

# TOWN OF EXETER, NEW HAMPSHIRE

10 FRONT STREET • EXETER, NH • 03833-3792 • (603) 778-0591 •FAX 772-4709 www.town.exeter.nh.us

# PUBLIC NOTICE EXETER CONSERVATION COMMISSION

The Exeter Conservation Commission will meet in the Nowak Room of the Town Office Building, Exeter on **Tuesday, March 81, 2014 at 7:00 P.M.** 

# **Call to Order:**

- 1. Introduction of Members Present
- 2. Public Comment

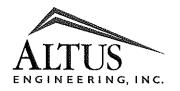
# **Regular Business:**

- 1. RiverWoods New at 20 Minimum Impact Expedited Dredge and Fill Wetland Application for 1,127 sf of impact to accommodate the installation of a rain garden at an existing drainage ditch (Map 97, Lot 23)
- 2. Committee Reports (trails, boundary monitoring, outreach, etc)
- 3. Approval of Minutes: February 11<sup>th</sup>, 2014
- 4. Natural Resources Planner's Report and Correspondence
  - a. Expenditure Requests
  - b. Upcoming Events/Workshops
- 5. Other Business
- 6. Next Meeting: Date and Agenda Items

Kristen Murphy for Russell Kaphan, Chair

**Exeter Conservation Commission** 

Posted March 14<sup>th</sup>, 2014: Exeter Town Office, Exeter Public Library, EXTV and Town Departments.



Civil Site Planning Environmental Engineering

133 Court Street Portsmouth, NH 03801-4413

March 13, 2014

Kristen Murphy, Natural Resource Planner Town of Exeter 10 Front Street Exeter, New Hampshire 03833

Re: RiverWoods – New at 20

RiverWoods Drive Exeter, New Hampshire P-4568

Dear Ms. Murphy:

We understand that review of the NHDES Minimum Expedited Wetland Permit Application for the proposed hybrid rain garden at *The Woods at RiverWoods* facility is on the March 18<sup>th</sup> Conservation Commission agenda. Attached is a PDF of the full Application for the Commission's review prior to the meeting. We will bring multiple bound copies of the Application to the meeting; upon signing, these copies will be submitted to NHDES (via the Town Clerk).

If a hard copy is needed before the meeting, please let me know and we will make arrangements for delivery.

Please call if you have any questions or require additional information.

Sincerely,

Jeffrey K. Clifford, P.E.

Vice President

JKC/jkc/4568.002.KM.ltr.doc

e-copy: Sylvia Von Aulock, Town Planner

Kathleen LaFave, RiverWoods

Tel: (603) 433-2335 Fax: (603) 433-4194 E-mail: Altus@altus-eng.com

March 13, 2014

NHDES Wetlands Bureau 29 Hazen Drive P.O. Box 95 Concord, NH 03302-0095

Re:

Minimum Impact Expedited Application

RiverWoods - New at 20 Tax Map 97, Lot 23 Exeter, New Hampshire

# Dear Inspector:

Altus is submitting on behalf of the applicant (The RiverWoods Company at Exeter, N.H.), a NHDES Minimum Impact Expedited Permit Application for proposed drainage and landscape improvements at their continuing care retirement community in Exeter. This project is located at Tax Map 97 Lot 23 where the Woods at RiverWoods portion of the campus which was constructed 20 years ago.

Proposed drainage improvements will extend the existing closed drainage system into the court yard area to address safety concerns due to frost heaves and ponding water at sidewalks. Runoff from roofs drain to the court yard is collected by an existing 18-inch drain pipe, which daylights at a problematic ditch. A hybrid rain garden is proposed at the ditch area to cool the roof runoff and to treat runoff from adjacent paved surfaces. The rain garden will impact to 1,127 square feet of manmade wetlands.

Enclosed for your review and approval are a Minimum Impacted Expedited Application and a \$200 check for the application fee.

Please call if you have any questions or require additional information.

Sincerely,

Jeffrey K Clifford, P.E. Vice-President

Kathleen Lafave, RiverWoods at Exeter, w/ encl. cc:

JKC/RMB/jkc/4568.NHDES.ltr.doc



# THE STATE OF NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES LAND RESOURCES MANAGEMENT **WETLANDS BUREAU**

29 Hazen Drive, PO Box 95, Concord, NH 03302-0095 Phone: (603) 271-2147 Fax: (603) 271-6588 http://des.nh.gov/organization/divisions/water/wetlands



# **PERMIT APPLICATION**

A SECTION OF THE SECT				Section of the section of the	
				-	
1. REVIEW TIME:					
Indicate your Review Time	below. Refer to Guidance Document A for in	nstructions.			
Standard Review	w (Minimum, Minor or Major Impact)			d Review (Mi	inimum Impact)
2. PROJECT LOCATION: Separate applications must	t be filed with each municipality that jurisdict	ional impacts	will occur in.		
ADDRESS: 7 RiverWood	s Drive			TOWN/CITY	: Exeter
ТАХ МАР: <b>97</b>	BLOCK:	LOT;	23	L	JNIT:
USGS TOPO MAP WATERBO	DDY NAME: <b>Unnamed Wetlands</b>	□ NA	STREAM WA	TERSHED SI	ZE: ⊠ NA
LOCATION COORDINATES (I	If known): 42-58'-36"N 70-56'-35"W	TO THE STATE OF TH	I and the second		☑ Latitude/Longitude □
3. PROJECT DESCRIPTION Provide a brief description of your project. DO NOT re	ON: of the project outlining the scope of work. A eply "See Attached" in the space provided by	ittach addition	al sheets as n	needed to pro	ovide a detailed explanation
The project includes consite entrance. The intersubsurface stone filled inch thick filter media	onstruction of a hybrid rain garden a ent of the hybrid rain garden is to coo I layer and to also treat runoff from a above. This ditch area was upland be ago and has reverted to a manmade	t an unsight of roof runot djacent pav efore being	ff draining to ed surfaces excavated a	o the ditch s draining t is part of t	by constructing a with a landscaped, 18- he original RiverWoods
4. RELATED PERMITS, E	ENFORCEMENT, EMERGENCY AUTHORIZ	ZATION, SHO	PRELAND, AL	TERATION	OF TERRAIN, ETC
N/A					
	BUREAU & DESIGNATED RIVERS: uired Attachments document for instructions	s to complete	a & b below.		
a. Natural Heritage Burea	u File ID: NHB <u>14 - 0667 .</u>				
	ne project is in ¼ miles of: Exeter River			; and	
date a copy of the a  ☐ NA	application was sent to Local River Advisory	/ Committee: I	Month: D	ay: Yea	ar:

6. APPLICANT INFORMATION (Desired permit holder)				
LAST NAME, FIRST NAME, M.I.: Kathleen Lafave				
TRUST / COMPANY NAME: The RiverWoods Company at Exeter, N.H.	MAILING A	DDRESS: 7 R	iverwoods D	)rive
TOWN/CITY: Exeter	A THE STATE OF THE	TO CONTROL OF THE STATE OF THE	STATE: NH	ZIP CODE: <b>03833</b>
EMAIL or FAX: klafave@riverwoodsrc.org	PHON	E: 603-772-4	4700	
ELECTRONIC COMMUNICATION: By initialing here:, I here	by authorize DES to	o communicate	all matters relat	ive to this application electronically
7. PROPERTY OWNER INFORMATION (If different than ap	plicant)	ent vertigen er krieft ein beschiert beschiert beschiert er vertigen er eine vertigen er eine vertigen er eine		
LAST NAME, FIRST NAME, M.I.: Same as above				
TRUST / COMPANY NAME:	MAILING A	DDRESS:		
TOWN/CITY:	A	n spiran jump a sjung og jum a jara j a stjar i 1974 i 1974 julystyr j 1974 july	STATE:	ZIP CODE:
EMAIL or FAX:	THE PARTY MAN AND A PERSON OF THE PARTY OF T	PHONE:		
ELECTRONIC COMMUNICATION: By initialing here I herel	by authorize DES to	communicate	all matters relati	ive to this application electronically
8. AUTHORIZED AGENT INFORMATION				
LAST NAME, FIRST NAME, M.I.: Jeffrey K. Clifford, P.E.		COMPANY N	NAME: <b>Altus E</b>	ngineering, Inc.
MAILING ADDRESS: 133 Court Street		v.d		
TOWN/CITY: Portsmouth		TEPPETER IPPE SEPTIFICATION AND ASSESSMENT ASSESSMENT	STATE: <b>NH</b>	ZIP CODE: <b>03801</b>
EMAIL or FAX: jclifford@altus-eng.com	PHONE: (	603-433-233	35	The second secon
ELECTRONIC COMMUNICATION: By initialing here <u>JKC</u> , I hereby	authorize DES to o	ommunicate al	l matters relative	to this application electronically
PROPERTY OWNER SIGNATURE:     See the Instructions & Required Attachments document for clar	ification of the be	low statemen	ts	
By signing the application, I am certifying that:				
I authorize the applicant and/or agent indicated on this for upon request, supplemental information in support of this content.	s permit application	on.	-	
<ul><li>2. I have reviewed and submitted information &amp; attachment</li><li>3. All abutters have been identified in accordance with RSA</li></ul>				tachment document.
4. I have read and provided the required information outline 5. I have read and understand Env-Wt 302.03 and have che				type.
Any structure that I am proposing to repair/replace was e grandfathered per Env-Wt 101.47.				ureau or would be considered
7. I have submitted a copy of the application materials to th				
<ul><li>8. I authorize DES and the municipal conservation commiss</li><li>9. I have reviewed the information being submitted and that</li></ul>				
10. I understand that the willful submission of falsified or I	misrepresented i	nformation to		
Environmental Services is a criminal act, which may require	_		ral permits wh	nich I am responsible for
obtaining.  12. The mailing addresses I have provided are up to date			•	
forward returned mail.	***	·	Τ	
				1 1
Property Owner Signature Print	name legibly		D	ate

# **MUNICIPAL SIGNATURES**

# The signature below certifies that the municipal conservation commission has reviewed this application, and: 1. Waives its right to intervene per RSA 482-A:11; 2. Believes that the application and submitted plans accurately represent the proposed project; and 3. Has no objection to permitting the proposed work.

Print name legibly

# **DIRECTIONS FOR CONSERVATION COMMISSION**

Authorized Commission Signature

- 1. Expedited review ONLY requires that the conservation commission's signature is obtained in the space above.
- 2. The Conservation Commission signature should be obtained prior to the submittal of the original application and four copies to the town/city clerk for mailing to the DES.
- 3. The Conservation Commission may refuse to sign. If the Conservation Commission does not sign this statement for any reason, the application is not eligible for expedited review and the application will reviewed in the standard review time frame.

As required by Chapter 482-A:3 (amen detailed plans, and five USGS location postal receipts (or copies) for all abutte	maps with the town/city indicated t	applicant has filed five applica	
் Town/City Clerk Signature	Print name legibly	Town/City	Date

# **DIRECTIONS FOR TOWN/CITY CLERK:**

Per RSA 482-A:3,I(d):

- 1. For applications where "Expedited Review" is checked on page 1, accept the application for mailing only if the Conservation Commission signature has been sought;
- Collect the postal receipts demonstrating that all abutters and the Local Advisory Committee were sent proper notice:
- 3. Collect any administrative fees, not to exceed \$10 plus the cost of postage by certified mail (RSA 482-A:3,I).
- 4. IMMEDIATELY sign the original application and four copies in the signature space provided above;
- Retain one copy of the application form, one complete set of attachments and the postal receipts demonstrating that all abutters and the Local River Advisory Committee were notified and make them reasonably accessible to the public;
- IMMEDIATELY distribute a copy of the application with one complete set of attachments to each of the following bodies: the municipal Conservation Commission, the local governing body (Board of Selectmen or Town/City Council), and the Planning Board in accordance with RSA 482-A:3, I; and
- IMMEDIATELY send the ORIGINAL application form, one complete set of attachments and filing fee, by CERTIFIED MAIL to the NHDES Wetlands Bureau at the address indicated on page 1 of this application. (DO NOT HOLD FOR CONSERVATION COMMISSION SIGNATURE).

Date

# 12. IMPACT AREA:

For each jurisdictional area that will be/has been impacted, provide square feet and, if applicable, linear feet of impact <u>Permanent</u>: impacts that will remain after the project is complete.

<u>Temporary</u>: impacts not intended to remain (and will be restored to pre-construction conditions) after the project is complete. After-the-fact (ATF): work completed prior to receipt of this application by DES. Check box to indicate ATF

JURISDICTIONAL AREA	PERMANENT Sq. Ft. / Lin. Ft.		TEMPORARY Sq. Ft. / Lin. Ft.
Forested welland		☐ ATF	☐ ATF
Scrub-shrub wetland		☐ ATF	□atf
Emergent wetland (MAN-MADE	DITCH) 1,127	ATF	ATF
Wet meadow		☐ ATF	☐ ATF
Intermittent stream		☐ ATF	ATF
Perennial Stream / River	1	☐ ATF	/ ATF
Lake / Pond	1	☐ ATF	/ ATF
Bank - Intermittent stream	1	☐ ATF	/ ATF
8ank - Perennial stream / River	1	ATF	/ATF
Bank - Lake / Pond	1	☐ ATF	/ ATF
Tidal water	1	☐ ATF	/ATF
Salt marsh		☐ ATF	ATF
Sand dune		☐ ATF	ATF
Prime wetland		☐ ATF	ATF
Prime wetland buffer		☐ ATF	_ ATF
Undeveloped Tidal Buffer Zone (TBZ)		☐ ATF	ATF
Previously-developed upland in TBZ		☐ ATF	ATF
Docking - Lake / Pond		☐ ATF	_ ATF
Docking - River		☐ ATF	☐ ATF
Docking - Tidal Water	The state of the s	☐ ATF	ATF
TOTAL	1,127 /	P1170744.16.16.1	

13. APPLICATION FEE: See the Instructions & Required Attachments	document for further	r ins	struction	
☑ Minimum Impact Fee: Flat fee of \$ 200				
☐ Minor or Major Impact Fee: Calculate using the below table below				
Permanent and Temporary (non-docking)	sq. ft.	Х	\$0.20 =	\$
Temporary (seasonal) docking structure:	sq. ft.	Х	\$1.00 =	\$
Permanent docking structure:	sq. ft.	X	\$2.00 =	\$
Projects proposing shoreline structure	es (including docks	s) ad	ld \$200 =	\$
			Total =	\$
The Application Fee is the above calculated To	tal or \$200, whichev	er is	greater =	\$

# **EXHIBIT A**

NHDES Expedited Review – Minimum Impact

# PROJECT DESCRIPTION

The applicant, The RiverWoods Company, is proposing drainage and landscape improvements at their original facility, "The Woods", Exeter. The portion of the campus was completed 20 years ago at a 84.37-acre parcel identified as Tax Map 97 Lot 23 on the Town assessor maps. The property is abutted by single-family residential lots protected woodlands. Runoff from the facility flows into adjacent wetlands before draining to the Exeter River.

The facility has ongoing issues with runoff from the roofs and drip edges that lack a collection system. Generally, silty soils at the site have a shallow restrictive layer, contributing to unwarranted heaving of sidewalks and paved surfaces. Drainage improvements will extend the existing closed system into the court yard. Runoff from the courtyard is collect by an existing 18-inch drain pipe, which daylights at an unsightly and problematic drainage ditch near the site entrance. This ditch was an upland area before being excavated as part of the original project and has reverted to a manmade wetland. Sheet C-1, Entry Court West-Utility and Grading Plan depicts both the 1994 wetlands and the October 2013 delineations by Mark West.

Minimal treatment is currently being provided to runoff from this outfall. As part of the drainage improvements, a hybrid rain garden is proposed. The intent of the hybrid rain garden is to cool roof runoff draining to the ditch by constructing a subsurface stone filled layer and to also treat runoff from adjacent paved surfaces draining with a landscaped, 18-inch thick filter media above. This will significantly improve water quality of the stormwater runoff.

# MINIMIZATION & AVOIDANCE

The ditch area was upland prior to the construction on the development 20 years ago. There is currently minimal treatment of stormwater from this outfall. The proposed hybrid rain garden will provide treatment, significantly improve water quality, reduce peak flow and low the water temperature of the runoff. In general, the wetland impact area is limited to an area that was upland prior to 1994.



48 Stevens Hill Road, Nottingham, NH 03290 603-734-4298 ♦ Fax 603-734-4316 ♦ mark@westenv.net

Jeff Bertrand Riverwoods Retirement Community 7 Riverwoods Drive Exeter, NH 03833 March 11, 2014

**RE: Riverwoods Retirement Community** 

**SUBJ: Wetland Delineation Report** 

# Dear Jeff:

At your request, West Environmental, Inc.(WEI) delineated wetlands at the above referenced property on October 29, 2013. The onsite wetlands were delineated according to the following standards:

- US Army Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1 (January, 1987).
- Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (October 2009).
- National List of Plant Species That Occur in Wetlands: Northeast (Region 1). U.S. Fish and Wildlife Service (May 1988).
- NHDES Wetlands Bureau Administrative Rules

The wetland boundaries are shown on plans entitled Topographic Plan prepared by Doucet Survey sheets 1 and 2 of 2 and dated 11-13-13. This plan depicts the wetlands delineated on the site. WEI evaluated plant communities, soils through augered soil samples and hydrology to determine the wetland boundary.

Mark West delineated the wetlands some 18 years ago when this facility was first constructed. The wetland swale west of the main entrance is a human created wetland resulting from drainage associated with the Riverwoods building. The water source for this wetland is roof and foundation drainage. This wetland was not present at the time of the original wetland delineation. It functions as a stormwater conveyance to the natural wetland downstream.

This completes our report at this time and we hope that it meets your needs. Please call our office if you have any questions or require additional information.

Sincerely,

West Environmental, Inc.

Mark C. West.

Min

NH Certified Wetland Scientist #10

Cc: Jeff Clifford

To: Ronald Beal

133 Court Street

Portsmouth, NH 03801

From: NH Natural Heritage Bureau

Re: Review by NH Natural Heritage Bureau of request dated 2/13/2014

VALID ONLY FOR NOTIFICTION OR MINIMUM EXPEDITED APPLICATIONS SUBMITTED TO

THE NHDES WETLANDS BUREAU

NHB File ID: NHB14-0667 Applicant: Justine Vogel

Location: Tax Map(s)/Lot(s): 97/23

Exeter

Project Description: Drainage improvements adjacent to existing building and

the enclosed quad; Convert a man-made wetland (ditch) to a high valued rain garden with a flow control outlet structure. Rain garden will provide treatment to the surrounding impervious surfaces while the outlet structure will slow the outflow thereby cooling runoff before entering

wetlands system

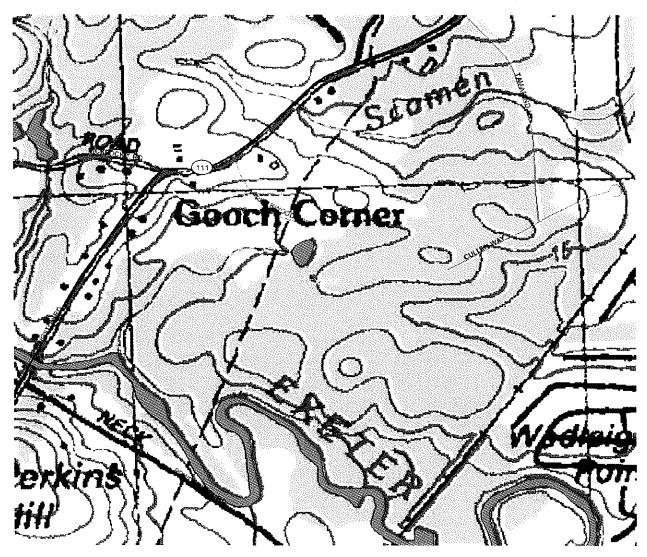
The NH Natural Heritage database has been checked for records of rare species and exemplary natural communities near the area mapped below. The species considered include those listed as Threatened or Endangered by either the state of New Hampshire or the federal government. We currently have no recorded 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 2/12/2015.

Date: 2/13/2014

# MAP OF NOTIFICATION POINTS FOR NHB FILE ID: NHB14-0667





# US Army Corps of Engineers 8

New England District

# New Hampshire Programmatic General Permit (PGP) Appendix B - Corps Secondary Impacts Checklist (for inland wetland/waterway fill projects in New Hampshire)

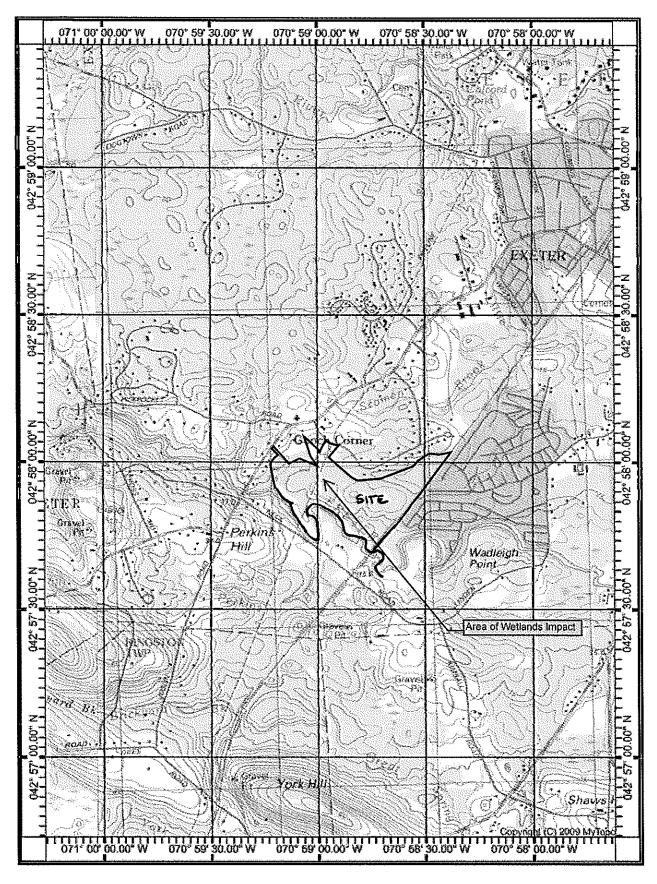
- 1. Attach any explanations to this checklist. Lack of information could delay a Corps permit determination.
- 2. All references to "work" include all work associated with the project construction and operation. Work includes filling, clearing, flooding, draining, excavation, dozing, stumping, etc.
- 3. See PGP, GC 5, regarding single and complete projects.
- 4. Contact the Corps at (978) 318-8832 with any questions.

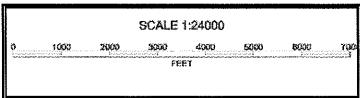
1. Impaired Waters	Yes	No
1.1 Will any work occur within 1 mile upstream in the watershed of an impaired water? See		
http://des.nh.gov/organization/divisions/water/wmb/section401/impaired_waters.htm	x	ı
to determine if there is an impaired water in the vicinity of your work area.*		
2, Wetlands	Yes	No
2.1 Are there are streams, brooks, rivers, ponds, or lakes within 200 feet of any proposed work?		X
2.2 Are there proposed impacts to SAS, shellfish beds, special wetlands and vernal pools (see		
PGP, GC 26 and Appendix A)? Applicants may obtain information from the NH Department of		
Resources and Economic Development Natural Heritage Bureau (NHB) website,		X
www.nhnaturalheritage.org, specifically the book Natural Community Systems of New		
Hampshire.		
2.3 If wetland crossings are proposed, are they adequately designed to maintain hydrology,		
sediment transport & wildlife passage?		N/A
2.4 Would the project remove part or all of a riparian buffer? (Riparian buffers are lands adjacent		
to streams where vegetation is strongly influenced by the presence of water. They are often thin		
lines of vegetation containing native grasses, flowers, shrubs and/or trees that line the stream		N/A
banks. They are also called vegetated buffer zones.)		
2.5 The overall project site is more than 40 acres. (Limit of construction 43,000 s.f. +/-)		X
2.6 What is the size of the existing impervious surface area?	21,089	S.F.
2.7 What is the size of the proposed impervious surface area?	18,156	S.F.
2.8 What is the % of the impervious area (new and existing) to the overall project site?	49% / 4	12%
3. Wildlife	Yes	No
3.1 Has the NHB determined that there are known occurrences of rare species, exemplary natural		
communities, Federal and State threatened and endangered species and habitat, in the vicinity of		x
the proposed project? (All projects require a NHB determination.)		
3.2 Would work occur in any area identified as either "Highest Ranked Habitat in N.H." or		
"Highest Ranked Habitat in Ecological Region"? (These areas are colored magenta and green,		
respectively, on NH Fish and Game's map, "2010 Highest Ranked Wildlife Habitat by Ecological		
Condition.") Map information can be found at:		X
• PDF: www.wildlife.state.nh.us/Wildlife/Wildlife_Plan/highest_ranking_habitat.htm.		^`
• Data Mapper: www.granit.unh.edu.		
• GIS: www.granit.unh.edu/data/downloadireedata/category/databycategory.html.		

	Х
	х
	N/A
Yes	No
	Х
	N/A
	Yes

<sup>\*</sup>Although this checklist utilizes state information, its submittal to the Corps is a Federal requirement.

<sup>\*\*</sup> If project is not within Federal jurisdiction, coordination with NH DHR is not required under Federal law..





# **EXHIBIT A**

NHDES Expedited Review – Minimum Impact

# PROJECT DESCRIPTION

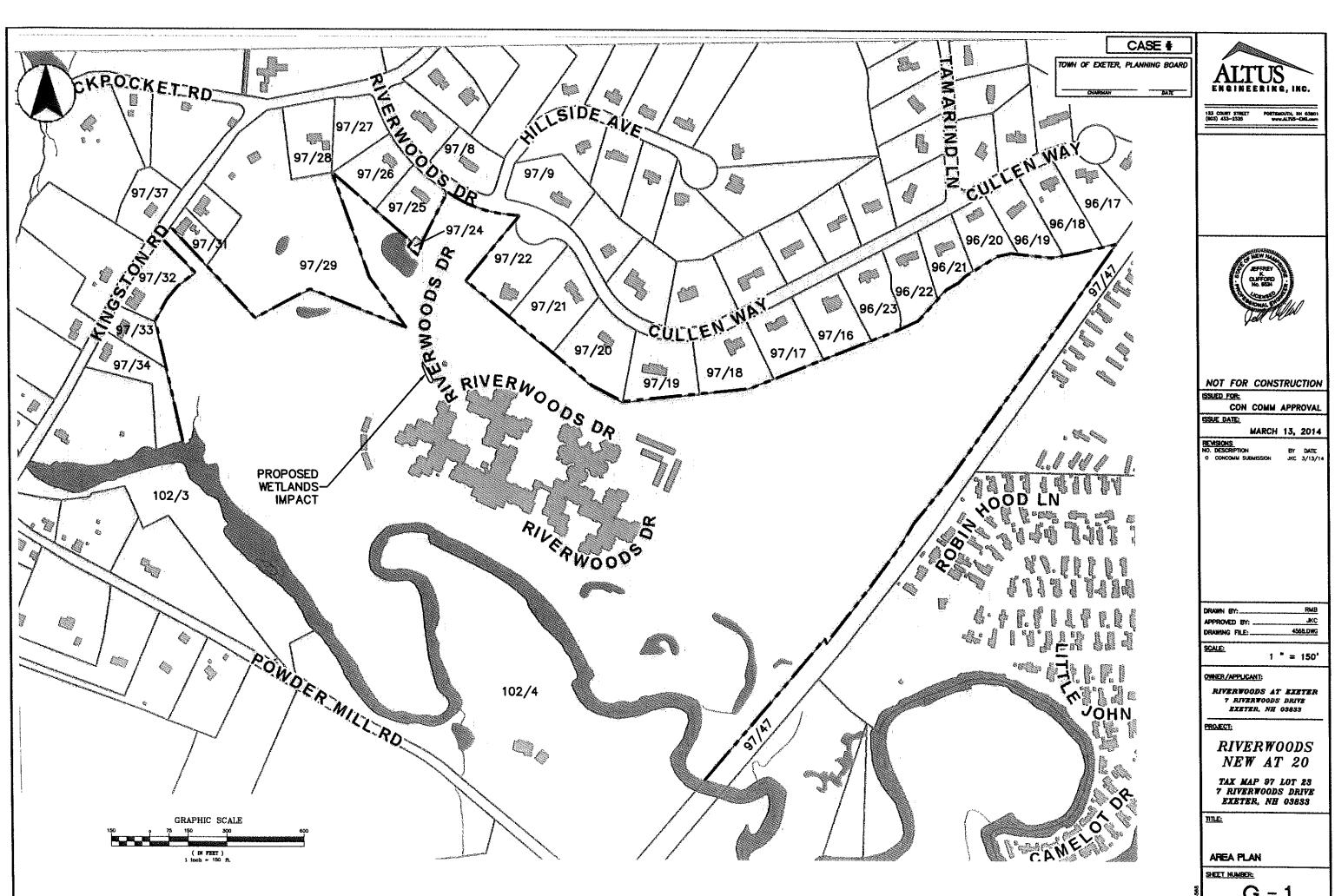
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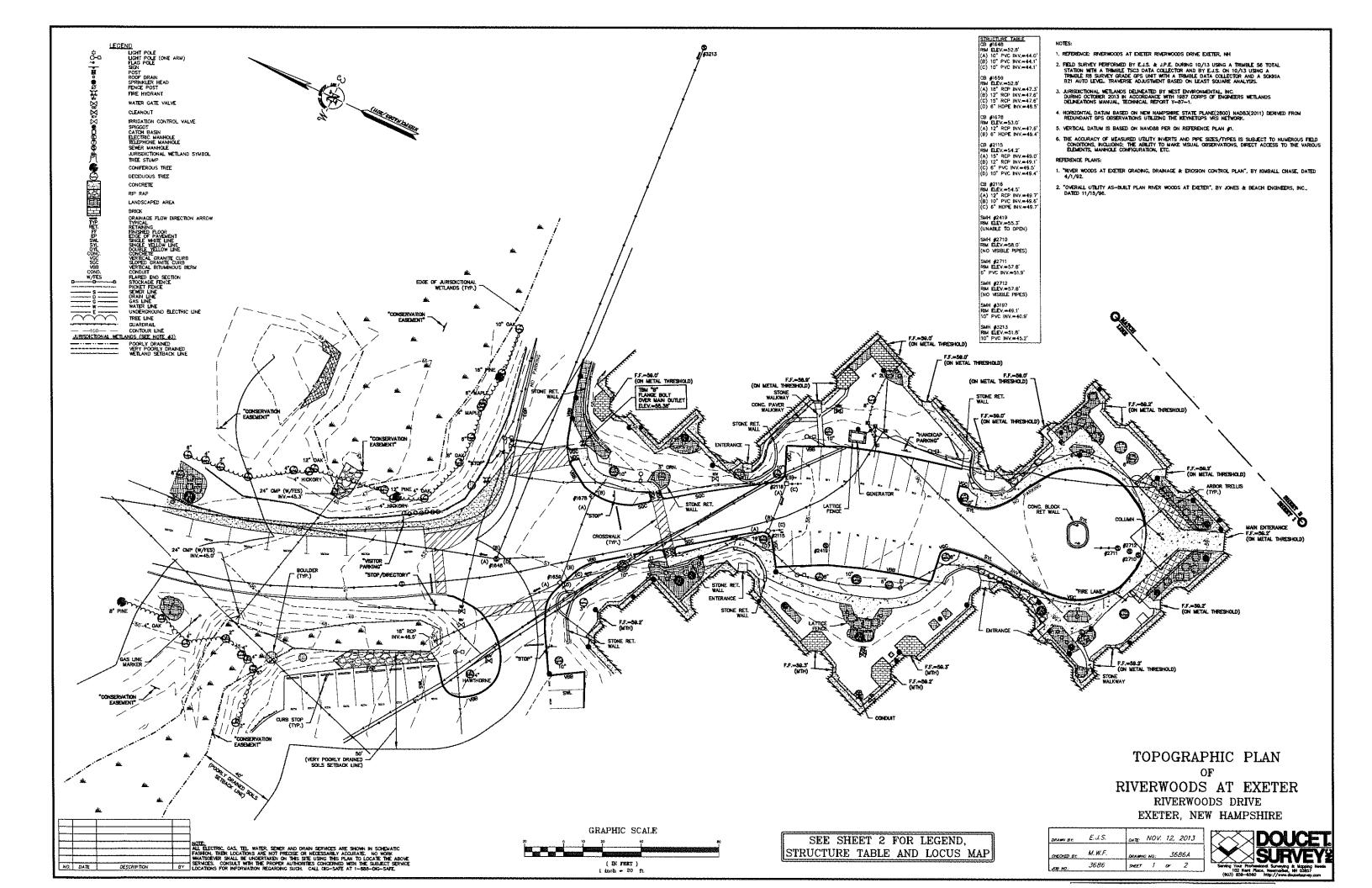
Minimal treatment is currently being provided to runoff from this outfall. As part of the drainage improvements, a hybrid rain garden is proposed. The intent of the hybrid rain garden is to cool roof runoff draining to the ditch by constructing a subsurface stone filled layer and to also treat runoff from adjacent paved surfaces draining with a landscaped, 18-inch thick filter media above. This will significantly improve water quality of the stormwater runoff.

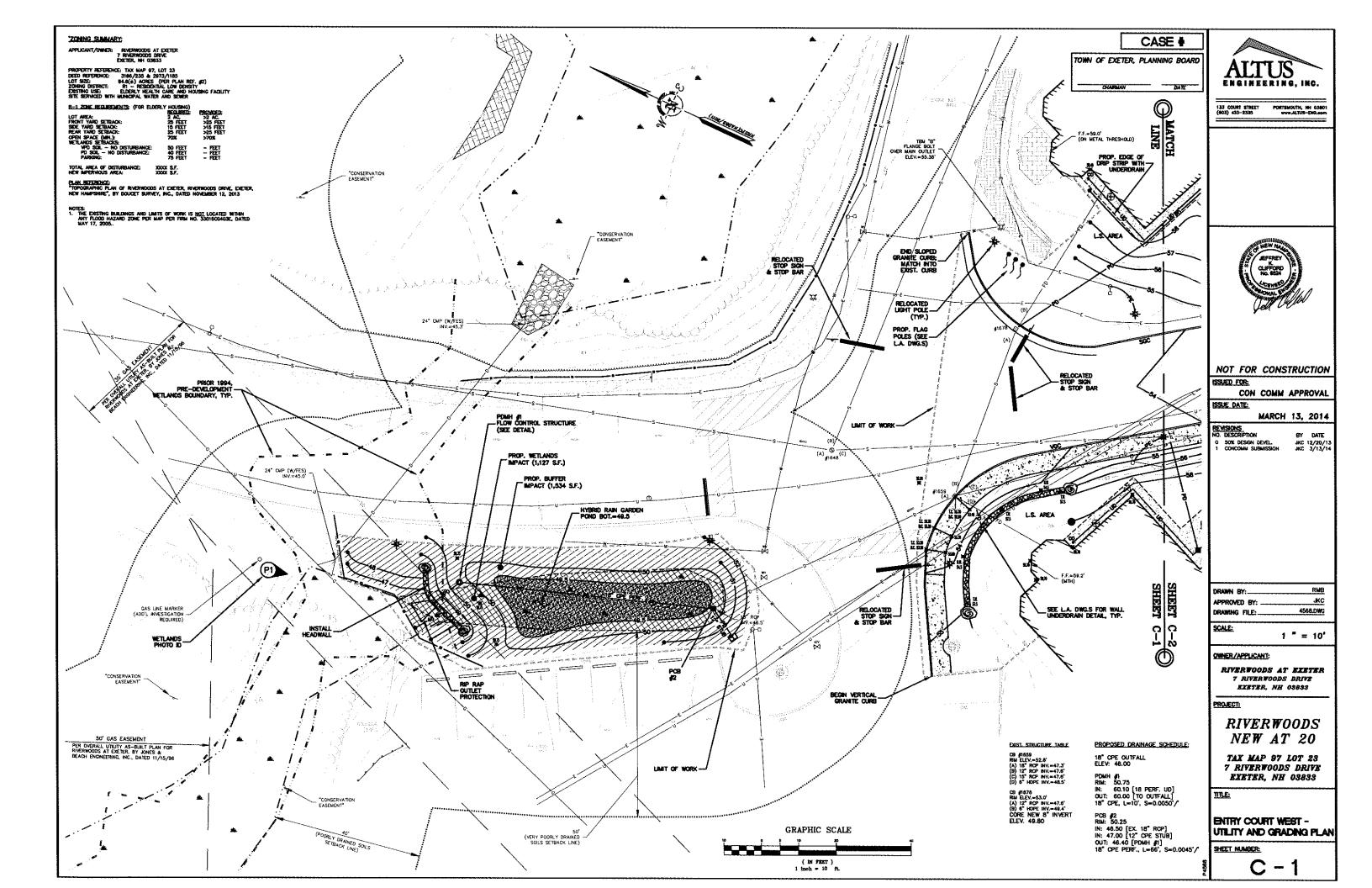
# MINIMIZATION & AVOIDANCE

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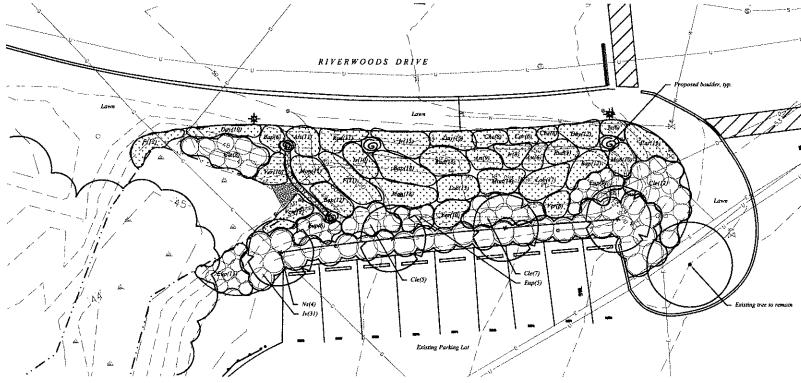




# Rain Garden Notes

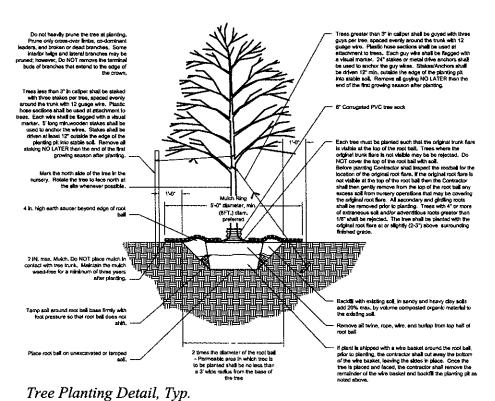
initial Establishment: During the first 2-3 months of establishment water the garden on a weekly basis (to supplement rainfall for a total of 1-inch per week).

Replace plants as needed, until area is covered with established plants









# Landscape Notes

- Design is based on drawings by Alfus Engineering dated 03/04/2014 and may require adjustment due to actual field conditions.

  The contractor shall brow best management practices during construction and shall stee all meens necessary to stabilize and protect the site all non-records.

  The contractor all shall be provided on each shall be protected for the construction.

  The Contractor shall very liquout and grades and inform the Landscape Architect or Client's Representative of any discrepanication or changes in targout endorgrading residence of changes in targout endorgrading and provided on each shall be protected for the construction.

  If it is the contractor's responsibility to weigh drawings provided as as to the correct scale prior to any bid, estimate or installation. A graphic cascile be his shall be provided on each shall be protected on the construction. The contractor's responsibility to weight to the construction of the construction and exhall be protected from damage for the equation of the protect by snow fence of other suitable means of protection to be approved by Landscape Architect or Client's Representative. Snow fence of other suitable means of protection to be approved by Landscape Architect or Client's Representative. Snow fence and the coated of the other bid in each of maintain and shall include any and all surface reds. On one filt or maintain on the trust facts. Do not exceed the object of protection of the construction exceeds the protection of the construction of the constru

- Nutreprimen, Inc. in the <u>Annexed Standard of Nutreps Stock</u>. American Standards institute, Inc. 230 Southern Building, Valenbington, O. C. 2000.

  A complete list of plants, including a schedule of sizes, quantities and other requirements is shown on the drawings. In this A complete list of plants, including a schedule of sizes, quantities and other requirements is shown on the drawings. In this A plants shall be eighty flagged with proper bostance have.

  The Contractor shall guarantee air plants for not less than one year from time of accopiance.

  Owner or Owner's Representative will impace plants upon delivery for conformity to Specification requirements. Such approval shall not affect the right of inspection and rejection during or after the progress of the work. The Owner reserves be right to improve a temperature amazine of each type of shrub, herbocatous persential annual, end ground cover at the place of growth. Such sample will awye as a minimum standard for all plants of the same species used in this work.

  All bardicaping shall be provided with either of the following.

  An underground spiritualing system.

  b. An outside hose sinchment within 150 feet. If an automatic ringstoon system is installed, all impation valve boxes shall be located within planting bod areas.

- b. An outside hose attribution to letter to the control of the authorise fringed on space of the authorise fringed on space in statistical, all register or space of the authorise fringed on space of the authorise fringed on space of the authorise of the auth
- bloc.
   in no case shall much louch the stem of a plant her shall much ever be more than 3" thick total (including previously applied molet) over the not bail of any plant.
   Secondary listeral branches of decadeous trees overhanging vehicular and pedestrian trevel ways shall be prured up to a neight of 6" to allow close and safe passage of vehicles and pedestrians under their caseby.
   Secondary Architect is not report to the other standards of the contractor.
   I candidate of Architect is not report to list of the means and methods of the contractor.

# Plant List

TREES					
Symbol	Botanical Name	Common Name	Quantity	Size	Comments
Ns	Nyssa Sylvatica	Black Tupelo	4	2.5-3" Cal	B&B
SHRUBS					
Symbol	Botanical Name	Common Name	Quantily	Size	Comments
Cie	Clethra sinifolia Hummingbird	Hummingbird Compact Summersweet	32	5 gal	
٨	llex verticitate "Maryland Beauty"	Maryland Beauty Winterberry	31	5 gai	
PERENNIA	ALS, GROUNDCOVERS, VINES and	ANNUALS			
Symbol	Botanical Name	Common Name	Quantity	Size	Comments
Ast	Aster novae-angliae Furple Dome"	Purple New England Aster	26	1 gai	
₿ap	Baptisia austraks	Felse Blue Indigo	48	1 공화	
Car	Carex 'Ice Dence'	ice Danse Sedge	22	1 gai	
Che	Chelone glabra	Turtihead	18	1 gal	
Day	Hemerocatis Big Time Happy	Big Time Happy Daylify	32	1 cal	
Eup	Eupatorium maculatum Gatevay	Joe-pye Weed	31	1 gal	
F	Matteuccia struttiopraris	Ostrich Fem	33	t pal	
fr	Iris versicolor	Blue Flag Iris	39	1 gal	
Lob	Lobelia siphilitica	Great Blue Lobelia	30	1 02	
	Monarda 'Jacob Cline'	Red Bee Baim	53	1 gai	
Mon	Partial de Percon Cities				
Rudi	Rudbeckia fulgida "Goldsturm"	Black-Eyed Susan	36	1 gal	

WOODFURN ACOMPANY Landscape Architecture, LLC 103 Kent Plac Normarker, Nia 03857 Tcl 403 659 5949 Fax: 603 659 5939

# 20 at Planting. New Garden RiverWoods Rain RiverWoods

Hybrid

Drawn By: VBRW Checked By: Scale: I'' = I0' - 0''March 5, 2014 Revisions:



© 2014 Woodburn & Company Landscape Architectury, LLC

# PROJECT NAME AND LOCATION

olicant: RiverWoods at Exeter 7 RiverWoods Drive Exeter, NH 03820

# DESCRIPTION

# NAME OF RECEIVING WATER

Closed drainage system draining into the Exeter River.

# TEMPORARY EROSION AND SEDIMENT CONTROLS AND STABILIZATION PRACTICES

ited in the sequence of Major Activities, the hoy bales and silt fences shall be installed commencing any dearing or grading of the site. Structural controls shall be installed intly with the applicable activity. Once construction activity access permanently in an area, silt and hay bale barriers and any earth/dikes will be removed once permanent measures are established.

During construction, runoff will be diverted around the site with stabilized channels where possible. Sheet runoff from the site shall be filtered through hey bole borriers, atone check doms, and all tences. All storm drain inlets shall be provided with hey bole filters or stone check doms. Stone rip rep shall be provided at the outlets of drain pipes and culvarts where shown on the drawings.

Temporary vegetation shall be maintained in these greats until permanent seeding is applied. Additionally, erosion sedimentation measures shall be maintained until permanent vegetation is established.

# INSTALLATION, MAINTENANCE AND INSPECTION PROCEDURES FOR TEMPORARY EROSION AND SEDMENT CONTROL MEASURES

These are the general inspection and maintenance practices that shall be used to implement the plan.

- The smallest practical portion of the site shall be decladed at one time. The amount of open area shall be determined by an approved "Construction Sequence Plan" which will be prepared by the contractor and submitted to the engineer at least 30 days prior to construction.
- All control measures shall be inspected at least once each week and following any storm event of 0.5 inches or greater.
- All measures shall be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours.
- Built up sediment shall be removed from sit tence or hoybale barriers when it has reached one third
  the height of the fence or bale, or when "bulges" occur.
- 6. Temporary seeding and planting shall be inspected for bare spats, washouts, and unhealthy growth.
- The Contractor's site superintendent shall be responsible for inspections, maintenance and repair activities, and filling out the inspection and maintenance report.
- The owner's authorized engineer shall inspect the site on a periodic basis to review compliance with the Plans.

- 10. An area shall be considered stable if one of the following has occurred:

  a. Base course groves have been installed in areas to be poved;
  b. A minimum of 35 inches of non-erosive motiental such as stone of riprap has been installed or d. Erosion control blankets have been properly installed.

# MULCHING

Mulching — mulch shall be used on highly eradible soils, on critically erading areas, on areas where conservation of moisture will facilitate plant establishment, and where shown on the plans.

The time period can range from 21 to 28 days of inactivity on a area, the length of time varying with site conditions. Professional judgment shall be used to evaluate the interaction of site conditions (soil eradibility, season of year, extent of disturbance, proximity to sensitive resources, etc.) and the potential impact of erasion on adjacent areas to chaose on appropriate time restriction.

# 2. Mulch Application

Type	per 1,000 s.f.	per 1,000 s.f.	Use and Comments
Hay or Straw	75-92 lbs.	150~185 lbs.	Must be dry and free from mold. May be used with plantings.
Jule and Fibrous Matting	As per monufacturer Specifications	As per monufacturer Specifications	Used in scope areas, water coursed and other areas.
Crushed Stone 1/4" to 1-1/2" dia.	Spread more than 1/2" thick	Spread more than 1/2" thick	Effective in controlling wind and water erosion.
Wood chips or bark mulch	460 to 920 lbs.	~	Used mostly with trees and shrub plantings.
Empion Control Mix	7º dhinir mata	Par winter	* The omanic matter content is

- \* The organic motter content is between 80 and 100%, dry weight basis. Particle size by weight is 100% passing a 6" screen and a minimum at 70 %, maximum of 85%, possing a 0.75' screen. The organic partion needs to be Thorus and elempated to be Thorus and elempated to be and to the sands are not acceptable in the mis. Soluble solts content is less than 4.0 mmhos/cm.

  - 4.0 mmhos/cm.
    \* The pH should fall between 5.0 and 8.0.

All mulches shall be inspected periodically, in particular after rainstorms, to check for rail erosion. If less than 90% of the soil surface is covered by the specified thickness of mulch, additional mulch shall be introdicated, confied.

# C. TEMPORARY GRASS COVER

## 1. Seedbed Preparation

Apply fertilizer at the rate of 500 pounds per ours of 10-10-10. Apply limestone (equivolent to 50 percent acidium plus magnesium axide) at a rate of three (3) tans per ours.

- c. Utilize annual rye grass at a rate of 40 lbs/core.
- Where the soil has been compacted by construction operations, loosen soil to a depth of two (2) inches before applying fertilizer, lime and seed.

Temporary seedings shall be periodically inspected. At a minimum, 95% of the soil surface should be covered by vegetation. If any evidence of erosion or sedimentation is apparent, repairs shall be made and other temporary measures used in the interim (mutch, filter barriers, check down, etc.).

# D. FILTERS

# 1. Strow/Hoy Boles

- a. Sheet Flow Applications
  - Botes shall be placed in a single row, lengthwise on the contour, with ends of adjacent boies tightly obutting one another.
  - 2. All boles shall be string—lied. Boles shall be installed so that blindings are oriented around the sides rather than along the tope and bottoms of the boles to prevent deterioration of the bindings.
    3. The bornier shall be entrenched not bootfield. At whench shall be exceeded the width of a bole control of the boles are stated and of the boles. After the boles are stated and philade, the control of the boles are boles of the boles. After the boles are stated and philade, the control of the boles are boles and boles.
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    4. All boles are the boles are the boles are the boles are the boles.
    4. All boles are the boles a
  - 4. Each balls shall be securely anchored by at least two (2) stakes driven through the bale. The first stake in each bale shall be driven toward the previously laid bale to force the bales together. Stakes shall be driven deep enough into the ground to securely anchor the bales.
  - The gaps between bales shall be chinked (filled by wedging) with how to prevent water from escaping between the bales.

# 2. Sitt Fence

a. Synthetic filter fabric shall be a pervious sheet of propylene, nylon, polyester or ethylene yarn and shall be certified by the manufacturer or supplier as conforming to the following requirements:

Physical Property	Test	Requirements
Filtering Efficiency	VTM-51	75% minimum
Tensile Strength at 20% Maximum Elongation*	VTM-52	Extra Strength 50 lb/lin in (min)
		Standard Strength 30 lb/lin in (min)
Flow Rote	VIM51	0.3 gai/sf/min (min)

Requirements reduced by 50 percent ofter six (6) months of installation.

Synthetic filter fabric shall contain utraviolet ray inhibitors and stabilizers to provide a minimum of six (6) months of expected usable construction life at a temperature range of 0 degrees F to 120° F.

- The "stondard strength" filter fabric shall be stopied or wired to the fence, and eight (8) inches of the fabric shall be attended into the trench. The fabric shall not extend more than 36 inches above the original ground surface. Filter fabric shall not be stopied to existing trees.

- Sit fences shall be removed when they have served their useful purpose but not before the upsiops prece has been permanently stabilized.

# 3. Sit Sock or approved equal

Sediment borriers shall be installed prior to any soil disturbance of the contributing upslope drainage area

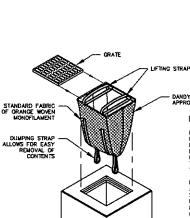
- o. Strew/hoy bole borrier and silt fence borriers shall be inspected immediately ofter each rainfoil and ot least delily during protonged rainfoil. They shall be repaired if there are any signs of areason or sedimentation below them. Any required repairs shall be made immediately, if there are signs of undercutting at the center or the edges, or impounding of large volumes of water, the sediment barriers shall be rainfood with a temporary check dom.
- Sediment deposits shall be removed when deposits reach approximately one third (1/3) the height of the barrier.
- Any sediment deposits remaining in place after the sit fence or haybale barrier is no longer required shall be removed. The area shall be prepared and seeded.
- Additional stone, if needed, shall be added to the construction entrance, stone lined swales, etc., periodically to maintain proper function of the erosion control structure.

# E. PERMANENT SEEDING

- Bedding stones larger than  $3/4^*$ , trash, roots, and other debris that will interfere with seading and future molrisonence of the area should be removed. Where feasible, the soil sholl be tilted to a depth of  $4^*$  to prepare a seadbed and risk fartilizes into the soil. Furnish up to  $4^*$  depth of foam, where necessary, to establish the  $4^*$  deep seeed bed.
- Farillizer lines and fertilizer shall be applied award over the crea prior to an at the time of seeding and incorporated into the soil. Kinds and amounts of lines and fertilizer should be based on an evaluation of soil tests. When a soil test is not available, the following minimum amounts should be applied.

## 3. Seed Mixture: (See Technical Specifications)

Sodding — sodding is done where it is desirable to repidly setablish cover on a disturted area. Sodding an area may be substituted for permanent seeding procedures anywhere on site. Bed preparation, fertilizing, and plocement of sod shall be performed according to supplier's specification Sodding is recommended for steep sloped areas, areas immediately adjacent to sensitive water coursed, eatily excludes soils (fine sand/sitt) etc.



# INSTALLATION AND MAINTENANCE:

INSTALLATION: REMOVE THE GRATE FROM CATCH BASIN. IF USING OPTIONAL OIL ABSORBENTS, PLACE ABSORBENT PILLOW IN UNIT. STANG GRATE ON EID. MOVE THE TOP LICTING STRAPS OUT OF THE WAY AND PLACE THE GRATE HITO CATCH BASIN INSERT SO THE GRATE IS BELLOW THE TOTAL STAPS. AND ADDRESS THE GRATE HITO CATCH BASIN INSERT SO THE GRATE INTO THE INLET.

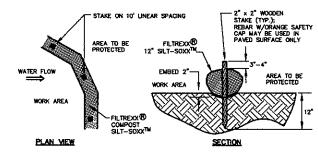
MAINTENANCE: REMOVE ALL ACCUMULATED SEDMENT AND BEBRIS FROM WOINITY OF THE UNIT AFTER ACH STORM EVENT. AFTER EACH STORM EVENT AND AT REGULAR INTERVALS, LOOK INTO THE CATCH BASIN INSERT. IF THE CONTAMENT AREA IS MORE THAN 1/3 FALL OF SEDMENT, THE UNIT MUT BE BUFTLED. TO EMPTY THE UNIT, LUT THE UNIT OUT OF THE INLET USING OPTIONAL ASSORBENTS, REPLACE ASSORBENT WHEN NEAR SATURATION.

# UNACCEPTABLE INLET PROTECTION METHOD:

A SIMPLE SHEET OF GEOTEXTILE UNDER THE GRATE IS NOT ACCEPTABLE.

# STORM DRAIN INLET PROTECTION

NOT TO SCALE



NOTES:

1. SELTSOOK OR APPROVED EQUAL SHALL BE USED FOR SEDMENT BARRIERS.

2. ALL MATERIAL TO MEET FILIREDK SPECIFICATIONS.

3. SELTSOOK COMPOST/SOEL/ROCK/SEED FILL MATERIAL SHALL BE ADJUSTED AS NECESSARY TO MEET THE REQUIREMENTS OF THE SPECIFIC APPLICATION.

4. ALL SEDMENT TRAPPED BY SILTSOOK SHALL BE DISPOSED OF PROPERLY.

# SEDIMENT BARRIER DETAIL

NOT TO SCALE



133 COURT STREET PORTSMOUTH, NH 0380 WWW.ALTUS-ENG.com



NOT FOR CONSTRUCTION

CON COMM APPROVAL SSUE DATE:

MARCH 13, 2014

REVISIONS IO. DESCRIPTION

50% DESIGN DEVEL. CONCOMM SUBMISSION JKC 12/20/13 JKC 3/13/14

RMB DRAWN BY: JKÇ APPROMED BY: DRAWING FILE: \_ 4568.DWG

OWNER/APPLICANT:

SCALE:

RIVERWOODS AT EXETER 7 RIVERWOODS DRIVE EXETER, NH 03833

N.T.S.

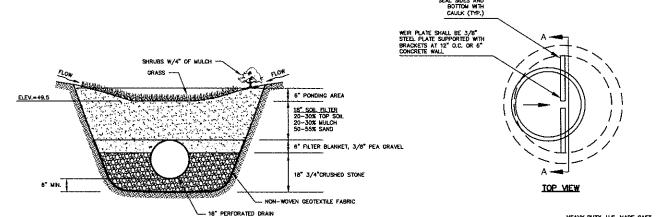
**RIVERWOODS** NEW AT 20

TAX MAP 97 LOT 23 7 RIVERWOODS DRIVE EXETER, NH 03833

TITLE

DETAIL SHEET

SHEET NUMBER:



# SON, FILTER MEDIA

FILTER MEDIA	MONTINE BY VOLUME	SPECIFICATION			
SAND	50~55%	NHOCT SPECICATION 4304.01 FINE AGGREGATE FOR CONCRETE			
TOPSON.	20~30%	LOAMY SAND TOPSOR, WITH MINIMAL CLAY CONTENT AND BETWEEN 15 TO 25% FINES PASSING THE #200 SIEVE			
MULCH	20-30%	MODERATELY FINE, SHREDDED BARK OR WOOD FIBER MULCH WITH LESS THAN 5% PASSING #200 SIEVE			

# PRELIMINARY SHRUO LIST CREEPING RED FESCUE 20 LB /ACRE DWARF FOTHERILLA

TALL FESCUE	20 LB/ACRE	
BIRD'S FOCT TREEFOL	8 LB/ACRE	
AHNUAL RYE	20 LB/ACRE	
TOTAL	68 LB/ACRE	

# STRAW MULCH OR EROSION CONTROL BLANKET AFTER SEEDING

SEEDING

- NOTICES

  1. THE SUBGRADE SHALL BE EXCAVATED TO THE DESIGN DEPTH PLUS TWO (2) INCHES, AT THAT DEPTH FOUR (4) INCHES OF COMPOST SHALL BE TALLED INTO THE ENSTING SOLS SUCH THAT THE SOLS ARE WELL MIXED.

  2. RAIN GARDEN SHALL BE CONSTRUCTED AND REMAIN OFF—LINE UNTIL TURY IS ESTABLISHED AT BOX COVERAGE FOR CONTRIBUTING DERINAGE AREA. DO NOT ALLOW SILTED RUNDET TO ENTER THE .

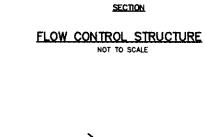
  3. DO NOT DRIVE CONSTRUCTION EQUIPMENT ON PLTER SUBGRADE NOR ON THE FILTER MATERIAL. INSTALL FILTER MATERIALS BY MEANS OF AN EXCAVATOR LOCATED ADJACENT TO THE FILTER RATERIAL. INSTALL FILTER MATERIALS BY MEANS OF AN EXCAVATOR LOCATED ADJACENT TO THE FILTER RATERIAL. INSTALL FILTER PASSING THE \$200 SEVE. MULCH SHALL CONTAIN NO MORE THAN 5X FINES PASSING THE \$200 SEVE. MULCH SHALL CONTAIN THE \$100 SEVE. MULCH SHALL SEVEN STABLISHMENT SHALL SHALL SEVEN SEVEN STABLISHMENT SHALL SEVEN SEVEN STABLISHMENT SHALL SEVEN SEVEN SEVEN SEVEN SEVEN SEVEN SEVEN SHALL SEVEN SE
- VECETATION.

  SIRUBBERY SHALL CONSIST OF A MINIMUM OF 15 PLANTS (TOTAL).

  ANNUAL MANITHANNE: IN THE SPRING OF FACH YEAR, ANY DEAD VECETATION SHALL BE REMOVED TO ALLOW FOR NEW ROOMTH, AND ANY ACQUINITATED SCHOOLING (HORMALLY AT THE ENTRANCE TO THE ) SHALL ALSO BE REMOVED. DURING THE GROWING SEASON THEF SHALL BE MOWED AS NEEDED. IF WATER POWDS ON THE SURFACE FOR MORE THAN 24 HOURS DURING THE FIRST YEAR OR 72 HOURS THEREAFTER, THE FLITER SURFACE SHALL BE AERATED WITH DEEP TINES OR THE SURFACE REPLACED.

# HYBRID RAIN GARDEN DETAIL

NOT TO SCALE



NY. IN 46.10

HEAVY DUTY, U.S. MADE CAST IRON FRAME AND COVER

RIM ELEV. 50.50

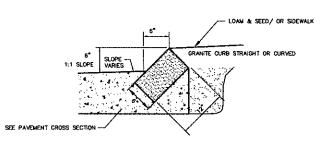
WEIR PLATE

#4 REBAR, 2'-0" LONG 2' ON CENTER

4" # PERFORATED UNDERDRAIN ASTM F810, TRIPLE WALL HIDPE

NON-WOVEN GEOTEXTILE, 5 OZ. SY (MIN.)

SECTION A-A WEIR PLATE VIEW



# NOTES

- 1. SEE SITE PLAN FOR LIMITS OF CURBING
- 2. ADJOINING STONES OF STRAIGHT CURB LAID ON CURVES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH
- 3. MINIMUM LENGTH OF STRAIGHT CURB STONES = 18" 4. MAXIMUM LENGTH OF STRAIGHT CURB STONES = 8'
- MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES SEE CHART

MAXIMUM LENGTH
1'6"
3,
4' 5' 6'
7' 8'

# SLOPED GRANITE CURB

NOT TO SCALE





NOT FOR CONSTRUCTION

ISSUED FOR:

CON COMM APPROVAL

ISSUE DATE:

MARCH 13, 2014

REVISIONS

NO. DESCRIPTION

0 50% DESIGN DEVEL.

1 CONCOMM SUBMISSION BY DATE JKC 12/20/13 JKC 3/13/14

RMB DRAWN BY: JKC APPROVED BY: 4568.DWG DRAWING FILE:

N.T.S.

SCALE:

OWNER/APPLICANT:

RIVERWOODS AT EXETER 7 RIVERWOODS DRIVE EXETER, NH 03833

PROJECT:

RIVERWOODS NEW AT 20

TAX MAP 97 LOT 23 7 RIVERWOODS DRIVE EXETER, NH 03833

TITLE:

DETAIL SHEET

SHEET NUMBER:

DRIP EDGE DETAIL NOT TO SCALE

# March 13, 2014

New Hampshire Division of Historical Resources State Historic Preservation Office Attention: Review and Compliance 19 Pillsbury Street Concord, NH 03301-3570

Re: Request for Project Review Assessor's Map 97, Lot 23 7 Riverwoods Drive Exeter, NH Altus Project #P4568

Dear Reviewer,

On behalf of the Applicant (The RiverWoods Company at Exeter, N.H.), Altus Engineering, Inc. respectfully submits a Request for Project Review for the property. Enclosed please find the following items:

- Request for Project Review
- Project Narrative
- Photos
- USGS Map
- NRCS Soils Map
- Copy of Wetland Permit Application
- Site Plans
- Self-addressed Stamped Envelope

Please call me if you have any questions or need any additional information.

Sincerely,

Jeffrey K. Clifford, PE Vice President

Enclosures

ecopy: Kathleen Lafave, RiverWoods at Exeter

 $RMB \ | jkc \ | 4568. SHPO-cover-letter. doc$ 

Please mail the completed form and required material to:

New Hampshire Division of Historical Resources State Historic Preservation Office Attention: Review & Compliance 19 Pillsbury Street, Concord, NH 03301-3570

DHR Use Only	7
R&C#	
Log In Date	
Response Date	//
Sent Date	

# Request for Project Review by the New Hampshire Division of Historical Resources

This is a new submittal This is additional information relating to DHR Review & Compliance (R&C) #:
GENERAL PROJECT INFORMATION
Project Title RiverWoods New at 20
Project Location 7 Riverwoods Drive
City/Town Exeter Tax Map 97 Lot # 23
NH State Plane - Feet Geographic Coordinates: Easting 1167232 Northing 170891 (See RPR Instructions and R&C FAQs for guidance.)
Lead Federal Agency and Contact (if applicable) (Agency providing funds, licenses, or permits) Permit Type and Permit or Job Reference #
State Agency and Contact (if applicable) NHDES Wetlands
Permit Type and Permit or Job Reference # Not yet assigned
APPLICANT INFORMATION
Applicant Name The RiverWoods Company at Exeter, N.H. (Kathleen Lafave)
Mailing Address 7 Riverwoods Drive Phone Number 603-772-4700
City Exeter State NH Zip 03833 Email klafave@riverwoodsrc.org
CONTACT PERSON TO RECEIVE RESPONSE
Name/Company Jeffrey Clifford / Altus Engineering, Inc.
Mailing Address 133 Court Street Phone Number 603-433-2335
City Portsmouth State NH Zip 03801 Email jclifford@altus-eng.com

This form is updated periodically. Please download the current form at www.nh.gov/nhdhr/review. Please refer to the Request for Project Review Instructions for direction on completing this form. Submit one copy of this project review form for each project for which review is requested. Include a self-addressed stamped envelope to expedite review response. Project submissions will not be accepted via facsimile or e-mail. This form is required. Review request form must be complete for review to begin. Incomplete forms will be sent back to the applicant without comment. Please be aware that this form may only initiate consultation. For some projects, additional information will be needed to complete the Section 106 review. All items and supporting documentation submitted with a review request, including photographs and publications, will be retained by the DHR as part of its review records. Items to be kept confidential should be clearly identified. For questions regarding the DHR review process and the DHR's role in it, please visit our website at: <a href="www.nh.gov/nhdhr/review">www.nh.gov/nhdhr/review</a> or contact the R&C Specialist at <a href="mailto:christina.st.louis@dcr.nh.gov">christina.st.louis@dcr.nh.gov</a> or 603.271.3558.

PROJECTS CANNOT BE PROCESSED WITHOUT THIS INFORMATION
Project Boundaries and Description
Attach the relevant portion of a 7.5' USGS Map (photocopied or computer-generated) indicating the defined project boundary. (See RPR Instructions and R&C FAQs for guidance.)  Attach a detailed narrative description of the proposed project.  Attach a site plan. The site plan should include the project boundaries and areas of proposed excavation.  Attach photos of the project area (overview of project location and area adjacent to project location, and specific areas of proposed impacts and disturbances.) (Informative photo captions are requested.)  A DHR file review must be conducted to identify properties within or adjacent to the project area. Provide file review results in Table 1 or within project narrative description. (Blank table forms are available on the DHR website.)  File review conducted on 03/10/2014.
<u>Architecture</u>
Are there any buildings, structures (bridges, walls, culverts, etc.) objects, districts or landscapes within the project area? 🛛 Yes 🗌 No If no, skip to Archaeology section. If yes, submit all of the following information:
Approximate age(s): 20 years
<ul> <li>Photographs of each resource or streetscape located within the project area, with captions, along with a photo key. (Digital photographs are accepted. All photographs must be clear, crisp and focused.)</li> <li>If the project involves rehabilitation, demolition, additions, or alterations to existing buildings or structures, provide additional photographs showing detailed project work locations. (i.e. Detail photo of windows if window replacement is proposed.)</li> </ul>
Archaeology
Does the proposed undertaking involve ground-disturbing activity? 🛛 Yes 🗌 No If yes, submit all of the following information:
Description of current and previous land use and disturbances.  Available information concerning known or suspected archaeological resources within the project area (such as cellar holes, wells, foundations, dams, etc.)
Please note that for many projects an architectural and/or archaeological survey or other additional information may be needed to complete the Section 106 process.
DHR Comment/Finding Recommendation This Space for Division of Historical Resources Use Only
☐ Insufficient information to initiate review. ☐ Additional information is needed in order to complete review. ☐ No Potential to cause Effects ☐ No Historic Properties Affected ☐ No Adverse Effect ☐ Adverse Effect Comments:
2016年1月18日 1917年1月18日 1月18日 1日18日 1
If plans change or resources are discovered in the course of this project, you must contact the Division of Historical Resources as required by federal law and regulation.
Authorized Signature:Date:

# PROJECT NARRATIVE

# Site Overview

The applicant, RiverWoods at Exeter, is filing a NHDES Expedited Review, Minimum Impact Permit for drainage and landscape improvements at their first facility, "The Woods at RiverWoods" in Exeter. The 84.37-acre parcel is identified as Tax Map 97 Lot 23 on the town assessor's maps. It is bordered by single family homes and the Exeter River. The facility is a continuing care retirement community that was completed 20 years ago. All proposed construction will be within areas previously disturbed during the original construction.

# Site Soils

The NRCS indicates that the work area has the following soil classification:

26B - Windsor, loamy sand

32B - Boxford, silt loam

33A – Scitico, slit loam

The limits of work of the proposed improvements are within areas previously disturbed during the original construction, therefore no Site Specific or High Intensity Soils Survey was not conducted for this project.

# **Buildings**

The existing building was constructed 20 years ago and is 146,000 (+/-) square feet. This structure is one of the largest wood frame structures in New Hampshire. Renovation work to the building will limited to a new entrance way, but the main effort being indoor improvements.

# Site Disturbance

The improvements proposed include the installation of underdrain drip strip system along building perimeter; extending the existing closed drainage system into the court yard and to the new underdrain drip strips; and converting the 18-inch outfall into hybrid rain garden.

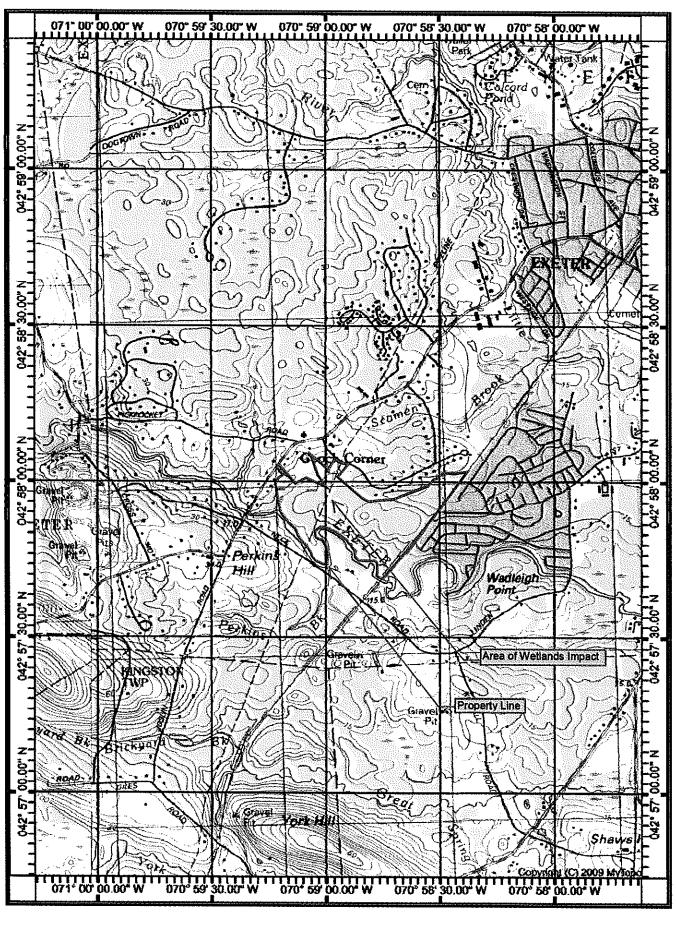
There are no known or suspected archaeological or historical resources within the project area. Over the years typical activities associated with building and pavement have occurred on the original property. All improvements are within previously disturbed areas.

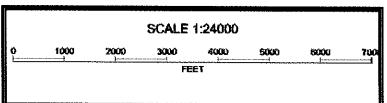
# **NHDHR File Review**

Investigation of NHDHR's archives on March 10, 2014 yielded no records for the subject site. Reference to a natural gas pipeline project in the area of Riverwoods Drive was noted in an Individual Inventory Form.

# Conclusion

It is our opinion that this information along with the Request for Project Review form and attached exhibits meet the NHDES Wetlands Application requirements. If you need any additional information, please feel free to contact the project manager, Jeffrey Clifford, PE directly.



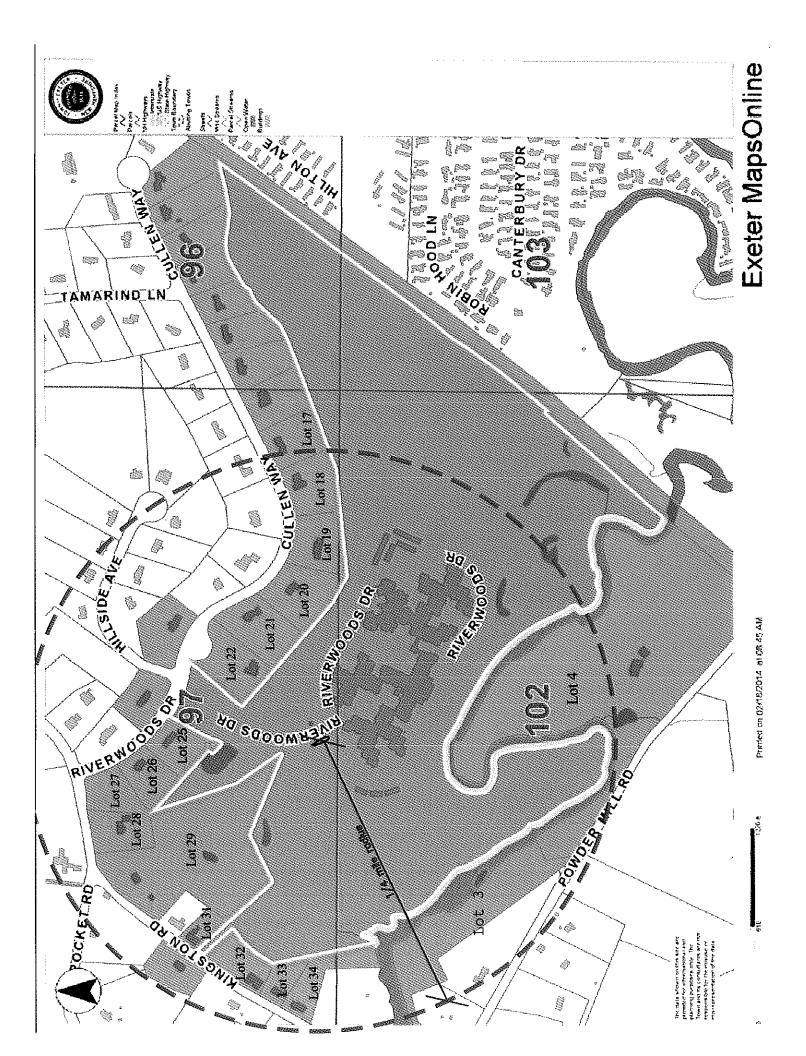


# PHOTO P1

# October 2013

Photo taken from the driveway access off Riverwoods Drive, looking south at the man-made ditch. The existing 18-inch pipe outfall is buried at the southerly end of the ditch (upper left portion of photo).





# Abutters List – Wetlands Permit

Within quarter-mile of project limits Compiled March 7, 2014

# RIVERWOODS CO. AT EXETER TAX MAP 97, LOT 23 Exeter, New Hampshire

Tax Map 97 Lot 16 Terry & Mary Braun Tommie Bower 21 Cullen Way Exeter, NH 03833

Tax Map 97 Lot 17 Jean F. Fremont-Smith, Trustee 19 Cullen Way Exeter, NH 03833

Tax Map 97 Lot 18 Mary Grillo 17 Cullen Way Exeter, NH 03833

Tax Map 97 Lots 19 William & Kathleen Evans 15 Cullen Way Exeter, NH 03833

Tax Map 97 Lot 20 James & Virginia Harnett 13 Cullen Way Exeter, NH 03833

Tax Map 97 Lot 21 John & Carol Sideris Revoc. Trust 11 Cullen Way Exeter, NH 03833

Tax Map 97 Lot 22 Arthur & Joyce Christianson 9 Cullen Way Exeter, NH 03833

Tax Map 97 Lot 24 Tax Map 102 Lot 3 Town of Exeter 10 Front Street Exeter, NH 03833 Tax Map 97 Lot 25 Trivikram & Stephanie Godse 5 Riverwoods Drive Exeter, NH 03833

Tax Map 97 Lot 26 Daniel & Susan Sarmiento 3 Riverwoods Drive Exeter, NH 03833

Tax Map 97 Lot 27 Portland Natural Gas c/o Spectra Energy Corp P.O. Box 1642 Houston, TX 77251

Tax Map 97 Lot 28 Grant & Carol Murray 74 Kingston Road Exeter, NH 03833

Tax Map 97 Lot 29 Robert Lannon & Shiela Groonell 78 Kingston Road Exeter, NH 03833

Tax Map 97 Lot 31 Frederick Bird Rev. Trust 84 Kingston Road Exeter, NH 03833

Tax Map 97 Lot 32 Jonathan & Lauren Drinker 88 Kingston Road Exeter, NH 03833

Tax Map 97 Lot 33 Todd & Bonnie Goudreau 90 Kingston Road Exeter, NH 03833

# Abutters List - Wetlands Permit

Within quarter-mile of project limits Compiled March 7, 2014

# RIVERWOODS CO. AT EXETER TAX MAP 97, LOT 23 Exeter, New Hampshire

Tax Map 97 Lot 34 Keely Rose McElwain 92 Kingston Road Exeter, NH 03833

Tax Map 102 Lot 4 Schaefer Family Rev. Living Trust 24 Powder Mill Road Exeter, NH 03833

# Owner/Applicant:

Riverwoods Co. at Exeter 7 Riverwoods Drive Exeter, NH 03833

Prepared by Altus Engineering, Inc.

4568.Abut.lst.wet.doc Page 2 of 2

March 13, 2014

Subject: RiverWoods - New at 20

Tax Map 97, Lot 23 7 RiverWoods Drive Exeter, New Hampshire

P4568

Dear Abutter:

Pursuant to State of New Hampshire RSA Chapter 482-A, this letter is to notify you, that RiverWoods at Exeter is submitting a Minimum Impact Expedited Application to the NHDES for work at the property identified on Town of Exeter as Tax Map 97, Lot 23. Your parcel abuts land owned by the Applicant.

The Applicant proposes to construct a hybrid rain garden at an unsightly and problematic drainage ditch near the site entrance. The intent of the rain garden is to cool roof runoff draining to the ditch be constructing a subsurface stone filled layer and to also treat runoff from adjacent paved surfaces with a landscape, 18-inch thick filter media above. The ditch area was previously uplands before being excavated as part of the original RiverWoods.

The area of wetlands impact is only 1,127 square feet. There will be no construction within 20-feet of your property line and therefore no action is required by you.

Plans are on file for your review at the Town of Exeter Clerk's office. Please feel free to contact us, the Applicant's engineering consultant, at (603) 433-2335, if you have any questions.

Sincerely,

Jeffrey K. Clifford, P.E. Vice-President

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**CERTIFIED MAIL** 

# **Call to Order**

- Members present: Kristen Murphy (Natural Resource Planner), Jay Gregoire, Cynthia Fields, Bill Campbell, Peter Richardson, Russ Kaphan (Chair), Maggie Matick, Mike Fields, Virginia Raub, and Don Clement (BOS rep)
- 2. Public Comment: None

# **Regular Business**

1. Unitil Preliminary Presentation on the Granite State Gas Transmission 0.9 mile pipe line replacement between Newfields Road and Rte 101:

Stephen Herzog from Unitil described the work to be conducted near the wastewater treatment plant. The pipeline was set in 1956 and laid on the surface of the river. The new pipeline will be relocated to the North West side of the wastewater treatment plant. The existing line will be abandoned and secured in place. Mr. Briselden asked about any work to be done near the town forest and Mr. Herzog said work will not occur in the town forest. Mr. Clement asked if the Department of Public Works had been notified and Roger Barham, a Unitil Rep. responded that the reroute was negotiated with DPW. Mr. Briselden asked to define "temporary impact" in the application. The pipe is 10 inches in diameter and a 35 foot section will be traversed by equipment. The impacted wetland will be replaced with a seed mix. No impact to the Squamscott River is expected because the pipe will be installed by "horizontal directional drilling." Mr. Kaphan asked about the right of way to access the pipeline and it was answered that the land covering the pipeline will only need to be mowed periodically. Mr. Barham commented that work is expected to begin in 2015 and a wetlands application will be submitted in the coming months. Mr. Campbell asked if a section of the pipeline is located in a wooded area and Mr. Herzog pointed out the pipeline is not located on any wooded area.

# 2. Snowshoe Hullaballoo Event Request (Sarah Sallade/Ri Fahnestock)

Sarah Sallade and Ri Fahnestock presented the event request for the Snowshoe Hullaballoo. The snowshoe race will occur along 4 miles in the Henderson Swasey forest as described in the ECC Event Agreement. The event date is Saturday, February 22, 2014. They anticipated 60-75 participants. The race will start at the Lantern Factory on Industrial Drive where there is parking and bathrooms. Ms. Sallade stated they will clean the course after the race. The race starts at 11:00 AM and estimated finish at 1:00 PM. Partial proceeds from the race will benefit

the Southeast Land Trust (SELT) who will also be at the event. Conditions for canceling would be ice or no snow. Ms. Murphy stated that the current pre-race inspector Carlos Guindon is away and someone will have to fill that role. Without further discussion Mr. Briselden moved to approve the event request, Ms. Raub seconded and the motion was passed unanimously. The event request was granted.

# 3. Open Space Charter Finalization

Mr. Briselden talked about the modifications made to the Open Space Subcommittee charter. Mr. Campbell asked how and if the Open Space Committee was different from the Trails Committee. Mr. Briselden noted that originally the Open Space Committee was appointed by Board of Selectmen. Now it will be a subcommittee of the Conservation Commission intended to include other community members. Mr. Richardson moved to finalize the Open Space Committee as an official subcommittee. Mr. Campell seconded. The motion was passed unanimously.

# 4. Committee Reports

- a. Trails Committee: The Raynes Farm Snowshoe event will be held Saturday February 15 at 5:30PM starting at the parking lot by the barn. At the Trails Committee meeting tasks for the summer interns were discussed. The committee is also interested in creating an ADA (Americans with Disabilities Act) trail. The Sweet Trail in Newmarket and a trail in Brentwood were recommended as examples of other ADA trails. Mr. Briselden suggested the trails located on Court Street beyond the former high school as an ADA trail. The Eagle Scout working on these trails could ensure the crossings are an appropriate width so it is ADA compatible. Kristen also mentioned the trail along Cubie Rd as another site. Planning on the ADA trails will continue in the spring. Mr. Gregoire also mentioned the possibility for getting Timberland to work with on trails on their community volunteer day.
- b. **Outreach:** February 22 at 11:00AM there will be a riverside walk lead by Ms. Raub and Mr. Richardson to discuss terms associated with the Great Dam and the current feasibility study. The walk will last one hour. Another walk will also occur before the River Study town hall meeting on March 8 to discuss terms and answer questions. The flyer can be found under the River Study tab on the Exeter Town Website along with the minutes.

# 5. Approval of Minutes: January 14, 2014

Mr. Briselden moved to approve the minutes, Mr. Richardson seconded. The motion was passed unanimously.

# 6. Natural Resource Planner's Report and correspondence

The Franklin Street properties will be discussed for a second time, an by the Technical Review Committee meeting on February 18. During Monday's meeting the BOS discussed the town filing for exemption from state shore land regulations. It was initiated partially by the application at 28 Franklin Street which would need the exemption. Ms. Murphy had provided the Commission the comments she gave to the Town Manager prior to the meeting. The plans for the properties are in Ms. Murphy's office. The BOS did not take action on the application and was looking to hear from the ECC and Exeter Squamscott River Local Advisory Committee (ESRLAC). Mr. Clement said towns can request exemption from these regulations in developed areas where they have local shoreland regulations in place. He explained the area proposed still has a buffer intact and is exempt from our local shoreland regulations. The group discussed that the Squamscott and the Exeter River are protected under the Rivers Management and Protection Program. The Shoreland Protection Act provides protection for fish spawning grounds, archeological sites, freshwater and coastal wetlands, promoting wildlife habitat, and preventing pollution. The BOS would have to vote in order to apply for the exemption. The benefit of the state process is that the Department of Fish and Game and the Natural Heritage Bureau also review applications. Mr. Kaphan asked if the issue need not apply because the town does not have shore land protections in place. Mr. Clement said he mentioned this discrepancy at the meeting and the application could still be sent forward but may not be approved because of said limitations. Ms. Raub stated that the Franklin Street area is located inside of the dam impoundment so a decision should wait until the Great Dam removal is voted on. Mr. Briselden mentioned consistency with dam removal and creating healthy shoreline and applications for boat docks along the river require permitting. Mr. Briselden stated the committee should recommend the town retain protection on the river. Mr. Campbell made a motion to recommend to the BOS to not grant exemption, Ms. Field seconded. It was discussed the motion should also includes reasons behind recommendation. The reasons are stated in Ms. Murphy's email to the

BOS. The revised motion states to recommend to the BOS to not grant the Urban Exemption with supplemental materials stating reasons. The motion was passed unanimously. The Technical Review Committee also scheduled a McDonald's proposal and one other. Ms. Murphy also reported that legal counsel is reviewing the revised draft of the lease for the storage of historical items from the Historical Society in the Raynes Barn.

# 7. Other Business

A summary of deliberative session on February 1 was discussed. Items related to the ECC includedwork to be done on the Raynes' Barn roof which moved forward as part of the General Budget. Another item was the citizen's petition to add the dam removal to the ballot on March 11. No motion was made to amend the article. The River Study Committee presented background information and other proponents spoke. Any questions relating to the river can be sent to exeterdamstudy@gmail.com.

The fireside chat held by the River Study Committee was reported to have good attendance. Four representatives from state agencies were present. The event was taped by EXTV. Mr. Richardson stated it was important to make a decision at the town meeting about the Exeter Dam and it was his opinion in favor to take the dam out. Citizens should take care to study the options presented.

Another item from the deliberative session was an amendment made to the Eliot Property Warrant. The new warrant includes restructured language to clarify the amount of money spent and funds available.

The next Conservation Committee meeting will be on the on March 18, the third Tuesday of the month instead of the usual second Tuesday.

Mr. Campbell moved to adjourn the meeting, Ms Raub seconded, and the motion was passed unanimously.

Meeting adjourned at 8:16PM.

**Respectfully Submitted** 

Sarah McGraw