work.
b. The permit area has been recently created.
c. The proposed activity is of limited nature and scope.
d. Review of the latest published version of the National Register shows that no presence of registered properties listed as being eligible for inclusion therein are in the permit area or general vicinity.
e. Coordination with the State Historic Preservation Officer and/or Tribal Historic Preservation Officer(s).

ENDANGERED SPECIES CONSULTATION

The USACE has reviewed the application for the potential impact on Federally-listed threatened or endangered species and their designated critical habitat pursuant to section 7 of the Endangered Species Act as amended. It is our preliminary determination that the proposed activity for which authorization is being sought is designed, situated or will be operated/used in such a manner that it is not likely to adversely affect a listed species or their critical habitat. We are coordinating with the National Marine Fisheries Service and/or U.S. Fish and Wildlife Service on listed species under their jurisdiction and the ESA consultation will be concluded prior to the final decision.
OTHER GOVERNMENT AUTHORIZATIONS

The states of Connecticut, Maine, Massachusetts, New Hampshire and Rhode Island have approved Coastal Zone Management Programs. Where applicable, the applicant states that any proposed activity will comply with and will be conducted in a manner that is consistent with the approved Coastal Zone Management Program. By this Public Notice, we are requesting the State concurrence or objection to the applicant’s consistency statement.

The following authorizations have been applied for, or have been, or will be obtained:

- ( X ) Permit, license or assent from State.
- ( X ) Permit from local wetland agency or conservation commission.
- ( X ) Water Quality Certification in accordance with Section 401 of the Clean Water Act.

COMMENTS

In order to properly evaluate the proposal, we are seeking public comment. Anyone wishing to comment is encouraged to do so. Comments should be submitted in writing by the above date. If you have any questions, please contact Ruth Ann Brien at (978) 318-8054, (800) 343-4789 or (800) 362-4367, if calling from within Massachusetts.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for a public hearing shall specifically state the reasons for holding a public hearing. The USACE holds public hearings for the purpose of obtaining public comments when that is the best means for understanding a wide variety of concerns from a diverse segment of the public.

The initial determinations made herein will be reviewed in light of facts submitted in response to this notice. All comments will be considered a matter of public record. Copies of letters of objection will be forwarded to the applicant who will normally be requested to contact objectors directly in an effort to reach an understanding.

**THIS NOTICE IS NOT AN AUTHORIZATION TO DO ANY WORK.**

Paul Maniccia

Paul Maniccia  
Chief, Permits and Enforcement Branch  
Regulatory Division

If you would prefer not to continue receiving Public Notices by email, please contact Ms. Tina Chaisson at (978) 318-8058 or e-mail her at bettina.m.chaisson@usace.army.mil.
PURPOSE: SEAWALL REHABILITATION

DATUM: MLW: -4.79' NAVD88
MHW: 4.14' NAVD88
AHTL: 6.43' NAVD88

ENDICOTT COLLEGE,
376 HALE STREET, BEVERLY, MA 01915

PROPOSED SEAWALL REHABILITATION:
ADJACENT TO: SALEM SOUND

AT: ENDICOTT COLLEGE, BEVERLY
COUNTY OF: ESSEX, MA
APPLICATION BY: ENDICOTT COLLEGE

LOCUS MAP
1:24,000

SHEET 1 OF 11 DATE: OCTOBER 11, 2021
427 HALE ST
ENDICOTT COLLEGE
376 HALE ST,
BEVERLY, MA

EX. BEACH ACCESS STAIRS AND DECK TO REMAIN
EX. BEACH ACCESS STAIRS TO BE REMOVED AND REPLACED WITH 5' WIDE IPE STAIRS

PROPERTY LINE (TYP.)

PROP. PLANTING TO RESTORE TO EX. CONDITIONS

EX. BUILDING (TYP.)

425 HALE ST
OLNEYS, RICHARD III
PO BOX 194 PRIDES CROSSING, MA

EX. STONE SEAWALL TO REMAIN (TYP.)

431 HALE ST LANDMARK SCHOOL
PO BOX 227 PRIDES CROSSING, MA

EX. BEACH ACCESS GANGWAY

AREA C:
780 SF (1,300 CY) OF FILL BELOW MHW
5,675 SF (1,950 CY) OF FILL BELOW AHTL

SALEM SOUND

PROP. 8-10 TON TOE STONE
PROP. 4-6 TON ARMOR STONE REVETMENT @ 1H:1V SLOPE W/ TOP EL 22' NAVD88

MLW = -4.8' NAVD88
MHW = +4.1' NAVD88
AHTL = +6.4' NAVD88

PROP. BEACH ACCESS GANGWAY
EX. BEACH ACCESS STAIRS TO BE REMOVED AND REPLACE WITH 5' IPE STAIRS

413 HALE ST
ENDICOTT COLLEGE
376 HALE ST,
BEVERLY, MA

PURPOSE: SEAWALL REHABILITATION
DATUM: MLW = -4.79' NAVD88
MHW = 4.14' NAVD88
AHTL = 6.43' NAVD88

ENDICOTT COLLEGE,
376 HALE STREET, BEVERLY, MA 01915

MATCH LINE: CONTINUE TO SHEET 5

PROPOSED SEAWALL REHABILITATION:
ADJACENT TO: SALEM SOUND
AT: ENDICOTT COLLEGE, BEVERLY
COUNTY OF: ESSEX, MA
APPLICATION BY: ENDICOTT COLLEGE

SHEET 6 OF 11 DATE: OCTOBER 11, 2021
SECTION A: AREA A - PROPOSED ARMOR STONE REVETMENT
SCALE: 1' = 5'

PURPOSE: SEAWALL REHABILITATION

DATUM: MLW: -4.79' NAVD88
MWH: 4.14' NAVD88
AHTL: 6.43' NAVD88

ENDICOTT COLLEGE,
376 HALE STREET, BEVERLY, MA 01915

PROPOSED SEAWALL REHABILITATION: ADJACENT TO: SALEM SOUND
AT: ENDICOTT COLLEGE, BEVERLY
COUNTY OF: ESSEX, MA
APPLICATION BY: ENDICOTT COLLEGE

GRAPHIC SCALE

1 INCH = 5 FEET

11'-0"  ±20'-0"

TOP OF REVETMENT
APPROX. EL. 22.0 NAVD88
FEMA FLOOD ZONE
EL. 21.00 NAVD88

EX GRADE (VARIES)

PROP. 4-6 TON STONE REVETMENT @ 1H:1V SLOPE
EX. MORTARED STONE REVETMENT TO BE REMOVED

PROP. CRUSHED STONE FILTER LAYER

AHTL 6.43' NAVD88

PROP. GEOTEXTILE FABRIC

MHW 4.14' NAVD88

PROP. ANCHOR (TYP)

BEDROCK LIMITS UNKNOWN

MLW -4.79' NAVD88

 leans over drawing
SECTION F: AREA C-PROPOSED ARMOR STONE REVETMENT WITH PLANTING SCHEDULE
SCALE: 1' = 10'

PURPOSE: SEAWALL REHABILITATION
DATUM: MLW: -4.79' NAVD88
MHW: 4.14' NAVD88
AHTL: 6.43' NAVD88
ENDICOTT COLLEGE,
376 HALE STREET, BEVERLY, MA 01915

GRAPHIC SCALE
0 5 10
1 INCH = 10 FEET

PROPOSED SEAWALL REHABILITATION: ADJACENT TO: SALEM SOUND
AT: ENDICOTT COLLEGE, BEVERLY
COUNTY OF: ESSEX, MA
APPLICATION BY: ENDICOTT COLLEGE
SHEET 10 OF 11 DATE: OCTOBER 11, 2021
NOTES:
1. THE COMBINED SURFACE DATA SHOWN ON THIS PLAN WAS GATHERED ON MARCH 27, 2018 (RTK DATA COLLECTION, OCTOBER 10, 2018 (DRONE DATA COLLECTION) AND 2014-POST SANDY (USGS LIDAR).
2. ADDITIONAL STRUCTURE LIMITS SHOW IN PARCEL ID: 15-8 WAS GATHERED ON MARCH 8, 11, 2021 AND MAY 14, 2021 BY MERIDIAN ASSOCIATES, INC. ELEVATIONS ARE IN FEET AND TENTHS AND REFER TO ELEVATIONS ABOVE THE VERTICAL REFERENCE PLANE.
3. THE VERTICAL REFERENCE PLANE FOR THIS PROJECT IS NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD88).
4. THE DATUM IS DEFINED RELATIVE TO THE PRIMARY BENCHMARK, MASSACHUSETTS GEODETIC SURVEY DISK FOUND IN ROCK OUTCROP OR LEDGE, STAMPED "493 S" PUBLISHED ELEVATION TAKEN FROM SHARED SOLUTIONS. PUBLISHED ELEVATION = 152.89' NAVD88.
5. COORDINATES ARE BASED ON NAD 83 STATE PLANE MASSACHUSETTS MAINLAND.
6. RTK CORRECTIONS: RTK CORRECTIONS FOR THIS SURVEY PROVIDED BY KEYNET - VRS.
7. DRONE SURVEY PERFORMED BY FOTH WITH A NEXUS 800 LIDAR UNMANNED AERIAL VEHICLE (UAV).
8. DRONE DATA PROVIDED IS RELATIVE TO THE NAVD88 DATUM, A 3'X3' CENTERMOST VALUE SORT WAS UTILIZED FOR THE PURPOSE OF THIS PLAN.
10. SHORELINE, BRIDGES, PIERS, ETC. ARE SCALING FROM ORTHOMAGERY. ORTHOMAGERY AND SCALING DATA IS APPROXIMATE UNLESS OTHERWISE NOTED AND SHOULD BE USED AS A GENERAL REFERENCE ONLY.
12. ANNUAL HIGH TIDE TAKEN FROM NOAA TIDE STATION #8442845 SALEM, SALEM HARBOR TIDE PREDICTIONS FOR YEAR OF 2019. ANNUAL HIGH TIDE = +6.43' NAVD88.
13. THE INFORMATION DEPICTED ON THIS PLAN REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES SHOWN, AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS AT THAT TIME. INTERPOLATED INFORMATION BETWEEN SOUNING RUNS IS NOT GUARANTEED. SCHOOLS, OBSTRUCTIONS OR OTHER DIFFERING CONDITIONS MAY EXIST BETWEEN THESE RUNS. CONSULT WITH FOTH INFRASTRUCTURE AND ENVIRONMENT, LLC FOR MORE DETAILED INFORMATION.
14. POSSESSION AND USE OF THE MATERIAL CONTAINED ON THESE DRAWINGS IS GRANTED ONLY IN CONNECTION WITH ITS USE AS IT RELATES TO THE TITLED PROJECT, ANY OTHER USE, REPRODUCTION OR DISCLOSURE OF THE INFORMATION CONTAINED HEREON IS EXPRESSLY PROHIBITED WITHOUT THE WRITTEN CONSENT OF FOTH INFRASTRUCTURE AND ENVIRONMENT, LLC.

TIDAL DATUM CHART

NORTH AMERICAN VERTICAL DATUM OF
1988 (NAVD88) MEAN LOW WATER (MLW)

AHTL +6.43 +11.22
MHW +4.14 +9.11
NAVD88 +0.0 +4.79
MLW -4.79 +0.0
ML LW -5.12 -0.33

OFFSETS TAKEN FROM
NOAA TIDE STATION
BEVERLY #8442417
EPOCH 1983-2001

© COPYWRITE 2021, FOTH INFRASTRUCTURE AND ENVIRONMENT, LLC

PURPOSE: SEAWALL REHABILITATION

DATUM: MLW: -4.79' NAVD88
MHW: 4.14' NAVD88
AHTL: 6.43' NAVD88

ENDICOTT COLLEGE,
376 HALE STREET, BEVERLY, MA 01915

PROPOSED SEAWALL REHABILITATION:
ADJACENT TO: SALEM SOUND
AT: ENDICOTT COLLEGE, BEVERLY
COUNTY OF: ESSEX, MA
APPLICATION BY: ENDICOTT COLLEGE

SHEET 11 OF 11 DATE: OCTOBER 11, 2021