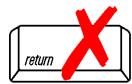




Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
WPA Emergency Certification Form
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
 Shutesbury General Wetlands Protection Bylaw

A. Emergency Information

Important:
 When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Issuance From: Shutesbury Conservation Commission
Issuing Authority
 1. Site Location: 64 Cushman Road, Shutesbury, DEP File 286-0288

2 Reason for Emergency:
Artesian well is uncontrolled and flooding front yard

3. Applicant to perform work: Dandelion Energy

4. Public agency to perform work or public agency ordering the work to be performed:
Emergency determined by Shutesbury Emergency Management Director

| | | |
|------------------------|----------------|-------------------|
| 5. Date of Site Visit: | Start Date: | End Date*: |
| <u>10/6/23</u> | <u>10/6/23</u> | <u>10/31/2023</u> |

* no later than 30 days from start date or 60 days in the case of an Immediate Response Action approved by DEP to address an oil/hazardous material release.

6. Work to be allowed*:
Addition of dry well to drain excess water from the artesian well; additional silt fences to be installed; shallow trench and 4' x 4' drywell; location of drywell is outside of the 50' Buffer Zone but is in inner Riverfront Area.

* May not include work beyond that necessary to abate the emergency.



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B. Signatures. See attached Certificate of Vote for digital signatures.

Certified to be an Emergency by this Issuing Authority.

Shutesbury Conservation Commission, approval by Chair

Signatures:

Miriam DeFant

Signature

Miriam DeFant

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

A copy of this form must be provided to the appropriate DEP Regional Office.

C. General Conditions

1. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, shall be deemed cause to revoke or modify this Emergency Certification or subject to enforcement action.
2. This Emergency Certification does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of property rights.
3. This Emergency Certification does not relieve the applicant or any other person of the necessity of complying with all other applicable federal, state, or local statutes, ordinances, bylaws, or regulations.
4. Any work conducted beyond that described above, and any work conducted beyond that necessary to abate the emergency, shall require the filing of a Notice of Intent.
5. The Agent or members of the Conservation Commission and the Department of Environmental Protection shall have the right to enter and inspect the area subject to this Emergency Certification at reasonable hours to evaluate compliance with this Certification, and may require the submittal of any data deemed necessary by the Conservation Commission or the Department for that evaluation.
6. This Emergency Certification shall apply to any contractor or any other person performing work authorized under this Certification.
7. No work may be authorized beyond 30 days from the date of this certification without written approval of the Department.



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D. Special Conditions

See attached Special Conditions.

E. Appeals

The Department may, on its own motion or at the request of any person, review: an emergency certification issued by a conservation commission and any work permitted thereunder; a denial by a conservation commission of a request for emergency certification; or the failure by a conservation commission to act within 24 hours of a request for emergency certification. Such review shall not operate to stay the work permitted by the emergency certification unless the Department specifically so orders. The Department's review shall be conducted within seven days of: issuance by a conservation commission of the emergency certification; denial by a conservation commission of the emergency certification; or failure by a conservation commission to act within 24 hours of a request for emergency certification. If certification was improperly granted, or the work allowed thereunder is excessive or not required to protect the health and safety of citizens of the Commonwealth, the Department may revoke the emergency certification, condition the work permitted thereunder, or take such other action as it deems appropriate.

CERTIFICATE OF VOTE AUTHORIZING SIGNATURES PURSUANT TO M.G.L. c.110G

On May 14, 2020, the Shutesbury Conservation Commission met in open session through publicly accessible video-conference software, pursuant to the "Order Suspending Certain Provisions of the Open Meeting Law, G.L. c. 30A, §20," issued by Governor Charles D. Baker on March 12, 2020. At this duly held meeting, the following action was taken:

Motion: Shutesbury Conservation Commission hereby recognizes and accepts the provisions of M.G.L. c.110G regarding electronic signatures and that its members will henceforth execute documents either with electronic signatures or with wet ink signatures and that both will carry the same legal weight and effect. Motion was seconded.

Roll Call vote:

Commissioner Penny Jaques: aye
Commissioner Russ Mizula: aye
Commissioner Robin Harrington: aye
Commissioner Liam Cregan: aye
Vote was Unanimous

The above is a true and accurate account of the proceedings of the Conservation Commission.

Title/Signature: Alice P. Jaques Date: 20 May, 2020

Commonwealth of Massachusetts
County of Franklin, ss.

On this 20 of May, 2020, before me, personally appeared Alice P. Jaques, Chair of said Conservation Commission, as aforesaid, and proved to me through satisfactory evidence of identification, which was Personally Known to me to be the person whose name is signed on the preceding document, and acknowledged to me that she signed it voluntarily for its stated purpose on behalf of the Town of Shutesbury.

Susan Mosher
Notary Public

My Commission Expires: 4/1/2022

Certified by Town/City Clerk:

Susan Mosher Date: May 20, 2020
Susan Mosher



SHUTESBURY CONSERVATION COMMISSION
SPECIAL CONDITIONS FOR EMERGENCY CERTIFICATION
64 CUSHMAN ROAD

Landowner: Nate and Anna Heard

Applicant: Dandelion Energy

Date: October 6, 2023

Findings:

F1. The Applicant proposes to install a trenched drywell to accept drainage from an uncontrolled artesian well that resulted from installation of a geothermal energy system. Repeated efforts to grout the well have been unsuccessful. Flooding constitutes a hazard to the home.

F3. The proposed measures are changes to the Amended Order of Conditions, DEP File Number 286-0288, issued 5/26/23.

F4. The Shutesbury Emergency Management Director has determined the current state is an imminent threat to public health and safety due to the uncontrolled flooding in proximity to the home.

Special Conditions

1. The proposed additional work shall be subject to all applicable Special Conditions in the Amended Order of Conditions for 64 Cushman Road, DEP File # 286-0288.
2. No tree removals are approved with this Emergency Certification. Existing vegetation shall be preserved to the greatest extent practicable.
3. Additional erosion controls shall be installed downgradient of the drywell area.
4. The Applicant shall submit photographs of the erosion controls and receive an email confirmation from the Commission before the commencement of any other work.
5. The area of the drywell shall be mulched with wood chips upon completion of the work to prevent erosion.
6. The Applicant shall contact the Commission to conduct a monitoring site visit upon the completion of the emergency work.

Permission for Site Visit given by: Anna Heard

(Owner, applicant, other)

Date permission given: 11/6/23 Permission received by: M. DeFanmt

**Shutesbury Conservation Commission
Site Visit Summary**

Observation Date: 11/6/23 **Time:** 11:00 am

Project Address/Location: 64 Cushman Road

Applicant(s): Nate and Anna Heard; Dandelion Energy

DEP/Permit File#: 286-0288

Type of Project: geothermal energy system

Attended:

Commissioners: M. DeFan t

Applicant(s)/Owner/Representative: _____

Abutters/Others (require landowner's permission): _____

Purpose of Visit: (check all apply)

- | | |
|---|--|
| <input type="checkbox"/> Building Permit Application | <input type="checkbox"/> Verify erosion controls |
| <input type="checkbox"/> To assess whether RDA or NOI is required | <input checked="" type="checkbox"/> Emergency Certificate |
| <input type="checkbox"/> As part of RDA meeting | <input type="checkbox"/> Monitor Order of Conditions |
| <input type="checkbox"/> As part of NOI hearing | <input type="checkbox"/> Request to amend Order of Conditions |
| <input type="checkbox"/> Verify staked boundaries | <input type="checkbox"/> Request for Certificate of Compliance |
| <input type="checkbox"/> Pre-construction site visit | <input type="checkbox"/> Work done without permit |

Other (describe): _____

Type of Resource Areas/Buffer Zones: (list)

Geothermal well has resulted in an Artesian well conditions; area around well is saturated; contractor reports that grouting has been unsuccessful; well is under pressure and leak is not under control; Landowner showed area for proposed drywell which is more than 50' upgradient from then nearest wetland; there appears to be no other suitable location; ground disturbance will be temporary and water is clean. Silt fences are in disrepair.

Recommendations:

Issue EC. Advise contractor about silt fences.

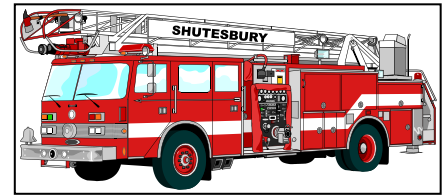
Prepared by: Miriam DeFant, Commissioner
Name Title

Note: Consider relevant aspects or features such as natural or piped drainage or obvious pollution, topography, alternative locations, existing vegetation, signs of wildlife, vernal pools, rare species habitat, proximity to water bodies or drainage areas, landmarks, recent or historical disturbances, adjacent land use. Very information presented, identify problems and potential solutions.

Site visit Preamble: Pursuant to the MA Open Meeting Law, the Commission performs site visits only for the purposes of observing conditions, collecting information, and providing guidance to applicants. Decisions, approvals, and denials can be made only by the Commission at a properly advertised public meeting or hearing. Site visit discussions with Commissioners should be kept to a minimum and should in no way be construed to result in final decisions of any kind.



Shutesbury
Fire Department
P.O. Box 295
42 Leverett Road
Shutesbury, MA 01072
(413) 259-1211
E-mail firedept@shutesbury.org



Fire Chief
Leonard T. Czerwonka

October 5, 2023

To Whom it may concern:

October 4th I received a phone call from Dandelion Energy stating they are installing a Geothermal well at 64 Cushman Rd, and encountered a problem that requires an emergency permit. The emergency permit is needed to fix the flooding water problem that they had encountered. After visiting the job sight that Wednesday, the foreman showed me that an Artesian well has formed at the drill hole resulting in unstoppable water. If left unchecked will flood the driveway and possibly the house. In order to minimize damage to the area the best course of action suggested by the site engineer is, to install a dry well around the closed loop geothermal well to prevent flooding to the existing area.

Leonard Czerwonka
Shutesbury Fire Chief,
Emergency Management Director.

DANDELION

To whom it may concern,

Enclosed is the proposed site plan for the installation of a dry well at 64 Cushman Rd, Amherst, MA 01002, USA.

This dry well installation is being requested to resolve on site issues that arose when an artesian well was created during the installation of the second closed loop geothermal well. We are also proposing additional silt fences around the new excavation area.

Dry Well Construction

During the installation of the close loop geothermal well the crew made several attempts to cap and grout the existing bore location. An artesian well was created due to high hydraulic pressure in the well and our field crews were unable to cap or grout the bore hole using standard methods. This resulted in excess ground water coming out of the well and flooding the work area and surrounding yard. To prevent flooding to the existing home, and to reduce erosion from the front yard into the wetlands we would like to install a dry well.

Our current plan consists of excavating a shallow trench from the geothermal well to the dry well location. We will install a 3" pipe from the geothermal well casing to the dry well location to direct the flow of water away from the home.

When both the drain and dry well have been constructed the trench will be backfilled with the original soil.

Erosion Control Changes

We are proposing the installation of a silt fence around the 4'x4' dry well pit, along with installation along the trench for the drywall piping. This will be installed before work is started on the dry well installation and will be removed when the work is completed to allow for the installation of the geothermal trench later this month.

The existing silt fence will be maintained during this process and any silt fence damaged during this process will be repaired once the dry well specific silt fence is removed.

Please let me know if the new site plan is acceptable. You can reach me at my cell phone number or email address below.

Hannah Kowalski

Permit and Inspection Coordinator

HKowalski@DandelionEnergy.com

(860) 301-7100

64 Cushman Road, Shutesbury, MA: Ground-source Heat Pump Site Plan

Prepared by: Nate Heard, Updated by Bob Braunlich October 6th 2023

