

## APPENDIX 1

**Randall Road/Stow Holdings, LLC/Stow Acres Driving Range**

**Order of Resource Area Delineation**

**Massachusetts Wetlands Protection Act File #299-638**

**Town of Stow Wetlands Bylaw**

**Map R11/Parcel 25B-3**

**December 19, 2017**

The Stow Conservation Commission has reviewed and confirmed the accuracy of the resource areas shown on the "Resource Area Plan, S.C.C. Driving Range, Randall Road, Stow, Massachusetts prepared by Foresite Engineering, dated July 31, 2017, with a latest revision date of 12/11/17, except as noted and described below. Wetland resource area boundaries were originally flagged by Chuck Caron on June 19 and 20, 2017 and revised as a result of a site visit by the Stow Conservation Commission on December 9, 2017. The Commission makes the following findings as part of this Order of Resource Area Delineation:

1. The Commission has verified the wetland delineation on **only that portion of the site shown on the above-referenced plan**. Wetlands on the remaining portions of the parcel have not been delineated.

2. **Bordering Vegetated Wetland (BVW)** (state and local) – All flags were confirmed, as adjusted in the field and shown on the above-referenced plan.

3. **Bank** (state and local) – All flags were confirmed, as adjusted in the field and shown on the above-referenced plan. The bank borders on a long linear excavated channel leading to a man-made pond on the golf course and is a portion of Stream B identified below. Only the landward limit of resource areas is shown on the plan and Bank within the BVW may need to be delineated in the future to ensure compliance with performance standards.

4. **Land Under Water (LUW)** (state and local) - All flags were confirmed, as adjusted in the field and shown on the above-referenced plan. Only the landward limit of resource areas is shown on the plan and LUW within the BVW may need to be delineated in the future to ensure compliance with performance standards.

5. **Perennial Stream/Intermittent Stream** (state and local):

a. Current and historical USGS maps and aerial photographs of the site were examined in conjunction with the review of the status of two streams on the property. The current USGS map depicts two perennial streams on the subject property. These streams exit Cedar Pond and an associated wooded swamp which lies to the northwest of the site and travel through the subject site in a southerly and easterly direction. They then cross under Randall Road and flow toward the Assabet River.

i. Stream A is located on the southern edge of the driving range near the road.

ii. Stream B is a channel that was apparently excavated to convey water from Cedar Pond to a man-made golf course pond sometime between 1965 and 1971, based on

aerial photography. The stream runs along the north side of the driving range where it has pond-like characteristics and flows into the man-made golf course pond.

iii. Stream C is not mapped as perennial by USGS and exits the pond at a control structure, flowing south to where it joins with Stream A.

b. Historical maps suggest that there was, at one time, a single stream flowing from northwest to southeast through the property that was likely relocated in conjunction with construction of the driving range. The site hydrology has been significantly altered over time as a result of historical golf course activities, including at least two enforcement actions by the Stow Conservation Commission for work without permits. The record in conjunction with a prior delineation on this site in 2000 suggests that irrigation has occurred from the man-made golf course pond, which may affect the hydrology of the streams on the site.

c. The Wetlands Protection Act regulations state that a stream shown as perennial on the current USGS map is perennial. The regulations also provide a process for rebutting this presumption.

d. The applicant claims in the submittal that Stream A and Stream B on the site are intermittent and has submitted the following information in substantiation of that claim:

i. An affidavit from Scott P. Hayes attesting to his observations of the stream being dry on August 28-31, 2017.

ii. Two photographs, undated, purporting to show different views of the dry stream channel.

iii. Notes from a logbook dated August 28-31, 2017 documenting the conditions in the stream.

iv. Meteorological data for August 29-31, 2017 from Bedford, MA during a non-drought period.

e. Testimony was received at the public hearing from Peter Brown, representative of Stow Acres that no water withdraws (wells or surface withdrawals) are occurring from the vicinity of the areas that are the subject of this ANRAD, and that all irrigation withdrawals are from the Assabet River downgradient of the site.

f. The Commission finds based on a site visit and examination of the documentation submitted by the applicant that Stream A is intermittent, and that the applicant has overcome the presumption on the USGS maps by their submittal. The Commission finds that Stream B has the characteristics of a pond vs. a stream as described in the Wetland Protection Act Regulations and therefore there is no Riverfront Area to this waterbody. This "stream" was also not found to be perennial in an ORAD issued by the Commission in 2000.

6. **Buffer Area** (local only): The plan depicts the 100' buffer to wetlands and other resources, 200' buffer to ponds, as well as the 35' no disturb buffer. These areas are protected by the Stow Wetlands Protection Bylaw and Regulations. The plan should be revised to show the 200' pond buffer around the pond only, excluding the streams.