ENGINEERING, INC

Professional Engineering Solutions

LETTER OF TRANSMITTAL

TO: Rebecca Gendreau,

PROJ. NO: 287-2248-L

DATE:

10/29/20

Conservation Agent

PROJECT:

Notice of Intent; DEP File # 300-1077

Town of Sturbridge 301 Main Street

LOCATION:

76 S Shore Drive

Sturbridge, MA 01566

N: 76

Parcel ID: 598-/0 0615/-076

508-347-2506

SENT BY WAY OF THE FOLLOWING: Hand Delivery

COPIES	DATE	ITEM DESCRIPTION
1	10/29/20	McClure Response to MassDEP comments date 10/20/20
1	10/29/20	"Notice of Intent Plan" 76 S Shore Drive, Sturbridge, MA revise date 10/29/20
		prepared by McClure Engineering, Inc. (Size 24x36)

REMARKS:

Dear Commission Members,

Enclosed are the above listed documents pertaining to the Notice of Intent for 76 S Shore Drive, Sturbridge, MA. Please call me with any questions or comments at (508) 248-2005.

Sincerely,

Peter Engle, P.E.

Senior Engineer

cc: MassDEP, Wetlands Permitting Office, 8 New Bond Street, Worcester, MA 01606 Peter Mimeault, 76 S Shore Drive, Sturbridge, MA 01566



ENGINEERING, INC

Professional Engineering Solutions

October 29, 2020

Rebecca Gendreau, Conservation Agent Town of Sturbridge 301 Main Street Sturbridge, MA 01566

RE: Notice of Intent (NOI) Application – Peter Mimeault 76 S Shore Drive, Sturbridge, MA; Parcel ID: 598-/0 0615/-076

Dear Commission Members:

On behalf of the project Applicant, Peter Mimeault, McClure Engineering, Inc. (McClure) is providing the following responses to MassDEP comments received via email on 10/20/20 for the Notice of Intent filed for 76 S Shore Drive, Sturbridge, MA (Property).

1. It is unclear if all work is proposed within the applicant's property. Permanent alterations to a Great Pond are likely to require Chapter 91 review and permitting, separate from the NOI review process.

McClure Response: Work is proposed on the applicant's property, however also within the mean annual high water level of South Pond. A Chapter 91 WW04 Determination of Applicability has been submitted to DEP by the applicant, file number 20-WW04-0008-APP. The appropriate permitting as deemed necessary by DEP's response to the Determination will be sought by the Applicant. (See attached)

2. A response must be received from NHESP prior to the closing of the hearing for this NOI.

McClure Response: A response from NHESP has been received with the determination that the project will not result in a prohibited take of state-listed species and will not adversely affect the resource area habitat of state-protected rare wildlife species. (See attached)

3. It appears that a deck and stairs have already been constructed within the Bank of the pond. Has the construction of these structures contributed to the instability of the Bank (soil instability from construction, increased runoff velocity from solid surfaces, shading of vegetation, etc.).

McClure Response: Both the deck (aluminum dock section) and wooden stairs are laid on the existing ground. Neither had earth work associated with its installation, therefore there would be no soil instability associated with the construction. It does not appear that either have contributed to the instability of the bank. There would be minimal runoff increase from these surfaces, and there is no visual evidence on site that runoff from above the bank is contributing to the instability. The existing slope of the bank, lack of vegetation on the face of the bank, and the existence of a deteriorating and decomposing stump within the bank appear to be the main factors contributing to the instability and failure of the bank.

4. The applicant should explain why the drinking water well can't be accessed safely by the same route that the residents have historically used to access their dock and waterfront, and the role of the proposed deck in the maintenance and access of the drinking water well.

McClure Response: As depicted on the plan, the mean annual high water mark of the pond requires accessing the drilled well head through 3.5 feet of water for a distance of approximately 30 feet from the existing access path along the southern property line during times of high water. The stairs from the house to the dug irrigation well provides access to the water line and electrical line from the drilled well within the dug irrigation well. There would be no access to this well without these stairs. The stairs

from the dug well to the drilled well provides easier, safer access to the drilled well head and the bank for future maintenance. The access way was recommended by the well pump maintenance company for future maintenance of the wells.

5. Bioengineering stabilization techniques are preferable to solid revetments. Native species suitable for Bank stabilization are recommended for the coir log plantings, rather than the Hostas proposed on the site plan.

McClure Response: A solid revetment stabilization technique was proposed instead of a bioengineering technique to help eliminate the need for future maintenance related to the deterioration of bioengineering stabilization techniques. A coir log revetment for example would eventually deteriorate (typical 2 to 5 year life span) and the stability of the bank would again need to be revisited, especially with the constant change in water elevations associated with the pond. The placement of the stone revetment also reduces the amount of fill, grading, and site work necessary to stabilize the bank versus bioengineering methods. The proposed plantings within the proposed coil logs above the stone revetment has been revised to a mix of Winterberry and Sweet Pepperbush.

6. The applicant should describe how the proposed work meets the Performance Standards for work in Bank (310 CMR 10.54(4)), Land Under Waterbody (310 CMR 10.56(4)), and Bordering Land Subject to Flooding (310 CMR 10.57(4)(a)).

McClure Response: See below for descriptions on how the project meets the performance standards of the work in Bank, Land Under Waterbody, and Bordering Land Subject to Flooding.

- Work shall not impair the physical stability of the bank.
 - The proposed work will not impair the physical stability of the bank as the project as proposed is meant to repair the current instability of the bank and provide stability in order to protect the existing water supply to the existing home.
- Work shall not impair the water carrying capacity within the bank.

The proposed stabilization work on the bank will result in a 2.4 cubic yard fill of flood storage capacity on the property associated with South Pond. This loss is flood storage capacity will be offset by a 2.4 cubic yard compensatory flood storage area on the property, therefore, the water carrying capacity within the bank will be unaffected.

- Work shall not impair the ground water and surface water quality.
 - The proposed work is meant to improve stability of the bank to reduce and/or minimize future erosion and sedimentation of the bank into South Pond. Therefore the surface water quality from the work area is meant to be improved by the proposed work. The project will not affect ground water quality.
- Work shall not impair the capacity of the bank to provide habitat functions, protect wildlife.

 The property and the proposed work is located within NHESP estimated habitat of rare wildlife and priority habitat of rare species. A response from NHESP has been received with the determination that the project will not result in a prohibited take of state-listed species and will not adversely affect the resource area habitat of state-protected rare wildlife species. (See attached)
- Compensatory storage shall be provided.

The proposed stabilization work on the bank will result in a 2.4 cubic yard fill of flood storage capacity on the property associated with South Pond. This loss is flood storage capacity will be offset by a 2.4 cubic yard compensatory flood storage area on the property. The proposed compensatory storage equals the lost storage volume of flood water at each foot of elevation up to and including the 100 year flood elevation which would be displaced by the proposed work.

7. A Wildlife Habitat Evaluation may be required for work in Bank.

McClure Response: A response from NHESP has been received with the determination that the project will not result in a prohibited take of state-listed species and will not adversely affect the resource area habitat of state-protected rare wildlife species. (See attached)

8. Compensatory flood storage is not required under 10.57(4)(a)(1) unless there will be a resultant increase in horizontal or vertical extent of flooding. Compensatory flood storage shall not be constructed in such a way as to increase the instability of the Bank.

McClure Response: Compensatory flood storage has been provided to offset the minimal fill and loss of flood storage produced from the proposed bank stabilization. The compensatory flood storage is proposed in a location on the property away from the bank and in a manner that will not create instability of the bank (slopes less than 3:1, coir log installation at the top of slope in the compensatory storage area, mulch and seed stabilization).

The following revised documents are enclosed for your review in support of this project:

• "Notice of Intent Plan" 76 S Shore Drive, Sturbridge, MA revise date 10-29-20 prepared by McClure Engineering, Inc. (Size 24x36)

If you have any questions regarding the enclosed subject matter, please contact me at (508) 248-2005.

Sincerely

Peter C. Engle, P.E.

cc: MassDEP, Wetlands Permitting Office, 8 New Bond Street, Worcester, MA 01606 Peter Mimeault, 76 S Shore Drive, Sturbridge, MA 01566

Department of Environmental Protection

One Winter Street Boston, MA 02108 • 617-292-5500

Charles D. Baker Governor

Karyn E. Polito Lieutenant Governor Kathleen A. Theoharides
Secretary

Martin Suuberg Commissioner

WW04 - Determination of Applicability Application

Permittee Information

Name: PETER MIMEAULT Phone: (508) 347-7606 Address: 76 SO.SHORE DR

STURBRIDGE, MA 01566

Application Submitter Information

Name: PETER MIMEAULT Phone: (508) 347-7606 Address: 76 SO.SHORE DR

STURBRIDGE, MA 01566

Location Information

Quaqumquasit (South Pond)

76 SOUTH SHORE DRIVE STURBRIDGE, MA 01566

Latitude: 42.162537 Longitude: -72.076561

General Information

Please provide a detailed description of the proposed project or subject of the request and identify existing and/or proposed fill, structures, dredging, uses(s)

The overall project involves bank stabilization and water supply protection for a previously developed single family home dating back to 1970. The home is on a small. irregular shaped lot and situated approximately 27 feet from the waters edge. The initial dug artesian well is still used as an irrigation well and a newer drilled metal casing well is located very near to the shoreline and offset from the onsite septic system by approximately 100 feet. The drinking water supply lines are below a bank parallel to the lake and erosion of the bank has created concern of water line freeze. Stone armoring and access stairs are proposed to limit erosion and adhere with current town board of health regulations and best practices for maintenance.

Property Information

Property Owner Name

Description of project location

Peter Mimeault

The subject site is referenced as Sturbridge Assessor's Parcel I.D. 598-/0 0615/-076 and lies on both the eastern and western side of South Shore Drive, approximately 1,300 feet off of Allen Road.

Additional Information

Does the property have any Chapter 91 authorizations (e.g. license/permit/Legislative Act)?

Νo

Attestation

I hereby certify that upon submittal of this application to the Department of Environmental Protection, I will submit copies of it to all persons identified in 310 CMR 9.13(1)(a), and have attached their names and addresses to this application

I understand that the Department of Environmental Protection may, at its discretion, require that a public hearing be held and that a newspaper notice be published at my expense regarding this request

Yes

Yes

Special Fee Provision

Exemption

Exclusion (special agreement or policy)

Substitution (ASP/IRP)

Double Fee for Enforcement

Hardship payment extension request

Documents

Documents

Required Documents:

- 1. Chapter 91 Plans
- 2. Locus Map
- 3. Notification List

Attachments

Name	Description	Туре	Latest Updated
201013McClure-76-2020-rev 1-pg1of2-pdf.pdf	bank stabilization plan pg1 rev1	Chapter 91 Plans	10/14/2020
201013McClure-76-2020-rev 1-pg2of2-pdf.pdf	well access plan pg2 rev1	Chapter 91 Plans	10/14/2020
01_Ltr to ConCom_Plan Rev Narrative_FNL_10-13-20.pdf	narrative letter	Cover Letter and Narrative	10/14/2020
Locus_76SSD-pdf.pdf	USGS Locus map	Locus Map	10/14/2020
Abutters-76SSD-pdf.pdf	abutters list	Notification List	10/14/2020

Application Contributors

Name	Organization Name	Contact Person	Telephone #	Contact Type	Email
PETER, MIMEAULT	n/a	n/a	(508) 347-7606	Application Prepared By	petermimeault@hotmail. com

Fee Info

Amount: \$ 100.00

Status: Paid

Description: WW04 Application Fees

Payment Date: 14-Oct-2020

Certification Information

Individual
PETER MIMEAULT
76 SO.SHORE DR
STURBRIDGE, MA 01566
United States

Telephone #: (508) 347-7606 E-mail: petermimeault@hotmail.com

I understand that any person may submit written comments to the Department of Environmental Protection on this request within twenty-one (21) days of the date the request is received by the Department or the newspaper notification date, if applicable. I hereby certify under the pains and penalties of perjury that the foregoing statements, information and accompanying material are true and complete to the best of my knowledge.



DIVISION OF FISHERIES & WILDLIFE

1 Rabbit Hill Road, Westborough, MA 01581 p: (508) 389-6300 | f: (508) 389-7890

MASS.GOV/MASSWILDLIFE

October 05, 2020

Sturbridge Conservation Commission 308 Main St Sturbridge MA 01566

Peter Mimeault 76 South Shore Dr Sturbringe MA 01566

RE: Applicant: Peter Mimeault

Project Location: 76 South Shore Drive

Project Description: Bank stabilization & water supply protection

DEP Wetlands File No.: Unavailable NHESP File No.: 20-39600

Dear Commissioners & Applicant:

The Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife (the "Division") received a Notice of Intent with site plans (dated 9/2/20) in compliance with the rare wildlife species section of the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.58(4)(b), 10.59). The Division also received the MESA Review Checklist and supporting documentation for review pursuant to the MA Endangered Species Act Regulations (321 CMR 10.18).

WETLANDS PROTECTION ACT (WPA)

Based on a review of the information that was provided and the information that is currently contained in our database, the Division has determined that this project, as currently proposed, **will not adversely affect** the actual Resource Area Habitat of state-protected rare wildlife species. Therefore, it is our opinion that this project meets the state-listed species performance standard for the issuance of an Order of Conditions.

Please note that this determination addresses only the matter of **rare** wildlife habitat and does not pertain to other wildlife habitat issues that may be pertinent to the proposed project.

MASSACHUSETTS ENDANGERED SPECIES ACT (MESA)

Based on a review of the information that was provided and the information that is currently contained in our database, the Division has determined that this project, as currently proposed, **will not result in a prohibited Take** of state-listed rare species. This determination is a final decision of the Division of Fisheries and Wildlife pursuant to 321 CMR 10.18. Any changes to the proposed project or any additional work beyond that shown on the site plans may require an additional filing with the Division pursuant to the MESA. This project may be subject to further review if no physical work is commenced within five years from the date of issuance of this determination, or if there is a change to the project.

Please note that this determination addresses only the matter of state-listed species and their habitats. If you have any questions regarding this letter please contact Melany Cheeseman, Endangered Species Review Assistant, at (508) 389-6357.

Sincerely,

Everose Schlüter, Ph.D. Assistant Director

cc: MA DEP Central Region

Evan Schlit

Peter Engle, McClure Engineering, LLC