

November 19, 2021

Ms. Penny Jaques, Interim Clerk
Shutesbury Conservation Commission
Town Hall
P.O. Box 276
1 Cooleyville Road
Shutesbury, MA 01072

Re: RESUBMITTED Abbreviated Notice of Resource Area Delineation (ANRAD)
Montague Road Project
Carver Road West
Shutesbury, MA
(Parcel ID ZD-37)
DEP File # 286-0285
Wetland Consultant Peer Review

Dear Ms. Jaques and Commissioners:

Per request, Stockman Associates LLC has performed a wetland consultant peer review of the RESUBMITTED Abbreviated Notice of Resource Area Delineation (ANRAD) prepared by TRC Companies on behalf of their client, W.D. Cowsls, Inc., for the review of delineated resource area boundaries located within an expanded specific study area of the property located off Montague Road (Parcel ID ZD-37) in Shutesbury, MA. The boundaries of Bordering Vegetated Wetlands (BVW), isolated wetlands and inland Bank have been reviewed. Additionally, the indicated expanded study area was reviewed to confirm that there are no additional protected wetland resource areas. Stockman Associates LLC has also reviewed past peer review comment letters and the latest revised ANRAD site plans (November 12, 2021).

Materials Reviewed

- WPA Form4A, supporting documents and site plans prepared by TRC Companies under the RESUBMITTED September 2021 ANRAD application.
- Site Plan "*Delineated Resources Map Montague Road Project Franklin County, MA*" prepared by TRC Companies (Pages 1 through 38) REVISION date November 12, 2021

Site Visit

- On October 19th and 26th 2021 a site visit was made by Ms. Emily Stockman (Stockman Associates LLC) and Mr. Greg Russo (TRC) to review delineated resource areas and the specified expanded study site.

Review Comments

- 1) Based on the field adjustments made by TRC during the October 2021 site visits, Stockman Associates concurs with the boundaries reviewed in the field. It is our opinion that portions of

the delineated wetland boundaries were conservative (included portions of upland). While this approach in delineation ensures that wetlands are fully incorporated within flagged boundaries, the approach can lead to the overestimation of wetland impacts and challenges with any subsequent wetland replication. Once an approval ORAD is issued the boundaries will be valid for three (3) years. Any adjustment to the boundaries would require an Amended Order.

- 2) Stockman Associates LLC concurs that wetlands W-GR-16 and W-GR-17 are isolated wetlands.
- 3) Based on a review of previous peer review comments, revised site plans and site observations the following site plan revisions are recommended:
 - a. Labeled points for flags 13 and 14 appear out of sequence (Page 5).
 - b. Old flag 13 (W-MBF-10) should be removed from Page 11.
 - c. Data plot W-MJR-06 UPL-1 should be removed from Page 9.
 - d. Per the July 2020 peer review comments (comment #5), flag 10 (W-GR-2) should be relocated to the east (Page 12). As previously stated, *"...The easterly adjustment in the vicinity of the old well (flag 10) is not depicted on the revised map."*
 - e. There are two flag 31s (W-GR-1) plotted and labeled on Page 13.
 - f. Per the July 2020 peer review comments (comment # 3), the BVW W-GR-1 should be adjusted to depict the BVW extending to the property line between flags 15 and 9. (Page 14) As previously stated, *"During the June 1, 2020 site visit, the easterly review of W-GR-1 ended with flag 15. In the field, it appeared that the adjustment of flag 15 to the east would extend to the project area boundary, with the area to the south included within the wetland..."*
 - g. Per the April 2020 peer review comments, centerline flagging of stream S1 should be removed from the site plans. Centerline is not a jurisdictional boundary under the MA WPA and Shutesbury General Wetlands Protection Bylaw. The Bank of stream S1 has not been delineated or reviewed.
 - h. Stream S2 Bank flag 122.1 has been added but the plotting does not correspond with observations made in the field (Page 35).
 - i. The plotting for stream S2 Bank flags 122 and 21 does not correspond with observations made in the field (Page 35).
 - j. Stream S2 Bank flag 27.1 was placed in the field by TRC during the October 26, 2021. Flag 27.1 has not been included on the revised site plans (Page 37).
 - k. For clarity, the applicant and Commission should consider a different line type/flag point/polygon for isolated versus bordering wetlands.
 - l. Based on discussion with TRC during the October 19, 2021 site, the wetland boundary for W-GR-2 demarcated by flags 155-164 and 105-164 was not reviewed for approval. This portion of the W-GR-2 wetland boundary should be removed from the final site plans.

- m. Based on discussion with TRC during the October 2021 site visits, flag series located outside of the project area which do not project a 100-FT Buffer Zone into the project area were not reviewed for approval. These flags and associated boundaries should be removed from the final site plans.
- 4) The applicant should respond to the previous 2020 peer review comment that, based on dominant wetland plant species and observed wetland hydrology there is a forested wetland along the boundary of the study area depicted on Pages 4 and 5. Where accessible, the wetland boundary should be delineated as the associated 100-FT Buffer Zone projects into the study area. Was TRC able to access this area to ascertain whether there is additional Buffer Zone along the northerly study area boundary?
- 5) As previously stated in the April 2020 peer review comments, it is recommended that data be collected and submitted to the Conservation Commission and MA NHESP for vernal pool certification of the identified TRC vernal pools (TRC VP-1, VP-2, VP-3, VP-4, and VP-5).
- 6) On the north side of Carver Road, the revised plan set depicts wetland W-MBF-10. Throughout the review process, the original wetlands systems (W-GR-4, W-MJR-5 and W-MJR-6) were determined to be connected, thus changing the entire westerly BVW to W-MBF-10. The Commission should be aware that, based on previous field observations, wetlands have been relabeled on the plan set, but not all flagging has been updated in the field (e.g. some flags remained labeled W-GR-4). Similarly, on south side of Carver Road W-GR-2, W-GR-11 and W-MBF-12 are now connected.
- 7) The Commission should be aware that due to boundary changes made in the field by TRC during the review process, several wetlands systems have repeated flagging numbers. For example, on Page 16 wetland W-MBF-10 repeats the flags 1 through 12 in two areas along the boundary. Then on Page 17 and Page 11 flags 1 through 12 are repeated for a third time. This is primarily the result of the discovered connection between previously unconnected wetland systems.
- 8) The Commission should be aware that the expanded delineation of wetlands to the south of Carver Road has also resulted in repeated flagging numbers. For example, on Page 16 W-MBF-10 is now shown to the north and south of Carver Road with repeated 100-series flag numbers (south and north).
- 9) The Commission should be aware that sections of the revised and extended flagging are no longer consecutively numbered. Therefore, review in the field is challenging (if not impossible) without the site plan, which may add complications to further applications.
 - a. As previously stated by the Commission, the ORAD should include a condition stating: if a Notice of Intent is submitted citing the boundaries approved under this ORAD, then current flags shall be renumbered and replaced at the exact geo-referenced location depicted on the final plan in consecutive numeric order.
- 10) The delineation report states that handheld GPS data was post-processed to achieve sub-meter accuracy. The Commission may request supporting documentation regarding the GPS accuracy to ensure that all plans accurately describe the site and the resource area boundaries. Inaccuracies with sub-meter GPS mapping have presented issues with previous projects.
- 11) The Town of Shutesbury, Massachusetts Regulations under the General Wetlands Protection Bylaw define an isolated wetland (SECTION III.E.) as "*Isolated Wetland*" shall be defined as

any area of one thousand square feet or more which meets all standards for vegetated wetlands under state law or regulations, except for the "bordering" requirement."

- a. Based on the April 8, 2020 and October 2021 site visits, wetlands W-GR-3, W-GR-16 and W-G-17 are isolated. As stated in the April 2020 peer review comments, square footage should be assessed to determine whether the 1,000-SF criteria for an isolated wetland under the General Wetlands Protection Bylaw has been met.
- 12) Calculations should be provided to determine whether any isolated wetlands also meet the criteria for protection as Isolated Land Subject to Flooding under the MA WPA.
- 13) Per the Town of Shutesbury, Massachusetts General Wetlands Protection areas subject to protection under the bylaw include:
- a. any freshwater wetland, isolated wetland, marsh, wet meadow, bog or swamp; within 100 feet of any freshwater wetland, isolated wetland, marsh, wet meadow, bog or swamp;
 - b. any lake, river, pond or stream (whether surface or subsurface); within 100 feet of any lake, river, pond or stream (whether surface or subsurface); any land under said waters;
 - c. any land subject to flooding or inundation by groundwater, surface water, storm flowage, or within a 100-year flood plain.

For review and approval under the local bylaw, the site plans should be revised to depict the boundary of the resource areas stated above.

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

