

# ALTERATION OF TERRAIN AMENDMENT REQUEST FORM

Water Division/ Alteration of Terrain Bureau/ Land Resources Management  
Check the status of your application: [www.des.nh.gov/onestop](http://www.des.nh.gov/onestop)



RSA/ Rule: RSA 485-A:17/ Env-Wq 1500

Administrative Use Only	Administrative Use Only	Administrative Use Only	Permit Number
			Check No
			Amount
			Initials

<b>1. TYPE OF AMMENDMENT REQUEST</b>			
<input type="checkbox"/> CHANGE OF OWNERSHIP (NO. 6)	<input type="checkbox"/> TIME EXTENSION (NO. 7)	<input checked="" type="checkbox"/> PLAN CHANGE (NO. 8) * A FEE IS REQUIRED. SEE NO. 8A(3)	
<b>2. PROJECT INFORMATION</b>			
NAME OF PROJECT: Pike Brook Road			
TOWN/CITY: New London		COUNTY: Merrimack	STATE: NH ZIPCODE: 03257
TAX MAP: 135	BLOCK:	LOT: 8 & 10	UNIT:
<b>3. CURRENT PERMIT INFORMATION</b>			
PERMIT NO.: AoT-1072		CURRENT EXPIRATION DATE: 4/21/2021	
DES SIGNATURE NAME ON PERMIT: Bethann McCarthy			
CURRENT PERMIT HOLDER NAME: Pike Brook Road Rev Trust of 2014		CONTACT NAME: Ms. Jacqueline Hudkins, Trustee	
EMAIL: jackie@hudkinslaw.com	PHONE: 434-1770	FAX: 434-7226	
ADDRESS: P.O. Box 6630			
TOWN/CITY: Portsmouth		STATE: NH	ZIPCODE: 03802
<b>4. PROPERTY OWNER INFORMATION (IF DIFFERENT THAN CURRENT PERMITTEE)</b>			
NAME: Philip and Jill Miller			
EMAIL: philipmiller@comcast.net	PHONE:	PHONE:	
ADDRESS: P.O. Box 1280			
TOWN/CITY: New London		STATE: NH	ZIPCODE: 03257
<b>5. AGENT INFORMATION (IF APPLICABLE)</b>			
NAME: Peter J. Blakeman		COMPANY NAME: Blakeman Engineering, Inc.	
EMAIL: blakemaneng@tds.net	PHONE: 927-4163	FAX:	
ADDRESS: P.O. Box 4			
TOWN/CITY: North Sutton		STATE: NH	ZIPCODE: 03260

Ridge.Mauck@des.nh.gov or (603) 271-2147  
NHDES Alteration of Terrain Bureau, PO Box 95, Concord, NH 03303-0095  
[www.des.nh.gov](http://www.des.nh.gov)



**6. CHANGE OF OWNERSHIP – ENTER ONLY IF REQUESTING A CHANGE OF OWNERSHIP****6A. NEW PERMIT OWNER INFORMATION**

NAME:

EMAIL:

PHONE:

FAX:

ADDRESS:

TOWN/CITY:

STATE:

ZIPCODE:

**6B. NEW PERMIT OWNER SIGNATURE**

My signature below certifies that I have received a copy of the permit and all approved plans and specifications. In addition, I agree to comply with RSA 485-A:17, Env-Wq 1500, the permit, and all conditions contained in the permit, including the requirement for on-going inspection and maintenance of the stormwater management system(s).

NEW PERMITTEE:

PRINT NAME LEGIBLY:

DATE:

**6C. CURRENT OWNER SIGNATURE**

My signature below certifies that I have provided a copy of the permit and all approved plans and specifications to the new owner and am relinquishing all rights to the permit as originally issued.

CURRENT PERMITTEE:

PRINT NAME LEGIBLY:

DATE:

**7. TIME EXTENSION – ENTER ONLY IF REQUESTING A TIME EXTENSION****7A. REQUIREMENTS**

1. Has any earthwork been done to date?  Yes  No

If yes, attach an inspection report (see Env-Wq 1503.27(g)).

2. This request is being submitted no more than 90 days prior to the expiration date of the permit?  Yes  No

If no, this request does not qualify for an extension.

**7B. EXPLANATION OF WHY THE EXTENTION IS BEING SOUGHT****7C. PERMIT HOLDER SIGNATURE**

My signature below certifies that I have received a copy of this request and all supporting information that pertains to this request and the information is true, complete, and not misleading to my knowledge and belief. In addition, I understand that any permit amendment that is issued based on false, incomplete, or misleading information shall be subject to revocation.

PERMITTEE:

PRINT NAME LEGIBLY:

DATE:

8. PLAN CHANGE - ENTER ONLY IF REQUESTING A PLAN CHANGE

8A. REQUIREMENTS

1. Do the proposed changes meet the criteria outlined in Env-Wq 1503.22(c)?  Yes  No  
If no, then the changes do not qualify for an amendment and a new application will be required.

2. State the area of disturbance associated with the changes: 13,400 square feet.

3. Include the fee (\$50 + \$0.005 per square foot of disturbance associated with the requested plan change)

4. State what plan sheets the changes are reflected on (highlight the changes on these sheets):

5. Submit the revised plan sheets and revised calculations, as necessary.

6. Summary of Plan Change. Within the space provided below, please summarize the plan changes. **DO NOT** write, "See Attached". This amendment proposes to re-align Pike Brook Road northerly from a point (STA 6+01) within Map 135, Lot 10 (Pike Brook Road Revocable Trust of 2014 - the current permit holder), through Map 135, Lot 11 (Philip Miller) and terminating at a point (STA 9+58) within Map 136, Lot 7 (Carr Land Holdings LLC). This re-alignment will shift the road up to 80' further away from the shoreline of Lake Sunapee. Existing driveways will be extended to the new road surface and existing road surfaces to be abandoned will be restored as shown on the plans. It is intended that Philip and Jill Miller will be added as the Permit Holder for the road and stormwater improvements on Map 135, Lot 11 and Map 136, Lot 6.

7. Attach a copy of the proof of delivery via certified mail of the complete amendment application (this form and any supporting information) to the applicable municipality and, if applicable, the local rivers management advisory committee (LAC) at the same time (or before) filing this amendment request (see Env-Wq 1503.22(d)(3)).

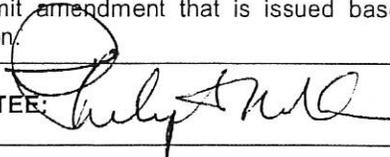
8. Is the area affected by this amendment request outside of the current permitted area?  Yes  No

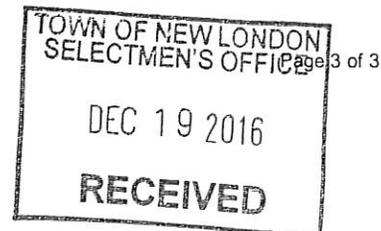
If yes, attach a letter from the Natural Heritage Bureau as specified in Env-Wq 1503.08(b).

Link: <https://www2.des.state.nh.us/nhbdatacheck/>

8B. PERMIT HOLDER SIGNATURE

My signature below certifies that I have received a copy of this request and all supporting information that pertains to this request and the information is true, complete, and not misleading to my knowledge and belief. In addition, I understand that any permit amendment that is issued based on false, incomplete, or misleading information shall be subject to permit revocation.

PERMITTEE: 	PRINT NAME LEGIBLY: Philip Miller	DATE: 12/8/16
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# New Hampshire Natural Heritage Bureau

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**To:** Pete Blakeman  
P.O. Box 4  
North Sutton, NH 03260

**Date:** 12/16/2016

**From:** NH Natural Heritage Bureau

**Re:** Review by NH Natural Heritage Bureau of request dated 12/16/2016

NHB File ID: NHB16-3786

Applicant: Pete Blakeman

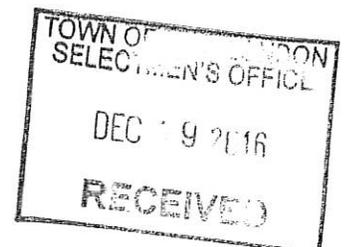
**Location:** Tax Map(s)/Lot(s): Map 135, Lots 6, 7, 8, 10, 11 & Map 136, Lot 7  
New London

**Project Description:** Relocate a narrow private road so that it is 70-80 ft further away from the lake

The NH Natural Heritage database has been checked for records of rare species and exemplary natural communities near the area mapped below. The species considered include those listed as Threatened or Endangered by either the state of New Hampshire or the federal government. We currently have no recorded occurrences for sensitive species near this project area.

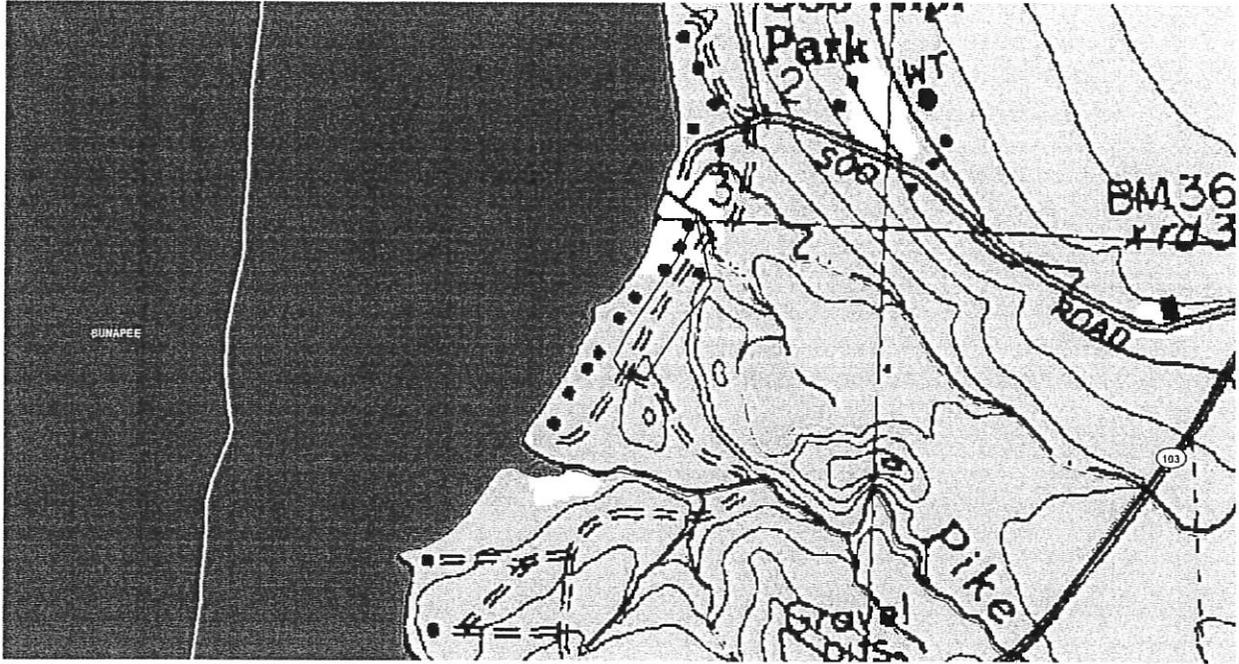
A negative result (no record in our database) does not mean that a sensitive species is not present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain species. An on-site survey would provide better information on what species and communities are indeed present.

This report is valid through 12/15/2017.





MAP OF PROJECT BOUNDARIES FOR NHB FILE ID: NHB16-3786



TOWN OF NEW LONDON  
SELECTMEN'S OFFICE  
DEC 19 2016  
RECEIVED

**PROJECT NARRATIVE****Alteration of Terrain Amendment Request***AoT Permit #AoT-1072***Pike Brook Road, New London, NH****Project Location: Tax Map 135, Lots 10 and 11 & 136, Lot 7**

Plans are herewith submitted for NH DES review for relocating an existing private road (Pike Brook Road) on the three properties noted above. The project proposes to amend an existing AoT permit granted to Pike Brook Road Revocable Trust of 2014 (PBR Trust) for moving a section of the same road located entirely on their properties at New London Tax Map 135, Lots 8 and 10.

This amendment proposes to re-align the northern end of this section of Pike Brook Road – a total of 357 LF across the three properties. All three properties front on Lake Sunapee and the re-alignment will move the road approximately 80’ further away from the lakeshore. A separate amendment proposes to re-align the southern end of Pike Brook Road – a total of 406 LF across three properties - that will move the road at that end approximately 70’ away from the lake. All properties involved with these amendments include restoration of abandoned roadbed and the extension of existing driveways to the new road. The work proposed by this Amendment can be found on new project plans D7, D9, D10 and D11 (note: Sheet D8 is a plan of work for the 406 LF of roadwork that will be submitted with the Amendment at the southern end of Pike Brook Road).

The Amendment described herein requests adding one more Permit Holder for the two abutting properties that encompass much of the work proposed with it. The PBR Trust is the Permit Holder on Map 135, Lots 8 and 10 for the existing AoT-1072 and for revised work on their lots proposed by this amendment. The three property owners and the two permit holders encompassing the road work proposed by this amendment:

Map 135, Lot 10	STA 6+01 to 8+04	Owner:	Pike Brook Road Revocable Trust of 2014
		Permit Holder:	Pike Brook Road Revocable Trust of 2014
Map 135, Lot 11	STA 8+04 to 9+06	Owner:	Philip and Jill Miller
		Proposed Permit Holder:	Philip and Jill Miller
Map 136, Lot 7	STA 9+06 to 9+58	Owner:	Carr Land Holdings, LLC
		Proposed Permit Holder:	Philip and Jill Miller

An MOU has been prepared for the various property owners designating who is responsible for things such as who is paying for what, or who is responsible for various plantings and, of course, maintenance. As far as inspection and maintenance, that will be performed by the parties mandated by AoT Rules, namely the Permit Holders. The wording of the MOU is included at the end of this project summary.

Permit amendments are subject to certain criteria as set out in Env-Wq 1503.22 (c):

- (1) *Compliance with Env-Wq 1507.02:* Water quality on 135/10 will be protected by extending the 50’ Roadside Buffer to the property line. On 135/11 and 136/7 a small filter practice (Rain Garden) will be constructed as well as a section of Roadside Buffer. Groundwater Recharge is accomplished with the previously-approved pervious driveways on 135/10 (GRV Calculation worksheet has been updated). A waiver is requested for drainage calculations (see request below). Inspection and Maintenance Manual has been prepared for the new Permit Holder.

- (2) *NH Wetland and Shoreland Permits:*  
Map 135, Lot 10: Wetland Permit 2016-02711 (for small wetland crossing at +/-STA 7+96)  
SWQPA Permit 2015-03318  
Map 135, Lot 11: SWQPA Permit 2016-02630
- (3) *Proposed disturbed area outside of that already permitted:* +/-13,400 SF
- (4) *Impervious Area:* The project results in a small net increase of +/-1800 SF in impervious surface on the three properties.
- (5) *Changes to stormwater management:* A positive change is being made to overall stormwater management in that more area that currently has no stormwater treatment practices in place is being mitigated with approved stormwater BMPs. While a waiver is being requested to forego expanding the drainage analysis I would point out that the highest 2-yr inflow rate projected by the underlying permit is 0.1 *cfs*. Jon Sisson, the Soil Scientist who prepared the original soil map, expanded his study area to include the area covered by this proposed amendment and the soils are found to be the same, namely somewhat excessively-draining sand (Adams series). I can state without hesitation that the inflow area covered by this amendment will not approach the 1 *cfs* threshold for a 2-yr 24 hour storm event.
- (6) - (9) These four criteria do not apply to this particular project.

## STORMWATER TREATMENT

This amendment proposes two general methods for stormwater treatment. As with the original permitted project, there are no stormwater treatment practices along the existing section of road proposed to be moved. And while not a formal practice such as those described below it shouldn't be overlooked that the simple act of moving the road up to 80' further inland from the lake will provide a certain level of beneficial treatment.

The two treatment methods described herein and depicted on the plans are a filtration practice (rain garden) and a roadside buffer.

The rain garden is a filtering practice that takes the runoff from a section of roadway and the roof of a new shed and filters it through an 18" deep layer of filtering media stabilized with ground cover plantings and native shrubs. Prior to entering the planted section of rain garden the road runoff will pass through a sediment forebay so that the plants do not become choked with sand and silt. A test pit adjacent to the rain garden confirms that the practice meets NH DES requirements for separation distance from the bottom of the filter layer to the ESHWT (see *Infiltration Feasibility Report* for Phil & Jill Miller).

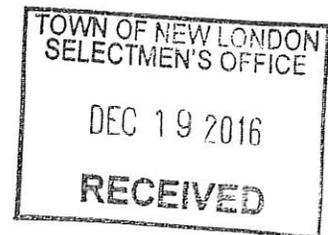
The project also proposes a 50' roadside buffer in two locations. The first location is at the northerly end of the road re-alignment and treats the runoff from the first 50+ feet of roadway. The road cross-section will be constructed to a uniform 1% cross slope along that length of roadway. This will allow runoff from the road surface to enter the buffer as sheet flow. The second buffer area is an extension of the existing buffer on the PBR Trust property (135/10). This buffer will extend from where the amended road alignment blends into the existing road and extends it northerly to the property line.

#### WAIVER REQUEST FOR DRAINAGE CALCULATIONS

This proposed amendment requests a waiver to updating the Drainage Calculations requested at Env-Wq 1503.27 (e) (4). There is minimal total disturbed area included in this proposed amendment (+/-13,400 SF) and within that area almost 30% (+/-3810 SF) is existing road surface that will be restored back to woods and meadow.

This waiver will not result in any adverse impact on the environment as the project itself will have a positive impact by moving the road further away from the lake and incorporating stormwater management practices to the sections of realigned roadway. This proposed amendment, like the road work covered under the original permit, is providing stormwater treatment where none has previously been present. These BMPs have been designed in conformance with NH DES AoT Rules. Details can be found on the additional project Site Plans (see Shts D

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***Proposed MOU wording for Carr Land Holdings to endorse for the project:***

- The Millers will pay for the design and permitting of the road realignment, from the fork at the log landing on the Carr property, south to the southern edge of the wetland on lot 8 (owned by the Ferrantes). Currently, the town has granted 4 Special Exceptions for work in this area, and NHDES has approved a shoreland application for work on the Miller lot. No state permitting is required for the proposed work on the Carr lot, as the area falls outside of wetland and shoreland jurisdictions. A wetlands application is pending for work elsewhere on the proposed road, and A.o.T (Alteration of Terrain) permitting is nearing completion. The plan is for early winter construction, with finish landscaping and grading to take place in the spring.
- The Millers will assume construction costs for the realigned road from the fork at the log landing on the Carr property, south to the southern edge of the wetland on lot 8 (owned by the Ferrantes). The road construction will match the width and material composition of the newly realigned road on the Ferrante property, with a 14' wide travel way and 2' wide loamy gravel shoulders on either side. Any related utility expenses would be paid by the Millers, only from their property to the utility pole just north of the fork on the Carr property, and only as the work relates to the road realignment... i.e. line transfers for phone, cable, etc. The primary power, and other pole mounted utilities along the road, will remain overhead.
- Based on conversations with the town, it appears there are no impacts to the Current Use status or, Current Use area on the Carr property. Consequently, there should be no Current Use penalties applied. If penalties are assessed, relative to this project, the Millers would assume the cost of the penalty.
- The Millers will assume costs for the removal and restoration of the old roadbed on the subject properties. The restoration will consist of removing the compacted soil/gravel on the existing roadbed, replacing it with salvaged on-site forest duff material, and blending grades for a natural contour of the land. It is anticipated, that overtime, native understory plants will inhabit this area. However, a restoration plan has been developed, reviewed and approved by the parties, and will be planted according to plan, with the right to substitute plantings with other native plants, based on availability. Plant locations to be verified in field by landscape architect from Pellettieri Associates.
- Long term maintenance of the culvert(s), if any, and other drainage practices, shall be the responsibility of the NH DES AoT Permit Holder for the property on which the practice or culvert falls.
- Any vegetative screening identified on the agreed upon restoration plan (Sheet RP) dated 23 Mar 15, by Pellettieri Associates, Inc., whether on the Miller property or the Carr property, will be paid for, and maintained by, the Millers for a period of 2 years from the date of installation. Plantings on the Ferrante lot will be maintained by the Ferrantes.

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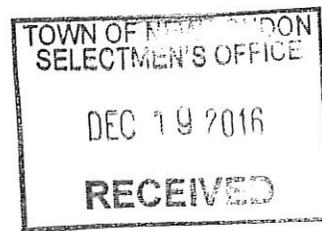
## ***INFILTRATION FEASIBILITY REPORT***

*Philip and Jill Miller  
Pike Brook Road  
New London, NH*

*December 1, 2016*

### TABLE OF CONTENTS:

- I. Location of the practice
- II. Existing topography at the location of the practice
- III. Test Pit or boring locations
- IV. Seasonal High Water Table (SHWT) and bedrock elevations
- V. Soil Profile Descriptions
- VI. Soil Plan in the area of the proposed practice
- VII. Summary of Default Data used to determine the infiltration rate
- VIII. Grading and Soil Plans



# FILTRATION PRACTICE DESIGN CRITERIA (Env-Wq 1508.06)

Type/Node Name: \_\_\_\_\_

**Rain Garden RG1**

Enter the type of filtration practice (e.g., bioretention system) and the node name in the drainage analysis, if applicable

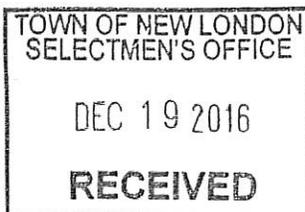
YES		Have you reviewed the restrictions on unlined systems outlined in Env-Wq 1508.06(b)?	
0.08	ac	$A = \text{Area draining to the practice}^1$	
0.03	ac	$A_1 = \text{Impervious area draining to the practice}$	
0.34	decimal	$I = \text{percent impervious area draining to the practice, in decimal form}$	
0.36	unitless	$R_v = \text{Runoff coefficient} = 0.05 + (0.9 \times I)$	
0.03	ac-in	$WQV = 1'' \times R_v \times A$	
105	cf	WQV conversion (ac-in x 43,560 sf/ac x 1ft/12")	
26	cf	25% x WQV (check calc for sediment forebay volume)	
78	cf	75% x WQV (check calc for surface sand filter volume)	
sediment forebay		Method of Pretreatment? (not required for clean or roof runoff)	
30	cf	$V_{SED} = \text{sediment forebay volume, if used for pretreatment}$	← ≥ 25%WQV
96	sf	$A_{SA} = \text{surface area of the practice}$	
3.00	iph	$I_{DESIGN} = \text{design infiltration rate}^2$	
	Yes/No	If $I_{DESIGN}$ is < 0.50 iph, has an underdrain been provided?	
4.4	hours	$T_{DRAIN} = \text{drain time} = V / (A_{SA} * I_{DESIGN})$	← ≤ 72-hrs
1,097.25	feet	$E_{FC} = \text{elevation of the bottom of the filter course material}$	
	feet	$E_{UD} = \text{invert elevation of the underdrain (UD), if applicable}$	
1,097.00	feet	$E_{BTM} = \text{elevation of the bottom of the practice (i.e., bottom of the stone reservoir).}$	
1,093.50	feet	$E_{SHWT} = \text{elevation of SHWT (if none found, enter the lowest elevation of the test pit)}$	
1,093.50	feet	$E_{ROCK} = \text{elevation of bedrock (if none found, enter the lowest elevation of the test pit)}$	
1,097.25	feet	$D_{FC \text{ to } UD} = \text{depth to UD from the bottom of the filter course}^3$	← ≥ 1'
3.75	feet	$D_{FC \text{ to } ROCK} = \text{depth to bedrock from the bottom of the filter course}^3$	← ≥ 1'
3.75	feet	$D_{FC \text{ to } SHWT} = \text{depth to SHWT from the bottom of the filter course}^3$	← ≥ 1'
3.50	feet	$D_{BTM \text{ to } SHWT} = \text{depth to SHWT from the bottom of the practice}^3$	← ≥ 2'
	ft	Peak elevation of the 10-year storm event (infiltration can be used in analysis)	
	ft	Elevation of the top of the practice	
-		10 peak elevation ≤ Elevation of the top of the practice	← yes

**If a surface sand filter is proposed:**

YES	ac	Drainage Area check.	← < 10 ac
	cf	$V = \text{volume of storage}^{4,5}$ (attach a stage-storage table)	← ≥ 75%WQV
	inches	$D_{FC} = \text{filter course thickness}$	← 18"
	Sheet	Note what sheet in the plan set contains the filter course specification	
	Yes/No	Access grate provided?	← yes
		The filter shall not be covered in grass. What is covering the filter?	

**If an underground sand filter is proposed:**

YES	ac	Drainage Area check.	← < 10 ac
	cf	$V = \text{volume of storage}^{4,5}$ (attach a stage-storage table)	← ≥ 75%WQV
	inches	$D_{FC} = \text{filter course thickness}$	← 24"
	Sheet	Note what sheet in the plan set contains the filter course specification	
	Yes/No	Access grate provided?	← yes





## BUFFER DESIGN CRITERIA (Env-Wq 1508.08)

Type

Roadside Buffer, single lane

Enter the type of buffer (e.g., residential buffer) and the node name in the drainage analysis, if applicable

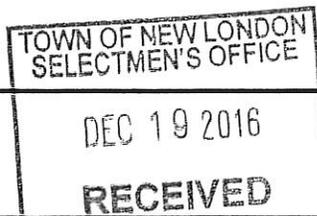
Yes	Yes/No	Is the buffer adjacent to the area that you are treating?	← yes
Yes	Yes/No	Does the runoff enter the buffer as sheet flow (naturally or with a level spreader?)	
No	Yes/No	Has a level spreader been provided?	
100.0	%F	% Forest (F) cover in the buffer (remaining assumed to be meadow (M)).	
-	%M	% Meadow cover in the buffer	
100.0	%A	Hydrologic soil group (HSG) <u>in buffer</u> (%A, %B, %C). Remaining assumed to be D soil	
-	%B		
-	%C		
-	%D		
15.0	%	Buffer Slope	← ≤ 15%

**If a Residential or Small Pervious Area buffer is proposed:**

	Yes/No	Is the runoff from a single family or duplex residential lot?	← yes
		$L_{FP}$ = maximum flow path to the buffer	
	ac	A = area draining to the buffer	
	ac	$A_{IMP}$ = impervious area draining to the buffer	
-	%	I = percent impervious area draining to the buffer	← ≤ 10%
FALSE		Option A check: $A_{IMP} \leq 1 \text{ ac} \ \& \ L_{FP} \leq 100'$	← yes for
FALSE		Option B check: $I \leq 10\% \ \& \ L_{FP} \leq 150'$	A or B
No		Level Spreader proposed? (Sheet flow without the aid of a LS)	← no
Good		Slope check	← ≤ 15%
	25 feet	Buffer base length due to soil type (weighted based on HSG)	
	30 feet	Buffer length adjustment due to steepness of buffer	
	- feet	Buffer length adjustment due to percent of meadow in buffer	
	55 feet	Minimum buffer length required <sup>1</sup>	

**If a Developed Area Buffer with a Level Spreader is proposed:**

No		Level Spreader proposed?	← yes
	ac	A = Area draining to the buffer <sup>2</sup>	
	ac	$A_I$ = impervious area draining to the buffer <sup>2</sup>	
-	%	Percent impervious of the area that is draining to the buffer	
Good		Slope check	← ≤ 15%
	- sf	Buffer base area due to soil type in the buffer (weighted based on HSG)	
	- sf	Buffer area adjustment due to impervious cover draining to buffer	
	- sf	Buffer area adjustment due to steepness of buffer	
	- sf	Buffer area adjustment due to percent of meadow in buffer	
	- sf	$A_{MIN}$ = Minimum buffer area required	
	ft	$L_{LS}$ = <u>total</u> length of level spreader(s) provided <sup>3</sup>	
	ft	$L_B$ = buffer length <sup>4</sup>	
	sf	$A_B$ = buffer area provided	← ≥ $A_{MIN}$



**If a Roadway Buffer is proposed:**

No	Yes/No	LS proposed? Roadway/shoulder must sheet directly to the buffer.	← no
No	Yes/No	Do any other areas drain to the buffer (other than roadway & shoulder)?	← no
Yes	Yes/No	Is the road parallel to the contours of the buffer slope?	← yes

Good		Natural slope check <sup>5</sup>	← ≤ 20%
-	feet	How much embankment slope counts toward the buffer? <sup>6</sup>	← 0 - 20 feet
1.0	Lane(s)	Number of travel lanes draining to the buffer	
50.0		Minimum buffer flow path ( $L_{MIN}$ )	
50.0	feet	Buffer flow path	← ≥ $L_{MIN}$

**If a Ditch Turn Out Buffer is proposed:**

No		Level Spreader proposed?	← yes
	feet	Level Spreader Length <sup>7</sup>	
	Yes/No	Do any other areas drain to the buffer (other than roadway & shoulder)?	← no
	sf	Drainage Area to the ditch	← ≤ 6000 sf
Good		Slope check	← ≤ 15%
-	feet	Buffer base length due to soil type (weighted based on HSG)	
30	feet	Buffer length adjustment due to steepness of buffer	
-	feet	Buffer length adjustment due to percent of meadow in buffer	
50	feet	Minimum buffer length required <sup>8</sup>	

1. Minimum buffer length is the total of the above three cells OR 45', whichever is greater.
2. If a detention structure is used upstream of the level spreader, the drainage area draining to the buffer shall considered equal to 1 acre of impervious area for every 1 cfs of peak 2-year, 24-hr outflow from the detention structure.
3. Minimum level spreader length is 20 feet and maximum is 50 feet. You may use multiple level spreaders if the stormwater is evenly distributed to them.  
Example:  $A_{MIN} = 6,000$  sf with a 100' buffer available. Therefore the LS lengths must total 60 feet (6,000 sf/100'); however LS lengths must be between 20' and 50' so one 60' long level spreader is not permitted. The design would have two LS, each 30'. As long as a collection basin is provided to evenly distribute the flow to the two level spreaders.
4. Minimum buffer length 50 feet.
5. If the slope is man-made, it must be 15% or flatter.
6. 20' (max) of the roadway embankment slope may count towards the buffer length if it is 3:1 or flatter.
7. Minimum level spreader length is 20 feet and maximum is 50 feet. You may use multiple level spreaders if the stormwater is evenly distributed to them. For example, you may have a total length of 100 feet for the level spreaders as long as you have two 50' level spreaders.
8. Minimum buffer length is the total of the above three cells OR 50', whichever is greater.

Designer's Notes:

Due to the roadway width totalling 14' using a single lane buffer is appropriate.
The road is designed to be sloped at a 1% cross-slope towards the buffer
The 15% buffer slope is the maximum. Much of it is in the 2-5% range.

# BLAKEMAN ENGINEERING, INC.

P.O. BOX 4 ROUTE 114  
NORTH SUTTON, NEW HAMPSHIRE 03260  
(603) 927-4163  
blakemaneng@tds.net

ENGINEERING: PLANNING  
DESIGN  
PERMITTING

SEPTIC SYSTEM DESIGN  
SITE PLANNING and DESIGN  
SUBDIVISION DESIGN

## INSPECTION AND MAINTENANCE (I&M) MANUAL FOR STORMWATER BEST MANAGEMENT PRACTICES

***PIKE BROOK ROAD ~ Tax Maps 135, Lot 11 & 136, Lot 7  
NEW LONDON, NEW HAMPSHIRE***

The purpose of the I&M Manual is to assist the responsible parties in maintaining and understanding the functions of the stormwater best management practices (BMPs).

Inspection records shall be maintained by the responsible party(ies) indicated below and made available to the New Hampshire Department of Environmental Services upon request.

### **Party responsible for Reporting, Inspection and Maintenance during Construction:**

*Peter J Blakeman, PE (603)927-4163 blakemaneng@tds.net*

Name, address, telephone and email

### **Party responsible for Reporting, Inspection and Maintenance after Construction:**

*Philip and Jill Miller; P.O. Box 1280; New London, NH 03257*

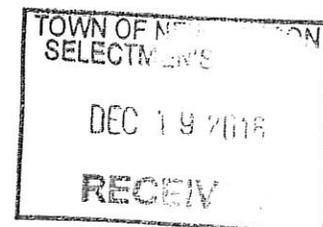
*philipfmiller@comcast.net*

Name, address, telephone and email

### ***The BMPs for this project are:***

1. Rain Garden
2. 50' Vegetated Buffer

See Location Map for locations of BMPs



## Control of Invasive Plants

New Hampshire  
Department of Agriculture,  
Markets & Food  
*Douglas Cygan*  
603-271-3488  
[doug.cygan@agr.nh.gov](mailto:doug.cygan@agr.nh.gov)

This guide lists garden plants and weeds which are already causing significant changes to natural areas in the Mid-Atlantic. Measures for controlling each species are indicated by number, e.g., (3), in the text with a full explanation at the end of this article. Click on the word Control: to jump to that section. Then click your 'back' button to return to the text. Following each section suggested alternative plants are given. These alternatives are native plants, well adapted and needing little care, attractive to birds and butterflies, and an important part of the food web for our indigenous species.

### INVASIVE TREES

**NORWAY MAPLE** (*Acer platanoides*) has large leaves similar to sugar maple. To easily confirm that the plant is Norway maple, break off a leaf and if it's truly Norway maple it will exude milky white sap. Fall foliage is yellow. (Exception: cultivars such as 'Crimson King,' which have red leaves in spring or summer, may have red autumn leaves.) The leaves turn color late, usually in late October after native trees have dropped their foliage. This tree suppresses growth of grass, garden plants, and forest understory beneath it, at least as far as the drip-line. Its wind-borne seeds can germinate and grow in deep shade. The presence of young Norway maples in our woodlands is increasing.

Control: (1); (7), (8), (9), or (10); (11) in mid-October to early November, before the leaves turn color.

**TREE OF HEAVEN** (*Ailanthus altissima*), is incredibly tough and can grow in the poorest conditions. It produces huge quantities of wind-borne seeds, grows rapidly, and secretes a toxin that kills other plants. Its long compound leaves, with 11-25 lance-shaped leaflets, smell like peanut butter or burnt coffee when crushed. Once established, this tree cannot be removed by mechanical means alone.

Control: (1) - seedlings only. Herbicide - use Garlon 3a (9) with no more than a 1" gap between cuts, or (10); plus (11) on re-growth. Or paint bottom 12' of bark with Garlon 4 Ultra (in February or March to protect surrounding plants). USE MAXIMUM STRENGTH SPECIFIED ON LABEL for all herbicide applications on Ailanthus. Glyphosate is not effective against Ailanthus.

### INVASIVE SHRUBS

**AUTUMN OLIVE** (*Elaeagnus umbellata*): Formerly recommended for erosion control and wildlife value, these have proved highly invasive and diminish the overall quality of wildlife habitat.

Control: (1) - up to 4" diameter trunks; (7) or (10) or bury stump. Do not mow.

**MULTIFLORA ROSE** (*Rosa multiflora*), formerly recommended for erosion control, hedges, and wildlife habitat, becomes a huge shrub that chokes out all other vegetation and is too dense for many species of birds to nest in, though a few favor it. In shade, it grows up trees like a vine. It is covered with white flowers in June. (Our native roses have fewer flowers, mostly pink.) Distinguish multiflora by its size, and by the presence of very hard, curved thorns, and a fringed edge to the leaf stalk.

Control: (1) - pull seedlings, dig out larger plants at least 6' from the crown and 6' down; (4) on extensive infestations; (10) or (11). It may remain green in winter, so herbicide may applied when other plants are dormant. For foliar application, mix Rodco with extra sticker-spreader, or use Roundup Sure Shot Foam on small plants.

BUSH HONEYSUCKLES (*Lonicera spp.*), including Belle, Amur, Morrow's, and Tatarian honeysuckle. (In our region, assume that any honeysuckle is exotic unless it is a scarlet-flowered vine). Bush honeysuckles create denser shade than native shrubs, reducing plant diversity and eliminating nest sites for many forest interior species.

Control: (2) on ornamentals; (1) on shady sites only, brush cut in early spring and again in early fall (3); (4) during the growing season; (7); or (10) late in the growing season.

BLUNT-LEAVED PRIVET (*Ligustrum obtusifolium*). Control: (1); (7) or (10); or trim off all flowers. Do not cut back or mow.

BURNING BUSH, WINGED EUONYMUS (*Euonymus alatus*), identified by wide, corky wings on the branches.  
Control: (1); (7) or (10); or trim off all flowers.

JAPANESE BARBERRY (*Berberis thunbergii*), and all cultivars and varieties.  
Control: (1); (7) or (10); or trim off all flowers.

### INVASIVE WOODY VINES

All of these vines shade out the shrubs and young trees of the forest understory, eventually killing them, and changing the open structure of the forest into a dense tangle. DO NOT PLANT NEXT TO OPEN SPACE.

JAPANESE HONEYSUCKLE (*Lonicera japonica*), including Hall's honeysuckle, has gold-and-white flowers with a heavenly scent and sweet nectar in June. This is probably the familiar honeysuckle of your childhood. It is a rampant grower that spirals around trees, often strangling them.  
Control: (1); (3); (10); (11) in fall or early spring when native vegetation is dormant. Plan to re-treat repeatedly.

ORIENTAL BITTERSWEET (*Celastrus orbiculatus*) has almost completely displaced American bittersweet (*C. scandens*). The Asian plant has its flowers and bright orange seed capsules in clusters all along the stem, while the native species bears them only at the branch tips.

Control: (1); keep ornamental plants cut back, remove all fruits as soon as they open, and bag or burn fruits; to eradicate use Garlon 3a (10).

JAPANESE KNOTWEED, MEXICAN BAMBOO (*Polygonum cuspidatum*) can grow in shade. The stems have knotty joints, reminiscent of bamboo. It grows 6-10' tall and has large pointed oval or triangular leaves.

Control: Cut at least 3 times each growing season and/or treat with Rodeo (10) or (11). In gardens, heavy mulch or dense shade may kill it.

### INVASIVE HERBACEOUS PLANTS

GARLIC MUSTARD (*Alliaria petiolata*, *A. officinalis*), a white-flowered biennial with rough, scalloped leaves (kidney-, heart- or arrow-shaped), recognizable by the smell of garlic and taste of mustard when its leaves are crushed. (The odor fades by fall.)

Control: Pull before it flowers in spring (1), removing crown and roots. Tamp down soil afterwards. Once it has flowered, cut (2), being careful not to scatter seed, then bag and burn or send to the landfill. (11) may be appropriate in some settings.

JAPANESE STILT GRASS (*Microstegium vimineum*) can be identified by its lime-green color and a line of silvery hairs down the middle of the 2-3' long blade. It tolerates sun or dense shade and quickly invades areas left bare or disturbed by tilling or flooding. An annual grass, it builds up a large seed bank in the soil.

Control: Easily pulled in early to mid-summer (1) - be sure to pull before it goes to seed. If seeds have formed, bag and burn or send to landfill. Mowing weekly or when it has just begun to flower may prevent it from setting seed (3). Use glyphosate (11) or herbicidal soap (less effective) on large infestations. Follow up with (5) in spring.

**MILE-A-MINUTE VINE, DEVIL'S TAIL TEARTHUMB (*Polygonum perfoliatum*),** a rapidly growing annual vine with triangular leaves, barbed stems, and turquoise berries in August which are spread by birds. It quickly covers and shades out herbaceous plants.  
Control: same as for stilt grass.

**SPOTTED KNAPWEED (*Centaurea maculosa*),** a biennial with thistle-like flowers.

Control: Do NOT pull (1) unless the plant is young and the ground is very soft - the tap root will break off and produce several new plants. Wear sturdy gloves. (2); (6); (10) or (11).

-----  
CONTROL MEASURES

- (1) PULL seedlings and small or shallow-rooted plants when soil is moist. Dig out larger plants, including the root systems. Use a forked spade or weed wrench for trees or shrubs.
- (2) DEADHEAD to prevent spread of seeds of invasive plants. Cut off seeds or fruits before they ripen. Bag, and burn or send to a landfill.
- (3) MOW or CUTTING at least 4 times a season to deplete plants' store of nutrients and carbohydrates, reduce seed formation, and kill or minimize spread of plants. If necessary, repeat each year.
- (4) CONTROLLED BURNING during the spring, repeated over several years, allows native vegetation to compete more effectively with the invasive species. This requires a permit. Spot treatment with glyphosate in late fall can be used to make this method more effective.
- (5) Use a CORN-BASED PRE-EMERGENCE HERBICIDE on annual weeds. This product is also an organic fertilizer, i.e., it can stimulate growth of existing plants, including weeds, so it is appropriate for lawns and gardens but may not be appropriate in woodlands.
- (6) In lawns, SPOT TREAT with BROAD-LEAF WEEDKILLER. Good lawn-care practices (test soil, use lime and fertilizer only when soil test shows a need; mow high and frequently; leave clippings on lawn) reduce weed infestations.
- (7) CUT DOWN the tree. Grind out the stump, or clip off re-growth.
- (8) GIRDLE tree: cut through the bark and growing layer (cambium) all around the trunk, about 6' above the ground. Girdling is most effective in spring when the sap is rising, and from middle to late summer when the tree is sending down food to the roots. Clip off sucker sprouts.
- (9) FRILL: Using a machete, hatchet or similar device, hack scars (several holes in larger trees) downward into the cambium layer, and squirt in glyphosate (or triclopyr if recommended in text above). Follow label directions for Injection and Frill Applications. This is most effective from middle to late summer. Clip off any sucker sprouts or treat with glyphosate.
- (10) CUT STEM / CUT STUMP WITH GLYPHOSATE (or triclopyr if specified above). Follow label directions for Cut Stump Application. Clip off sucker sprouts or paint with glyphosate. See Note on Herbicides.
- (11) FOLIAR SPRAY WITH GLYPHOSATE herbicide (see Note on Herbicides). Use a backpack or garden sprayer or mist blower, following label directions. Avoid overspray and/or dripping onto non-target plants, because glyphosate kills most plants except moss. If it rolls off waxy or grass-like foliage, use additional sticker-spreader. Deciduous trees, shrubs, and perennials move nutrients down to the roots in late summer. Glyphosate is particularly effective at this time and when plants have just gone out of flowering. Several invasive species retain their foliage after native plants have lost theirs, and resume growth earlier in spring than most natives. This allows you to treat them without harming the natives. However, the plant must be actively growing for the herbicide to work. Retreatments may be necessary the following year if suckering occurs or the plant hasn't been entirely killed.

NOTE ON HERBICIDES: It is highly recommended that small populations try to be controlled using non-chemical methods wherever feasible. However, for large infestations, and for a few plants specified above, herbicide use is essential. Apply herbicides carefully to avoid non-target plants, glyphosate is the least environmentally damaging herbicide in most cases. Add food coloring for visibility, and a soap-based sticker such as Cide-Kick. Glyphosate is ineffective on some

plants; for these, triclopyr (Garlon) may be indicated. When using herbicides, read the entire label and observe all precautions listed, including proper disposal. If in doubt, call your local Cooperative Extension Service.

# BLAKEMAN ENGINEERING, INC.

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ENGINEERING: PLANNING  
DESIGN  
PERMITTING

SEPTIC SYSTEM DESIGN  
SITE PLANNING and DESIGN  
SUBDIVISION DESIGN

---

## LETTER OF TRANSMITTAL

TO: **Town of New London**  
c/o Lucy St John

DATE: December 19, 2016

FROM: Peter Blakeman, PE

RE: **NH DES AoT Amendment Request**  
**Phil and Jill Miller**

---

We are providing you the following:

<u>COPIES</u>	<u>DATE</u>	<u>DESCRIPTION</u>
1		NH DES AoT Amendment Request

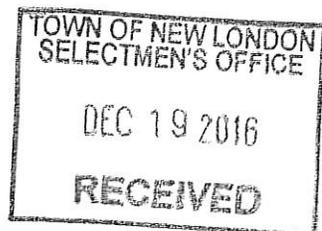
These are transmitted for:

REMARKS:

Hi Lucy,

Attached is an AoT Amendment Request for the Pike Brook Road relocation on the Miller & Carr properties on Map 135, Lot 11 & 136, Lot 7.

Please don't hesitate to call/email me with any questions.



---

Blakeman Engineering, Inc.

# PIKE BROOK ROAD RE-ALIGNMENT ~ STA 0+16 to 9+58

PREPARED FOR PROPERTY LOCATED AT

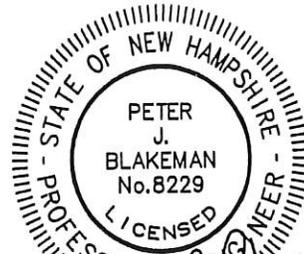
TAX MAP 135 ~ LOTS 6, 7, 8, 10 & 11  
& TAX MAP 136 ~ LOT 7

PIKE BROOK ROAD  
NEW LONDON, NEW HAMPSHIRE

DECEMBER 14, 2016

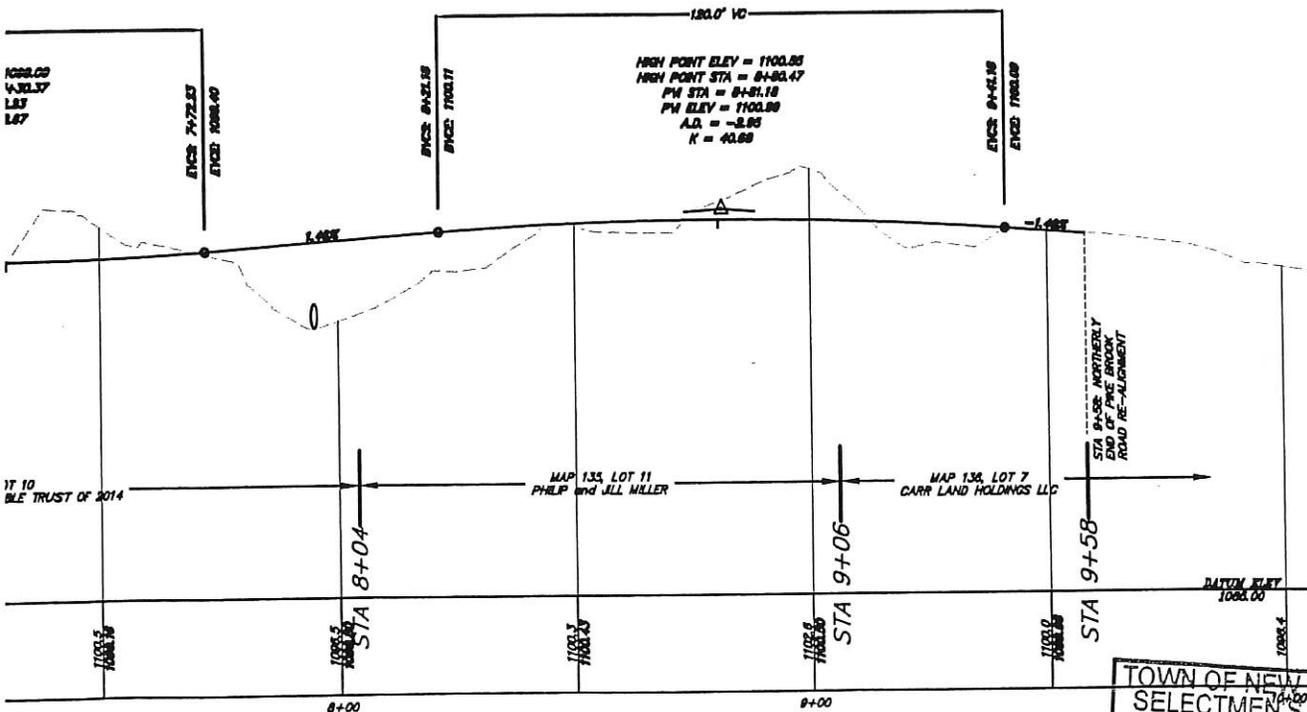
**BLAKEMAN ENGINEERING, INC.**

P.O. BOX 4 ROUTE 114  
NORTH SUTTON, NEW HAMPSHIRE 03260  
(603) 927-4163



*Peter J. Blakeman*

**D7**



TOWN OF NEW LONDON  
SELECTMEN'S OFFICE  
DEC 19 2016  
RECEIVED

CURRENT OWNER	TOPO	UTILITIES	STRT./ROAD	LOCATION	DESCRIPTION	CURRENT ASSESSMENT	ASSESSED VALUE
PIKE BROOK ROAD REVOCABLE TRUST ACQUELINE M HODKINS, TRUSTEE PO BOX 6630	Rolling	5 Well 6 Septic	Unpaved	7 Waterfront	RESIDENTIAL RES LAND RESIDENTL	Code 1013 Code 1013 Code 1013	Appraised Value 1,170,600 Appraised Value 2,557,600 Appraised Value 7,200
Additional Owners: PORTSMOUTH, NH 03802							ASSESSED VALUE 1,170,600 ASSESSED VALUE 2,557,600 ASSESSED VALUE 7,200

OTHER ID:	SEPTIC INFOR	MP	WFR	CONSERVAT	PREC.	ROADFF	GIS ID:
00135 00004 00000	Septic Infor	MP	WFR	CONSERVAT	PREC.	ROADFF	135-008-000

RECORD OF OWNERSHIP	BK-VOL/PAGE	SALE DATE	Q/U	W/I	SALE PRICE	V.C.	Yr.	Code	ASSESSED VALUE	Yr.	Code	ASSESSED VALUE	Yr.	Code	ASSESSED VALUE
PIKE BROOK ROAD REVOCABLE TRUST OF 2014 PORTSMOUTH AMY S EXEMPTION TRUST	3457/1338	10/02/2014	U	I	3,000,000	IN	2016	1013	1,170,600	2016	1013	2,557,600	2016	1013	7,200
<p>ASSOC PID#</p> <p>PREVIOUS ASSESSMENTS (HISTORY)</p> <p>Total: 3,735,400</p>															

EXEMPTIONS	OTHER ASSESSMENTS	APPRAISED VALUE SUMMARY
Year Type Description Amount Code Description Number Amount Comm. Int.	Year Code Description Amount Comm. Int.	Appraised Bldg. Value (Card) Appraised XF (B) Value (Bldg) Appraised OB (L) Value (Bldg) Appraised Land Value (Bldg) Special Land Value
<p>ASSESSING NEIGHBORHOOD</p> <p>4/A NBHD/SUB NBHD Name Street Index Name Tracing Batch</p> <p>NOTES: HAS PUB WILL BE MOVING POWER POLES/ SEPTIC SYSTEM WITH RD. 3/16-40% PER BUILDER</p>		
<p>Total: 3,735,400</p> <p>Total: 3,735,400</p> <p>Total: 1,405,900</p>		

BUILDING PERMIT RECORD	VISIT/ CHANGE HISTORY
Permit ID Issue Date Type Description Amount Insp. Date % Comp. Date Comp. Comments Date Type IS ID Cd. Purpose/Result	Permit ID Issue Date Type Description Amount Insp. Date % Comp. Date Comp. Comments Date Type IS ID Cd. Purpose/Result
16-129 AD ADDITION 25,000 03/31/2016 Building Tilt Hut of 120	16-129 AD ADDITION 25,000 03/31/2016 Building Tilt Hut of 120
16-130 RE REMODEL 500 01/20/2016 Removing th existing Tilt	16-130 RE REMODEL 500 01/20/2016 Removing th existing Tilt
16-080 NC NEW CONSTRUCTI 0 01/04/2013 Extension BP15-081	16-080 NC NEW CONSTRUCTI 0 01/04/2013 Extension BP15-081
16-071 OB OUTBUILDING 469,800 06/01/2005 Barn w/garage	16-071 OB OUTBUILDING 469,800 06/01/2005 Barn w/garage
16-072 AD ADDITION 16,975 04/20/2005 Porte Cochere	16-072 AD ADDITION 16,975 04/20/2005 Porte Cochere
15-081 New Residential 2,700,000 03/31/2016 Lot merger 008/009 reco	15-081 New Residential 2,700,000 03/31/2016 Lot merger 008/009 reco
15-046 Demolition 0 04/01/2016 Demo garage	15-046 Demolition 0 04/01/2016 Demo garage

LAND LINE VALUATION SECTION	UNIT PRICE	ACRE	DISC	FACTOR	ST. ADJ.	NOTES- ADJ.	S ADJ. FACT	ADJ. UNIT PRICE	LAND VALUE
1 1013 SFR WATER	43,560 SF	1.99	1.6000	8	1.36 PBS	+36 XCS W/F	1.00	56.29	2,457,000
1 1013 SFR WATER	2.03 AC	5,000.00	1.6000	8	0.50 PBS		1.00	52,000.00	105,600
<p>Total Card Land Units: 3.03 AC Parcel Total Land Area: 3.03 AC Total Land Value: 2,557,600</p>									



**CONSTRUCTION DETAIL**

**CONSTRUCTION DETAIL (CONTINUED)**

Element	Ca.	Ch.	Description	Element	Ca.	Ch.	Description
Style	07		Modern/Contemp				
Model	01		Residential				
Design/Appeal	20		Custom +70				
Stories	2		2 Stories				
Occupancy	1						
Exterior Wall 1	14		Wood Shingle				
Exterior Wall 2	03		Gable/Hip				
Roof Structure	03		Wood Shingle				
Roof Cover	10		Plastered				
Interior Wall 1	03						
Interior Wall 2	12		Hardwood				
Interior Flr 1							
Interior Flr 2	03		Gas				
Heat Fuel	08		Radiant				
Heat Type	03		Central				
A/C Type	04		4 Bedrooms				
Total Bedrooms	5						
Total Bathms	2						
Total Half Baths	10						
Total Xtra Fixus	02		Average				
Total Rooms	02		Average				
Bath Style	02						
Kitchen Style							

**OB-OUTBUILDING & YARD ITEMS(D) /XF-BUILDING EXTRA FEATURES(B)**

Code	Description	Comment	L/B	Units	Unit Price	Yr.	Gde	Dp	Rr	Cnd	%Cnd	Apr. Value
SHD1	SHED FRAME		L	600	20.00	2003	0	1		60	7.200	
FPL3	2 STORY CHIL		B	2	4,000.00	2014	1	1		100	3,200	
FPO	EXTRA FPL O		B	2	1,000.00	2014	1	1		100	800	

**BUILDING-SUB-AREA SUMMARY SECTION**

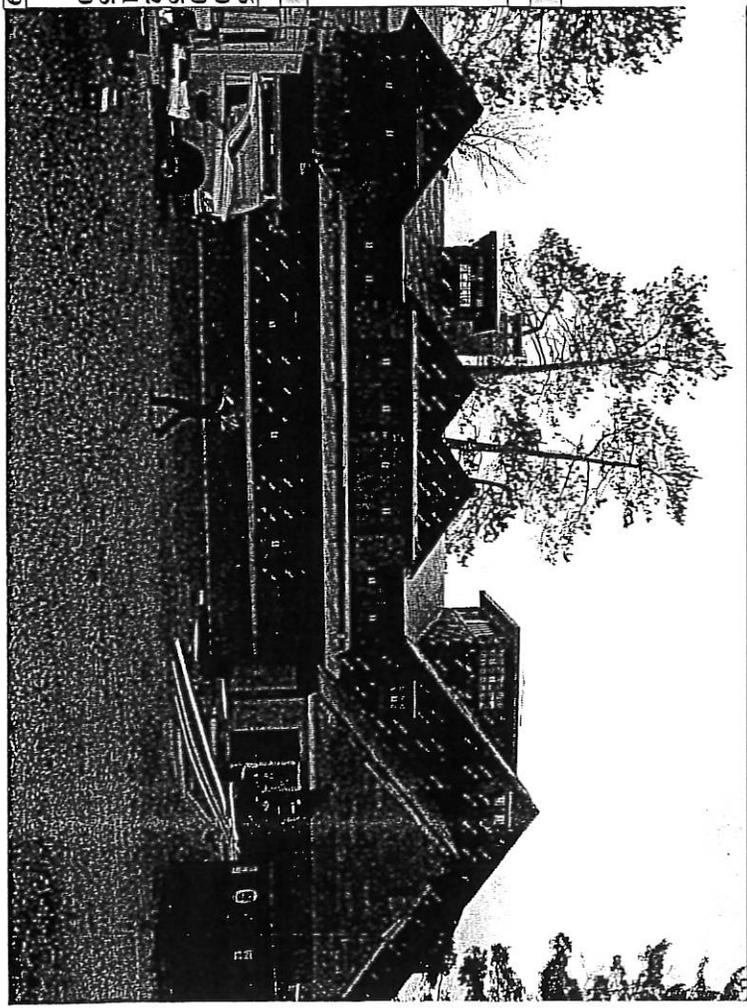
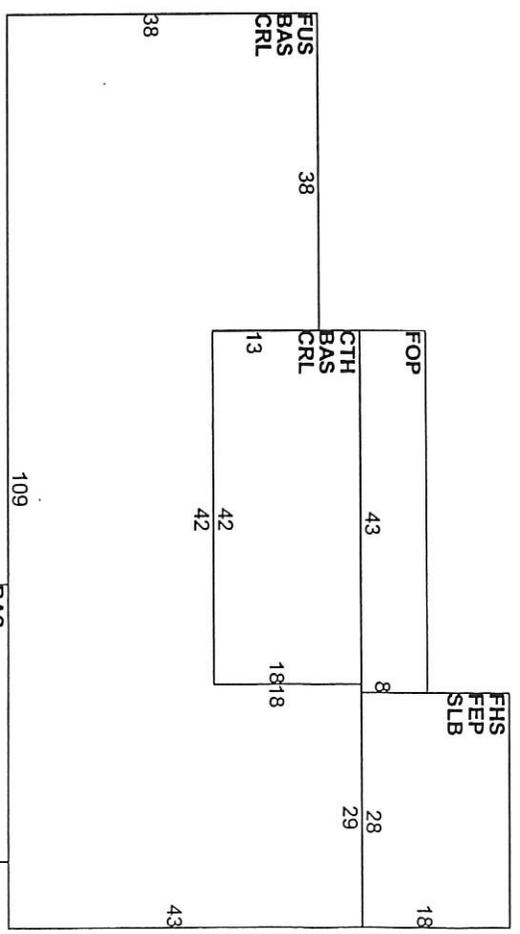
Code	Description	Living Area	Gross Area	Eff. Area	Unit Cost	Undeprec. Value
BAS	First Floor	4,827	4,827	4,827		1,515,176
CRL	Crawl Space	0	4,827	0		0
CTH	Cathedral ceiling	0	756	0		0
FEP	Enclosed Porch	0	504	0		110,805
FHS	Half Story, Finished	252	504	353		79,102
FOP	Open Porch	0	542	108		33,901
FUS	Upper Story, Finished	3,741	3,741	3,741		1,174,285
SLB	Slab	0	504	0		0
<b>Ttl. Gross Liv/Lease Area:</b>		<b>8,320</b>	<b>16,205</b>	<b>9,281</b>		<b>2,916,549</b>

**MIXED USE**

Code	Description	Percentage
1013	SFR WATER	100

**COST/MARKET VALUATION**

Adj. Base Rate:	313.90
Net Other Adj:	2,913,269
Replace Cost	3,280,400
AYB	2,916,549
EYB	2016
Dcp Code	2014
Remodel Rating	A
Year Remodeled	
Dep %	1
Functional Obslnc	0
External Obslnc	0
Cost Trend Factor	1
Condition	UC
% Complete	40
Overall % Cond	40
Apprais Val	1,166,600
Dcp % Ovr	0
Dcp Ovr Comment	
Misc Imp Ovr	0
Misc Imp Ovr Comment	
Cost to Cure Ovr	0
Cost to Cure Ovr Comment	



CURRENT OWNER	TOPO	UTILITIES	STRT/ROAD	LOCATION	DESCRIPTION	CURRENT ASSESSMENT	ASSESSED VALUE	ASSESSED VALUE	ASSESSED VALUE
PIKE BROOK ROAD REVOCABLE TRUST JACQUELINE M HUDKINS TRUSTEE PO BOX 6630	Rolling	5 Well 6 Septic	3 Unpaved	7 Waterfront	RES LAND RESIDENTL	Code 1330 Appraised Value 1330	Appraised Value 1,604,900 18,000	Assessed Value 1,604,900 18,000	2119 NEW LONDON, NH

Additional Owners: PORTSMOUTH, NH 03802

Other ID: 00135 00002 00000

ZONE MP  
UTILTY WF  
Ward CONSERVA  
Prec. 170

ROADFR GIS ID: 135-010-000

ASSOC PID#

RECORD OF OWNERSHIP

Year	Type	Description	Amount	Code	Description	Number	Amount	Comm. Int.
2014		PIKE BROOK ROAD REVOCABLE TRUST	3457/1350	Q	10/02/2014	1	1,750,000	00
		EVANS VIRGINIA M TRUST	1553/0829	U	03/01/1986	1	67,500	00
<b>Total:</b>								1,622,900

EXEMPTIONS

Year	Type	Description	Amount	Code	Description	Number	Amount	Comm. Int.
<b>Total:</b>								

ASSESSING NEIGHBORHOOD

NOTES

LOCATION NEGATES SIZE ADJ

2016:NEW HOUSE UNDER CONST. NO CHANGES TO CARD TIL APRIL 1 FALG FOR PU 2017.NO ACTION TAKEN/NOT BILLING

97 ADDITION COMPLETE

HAS SPECIAL CABANA ON WF WILL BE PATIO

OUTDOOR ENTERTAINMENT FOR ABUTTING OWNER

WHITE W/BL TRIM I-A

05/03 NO CHANGES APPARENT

NICEST BEACH ON LAKE

BUILDING PERMIT RECORD

Permit ID	Issue Date	Type	Description	Amount	Insp. Date	% Comp.	Date Comp.	Comments	Date
15-044	05/26/2015	7	Demolition	0	03/31/2016	100	04/01/2016	garage house	03/31/2016
15-043	05/26/2015	7	Demolition	0	03/31/2016	100	04/01/2016		08/24/2010
									05/13/2003
									08/21/2002
									06/14/2002

LAND LINE VALUATION SECTION

Use #	Code	Description	Zone	D	Front	Depth	Units	Unit Price	I. Factor	S.A.	acre	C. Factor	ST. Adj.	Notes- Adj.	S Adj. Fact	Adj. Unit Price	Land Value
1	1330	SFR WATER	R2				43,560	1,99	1,6000	8	1,0000	0.88	13,00	-2%WFF/-10%VACANT LEV	1.00	36.43	1,586,900
1	1330	SFR WATER	R2				0.30	5,000.00	1.0000	0	1.0000	1.00	12.00		1.00	60,000.00	18,000

Total Card Land Units: 1.30 AC Parcel Total Land Area: 1.3 AC Total Land Value: 1,604,900



This signature acknowledges a visit by a Data Collector or Assessor

APPRAISED VALUE SUMMARY

Appraised Bldg. Value (Card) 0

Appraised XF (B) Value (Bldg) 0

Appraised OB (L) Value (Bldg) 18,000

Appraised Land Value (Bldg) 1,604,900

Special Land Value 0

Total Appraised Parcel Value 1,622,900

Valuation Method: C

Adjustment: 0

Net Total Appraised Parcel Value 1,622,900

VISIT/CHANGE HISTORY

ID	CD.	Purpose/Result
NB	BP	BUILDING PERMIT
NB	FR	IN FIELD REVIEW
JS	CB	CALL BACK
KL	NC	NO CHANGE (HEARING)
TN	ML	MEASURE & LIST

CONSTRUCTION DETAIL

CONSTRUCTION DETAIL (CONTINUED)

Element	Cd.	Ch.	Description	Element	Cd.	Ch.	Description
Model	00		Vacant				

MIXED USE		Percentage
Code	Description	
1330	SFR WATER	100

COST/MARKET VALUATION

Adj. Base Rate:	0.00
Net Other Adj:	0
Replace Cost	0.00
AYB	0
EYB	0
Dep Code	
Remodel Rating	
Year Remodeled	
Dep %	
Functional Obslnc	
External Obslnc	
Cost Trend Factor	1
Condition	
% Complete	
Overall % Cond	
Apprais Val	
Dep % Ovr	0
Dep Ovr Comment	
Misc Imp Ovr	0
Misc Imp Ovr Comment	
Cost to Cure Ovr	0
Cost to Cure Ovr Comment	

OB-OUTBUILDING & YARD ITEMS(D) /XF-BUILDING EXTRA FEATURES(B)

Code	Description	Comment	L/B Units	Unit Price	Yr	Gde	Dp	Rt	Cnd	%Cnd	Apr Value
SHD1	SHED FRAME		64	20.00	2003		0			50	600
FGRI	GARAGE-AVE		L	1,106	25,00	2003		0		50	13,800
SHD1	SHED FRAME		L	240	20.00	2003		0		50	2,400
WDK	WOOD DECK		L	192	13.00	2003		0		50	1,200

BUILDING-SUB-AREA SUMMARY SECTION

Code	Description	Living Area	Gross Area	Eff. Area	Unit Cost	Underprc. Value

Ttl. Gross Liv/Lense Area:

0

0

0

0

