Commonwealth of Massachusetts
Executive Office of Environmental Affairs ■ MEPA Office

ENF Environmental Notification Form

For Office Use Only
Executive Office of Environmental Affairs
EOEA No.: 13632
MEPA Analyst: Bill Gage
Phone: 617-626-1025

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Plympton Street Cranberry Bog, John Melville		
Street: Off Plympton Street		
Municipality: Middleborough	Watershed: Taunton	
Universal Tranverse Mercator Coordinates:	Latitude: 41 55 23 Longitude: -70 49 49	
Estimated commencement date: In progress per Administrative Consent Order w/ Penalties	Estimated completion date:	
Approximate cost: $80 K	Status of project design: 50 %complete	
Proponent: John Melville		
Street: 8 Pine Street		
Municipality: Middleborough	State: MA	Zip Code: 02346
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Andrew Ashley		
Firm/Agency: Wetlands Consulting, Inc.	Street: P.O Box 11, 6 Crossroad Drive	
Municipality: East Freetown	State: MA	Zip Code: 02717
Phone: 508-997-0268	Fax: 508-947-7968	E-mail: 50099@wetcsi.com

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)? ☒Yes ☐No

Has this project been filed with MEPA before? ☐Yes (EOEA No._____) ☒No

Has any project on this site been filed with MEPA before? ☐Yes (EOEA No._____) ☒No

Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting: No

a Single EIR? (see 301 CMR 11.06(8))	☐Yes	☒No
a Special Review Procedure? (see 301CMR 11.09)	☐Yes	☒No
a Waiver of mandatory EIR? (see 301 CMR 11.11)	☒Yes	☐No
a Phase I Waiver? (see 301 CMR 11.11)	☐Yes	☒No

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres):

Are you requesting coordinated review with any other federal, state, regional, or local agency? ☐Yes(Specify_____) ☒No

List Local or Federal Permits and Approvals: ACOP-SE-05-F001

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- ☐ Land
- ☒ Water
- ☐ Energy
- ☐ ACEC
- ☐ Rare Species
- ☐ Wastewater
- ☐ Air
- ☐ Regulations
- ☒ Wetlands, Waterways, & Tidelands
- ☐ Transportation
- ☐ Solid & Hazardous Waste
- ☐ Historical & Archaeological Resources

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage			
New acres of land altered			
Acres of impervious area			
Square feet of new bordering vegetated wetlands alteration			
Square feet of new other wetland alteration			
Acres of new non-water dependent use of tidelands or waterways			
STRUCTURES			
Gross square footage			
Number of housing units			
Maximum height (in feet)			
TRANSPORTATION			
Vehicle trips per day			
Parking spaces			
WATER/WASTEWATER			
Gallons/day (GPD) of water use			
GPD water withdrawal			
GPD wastewater generation/ treatment			
Length of water/sewer mains (in miles)			

State Permits & Approvals

- ☐ Order of Conditions
- ☐ Superseding Order of Conditions
- ☐ Chapter 91 License
- ☐ 401 Water Quality Certification
- ☐ MHD or MDC Access Permit
- ☐ Water Management Act Permit
- ☐ New Source Approval
- ☐ DEP or MWRA Sewer Connection/ Extension Permit
- ☐ Other Permits (*including Legislative Approvals*) – Specify:

CONSERVATION LAND: Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

☐Yes (Specify_____) ☒No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

☐Yes (Specify_____) ☒No

RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

☐Yes (Specify_____) ☒No

HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

☐Yes (Specify_____) ☒No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

☐Yes (Specify_____) ☒No

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?

☐Yes (Specify_____) ☒No

PROJECT DESCRIPTION: The project description should include **(a)** a description of the project site, **(b)** a description of both on-site and off-site alternatives and the impacts associated with each alternative, and **(c)** potential on-site and off-site mitigation measures for each alternative (*You may attach one additional page, if necessary.*)

The proposed work is part of a mitigation effort intended to rectify impacts incurred during Mr. Melville's expansion of his farm. Due to the nature of this filing, being part of an enforcement action, an alternatives analysis for the initial impact is moot.

The applicant has altered 4.42 Acres of wetland resources in the process of constructing cranberry bogs. The mitigation plan proposes to restore and replicate these wetland areas in the ratios described and required under Section V, # 4 of the Consent Order. The mitigation areas as proposed will total 5.37 Acres of Wooded Swamp and Shrub Swamp.

An Erosion Control Plan has been developed for use during and following construction of this site. A copy of this plan is included with this application.

This project is water dependent, and will require access to freshwater wetlands and the excavation of material in the areas designated for mitigation. The included plan displays details of all procedures necessary for the total wetland mitigation.

This project incorporates design features intended to protect the wetlands. Measures have been utilized to limit potential environmental impacts while still providing the required mitigation.

The areas that have been designated for wetland replication lie adjacent to undisturbed areas, or areas to be restored. The existing soil conditions in these locations will properly promote wetland vegetation, and are best suitable for mitigation. A formal soil investigation has been done in the areas proposed as mitigation. Soil investigation field forms have been included with this application.

As part of the consent order, Mr. Melville, ceased operations on two sections of cranberry bog (Bog #2 and Bog #6), both of which are to be restored to Bordering Vegetated Wetland. The abandonment of productive bog has serious economic impact on the farmer. Bog # 2 is a large section of hybrid cranberry vines that are costly to plant, but reap heavy yields once the vines mature.

It is for this reason that the impacts for a third bog (Bog #3) are proposed to be mitigated for by Replication. The loss of Bog #3 would reduce the farm operations gross annual income by an estimated $50,000. The financial burden incurred by the farm operations lack of compliance with the Wetland regulations is substantial. The production of Bog #3 is vital to the economic survival of this agricultural operation. Clearly the financial stability of the farm plays a role in the proponents ability to move forward and implement the proposed mitigation efforts successfully. The mitigation plan, as submitted, calls for a replication/impact ratio greater than 1.5/1 (Impact of 192,706 s.f., less Restoration of 110,961 s.f. equals 81745 * 1.5 = 122,618 s.f.

The proposed 123,039 s.f. replication area is designed to ensure that a wetland hydrology shall

maintain itself without outside intervention. Efforts were redoubled to ascertain the correct depth to the seasonal high water table as it occurs during the onset of the growing season as well as the typical depth to water during the remaining portions of the growing season.

The replication area is designed to become saturated to the surface and even inundated during peak flow periods of Whetstone Brook. The replication area shall intercept the water table in the vicinity of Test Pit #8 providing an inflow to the created wetland even during the drier months of the year.

The proponent possesses knowledge and equipment that are useful to the mitigation effort. Modern cranberry production is essentially managing a wetland system. Cranberry bogs built from upland require that an impervious layer be constructed on top of which the cranberry bog is built. The construction of the replication area is similar to the process of creating a working cranberry bog using Best Management Practices.

The constructed and restored wetlands will total 234,000 s.f ,as mitigation for the 192,706 s.f. of Bordering Vegetated Wetlands lost. Please find attached: Erosion and Sedimentation Control Plan, revised drawings, and a Work Sequence Narrative.

The applicant is proposing the construction of Pond 3 to aid in the flood water supply for cranberry harvest. The farm utilizes surface water from Whetstone Brook and Pond 1 which is fed by the brook. Pond 1 is located centrally on the farm. Two irrigation pumps, each with a capacity of 1900 gallons per minute gpm, draw from this reservoir. One pump services the bog sections to the West (Bogs 1, 3, 4, and 5), the second pump services the east half of the farm (Bogs 7, 8, 9, 10, and 11).

Pond 1 also serves as the source for flood waters for the west half of the farm. A lift pump in the northwest corner of the reservoir is used for flooding. The capacity of this pump is 5200 gpm. Flood water is returned to Pond 1 after each use. Stormwater and excess irrigation water from the west half of the farm is also directed to Pond 1 through the ditch drainage system.

The east portion of the farm is flooded by gravity directly from Whetstone Brook. The water is returned to the brook after each use.

Pond 2 was created for supplementing the supply of flood water for the harvest, trash and winter floods on the west half of the pond. Pond 3 is proposed for the same purpose. Water shall be withdrawn from Ponds 2 and 3 with a portable Crisafully™ lift pump with a 5200 gpm capacity. Water from Ponds 2 and 3 will be moved and reused from section to section down gradient until it is discharged into Pond 1.

Est. Firm Yields			
Surface	47900	12200	21100
Avg Depth	16	16	16
Volume	**766400**	**195200**	**337600**
vol ac/ft	17.59412	4.481175	7.75023

Pond 1 is replenished by the perennial flow of Whetstone Brook. Ponds 2 and 3 are recharged by ground water and, to a limited extent, storm water flows.