

November 3, 2022

Ms. Miriam DeFant, Chair  
Shutesbury Conservation Commission  
Town Hall  
P.O. Box 276  
1 Cooleyville Road  
Shutesbury, MA 01072

Re: Abbreviated Notice of Resource Area Delineation (ANRAD)  
66 Leverett Road  
Shutesbury, MA  
(Parcel ID O-32)  
DEP File # 286-0297  
Wetland Consultant Peer Review

Dear Ms. DeFant and Commissioners:

Per request of the Shutesbury Conservation Commission, Stockman Associates LLC has performed a wetland consultant peer review of the Abbreviated Notice of Resource Area Delineation (ANRAD) submitted by Fuss and O'Neill on behalf of their client, the Town of Shutesbury, for the review of delineated resource area boundaries located within the property at 66 Leverett Road in Shutesbury, MA (Parcel ID O-31). Based on the submitted WPA Form 4A prepared by Fuss and O'Neill dated September 30, 2022, 1,921 linear feet of Bordering Vegetated Wetland (BVW) boundary and 445 linear feet of Isolated Vegetated Wetland boundary were reviewed. At the Commission's request and with landowner permission, Stockman Associates LLC also evaluated the potential connection between resource areas within an abutting property (#62 Leverett Road) and the Isolated Vegetated Wetland (IVW 2) depicted on the ANRAD "Wetland Delineation Overview" figure. The peer review also included an evaluation of the entire subject property to determine the presence of any additional unmapped, protected wetland resource areas.

### **Materials Reviewed**

- ANRAD WPA Form 4A, "Massachusetts Inland Resource Area Delineation Report", and other supporting documents within the September 2022 submittal prepared by Fuss and O'Neill.
- October 10, 2022 Applicant Response to Initial DEP Comments
- Revised October 10, 2022 ANRAD cover letter,

### **Site Visit**

- 1) On October 28, 2022 Ms. Emily Stockman (Stockman Associates LLC) conducted a site visit to review the subject property presented under the September 2022 ANRAD filing.

Ms. April Doroski (Fuss & O'Neill), Ms. Miriam DeFant (SCC), Ms. Mary Anne Antonellis (Library Director), and Ms. Penny Jaques (Library Building Committee) were also present during the site visit. Ms. Nancy Dihlmann (abutter) was present for the portion of the site visit within #62 Leverett Road.

### **Review Comments**

- 1) Based on information provided by Fuss and O'Neill during the site visit, delineation flagging depicted on ANRAD Figure 3. "Wetland Flag Locations" was located via submeter GPS. The Commission should note that Figures 1 through 3 accompanying the ANRAD include a disclaimer stating *"This map is not the product of Professional Land Surveyor. It was created by Fuss & O'Neill, Inc. for general reference, information, planning and guidance use, and is not a legally authoritative source as to location of natural or manmade features. Proper interpretation of this map may require the assistance of appropriate professional services. Fuss & O'Neill makes no warranty, express or implied, related to the spatial accuracy, reliability, completeness or currentness of this map."*

The Commission has the authority to require supporting documentation regarding the GPS accuracy, or the submittal of a site plan prepared by a Professional Land Surveyor to ensure that the final plans of record accurately depict the site and the resource area boundaries.

#### BVW 1

- 2) Stockman Associates LLC concurs with the boundary of BVW 1 depicted by flags 1A-100 through and including 1A-133.

#### BVW 3

- 3) Stockman Associates LLC concurs with the boundary of BVW 3 depicted by flags 3A-100 through and including 3A-118 and 3B-100 through and including 3B-133 with the exception of the boundary along flags 3A-114 and 3A-115. This portion of the boundary appears to have been altered by historic fill and dumping (observed buried debris, surface litter and breakout fill).

Stockman Associates LLC recommends that the BVW boundary along flags 3A-114 and 3A-115 be revisited using the criteria required under 310 CMR 10.55(2)(c)3. and the delineation methodology presented in "Section 5 Difficult Situations" of the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-12-1. Vicksburg, MS: U.S. Army Engineer Research and Development Center (Version 2.0), US Army Corps of Engineers, 2012.

Based on reviewed historical aeriels, alterations to the area appear to have occurred after 1972. Unpermitted fill and dumping within protected BVW is a violation of the MA Wetlands Protection Act (MA WPA). It is our understanding that the Shutesbury Conservation Commission is currently working with the landowner to address the violation. A BVW restoration plan is anticipated.

Based on the observed depth of fill, further boundary assessment within the area will likely require the use of machinery. The Commission may consider allowing the assessment of

the BVW boundary to occur during approved restoration efforts. If so, this should be reflected in the findings of the ORAD.

#### IVW 2

- 4) Subsequent to the original delineation by Fuss & O'Neill, landowner permission was obtained to assess the abutting property to the east (#62 Leverett Road). Based on an observed wetland plant community, hydric soils, and hydrologic connections, IVW 2 depicted on the ANRAD Figures 2 and 3 is a Bordering Vegetated Wetland. The delineated wetland system continues to the east within the abutting property and borders on a drop inlet connected to an open water BVW (small, anthropogenic depression/impoundment). The open water BVW within #62 Leverett Road is connected to an intermittent stream and additional BVW to the east via an overflow outlet pipe and culvert.
- 5) Soils to the west of IVW (BVW) 2 flags 2A-101 through 2A-104 were examined. The presence of fill (sand, gravel) and buried A horizons (Ab) indicate disturbed soils. Depth of examination was limited by the use of hand tools (soil auger). Subsequent to the site review, Stockman Associates evaluated historic/past aeriels and reporting pertaining to the site.
  - a. Based on a review of historic aeriels from 1938 through 1962, a portion of the area to the west of the IVW (BVW) 2 was altered prior to the "Hatch" Act, Chapter 220, Acts of 1965, adopted March 25, 1965 and the MA Wetlands Protection Act (MA WPA) of 1972.
  - b. Stockman Associates reviewed groundwater data obtained from the 2011 Cold Spring Environmental Consulting, Inc. (CSEC) report. Boring GP-3 is located between the floor drain line and easterly access way (approximately 50-LF west of the property line). Groundwater data for GP-3 was reported at 1.85-FT during December 22, 2011. Groundwater reporting for GP-3 indicates that wetland hydrology was not present at the time of the CSEC assessment.
- 6) Buried hydric soils, mounded fill piles and an access way were observed east of the CSEC assessment area (proximal to flags 2A-101 through 2A-104). Based on a review of historic aeriels the access way was established circa 1987. Based on the presence of more recent anthropogenic debris within the dump piles and the age of saplings and shrubs, these impacts appear to post-date the "Hatch" Act and the MA WPA.
  - a. Stockman Associates LLC recommends that the westerly boundary of IVW (BVW) 2 (proximal to the access way, dump piles, and the wood line) be revisited.
  - b. The westerly boundary should be revisited using the criteria required under 310 CMR 10.55(2)(c)3. and the delineation methodology presented in "Section 5 Difficult Situations" of the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-12-1. Vicksburg, MS: U.S. Army Engineer Research and Development Center (Version 2.0), US Army Corps of Engineers, 2012.

#### IVW 4

- 7) Overall, Stockman Associates LLC concurs with the boundary of IVW 4 depicted by flags 4A-100 through and including 4A-109. The IVW appears anthropogenic in origin, resultant of historic grading and the establishment of an access way (rutting). It should be noted that based on observed vegetation, the overall IVW boundary encapsulates areas of internal, isolated uplands. A more detailed delineation of the area would likely reduce the overall square footage of the IVW.

#### SUBJECT PROPERTY REVIEW

- 8) A disturbed landscape was observed within the woodlands to the south of the open field. Excavated channels (linear), berms, piles, and shallow A horizons underlaid by C-horizons indicate past earthmoving. These observations are further supported by reviewed aerial imagery from 1968 through 2009.
- 9) An area of inundation was observed within the access way south of IVW 4. Portions of the inundated area were dominated by a wetland indicator species (Cranberry, *Vaccinium oxycoccos*). Proximal areas contained upland plant species as well as areas void of vegetation (exposed soils). Additional photographic documentation of inundation was obtained by the Shutesbury Conservation Commission during a September 7, 2022 site visit. [Note: Inundation was observed within the compacted access way and after a recent rain event, therefore, other indicators of hydrology should be assessed to confirm the presents of wetland hydrology.]
  - a. Stockman Associates LLC observed hydric soils proximal to rutting and a population of Cranberry, *Vaccinium oxycoccos* (OBL). Based on a preliminary assessment the area presented as too small to meet the 1,000-SF size criteria for protection under the Town of Shutesbury General Wetlands Protection Bylaw as an isolated wetland. However, given the disturbed natural of the area, a more in-depth assessment is recommended. The Commission should consider a request that the area be formally assessed and delineated by the applicant to confirm the square footage of the isolated wetland and assess jurisdiction under the local bylaw.
- 10) The current ANRAD submittal defines the review area as the entire parcel. The USDA NRCS published soil survey indicates a mapped hydric soil towards the rear of the property. This area was evaluated during the site visit. The majority of the observed soils were not consistent with the mapped hydric soil type, Pillsbury loam. Hydric soils were observed along the southwesterly property line. The property line was approximated by Fuss & O'Neill via GPS. The forested BVW (Hemlock, *Tsuga canadensis*, Red Maple, *Acer rubrum*, Yellow Birch, *Betula alleghaniensis*) observed within this area appeared predominately located within the abutting property. [Note: There is a limitation of scale associated with the USDA NRCS soil survey maps. Mapped soils units may contain inclusions of other soil series, both hydric and nonhydric.]

For approval of all BVW boundaries under the ANRAD further assessment of the BVW boundary and property line is recommended. Alternatively, the subject area under the ANRAD may be redefined by the applicant to exclude the southerly portion of the property.

- 11) Based on the field review of the westerly property line, a large BVW is located on the abutting property. The boundary of the BVW meanders east and west proximal to the

approximated property line. The 100-FT Buffer Zone associated with the BVW projects into the subject property.

The Commission and applicant should be aware that 100-FT Buffer Zone is protected as a resource area under the local Town of Shutesbury General Wetlands Protection Bylaw. Currently, the ANRAD is requesting approval of BVW and IVW boundaries. The Commission should consider a finding that 100-FT Buffer Zone exists on the property; the boundary of which has not been depicted on the plans, reviewed, or approved.

I trust that the above comments will assist the Commission in their review of the previously referenced ANRAD application. Please do not hesitate to contact me with any questions.

Sincerely,



Emily Stockman, M.S., P.W.S.  
Senior Scientist/Principal  
Stockman Associates LLC

