John P. Hayes III CSS, CWS,
33 Third Street Apt. 2
Dover, NH 03820
603-205-4396
johnphayes@comcast.net

2/25/13 **Job #13-006**
Kevin Roy
39 Knowles Drive
Barrington, NH 03825

Re: Wetland Delineation 39 and 42 Knowles Drive Barrington, NH 2/21/13

Dear Kevin:

This letter reports the completion of a wetland delineation conducted on the referenced property by John P. Hayes III on February 21, 2013. The site is located on the southwest side of Young road, and north of, and abutting Swains Pond in Barrington, NH. The purpose of the delineation is to determine the wetland setbacks for possible improvements on the property. The Parcels contains several structures,and is mostly open area. Flags A1 to A4, and flag A12 delineate the edge of Swains Pond. Flags A5 to A11 delineate a drainage swale that is juristictionally wet, with poorly drained soil.

The wetland delineation was conducted in accordance with the 1987 Army Corps of Engineers Wetlands Delineation Manual using the Routine Determinations Method, as required by the New Hampshire Department of Environmental Services Wetlands Bureau and the US Army Corps of Engineers. The following standards were used to determine jurisdiction under the manual and to classify the wetland systems on the site:

1) *Field Indicators for Identifying Hydric Soils in the United States* Version 7.0. 2010.

2) *Field Indicators for Identifying Hydric Soils in New England* New England Hydric Soils Technical Committee. April 2004. 3rd Edition. NEIWPCC Lowell, MA. .

3) *National List of Plant Species That Occur in Wetlands: 1988 New Hampshire.* United States Department of the Interior. Fish and Wildlife Service. NERC-88/18.29.

4) *Corps of Engineers Wetlands Delineation Manual,* January 1987. Wetlands Research Program Technical Report Y-87-1.

5) *Classification of Wetlands and Deepwater Habitats of the United States.* December 1979. US Department of the Interior. Fish and Wildlife Service. FWS/OBS-79/31.

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Wetland boundaries identified on the property are witnessed in the field with pink flagging tape, hung periodically on vegetation and wire flags, using an alpha-numeric system as follows:

A1 to A12 (stop)

It is strongly recommended that the flagged line(s) be survey located as soon as possible and depicted on a base plan.

According to the "Classification of Wetlands and Deepwater Habitats of the United States" (USFWS December 1979) the wetland area delineated by flags A5 to A11 would be classified as a Palustrine Emergent Persistent system that is seasonally flooded and/or saturated. (PEM1E). Flags A1 to A4, and A11 would be classified as a Palustrine Open Water system (POW).

The plant species in the wetlands includes but is not limited to: Red maple *(Acer rubrum),* Eastern Hemlock *(Tsuga canadensis),* Speckled alder *(Alnus rugosa),* Highbush blueberry *(Vaccinium corymbosum),* Silky dogwood *(Cormus amomum),* and Sensitive fern, *(Onoclea sensibilis)*

Please contact me if you have any questions or if I can be of further assistance.

Sincerely,

John P. Hayes III

John P. Hayes III CWS, CSS,

JOHN P. HAYES, III
No. 18

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