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

October 28, 2024

Regulatory Division
File Number: NAE-2024-01874

Robert E. Ward
City of Haverhill
40 South Porter Street
Haverhill, Massachusetts 01835
(Via Email): rward@haverhillma.gov

Dear Robert E. Ward:

This regards your application submitted to the U.S. Army Corps of Engineers (USACE) to temporarily impact 700 square feet of wetlands and install structures below a Section 10 river for the purposes of constructing a radial collector well. The collector radial well will be installed in an upland area adjacent to the Merrimack River. 5 well laterals will be hydraulically jacked from the well. The well laterals will be approximately 40 to 50 feet below the river bottom and will be 200 to 250 feet long. Approximately 30 cubic yards of sediment is anticipated to be removed from the installation of the well laterals. There will be temporary impacts of 700 square feet in wetlands due to the monitoring well installation. Monitoring wells will also be installed in the river. The wells will be driven 40 to 70 feet below the substrate. The monitoring wells will not be accessible within or above the river after construction. Once the casing is driven to depth within the substrate, a transducer will be installed with a communication cable that runs to shore. The well will then be plugged at the river bottom. This project is located in the Merrimack River, 309 East Broadway, Haverhill, Massachusetts 01830 at approximate site coordinates 42.77604, -71.02614. The work is shown on the enclosed plans titled “CITY OF HAVERHILL, MASSACHUSETTS MERRIMACK RIVER RADIAL COLLECTOR WELL - 309 E. BROADWAY HAVERHILL, MASSACHUSETTS” on 1 sheet and dated “5/15/2024”.

Based on the information that you have provided, we verify that the activity is authorized under General Permit # 6 of the June 2, 2023, federal permit known as the Massachusetts General Permits (GPs). The GPs are available at https://www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/Massachusetts-General-Permit.

Please review the enclosed GPs carefully, in particular the general conditions beginning on page 35, and ensure that you and all personnel performing work authorized by the GPs are fully aware of and comply with its terms and conditions. A copy of the GPs and this verification letter shall be available at the work site as required by General

Condition 17. You must perform this work in compliance with the following special condition(s):

1) You must complete and return the enclosed Work Start Notification Form to this office at least two weeks before the anticipated start date. The form shall be emailed to Maninder Singh at Maninder.Singh@usace.army.mil and cenae-r@usace.army.mil; or mailed to Maninder Singh, Regulatory Division, U.S. Army Corps of Engineers, New England District, 696 Virginia Road, Concord, Massachusetts 01742-2751.

2) You must complete and return the enclosed Compliance Certification Form to this office within one month of the completion of work. The form shall be emailed to Maninder Singh at Maninder.Singh@usace.army.mil and cenae-r@usace.army.mil; or mailed to Maninder Singh, Regulatory Division, U.S. Army Corps of Engineers, New England District, 696 Virginia Road, Concord, Massachusetts 01742-2751.

3) You must submit monitoring reports to the listed emails. The reports shall be emailed to Maninder Singh at Maniner.Singh@usace.army.mil, Kaitlyn Shaw at kaitlyn.shaw@noaa.gov, and Alexa Cacacie at alexa.cacacie@noaa.gov.

4) Maintain project vessels operating within the action area to speed limits below 10 knots and dredge vessel speeds of 4 knots maximum, while dredging.

5) Maintain a 1,500-foot buffer between project vessels and ESA-listed whales and a 150-foot buffer between project vessels and sea turtles unless the vessel is navigating to an in-water disposal site/activity. If the vessel is navigating to an in-water disposal site/activity, refer to and include the conditions contained in the appropriate GARFO-USACE/EPA consultation for the disposal site.

6) The number of project vessels must be limited to the greatest extent possible, as appropriate to size and scale of project.

7) The permanent net increase in vessels resulting from a project (e.g., dock/float/pier/boating facility) must not exceed two non-commercial vessels. A project must not result in the permanent net increase of any commercial vessels (e.g., a ferry terminal).

8) Removal of any trees equal to or greater than 3 inches in diameter shall only occur between October 1st and March 31st.

This authorization expires on June 1, 2028. You must commence or have under contract to commence the work authorized herein by June 1, 2028, and complete the work by June 1, 2029. If not, you must contact this office to determine the need for further authorization and we recommend you contact us *before* the work authorized herein expires. Please contact us immediately if you change the plans or construction methods for work within our jurisdiction as we must approve any changes before you undertake them. Performing work within our jurisdiction that is not specifically authorized by this determination or failing to comply with the special condition(s) provided above or all the terms and conditions of the GPs may subject you to the enforcement provisions of our regulations.

This authorization does not obviate the need to obtain other federal, state, or local authorizations required by law. Applicants are responsible for applying for and obtaining any other approvals.

Your project is located within, or may affect resources within, the coastal zone. The Massachusetts Office of Coastal Zone Management (CZM) has already determined that no further Federal Consistency Review is required.

We continually strive to improve our customer service. To better serve you, we would appreciate your completing our Customer Service Survey located at https://regulatory.ops.usace.army.mil/customer-service-survey.

Please contact Maninder Singh of my staff at (978) 318-8967 or (978)-257-6884 or Maninder.Singh@usace.army.mil if you have any questions.

Sincerely,

Paul Maniccia

Paul Maniccia
Chief, Massachusetts Section
Regulatory Division

Enclosures

Cc:
Sarah Read, Wright Pierce; sarah.read@wright-pierce.com
Amy Coppers, Wright Pierce; amy.coppers@wright-pierce.com
Ed Reiner, U.S. EPA, Region 1, Boston, MA, reiner.ed@epa.gov
Rachel Croy, U.S. EPA, Region 1, Boston, MA, croy.rachel@epa.gov

Kaitlyn Shaw, NMFS, Gloucester, MA; kaitlyn.shaw@noaa.gov
Alexa Cacacie, NMFS, Gloucester, MA; alexa.cacacie@noaa.gov
Sean Duffey, Coastal Zone Management, Boston, MA, sean.duffey@mass.gov
Patrice Bordonaro, Coastal Zone Management, Boston, MA,
patrice.bordonaro@mass.gov
Jill Provencal, DEP NERO, Wetland and Waterways, Wilmington, MA;
jill.provencal@state.ma.us
Kristin Divris, DEP NERO, Wetland and Waterways, Wilmington, MA;
Kristin.Divris@mass.gov
Philip Di Pietro, DEP NERO, Wetland and Waterways, Wilmington, MA;
philip.dipietro@mass.gov
David Robinson, MA Board of Underwater Archaeological Resources (BUAR);
david.s.robinson@mass.gov
Haverhill Conservation Commission; conservation@cityofhaverhill.com
rmoore@cityofhaverhill.com

LAST SAVED BY: SHAWN.CANTWELL 6/21/2024 8:38 AM

NOTES

1. EXISTING CONDITIONS INFORMATION SHOWN ON THIS PLAN ARE BASED ON THE OCTOBER 3 & 4, 2016 LAND SURVEY PERFORMED BY LIGHTHOUSE LAND SURVEYING, LLC, OF TAUNTON, MASSACHUSETTS.
2. PROPERTY LINES SHOWN ON THIS PLAN ARE BASED ON THE FINAL SURVEY PLAN CREATED BY THE MORIN-CAMERON GROUP, INC., OF HAVERILL, MASSACHUSETTS.
3. HORIZONTAL DATUM REFERENCES NAD83, MASSACHUSETTS STATE PLANE, MAINLAND ZONE, US-FOOT. VERTICAL DATUM REFERENCES NAVD88.
4. MEAN HIGH WATER MARK LOCATIONS SHOWN ON THE FOLLOWING PLANS WERE OBTAINED FROM NOAA TIDAL STATION 8440889, RIVERSIDE, MERRIMACK RIVER.
5. 100-YEAR FLOOD ZONE INFORMATION SHOWN ON THE FOLLOWING PLANS WAS OBTAINED FROM FEMA'S ONLINE MAPPING SERVICE. FIRM PANELS INCLUDE 25009C0092F, 25009C0093F & 25009C0094F, DATED FEBUARY 2, 2024.

AREA CALCULATIONS

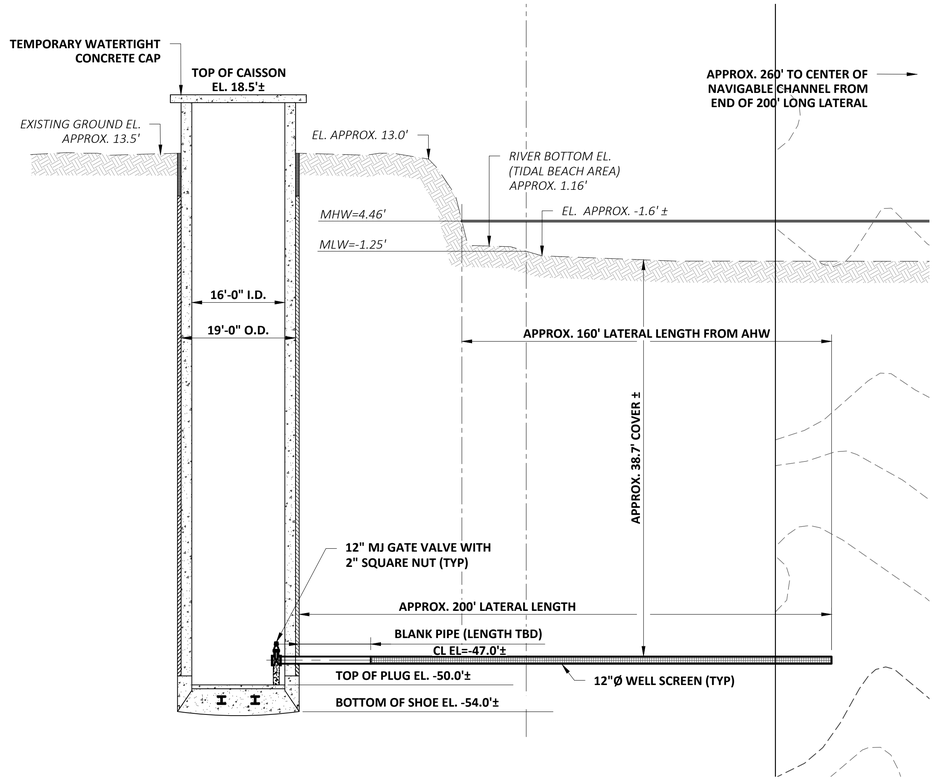
1.	PROPOSED ZONE 1/ 250' WELL SCREEN BUFFER	132,994 SF	(3.05 ACRES)
2.	AREA ALTERED WITHIN RIVER FRONT AREA	30,000 SF	(23.8% OF PARCEL)

LEGEND

- PROPERTY LINE TO BE AQUIRED
- PROPERTY/ROW LINE
- FLOOD ZONE (AE)
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- BUILDING
- PROPOSED BUILDING
- GRAVEL ACCESS ROAD
- FENCE
- MEAN HIGH WATER
- MB — MAILBOX
- MW/TW — MONITORING WELL/TEST WELL

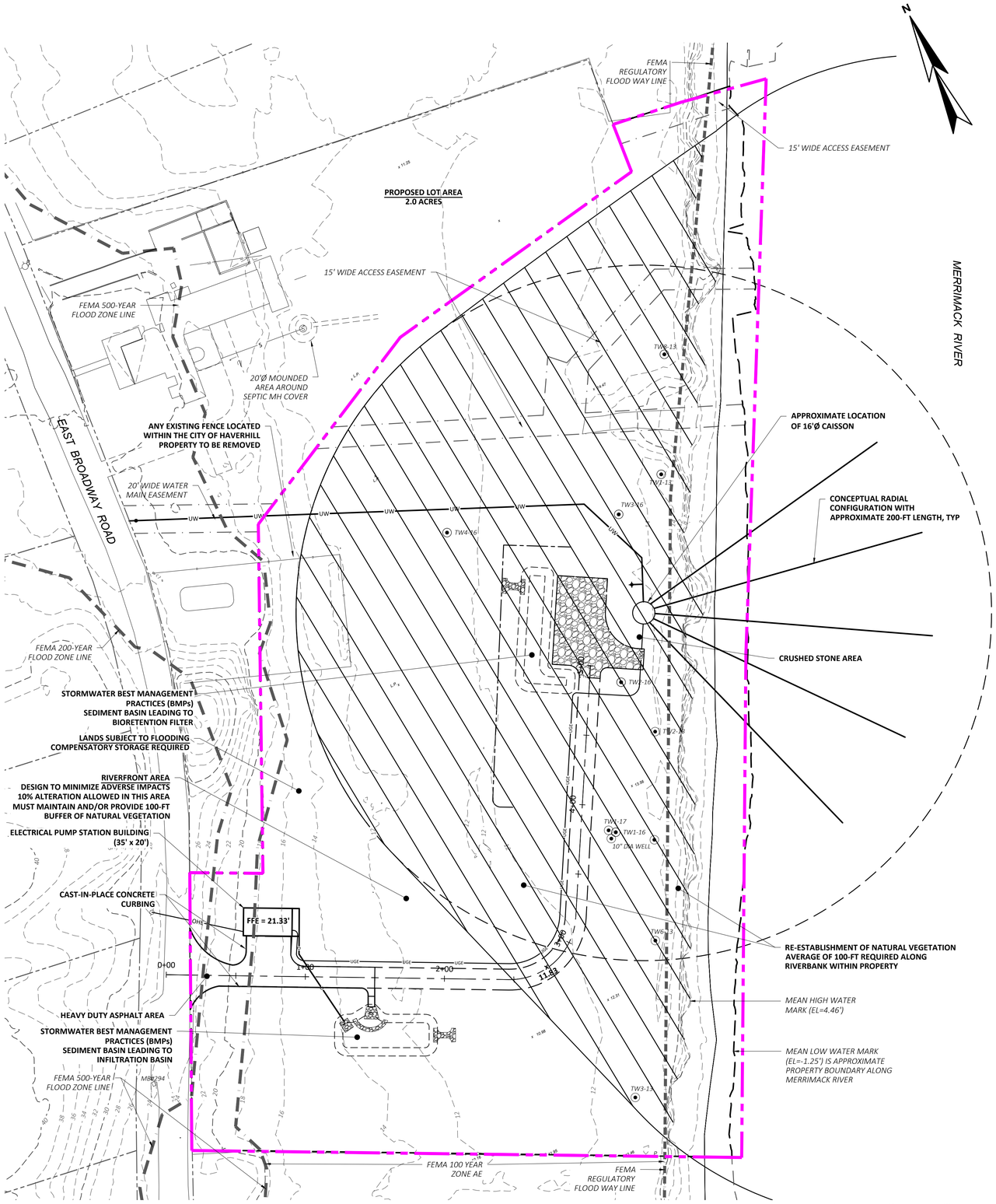
ABBREVIATIONS

&	AND
Ø, DIA	DIAMETER
#, NO	NUMBER
DWG	DRAWING
EL	ELEVATION
FT	FEET
IN	INCH
MIN	MINIMUM
MW	MONITORING WELL
NAD	NORTH AMERICAN DATUM
NAVD	NORTH AMERICAN VERTICAL DATUM
NTS	NOT TO SCALE
TYP	TYPICAL



SECTION VIEW - CONCRETE CAISSON

SCALE: 'NTS'



SITE PLAN

SCALE: 1"=40'

NO	DATE	APPD	REVISIONS

PROJECT NO: 13582
DESIGNED:
CAD COORD: W.EDGAR
CAD: W.EDGAR
CHECKED:
DATE:
APPROVED:
DATE: 5/15/2024
SUBMISSION:

WRIGHT-PIERCE
978.416.8000 | www.wright-pierce.com
600 FEDERAL STREET, SUITE 2151, ANDOVER, MA 01810

CITY OF HAVERHILL, MASSACHUSETTS
MERRIMACK RIVER RADIAL COLLECTOR WELL - 309 E. BROADWAY
HAVERHILL, MASSACHUSETTS

RADIAL COLLECTOR WELL SITE PLAN

DRAWING C-2

J:\ENG\MA\HAVERHILL\13582-MERRIMACKRVRANGLEWELLTESTING\13582-RADIAL COLLECTOR DESIGN\DRAWINGS\CIV\13582-CS-SITEPLAN.DWG | SitePlan | 1:2.5849 | ---- | 6/21/2024 8:43:18 AM | SHAWN.CANTWELL

US Army Corps of Engineers ®
New England District

WORK-START NOTIFICATION FORM

(Minimum Notice: Two weeks before work begins)

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EMAIL TO: Maninder.Singh@usace.army.mil and cenae-r@usace.army.mil; or

MAIL TO: Maninder Singh
Regulatory Division
U.S. Army Corps of Engineers, New England District
696 Virginia Road
Concord, Massachusetts 01742-2751

Also, if the work is in the Massachusetts Coastal Zone (https://www.mass.gov/service-details/czm-regions-coastal-communities-and-coastal-zone-boundary), email this form to Sean.Duffey@mass.gov and patrice.bordonaro@mass.gov or mail it to: The Massachusetts Office of Coastal Zone Management, Project Review Coordinator, Suite 800, 251 Causeway Street, Boston, MA 02114.

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Corps of Engineers Permit No. **NAE-2024-01874** was issued to **Robert E. Ward**. This work is located in the Merrimack River, 309 East Broadway, Haverhill, Massachusetts 01830 at approximate site coordinates 42.77604, -71.02614 and authorized to temporarily impact 700 square feet of wetlands and install structures below a Section 10 river for the purposes of constructing a radial collector well. The collector radial well will be installed in an upland area adjacent to the Merrimack River. 5 well laterals will be hydraulically jacked from the well. The well laterals will be approximately 40 to 50 feet below the river bottom and will be 200 to 250 feet long. Approximately 30 cubic yards of sediment is anticipated to be removed from the installation of the well laterals. There will be temporary impacts of 700 square feet in wetlands due to the monitoring well installation. Monitoring wells will also be installed in the river. The wells will be driven 40 to 70 feet below the substrate. The monitoring wells will not be accessible within or above the river after construction. Once the casing is driven to depth within the substrate, a transducer will be installed with a communication cable that runs to shore. The wells will then be plugged at the river bottom.

The people (e.g., contractor) listed below will do the work, and they understand the permit's conditions and limitations.

PLEASE PRINT OR TYPE

Name of Person/Firm: _____

Business Address: _____

_____

_____

Phone & email: (___) _____ (___) _____ _____

Proposed Work Dates: **Start:** _____ **Finish:** _____

Permittee/Agent Signature: _____ **Date:** _____

Printed Name: _____ **Title:** _____

Date Permit Issued: _____ **Date Permit Expires:** _____

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FOR USE BY THE CORPS OF ENGINEERS

PM: _____ **Submittals Required:** _____

Inspection Recommendation: _____

US Army Corps of Engineers ®
New England District

COMPLIANCE CERTIFICATION FORM

(Minimum Notice: Permittee must sign and return notification within one month of the completion of work.)

Permit Number: NAE-2024-01874

Project Manager: Maninder Singh

Name of Permittee: Robert E. Ward

Permit Issuance Date: October 28, 2024

Please sign this certification and return it to our office upon completion of the activity.

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* E-MAIL TO: cenae-r-ma@usace.army.mil; & Maninder.singh@usace.army.mil *
*
* MAIL TO: Massachusetts Section *
* Regulatory Division *
* U.S. Army Corps of Engineers, New England District *
* 696 Virginia Road *
* Concord, MA 01742-2751 *
********** *

Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit was completed in accordance with the terms and conditions of the above referenced permit, and any required mitigation was completed in accordance with the permit conditions.

_____ _____
Signature of Permittee Date

_____ _____
Printed Name Date of Work Completion

( ) _____ ( ) _____
Telephone Number Telephone Number