Beaver Brook Planning & Design, LLC
Wetland Delineation / Site Assessments
Septic System Design / Wetland Mitigation / Landscape Design

October 10, 2016

Mr. Robert Carey
Orr and Reno
45 South Main Street
Concord, NH 03301

Re: Heselton Property
County Road
Bradford, NH

Dear Mr. Carey,

At the request of your client, Churchill Heselton, I visited the above referenced site to determine if any jurisdictional wetlands are located on a 2.9 acre portion of his property and to examine the soils. The area being studied is located approximately 1900' up County Road from the Rowe Mountain Road intersection and 500' east of County Road. The parcel is identified by the Town of Bradford as Map 9, Lot 45 and is comprised of 123 acres. It is my understanding that Mr. Heselton proposes to operate an Automobile Recycling Yard in this area and my task is to document the existing site conditions as they may impact this proposed use.

I am a Certified Wetland Scientist as well as a licensed Septic System Designer and be engaged in this type of work for over 30 years. A copy of my resume is attached for you use.

On October 4, 2016 I visited the site to do my field investigations. The proposed area of development is surrounded by an existing stone wall and has a 3-8% (B) slope. The vegetation is dominantly upland with a canopy of white pine (Pinus strobis). A plant list of observed species and their "Wetland Indicator Status" is attached. Using a soil auger, I examined the soils in several locations within the stone walled area. The soils were found to be a loamy glacial till with high chroma colors and a seasonal high water table of between 24-36". The drainage class of the soil would be Moderately Well Drained, a group 3 soil. In reviewing the NRCS Soil Survey the proposed area of development is mapped as having soils in the both the Becket and Skerry Soil Series. These soils were both formed from the same loamy sediments and are underlain by a loamy, compacted and firm basal glacial till. Both soils are deep to bedrock and the only major difference

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being the drainage class. Becket soils have a drainage class of Well Drained meaning that the seasonal high water table is between 40 and 60" deep. The Skerry soils have a drainage class of Moderately Well Drained meaning that the seasonal high water table is between 15 and 40'. My field observations show that the soils found onsite better represent the Skerry Series based on the observed seasonal high water table.

As mentioned earlier, both soil types are derived from a loamy till with and dense basal (hardpan) soil horizon at approximately 24". The permeability rate of these soils is moderate in the topsoil and subsoil (0.6 inches/hour) and moderately slow to slow in the substratum (0.06 inches/0.6 hour). It should also be noted that the erosion potential for these soils is very low due to their composition and slope.

Based upon my field work I have determined that there are no jurisdictional wetland areas or surface waters within 100' of the proposed area of development. The Bradford Zoning Ordinance, Article VIII calls for wetland buffers up to 100' wide from certain wetland systems. In this case the area of development is outside any buffer requirements.

The soils found on this site are suitable for development based on their texture, slope and permeability rate. Soils with a loamy texture have the ability to bind certain nutrients and contaminants in the soil. In addition, the soil has a very slow permeability rate. While this should not be an issue since all liquids will drained from the vehicles on a concrete slab, should a small spill be noted, the cleanup will be minimized by the soil type. Conversely, should this type of operation be located in an area of sand and gavels which have little or no binding capacity and are highly permeable, the spill could become more spread out and require a more extensive clean up.

With regards to the proposed development, the site is in a very remote location and will be located approximately 500' off of County Road. A 6' stockade fence will be installed around the site and a gate will control access/egress. It is unlikely to be visible from County Road. In addition the nearest dwelling is approximately 1600' away from the site. An attachment showing the site in relation to nearby residences is attached to this report.

Based on my recent conversation with Mr. Heselton and his proposed business, I have prepared a concept layout of the site. The attached sketch shows a cross-section of a concrete slab that NHDES references on their website which specifically states that the slab shall have a curb around it; it shall be sloped to the center and shall not have any floor drains. Mr. Heselton has requested two of these, one under cover and one open to the elements. A copy of the sketch is included with this document.

The proposed structure will have no running water and an NHDES approved septic system will not be required as long as the building has no running water. The total disturbance to develop the site should not exceed 100,000 square feet. If this area is exceeded then an Alteration of Terrain Permit will be required by NHDES.

If I can be of further assistance on this project, please contact me at 496-9097 or beaverbrookpandd@gmail.com.

Sincerely,

Michael Seraikas
Certified Wetland Scientist #9
NHDES Designer #1114

Michael P. Seraikas
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Qualifications

- NHDES Designer of Subsurface Disposal Systems, License #1114
- NHDES Certified Wetland Scientist, License #9

Education

University of Massachusetts, Graduate School — 1999
Certificate : New England Regional Soil Scientist, Amherst, MA

New Hampshire Technical Institute — 1990
Certificate in Landscape Design, Concord, NH

University of Rhode Island — 1984
Certificate in Plant and Soil Science Kingston, RI

Bentley College — 1975-1978
BS Management Waltham, MA

Career History & Representative Projects

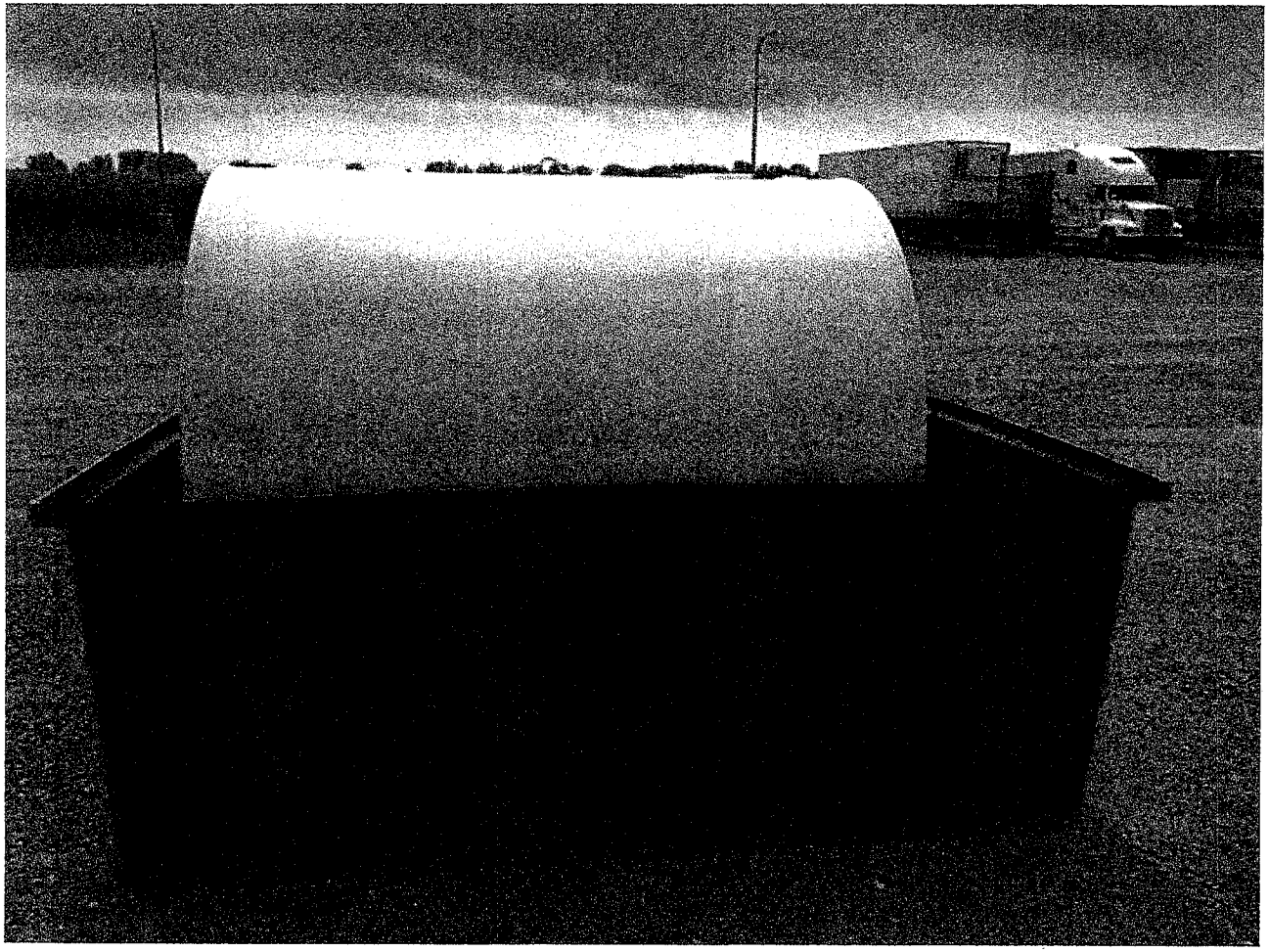
- Became licensed by the New Hampshire Department of Environmental Services to design septic systems in 1989. Since then I have prepared approximately 1,800 designs, and have worked with the contractors installing them by providing guidance, field changes, and as-built plans where required.
- Town of Webster, NH - Retained by the town to prepare wetlands permits for the town and to review septic system designs prior to submission to the New Hampshire Department of Environmental Services and field check constructed fields. Also worked with the town selectmen on rewriting town ordinances and worked with the town attorney on several environmental issues.
- Irongate Village, NH – Retained by client to design a more cost effective septic system than had previously been approved for a 14 unit, 55 plus community. Prepared the design utilizing a Clean Solution (pretreatment system) which allowed for a reduced sized leaching field. Also worked with contractor throughout the installation process and preformed sediment/erosion control monitoring for the entire site.
- Lake Umbagog National Wildlife Refuge, Wentworth Location NH – Retained by the refuge manager to design and permit the layout of a new canoe launch facility with a handicap accessible dock along the Magalloway River.
- Campers Inn, Chichester NH - As part of the construction of a new facility where impacts to wetlands. were permitted, prepared the mitigation package which included a 5 acre conservation easement and an area of upland converted to a wetland. Tasks included the preparation of the conservation easement baseline report, layout the proposed mitigation area, supervised the construction and re-vegetation of a 1 acre site.
- Sierra Suites Hotel, Woburn, Massachusetts – Retained by the site contractor to make inspections and prepare biweekly reports on all construction activity in or adjacent to wetland areas as required by the Woburn Conservation Commission. Tasks included the inspection of erosion control barriers, wetland delineation, preparation of wetland mitigation plans, and oversaw the construction of a mitigation area.

Career History & Representative Projects

- Plausawa Valley Country Club, Pembroke NH – Prepared re-vegetation plans, specifications, and wetland permit applications, for portions of the golf course where the Suncook River was eroding parts of three holes. This work as in partnership with an engineering firm who prepared drainage calculations and sized the rip rap for the shoreline. Also prepared a septic system design for the maintenance building.
- New Hampshire Department of Transportation, Concord NH – Delineated wetlands, prepared a report on existing site conditions and prepared a New Hampshire Wetlands Bureau Permit Application for a site located on the Second New Hampshire Turnpike. This application was for the restoration of two stone arch bridges, which had become structurally unsound because of erosion at the footings.
- Child and Family Services of New Hampshire, Concord NH – Delineated wetlands and prepared a permit application for the New Hampshire Wetlands Bureau as part of the proposed expansion of Camp Spaulding. Also prepared septic system designs for a new dining facility and new shower/restroom building. Prepared a design and obtained a wetlands permit for the expansion of an existing pond.
- Capital Center Project, Providence, Rhode Island – Employed by the General Contractor for a new train station, parking garage and tunnel. Job entailed stakeout, estimating quantities, and tracking daily work completed for inclusion into a cost report.

EXISTING PLANT LIST

COMMON NAME	BOTANICAL NAME	WET INDICATOR
WHITE PINE	PINUS STROBUS	FACU
HEMLOCK	TSUGA CANADENSIS	FACU
MOUNTAIN MAPLE	ACER SPICATUM	FACU
BEECH	FAGUS GRANDIFLORA	FACU
PARTRIDGE BERRY	MITCHELLA REPENS	FACU
GOLD THREAD	COPTIS TRIFOLIA	FACW
HAY SCENTED FERN	DENNSTAEDTIA PUNCTILOBULA	UPL
RED OAK	QUERCUS RUBRA	FACU
RED MAPLE	ACER RUBRUM	FAC
PAPER BIRCH	BETULA PAPYRIFERA	FACU
BRACKEN FERN	PTERIDIUM AQUILINIUM	FACU
PRINCESS PINE	LYCOPODIUM OBSCURUM	FACU
CLUB MOSS	LYCOPODIUM CLAVATUM	FAC
GROUND CEDAR	DIPHASIASTRUM DIGITATUM	FACU
SASPARILLA	ARALIA NUDICAULIS	FACU
DEWBERRY	RUBUS INVISUS	FACW
CINNAMON FERN	OSMUNDA CINNAMOMEA	FACW
BLACK SPRUCE	PICEA MARIANA	FACW
HAZELNUT	CORYLUS CORNUTA	FACU



ABOVE GROUND FUEL TANK - SECONDARY CONTAINMENT
(PICTURED AS HEAVY-DUTY PLASTIC, CAN BE STEEL OR CONCRETE)


Pearl Town
Forest
W Rd
W Rd
Bradford
ational Church
1832 feet
Rowe Mountain Rd
1616 feet
Max Recognition
Corporation
1836 feet
County Rd
1618 feet
Rowe Moun
2357 feet
Miller Plains Rd