

STORMWATER MANAGEMENT REPORT

FOR

**R.S. Audley Inc.
Gravel Pit Expansion
Assessors Map 47 Lot 6
243 Daniel Webster Highway (NH Route 3)
Boscawen, NH**

March 2022

PREPARED BY:

NORTHEAST ENGINEERING, PLLC
James J. Donison, P.E.
95 Quaker Street
Weare, NH 03281
603-759-4065

&

T. F. BERNIER, INC.
P.O. Box 3464 50 Pleasant Street
Concord, NH 03302-3464
Phone: 603-224-4148

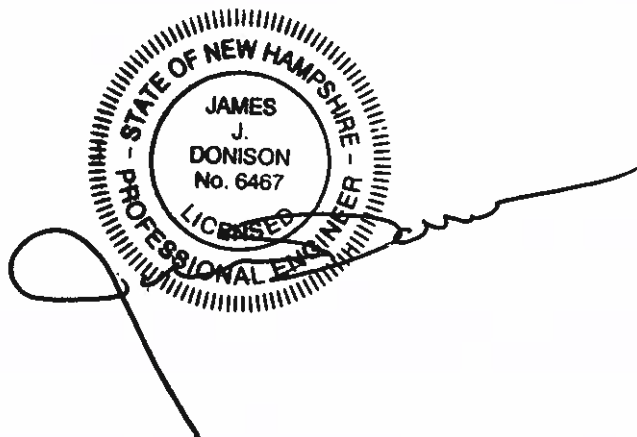


Table of Contents

Copy of signed Application & Checklist
Copy of check
USGS Map

1. Project Narrative
 - Introduction
 - Existing Conditions
 - Project Description
 - Design Methodology
 - Runoff Results Table
2. Web GIS printout
3. Natural Heritage Bureau letter
4. Web Soil Survey Map with descriptions & project overlay
5. Aerial Photograph & Site Photos
6. Pre Development Drainage Analysis HydroCad Output
7. Post Development Drainage Analysis HydroCad Output
8. Site Specific Soil Survey
9. Well / water service information (due to blasting)
10. Color Coded Soils Plans
11. Drainage Area Plans



ALTERATION OF TERRAIN PERMIT APPLICATION

Water Division/ Alteration of Terrain Bureau/ Land Resources Management
Check the Status of your Application: www.des.nh.gov/onestop



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

Administrative Use Only	Administrative Use Only	Administrative Use Only	File Number
			Check No.
			Amount
			Initials

1. APPLICANT INFORMATION (INTENDED PERMIT HOLDER)

Applicant Name: R.S. Audley Inc.		Contact Name: Ryan Audley	
Email:		Daytime Telephone: 603-224-7724	
Mailing Address: 11 Vaughn Road			
Town/City: Bow		State: NH	Zip Code: 03304

2. APPLICANT'S AGENT INFORMATION

If none, check here: ☐

Business Name: T.F. Bernier, Inc.		Contact Name: Timothy Bernier	
Email: tim@tfbinc.com		Daytime Telephone: 603-224-4148	
Address: P.O. Box 3464 50 Pleasant Street			
Town/City: Concord		State: NH	Zip Code: 03302

3. PROPERTY OWNER INFORMATION (IF DIFFERENT FROM APPLICANT)

Applicant Name: Ryan Stacy LLC		Contact Name: Ryan Audley	
Email:		Daytime Telephone: 603-224-7724	
Mailing Address: 11 Vaughn Road			
Town/City: Bow		State: NH	Zip Code: 03304

4. PROPERTY OWNER'S AGENT INFORMATION

If none, check here: ☐

Business Name: T.F. Bernier, Inc.		Contact Name: Timothy Bernier	
Email: tim@tfbinc.com		Daytime Telephone: 603-224-4148	
Address: P.O. Box 3464 50 Pleasant Street			
Town/City: Concord		State: NH	Zip Code: 03302

5. CONSULTANT INFORMATION

If none, check here: ☐

Engineering Firm: Northeast Engineering, PLLC		Contact Name: James Donison, PE	
Email: jdonison@comcast.net		Daytime Telephone: 603-759-4065	
Address: 95 Quaker Street			
Town/City: Weare		State: NH	Zip Code: 03281

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

6. PROJECT TYPE

☒ Excavation Only
 ☐ Residential
 ☐ Commercial
 ☐ Golf Course
 ☐ School
 ☐ Municipal
☐ Agricultural
☐ Land Conversion
☐ Other:

7. PROJECT LOCATION INFORMATION

Project Name: Excavation R.S. Audley Inc.

Street/Road Address: Daniel Webster Highway (NH Route 3)

Town/City: Boscawen

County: Merrimack

Tax Map: 47

Block:

Lot Number: 6

Unit:

Location Coordinates: N:307150, E:989700

☐ Latitude/Longitude☐ UTM☒ State Plane

Post-development, will the proposed project withdraw from or directly discharge to any of the following? If yes, identify the purpose.

1. Stream or Wetland Purpose:	<input type="checkbox"/> Yes	<input type="checkbox"/> Withdrawal	<input type="checkbox"/> Discharge
	<input checked="" type="checkbox"/> No		
2. Man-made pond created by impounding a stream or wetland Purpose:	<input type="checkbox"/> Yes	<input type="checkbox"/> Withdrawal	<input type="checkbox"/> Discharge
	<input checked="" type="checkbox"/> No		
3. Unlined pond dug into the water table Purpose:	<input type="checkbox"/> Yes	<input type="checkbox"/> Withdrawal	<input type="checkbox"/> Discharge
	<input checked="" type="checkbox"/> No		

Post-development, will the proposed project discharge to:

- A surface water impaired for phosphorus and/or nitrogen? ☒ No ☐ Yes - include information to demonstrate that project will not cause net increase in phosphorus and/or nitrogen
- A Class A surface water or Outstanding Resource Water? ☒ No ☐ Yes - include information to demonstrate that project will not cause net increase in phosphorus and/or nitrogen
- A lake or pond not covered previously? ☒ No ☐ Yes - include information to demonstrate that project will not cause net increase in phosphorus in the lake or pond

Is the project a High Load area? ☐ Yes ☒ No

If yes, specify the type of high load land use or activity: _____

Is the project within a Water Supply Intake Protection Area (WSIPA)?

☐ Yes ☒ No

Is the project within a Groundwater Protection Area (GPA)?

☐ Yes ☒ No

Will the well setbacks identified in Env-Wq 1508.02 be met?

☒ Yes ☐ No

Note: Guidance document titled "Using NHDES's OneStop WebGIS to Locate Protection Areas" is available online. For more details on the restrictions in these areas, read Chapter 3.1 in Volume 2 of the NH Stormwater Manual.

Is any part of the property within the 100-year floodplain?

☐ Yes ☒ No

If yes: Cut volume: _____ cubic feet within the 100-year floodplain

Fill volume: _____ cubic feet within the 100-year floodplain

☐ Project IS within ¼ mile of a designated river

Name of River:

☒ Project is NOT within ¼ mile of a designated river☐ Project IS within a Coastal/Great Bay Region community - include info required by Env-Wq 1503.08(I) if applicable☒ Project is NOT within a Coastal/Great Bay Region community**8. BRIEF PROJECT DESCRIPTION (PLEASE DO NOT REPLY "SEE ATTACHED")**

Excavation of Sand, Gravel & Rock and the subsequent reclamation of site in accordance with RSA 155E. During the excavation runoff will be contained within the pit. The overall runoff pattern through the site will remain substantially the same after the mining. DA 2 & 3 become larger after the excavation. A staging/processing area will be located within the limits of the disturbed area.

9. IF APPLICABLE, DESCRIBE ANY WORK STARTED PRIOR TO RECEIVING PERMIT

A smaller mining area was permitted by the Town of Boscawen in July 2021. There is currently gravel mining taking place within this area, shown on Existing Conditions Plan. A considerable area outside of the approved pit has been cleared & stumped.

10. ADDITIONAL REQUIRED INFORMATION

A. Date a copy of the application was sent to the municipality as required by Env-Wq 1503.05(e)¹: 4/7/22.
(Attach proof of delivery)

B. Date a copy of the application was sent to the local river advisory committee if required by Env-Wq 1503.05(e)²: NA.
(Attach proof of delivery)

C. Type of plan required: ☐ Land Conversion ☐ Detailed Development ☒ Excavation, Grading & Reclamation ☐ Steep Slope

D. Additional plans required: ☒ Stormwater Drainage & Hydrologic Soil Groups ☐ Source Control ☐ Chloride Management

E. Total area of disturbance: 831,950 square feet

F. Additional impervious cover as a result of the project: 15,940 square feet (use the "-" symbol to indicate a net reduction in impervious coverage).

Total final impervious cover: 15,940 square feet

G. Total undisturbed cover: 9,943,000 square feet

H. Number of lots proposed: 0

I. Total length of roadway: 0 linear feet

J. Name(s) of receiving water(s): 0

K. Identify all other NHDES permits required for the project, and for each indicate whether an application has been filed and is pending, or if the required approval has been issued provide the permit number, registration date, or approval letter number, as applicable.

Type of Approval	Application Filed?	Status	
		Pending	If Issued:
1. Water Supply Approval	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/>	Permit number:
2. Wetlands Permit	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	Permit number:
3. Shoreland Permit	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/>	Permit number:
4. UIC Registration	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/>	Registration date:
5. Large/Small Community Well Approval	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/>	Approval letter date:
6. Large Groundwater Withdrawal Permit	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/>	Permit number:
7. Other:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/>	Permit number:

L. List all species identified by the Natural Heritage Bureau as threatened or endangered or of concern: None identified

M. Using NHDES's Web GIS OneStop program (www2.des.state.nh.us/gis/onestop/), with the Surface Water Impairment layer turned on, list the impairments identified for each receiving water. If no pollutants are listed, enter "N/A."
NA

N. Did the applicant/applicant's agent have a pre-application meeting with AOT staff? ☐ Yes ☒ No
If yes, name of staff member:

O. Will blasting of bedrock be required? ☒ Yes ☐ No If yes, estimated quantity of blast rock: +/-30,000(?) cubic yards
If yes, standard blasting BMP notes must be placed on the plans, available at:
<http://des.nh.gov/organization/commissioner/pip/publications/wd/documents/wd-10-12.pdf>

NOTE: If greater than 5,000 cubic yards of blast rock will be generated, a groundwater monitoring program must be developed and submitted to NHDES. Contact AOT staff for additional detail.

¹ Env-Wq 1503.05(c)(6), requires proof that a completed application form, checklist, plans and specifications, and all other supporting materials have been sent or delivered to the governing body of each municipality in which the project is proposed.

² Env-Wq 1503.05(c)(6), requires proof that a completed application form, checklist, plans and specifications, and all other supporting materials have been sent or delivered to the Local River Advisory Committee, if the project is within ¼ mile of a designated river.

11. CHECK ALL APPLICATION ATTACHMENTS THAT APPLY (SUBMIT WITH APPLICATION IN ORDER LISTED)**LOOSE:**

- ☒ Signed application form: des.nh.gov/organization/divisions/water/aot/index.htm (with attached proof(s) of delivery)
- ☒ Check for the application fee: des.nh.gov/organization/divisions/water/aot/fees.htm
- ☒ Color copy of a USGS map with the property boundaries outlined (1" = 2,000' scale)
- ☐ If Applicant is not the property owner, proof that the applicant will have a legal right to undertake the project on the property if a permit is issued to the applicant.

BIND IN A REPORT IN THE FOLLOWING ORDER:

- ☒ Copy of the signed application form & application checklist (des.nh.gov/organization/divisions/water/aot/index.htm)
- ☒ Copy of the check
- ☒ Copy of the USGS map with the property boundaries outlined (1" = 2,000' scale)
- ☒ Narrative of the project with a summary table of the peak discharge rate for the off-site discharge points
- ☒ Web GIS printout with the "Surface Water Impairments" layer turned on - <http://www4.des.state.nh.us/onestopdatamapper/onestopmapper.aspx>
- ☒ Web GIS printouts with the AOT screening layers turned on - <http://www4.des.state.nh.us/onestopdatamapper/onestopmapper.aspx>
- ☒ NHB letter using DataCheck Tool - www.nhdf.org/about-forests-and-lands/bureaus/natural-heritage-bureau/
- ☒ The Web Soil Survey Map with project's watershed outlined - websoilsurvey.nrcs.usda.gov
- ☒ Aerial photograph (1" = 2,000' scale with the site boundaries outlined)
- ☒ Photographs representative of the site
- ☐ Groundwater Recharge Volume calculations (one worksheet for each permit application): des.nh.gov/organization/divisions/water/aot/documents/bmp_worksh.xls
- ☐ BMP worksheets (one worksheet for each treatment system): des.nh.gov/organization/divisions/water/aot/documents/bmp_worksh.xls
- ☒ Drainage analysis, stamped by a professional engineer (see Application Checklist for details)
- ☐ Riprap apron or other energy dissipation or stability calculations
- ☒ Site Specific Soil Survey report, stamped and with a certification note prepared by the soil scientist that the survey was done in accordance with the Site Specific Soil Mapping standards, *Site-Specific Soil Mapping Standards for NH & VT, SSSNNE Special Publication No. 3*.
- ☐ Infiltration Feasibility Report (example online) [Env-Wq 1503.08(f)(3)]
- ☐ Registration and Notification Form for Storm Water Infiltration to Groundwater (UIC Registration-for underground systems only, including drywells and trenches): http://des.nh.gov/organization/divisions/water/dwgb/dwssp/gw_discharge
- ☐ Inspection and maintenance manual with, if applicable, long term maintenance agreements [Env-Wq 1503.08(g)]
- ☐ Source control plan

PLANS:

- ☒ One set of design plans on 34 - 36" by 22 - 24" white paper (see Application Checklist for details)
- ☒ Pre & post-development color coded soil plans on 11" x 17" (see Application Checklist for details)
- ☒ Pre & post-development drainage area plans on 34 - 36" by 22 - 24" white paper (see Application Checklist for details)

100-YEAR FLOODPLAIN REPORT:

- ☐ All information required in Env-Wq 1503.09, submitted as a separate report.

ADDITIONAL INFORMATION RE: NUTRIENTS, CLIMATE

- ☐ See Checklist for Details

- ☐ **REVIEW APPLICATION FOR COMPLETENESS & CONFIRM INFORMATION LISTED ON THE APPLICATION IS INCLUDED WITH SUBMITTAL.**

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

12. REQUIRED SIGNATURES

TFB By initialing here, I acknowledge that I am required by Env-Wq 1503.20(e) to submit a copy of all approved documents to the department in PDF format on a CD within one week after permit approval.

By signing below, I certify that:

- The information contained in or otherwise submitted with this application is true, complete, and not misleading to the best of my knowledge and belief;
- I understand that the submission of false, incomplete, or misleading information constitutes grounds for the department to deny the application, revoke any permit that is granted based on the information, and/or refer the matter to the board of professional engineers established by RSA 310-A:3 if I am a professional engineer; and
- I understand that I am subject to the penalties specified in New Hampshire law for falsification in official matters, currently RSA 641.

☐ **APPLICANT**

☒ **APPLICANT'S AGENT:**

Signature: _____

Date: 4/5/22

Name (print or type): Timothy Bernier

Title: LLS, CWS

☒ **PROPERTY OWNER**

☐ **PROPERTY OWNER'S AGENT:**

Signature: _____

Date: 3/29/2022

Name (print or type): Ryan Audley

Title: owner: Ryan Stacy LLC & R.S. Audley Inc.

ATTACHMENT A:**ALTERATION OF TERRAIN PERMIT APPLICATION CHECKLIST**

Check the box to indicate the item has been provided or provide an explanation why the item does not apply.

DESIGN PLANS

☒ Plans printed on 34 - 36" by 22 - 24" white paper

NA ☐ PE stamp

☒ Wetland delineation

☒ Temporary erosion control measures

☒ Treatment for all stormwater runoff from impervious surfaces such as roadways (including gravel roadways), parking areas, and non-residential roof runoff. Guidance on treatment BMPs can be found in Volume 2, Chapter 4 of the NH Stormwater Management Manual.

☒ Pre-existing 2-foot contours

☒ Proposed 2-foot contours

NA ☐ Drainage easements protecting the drainage/treatment structures

NA ☐ Compliance with the Wetlands Bureau, RSA 482- A <http://des.nh.gov/organization/divisions/water/wetlands/index.htm>. Note that artificial detention in wetlands is not allowed.

NA ☐ Compliance with the Comprehensive Shoreland Protection Act, RSA 483-B. <http://des.nh.gov/organization/divisions/water/wetlands/cspa>

NA ☐ Benches. Benching is needed if you have more than 20 feet change in elevation on a 2:1 slope, 30 feet change in elevation on a 3:1 slope, 40 feet change in elevation on a 4:1 slope.

☒ Check to see if any proposed ponds need state Dam permits.
<http://des.nh.gov/organization/divisions/water/dam/documents/damdef.pdf>

DETAILS

NA ☐ Typical roadway x-section

☒ Detention basin with inverts noted on the outlet structure

NA ☐ Stone berm level spreader

☒ Outlet protection – riprap aprons

NA ☐ A general installation detail for an erosion control blanket

☒ Silt fences or mulch berm

NA ☐ Storm drain inlet protection. Note that since hay bales must be embedded 4 inches into the ground, they are not to be used on hard surfaces such as pavement.

NA ☐ Hay bale barriers

NA ☐ Stone check dams

☒ Gravel construction exit

NA ☐ Temporary sediment trap

NA ☐ The treatment BMP's proposed

NA ☐ Any innovative BMP's proposed

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

CONSTRUCTION SEQUENCE/EROSION CONTROL

- ☒ Note that the project is to be managed in a manner that meets the requirements and intent of RSA 430:53 and Chapter Agr 3800 relative to invasive species.
- ☒ Note that perimeter controls shall be installed prior to earth moving operations.
- ☒ Note that temporary water diversion (swales, basins, etc) must be used as necessary until areas are stabilized.
- ☒ Note that ponds and swales shall be installed early on in the construction sequence (before rough grading the site).
- ☒ Note that all ditches and swales shall be stabilized prior to directing runoff to them.

NA ☐ Note that all roadways and parking lots shall be stabilized within 72 hours of achieving finished grade.

NA ☐ Note that all cut and fill slopes shall be seeded/loamed within 72 hours of achieving finished grade

- ☒ Note that all erosion controls shall be inspected weekly AND after every half-inch of rainfall.

NA ☐ Note the limits on the open area allowed, see Env-Wq 1505.02 for detailed information.

Example note: The smallest practical area shall be disturbed during construction, but in no case shall exceed 5 acres at any one time before disturbed areas are stabilized.

- ☒ Note the definition of the word "stable"

Example note: An area shall be considered stable if one of the following has occurred:

- Base course gravels have been installed in areas to be paved.
- A minimum of 85 percent vegetated growth has been established.
- A minimum of 3 inches of non-erosive material such stone or riprap has been installed.
- Or, erosion control blankets have been properly installed.

NA ☐ Note the limit of time an area may be exposed

Example note: All areas shall be stabilized within 45 days of initial disturbance.

- ☒ Provide temporary and permanent seeding specifications. (Reed canary grass is listed in the Green Book; however, this is a problematic species according to the Wetlands Bureau and therefore should not be specified)

NA ☐ Provide winter construction notes that meet or exceed our standards.

Standard Winter Notes:

- All proposed vegetated areas that do not exhibit a minimum of 85 percent vegetative growth by October 15, or which are disturbed after October 15, shall be stabilized by seeding and installing erosion control blankets on slopes greater than 3:1, and seeding and placing 3 to 4 tons of mulch per acre, secured with anchored netting, elsewhere. The installation of erosion control blankets or mulch and netting shall not occur over accumulated snow or on frozen ground and shall be completed in advance of thaw or spring melt events.
- All ditches or swales which do not exhibit a minimum of 85 percent vegetative growth by October 15, or which are disturbed after October 15, shall be stabilized temporarily with stone or erosion control blankets appropriate for the design flow conditions.
- After October 15, incomplete road or parking surfaces, where work has stopped for the winter season, shall be protected with a minimum of 3 inches of crushed gravel per NHDOT item 304.3.

NA ☐ Note at the end of the construction sequence that "Lot disturbance, other than that shown on the approved plans, shall not commence until after the roadway has the base course to design elevation and the associated drainage is complete and stable." – This note is applicable to single/duplex family subdivisions, when lot development is not part of the permit.

DRAINAGE ANALYSES

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

Please double-side 8 1/2" x 11" sheets where possible but, **do not** reduce the text such that more than one page fits on one side.

NA ☐ PE stamp

☒ Rainfall amount obtained from the Northeast Regional Climate Center- <http://precip.eas.cornell.edu/>. Include extreme precipitation table as obtained from the above referenced website.

☒ Drainage analyses, in the following order:

- Pre-development analysis: Drainage diagram.
- Pre-development analysis: Area Listing and Soil Listing.
- Pre-development analysis: Node listing 1-year (if applicable), 2-year, 10-year and 50-year.
- Pre-development analysis: Full summary of the 10-year storm.
- Post-development analysis: Drainage diagram.
- Post-development analysis: Area Listing and Soil Listing.
- Post-development analysis: Node listing for the 2-year, 10-year and 50-year.
- Post-development analysis: Full summary of the 10-year storm.

☒ Review the Area Listing and Soil Listing reports

- Hydrologic soil groups (HSG) match the HSGs on the soil maps provided.
- There is the same or less HSG A soil area after development (check for each HSG).
- There is the same or less "woods" cover in the post-development.
- Undeveloped land was assumed to be in "good" condition.
- The amount of impervious cover in the analyses is correct.

Note: A good check is to subtract the total impervious area used in the pre analysis from the total impervious area used in the post-analysis. For residential projects without demolition occurring, a good check is to take this change in impervious area, subtract out the roadway and divide the remaining by the number of houses/units proposed. Do these numbers make sense?

☒ Check the storage input used to model the ponds.

☒ Check to see if the artificial berms pass the 50-year storm, i.e., make sure the constructed berms on ponds are not overtopped.

☒ Check the outlet structure proposed and make sure it matches that modeled.

☒ Check to see if the total areas in the pre and post analyses are same.

☒ Confirm the correct NRCS storm type was modeled (Coos, Carroll & Grafton counties are Type II, all others Type III).

PRE- AND POST-DEVELOPMENT DRAINAGE AREA PLANS

☒ Plans printed on 34 - 36" by 22 - 24" on white paper.

☒ Submit these plans separate from the soil plans.

☒ A north arrow.

☒ A scale.

☒ Labeled subcatchments, reaches and ponds.

☒ Tc lines.

☒ A clear delineation of the subcatchment boundaries.

NA ☐ Roadway station numbers.

☒ Culverts and other conveyance structures.

PRE AND POST-DEVELOPMENT COLOR-CODED SOIL PLANS

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

NHDES-W-01-003

- ☒ 11" x 17" sheets suitable, as long as it is readable.
- ☒ Submit these plans separate from the drainage area plans.
- ☒ A north arrow.
- ☒ A scale.
- ☒ Name of the soil scientist who performed the survey and date the soil survey took place.
- ☒ 2-foot contours (5-foot contours if application is for a gravel pit) as well as other surveyed features.
- ☒ Delineation of the soil boundaries and wetland boundaries.
- ☒ Delineation of the subcatchment boundaries.
- ☒ Soil series symbols (e.g., 26).
- ☒ A key or legend which identifies each soil series symbol and its associated soil series name (e.g., 26 = Windsor).
- ☒ The hydrologic soil group color coding (A = Green, B = yellow, C = orange, D = red, Water = blue, & Impervious = gray).

Please note that excavation projects (e.g., gravel pits) have similar requirements to that above, however the following are common exceptions/additions:

- NA ☐ Drainage report is not needed if site does not have off-site flow.
- ☐ 5 foot contours allowed rather than 2 foot.
- ☒ No PE stamp needed on the plans.
- ☒ Add a note to the plans that the applicant must submit to the Department of Environmental Services a written update of the project and revised plans documenting the project status every five years from the date of the Alteration of Terrain permit.
- ☒ Add reclamation notes.

See NRCS publication titled: *Vegetating New Hampshire Sand and Gravel Pits* for a good resource, it is posted online at:
<http://des.nh.gov/organization/divisions/water/aot/categories/publications>.

ADDITIONAL INFORMATION RE: NUTRIENTS, CLIMATE

- NA ☐ If project will discharge stormwater to a surface water impaired for phosphorus and/or nitrogen, include information to demonstrate that project will not cause net increase in phosphorus and/or nitrogen.
- NA ☐ If project will discharge stormwater to a Class A surface water or Outstanding Resource Water, include information to demonstrate that project will not cause net increase in phosphorus and/or nitrogen.
- NA ☐ If project will discharge stormwater to a lake or pond not covered previously, include information to demonstrate that project will not cause net increase in phosphorus in the lake or pond.
- NA ☐ If project is within a Coastal/Great Bay Region community, include info required by Env-Wq 1503.08(l) if applicable.

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

THIS CHECK IS PRINTED ON PAPER THAT HAS FLUORESCENT PAPER FIBERS, A WATERMARKED BACKER AND IS REACTIVE TO CHEMICAL ALTERATION



R S AUDLEY INC
1113 ROUTE 3A
BOW, NH 03304

BANK OF NEW HAMPSHIRE
62 PLEASANT STREET
LACONIA, NH 03246

54-7027
2117

Date

Check No.

04/06/22

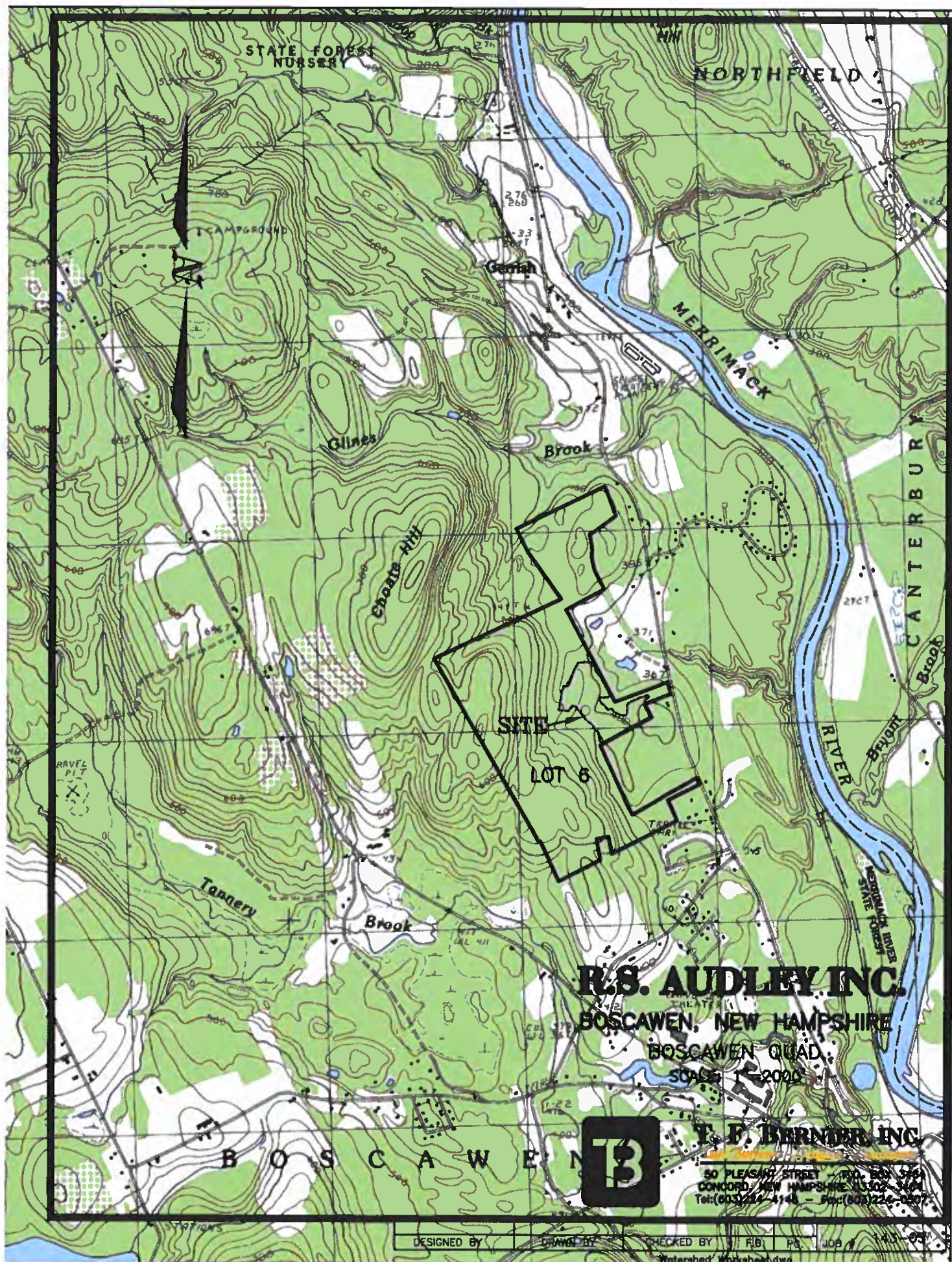
068086

PAY **ELEVEN THOUSAND EIGHT HUNDRED SEVENTY-FIVE AND XX / 100 DOLLARS

\$ ** 11,875.00

TO THE ORDER OF
TREASURER, STATE OF NH
STATE HOUSE - ROOM 204
107 NORTH MAIN STREET
CONCORD, NH 03301

⑈068086⑈ ⑆211770271⑆ 851008497⑈



R.S. AUDLEY INC.

BOSCAWEN, NEW HAMPSHIRE

BOSCAWEN QUAD.

SCALE 1"=2000'

T. F. BERNDT, INC.

50 PLEASANT STREET - P.O. BOX 574
CONCORD, NEW HAMPSHIRE 03302-0574
Tel: (603) 224-4148 - Fax: (603) 224-0507

DESIGNED BY	DRAWN BY	CHECKED BY	R.B.	P.C.	JOB #	143-03
Entered: Workshop.dwg						

1. Project Narrative:

Introduction:

The project is for the expansion of an existing sand & gravel mining operation on Assessors Map 47 Lot 6 in Boscawen. Lot 6 is located on Daniel Webster Highway (Route 3) and is currently undeveloped woodland and an active gravel pit. The total area to be mined (including the existing pit) will be approximately 19.5 acres, and Lot 6 is 249 acres with frontage on Daniel Webster Highway.

The operation will be accessed by the gravel driveway off of Daniel Webster Highway which is being used for the existing pit.

Existing Conditions:

The area to be mined was forested. The property has been periodically logged, so there are existing logging roads and log landings. There was an excavation permit issued by the Town of Boscawen in May 2021 for an area under 100,000 square feet, noted on plans. Currently, the approved mining site and a notable portion outside of the permitted pit has been logged, stumped and stripped. There is a gravel access driveway from Route 3. There are material stockpiles alongside the driveway as of November 2021, also outside of the permitted pit area, but within the area of the proposed expansion. The Existing Conditions Plan shows the site conditions as of November 2021. The Pre-Development Drainage Area Plan shows conditions in May 2021, prior to the excavation permit. There was an existing gravel drive used for logging. For the pre-development Hydrocad analysis the property is considered as fully wooded.

As shown on the attached drainage area plans, three drainage areas are analyzed on the site- 1, 2 and 3. The drainage areas are analyzed at the property line.

A break in drainage divide runs through the south-southwest corner of the area to be mined. The excavation will re-locate this drainage divide further south & west, adding area to DA 2 and DA 3. Runoff generally flows either northeast through the site in DA 1, 2 & 3 toward a $\frac{3}{4}$ acre pond on the abutting lot, or south & west into forested wetlands.

Photographs of the site from November 1, 2021 and a 2010 aerial photo of the site are included.

Project Description:

The mining will alter the location of the southwesterly drainage divide on DA 2 & 3, increasing the size of DA 2 & 3. A portion of the mined area in DA 3 will consist of blasting ledge, as predicted by test pit data. Runoff from the area of newly exposed ledge will be directed into a large shallow depression, and then continue to flow

northeasterly off the property.

During mining the slopes of the pit are to be pitched inward to contain runoff within the pit. There will be a staging/processing area within the limits of disturbance/mining. The mined and disturbed areas will be reclaimed in accordance with RSA 155E standards.

The drainage analysis evaluates runoff at three areas along the north/northeasterly property lines as DA 1,2 and 3 leave the property. Drainage Area 1 generally drains northeasterly toward & along Route 3, through woods and a field, and then toward the $\frac{3}{4}$ acre pond. This size of DA 1 is slightly reduced due to final regrading at the staging area and entrance drive. Drainage Areas 2 and 3 will become much larger. Depressions have been designed in each of these areas to offset additional runoff toward the northeast.

The post development analysis has been performed for the condition immediately after reclamation when the reclaimed areas are revegetated to grass/meadow cover. Results are shown below in the Runoff Results Table.

2. Design Methodology:

This drainage analysis was performed using HydroCad Version 10.00-25, which utilizes the TR-20 and TR-55 methodology. Calculations have been performed for 2, 10 and 50 year storm frequency events (Type III 24-hour Storm: 2yr.=2.76", 10yr.=4.03" and 50 yr.=5.90"). The Cornell Extreme Precipitation table for the site is attached.

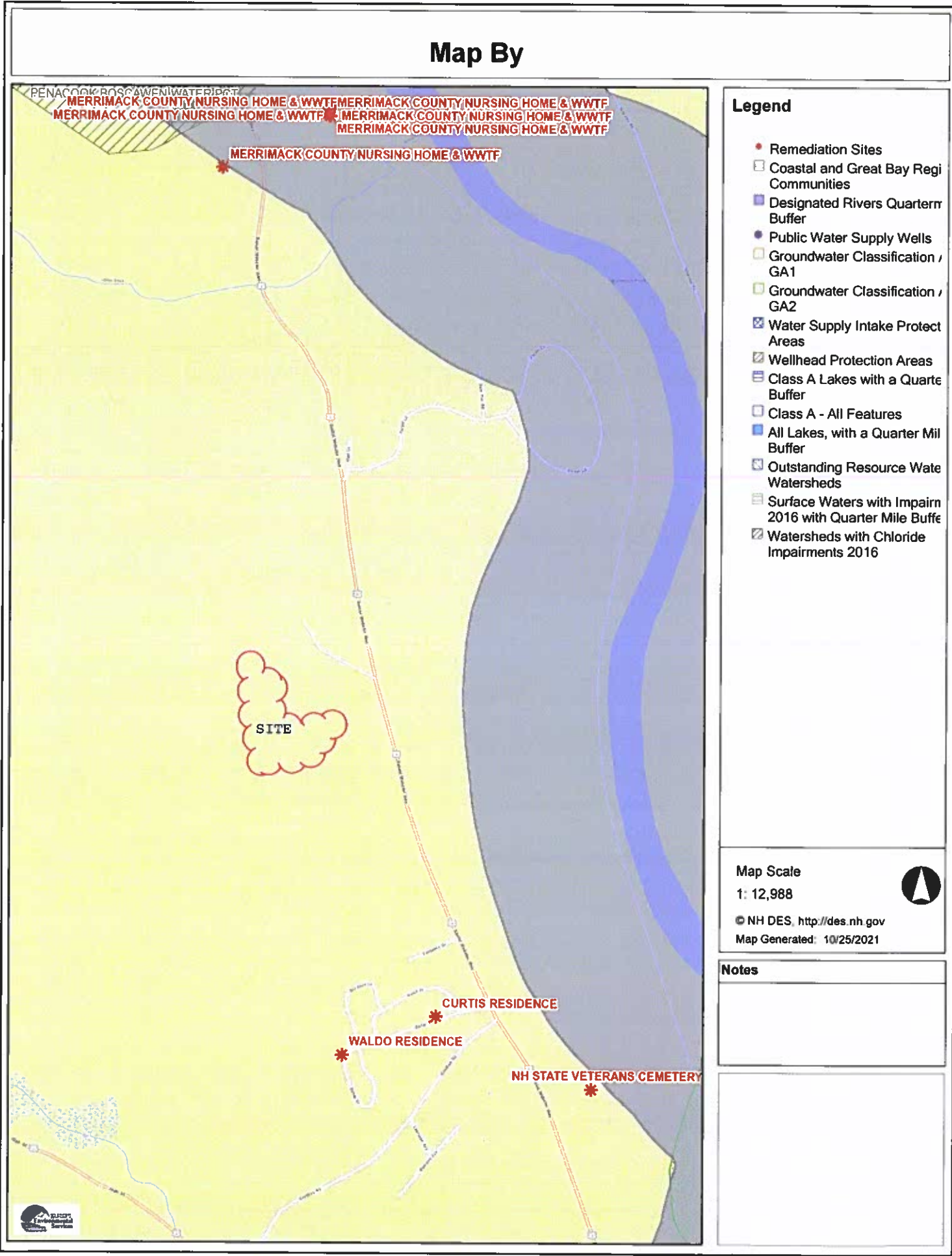
3. Runoff Results:

The following are the Hydrocad results for pre and post development conditions at the analysis points:














Location	2Yr Pre flow(cfs)/ vol.(ac.-ft.)	2Yr Post flow(cfs)/ vol.(ac.-ft.)	10Yr Pre flow(cfs)/ vol.(ac.-ft.)	10Yr Post flow(cfs)/ vol.(ac.-ft.)	50Yr Pre flow(cfs)/ vol.(ac.-ft.)	50Yr Post flow(cfs)/ vol.(ac.-ft.)
DA 1	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0	0.1 / 0.0	0.0 / 0.0
DA 2	0.1 / 0.1	0.4 / 0.1	1.4 / 0.3	2.5 / 0.4	7.2 / 1.1	8.1 / 0.9
DA 3	0.8 / 0.2	0.0 / 0.0	3.5 / 0.5	0.3 / 0.0	9.4 / 1.1	1.5 / 0.8

HYDROCAD results are presented in "drainage analysis output"

Map By



Legend

- Remediation Sites
-  Coastal and Great Bay Regional Communities
-  Designated Rivers Quarter Mile Buffer
-  Public Water Supply Wells
-  Groundwater Classification / GA1
-  Groundwater Classification / GA2
-  Water Supply Intake Protection Areas
-  Wellhead Protection Areas
-  Class A Lakes with a Quarter Mile Buffer
-  Class A - All Features
-  All Lakes, with a Quarter Mile Buffer
-  Outstanding Resource Watersheds
-  Surface Waters with Impaired 2016 with Quarter Mile Buffer
-  Watersheds with Chloride Impairments 2016



**New Hampshire Natural Heritage Bureau
NHB DataCheck Results Letter**

To: Jonathan Crowdes
P.O. Box 3464
Concord, NH 03302-3464

From: NH Natural Heritage Bureau

Date: 10/25/2021 (This letter is valid through 10/25/2022)

Re: Review by NH Natural Heritage Bureau of request dated 10/25/2021

Permit Type: Alteration of Terrain Permit

NHB ID: NHB21-3324

Applicant: Jonathan Crowdes

Location: Boscawen
Tax Map: 47, Tax Lot: 6
Address: Daniel Webster Highway

Proj. Description: The proposed project is a new gravel pit located on Daniel Webster Highway in Boscawen, NH. The new pit is 2.26 Acres and will be accessed by an existing driveway. There will be no new buildings.

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.

**New Hampshire Natural Heritage Bureau
NHB DataCheck Results Letter**

MAP OF PROJECT BOUNDARIES FOR: NHB21-3324



N



R.S. AUDLEY INC.
 BOSCAWEN, NEW HAMPSHIRE
 WEB SOIL SURVEY OVERLAY
 SCALE: 1"=300'

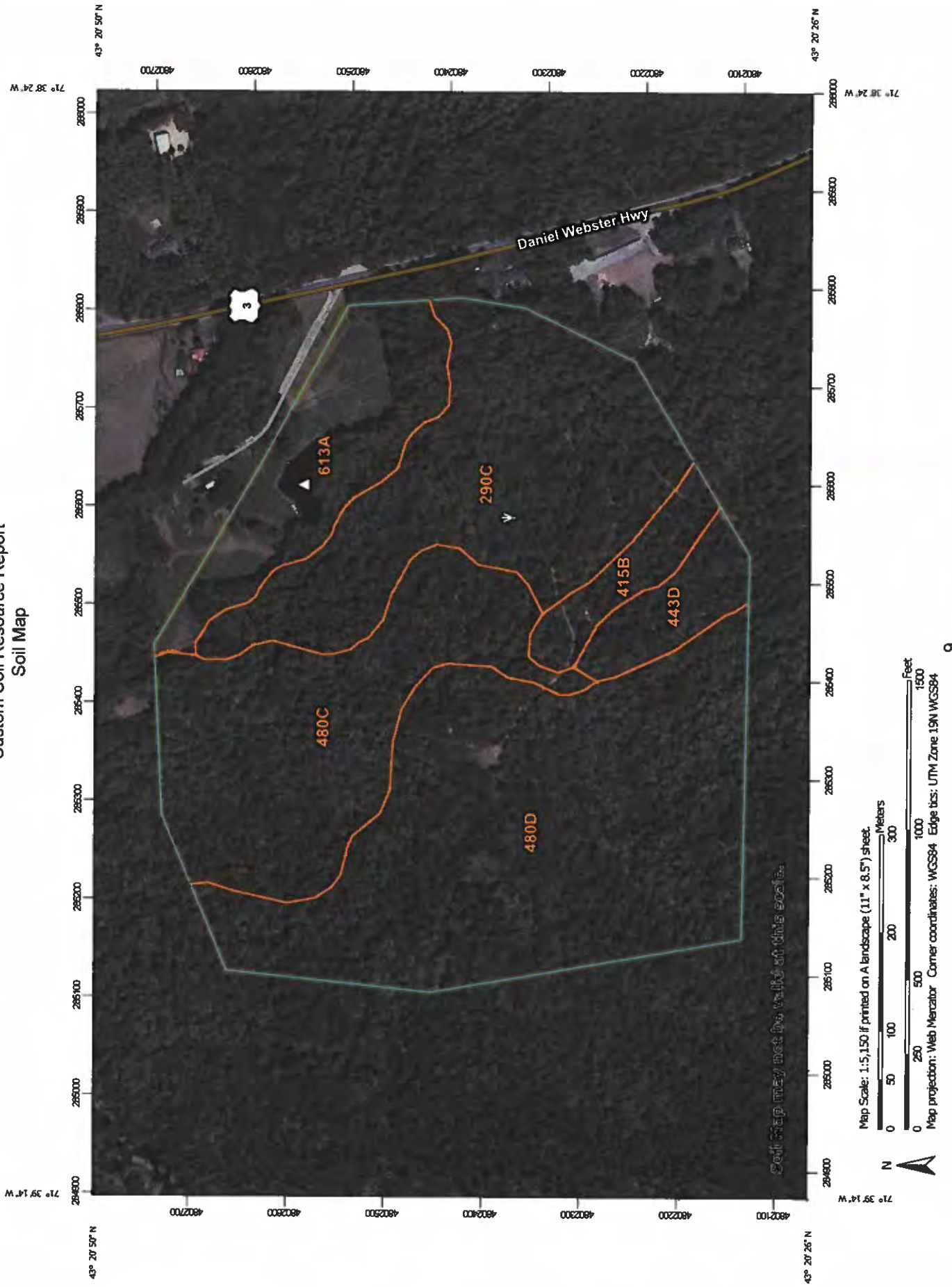


T. F. BERNIER, INC.
Land Surveyors - Designers - Consultants
 50 PLEASANT STREET - P.O. BOX 3484
 CONCORD, NEW HAMPSHIRE 03302-3484
 Tel:(603)224-4148 - Fax:(603)224-0607

DESIGNED BY	DRAWN BY	CHECKED BY	F.B.	PG.	JOB #	143-05
-------------	----------	------------	------	-----	-------	--------

Watershed Worksheet.dwg

Custom Soil Resource Report Soil Map



Map Unit Legend

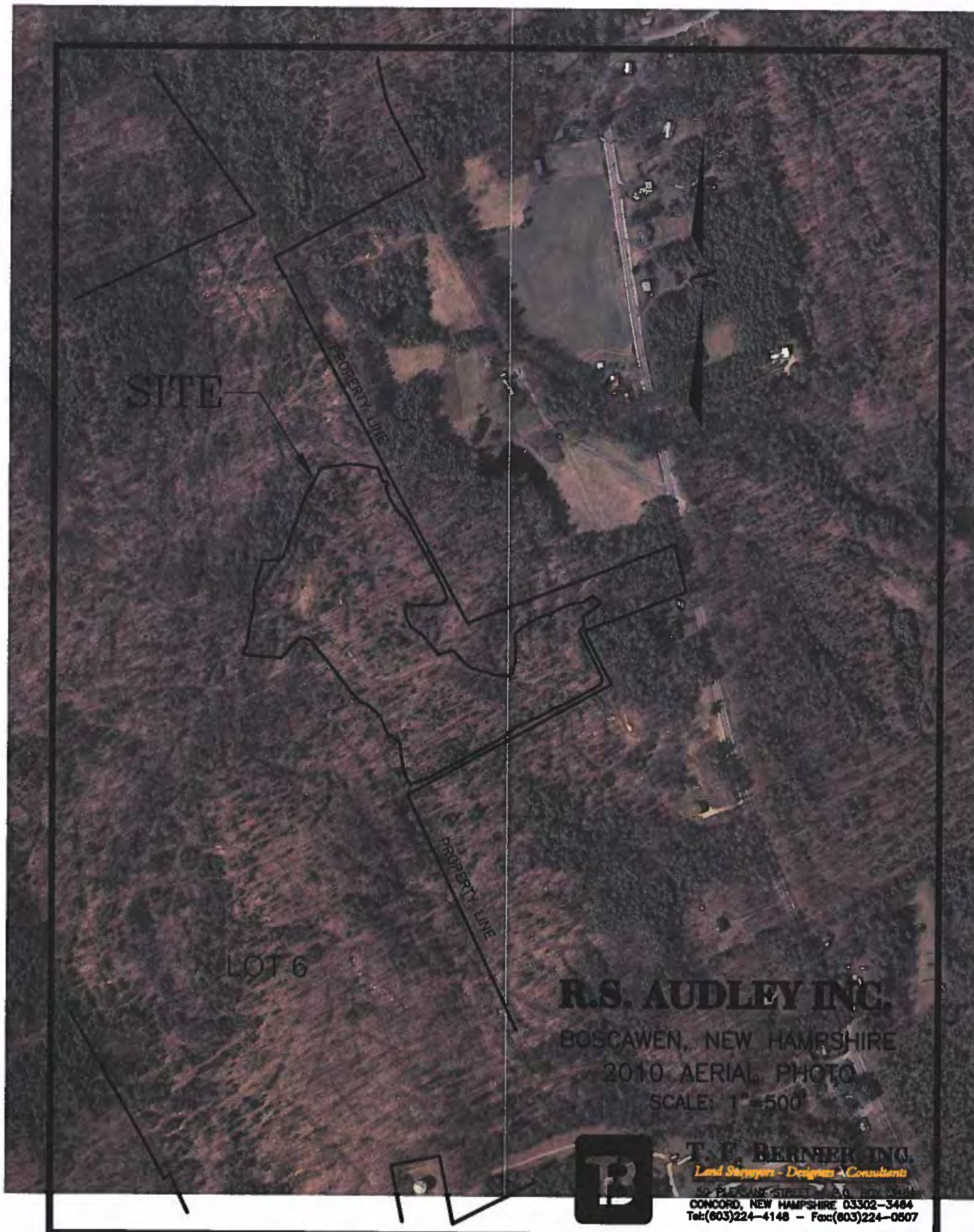
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
290C	Champlain-Woodstock complex, 8 to 15 percent slopes	20.0	23.1%
415B	Moosilauke fine sandy loam, 3 to 8 percent slopes, very stony	3.0	3.5%
443D	Chichester sandy loam, 15 to 25 percent slopes, very stony	3.3	3.8%
480C	Millsite-Woodstock-Henniker complex, 8 to 15 percent slopes, very stony	18.0	20.9%
480D	Millsite-Woodstock-Henniker complex, 15 to 25 percent slopes, very stony	32.4	37.5%
613A	Croghan loamy fine sand, 0 to 8 percent slopes, wooded	9.7	11.3%
Totals for Area of Interest		86.4	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a



DESIGNED BY	DRAWN BY	CHECKED BY	F.B.	PG.	JOB #	143-05
-------------	----------	------------	------	-----	-------	--------

Watershed Worksheet.dwg

**PHOTOGRAPHS November 2021
AOT Application-Excavation
R.S. Audley Inc. Boscawen, NH
(see Pre-Development Drainage Area Plan)**



Photo A



Photo B



Photo C



Photo D



Photo E



Photo F



Photo G



Photo H



Photo I



Photo J



Photo K



Photo L



Photo M



Photo N



Photo O



Photo P



Photo Q



Photo R



Photo S

Extreme Precipitation Tables

Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

Smoothing	Yes
State	New Hampshire
Location	
Longitude	71.642 degrees West
Latitude	43.343 degrees North
Elevation	0 feet
Date/Time	Tue, 26 Oct 2021 10:01:48 -0400

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.26	0.40	0.50	0.65	0.81	1.02	1yr	0.70	0.97	1.18	1.48	1.86	2.35	2.56	1yr	2.08	2.46	2.89	3.56	4.08	1yr
2yr	0.32	0.49	0.61	0.80	1.00	1.26	2yr	0.87	1.15	1.45	1.80	2.23	2.76	3.09	2yr	2.45	2.97	3.45	4.12	4.71	2yr
5yr	0.37	0.58	0.73	0.98	1.25	1.58	5yr	1.08	1.46	1.83	2.27	2.79	3.43	3.90	5yr	3.03	3.75	4.34	5.10	5.80	5yr
10yr	0.42	0.67	0.84	1.14	1.49	1.89	10yr	1.28	1.75	2.19	2.71	3.32	4.03	4.65	10yr	3.57	4.47	5.17	5.99	6.79	10yr
25yr	0.50	0.80	1.02	1.40	1.86	2.39	25yr	1.61	2.23	2.76	3.41	4.16	5.01	5.88	25yr	4.43	5.65	6.51	7.41	8.36	25yr
50yr	0.57	0.92	1.18	1.64	2.21	2.85	50yr	1.91	2.67	3.30	4.07	4.93	5.90	7.02	50yr	5.22	6.75	7.76	8.71	9.79	50yr
100yr	0.65	1.05	1.36	1.93	2.63	3.40	100yr	2.27	3.20	3.95	4.85	5.85	6.96	8.39	100yr	6.16	8.07	9.24	10.24	11.47	100yr
200yr	0.75	1.22	1.58	2.26	3.12	4.05	200yr	2.69	3.84	4.71	5.78	6.94	8.22	10.04	200yr	7.27	9.65	11.02	12.05	13.44	200yr
500yr	0.90	1.48	1.93	2.80	3.92	5.12	500yr	3.38	4.89	5.95	7.28	8.71	10.24	12.72	500yr	9.07	12.23	13.91	14.95	16.58	500yr

Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.24	0.36	0.44	0.60	0.73	0.88	1yr	0.63	0.86	0.98	1.33	1.58	2.03	2.37	1yr	1.80	2.28	2.65	3.25	3.79	1yr
2yr	0.30	0.47	0.58	0.78	0.97	1.14	2yr	0.83	1.12	1.31	1.71	2.20	2.69	3.00	2yr	2.38	2.89	3.35	4.01	4.58	2yr
5yr	0.34	0.53	0.66	0.90	1.15	1.36	5yr	0.99	1.33	1.55	2.00	2.58	3.22	3.61	5yr	2.85	3.47	4.04	4.76	5.41	5yr
10yr	0.38	0.58	0.72	1.00	1.30	1.53	10yr	1.12	1.50	1.73	2.23	2.89	3.70	4.15	10yr	3.27	3.99	4.64	5.41	6.11	10yr
25yr	0.43	0.66	0.82	1.16	1.53	1.81	25yr	1.32	1.77	2.05	2.58	3.37	4.44	4.97	25yr	3.93	4.78	5.60	6.41	7.19	25yr
50yr	0.47	0.72	0.90	1.29	1.74	2.05	50yr	1.50	2.00	2.32	2.89	3.78	5.12	5.69	50yr	4.53	5.47	6.45	7.29	8.15	50yr
100yr	0.52	0.79	0.99	1.43	1.97	2.32	100yr	1.70	2.27	2.62	3.23	4.25	5.91	6.53	100yr	5.23	6.28	7.44	8.28	9.22	100yr
200yr	0.58	0.87	1.10	1.59	2.22	2.61	200yr	1.92	2.56	2.96	3.61	4.78	6.86	7.52	200yr	6.07	7.23	8.59	9.45	10.42	200yr
500yr	0.66	0.99	1.27	1.84	2.62	3.05	500yr	2.26	2.99	3.47	4.19	5.59	8.34	9.08	500yr	7.38	8.73	10.40	11.25	12.25	500yr

Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.29	0.44	0.54	0.73	0.89	1.09	1yr	0.77	1.07	1.21	1.56	1.93	2.54	2.75	1yr	2.25	2.64	3.09	3.85	4.37	1yr
2yr	0.33	0.51	0.63	0.85	1.05	1.25	2yr	0.91	1.22	1.41	1.83	2.34	2.85	3.21	2yr	2.52	3.08	3.57	4.25	4.88	2yr
5yr	0.41	0.63	0.78	1.07	1.36	1.64	5yr	1.18	1.60	1.86	2.38	3.00	3.64	4.18	5yr	3.22	4.02	4.68	5.42	6.21	5yr
10yr	0.49	0.76	0.94	1.31	1.69	2.01	10yr	1.46	1.97	2.24	2.81	3.52	4.39	5.12	10yr	3.88	4.93	5.76	6.53	7.46	10yr
25yr	0.64	0.98	1.22	1.74	2.28	2.69	25yr	1.97	2.63	2.96	3.60	4.47	5.61	6.71	25yr	4.96	6.45	7.56	8.36	9.55	25yr
50yr	0.78	1.19	1.48	2.13	2.86	3.36	50yr	2.47	3.29	3.65	4.35	5.35	6.75	8.24	50yr	5.97	7.93	9.28	10.07	11.52	50yr
100yr	0.96	1.45	1.81	2.62	3.59	4.21	100yr	3.10	4.11	4.51	5.25	6.41	8.13	10.12	100yr	7.19	9.74	11.42	12.14	13.89	100yr
200yr	1.17	1.76	2.23	3.23	4.50	5.27	200yr	3.89	5.15	5.59	6.34	7.67	9.78	12.44	200yr	8.65	11.96	14.05	14.65	16.77	200yr
500yr	1.54	2.29	2.95	4.29	6.10	7.11	500yr	5.26	6.95	7.42	8.15	9.76	12.48	16.32	500yr	11.04	15.70	18.46	18.77	21.50	500yr

About this Project

Data & Products

Daily Monitoring

Documentation

Select Product ?

Extreme Precipitation
Tables - HTML ?

Extreme Precipitation
Tables - Text/CSV ?

Partial Duration Series -
by Point ?

Partial Duration Series -
by Station ?

Distribution Curves -
Graphical ?

Distribution Curves -
Text/TBL ?

Intensity Frequency
Duration Graphs ?

Precipitation Frequency
Duration Graphs ?

GIS Data Files ?

Regional/State Maps ?

Select Location ? Double-click the map to place a marker, or enter address or latitude/longitude.

Map

Satellite

Locate by Address ?
239 daniel webster hightway

Locate by Lat/Lon ?
°N °W →

Locate by State/County ?
▼



Google

Keyboard shortcuts | Map Data | Terms of Use | Report a map error

👤 + -

Select Options ?

Smoothing ?

Yes ▼

Delivery ?

Popup ▼

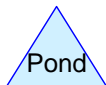
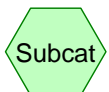
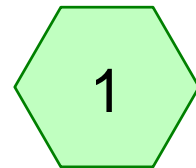
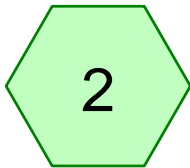
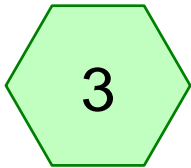
Pre Development Calculations:

Drainage Diagram

Area & Soil Listings

Node Listings for 2, 10 & 50 year storm

Full Summary for 10 year storm



Routing Diagram for PRE

Prepared by {enter your company name here}, Printed 3/17/2022
HydroCAD® 10.00-25 s/n 06299 © 2019 HydroCAD Software Solutions LLC

PRE

Prepared by {enter your company name here}

Printed 3/17/2022

HydroCAD® 10.00-25 s/n 06299 © 2019 HydroCAD Software Solutions LLC

Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.025	98	Unconnected pavement, HSG A (1)
0.009	98	Unconnected roofs, HSG A (1)
7.497	30	Woods, Good, HSG A (1, 2, 3)
9.034	55	Woods, Good, HSG B (2, 3)
2.658	70	Woods, Good, HSG C (2, 3)
2.892	74	Woods, Good, HSG C/D (1, 2, 3)
22.115	51	TOTAL AREA

PRE

Prepared by {enter your company name here}

Printed 3/17/2022

HydroCAD® 10.00-25 s/n 06299 © 2019 HydroCAD Software Solutions LLC

Page 3

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
7.531	HSG A	1, 2, 3
9.034	HSG B	2, 3
5.550	HSG C	1, 2, 3
0.000	HSG D	
0.000	Other	
22.115		TOTAL AREA

PRE*Type III 24-hr 2 Year Rainfall=2.76"*

Prepared by {enter your company name here}

Printed 3/17/2022

HydroCAD® 10.00-25 s/n 06299 © 2019 HydroCAD Software Solutions LLC

Page 4

Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 1:

Runoff Area=139,670 sf 1.06% Impervious Runoff Depth=0.00"
Flow Length=720' Tc=26.1 min UI Adjusted CN=32 Runoff=0.0 cfs 0.0 af

Subcatchment 2:

Runoff Area=527,405 sf 0.00% Impervious Runoff Depth=0.05"
Flow Length=720' Tc=28.0 min CN=50 Runoff=0.1 cfs 0.1 af

Subcatchment 3:

Runoff Area=296,270 sf 0.00% Impervious Runoff Depth=0.28"
Flow Length=830' Tc=22.5 min CN=61 Runoff=0.8 cfs 0.2 af

Total Runoff Area = 22.115 ac Runoff Volume = 0.2 af Average Runoff Depth = 0.12"
99.85% Pervious = 22.081 ac 0.15% Impervious = 0.034 ac

PRE*Type III 24-hr 10 Year Rainfall=4.03"*

Prepared by {enter your company name here}

Printed 3/17/2022

HydroCAD® 10.00-25 s/n 06299 © 2019 HydroCAD Software Solutions LLC

Page 5

Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 1:

Runoff Area=139,670 sf 1.06% Impervious Runoff Depth=0.00"
Flow Length=720' Tc=26.1 min UI Adjusted CN=32 Runoff=0.0 cfs 0.0 af

Subcatchment 2:

Runoff Area=527,405 sf 0.00% Impervious Runoff Depth=0.34"
Flow Length=720' Tc=28.0 min CN=50 Runoff=1.4 cfs 0.3 af

Subcatchment 3:

Runoff Area=296,270 sf 0.00% Impervious Runoff Depth=0.83"
Flow Length=830' Tc=22.5 min CN=61 Runoff=3.5 cfs 0.5 af

Total Runoff Area = 22.115 ac Runoff Volume = 0.8 af Average Runoff Depth = 0.44"
99.85% Pervious = 22.081 ac 0.15% Impervious = 0.034 ac

PRE

Type III 24-hr 50 Year Rainfall=5.90"

Prepared by {enter your company name here}

Printed 3/17/2022

HydroCAD® 10.00-25 s/n 06299 © 2019 HydroCAD Software Solutions LLC

Page 6

Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 1:

Runoff Area=139,670 sf 1.06% Impervious Runoff Depth=0.12"
Flow Length=720' Tc=26.1 min UI Adjusted CN=32 Runoff=0.1 cfs 0.0 af

Subcatchment 2:

Runoff Area=527,405 sf 0.00% Impervious Runoff Depth=1.09"
Flow Length=720' Tc=28.0 min CN=50 Runoff=7.2 cfs 1.1 af

Subcatchment 3:

Runoff Area=296,270 sf 0.00% Impervious Runoff Depth=1.94"
Flow Length=830' Tc=22.5 min CN=61 Runoff=9.4 cfs 1.1 af

Total Runoff Area = 22.115 ac Runoff Volume = 2.2 af Average Runoff Depth = 1.21"
99.85% Pervious = 22.081 ac 0.15% Impervious = 0.034 ac

PRE

Type III 24-hr 10 Year Rainfall=4.03"

Prepared by {enter your company name here}

Printed 3/17/2022

HydroCAD® 10.00-25 s/n 06299 © 2019 HydroCAD Software Solutions LLC

Page 1

Summary for Subcatchment 1:

[45] Hint: Runoff=Zero

Runoff = 0.0 cfs @ 0.00 hrs, Volume= 0.0 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=4.03"

Area (sf)		CN	Adj	Description	
* * * *	131,745	30		Woods, Good, HSG A	
	6,440	74		Woods, Good, HSG C/D	
	1,100	98		Unconnected pavement, HSG A	
	385	98		Unconnected roofs, HSG A	
	139,670	33	32	Weighted Average, UI Adjusted	
	138,185			98.94% Pervious Area	
	1,485			1.06% Impervious Area	
	1,485			100.00% Unconnected	
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.7	100	0.0300	0.08		Sheet Flow, woods Woods: Light underbrush n= 0.400 P2= 2.76"
6.4	620	0.0530	1.61		Shallow Concentrated Flow, woods, yard,grass,gravel Short Grass Pasture Kv= 7.0 fps
26.1	720	Total			

Summary for Subcatchment 2:

Runoff = 1.4 cfs @ 12.64 hrs, Volume= 0.3 af, Depth= 0.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=4.03"

Area (sf)	CN	Description
190,130	30	Woods, Good, HSG A
224,850	55	Woods, Good, HSG B
29,360	70	Woods, Good, HSG C
* 83,065	74	Woods, Good, HSG C/D
527,405	50	Weighted Average
527,405		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.0	100	0.0430	0.10		Sheet Flow, woods Woods: Light underbrush n= 0.400 P2= 2.76"
5.3	390	0.0610	1.23		Shallow Concentrated Flow, woods Woodland Kv= 5.0 fps
5.7	230	0.0180	0.67		Shallow Concentrated Flow, wet woods Woodland Kv= 5.0 fps
28.0	720	Total			

PRE

Type III 24-hr 10 Year Rainfall=4.03"

Prepared by {enter your company name here}

Printed 3/17/2022

HydroCAD® 10.00-25 s/n 06299 © 2019 HydroCAD Software Solutions LLC

Page 2

Summary for Subcatchment 3:

Runoff = 3.5 cfs @ 12.38 hrs, Volume= 0.5 af, Depth= 0.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=4.03"

Area (sf)	CN	Description
4,710	30	Woods, Good, HSG A
168,675	55	Woods, Good, HSG B
86,430	70	Woods, Good, HSG C
* 36,455	74	Woods, Good, HSG C/D
296,270	61	Weighted Average
296,270		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.7	100	0.1100	0.14		Sheet Flow, woods Woods: Light underbrush n= 0.400 P2= 2.76"
10.8	730	0.0510	1.13		Shallow Concentrated Flow, woods Woodland Kv= 5.0 fps
22.5	830	Total			

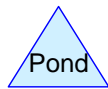
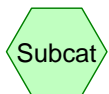
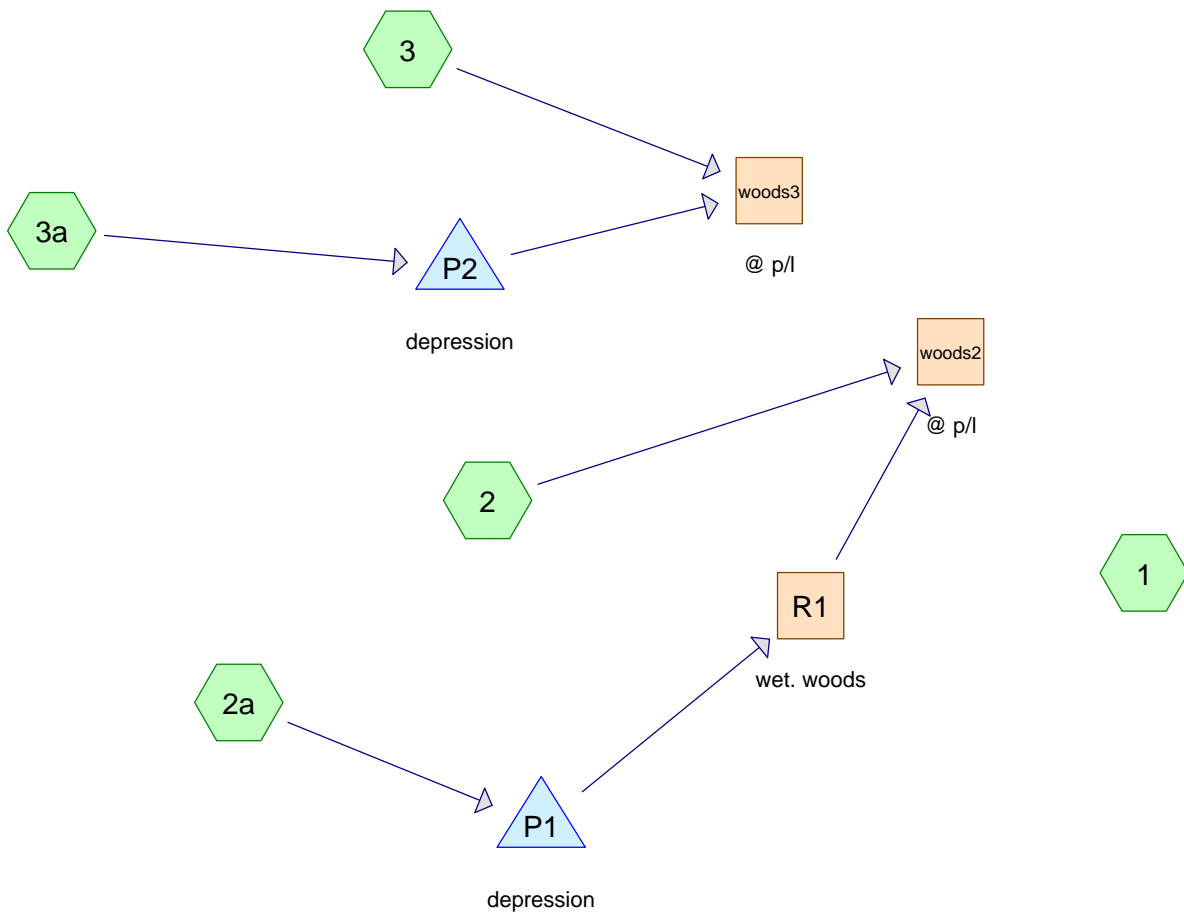
Post Development Calculations:

Drainage Diagram

Area & Soil Listings

Node Listings for 2, 10 & 50 year storm

Full Summary for 10 year storm



Routing Diagram for POST

Prepared by {enter your company name here}, Printed 3/17/2022
HydroCAD® 10.00-25 s/n 06299 © 2019 HydroCAD Software Solutions LLC

POST

Prepared by {enter your company name here}

HydroCAD® 10.00-25 s/n 06299 © 2019 HydroCAD Software Solutions LLC

Printed 3/17/2022

Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
7.089	30	Meadow, non-grazed, HSG A (1, 2, 2a)
7.678	58	Meadow, non-grazed, HSG B (2, 2a, 3a)
2.184	71	Meadow, non-grazed, HSG C (3a)
3.142	74	Meadow, non-grazed, HSG C/D (1, 2, 2a, 3a)
0.024	98	Unconnected Ledge, HSG C (3a)
0.342	98	Unconnected Ledge, HSG C/D (3a)
0.025	98	Unconnected pavement, HSG A (1)
0.009	98	Unconnected roofs, HSG A (1)
2.384	30	Woods, Good, HSG A (1, 2, 2a)
2.138	55	Woods, Good, HSG B (2, 3)
0.830	70	Woods, Good, HSG C (2, 3)
0.786	74	Woods, Good, HSG C/D (1, 2, 2a, 3a)
26.631	52	TOTAL AREA

POST

Prepared by {enter your company name here}

Printed 3/17/2022

HydroCAD® 10.00-25 s/n 06299 © 2019 HydroCAD Software Solutions LLC

Page 3

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
9.508	HSG A	1, 2, 2a
9.816	HSG B	2, 2a, 3, 3a
7.308	HSG C	1, 2, 2a, 3, 3a
0.000	HSG D	
0.000	Other	
26.631		TOTAL AREA

POST

Type III 24-hr 2 Year Rainfall=2.76"

Prepared by {enter your company name here}

Printed 3/17/2022

HydroCAD® 10.00-25 s/n 06299 © 2019 HydroCAD Software Solutions LLC

Page 4

Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 1:	Runoff Area=134,010 sf 1.11% Impervious Runoff Depth=0.00" Flow Length=720' Tc=26.1 min CN=32 Runoff=0.0 cfs 0.0 af
Subcatchment 2:	Runoff Area=294,340 sf 0.00% Impervious Runoff Depth=0.18" Flow Length=792' Tc=18.0 min CN=57 Runoff=0.4 cfs 0.1 af
Subcatchment 2a:	Runoff Area=335,350 sf 0.00% Impervious Runoff Depth=0.00" Flow Length=772' Tc=17.4 min CN=40 Runoff=0.0 cfs 0.0 af
Subcatchment 3:	Runoff Area=29,435 sf 0.00% Impervious Runoff Depth=0.20" Flow Length=262' Tc=13.3 min CN=58 Runoff=0.0 cfs 0.0 af
Subcatchment 3a:	Runoff Area=366,915 sf 4.34% Impervious Runoff Depth=0.43" Flow Length=1,003' Tc=20.7 min CN=66 Runoff=2.0 cfs 0.3 af
Reach R1: wet. woods	Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.0 cfs 0.0 af n=0.080 L=290.0' S=0.0369 '/' Capacity=59.7 cfs Outflow=0.0 cfs 0.0 af
Reach woods2: @ p/l	Inflow=0.4 cfs 0.1 af Outflow=0.4 cfs 0.1 af
Reach woods3: @ p/l	Inflow=0.0 cfs 0.0 af Outflow=0.0 cfs 0.0 af
Pond P1: depression	Peak Elev=388.00' Storage=0 cf Inflow=0.0 cfs 0.0 af 12.0" Round Culvert n=0.013 L=56.5' S=0.0265 '/' Outflow=0.0 cfs 0.0 af
Pond P2: depression	Peak Elev=390.49' Storage=13,294 cf Inflow=2.0 cfs 0.3 af Outflow=0.0 cfs 0.0 af

Total Runoff Area = 26.631 ac Runoff Volume = 0.4 af Average Runoff Depth = 0.19"
98.50% Pervious = 26.231 ac 1.50% Impervious = 0.400 ac

POST

Type III 24-hr 10 Year Rainfall=4.03"

Prepared by {enter your company name here}

Printed 3/17/2022

HydroCAD® 10.00-25 s/n 06299 © 2019 HydroCAD Software Solutions LLC

Page 5

Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 1:	Runoff Area=134,010 sf 1.11% Impervious Runoff Depth=0.00" Flow Length=720' Tc=26.1 min CN=32 Runoff=0.0 cfs 0.0 af
Subcatchment 2:	Runoff Area=294,340 sf 0.00% Impervious Runoff Depth=0.63" Flow Length=792' Tc=18.0 min CN=57 Runoff=2.5 cfs 0.4 af
Subcatchment 2a:	Runoff Area=335,350 sf 0.00% Impervious Runoff Depth=0.07" Flow Length=772' Tc=17.4 min CN=40 Runoff=0.1 cfs 0.0 af
Subcatchment 3:	Runoff Area=29,435 sf 0.00% Impervious Runoff Depth=0.68" Flow Length=262' Tc=13.3 min CN=58 Runoff=0.3 cfs 0.0 af
Subcatchment 3a:	Runoff Area=366,915 sf 4.34% Impervious Runoff Depth=1.10" Flow Length=1,003' Tc=20.7 min CN=66 Runoff=6.5 cfs 0.8 af
Reach R1: wet. woods	Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.0 cfs 0.0 af n=0.080 L=290.0' S=0.0369 '/' Capacity=59.7 cfs Outflow=0.0 cfs 0.0 af
Reach woods2: @ p/l	Inflow=2.5 cfs 0.4 af Outflow=2.5 cfs 0.4 af
Reach woods3: @ p/l	Inflow=0.3 cfs 0.0 af Outflow=0.3 cfs 0.0 af
Pond P1: depression	Peak Elev=388.23' Storage=1,849 cf Inflow=0.1 cfs 0.0 af 12.0" Round Culvert n=0.013 L=56.5' S=0.0265 '/' Outflow=0.0 cfs 0.0 af
Pond P2: depression	Peak Elev=391.19' Storage=33,753 cf Inflow=6.5 cfs 0.8 af Outflow=0.0 cfs 0.0 af

Total Runoff Area = 26.631 ac Runoff Volume = 1.2 af Average Runoff Depth = 0.55"
98.50% Pervious = 26.231 ac 1.50% Impervious = 0.400 ac

POST*Type III 24-hr 50 Year Rainfall=5.90"*

Prepared by {enter your company name here}

Printed 3/17/2022

HydroCAD® 10.00-25 s/n 06299 © 2019 HydroCAD Software Solutions LLC

Page 6

Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 1:	Runoff Area=134,010 sf 1.11% Impervious Runoff Depth=0.12" Flow Length=720' Tc=26.1 min CN=32 Runoff=0.0 cfs 0.0 af
Subcatchment 2:	Runoff Area=294,340 sf 0.00% Impervious Runoff Depth=1.62" Flow Length=792' Tc=18.0 min CN=57 Runoff=8.1 cfs 0.9 af
Subcatchment 2a:	Runoff Area=335,350 sf 0.00% Impervious Runoff Depth=0.47" Flow Length=772' Tc=17.4 min CN=40 Runoff=1.3 cfs 0.3 af
Subcatchment 3:	Runoff Area=29,435 sf 0.00% Impervious Runoff Depth=1.69" Flow Length=262' Tc=13.3 min CN=58 Runoff=1.0 cfs 0.1 af
Subcatchment 3a:	Runoff Area=366,915 sf 4.34% Impervious Runoff Depth=2.37" Flow Length=1,003' Tc=20.7 min CN=66 Runoff=15.2 cfs 1.7 af
Reach R1: wet. woods	Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.0 cfs 0.0 af n=0.080 L=290.0' S=0.0369 '/' Capacity=59.7 cfs Outflow=0.0 cfs 0.0 af
Reach woods2: @ p/l	Inflow=8.1 cfs 0.9 af Outflow=8.1 cfs 0.9 af
Reach woods3: @ p/l	Inflow=1.5 cfs 0.8 af Outflow=1.5 cfs 0.8 af
Pond P1: depression	Peak Elev=389.18' Storage=13,128 cf Inflow=1.3 cfs 0.3 af 12.0" Round Culvert n=0.013 L=56.5' S=0.0265 '/' Outflow=0.0 cfs 0.0 af
Pond P2: depression	Peak Elev=391.64' Storage=47,244 cf Inflow=15.2 cfs 1.7 af Outflow=1.4 cfs 0.7 af

Total Runoff Area = 26.631 ac Runoff Volume = 3.0 af Average Runoff Depth = 1.35"
98.50% Pervious = 26.231 ac 1.50% Impervious = 0.400 ac

POST

Type III 24-hr 10 Year Rainfall=4.03"

Prepared by {enter your company name here}

Printed 3/17/2022

HydroCAD® 10.00-25 s/n 06299 © 2019 HydroCAD Software Solutions LLC

Page 1

Summary for Subcatchment 1:

[45] Hint: Runoff=Zero

Runoff = 0.0 cfs @ 0.00 hrs, Volume= 0.0 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=4.03"

Area (sf)	CN	Description
96,515	30	Woods, Good, HSG A
* 120	74	Woods, Good, HSG C/D
32,310	30	Meadow, non-grazed, HSG A
* 3,580	74	Meadow, non-grazed, HSG C/D
* 1,100	98	Unconnected pavement, HSG A
385	98	Unconnected roofs, HSG A
134,010	32	Weighted Average
132,525		98.89% Pervious Area
1,485		1.11% Impervious Area
1,485		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.7	100	0.0300	0.08		Sheet Flow, woods
					Woods: Light underbrush n= 0.400 P2= 2.76"
6.4	620	0.0530	1.61		Shallow Concentrated Flow, woods, yard,grass,gravel
					Short Grass Pasture Kv= 7.0 fps
26.1	720	Total			

Summary for Subcatchment 2:

Runoff = 2.5 cfs @ 12.34 hrs, Volume= 0.4 af, Depth= 0.63"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=4.03"

Area (sf)	CN	Description
3,890	30	Woods, Good, HSG A
70,505	55	Woods, Good, HSG B
29,360	70	Woods, Good, HSG C
* 21,760	74	Woods, Good, HSG C/D
53,135	30	Meadow, non-grazed, HSG A
72,320	58	Meadow, non-grazed, HSG B
* 43,370	74	Meadow, non-grazed, HSG C/D
294,340	57	Weighted Average
294,340		100.00% Pervious Area

POST

Type III 24-hr 10 Year Rainfall=4.03"

Prepared by {enter your company name here}

Printed 3/17/2022

HydroCAD® 10.00-25 s/n 06299 © 2019 HydroCAD Software Solutions LLC

Page 2

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.8	20	0.5000	0.41		Sheet Flow, meadow Grass: Short n= 0.150 P2= 2.76"
6.7	80	0.0400	0.20		Sheet Flow, meadow Grass: Short n= 0.150 P2= 2.76"
5.0	345	0.0270	1.15		Shallow Concentrated Flow, meadow Short Grass Pasture Kv= 7.0 fps
2.2	180	0.0750	1.37		Shallow Concentrated Flow, woods Woodland Kv= 5.0 fps
3.3	167	0.0280	0.84		Shallow Concentrated Flow, woods Woodland Kv= 5.0 fps
18.0	792	Total			

Summary for Subcatchment 2a:

Runoff = 0.1 cfs @ 15.33 hrs, Volume= 0.0 af, Depth= 0.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=4.03"

	Area (sf)	CN	Description
	3,450	30	Woods, Good, HSG A
*	4,495	74	Woods, Good, HSG C/D
	223,370	30	Meadow, non-grazed, HSG A
	81,105	58	Meadow, non-grazed, HSG B
*	22,930	74	Meadow, non-grazed, HSG C/D
	335,350	40	Weighted Average
	335,350		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.8	20	0.5000	0.41		Sheet Flow, meadow Grass: Short n= 0.150 P2= 2.76"
6.7	80	0.0400	0.20		Sheet Flow, meadow Grass: Short n= 0.150 P2= 2.76"
9.9	672	0.0260	1.13		Shallow Concentrated Flow, meadow Short Grass Pasture Kv= 7.0 fps
17.4	772	Total			

Summary for Subcatchment 3:

Runoff = 0.3 cfs @ 12.23 hrs, Volume= 0.0 af, Depth= 0.68"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=4.03"

POST

Type III 24-hr 10 Year Rainfall=4.03"

Prepared by {enter your company name here}

Printed 3/17/2022

HydroCAD® 10.00-25 s/n 06299 © 2019 HydroCAD Software Solutions LLC

Page 3

Area (sf)	CN	Description
22,620	55	Woods, Good, HSG B
6,815	70	Woods, Good, HSG C
29,435	58	Weighted Average
29,435		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.7	100	0.1100	0.14		Sheet Flow, woods Woods: Light underbrush n= 0.400 P2= 2.76"
1.6	162	0.1200	1.73		Shallow Concentrated Flow, woods Woodland Kv= 5.0 fps
13.3	262	Total			

Summary for Subcatchment 3a:

Runoff = 6.5 cfs @ 12.31 hrs, Volume= 0.8 af, Depth= 1.10"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=4.03"

Area (sf)	CN	Description
* 7,845	74	Woods, Good, HSG C/D
181,025	58	Meadow, non-grazed, HSG B
95,120	71	Meadow, non-grazed, HSG C
* 66,985	74	Meadow, non-grazed, HSG C/D
* 1,040	98	Unconnected Ledge, HSG C
* 14,900	98	Unconnected Ledge, HSG C/D
366,915	66	Weighted Average
350,975		95.66% Pervious Area
15,940		4.34% Impervious Area
15,940		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	57	0.3600	0.20		Sheet Flow, woods Woods: Light underbrush n= 0.400 P2= 2.76"
3.2	26	0.1900	0.14		Sheet Flow, woods Woods: Light underbrush n= 0.400 P2= 2.76"
12.9	920	0.0290	1.19		Shallow Concentrated Flow, meadow Short Grass Pasture Kv= 7.0 fps
20.7	1,003	Total			

Summary for Reach R1: wet. woods

Inflow Area = 7.699 ac, 0.00% Impervious, Inflow Depth = 0.00" for 10 Year event
Inflow = 0.0 cfs @ 0.00 hrs, Volume= 0.0 af
Outflow = 0.0 cfs @ 0.00 hrs, Volume= 0.0 af, Atten= 0%, Lag= 0.0 min

POST

Type III 24-hr 10 Year Rainfall=4.03"

Prepared by {enter your company name here}

Printed 3/17/2022

HydroCAD® 10.00-25 s/n 06299 © 2019 HydroCAD Software Solutions LLC

Page 4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min

Avg. Velocity= 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs

Average Depth at Peak Storage= 0.00'

Bank-Full Depth= 1.00' Flow Area= 22.5 sf, Capacity= 59.7 cfs

10.00' x 1.00' deep channel, n= 0.080 Earth, long dense weeds

Side Slope Z-value= 15.0 10.0 ' Top Width= 35.00'

Length= 290.0' Slope= 0.0369 ' '

Inlet Invert= 389.50', Outlet Invert= 378.80'



Summary for Reach woods2: @ p/I

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 14.456 ac, 0.00% Impervious, Inflow Depth = 0.30" for 10 Year event

Inflow = 2.5 cfs @ 12.34 hrs, Volume= 0.4 af

Outflow = 2.5 cfs @ 12.34 hrs, Volume= 0.4 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Summary for Reach woods3: @ p/I

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 9.099 ac, 4.02% Impervious, Inflow Depth = 0.05" for 10 Year event

Inflow = 0.3 cfs @ 12.23 hrs, Volume= 0.0 af

Outflow = 0.3 cfs @ 12.23 hrs, Volume= 0.0 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Summary for Pond P1: depression

Inflow Area = 7.699 ac, 0.00% Impervious, Inflow Depth = 0.07" for 10 Year event

Inflow = 0.1 cfs @ 15.33 hrs, Volume= 0.0 af

Outflow = 0.0 cfs @ 0.00 hrs, Volume= 0.0 af, Atten= 100%, Lag= 0.0 min

Primary = 0.0 cfs @ 0.00 hrs, Volume= 0.0 af

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Peak Elev= 388.23' @ 24.99 hrs Surf.Area= 8,637 sf Storage= 1,849 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)

POST

Type III 24-hr 10 Year Rainfall=4.03"

Prepared by {enter your company name here}

Printed 3/17/2022

HydroCAD® 10.00-25 s/n 06299 © 2019 HydroCAD Software Solutions LLC

Page 5

Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	388.00'	94,845 cf	Custom Stage Data (Irregular) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
388.00	7,285	427.0	0	0	7,285
390.00	22,670	705.0	28,537	28,537	32,353
392.00	44,890	1,125.0	66,307	94,845	93,544

Device	Routing	Invert	Outlet Devices
#1	Primary	391.00'	12.0" Round Culvert L= 56.5' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 391.00' / 389.50' S= 0.0265 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.0 cfs @ 0.00 hrs HW=388.00' (Free Discharge)

↑1=Culvert (Controls 0.0 cfs)

Summary for Pond P2: depression

Inflow Area = 8.423 ac, 4.34% Impervious, Inflow Depth = 1.10" for 10 Year event
 Inflow = 6.5 cfs @ 12.31 hrs, Volume= 0.8 af
 Outflow = 0.0 cfs @ 0.00 hrs, Volume= 0.0 af, Atten= 100%, Lag= 0.0 min
 Primary = 0.0 cfs @ 0.00 hrs, Volume= 0.0 af

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Peak Elev= 391.19' @ 25.17 hrs Surf.Area= 29,799 sf Storage= 33,753 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)

Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	390.00'	58,618 cf	Custom Stage Data (Irregular) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
390.00	26,740	850.0	0	0	26,740
392.00	31,955	885.0	58,618	58,618	31,874

Device	Routing	Invert	Outlet Devices
#1	Primary	391.50'	10.0' long x 15.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=0.0 cfs @ 0.00 hrs HW=390.00' (Free Discharge)

↑1=Broad-Crested Rectangular Weir (Controls 0.0 cfs)

**John P. Hayes III CSS, CWS,
7 Limestone Way
North Hampton, NH 03862
603-205-4396
johnphayes@comcast.net**

11
~~12/30/21~~
**Tim Bernier
T.F. Bernier Inc.
P.O. Box 3464
50 Pleasant Street
Concord, NH 03302**

Job # 21-034

**Site Specific Soil Survey 11/1/21 & 11/2/21
Map 47 Lot 6
Route 3
Boscawen, NH**

Dear Tim,

This letter report presents the findings of a Site Specific Soil Survey conducted on the referenced property by John P. Hayes III on November 12 and November 13, 2021. The soil survey was conducted in accordance with the New Hampshire Supplement of the Site-Specific Soil Mapping Standard For New Hampshire and Vermont, Special Publication #3, Version 7.0, July 2021, published by the Society of Soil Scientist of Northern New England.

The portion of the property that is subject of the soil survey is located on the southside of Route 3, and southwest of Forrest Lane, in Boscawen NH. The area of the parcel that is the subject of the soil survey is approximately 50 acres. The plans used for these soil maps are a 100 scale plan, where 1 inch equals 100 feet, with two foot contours.

The site is presently an active sand and gravel pit. The purpose of the soil survey is to provide the client with soils information to continue to excavate material from the site. Soil characteristics on the property were evaluated through observations of numerous test holes and auger probes conducted throughout the property. Slope phases were determined with the use of the topography provided on the plan. The Site-specific Soil Map Units identified are taken from the New Hampshire State-Wide Numerical Soils Legend, Issue #10 January 2011, and are briefly described below. Official Series Descriptions (OSD) for each of these soil series are enclosed with this report. The soil map units comply with the Range In Characteristics described in the OSD. Any limiting enclussions do not exceed 15 percent of any of the soil map units. Dissimilar inclusions, if any, are noted above. Limits of the Site Specific mapping units are highlighted on the plan. The Hydrological Soil Groups for each of the soil series was determined using SSSNNE Publication No. 5 Ksat Values for New Hampshire Soils September 2009.

Soils on this site include very deep soils as well as soils that are shallow to ledge. Soil parent materials include Glacial Till, Glaciofluvial, and Glaciolacustrine deposits. Portions of the soil map with the map unit denominator P and VP, are poorly drained, and very poorly drained soils respectively. Portions of the map with the unit numerator of P, are areas of the map with insufficient topography to determine the slope. Portions of the soil map, with the map labels 400 and 900/P, contain disturbed soils that have been excavated and/or regraded, that are sandy in texture. A Disturbed Soil Mapping Unit Supplement for New Hampshire DES AoT Site Specific Soil Maps, is also included. This supplement explains the additional information given about each of the disturbed soil map units that are present on the site.

MAP UNIT #	SOIL TAXANOMI C NAME	SLOPES	HYDRO LOGIC SOIL GROUP	DESCRIPTION
35	Champlain	B,C,D	A	The Champlain Series consists of very deep, excessively to somewhat excessively drained, sandy soils formed in glacio-fluvial or glacio-lacustrine deposits. Some pockets of these soils were found mostly on the eastern portion of the mapped area of the parcel. These soils are deep to bedrock. The saturated hydraulic conductivity is high. Some inclusions of moderately well drained Croghan soil are present, but are less than 10 percent. Estimated seasonal high water tables in these soils range from 38 to 50 inches.
47	Henniker (very stony)	E	C	The Henniker series consists of well drained soils that formed in a loamy mantle overlying sandy or loamy dense till. These soils are located on a steep slope on the northeast portion of the subject area. The soil is deep to bedrock here, but has a restrictive layer of loamy sand between 35 and 40 inches. The saturated hydraulic conductivity is moderately high in the upper area, and moderately low in the firm substratum. Some inclusions of moderately well drained Croghan soil are present, but are less than 10 percent. Estimated seasonal high water tables in these soils range from 35 to 40 inches.
<u>214</u> P	Naumburg (poorly drained)	B,C	C	The Naumburg series consists of very deep, poorly drained soils that formed in sandy deltaic or glaciofluvial deposits. These soils are located in two wetland areas on the northeast part of the mapped area. The soils are deep to bedrock. The soil textures are loamy fine sand over fine sand. The saturated hydraulic conductivity is high or very high in the solum and in the substratum. There are no inclusions. Estimated seasonal high water tables in these areas is less than 10 inches.
400 (bbada)	Udorthents (sandy or gravelly)	A,B,C,D, E	A	Udorthents are disturbed soils that have been excavated and/or regraded and are sandy or gravelly in texture. These disturbed soils are located on the southeast portion of the mapped area. These disturbed soils are mostly derived from the Champlain soil series, and are somewhat excessively drained. The soils are deep to bedrock. The saturated hydraulic conductivity is high. Estimated seasonal high water tables in these soils is greater than 40 inches.

MAP UNIT #	SOIL TAXANOMI C NAME	SLOPES	HYDRO LOGIC SOIL GROUP	DESCRIPTION
400 (dbadb)	Udorthents (sandy or gravelly)	B,E	B	Udorthents are disturbed soils that have been excavated and/or regraded and are sandy or gravelly in texture. These disturbed soils are located on the northeast portion of the mapped area. These disturbed soils are mostly derived from the Croghan soil series, and are moderately well drained. The soils are deep to bedrock. The saturated hydraulic conductivity is high. Estimated seasonal high water tables in these soils range from 15 to 30 inches.
459	Metacomet	D	C	The Metacomet series consists of moderately well drained soils that formed in a loamy mantle overlying sandy dense till or loamy dense till. These soils are located on a slope, on the northwest section of the mapped area. The soils are deep to bedrock. The saturated hydraulic conductivity is moderately high in the upper area, and moderately low in the firm substratum. Some inclusions of moderately well drained Croghan soil are present, but are less than 10 percent. Estimated seasonal high water tables in these soils range from 24 to 35 inches.
461 Rk	Woodstock Millsite Rock outcrop complex	B,C,D,E	C/D	The Woodstock/Millsite rock outcrop complex consists of Woodstock and Millsite soils both of which are shallow to bedrock. This soil complex is located on a steep slopes on the northwest portion of the subject area. Woodstock component of the complex consists of soils that formed in loamy till on bedrock controlled, glaciated uplands. Depth to bedrock ranges from 0 to 12 inches. The Millsite component consists of moderately deep, well drained and somewhat excessively drained soils formed in till underlain by bedrock. Depth to bedrock ranges from 12 to 30 inches. The saturated hydraulic conductivity of both soil components of the complex is moderately high to high.. The approximate percentages of each soil series in this complex is Woodstock 50%, Millsite 40%, and Hennessey less than 10%. These shallow to bedrock soils have no estimated seasonal high water tables.

MAP UNIT #	SOIL TAXANOMI C NAME	SLOPES	HYDRO LOGIC SOIL GROUP	DESCRIPTION
480 Rk	Millsite Woodstock Henniker complex (very stony)	B,C,D,E	C/D	The Woodstock/Millsite/Woodstock/ Henniker complex consists of Woodstock and Millsite soils both of which are shallow to bedrock. This soil complex is located on a steep slopes on the southwest portion of the subject area. The Millsite component consists of moderately deep, well drained and somewhat excessively drained soils formed in till underlain by bedrock. Depth to bedrock ranges from 12 to 30 inches. The Woodstock component of the complex consists of soils that formed in loamy till on bedrock controlled, glaciated uplands. Depth to bedrock ranges from 0 to 12 inches. The Henniker component of the complex consists of well drained soils that formed in a loamy mantle overlying sandy or loamy dense till. The saturated hydraulic conductivity of the Woodstock and the Millsite components is moderately high to high. The saturated hydraulic conductivity of the Henniker component is moderately high in the upper area, and moderately low in the firm substratum. The approximate percentages of each soil series in this complex is Woodstock 10%, Millsite 70%, and Henniker 20%. The estimated seasonal high water tables for the Henniker component are greater than 40 in. The Woodstock and Millsite shallow to bedrock soils have no estimated seasonal high water tables.
549 VP	Peacham	A	D	The Peacham series consists of very deep, very poorly drained soils that formed in organic material over loamy lodgment till. These soils are located at the northwest and the southwest portion of the mapped area, in the flat sections of the wetlands at the toe of the steep slopes. The soils are deep to bedrock. They have an organic layer of 4 to 8 inches, underlain by fine sandy loam, with a restrictive layer between ranging between 24 and 30 inches. The saturated hydraulic conductivity is moderately high in the upper area, and moderately low in the firm substratum. There are no inclusions. Estimated seasonal high water table is at the soil surface.

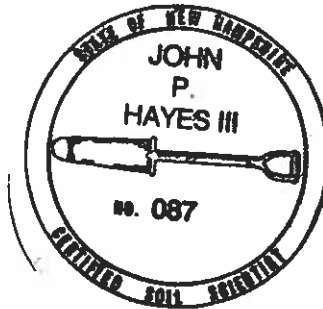
MAP UNIT #	SOIL TAXANOMI C NAME	SLOPES	HYDRO LOGIC SOIL GROUP	DESCRIPTION
613C	Croghan	B,C,D,E	B	The Croghan series consists of very deep, moderately well drained soils formed in glacio-fluvial deposits. These soils are located on a slope, on the northeast section of the mapped area. The soils are deep to bedrock. The soil textures are loamy sand over medium sand. The saturated hydraulic conductivity is high, to very high. Some inclusions of well drained Henniker and the somewhat poorly drained Croghan variant soil are present, but are both less than 10 percent. Estimated seasonal high water tables in these soils range from 15 inches to 35 inches.
<u>647</u> P	Pillsbury (very stony)	B,C,D,E	C	The Pillsbury series consists of poorly drained soils that formed in loamy lodgment till in glaciated uplands and lowlands. These soils are located in the wetland area that runs down hill from the southwest portion of the mapped area, and in the flat areas at the toe of the steep slope. The soils are deep in the flat areas at the toe of the slope, and shallow to bedrock on the steep slopes. The soil textures are loamy fine sandy loam, with the flat areas having a restrictive layer between 18 and 25 inches. The saturated hydraulic conductivity is high in the upper part, and moderately high to moderately low in the firm substratum. There are no inclusions. Estimated seasonal high water tables in these areas is less than 10 inches.
<u>900</u> P (fbadc)	Endoaquents	A	C	This map unit represents areas where soil material was excavated down to, or near the water table, and are sandy or gravelly in texture. These disturbed soils are located in a wetland small area, on the northeast portion of the mapped area. These disturbed soils have been excavated down to the water table. These soils are derived from the Croghan soil series,]. They are poorly drained, and are deep to bedrock. The saturated hydraulic conductivity is high. Estimated seasonal high water table in these soils is less than 10 inches.

Slope Phases

<u>Alpha Slope Symbol</u>	<u>Range</u>
A	0 – 3%
B	3 – 8%
C	8 – 15%
D	15 – 25%
E	25 – 50%
F	> 50%

I trust that this Soil Survey and report meet your current planning needs. Please do not hesitate to contact me if you have any questions.

Sincerely:



John P. Hayes III CSS, CWS

Disturbed Soil Mapping Unit Supplement for New Hampshire DES AoT Site Specific Soil Maps

Introduction

The NRCS NH State-Wide Legend, as amended, contains a number of distinct map units used for identifying areas of soils altered or disturbed by human influence. However, in preparing the required Site Specific Soils Maps for compliance with NH Department of Environmental Services Alteration of Terrain (AoT) rules, additional information is often needed and desired. This supplement provides a means to supply the user a more detailed soil mapping unit description to meet this need.

Purpose

To provide soil scientists with additional soil mapping tools for disturbed sites and miscellaneous areas to enhance site specific soil maps and interpretations to reflect new requirements under the revised NH Alteration of Terrain regulations. This supplement is intended to allow the creation of soil maps with mapping units that can be expanded beyond those of the NRCS NH State-Wide Numerical Legend and the standards of the National Cooperative Soil Survey for disturbed units in order to provide specific information useful in preparation of site specific soils maps and reports to comply with NHDES Env-Wq 1500-Alteration of Terrain.

Note that the disturbed soil supplement has been created by SSSNNE and is not a product of the NRCS or the National Cooperative Soil Survey. Additionally, the supplemental legend can only be used in conjunction with the Site Specific Soil Mapping standards and cannot be used to create a stand-alone soils map.

For the purposes of this supplement, the definition of disturbed land, including excavate and fill, is as defined by RSA 485-A: 6, VIII; RSA 485-A: 17, and NHDES Env-Wq 1500.

Map Notation

Notation on the Site Specific Soil Map completed to comply with the NH AoT rules should include the following disclaimer:

Site-Specific Soil Map

1. This detailed Site-Specific Soil Map conforms to the standards of SSSNNE Publication No. 3, as amended, "Site-Specific Soil Mapping Standards for NH and VT".
2. This map has been prepared to comply with soil mapping requirements of RSA 485 A: 17 and NHDES Env-Wq 1500, Alteration of Terrain.
3. See accompanying narrative report for methodology, map symbol legend, and interpretations.

Map Symbol Denominators for Disturbed Unit Supplements

The map symbols for Site-Specific Soil Mapping of disturbed soils in New Hampshire is a two part symbol with parts separated by a forward slash (/).

The first part consists of the USDA-NRCS Disturbed Map Unit symbol from the NH State-Wide Numerical Soil Legend. The map symbol is composed of 1 to 3 digits followed by a capital letter designating slope.

The second part consists of symbols of the SSSNNE NH Disturbed Soil Supplement to the Site Specific Soil Survey Standards, as detailed below. The disturbed map symbol is composed of 5 lower case letters.

Thus a Site Specific map symbol for a map prepared for an AoT application would be formatted as follows:

400A/aaaaa

These SSSNNE NH Disturbed Soil Supplemental symbols can only be used in conjunction with the USDA-NRCS Disturbed Map Unit symbols for the NH Statewide Numerical Soil Legend.

Supplemental Symbols

The five components of the Disturbed Soil Mapping Unit Supplement are as follows:

Symbol 1: Drainage Class

- a-Excessively Drained
- b-Somewhat Excessively Drained
- c-Well Drained
- d-Moderately Well Drained
- e-Somewhat Poorly Drained
- f-Poorly Drained
- g-Very Poorly Drained
- h-Not Determined

Symbol 2: Parent Material (of naturally formed soil only, if present)

- a-No natural soil within 60"
- b-Glaciofluvial Deposits (outwash/terraces of sand or sand and gravel)
- c-Glacial Till Material (active ice)
- d-Glaciolacustrine very fine sand and silt deposits (glacial lakes)
- e-Loamy/sandy over Silt/Clay deposits
- f-Marine Silt and Clay deposits (ocean waters)
- g-Alluvial Deposits (floodplains)
- h-Organic Materials-Fresh water Bogs, etc
- i- Organic Materials-Tidal Marsh

Symbol 3: Restrictive/Impervious Layers

- a-None
- b-Bouldery surface with more than 15% of the surface covered with boulders
- c-Mineral restrictive layer(s) are present in the soil profile less than 40 inches below the soil surface such as hard pan, platy structure or clayey texture with consistence of at least firm (i.e. more than 20 newtons). For other examples of soil characteristics that qualify for restrictive layers, see "Soil Manual for Site evaluations in NH" 2nd Ed., (page 3-17, figure 3-14)
- d-Bedrock in the soil profile; 0-20 inches
- e-Bedrock in the soil profile; 20-60 inches
- f-Areas where depth to bedrock is so variable that a single soil type cannot be applied, will be mapped as a complex of soil types
- g-Subject to Flooding
- h-Man-made impervious surface including pavement, concrete, or built-up surfaces (i.e. buildings) with no morphological restrictive layer within control section

Symbol 4: Estimated Ksat* (most limiting layer excluding symbol 3h above).

a- High

b-Moderate

c-Low

d-Not determined

*See "Guidelines for Ksat Class Placement" in Chapter 3 of the Soil Survey Manual, USDA

Symbol 5: Hydrologic Soil Group*

a-Group A

b-Group B

c-Group C

d-Group D

e-Not determined

*excluding man-made surface impervious/restrictive layers

Correspondence with Penacook-Boscawen Water District
Regarding water service or wells within 2000' of proposed blasting.

Jonathan Crowdes

To: LAWREEN & WILLIAM MURPHY
Subject: RE: Re: Fwd: wells on DWH in Boscawen

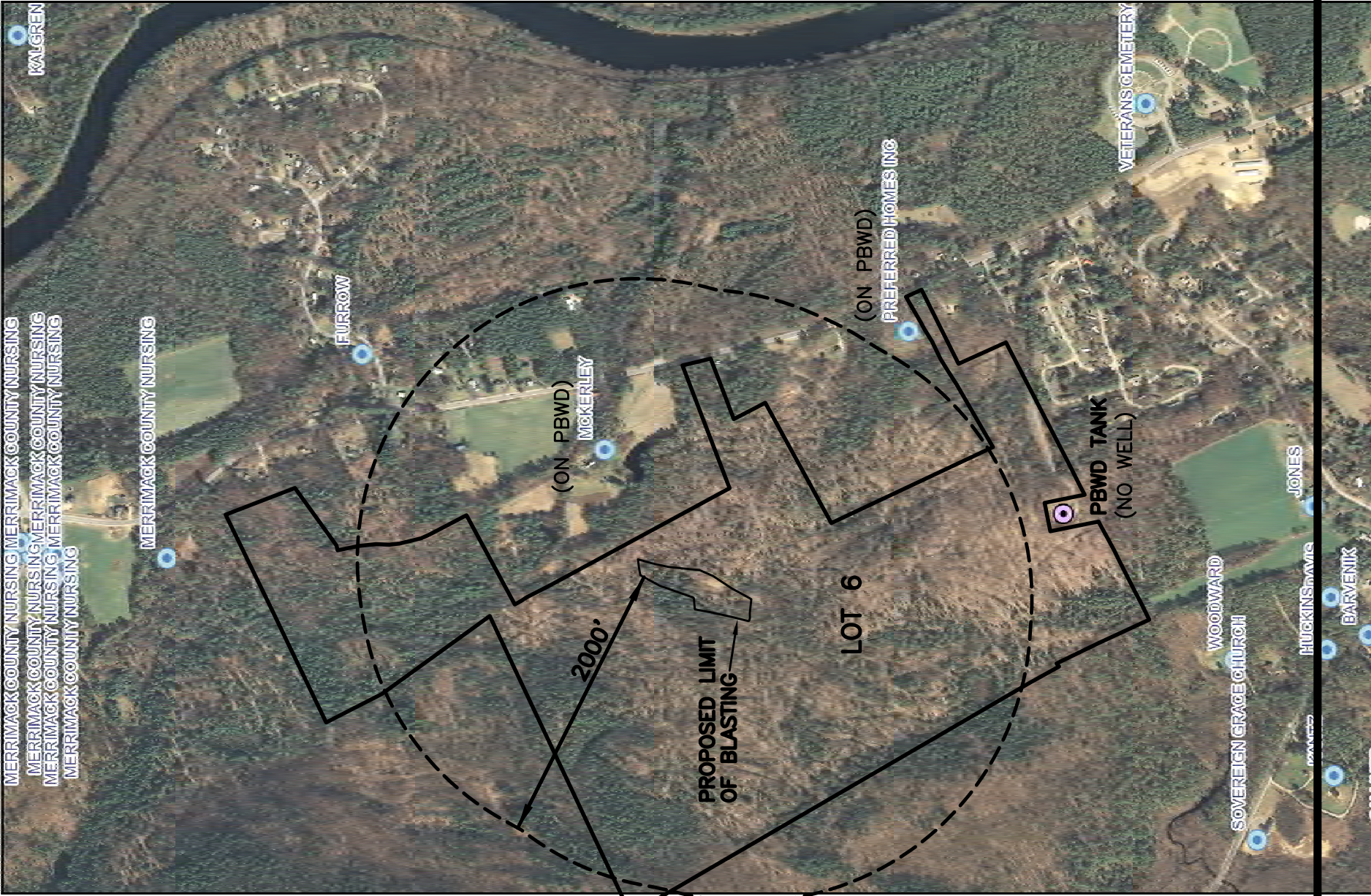
From: LAWREEN & WILLIAM MURPHY <lawremurphy@comcast.net>
Sent: Tuesday, March 1, 2022 7:05 AM
To: Jonathan Crowdes <jon@tfbinc.com>
Subject: Fwd: Re: Fwd: wells on DWH in Boscawen

----- Original Message -----

From: LAWREEN & WILLIAM MURPHY <lawremurphy@comcast.net>
To: Boscawen Water <boscawenwater@gmail.com>, Nathan Young <nyoung2@manchesternh.gov>
Date: 02/28/2022 1:25 PM
Subject: Re: Fwd: wells on DWH in Boscawen

Good afternoon,
PBWP is showing accounts for the following:
225 Campbell
229 Goldman
239 Porter
247 McKerley
255 Porter
256 LaBreque
260 Booker
262 Nepus
266 Thibeault
268 Thibeault
269 McAllister
273 Butler
275 Schellekens
as well as 2 Forest Lane, Dow
I believe that is every house in that area.

Map By



Legend

- Public_Water_Supply_Entiti
- Water Well Inventory
- NH 2010 2011 1-foot RGB Ir

Map Scale



© NH DES, <http://des.nh.gov>
Map Generated: 2/28/2022

Notes

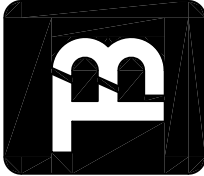
NOTES

1. THE IMAGE SHOWN HEREON IS FROM THE NHDES ONESTOP. THE IMAGE HAS BEEN OVERLAID ONTO THE EXISTING PROPERTY AND PROPOSED BLASTING LIMITS USING THE ATTACHED 2010 AERIAL PHOTOGRAPH (FIGURE 2).
2. ACCORDING TO THE PENACOOK BOSCAWEN WATER DISTRICT (PBWD) ALL OF THE HOUSES WITHIN THE 2000’ RADIUS OF THE PROPOSED BLASTING ARE ON PBWD SERVICE, INCLUDING “MCKERLEY” SHOWN HEREON. SEE FIGURE 2 WHICH SHOWS ALL ADDRESSES THAT ARE LISTED ON PBWD SERVICE.

R.S. AUDLEY INC.
MAP 47 LOT 6
DANIEL WEBSTER HIGHWAY BOSCAWEN
GROUNDWATER MONITORING PLAN FIGURE 1

IMAGE FROM NHDES ONESTOP SHOWING WELL LOCATIONS
OVERLAID ONTO PROPERTY, WITH BLASTING LIMITS
AND 2000’ BUFFER SHOWN.

MARCH 2022
SCALE: 1”=1000’



T. F. BERNIER, INC.
Land Surveyors - Designers - Consultants

50 PLEASANT STREET – P.O. BOX 3464
CONCORD, NEW HAMPSHIRE 03302-3464
Tel:(603)224-4148 – Fax:(603)224-0507

DESIGNED BY	DRAWN BY	CHECKED BY	F.B.	PG.	JOB #
DRAWING NAME					
Well Monitoring					



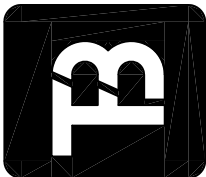
NOTES

- 1. ACCORDING TO THE PENACOOK BOSCAWEN WATER DISTRICT (PBWD) ALL OF THE HOUSES WITHIN THE 2000' RADIUS OF THE PROPOSED BLASTING ARE ON PBWD SERVICE, (LABELED HEREON).

R.S. AUDLEY INC.
MAP 47 LOT 6
DANIEL WEBSTER HIGHWAY BOSCAWEN
GROUNDWATER MONITORING PLAN FIGURE 2

2010 AERIAL PHOTO
WITH PROPERTY, PROPOSED BLASTING LIMITS
AND 2000' BUFFER SHOWN.

MARCH 2022
1"=1000'



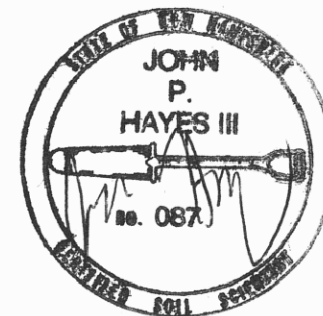
T. F. BERNIER, INC.
Land Surveyors - Designers - Consultants

50 PLEASANT STREET – P.O. BOX 3464
CONCORD, NEW HAMPSHIRE 03302–3464
Tel:(603)224–4148 – Fax:(603)224–0507


DESIGNED BY	DRAWN BY	CHECKED BY	F.B.	PG.	JOB #
DRAWING NAME					

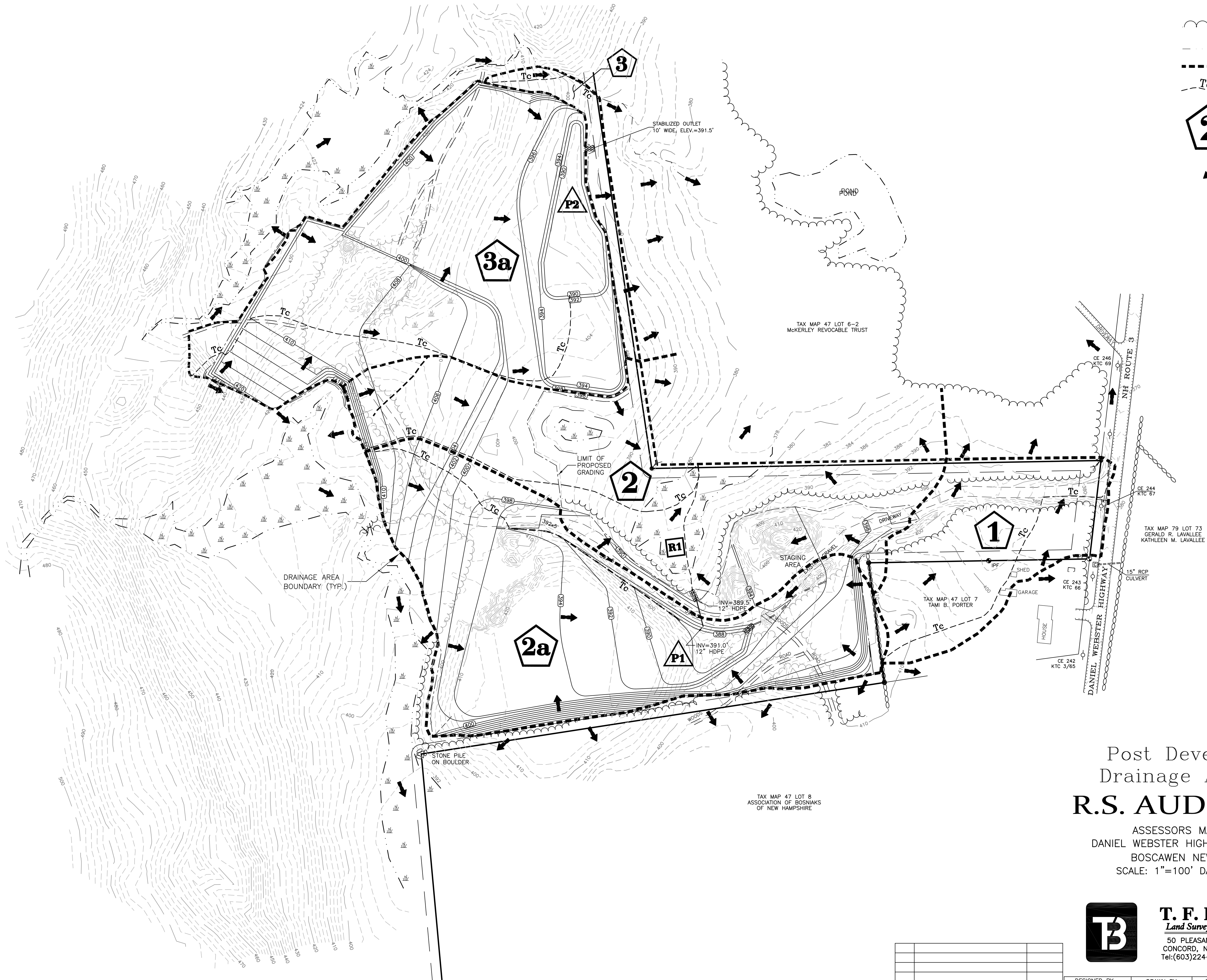
FROM SITE SPECIFIC SOIL SURVEY PERFORMED BY
JOHN P. HAYES III, CSS, CWS ON NOVEMBER 12-13, 2021.

- A: 0-3%
B: 3-8%
C: 8-15%
D: 15-25%
E: 25-50%
F: >50%



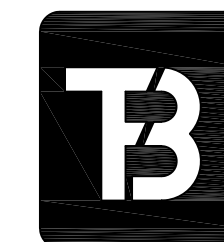
T. F. BERNIER, INC.
Land Surveyors - Designers - Consultants
50 PLEASANT STREET - P.O. BOX 3464
CONCORD, NEW HAMPSHIRE 03302-3464
Tel: (603) 224-4148 - Fax: (603) 224-0507

			<div>  <div> 50 PLEASANT STREET - P.O. BOX 3484 CONCORD, NEW HAMPSHIRE 03302-3484 Tel: (603) 224-4148 - Fax: (603) 224-0507 </div> </div>						
NO.	REVISION	DATE	DESIGNED BY	DRAWN BY	CHECKED BY	F.B.	PG.	JOB #	143-05
			DRAWING NAME						



Post Development
Drainage Area Plan
R.S. AUDLEY INC.

ASSESSORS MAP 47 LOT 6
DANIEL WEBSTER HIGHWAY / NH ROUTE 3
BOSCAWEN NEW HAMPSHIRE
SCALE: 1"=100' DATE: MARCH 2022



T. F. BERNIER, INC.
Land Surveyors - Designers - Consultants
50 PLEASANT STREET - P.O. BOX 3464
CONCORD, NEW HAMPSHIRE 03302-3464
Tel:(603)224-4148 - Fax:(603)224-0507

NO.	REVISION	DATE

DESIGNED BY	DRAWN BY	CHECKED BY	F.B.	PG.	JOB #
					143-05
DRAWING NAME					



TOWN OF BOSCAWEN, NEW HAMPSHIRE | Conditional Use Permit

116 North Main Street, Boscawen, NH 03303 | 603 753-9188x2309 | keasler@townofboscawen.org

Application is hereby made for Planning Board review of a proposed project. I/We have reviewed the Town of Boscawen's Zoning Ordinance, Land Development Regulations and provide the information required below.

1. *Applicant's Name(s) Ryan Stacy LLC
Address 11 Vaughn Road Bow, NH 03304
Phone 603-224-7724
2. *Name and Address of Owner(s) if different from Applicant:
Name: _____ Address: _____
Phone: _____ Email: _____
3. Interest of Applicant if not Owner: _____
4. Location of proposed site: 243 Daniel Webster Highway
(Address of property)

<u>47</u> (Tax Map)	<u>6</u> (Lot # of Tax Map)	_____ (Sub lot #)
------------------------	--------------------------------	----------------------
5. Present use of the property Gravel Pit and woodlot
6. Proposed use of the site Gravel Pit (expansion of previous approved) and woodlot
7. Has a Variance or Special Exception been granted for this site? ☐ Yes ☒ No
(If yes, please attach decision)
8. Area of entire tract 249 acres
9. Do you require extension of water or sewer lines? No
10. What zone is the parcel in? ☐ AR ☒ R-1 ☐ R-2 ☐ C ☐ I ☐ MRD ☐ Village Check all that apply
11. Names and addresses of abutting owners (Attach a separate sheet with this information).

***If applicant is not owner, a notarized letter of authorization from owner must be on file.**



TOWN OF BOSCAWEN, NEW HAMPSHIRE | Conditional Use Permit

116 North Main Street, Boscawen, NH 03303 | 603 753-9188x2309 | keasler@townofboscawen.org

Application Procedure: The applicant shall consult with the Planning & Community Development Director and request a Determination Letter from the Code Enforcement Officer for the proposed use. The Determination Letter will make reference to the Zoning Ordinance, Article IV, Use Regulations, for uses that are allowed by conditional use permit. If the Determination Letter indicates that the proposed use requires subdivision of land, the applicant will be directed to refer to the Land Development Regulations and make application for subdivision following the requirement of those regulations. Finally, if the Determination Letter indicates that a Site Plan Review is necessary, the applicant will be directed to refer to the Land Development Regulations and make application for Site Plan Review following the requirements of those regulations.

Letters from the following departments: Police Department, Fire Department, and Public Works Department.

Plan Format: The plan shall be drawn in black ink on sheets 22" x 34" and at a scale of 1" — 100' or larger. Where necessary, sections of the plan may be presented in several sheets at the required scale. North should be "up" on the plan. Please consult with the Planning & Community Development Department for the required number of copies of the application and plans for your particular application.

Other Items: As detailed below, the Board may require additional reports or studies deemed necessary to make an informed decision, including but not limited to: traffic, school, fiscal, environmental impact analyses, wildlife, historic, impact fee analysis, sprinkler system review and other studies. The Board reserves the right to request such information after an application has been accepted as administratively complete. If required, these special studies shall be conducted at the expense of the applicant.

Administrative Fees: Please consult with the Planning & Community Development Department for the required fee schedule. Remit payment with your application, supporting documents with the required payment to the Planning & Community Development Department.

Application Review and Procedure

An application for a Conditional Use Permit shall be initiated by filing an application for conditional use with the Planning Board. The following procedures shall apply to the processing of such an application:

1. When Subdivision or Site Plan approval is required, the application and review procedure for a Conditional Use Permit shall be made concurrently and in accordance with the procedures specified in the Land Development Regulations as applicable to the particular development.



TOWN OF BOSCAWEN, NEW HAMPSHIRE | Conditional Use Permit

116 North Main Street, Boscawen, NH 03303 | 603 753-9188x2309 | keasler@townofboscawen.org

2. When Subdivision or Site Plan Approval is not required, the application and procedural requirements of the Land Development Regulations shall be applied to the application and processing of Conditional Use Permits with respect to content of applications, requirements for public notice, hearings and timing of decisions by the Planning Board only.

Burden of Persuasion

The applicant bears the burden of persuasion, through the introduction of sufficient evidence through testimony or otherwise, that the development, if completed as proposed, will comply with this Article and will satisfy the specific requirements for the use contained in the Zoning Ordinance in Article IV, Use Regulations.

Standards of Review

In reviewing an application for a Conditional Use Permit, the Planning Board shall consider the following information in its deliberation, as applicable to the case. Please answer the following questions in the space provided, or if necessary in an attached document:

1. Is there specific authorization for your proposed conditional use as established by the Zoning Ordinance in Article IV, Use Regulations?

Yes, in Article IV Table of uses- Excavation and filling. The commercial removal of
gravels, stone, loam, clay, sand or other types of soil is permitted with a Conditional
Use Permit in the R-1 zoning district.

2. Will your proposed conditional use comply with the specific standards for such use as contained in the Zoning Ordinance and Land Development Regulations?

Yes, the project will be performed in accordance with RSA 155-E regulations and
design plans to be reviewed by the Boscawen Planning Board and NHDES Alteration
of Terrain Bureau.

3. If the Planning Board has required any special investigative or scientific studies prepared in association with the proposed development, what is your response to those studies?

None requested at this time.



TOWN OF BOSCAWEN, NEW HAMPSHIRE | Conditional Use Permit

116 North Main Street, Boscawen, NH 03303 | 603 753-9188x2309 | keasler@townofboscawen.org

4. What is your response to any special reports or analyses of the project or its impacts prepared by the Town's departments, its consultants, boards or commissions?

No comments or reports known at this time.

Please be prepared to respond to testimony and evidence introduced at the public hearing on the application.

Waiver Request(s)

Where the Planning Board is authorized to administer the provisions of an Innovative Land Use Control under RSA 674:21, it may waive any standard within the section after making the following determinations:

1. Granting of a waiver shall not be detrimental to the public safety, health, or welfare or cause injury or damage to other property, or fail to promote the public interest;
2. The waiver is consistent with the purpose of the provisions of the Zoning Ordinance and Master Plan;
3. The waiver will result in a better design for the Town of Boscawen;
4. A particular hardship or circumstance exists that warrants granting a waiver. Such circumstances may include topography, soil constraints, wetlands, geographic location of the property, size and scale of the project.

Please state the requirement that you seek a waiver from and your reasons and/or justifications for requesting the waiver(s).

Certain waivers are requested of the major siteplan application checklist.

The waiver requests are outlined in the Planning Board cover letter.

Hearing and Decision

Following a public hearing on the proposed use, the Planning Board shall issue a Conditional Use Permit if it finds, based on information and testimony submitted with respect to the application that:



TOWN OF BOSCAWEN, NEW HAMPSHIRE | Conditional Use Permit

116 North Main Street, Boscawen, NH 03303 | 603 753-9188x2309 | keasler@townofboscawen.org

1. The use is specifically authorized by this Ordinance as a conditional use;
2. If completed as proposed by the applicant, the development in its proposed location will comply with all requirements of this Article, and with the specific conditions or standards established in this Ordinance for the particular use;
3. The use will not materially endanger the public health or safety;
4. The use will be compatible with the neighborhood and with adjoining or abutting uses in the area where it is to be located;
5. The use will not have a substantial adverse impact on highway or pedestrian safety; and
6. The use will not have a substantial adverse impact on the natural resources of the town.

Conditions of Approval

In granting a Conditional Use Permit, the Planning Board may attach reasonable conditions to its approval, including, but not limited to, performance guarantees and the phasing of a development, where such conditions are shown to be necessary to further the objectives of this Article. Representations made at a public hearing or in material submitted to the Planning Board by an applicant to obtain a Conditional Use Permit shall be deemed conditions of the issuance of the permit. All other conditions of approval shall be stated in writing in the permit. The Planning Board may require that such conditions be annotated on a site plan or subdivision plan, or otherwise recorded at the Merrimack County Registry of Deeds.

Appeals

Any persons aggrieved by a Planning Board decision on a Conditional Use Permit may appeal that decision to the Superior Court as provided in the manner prescribed in RSA 677:15. A Planning Board decision on the issuance of a Conditional Use Permit cannot be appealed to the Zoning Board of Adjustment (see RSA 676:5, III).



TOWN OF BOSCAWEN, NEW HAMPSHIRE | Conditional Use Permit

116 North Main Street, Boscawen, NH 03303 | 603 753-9188x2309 | keasler@townofboscawen.org

Statement of Assurance and Agreement:

I hereby certify that to the best of my knowledge this submitted application information is true and correct. All proposed development will be in conformance with the information contained on the application and in the approved plan as well as the provisions of the Town of Boscawen ordinances and regulations.

The Owner/Agent, by filing an application, hereby grants permission for members of the Board and staff to enter onto the subject property for the purposes of this review.

Applicant/Agent Signature

Date

Applicant/Agent Signature

Date

[Handwritten Signature]

3/29/2022

Owner Signature

Date

Owner Signature

Date

By my signature below, I hereby certify that I have reviewed the application package and I believe it to be administratively complete, the fees have been paid and the application is ready for Planning Board review.

Planning & Community Development Director

Date

Narrative
Conditional Use Permit
Earth Excavation
Article IV Table of Uses

R. S. Audley Inc.
Assessor's Map 47 Lot 6

Boscawen Zoning Article XXI- Conditional Use Permits.
Section 21.06:

- a. The use is specifically authorized by this ordinance as a conditional use:*

Excavation of earth materials is permitted as a conditional use on the property (R-1 zoning district), as listed in Article IV Table of Uses.

- b. If completed as proposed by the applicant, the development in its proposed location will comply with all requirements of this Article, and with the specific conditions or standards established in this Ordinance for the particular use:*

The excavation operation has been designed in accordance with the Minimum and Express Standards outlined in RSA 155-E, which regulates the excavation of earth materials. The operation as proposed will be conducted within the property line setbacks as defined in the Boscawen Zoning Ordinance. Excavation plans are to be reviewed by the Boscawen Planning Board, the Town's review Engineer and NH Department of Environmental Services Alteration of Terrain Bureau.

- c. The use will not materially endanger the public health or safety:*

The proposed excavation will take place on private property approximately 550 feet off Route 3. Any existing vegetated buffer to property lines will remain around the excavation site. There is an existing NHDOT driveway permit for the driveway access onto Route 3.

- d. *The use will be compatible with the neighborhood and with adjoining or abutting uses in the area where it is to be located:*

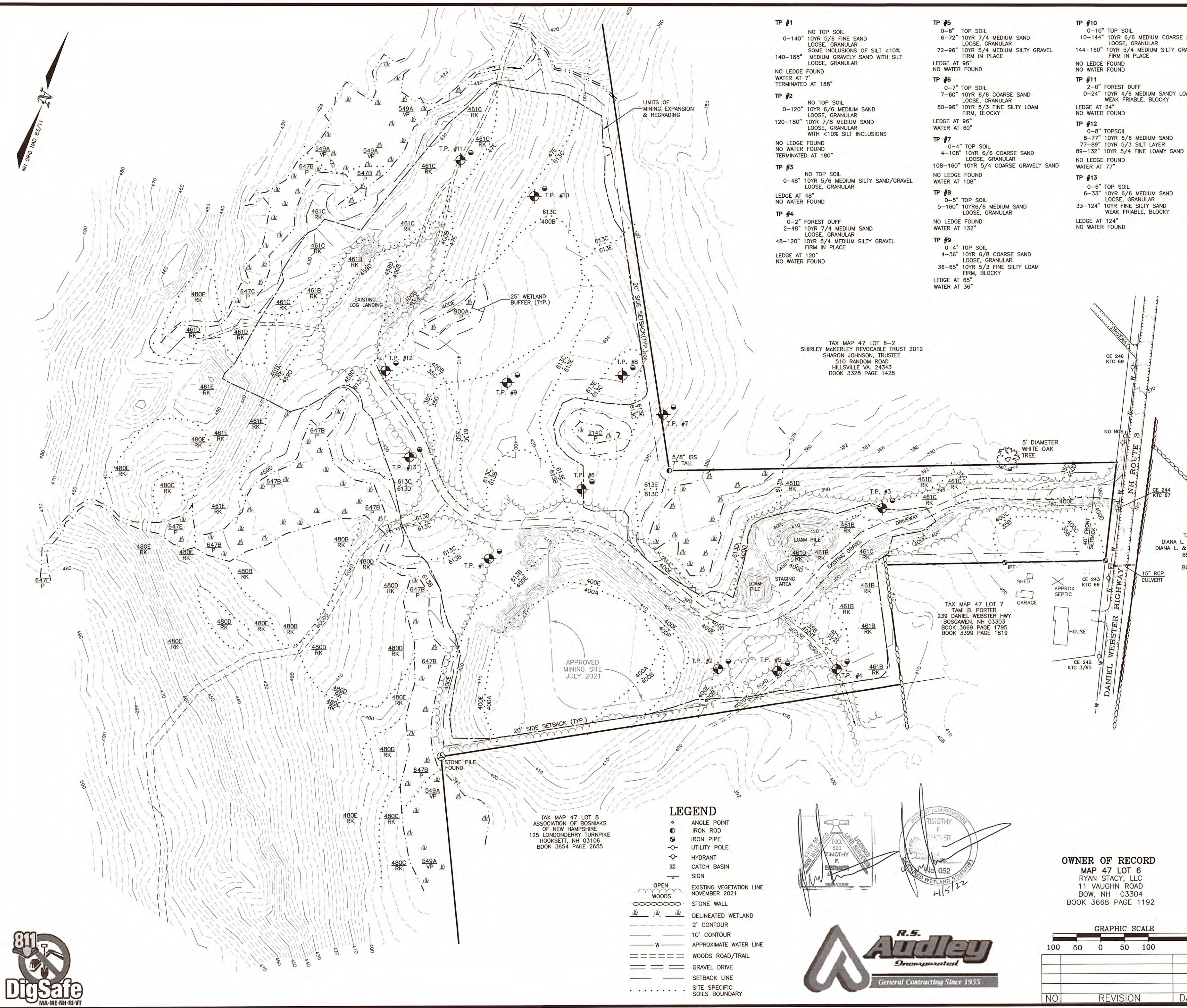
The site is situated well off of Route 3 on a 249 acre lot. The excavation site itself is not visible from Route 3. The excavation as designed will meet local and state setbacks, and runoff from the site will not increase. The site is accessed by way of a State highway.

- e. *The use will not have a substantial adverse impact on highway or pedestrian safety:*

The excavation is located within the boundaries of a 249-acre parcel. A NHDOT driveway permit was granted in August 2021 for the access driveway. The proposed excavation will have no interaction with pedestrians.

- f. *The use will not have a substantial adverse impact on the natural resources of the Town:*

The excavation will be taking place on private land, removing sand, gravel and stone. There will be no impacts to any wetlands or streams that flow off of the property. There is no net increase in run-off from the site. The excavation area will be revegetated in accordance with the RSA 155-E Reclamation Standards.



- TP #1**
0-140" NO TOP SOIL
10YR 5/6 FINE SAND
LOOSE, GRANULAR
SOME INCLUSIONS OF SILT <10%
MEDIUM GRAVELLY SAND WITH SILT
LOOSE, GRANULAR
NO LEDGE FOUND
WATER AT 7"
TERMINATED AT 188"
- TP #2**
0-120" NO TOP SOIL
10YR 6/6 MEDIUM SAND
LOOSE, GRANULAR
120-180" 10YR 7/8 MEDIUM SAND
LOOSE, GRANULAR
WITH <10% SILT INCLUSIONS
NO LEDGE FOUND
NO WATER FOUND
TERMINATED AT 180"
- TP #3**
NO TOP SOIL
0-48" 10YR 5/6 MEDIUM SILTY SAND/GRAVEL
LOOSE, GRANULAR
LEDGE AT 48"
NO WATER FOUND
- TP #4**
0-2" FOREST DUFF
2-48" 10YR 7/4 MEDIUM SAND
LOOSE, GRANULAR
48-120" 10YR 5/4 MEDIUM SILTY GRAVEL
FIRM IN PLACE
LEDGE AT 120"
NO WATER FOUND
- TP #5**
0-6" TOP SOIL
6-72" 10YR 7/4 MEDIUM SAND
LOOSE, GRANULAR
72-96" 10YR 5/4 MEDIUM SILTY GRAVEL
FIRM IN PLACE
LEDGE AT 96"
NO WATER FOUND
- TP #6**
0-7" TOP SOIL
7-60" 10YR 6/6 COARSE SAND
LOOSE, GRANULAR
60-96" 10YR 5/3 FINE SILTY LOAM
FIRM, BLOCKY
LEDGE AT 96"
WATER AT 60"
- TP #7**
0-4" TOP SOIL
4-108" 10YR 6/6 COARSE SAND
LOOSE, GRANULAR
108-160" 10YR 5/4 COARSE GRAVELLY SAND
NO LEDGE FOUND
WATER AT 108"
- TP #8**
0-5" TOP SOIL
5-160" 10YR 6/6 MEDIUM SAND
LOOSE, GRANULAR
NO LEDGE FOUND
WATER AT 132"
- TP #9**
0-4" TOP SOIL
4-36" 10YR 6/8 COARSE SAND
LOOSE, GRANULAR
36-65" 10YR 5/3 FINE SILTY LOAM
FIRM, BLOCKY
LEDGE AT 65"
WATER AT 36"
- TP #10**
0-10" TOP SOIL
10-144" 10YR 6/6 MEDIUM COARSE SAND
LOOSE, GRANULAR
144-160" 10YR 5/4 MEDIUM SILTY GRAVEL
FIRM IN PLACE
NO LEDGE FOUND
NO WATER FOUND
- TP #11**
2-0" FOREST DUFF
0-24" 10YR 4/6 MEDIUM SANDY LOAM
WEAK FRIABLE, BLOCKY
LEDGE AT 24"
NO WATER FOUND
- TP #12**
0-8" TOPSOIL
8-77" 10YR 6/6 MEDIUM SAND
77-89" 10YR 5/3 SILT LAYER
89-132" 10YR 5/4 FINE LOAMY SAND
NO LEDGE FOUND
WATER AT 77"
- TP #13**
0-6" TOP SOIL
6-33" 10YR 6/6 MEDIUM SAND
LOOSE, GRANULAR
33-124" 10YR FINE SILTY SAND
WEAK FRIABLE, BLOCKY
LEDGE AT 124"
NO WATER FOUND

- PLAN NOTES**
1. THE PURPOSE OF THIS PLAN IS TO SHOW THE EXISTING SITE CONDITIONS IN THE AREA OF THE PROPOSED EXCAVATION, BEING A PORTION OF LOT 6 AS SHOWN ON THE TOWN OF BOSCAWEN ASSESSORS MAP 47.
 2. THE INFORMATION SHOWN HEREON ON LOT 6 IS FROM FIELD SURVEYS COMPLETED UNDER THE SUPERVISION OF THIS OFFICE IN THE SPRING 2021 THROUGH JANUARY 2022 AND AERIAL PHOTOGRAMMETRY PERFORMED BY THIS OFFICE IN NOVEMBER 2021. THE VERTICAL DATUM IS NAVD83 BASED ON A GLOBAL POSITIONING SURVEY PERFORMED BY THIS OFFICE IN NOVEMBER 2021. THE TOPOGRAPHY OFF PROPERTY IS FROM NH GRANIT.
 3. THE WETLAND BOUNDARIES SHOWN HEREON WERE DELINEATED IN THE FIELD UNDER THE SUPERVISION OF TIMOTHY F. BERNIER, NEW HAMPSHIRE CERTIFIED WETLAND SCIENTIST #052 OF THIS OFFICE. ALL WETLAND BOUNDARIES WERE DEFINED IN ACCORDANCE WITH THE RULES ESTABLISHED UNDER NEW HAMPSHIRE RSA 482-A.

ZONING REQUIREMENTS

PROPERTY IS ZONED: R-1 = RESIDENTIAL - LOW DENSITY

MINIMUM LOT SIZE = 80,000 SQ. FT. OR 1.836 AC. (NO WATER OR SEWER)
= 40,000 SQ. FT. OR 0.918 AC. (WITH WATER OR SEWER)




MINIMUM FRONTAGE = 150 FEET (NO WATER OR SEWER)
= 125 FEET (WITH WATER OR SEWER)

STRUCTURE SETBACKS:

FRONT = 40 FEET
SIDE = 20 FEET
REAR = 40 FEET

- SITE SPECIFIC SOILS DATA**
- FROM SITE SPECIFIC SOIL SURVEY PERFORMED BY
JOHN P. HAYES III, CSS, CWS ON NOVEMBER 12-13, 2021.
- 35 - CHAMPLAIN, EXCESSIVELY-SOMEWHAT EXCESSIVELY DRAINED, HSG A
 - 47 - HENNIKER, WELL DRAINED, HSG C
 - 214/P - NAUMBURG, POORLY DRAINED, HSG C
 - 400 - (bbods) UDORTHENTS, SOMEWHAT EXCESSIVELY DRAINED, HSG A
 - 400 - (dbods) UDORTHENTS, MODERATELY WELL DRAINED, HSG B
 - 459 - METACOMET, MODERATELY WELL DRAINED, HSG C
 - 461/RK - WOODSTOCK MILLSITE ROCK OUTCROP COMPLEX, HSG C/D
 - 480/RK - MILLSITE WOODSTOCK HENNIKER COMPLEX, HSG C/D
 - 549/VP - PEACHAM, VERY POORLY DRAINED, HSG D
 - 613 - CROGHAN, MODERATELY WELL DRAINED, HSG B
 - 647/P - PILLSBURY, POORLY DRAINED, HSG C
 - 900/P - ENDOAQUENTS, POORLY DRAINED, HSG C

EXISTING CONDITIONS PLAN
PREPARED FOR
R.S. AUDLEY INC.
ASSESSORS MAP 47 LOT 6
243 DANIEL WEBSTER HIGHWAY
N.H. ROUTE 3
BOSCAWEN NEW HAMPSHIRE
SCALE: 1"=100' DATE: MARCH 2022
SHEET 2 OF 4



LEGEND

- ANGLE POINT
- IRON ROD
- IRON PIPE
- UTILITY POLE
- HYDRANT
- CATCH BASIN
- SIGN
- EXISTING VEGETATION LINE NOVEMBER 2021
- STONE WALL
- DELINEATED WETLAND
- 2' CONTOUR
- 10' CONTOUR
- APPROXIMATE WATER LINE
- WOODS ROAD/TRAIL
- GRAVEL DRIVE
- SETBACK LINE
- SITE SPECIFIC SOILS BOUNDARY

OWNER OF RECORD
MAP 47 LOT 6
RYAN STACY, LLC
11 VAUGHN ROAD
BOW, NH 03304
BOOK 3668 PAGE 1192

GRAPHIC SCALE
100 50 0 50 100 200

NO.	REVISION	DATE

DESIGNED BY	DRAWN BY	CHECKED BY	F.B.	PG.	JOB #
	TJH	TJB			143-05

DRAWING NAME
02_ExistCond2022

GENERAL EROSION AND SEDIMENT CONTROL NOTES

1. ALL EXCAVATION SHALL BE PERFORMED IN ACCORDANCE WITH THE APPROVED PLANS, THE TOWN OF BOSCAWEN REGULATIONS, AND THE BEST MANAGEMENT PRACTICES AS ACCEPTED BY THE STATE OF NEW HAMPSHIRE.
2. CONSTRUCT ALL PERIMETER CONTROLS, TEMPORARY SEDIMENT AND EROSION CONTROL FACILITIES, INCLUDING SILT FENCE.
3. DURING EXCAVATION ACTIVITIES THE SITE SHALL BE GRADED TO DIRECT RUNOFF TOWARD THE CUT FACE WITHIN THE ACTIVE EXCAVATION AREA.
3. FUGITIVE DUST SHALL BE CONTROLLED IN ACCORDANCE WITH ENV-A 1000.
4. CONSTRUCT DIVERSION SWALES AND DEPRESSIONS. SWALES AND DEPRESSIONS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
5. LOAM STRIPPED FROM THE SITE SHALL BE REAPPLIED TO AREAS WHERE EXCAVATION IS COMPLETE. AS NECESSARY, ADDITIONAL LOAM SHALL BE BROUGHT IN FROM OFF-SITE, BUT SHALL BE TESTED AND AMENDED AS NECESSARY, (SEE SEEDING/RECLAMATION NOTES).
6. REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL FACILITIES AFTER DISTURBED AREAS HAVE BEEN STABILIZED.
7. SEE RSA 155-E EXCAVATION & RECLAMATION STANDARDS ON SHEET 4.

MAINTENANCE RESPONSIBILITIES:

- A. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL WEEKLY AND AFTER EVERY RAINFALL OF 1/2" OR MORE WITHIN A 24 HOUR PERIOD. ANY DAMAGED, FAILING OR IMPROPER EROSION CONTROL MEASURES FOUND DURING THE INSPECTION SHALL BE REPAIRED IMMEDIATELY.
- B. THE CONTRACTOR SHALL CONSTRUCT TEMPORARY BERMS DRAINAGE DITCHES, SILT FENCE, SEDIMENT TRAPS ETC. AS NEEDED DURING EXCAVATION TO CONTROL STORMWATER AND MINIMIZE EROSION.
- C. LOAMED AND SEEDING AREAS SHALL BE INSPECTED, REPAIRED AND MAINTAINED AFTER EACH STORM EVENT UNTIL AREAS ARE STABLE.
- D. INSPECT VEGETATION GROWTH AND REMOVE INVASIVE SPECIES AS NECESSARY, IN ACCORDANCE WITH RSA 430:33 AND CHAPTER AGR 3800.

AN AREA SHALL BE CONSIDERED "STABLE" IF ONE OF THE FOLLOWING HAS OCCURRED:

1. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED.
2. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE RIP-RAP HAS BEEN INSTALLED.

GENERAL NOTES

1. THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED EXCAVATION LIMITS, FINAL GRADING AND RECLAMATION OF THE PROPOSED EXPANDED MINING AREA.
2. THE TOPOGRAPHY ON LOT 6 IS FROM FIELD SURVEYS COMPLETED UNDER THE SUPERVISION OF THIS OFFICE IN THE SPRING 2021 THROUGH JANUARY 2022 AND AERIAL PHOTOGRAMMETRY PERFORMED BY THIS OFFICE IN NOVEMBER 2021. THE VERTICAL DATUM IS NAVD83 BASED ON BASED ON A GLOBAL POSITIONING SURVEY PERFORMED BY THIS OFFICE IN NOVEMBER 2021.
3. THE WETLAND BOUNDARIES SHOWN HEREON WERE DELINEATED IN THE FIELD UNDER THE SUPERVISION OF TIMOTHY F. BERNIER, NEW HAMPSHIRE CERTIFIED WETLAND SCIENTIST #052 OF THIS OFFICE. ALL WETLAND BOUNDARIES WERE DEFINED IN ACCORDANCE WITH THE RULES ESTABLISHED UNDER NEW HAMPSHIRE RSA 482-A.
4. HOURS OF OPERATION WILL BE MONDAY-FRIDAY 7-5:00, SATURDAY 7-2:00.

GENERAL GRADING NOTES

1. MINIMUM SLOPE ACROSS OPEN AREAS SHALL BE NO LESS THAN 1%. THE BOTTOM OF THE DEPRESSIONS SHALL BE FLAT.
2. EXCEPT FOR LEDGE FACES, FINAL SIDE SLOPES SHALL NOT EXCEED 2:1.
3. SEE BLASTING NOTES ON SHEET 4.
4. OVERBURDEN MATERIAL WILL BE STOCKPILED ON SITE TO BE USED DURING RECLAMATION.
5. THE FINISH GRADE CONTOURS SHOWN HEREON ARE THOSE PROPOSED AT THE END OF RECLAMATION. AREAS OF EXPOSED LEDGE ON THE PIT FLOOR ARE TO BE BACKFILLED AND REGRADED WITH OVERBURDEN MATERIAL TO A DEPTH OF 2'-4' BEFORE IT IS LOAMED AND SEEDING.

NHDES APPROVALS

ALTERATION OF TERRAIN PERMIT: PENDING

****AOT NOTE: THE APPLICANT (PERMITEE) MUST SUBMIT TO THE DEPARTMENT OF ENVIRONMENTAL SERVICES A WRITTEN UPDATE OF THE PROJECT AND REVISED PLANS DOCUMENTING THE PROJECT STATUS EVERY 5 YEARS FROM THE DATE OF THE AOT PERMIT.**

WETLANDS PERMIT: PENDING

EXCAVATION & RECLAMATION PLAN
PREPARED FOR
R.S. AUDLEY INC.
ASSESSORS MAP 47 LOT 6
243 DANIEL WEBSTER HIGHWAY
N.H. ROUTE 3
BOSCAWEN NEW HAMPSHIRE
SCALE: 1"=100' DATE: MARCH 2022
SHEET 3 OF 4

T. F. BERNIER, INC.
Land Surveyors - Designers - Consultants
50 PLEASANT STREET - P.O. BOX 3464
CONCORD, NEW HAMPSHIRE 03302-3464
Tel:(603)224-4148 - Fax:(603)224-0507

WILDLIFE PROTECTION NOTES (Env-Wq 1504.18)

1. ALL OBSERVATIONS OF THREATENED OR ENDANGERED SPECIES ON THE PROJECT SITE SHALL BE REPORTED IMMEDIATELY TO NHF&G (NEW HAMPSHIRE FISH AND GAME) NONGAME AND ENDANGERED WILDLIFE ENVIRONMENTAL REVIEW PROGRAM BY PHONE AT 603-271-2461 AND BY EMAIL AT NHF&G@WILDLIFE.NH.GOV, WITH THE EMAIL SUBJECT LINE CONTAINING THE NHF&G TOOL RESULTS LETTER ASSIGNED NUMBER, THE PROJECT NAME, AND THE TERM "WILDLIFE SPECIES OBSERVATION".
2. PHOTOGRAPHS OF THE OBSERVED SPECIES AND NEARBY ELEMENTS OF HABITAT OR AREAS OF LAND DISTURBANCE SHALL BE PROVIDED TO THE NHF&G IN DIGITAL FORMAT AT THE ABOVE EMAIL ADDRESS FOR VERIFICATION AS FEASIBLE.
3. IN THE EVENT A THREATENED OR ENDANGERED SPECIES IS OBSERVED ON THE PROJECT SITE DURING THE TERM OF THE PERMIT, THE SPECIES SHALL NOT BE DISTURBED, HANDLED, OR HARMED IN ANY WAY PRIOR TO CONSULTATION WITH NHF&G AND IMPLEMENTATION OF CORRECTIVE ACTIONS RECOMMENDED BY NHF&G, IF ANY, TO ASSURE THE PROJECT DOES NOT APPRECIABLY JEOPARDIZE THE CONTINUED EXISTENCE OF THREATENED AND ENDANGERED SPECIES AS DEFINED IN FIS 1002.04.
4. THE NHF&G, INCLUDING ITS EMPLOYEES AND AUTHORIZED AGENTS, SHALL HAVE ACCESS TO THE PROPERTY DURING THE TERM OF THE PERMIT.

(Env-Wq 1506.15)

1. ALL MANUFACTURED EROSION AND SEDIMENT CONTROL PRODUCTS, EXCEPT FOR TURF REINFORCEMENT MATS, UTILIZED FOR, BUT NOT LIMITED TO, SLOPE PROTECTION, RUNOFF DIVERSION, SLOPE INTERRUPTION, PERIMETER CONTROL, INLET PROTECTION, CHECK DAMS AND SEDIMENT TRAPS SHALL NOT CONTAIN PLASTIC, OR MULTI-FILAMENT OR MONOFILAMENT POLYPROPYLENE NETTING OR MESH WITH AN OPENING SIZE OF GREATER THAN 1/8 INCH.
2. TURF REINFORCEMENT MATS SHALL BE COVERED WITH SOIL TO PREVENT EXPOSURE OF THE MATS TO THE SURFACE.

SOURCE CONTROL PLAN-EQUIPMENT REFUELING

NO FUEL OR LUBRICANTS ARE TO BE STORED ON-SITE. MOBILE FUELING OF EXCAVATION EQUIPMENT WILL OCCUR ON-SITE BY A MOBILE FUEL DELIVERY COMPANY. SECONDARY CONTAINMENT MUST BE PROVIDED FOR ALL REGULATED CONTAINERS AND BE IN PLACE DURING FUELING ACTIVITIES INVOLVING TRANSFERS FROM "ON-ROAD" DELIVERY TRUCKS, "OFF-ROAD" TANKS TRUCKS ("MOBILE REFUELERS") OR PORTABLE CONTAINERS TO FIELD EQUIPMENT. PORTABLE CONTAINMENT EQUIPMENT, SUCH AS A RIGID OR FLEXIBLE POP-UP POOL OR BERM, SHALL BE USED DURING MOBILE FUELING AND POSITIONED TO CATCH ANY FUEL SPILLS DUE TO OVER-FILLING THE EQUIPMENT AND ANY OTHER SPILLS THAT MAY OCCUR DURING THE FUELING PROCESS. EQUIPMENT (SPILL KIT) TO CLEAN UP SPILLS AND LEAKS MUST BE LOCATED IN THE IMMEDIATE AREA. PERSONNEL MUST ATTEND TO THE FUELING PROCESS. REFER TO NHDES FACT SHEET WD-DWGB-22-6, BEST MANAGEMENT PRACTICES FOR FUELING AND MAINTENANCE OF EXCAVATION AND EARTH MOVING EQUIPMENT, AVAILABLE AT: [HTTP://WWW.DES.NH.GOV/ORGANIZATION/COMMISSIONER/PIF/FACTSHEETS/DWGB/DOCUMENTS/DWGB-22-6.PDF]

THE BEST MANAGEMENT PRACTICES NOTED IN WD-DWGB-22-6 SHALL BE IMPLEMENTED, INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:

1. PROVIDE SECONDARY CONTAINMENT DURING FUEL TRANSFERS.
2. COMPLY WITH RELATED STATE AND FEDERAL REQUIREMENTS.
3. EMPLOYEE TRAINING TO PREVENT, CONTAIN AND CLEAN UP SPILLS.
4. IMMEDIATELY REPORT SIGNIFICANT OR UNCONTROLLED SPILLS.
5. PROPERLY STORE AND DISPOSE OF CONTAMINATED SOIL AND MATERIAL.

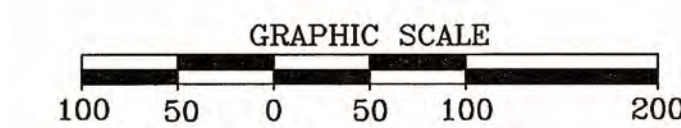
LEGEND

- IRON ROD
- IRON PIPE
- UTILITY POLE
- HYDRANT
- CATCH BASIN
- SIGN
- OPEN WOODS
- EXISTING VEGETATION LINE
- STONE WALL
- DELINEATED WETLAND
- 2' CONTOUR
- 10' CONTOUR
- WOODS ROAD
- GRAVEL DRIVE
- SETBACK LINE
- APPROXIMATE WATER LINE
- PROPOSED 2' CONTOUR
- PROPOSED SPOT GRADE

CERTIFICATION

THIS PLAT IS HEREBY APPROVED BY THE BOSCAWEN PLANNING BOARD
AT AN OFFICIAL MEETING HELD ON _____

DATE _____ CHAIRPERSON OF THE BOSCAWEN PLANNING BOARD

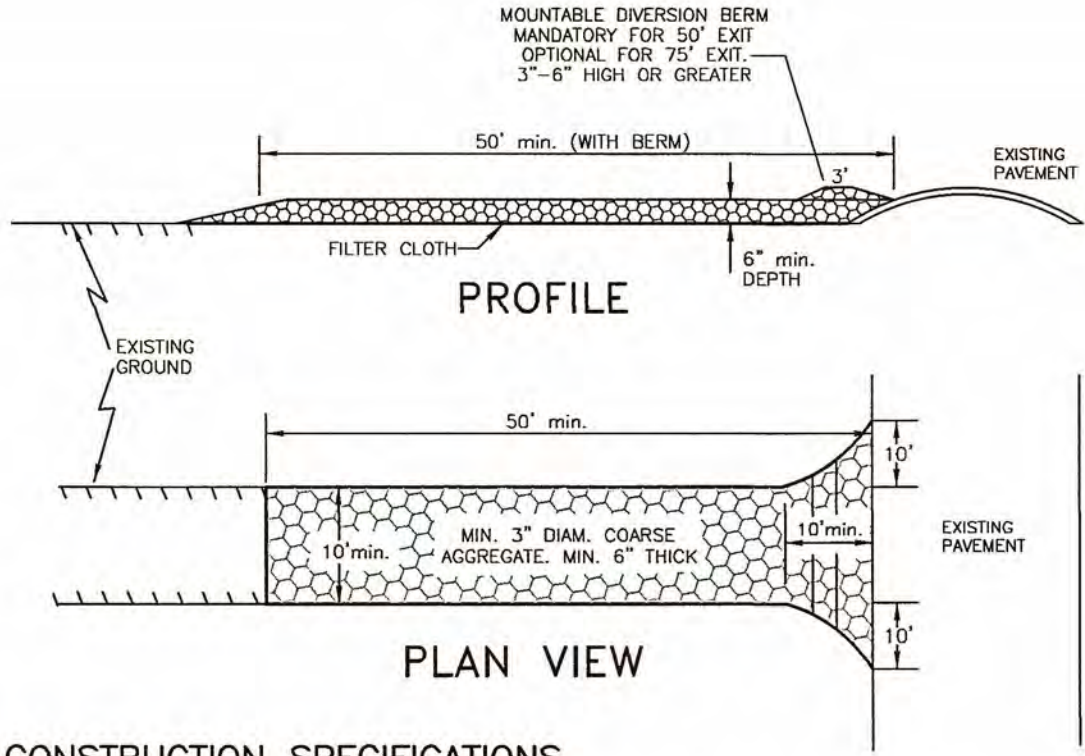


NO.	REVISION	DATE

DESIGNED BY	DRAWN BY	CHECKED BY	F.B.	PG.	JOB #
TFB	TJH, JRC	TFB			143-05

DRAWING NAME
03_Grading2022.dwg

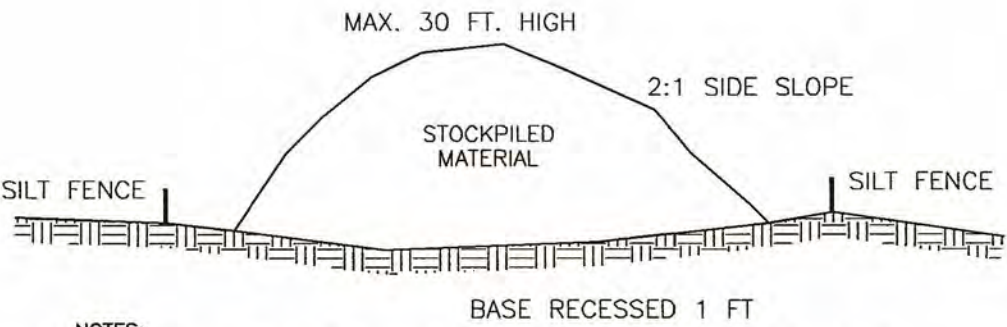




CONSTRUCTION SPECIFICATIONS

- STONE SIZE - USE 3" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
- THICKNESS - NOT LESS THAN SIX (6) INCHES.
- WIDTH - TEN (10) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
- FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER CLOTH WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
- SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

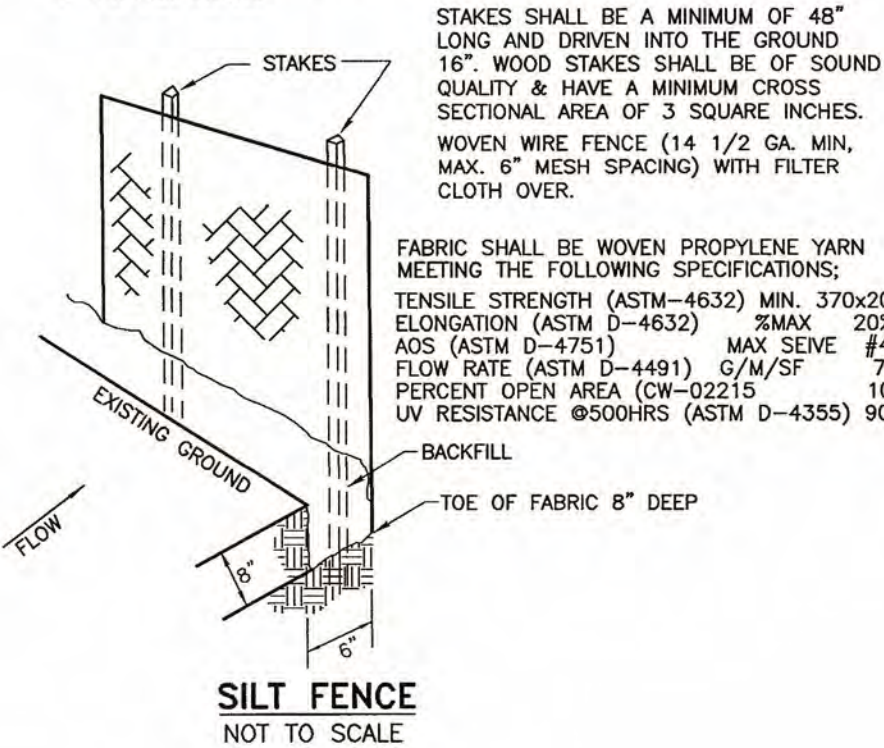
STABILIZED CONSTRUCTION ENTRANCE NOT TO SCALE



- NOTES:
- MATERIAL SHALL NOT BE STOCK PILED WITHIN 100' OF ANY WETLAND OR 50' OF CONCENTRATED FLOWS OF STORMWATER, DRAINAGE COURSES AND INLETS.
 - CONSTRUCT DIVERSION BERM ALONG UP SLOPE SIDE OF STOCKPILE TO PROTECT THE STOCKPILE FROM STORMWATER FLOWS.
 - INACTIVE STOCKPILES SHALL BE COVERED WITH TARPS OR SEEDED AND MULCHED. SILT FENCE BARRIERS SHALL BE MAINTAINED AT ALL TIMES.

TYPICAL MATERIAL STOCKPILE NOT TO SCALE

- CONSTRUCTION NOTES:
- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
 - FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP, MID SECTION, AND BOTTOM.
 - WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES, FOLDED AND STAPLED.
 - MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.



RSA 155-E-4-a MINIMUM AND EXPRESS OPERATIONAL STANDARDS

- NO EXCAVATION SHALL BE PERMITTED BELOW ROAD LEVEL WITHIN 50' OF THE RIGHT-OF-WAY OF ANY PUBLIC HIGHWAY AS DEFINED IN RSA 229:1 UNLESS SUCH EXCAVATION IS FOR THE PURPOSE OF SAID HIGHWAY.
- NO EXCAVATION SHALL BE PERMITTED WITHIN 50' OF THE BOUNDARY OF A DISAPPROVING ABUTTER, WITHIN 150' OF ANY DWELLING WHICH EITHER EXISTED OR FOR WHICH A BUILDING PERMIT HAS BEEN ISSUED AT THE TIME THE EXCAVATION IS COMMENCED.
- NO EXCAVATION SHALL BE PERMITTED WITHIN 75' OF ANY GREAT POND, NAVIGABLE RIVER, OR ANY OTHER STANDING BODY OF WATER 10 ACRES OR MORE IN AREA, OR WITHIN 25' OF ANY OTHER STREAM, RIVER OR BROOK WHICH NORMALLY FLOWS THROUGHOUT THE YEAR, OR ANY NATURALLY-OCCURRING STANDING BODY OF WATER LESS THAN 10 ACRES, PRIME WETLAND AS DESIGNATED IN ACCORDANCE WITH RSA 482-A:15-I, OR ANY OTHER WETLAND GREATER THAN 5 ACRES IN AREA AS DEFINED BY THE DEPARTMENT OF ENVIRONMENTAL SERVICES.
- VEGETATION SHALL BE MAINTAINED OR PROVIDED WITHIN THE PERIPHERAL AREAS REQUIRED BY PARAGRAPHS 1 AND II.
- DRAINAGE SHALL BE MAINTAINED SO AS TO PREVENT THE ACCUMULATION OF FREE STANDING WATER FOR PROLONGED PERIODS. EXCAVATION PRACTICES WHICH RESULT IN CONTINUED SILTATION OF SURFACE WATERS OR ANY DEGRADATION OF WATER QUALITY OF ANY PUBLIC OR PRIVATE WATER SUPPLIES ARE PROHIBITED.
- NO FUELS, LUBRICANTS OR OTHER TOXIC OR POLLUTING CHEMICALS SHALL BE STORED ONSITE UNLESS IN COMPLIANCE WITH STATE LAWS OR RULES PERTAINING TO THE STORAGE OF SUCH MATERIALS.
- WHERE TEMPORARY SLOPES WILL EXCEED 1:1 GRADE, A FENCE OR OTHER SUITABLE BARRICADE SHALL BE ERECTED TO WARN OF DANGER OR LIMIT ACCESS TO THE SITE.
- PRIOR TO THE REMOVAL OF TOPSOIL OR OTHER OVERBURDEN MATERIAL FROM ANY LAND AREA THAT HAS NOT YET BEEN EXCAVATED, THE EXCAVATOR SHALL FILE A RECLAMATION BOND OR OTHER SECURITY AS PRESCRIBED BY THE REGULATOR, SUFFICIENT TO SECURE THE RECLAMATION OF THE LAND AREA TO BE EXCAVATED.
- NOTHING IN THIS CHAPTER SHALL BE DEEMED TO SUPERSEDE OR PREEMPT APPLICABLE ENVIRONMENTAL STANDARDS OR PERMIT REQUIREMENTS CONTAINED IN OTHER STATE LAWS, AND NO EXEMPTION UNDER THIS CHAPTER SHALL BE CONSTRUED AS AN EXEMPTION FROM ANY OTHER STATE STATUTE.

RSA 155-E-5 MINIMUM AND EXPRESS RECLAMATION STANDARDS

WITHIN 12 MONTHS AFTER THE EXPIRATION DATE IN A PERMIT ISSUED UNDER THIS CHAPTER, OR OF THE COMPLETION OF ANY EXCAVATION, WHICHEVER OCCURS FIRST, THE OWNER OF THE EXCAVATED LAND SHALL HAVE COMPLETED THE RECLAMATION OF THE AREA AFFECTED BY THE EXCAVATION TO MEET EACH OF THE FOLLOWING STANDARDS, OR WHEN WHEN SUCH EXCAVATION IS NOT SUBJECT TO A PERMIT UNDER THIS CHAPTER PURSUANT TO RSA 155-E:2, TO MEET EACH OF THE FOLLOWING EXPRESS STANDARDS:

- EXCEPT FOR EXPOSED ROCK LEDGE, ALL AREAS WHICH HAVE BEEN AFFECTED BY THE EXCAVATION OR OTHERWISE STRIPPED OF VEGETATION SHALL BE SPREAD WITH TOPSOIL OR STRIPPINGS, IF ANY, BUT IN ANY CASE COVERED BY SOIL CAPABLE OF SUSTAINING VEGETATION, AND SHALL BE PLANTED WITH SEEDLINGS OR GRASS SUITABLE TO PREVENT EROSION. AREAS VISIBLE FROM A PUBLIC WAY, FROM WHICH TREES HAVE BEEN REMOVED, SHALL BE REPLANTED WITH TREE SEEDLINGS, SET OUT IN ACCORDANCE WITH ACCEPTABLE HORTICULTURAL PRACTICES.
- EARTH AND VEGETATIVE DEBRIS RESULTING FROM THE EXCAVATION SHALL BE REMOVED OR OTHERWISE LAWFULLY DISPOSED OF.
- ALL SLOPES, EXCEPT FOR EXPOSED LEDGE, SHALL BE GRADED TO NATURAL REPOSE FOR THE TYPE OF SOIL OF WHICH THEY ARE COMPOSED SO AS TO CONTROL EROSION, OR AT A RATIO OF HORIZONTAL TO VERTICAL PROPOSED BY THE OWNER AND APPROVED BY THE REGULATOR. CHANGES OF SLOPE SHALL NOT BE ABRUPT, BUT SHALL BLEND WITH THE SURROUNDING TERRAIN.
- THE ELIMINATION OF ANY STANDING BODIES OF WATER CREATED IN THE EXCAVATION PROJECT AS MAY CONSTITUTE A HAZARD TO HEALTH AND SAFETY.
- THE TOPOGRAPHY OF THE LAND SHALL BE LEFT SO THAT WATER DRAINING FROM THE SITE LEAVES THE PROPERTY AT THE ORIGINAL, NATURAL DRAINAGE POINTS AND IN THE NATURAL PROPORTIONS OF FLOW. FOR EXCAVATION PROJECTS WHICH REQUIRE A PERMIT FROM THE DEPARTMENT OF ENVIRONMENTAL SERVICES PURSUANT TO RSA 485-A:17, THE PROVISIONS OF THAT STATUTE, AND RULES ADOPTED UNDER IT, SHALL SUPERSEDE THIS PARAGRAPH AS TO AREAS OF EXCAVATION SITES COVERED THEREBY. THE EXCAVATOR SHALL FILE A COPY OF PERMITS ISSUED UNDER RSA-A:17 WITH THE REGULATOR.

RSA 155-E-5-a INCREMENTAL RECLAMATION

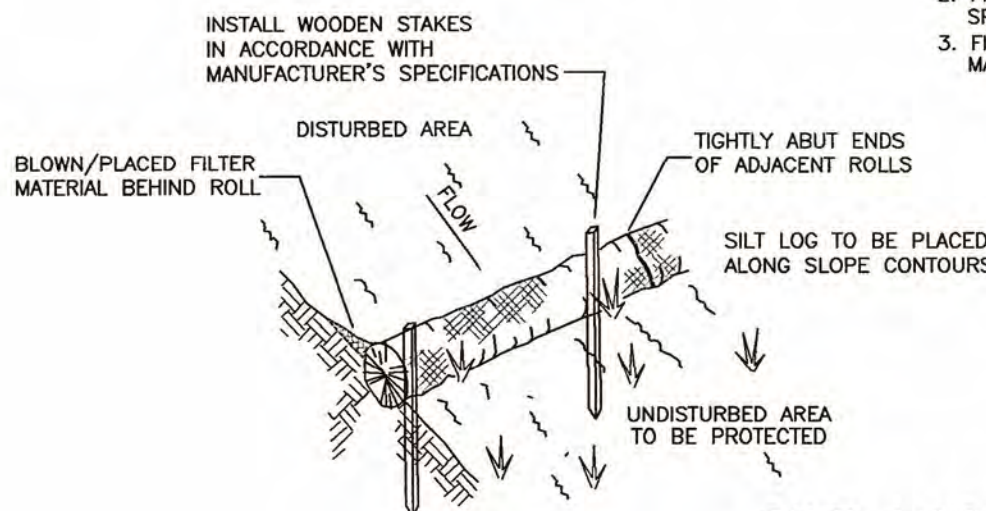
EXCEPT FOR EXCAVATION SITES OF OPERATING STATIONARY MANUFACTURING PLANTS, ANY EXCAVATED AREA OF 5 CONTIGUOUS ACRES OR MORE, WHICH IS DEPLETED OF COMMERCIAL EARTH MATERIALS, EXCLUDING BEDROCK, OR ANY EXCAVATION FROM WHICH EARTH MATERIALS OF SUFFICIENT WEIGHT OR VOLUME TO BE COMMERCIALY USEFUL HAVE NOT BEEN REMOVED FOR A 2-YEAR PERIOD, SHALL BE RECLAIMED IN ACCORDANCE WITH RSA 155-E-5, WITHIN 12 MONTHS FOLLOWING SUCH DEPLETION OR 2-YEAR NON-USE, REGARDLESS OF WHETHER OTHER EXCAVATION IS OCCURRING ON ADJACENT LAND IN CONTIGUOUS OWNERSHIP. EACH OPERATOR, OTHER THAN THE OPERATOR OF STATIONARY MANUFACTURING PLANTS WHICH ARE EXEMPT FROM PERMIT REQUIREMENTS PURSUANT TO RSA 155-E:2,III, SHALL PREPARE AND SUBMIT FOR THE REGULATOR'S RECORD A RECLAMATION PLAN FOR THE AFFECTED LAND, INCLUDING A TIMETABLE FOR RECLAMATION OF THE DEPLETED AREAS WITHIN THE RECLAMATION SITE.

WILDLIFE PROTECTION NOTES (Env-Wq 1504.18)

- ALL OBSERVATIONS OF THREATENED OR ENDANGERED SPECIES ON THE PROJECT SITE SHALL BE REPORTED IMMEDIATELY TO NHF&G (NEW HAMPSHIRE FISH AND GAME) NONGAME AND ENDANGERED WILDLIFE ENVIRONMENTAL REVIEW PROGRAM BY PHONE AT 603-271-2461 AND BY EMAIL AT NHF&GVIEW@WILDLIFE.NH.GOV, WITH THE EMAIL SUBJECT LINE CONTAINING THE NHB DATACHECK TOOL RESULTS LETTER ASSIGNED NUMBER, THE PROJECT NAME, AND THE TERM "WILDLIFE SPECIES OBSERVATION".
- PHOTOGRAPHS OF THE OBSERVED SPECIES AND NEARBY ELEMENTS OF HABITAT OR AREAS OF LAND DISTURBANCE SHALL BE PROVIDED TO THE NHF&G IN DIGITAL OR PRINT FORM AT THE ABOVE EMAIL ADDRESS FOR VERIFICATION AS FEASIBLE.
- IN THE EVENT A THREATENED OR ENDANGERED SPECIES IS OBSERVED ON THE PROJECT SITE DURING THE TERM OF THE PERMIT, THE SPECIES SHALL NOT BE DISTURBED, HANDLED, OR HARMED IN ANY WAY PRIOR TO CONSULTATION WITH NHF&G AND IMPLEMENTATION OF CORRECTIVE ACTIONS RECOMMENDED BY NHF&G, IF ANY, TO ASSURE THE PROJECT DOES NOT APPRECIABLY JEOPARDIZE THE CONTINUED EXISTENCE OF THREATENED AND ENDANGERED SPECIES AS DEFINED IN FHS 1002.04.
- THE NHF&G, INCLUDING ITS EMPLOYEES AND AUTHORIZED AGENTS, SHALL HAVE ACCESS TO THE PROPERTY DURING THE TERM OF THE PERMIT.

(Env-Wq 1506.15)

- ALL MANUFACTURED EROSION AND SEDIMENT CONTROL PRODUCTS, EXCEPT FOR TURF REINFORCEMENT MATS, UTILIZED FOR, BUT NOT LIMITED TO, SLOPE PROTECTION, RUNOFF DIVERSION, SLOPE INTERRUPTION, PERIMETER CONTROL, INLET PROTECTION, CHECK DAMS AND SEDIMENT TRAPS SHALL NOT CONTAIN PLASTIC, OR MULTI-FILAMENT OR MONOFILAMENT POLYPROPYLENE NETTING OR MESH WITH AN OPENING SIZE OF GREATER THAN 1/8 INCH.
- TURF REINFORCEMENT MATS SHALL BE COVERED WITH SOIL TO PREVENT EXPOSURE OF THE MATS TO THE SURFACE.



SILT LOG DETAIL NOT TO SCALE

NOTE: NO WELDED PLASTIC OR "BIODEGRADABLE PLASTIC" NETTING/THREAD TO BE USED.

ROCK BLASTING NOTES

FROM DOCUMENT ENTITLED "ROCK BLASTING AND WATER QUALITY MEASURES THAT CAN BE TAKEN TO PROTECT WATER QUALITY AND MITIGATE IMPACTS" PREPARED BY BRANDON KERNEN OF NHDES DRINKING WATER AND GROUNDWATER BUREAU, DATED 2019.

A. BEST MANAGEMENT PRACTICES FOR BLASTING:

ALL ACTIVITIES RELATED TO BLASTING SHALL FOLLOW BEST MANAGEMENT PRACTICES (BMPS) TO PREVENT CONTAMINATION OF GROUNDWATER INCLUDING PREPARING, REVIEWING AND FOLLOWING AN APPROVED BLASTING PLAN; PROPER DRILLING, EXPLOSIVE HANDLING AND LOADING PROCEDURES; OBSERVING THE ENTIRE BLASTING PROCEDURES; EVALUATING BLASTING PERFORMANCE; AND HANDLING AND STORAGE OF BLASTED ROCK.

(1) LOADING PRACTICES. THE FOLLOWING BLASTHOLE LOADING PRACTICES TO MINIMIZE ENVIRONMENTAL EFFECTS SHALL BE FOLLOWED:

- DRILLING LOGS SHALL BE MAINTAINED BY THE DRILLER AND COMMUNICATED DIRECTLY TO THE BLASTER. THE LOGS SHALL INDICATE DEPTHS AND LENGTHS OF VOIDS, CAVITIES, AND FAULT ZONES OR OTHER WEAK ZONES ENCOUNTERED AS WELL AS GROUNDWATER CONDITIONS.
- EXPLOSIVE PRODUCTS SHALL BE MANAGED ON-SITE SO THAT THEY ARE EITHER USED IN THE BOREHOLE, RETURNED TO THE DELIVERY VEHICLE, OR PLACED IN SECURE CONTAINERS FOR OFF-SITE DISPOSAL.
- SPILLAGE AROUND THE BOREHOLE SHALL EITHER BE PLACED IN THE BOREHOLE OR CLEANED UP AND RETURNED TO AN APPROPRIATE VEHICLE FOR HANDLING OR PLACEMENT IN SECURED CONTAINERS FOR OFF-SITE DISPOSAL.
- LOADED EXPLOSIVES SHALL BE DETONATED AS SOON AS POSSIBLE AND SHALL NOT BE LEFT IN THE BLASTHOLES OVERNIGHT, UNLESS WEATHER OR OTHER SAFETY CONCERNS REASONABLY DICTATE THAT DETONATION SHOULD BE POSTPONED.
- LOADING EQUIPMENT SHALL BE CLEANED IN AN AREA WHERE WASTEWATER CAN BE PROPERLY CONTAINED AND HANDLED IN A MANNER THAT PREVENTS RELEASE OF CONTAMINANTS TO THE ENVIRONMENT.
- EXPLOSIVES SHALL BE LOADED TO MAINTAIN GOOD CONTINUITY IN THE COLUMN LOAD TO PROMOTE COMPLETE DETONATION. INDUSTRY ACCEPTED LOADING PRACTICES FOR PRIMING, STEMMING, DECKING AND COLUMN RISE NEED TO BE ATTENDED TO.

(2) EXPLOSIVE SELECTION. THE FOLLOWING BMP'S SHALL BE FOLLOWED TO REDUCE THE POTENTIAL FOR GROUNDWATER CONTAMINATION WHEN EXPLOSIVES ARE USED:

- EXPLOSIVE PRODUCTS SHALL BE SELECTED THAT ARE APPROPRIATE FOR SITE CONDITIONS AND SAFE BLAST EXECUTION.
- EXPLOSIVE PRODUCTS SHALL BE SELECTED THAT HAVE THE APPROPRIATE WATER RESISTANCE FOR THE SITE CONDITIONS PRESENT TO MINIMIZE THE POTENTIAL FOR HAZARDOUS EFFECT OF THE PRODUCT UPON GROUNDWATER.

(3) PREVENTION OF MISFIRES. APPROPRIATE PRACTICES SHALL BE DEVELOPED AND IMPLEMENTED TO PREVENT MISFIRES.

(4) MUCK PILE MANAGEMENT. MUCK PILES (THE BLASTED PIECES OF ROCK) AND ROCK PILES SHALL BE MANAGED IN A MANNER TO REDUCE THE POTENTIAL FOR CONTAMINATION BY IMPLEMENTING THE FOLLOWING MEASURES:

- REMOVE THE MUCK PILE FROM THE BLAST AREA AS SOON AS REASONABLY POSSIBLE.
- MANAGE THE INTERACTION OF BLASTED ROCK PILES AND STORMWATER TO PREVENT CONTAMINATION OF WATER SUPPLY WELLS OR SURFACE WATER.

(5) SPILL PREVENTION MEASURES AND SPILL MITIGATION. SPILL PREVENTION AND SPILL MITIGATION MEASURES SHALL BE IMPLEMENTED TO PREVENT THE RELEASE OF FUEL AND OTHER RELATED SUBSTANCES TO THE ENVIRONMENT. THE MEASURES SHALL INCLUDE AT A MINIMUM:

- STORAGE OF REGULATED SUBSTANCES ON AN IMPERVIOUS SURFACE.
- SECURE STORAGE AREAS AGAINST UNAUTHORIZED ENTRY.
- LABEL REGULATED CONTAINERS CLEARLY AND VISIBLY.
- INSPECT STORAGE AREAS WEEKLY.
- COVER REGULATED CONTAINERS IN OUTSIDE STORAGE AREAS.
- WHEREVER POSSIBLE, KEEP REGULATED CONTAINERS THAT ARE STORED OUTSIDE MORE THAN 50 FEET FROM SURFACE WATER AND STORM DRAINS, 75 FEET FROM PRIVATE WELLS, AND 400 FEET FROM PUBLIC WELLS.
- SECONDARY CONTAINMENT IS REQUIRED FOR CONTAINERS CONTAINING REGULATED SUBSTANCES STORED OUTSIDE, EXCEPT FOR ON PREMISE USE HEATING FUEL TANKS, OR ABOVEGROUND OR UNDERGROUND STORAGE TANKS OTHERWISE REGULATED.
- THE FUEL HANDLING REQUIREMENTS SHALL INCLUDE:
 - EXCEPT WHEN IN USE, KEEP CONTAINERS CONTAINING REGULATED SUBSTANCES CLOSED AND SEALED.
 - PLACE DRIP PANS UNDER SPIGOTS, VALVES, AND PUMPS.
 - HAVE SPILL CONTROL AND CONTAINMENT EQUIPMENT READILY AVAILABLE IN ALL WORK AREAS.
 - USE FUNNELS AND DRIP PANS WHEN TRANSFERRING REGULATED SUBSTANCES.
 - PERFORM TRANSFERS OF REGULATED SUBSTANCES OVER AN IMPERVIOUS SURFACE.
- THE TRAINING OF ON-SITE EMPLOYEES AND THE ON-SITE POSTING OF RELEASE RESPONSE INFORMATION DESCRIBING WHAT TO DO IN THE EVENT OF A SPILL OF REGULATED SUBSTANCES.
- FUELING AND MAINTENANCE OF EXCAVATION, EARTHMOVING AND OTHER CONSTRUCTION RELATED EQUIPMENT WILL COMPLY WITH THE REGULATIONS OF THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES (NOTE THESE REQUIREMENTS ARE SUMMARIZED IN "WD-DWGB-22-8 BEST MANAGEMENT PRACTICES FOR FUELING AND MAINTENANCE OF EXCAVATION AND EARTHMOVING EQUIPMENT" OR ITS SUCCESSOR DOCUMENT).

SEEDING SPECIFICATIONS FOR DIVERSION SWALES

ROADSIDE SWALES & CONVEYANCE SWALES TO BE TREATED AS FOLLOWS:

- A MINIMUM OF 4" OF TOPSOIL SHALL BE PLACED ON ALL DISTURBED AREAS.
- 10-20-20 FERTILIZER SHALL BE PLACED AT A RATE OF 500 LBS. PER ACRE.
- THE FOLLOWING SEED MIXTURE SHALL BE SPREAD EVENLY OVER THE TOPSOIL AT THE RATES SHOWN.

MIXTURE	POUNDS/ACRE	POUNDS/Sq. Ft.
TALL FESCUE	20	.45
CREEPING RED FESCUE	20	.45
BIRDSFOOT TREFOIL	8	.20
TOTAL	48	1.10

- HAY, STRAW OR OTHER MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING.
- ALL SEEDING SHALL BE COMPLETED BEFORE JUNE 1ST IN THE SPRING OR BETWEEN AUGUST 15TH AND SEPTEMBER 15TH IN THE FALL. SEEDING MAY EXTEND INTO JUNE AND JULY IF CONSIDERATIONS ARE MADE FOR WATERING.

SEEDING SPECIFICATIONS RECLAMATION OF EXCAVATED AREAS

IN ACCORDANCE WITH THE "VEGETATING NEW HAMPSHIRE GRAVEL PITS", U.S.D.A. N.R.C.S. TECHNICAL NOTE PM-NH-21, REV. APRIL 2000, UPON FINAL GRADING AND RECLAMATION, AREAS TO BE SEEDED SHALL BE TREATED AS FOLLOWS:

- REMOVE LARGE STONES, BOULDERS AND OTHER DEBRIS THAT WILL HINDER THE SEEDING PROCESS AND THE ESTABLISHMENT OF VEGETATION.
- A MINIMUM OF 4" OF TOPSOIL SHALL BE PLACED ON ALL RECLAIMED AREAS.
- A PH TEST SHOULD BE CONDUCTED AND LIME ADDED AS NEEDED TO ESTABLISH A PH BETWEEN 5.5 AND 7.5. IN LIEU OF A SOIL TEST INCORPORATE 1 TON OF LIME PER ACRE (=1 TON PER 540 YARDS OF TOPSOIL), (=50 LBS. PER 1,000 SQ. FT.).
- 10-20-20 FERTILIZER SHALL BE PLACED AT A RATE OF 500 LBS. PER ACRE, (=11 LBS PER 1,000 SQ. FT.)
- THE FOLLOWING WARM SEASON GRASS SEED MIXTURE SHALL BE SPREAD EVENLY OVER THE TOPSOIL AT THE RATES SHOWN:

SPECIES	VARIETIES (SELECT ONE)	POUNDS/ACRE OF PLS FOR VARIOUS OPTIONS		
		(1)	(2)	(3)
SWITCHGRASS	TRAILBLAZER, PATHFINDER	6	2	6
COASTAL PANICGRASS	ATLANTIC	-	5	-
BIG BLUESTEM	NIAGRA, KAW	4	2	4
LITTLE BLUESTEM	ALDUS, CAMPER, BLAZE	2	-	-
SAND LOVEGRASS	BEND, NE-27	4	6	5
TOTALS		16	15	15

OPTION (1): THIS COMBINATION MOST CLOSELY REPRESENTS THE NATURALLY OCCURRING VEGETATION WHERE WARM SEASON GRASSES ARE NATIVE IN THE NORTHEAST.

OPTION (2): THIS COMBINATION HAS THE FASTEST ESTABLISHMENT AND COVER.

OPTION (3): THIS COMBINATION IS THE SIMPLEST AND MAY BE EASIER TO OBTAIN.

(OPTIONS 1 OR 2 ARE PREFERRED)

- APPLY LIME, SEED AND FERTILIZER WITH A HYDRO-SEEDER AND PRESS THE SEED MIX INTO THE SOIL BY TRACKING WITH A BULLDOZER. TRACK UP AND DOWN SLOPES, NOT ALONG THE SLOPE.
- APPLY WEED FREE MULCH, (CLEAN STRAW IS PREFERRED). APPLY AT THE MAXIMUM RATE OF 500-700 LBS. PER ACRE IMMEDIATELY AFTER SEEDING. NOTE: HIGHER MULCHING RATES OR MULCH WITH WEED SEED WILL SIGNIFICANTLY INHIBIT SEEDING SUCCESS.

SCHEDULE:

- SEEDING SHALL BEGIN AS SOON AS THE SNOW MELTS IN THE SPRING AND ENDS MAY 15.
- EARLY SEEDING IS VERY IMPORTANT TO THE SUCCESS OF THE REVEGETATION. IF LATE SEASON SEEDING IS NECESSARY, IT SHOULD BE DONE AFTER OCTOBER 20 TO PREVENT FALL GERMINATION AND SUBSEQUENT WINTERKILL.

MAINTENANCE:

- NOTE: THESE SEED MIXTURES GERMINATE AND GROW SLOWLY. COMPLETE COVER MAY NOT OCCUR FOR 2-4 YEARS.
- TOPDRESS THE SITE WITH FERTILIZER BETWEEN JUNE 15 AND JULY 15 OF THE FOLLOWING YEAR FOR SUBSTANTIAL STAND VIGOR. APPLY A BALANCED FERTILIZER AT A RATE OF 50 LBS/ACRE OF NITROGEN.

GENERAL EROSION AND SEDIMENT CONTROL NOTES

- ALL EXCAVATION SHALL BE PERFORMED IN ACCORDANCE WITH THE APPROVED PLANS, THE TOWN OF BOSCAWEN REGULATIONS, AND THE BEST MANAGEMENT PRACTICES AS ACCEPTED BY THE STATE OF NEW HAMPSHIRE.
- CONSTRUCT ALL PERIMETER CONTROLS, TEMPORARY SEDIMENT AND EROSION CONTROL FACILITIES, INCLUDING SILT FENCE.
- CONSTRUCT DIVERSION SWALES AND DITCHES. SWALES, DITCHES AND OUTLET AREAS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
- DURING EXCAVATION ACTIVITIES THE SITE SHALL BE GRADED TO DIRECT RUNOFF TOWARD THE CUT FACE WITHIN THE ACTIVE EXCAVATION AREA.
- LOAM STRIPPED FROM THE SITE SHALL BE REAPPLIED TO AREAS WHERE EXCAVATION IS COMPLETE. AS NECESSARY, ADDITIONAL LOAM SHALL BE BROUGHT IN FROM OFF-SITE, BUT SHALL BE TESTED AND AMENDED AS NECESSARY. (SEE SEEDING/RECLAMATION NOTES).
- ONCE THE GRAVEL PIT IS OPEN AND EXCAVATION IS TAKING PLACE FROM WITHIN THE PIT, ANY TEMPORARY STAGING AREA SHALL BE RESTORED, LOAMED & SEEDED.
- REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL FACILITIES AFTER DISTURBED AREAS HAVE BEEN STABILIZED.
- SEE RSA 155-E EXCAVATION & RECLAMATION STANDARDS FOR ADDITIONAL OPERATIONAL AND RECLAMATION STANDARDS.

MAINTENANCE RESPONSIBILITIES:

- THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL WEEKLY AND AFTER EVERY RAINFALL OF 1/2" OR MORE WITHIN A 24 HOUR PERIOD. ANY DAMAGED, FAILING OR IMPROPER EROSION CONTROL MEASURES FOUND DURING THE INSPECTION SHALL BE REPAIRED IMMEDIATELY.
- THE CONTRACTOR SHALL CONSTRUCT TEMPORARY BERMS DRAINAGE DITCHES, SILT FENCE, SEDIMENT TRAPS ETC. AS NEEDED DURING MINING TO CONTROL STORM WATER AND MINIMIZE EROSION.
- LOAMED AND SEEDED AREAS SHALL BE INSPECTED, REPAIRED AND MAINTAINED AFTER EACH STORM EVENT UNTIL AREAS ARE STABLE.
- INSPECT VEGETATION GROWTH AND REMOVE INVASIVE SPECIES AS NECESSARY, IN ACCORDANCE WITH RSA 430:53 AND CHAPTER AGR 3800.

AN AREA SHALL BE CONSIDERED "STABLE" IF ONE OF THE FOLLOWING HAS OCCURRED:

- A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED.
- A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE RIP-RAP HAS BEEN INSTALLED.

CONSTRUCTION DETAILS PREPARED FOR

R.S. AUDLEY INC.

ASSESSORS MAP 47 LOT 6

243 DANIEL WEBSTER HIGHWAY

N.H. ROUTE 3

BOSCAWEN NEW HAMPSHIRE

SCALE: "AS-SHOWN" DATE: MARCH 2022

SHEET 4 OF 4

T. F. BERNIER, INC. Land Surveyors - Designers - Consultants

50 PLEASANT STREET - P.O. BOX 3464
CONCORD, NEW HAMPSHIRE 03302-3464
Tel:(603)224-4148 - Fax:(603)224-0507



CERTIFICATION

THIS PLAT IS HEREBY APPROVED BY THE BOSCAWEN PLANNING BOARD AT AN OFFICIAL MEETING HELD ON _____

DATE _____ CHAIRPERSON OF THE BOSCAWEN PLANNING BOARD

OWNER OF RECORD
TAX MAP 47 LOT 6
RYAN STACY, LLC
11 VAUGHN ROAD
BOW, NH 03304

NO.	REVISION	DATE

DESIGNED BY	DRAWN BY	CHECKED BY	F.B.	P.G.	JOB #
	JRC,TFB	TFB			143-05

DRAWING NAME
03_Grading2022.dwg



T.F. BERNIER, INC.
Land Surveyors~Designers~Consultants

50 Pleasant Street, P.O. Box 3464
Concord, NH 03302-3464

Environmental Permitting
State and Local Permitting
Land Surveying
Aerial Mapping
Aerial Photography

Tel. (603) 224-4148
Fax (603) 224-0507

March 31, 2022

Mark Varney, Chair
Town of Boscawen Planning Board
116 N. Main Street
Boscawen, NH 03303

Re: Amended Site Plan Application for Expansion of Earth Excavation
Ryan Stacy, LLC/ R.S. Audley Inc.
Assessors Map 47 Lot 6

Dear Chair Varney and Members of the Board:

Please find enclosed a Major Site Plan Application for the expansion of the limits of the gravel pit located at 243 Daniel Webster Highway. The existing gravel pit was approved by the Town on July 6, 2021, and work has started. The current limits of use/disturbed area are shown on the Existing Conditions Plan. There will be no changes in the daily operation from the original application, (number of employees, hours of operation etc.).

Lot 6 is 249 acres and is forested. Access to the pit will continue to be on the existing gravel driveway from Route 3, a driveway permit was issued by NHDOT on August 20, 2021. The lot is in the R-1 Zoning District, where Earth Excavation requires a Conditional Use Permit. An application for a Conditional Use Permit to allow the expansion of the excavation is attached. The project will require an Alteration of Terrain Permit from NHDES. Copies of the AOT application and report are attached. An application is also being made to the Wetlands Bureau to excavate a 3,475 square foot forested wetland in the middle of the proposed gravel pit.

The plan set consists of 4 sheets. Sheet 1 shows an overview of the entire Lot 6, Sheet 2 shows the existing conditions in the area of the proposed expansion, Sheet 3 shows the proposed final grading after excavation is completed, and Sheet 4 shows construction details. The existing conditions and topography in the area of the current operation/disturbance were updated by this office in November 2021.

We are requesting waivers to the following items on the Major Site Plan checklist:

#14. *Photographs of buildings and site.* Reasoning: There are no buildings on the property. There are photographs of the site in the Alteration of Terrain report.

#23. *Soil, wetland delineation & slopes >15% & >25%.* Reasoning: A partial waiver is requested for the slopes, as this is not a development, it is a gravel pit being operated in accordance with RSA 155E.

#26. *Existing and proposed access to the site with sight distance.* Reasoning: A partial waiver is requested for sight distance. A driveway permit was issued by NHDOT in August 2021 for the existing gravel driveway to be used for the gravel pit.

#27. *Existing and proposed parking with tabulations.* Reasoning: A partial waiver for parking tabulations. An area is shown on the plans where the employees can park on the site. This gravel pit will be for the use of R.S. Audley Inc., not for the public.

#30. *Landscape Plan.* Reasoning: This is a gravel pit, not a development. The site will be reclaimed and the required vegetative buffer will be maintained in accordance with RSA 155E to the extent possible.

#36. *Solid waste disposal and recycling.* Reasoning: The site is carry-in, carry-out by the employees.

#42. *Photos of surrounding sites and structures.* Reasoning: The site is surrounded by woods and there are no structures within 200' of the pit. The location of houses on abutting lots in the vicinity of the pit are shown on Sheet 1 of the plan set.

Supporting Documentation for Major Site Plan

#1a-h *Development Impact Summary Report (buildings, floorspace, units, drainage, traffic etc.).*

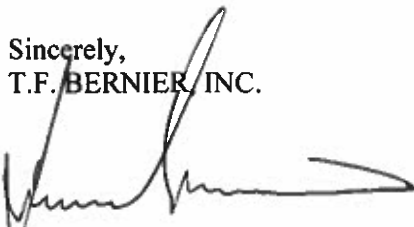
Reasoning: This is a gravel pit for use by R.S. Audley Inc., not a development. A drainage analysis has been completed with the Alteration of Terrain Application, and there is a net decrease in runoff from the site.

#4. *Traffic Study for projects generating >20 peak hour trips or 200 average daily trips.* Reasoning: Not applicable, this gravel pit operation will not generate those numbers of trips.

#5. *Environmental Report for projects over 20,000 sq. ft. of impervious or within protected shoreline, or with wetland/buffer impacts.* Reasoning: Applications are being made to the NHDES Alteration of Terrain Bureau for disturbance greater than 100,000 sq. ft. and to the Wetlands Bureau for excavation/filling of a 3,475 sq. ft. wetland. Both applications require environmental examination of the site.

Thank you for your time and consideration of this application. If you have any questions or need additional information, please give us a call.

Sincerely,
T.F. BERNIER, INC.



Timothy F. Bernier, LLS
President

enclosures

cc: file 143-05



TOWN OF BOSCAWEN, NEW HAMPSHIRE
APPLICATION FOR MAJOR SITE PLAN REVIEW

116 North Main Street, Boscawen, NH 03303 | 603 753-9188x2309 | keasler@townofboscawen.org

Application is hereby made for Planning Board review for a **MAJOR Site Plan Review**. I/We have read the Town of Boscawen Land Development Regulations and provide the information required below.

An incomplete application will be returned to the Applicant with no action taken by the Board

1. *Applicant's Name(s) T.F. Bernier, Inc.- Timothy Bernier
Address P.O. Box 3464 Concord, NH 03302
Phone 603-224-4148
2. *Name and Address of Owner(s) if different than Applicant:
Name Ryan Stacy LLC (Ryan Audley, Pricipal)
Address 11 Vaughn Road Bow, NH 03304
Phone 603-224-7724
3. Interest of Applicant if not Owner: Agent, LLS, CWS, Plan preparation
4. Location of proposed site: 243 Daniel Webster Highway
(Address of property)
47 6
(Tax Map) (Lot # of Tax Map)
5. Present use of the property Gravel Pit
6. Proposed use of the site Gravel Pit (w/ ledge removal)
(7/2021)
7. Has a Variance, Special Exception or Conditional Use Permit been granted for this site? ☒ Yes ☐ No
(If yes, please attach decision) (2022 pending)
8. Area of entire tract 249 acres
9. Do you require extension of water or sewer lines? no
10. Zone tract is in: ☐ AR ☒ R-1 ☐ R-2 ☐ C ☐ I ☐ MRD ☐ Village Check all that apply.
11. This application also includes a request for consideration of a Conditional Use Permit under the authority and provisions of the Village District requirements as specified in Article XVIII: ☐ Yes ☒ No



**TOWN OF BOSCAWEN, NEW HAMPSHIRE
APPLICATION FOR MAJOR SITE PLAN REVIEW**

116 North Main Street, Boscawen, NH 03303 | 603 753-9188x2309 | keasler@townofboscawen.org

12. No. of employees: 3 Gross square feet: --- Square footage to be used by public: 0

13. Days and Hours of Operation: M-F: 7-5, Sat. 7-2

***If applicant is not owner, a notarized letter of authorization from owner must be on file.**

General Information: The applicant shall refer to the Boscawen Land Development Regulations and shall complete this checklist as part of this site plan application. Staff will assist with fee requirements.

Plan Format: The plan shall be drawn in ink (blue or black) on sheets 22" x 34" and at a scale of 1" — 100' or larger. Where necessary, sections of the plan may be presented in several sheets at the required scale. North should be "up" on the plan.

FOR TOWN USE ONLY
Item
Submitted

1. Meet with the Planning & Community Development Director prior to submitting application;
2. Determination Letter from Code Enforcement Officer; pend.
3. Letter from Boscawen Public Works Department; X
4. Letter from Boscawen Police Department; X
5. Letter from Boscawen Fire Department; X
6. Holders of conservations, preservations or agricultural preservations restrictions on the
subject property and abutting properties; NA
7. List of current names and addresses of all professionals involved in the preparation of
plan; X
8. Application fees & fees for independent review, as set forth in Section 11: Fees X
9. Abutters List including all names & addresses from Assessors Database X
10. Current zoning classifications and boundaries on and adjacent to the tract; X
11. The required number of paper copies of plans and documents as well as electronic
submittals; X
12. All drawings shall be legibly prepared and drawn to scale. Each drawing shall have a
north arrow, a scale, preparation date and all revision dates; X



**TOWN OF BOSCAWEN, NEW HAMPSHIRE
APPLICATION FOR MAJOR SITE PLAN REVIEW**

116 North Main Street, Boscawen, NH 03303 | 603 753-9188x2309 | keasler@townofboscawen.org

13. A vicinity sketch showing the location of the site; X
14. Colored photographs of all buildings and the site; W
15. Copies of permit applications to state and federal agencies, where applicable; X
16. The following tabulations shall be shown on the plan:
- a. Lot area in square feet and acres. X
 - b. Ground floor area of all buildings. NA
 - c. Total floor area, floor area for each building, and floor area for each use by floor with a plan of all buildings with their type, size, location, building setback boundaries, and elevation of first floor indicated : (assume permanent on-site evaluation) NA
 - d. Existing and required parking spaces. Location and dimensions of existing and proposed parking bays and aisles, loading spaces and handicapped spaces, with tabulations X
17. The location of all easements on the property, their purpose, and Book and Page Number(s) in the Merrimack County Registry of Deeds where they are recorded. NA
18. The location of any common area, or limited common area, or land units within a condominium NA
19. Property Boundary lines, their source, bearings and dimensions. X
20. The shape, size, height, dimensions, location and use of existing and proposed structures located on the site and those existing within 200 feet of the site. X
21. Existing and proposed topographic contours, including those on site and within 200 feet of the site, with spot elevations where necessary. X
22. Existing natural and man-made features including those on site and within 200 feet of the site including: streams and ponds, standing water, rock ledges & boulders, stonewalls, foliage lines, impervious surfaces, or other natural or man- made site features. X
23. Soil and wetland delineation, slopes in excess of 15% and 25%. W



TOWN OF BOSCAWEN, NEW HAMPSHIRE
APPLICATION FOR MAJOR SITE PLAN REVIEW

116 North Main Street, Boscawen, NH 03303 | 603 753-9188x2309 | keasler@townofboscawen.org

24. Location, name and widths of any existing and proposed roads on the property and those existing within 200 feet of the site. X
25. Location of any existing or proposed easements, deed restrictions, or covenants. NA
26. Identification of existing and proposed access to the site with dimensions shown, sight distance at the access point(s), curb cuts and proposed changes (if any) to existing streets. W
27. Location and dimensions of existing and proposed parking bays and aisles, loading spaces and handicapped spaces, with tabulations; W
28. The size and location of all public service connections—gas, power, telephone, fire alarm, overhead or underground. X
29. The location of all storm water management facilities including catch basins, drainage pipes, swales, culverts, retention/detention facilities, or other drainage facilities existing or to be provided on site. X
30. A landscape plan, describing the number, location, types, and size of all existing and proposed landscaping and screening. Existing Proposed fences, walls, and vegetative buffers W
31. A plan for exterior lighting and for the location of signs. NA
32. The plan shall show the proposed mounting height of all exterior lighting fixtures, as well as analyses and luminance-level diagrams, to include foot-candle measurements, showing that the proposed installation conforms to the lighting-level standards in these Regulations. NA
33. The plan shall also include drawings of all relevant building elevations, showing the fixtures, the portions of the walls to be illuminated, the illumination levels of the walls, and the aiming points for any remote light fixtures. NA
34. Location of existing and proposed well(s), with 75-foot well radius, and septic systems on the site and within 200 feet of the site. X
35. The size and location of all existing and proposed water mains, sewers, culverts, proposed connections or alternative means of providing water supply and disposal of sewage and surface drainage. X



**TOWN OF BOSCAWEN, NEW HAMPSHIRE
APPLICATION FOR MAJOR SITE PLAN REVIEW**

116 North Main Street, Boscawen, NH 03303 | 603 753-9188x2309 | keasler@townofboscawen.org

- | | |
|---|-------------------|
| 36. Solid Waste Disposal and recycling facilities measures and locations. | <u>W</u> |
| 37. Plan for Storm Water Management and Erosion Control. | <u>X</u> |
| 38. Description and location of any solar, wind or other types of on-site power generation, fuel or propane storage tanks, or other mechanical or service equipment. | <u>NA</u> |
| 39. Existing and proposed fences, walls and vegetative buffers. | <u>X</u> |
| 40. Snow Management Plan. | <u>X</u> |
| 41. Drawings/samples of proposed signage and fencing. | <u>NA</u> |
| 42. Photographs of surrounding sites and structures. | <u>W</u> |
| 43. Outside storage and sales areas including surface preparations, fencing, screening and buffers. | <u>NA</u> |
| 44. The Applicant shall obtain and furnish a letter stating agreement by the public utilities to serve the site. | <u>NA</u> |
| 45. Surveyed property lines showing their deflection angles, or bearings, distances, radii, lengths of arcs, control angles, along property lines and monument; | <u>X</u> |
| 46. Topographical plan showing existing, proposed, and finished grade elevation with contour lines at two-foot vertical intervals or as otherwise accepted by the Planning Board benchmarked from the most current vertical datum available; | <u>X</u> |
| 47. Construction plans for all or modified parking and loading areas, pedestrian access, driveways and roadway improvement, storm water drainage, water and sewer improvements, private utilities, landscaping, lighting, along with construction and typical details and specifications; | <u>X</u> |
| 48. Certification, signature and stamp of the professionals who prepared each plan or report including where applicable including Licensed Land Surveyor, NH Licensed Civil Engineer, Wetland Scientist, Soil Scientist, Landscape Architect, Architect, or other licensed design professional; | <u>X</u> |
| 49. Any other exhibits or data that the Planning Board may require in order to adequately evaluate the proposed development for Site Plan Review; | <u> </u> |



116 North Main Street, Boscawen, NH 03303 | 603 753-9188x2309 | keasler@townofboscawen.org

Supporting Documentation for Major Site Plan The Following supporting studies shall be provided unless waived by the Board given the unusual nature of a site or an application:

1. Development Impact Summary Report contains the following:
 - a. Building size both existing and proposed (total and by building)
 - b. Total impervious surface and ground floor area of all buildings in square feet.
 - c. Floor area in square feet of existing and proposed uses.
 - d. Number of existing and proposed residential dwelling units, by type and number of bedrooms, and total number of dwelling units in the development and in each building.
 - e. Drainage Information including summary for major projects and for minor projects drainage calculations with measures to be used to control both the quantity and quality off-site drainage.
 - f. Traffic Generation for existing and proposed uses for AM, PM peak hours and Saturday Peak Hours for retail only, and total Average Daily Trips (ADT).
 - g. Community Facility Impacts
 - i. For residential uses estimated number of school age children.
 - ii. Amount and disposal method for solid waste and recycled materials.
 - h. Estimated value added by development, tax status, estimated Current Use Penalty, if any.
2. Public Safety Report – Reports from the Police and Fire Departments indicating their ability to serve the proposed application, and any unusual or possibly hazardous issues raised by the proposed buildings, structures or uses;
3. Drainage Study for major projects over 20,000 sq. ft.;
4. Traffic Study for projects which generate over 20 Peak Hour Trips or 200 Average Daily Trips (ADT);
5. Environmental Report for projects over 20,000 sq. ft. of impervious surface area, or projects within protected shoreline areas, or which have wetland or wetland buffer impacts;
6. Fiscal Impact Study for projects with 10 or more dwelling units;
7. Report from the Conservation Commission – for projects over 20,000 sq. ft. of impervious surface area, or projects within protected shoreline areas, or which have wetland or wetland buffer impacts.

A vertical column is shown with a downward-pointing arrow at the bottom. At the top of the column, a weight W is indicated by a horizontal line with a vertical line extending upwards from the center of the column.

$$\frac{X}{X \text{ (Aot)}}$$
W (NA)

AOT &
WETLAND APP'S

NA

Pend.



Legal Documents for All Site Plans if required:

57. Is the applicant submitting waivers	<u>YES</u>
---	------------



**TOWN OF BOSCAWEN, NEW HAMPSHIRE
APPLICATION FOR MAJOR SITE PLAN REVIEW**

116 North Main Street, Boscawen, NH 03303 | 603 753-9188x2309 | keasler@townofboscawen.org

Submission of waivers shall be provided if applicable to the project:

Waiver Requests

Pursuant to Sections _____ and _____ of the Boscawen Land Development Regulations, the following requirement is imposed: (Attach additional sheets if necessary.)

1. SEE COVER LETTER DESCRIBING WAIVER REQUESTS.
2. _____
3. _____

It is respectfully requested that the Board grant a waiver from this requirement for these reasons:

1. _____
2. _____
3. _____

I/ We _____ have submitted the following items for review:

- a. (12) Completed application (Hard Copy & Digital)
- b. (4) prints 22" x 34" of site drawing to scale (Hard Copy & Digital)
- c. (12) reduced 17" x 22" copies of the plan (Hard Copy & Digital)
- d. I/we have paid all Application Fees



**TOWN OF BOSCAWEN, NEW HAMPSHIRE
APPLICATION FOR MAJOR SITE PLAN REVIEW**

116 North Main Street, Boscaawen, NH 03303 | 603 753-9188x2309 | keasler@townofboscaawen.org

Upon finding that an application meets the submission requirements, the Planning Board will vote to accept the application as complete and a public hearing on the merits of the proposal will follow immediately. Should a decision not be reached at the public hearing, the application may remain on the Planning Board agenda until such time as it is either approved or denied.


(Signature of **Applicant**)

Timothy Boring, T.B. Boring Inc. 4/5/22
(Printed Name) (Date)

(Signature of **Applicant**)

(Printed Name) (Date)


(Signature of **Owner**)

Ryan Audley
(Printed Name) 3/29/2022
(Date)

(Signature of **Owner**)

(Printed Name) (Date)

Application Received By

Is Escrow Account Needed? (Date)

The Planning Board reserves the right to adjourn the public hearing at 10:00 pm. All remaining applications that have not been reviewed will be scheduled for review at the Planning Board's next scheduled public hearing.

The Town of Boscaawen prohibits discrimination on the basis of race, color, national origin, sex, sexual orientation, religion, age, disability, marital or family status. Boscaawen is an equal opportunity employer.

FOR TOWN USE ONLY

Distribution List

- ☐ Agricultural Commission
- ☐ Building Inspector
- ☐ Central NH Regional Planning Commission
- ☐ Code Enforcement Officer
- ☐ Conservation Commission
- ☐ Emergency Management
- ☐ Fire Chief

- ☐ Life Safety Officer
- ☐ Police Chief
- ☐ Public Works Director
- ☐ School District
- ☐ Penacook Boscaawen Water Precinct
- ☐ Zoning Board of Adjustment

BY DIRECTION OF PLANNING BOARD

- ☐ Planning Board Engineer

I have reviewed the application, checklist, and submittals attached and find that the site plan application is administratively complete according to the requirements of the current Boscaawen Land Development Regulations. I hereby submit the application for Planning Board compliance review.

Planning & Community Development Director

Date



T.F. BERNIER, INC.
Land Surveyors~Designers~Consultants

50 Pleasant Street, P.O. Box 3464
Concord, NH 03302-3464

Environmental Permitting
State and Local Permitting
Land Surveying
Aerial Mapping
Aerial Photography

Tel. (603) 224-4148
Fax (603) 224-0507

Abutters List
R. S. Audley, Inc.
Earth Excavation Application (155-E)
Tax Map 47 Lot 6

<u>MAP</u>	<u>LOT</u>	<u>OWNER</u>
47	6	Ryan Stacy, LLC 11 Vaughn Road Bow, NH 03304
47	1	Integrity Holdings, LLC P.O. Box 43336 Louisville, KY 40253
47	3A-3	Norman C. Bacon 285 Daniel Webster Highway Boscawen, NH 03303
47	3A-2	Skyler Sherman 283 Daniel Webster Highway Boscawen, NH 03303
47	3A-1	Lawrence M. & Pamela L. O'Neill 281 Daniel Webster Highway Boscawen, NH 03303
47	3	Dale G. & Barbara J. Randall 279 Daniel Webster Highway Boscawen, NH 03303
47	4B	Johann & Heather H. Schellekens 275 Daniel Webster Highway Boscawen, NH 03303
47	4A	Samantha A. & Matthew D. Butler 273 Daniel Webster Highway Boscawen, NH 03303
47	4	L. F. McAllister 2010 Revocable Trust 269 Daniel Webster Highway Boscawen, NH 03303

47	6-2	Shirley McKerley Revocable Trust 2012 510 Random Road Hillsville, VA 24343
47	6A	Kristen E. Bean & Andrew Warren 221 Daniel Webster Highway Boscawen, NH 03303
47	6-1	Penacook Boscawen Water Precinct 9 Woodbury Lane Boscawen, NH 03303
47	7	Tami B. Porter 239 Daniel Webster Highway Boscawen, NH 03303
47	8	Association of Bosniaks of New Hampshire 125 Londonderry Turnpike Hooksett, NH 03106
47	8A	Warren R. Campbell III & Rea Ann Havlock Campbell 225 Daniel Webster Highway Boscawen, NH 03303
47	14	Boscawen Academy Fund c/o Boscawen Historical Society 116 North Main Street Boscawen, NH 03303
47	15	Joseph G. & Barbara V. Colby 270 High Street Boscawen, NH 03303
47	16	Ernest P. Jones Sr. & Lola B. Jones Irrevocable Trust 9 Goodhue Road Boscawen, NH 03303
79	68	Diana L. Tompkins Revocable Trust Diana L. & Mark W. Tompkins, Trustees 85 ½ Chester Road Derry, NH 03038
79	73	Gerard R. & Kathleen M. Lavalley 222 Daniel Webster Highway Boscawen, NH 03303
79	86	Brendon H. & Christine Jackson 6 Fairbanks Drive Boscawen, NH 03303

79 94

Bill-Bob Mobile Home Park
14 Rosue Drive
Boscawen, NH 03303

79 140

Robert W. & Sally T. Hunneyman
Joint Revocable Trust
Robert W. & Sally T. Hunneyman &
Nancy J. Bouchard, Trustees
19 Goodhue Road
Boscawen, NH 03303

Agent / Professional Consultant

Timothy F. Bernier, LLS, CWS
T.F. Bernier, Inc.
PO Box 3464
Concord, NH 03302-3464

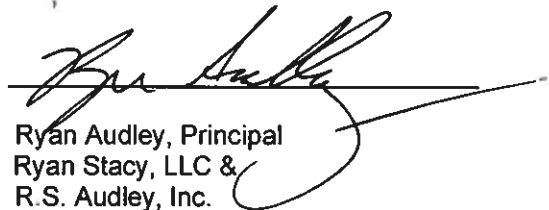
Ryan Stacy, LLC / R.S. Audley, Inc. (c/o Ryan Audley)
11 Vaughn Road
Bow, NH 03304

Town of Boscawen
Planning Board
116 North Main Street
Boscawen, NH 03303-1123

RE: Application for Earth Excavation Permit (expansion), Tax Map 47 Lot 6

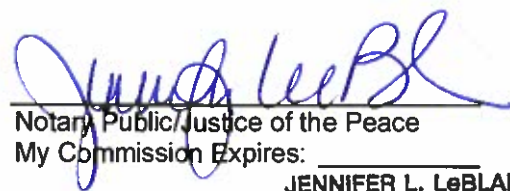
To Whom It May Concern:

I Ryan Audley, do hereby give permission for T.F. Bernier, Inc., P.O. Box 3464, Concord, New Hampshire, to represent Ryan Stacy LLC, as owner of Lot 6, before the Town of Boscawen Planning Board relative to the application of R. S. Audley Inc. for Earth Excavation Permit approval, Conditional Use Permit approval and all related matters.


Ryan Audley, Principal
Ryan Stacy, LLC &
R.S. Audley, Inc.

STATE OF NEW HAMPSHIRE
COUNTY OF MERRIMACK

The foregoing instrument was acknowledged before me this 29th day of March, 2022,
by Ryan Audley of Ryan Stacy, LLC


Notary Public/Justice of the Peace
My Commission Expires: _____
JENNIFER L. LeBLANC
Notary Public - New Hampshire
My Commission Expires April 19, 2022

BOSCAWEN FIRE DEPARTMENT
Timothy J. Kenney Chief of Department

March 31, 2022

Subject: Audley Gravel Pit, Map 47 Lot 6, 243 Daniel Webster Highway

Town of Boscawen Planning Board,

Concerns for expansion of gravel pit, 1) Will there be large quantities of fuel stored on site? 2) Will there be any explosives used or stored on site?

It is the request of the fire department to have a Knox Box (key safe) installed on the main access gate for emergency's.

Other questions or concerns may arise during the planning board meeting.

Thank you,

A handwritten signature in blue ink, appearing to read 'JK' followed by a stylized flourish and the number '21'.

Tim Kenney

116 North Main St.
Boscawen NH, 03303
(603) 568-7607
(603) 796-2237
tkenney@townofboscawen.org

Boscawen Police Department

116 North Main Street
Boscawen, New Hampshire 03303
Kevin S. Wyman, Chief
(603) 753-9123

To whom it may concern,

I have reviewed the application by Audley Construction of the excavation project off of Daniel Webster Highway. The only concerns I see is the increase in construction equipment traffic on Route 3 as well as, potential noise complaints.

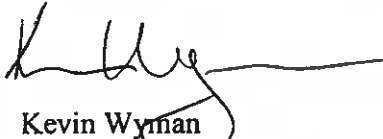
I would ask that operators of the construction equipment being driven to and from the pits respect the posted speed limits as well as, show courtesy to the residents on Daniel Webster Highway.

I would also ask that Audley Construction notify the police department with a phone call when they will be doing any blasting.

We ask GMI to do both of these things at their pits on Queen Street which has worked out well and allowed us to have a solid working relationship that is both beneficial to the company and the community.

If you need anything further, please feel free to reach out to me.

Respectfully,



Kevin Wyman
Chief of Police

Jonathan Crowdes

From: Dean Hollins <dhollins@townofboscawen.org>
Sent: Tuesday, April 5, 2022 12:26 PM
To: Jonathan Crowdes
Cc: Kellee Easler; Kearsten O'Brien
Subject: RE: [Town of Boscawen NH] Planning Board Application (Sent by Jonathan, jon@tfbinc.com)

Jonathan,

Thank You for reaching out.
After reviewing the plan set, I do not have any questions or comments regarding the Audley pit expansion.

Thank You,
Dean

From: Contact form at Town of Boscawen NH <cmsmailer@civicplus.com>
Sent: Tuesday, April 5, 2022 7:29 AM
To: Dean Hollins <dhollins@townofboscawen.org>
Subject: [Town of Boscawen NH] Planning Board Application (Sent by Jonathan, jon@tfbinc.com)

Hello dhollins,

Jonathan (jon@tfbinc.com) has sent you a message via your contact form (<https://www.townofboscawen.org/user/43/contact>) at Town of Boscawen NH.

If you don't want to receive such e-mails, you can change your settings at <https://www.townofboscawen.org/user/43/edit>.

Message:

Mr. Hollins,
Just checking in to make sure you saw my email from last week regarding the Audley pit expansion.
We need to submit comments from DPW with the Conditional Use Permit application and Excavation Applications.
The applications and plan set were attached with the 3/31 if you have any questions please feel free to call.



Town of Boscawen

116 North Main Street, Boscawen, NH 03303 | Telephone: 603.753.9188 | Fax: 603.753.9183

Planning Board Application Fees

Type of Fee	Fee	Total
Subdivision Application, per new lot(s) created (3402.04)	\$250.00	
Recording Plat Fees:(Recording and Surcharge) (3402.05)	\$50.00	
Gravel Permit Application (3402.04)	\$250.00	250.00
Recording Plat Fees:(Recording and Surcharge) (3402.05)	\$50.00	
Lot Line Adjustment (3402.04)	\$100.00	
Lot Merger (3402.04)	\$100.00	
Recording Plat Fees:(Recording and Surcharge) (3402.05)	\$50.00	
Site Plan Application (3402.04)	\$125.00	
Code Enforcement Review	\$50.00	50.00
(3401.02)Administration Fee (3401.03)	\$10.00	
Change of Use or Occupancy	\$125.00	
Conditional Use Application (3402.04)	\$125.00	125.00
Printing Fees (See Attached Sheet) (3402.01)		
Public Notice in the Newspaper (3402.03)	\$160.00	160.00
Certified Mailers	\$7.50	x24 = 180.00

Escrow, per Boards request (separate ck) See Attached Sheets

LCHIP Fee: Payable to Merrimack Cty Registry of Deeds: 25.00 (*due with final plat*)

Fee amount due:

\$765.00

Make both checks payable to Town of Boscawen

****Please Note:** Escrow is used to pay for professional reviews of applications (RSA 676:4 I (g)). Any remaining funds will be returned to the applicant upon completion of the review process.

Revisions: 02.11.14 07.09.13 09.10.12 04.15.10 2015 03.16.2017 05.01.18

The Town of Boscawen prohibits discrimination on the basis of race, color, national origin, sex, sexual orientation, religion, age, disability, marital or family status. Boscawen is an equal opportunity employer.



TOWN OF BOSCAWEN, NEW HAMPSHIRE

Escrow Fees

116 North Main Street, Boscawen, NH 03303 | 603 753-9188x2309 | keasler@townofboscawen.org

Owner: Ryan Stacy, LLC

Contractor: R.S. Audley, Inc.

Other: _____

Map/Lot/Sublot: Map 47 Lot 6

Date: March 2022

Subdivision Escrow

First Lot \$1,000.00.....	\$ 1,000.00
Each Additional Lot \$ 100.00	\$

Escrow for *CNHRPC* review:

\$ 300.00

Escrow for *Town Engineer* review:

\$ TBD

ESR #: _____

Additional Escrow:

1. _____

2. _____

Timber Bond: _____

\$ _____

Road Bond: _____

\$ _____

Town of Boscawen

[Print Now](#)

Parcel ID: 000047 000006 000000 (CARD 1 of 1)
 Owner: STACY LLC, RYAN
 Location: 243 DANIEL WEBSTER HIGHW
 Acres: 243.500

General

Valuation		Listing History	Districts
Building Value:	\$0	<u>List Date</u> <u>Lister</u>	<u>District</u> <u>% In Dist.</u>
Features:	\$0	06/03/2021 KCVL	Water Dist 100
Taxable Land:	\$15,178 Current Use	01/01/2021 INSP	
Card Value:	\$15,178 ?	03/31/2020 MSSR	
Parcel Value:	\$15,178		
Review and Pay Property Taxes Online			

Notes: 3/30;2-LOT SUB; CU CAT'S EST; 6/21; SOME CLEAR; DW IN GATED & POSTED; CK 22 FOR CHANGES;

History Of Taxable Values

Tax Year	Building	Features	Land	Value Method	Total Taxable
2021	\$0	\$0	\$15,178	Cost Valuation	\$15,178
2020	\$0	\$0	\$15,982	Cost Valuation	\$15,982

Sales

Sale Date	Sale Type	Qualified	Sale Price	Grantor	Book	Page
03/10/2020	VACANT	YES	\$263,000	MCKERLEY REV TRUST 2012	3668	1192

Land

Size:

Zone:

Neighborhood:

Land Use:

243.500 Ac.
06 - R1 W
AVERAGE
UNMNGD HARDWD

Site:

Driveway:

Road:

Taxable Value:

UNDEVELOPED
UNDEVELOPED
PAVED
\$15,178

Land Type	Units	Base Rate	NC	Adj	Site	Road	Dway	Topo	Cond	Ad Valorem	SPt	R	Tax Value	Notes
UNMNGD HARDWD	0.920 AC	95,000	E	100	50	100	90	95 MILD	100	40,600	100	Y	57	
UNMNGD HARDWD	242 580 AC	2 500	X	27	0	0	0	90 ROLLING	100	147,400	100	Y	15,121	
			ⓘ							ⓘ	ⓘ	ⓘ		

Building

There Is No Building For This Card

Features

There Are No Features For This Card

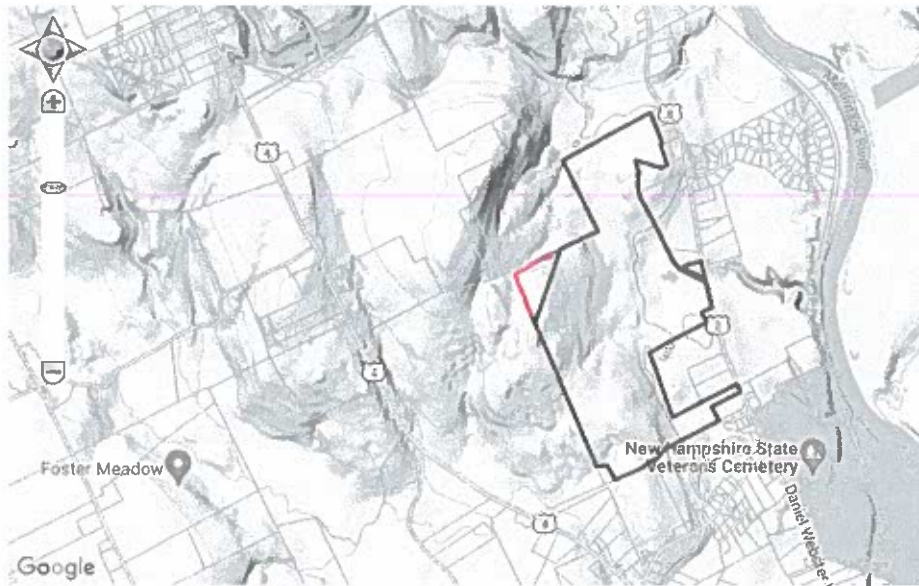
Photo





Sketch

Map



Printed on 02-04-22

Please return to:
Tarbell & Brodich, PA
45 Centre Street
Concord, NH 03301

14⁵⁵/₂
0
20✓

3945.00

WARRANTY DEED

KNOW ALL BY THESE PRESENTS, that **Sharon Johnson, Trustee of The Shirley McKerley Revocable Trust – 2012**, created under Agreement dated July 19, 2012 with an address of 510 Random Road, Hillsville, Virginia 24343 for consideration paid, grants to **Ryan Stacy, LLC**, a New Hampshire limited liability company with an address of 11 Vaughn Road, Bow, New Hampshire 03304, with **WARRANTY** covenants, the following:

A certain tract or parcel of land situated in the Town of Boscawen, County of Merrimack and State of New Hampshire and being shown as TAX MAP 47 LOT 6, after lot line adjustment and subdivision, as shown on Plan entitled, "LOT LINE ADJUSTMENT & SUBDIVISION PLAT, lands of The Shirley McKerley Revocable Trust-2012 Lot 6 and Tami B. Porter Lot 7" dated October 17, 2019 approved by the Boscawen Planning Board on March 2, 2020 and recorded in the Merrimack County Registry of Deeds as Plan 202000004093 to which reference may be made for a more particular description.

Subject to Current Use Tax Assessment by the Boscawen Tax Assessor.

Subject to matters as set forth on Plan 202000004093 as recorded in the Merrimack County Registry of Deeds.

MEANING and INTENDING to describe and convey a portion of the same premises as conveyed to The Shirley McKerley Revocable Trust - 2012 by deed of Shirley McKerley, dated July 19, 2012, and recorded at the Merrimack Registry of Deeds, Book 3328, Page 1428 .

THIS IS NOT HOMESTEAD PROPERTY.

The undersigned trustee of The Shirley McKerley Revocable Trust – 2012, created under Agreement dated July 19, 2012 has full and absolute power in said trust agreement to convey any interest in real estate and improvements thereon held in trust and no purchaser or third party shall be bound to inquire whether the trustee has said power or are properly exercising said power or to see to the application of any trust asset paid to the trustee for a conveyance thereof.

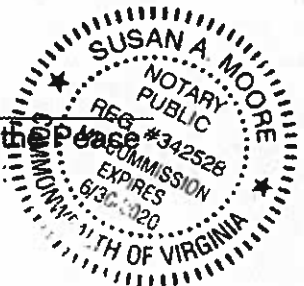
Executed this 9th day of March, 2020.

Sharon Johnson Trustee
Sharon Johnson, Trustee of
The Shirley McKerley Revocable Trust –
2012, created under Agreement dated
July 19, 2012

STATE OF VA
COUNTY OF Carroll, ss.

The foregoing instrument was acknowledged before me this 9 day of March 2020 by Sharon Johnson, Trustee of The Shirley McKerley Revocable Trust – 2012, created under Agreement dated July 19, 2012 in her capacity of Trustee on behalf of said trust.

Smoore
Notary Public/Justice of the Peace
My Commission Expires:





Town of
BOSCAWEN
Merrimack County
New Hampshire

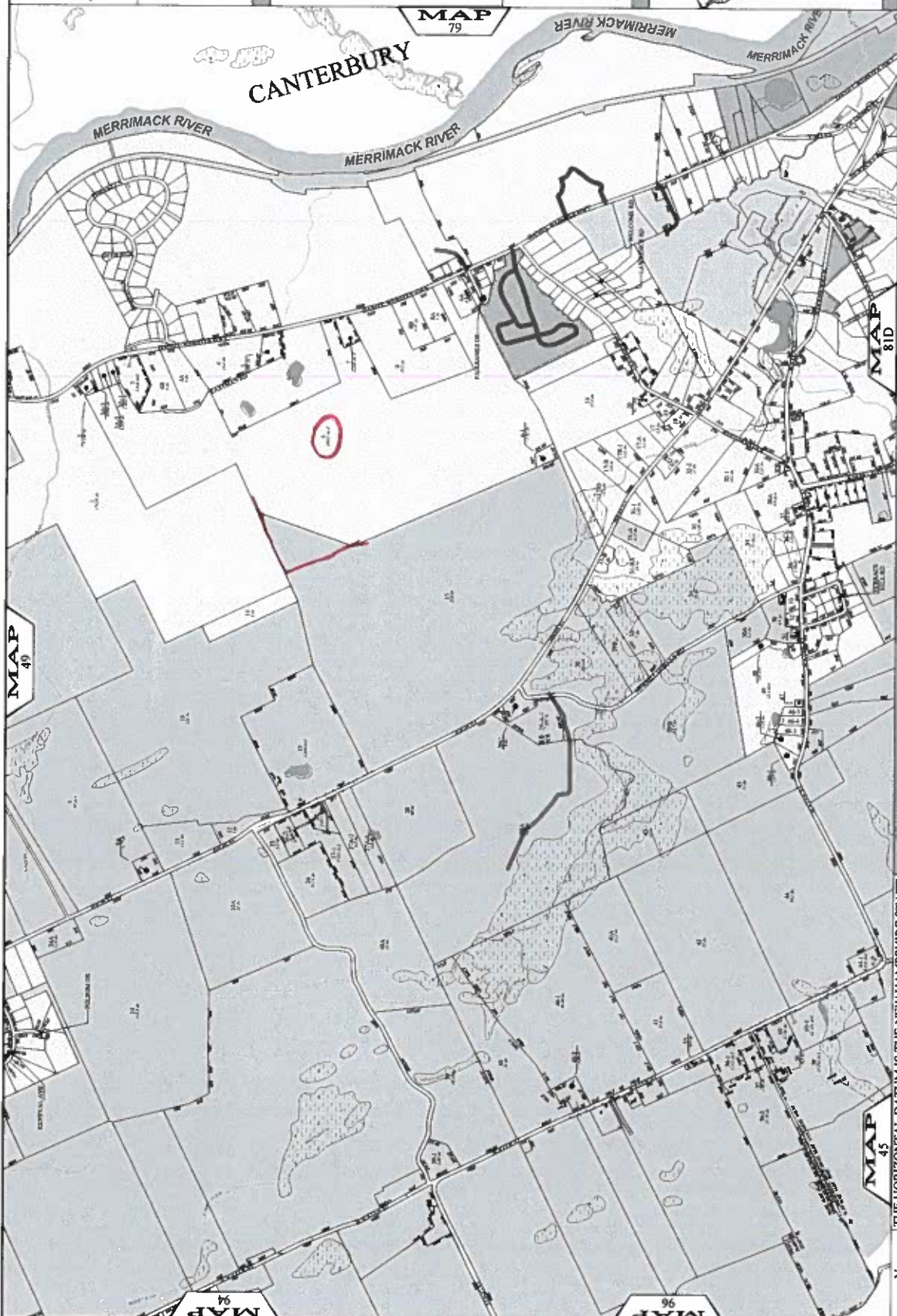
- LEGEND**
- Lot-Nbr 124
 - 200' ACS
 - Diminished (Feet) 150.00
 - Private & ROW Access
 - River
 - Wetland
 - Lake or Pond
 - Conservation Easement
 - Exempt Property
 - Town Owned Land
 - Structure
 - Mill Redevelopment District
 - Agricultural - Residential
 - Residential Low Density
 - Residential Medium Density
 - Commercial
 - Industrial
 - Village District



MAP INDEX

MAP NUMBER

47



MAP NOTES

SCALE



THE HORIZONTAL DATUM IS THE NEW HAMPSHIRE STATE
PLANE COORDINATE SYSTEM NAD 83

FOR ASSESSMENT PURPOSES

NOT TO BE USED FOR CONVEYANCES

REVISED APRIL 1, 2020





T.F. BERNIER, INC.
Land Surveyors~Designers~Consultants

50 Pleasant Street, P.O. Box 3464
Concord, NH 03302-3464

Environmental Permitting
State and Local Permitting
Land Surveying
Aerial Mapping
Aerial Photography

Tel. (603) 224-4148
Fax (603) 224-0507

April 7, 2022

Reviewer
NHDES Land Resources Management, Water Division

RE: Wetlands Permit Application
R.S. Audley, Inc, Daniel Webster Highway, Boscawen, NH
RSA 155E Excavation

Dear Reviewer:

- This Wetland Application is to excavate a 3,475 square foot wetland located centrally in the proposed mining area.
- An application has been made for an Alteration of Terrain Permit to mine sand and gravel on Lot 6 of the Town of Boscawen Assessor's Map 47.
- An Excavation Application is being made to the Town of Boscawen Planning Board.

Conservation Commission comments:

This application was not submitted for expedited review. A copy of the Wetland application package/plans will be distributed by the Town Clerk to the Boscawen Conservation Commission. They will meet on April 19 to review the application. Comments will be submitted at that time.

State General Permit- USACOE:

A species search for the action area was performed through the USFWS IPAC system on 3-8-2022, documents are attached. An assessment of the site was performed for the Small Whorled Pogonia, documents are attached. We have received a Consistency letter for the Northern Long-eared Bat from the USFWS, documents are attached. We have contacted the USFWS regarding the Monarch Butterfly and are waiting for comments. When we receive comments we will pass them along to DES. The NHB search had no hits.

Thank you for your time and coordination on this application, if you have any questions let us know.

Sincerely,
T. F. BERNIER, INC.

Jonathan Crowdes
Project manager



**STANDARD DREDGE AND FILL
WETLANDS PERMIT APPLICATION**
Water Division/Land Resources Management
Wetlands Bureau
[Check the Status of your Application](#)



RSA/Rule: RSA 482-A/Env-Wt 100-900

APPLICANT'S NAME: R.S. Audley, Inc.

TOWN NAME: Boscawen

Administrative Use Only	Administrative Use Only	Administrative Use Only	File No.:
			Check No.:
			Amount:
			Initials:

A person may request a waiver of the requirements in Rules Env-Wt 100-900 to accommodate situations where strict adherence to the requirements would not be in the best interest of the public or the environment but is still in compliance with RSA 482-A. A person may also request a waiver of the standards for existing dwellings over water pursuant to RSA 482-A:26, III(b). For more information, please consult the [Waiver Request Form](#).

SECTION 1 - REQUIRED PLANNING FOR ALL PROJECTS (Env-Wt 306.05; RSA 482-A:3, I(d)(2))

Please use the [Wetland Permit Planning Tool \(WPPT\)](#), the Natural Heritage Bureau (NHB) [DataCheck Tool](#), the [Aquatic Restoration Mapper](#), or other sources to assist in identifying key features such as: [priority resource areas \(PRAs\)](#), [protected species or habitats](#), coastal areas, designated rivers, or designated prime wetlands.

Has the required planning been completed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Does the property contain a PRA? If yes, provide the following information:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> Does the project qualify for an Impact Classification Adjustment (e.g. NH Fish and Game Department (NHF&G) and NHB agreement for a classification downgrade) or a Project-Type Exception (e.g. Maintenance or Statutory Permit-by-Notification (SPN) project)? See Env-Wt 407.02 and Env-Wt 407.04. 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> Protected species or habitat? <ul style="list-style-type: none"> If yes, species or habitat name(s): <input type="text"/> NHB Project ID #: 21-3324 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> Bog? 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> Floodplain wetland contiguous to a tier 3 or higher watercourse? 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> Designated prime wetland or duly-established 100-foot buffer? 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> Sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone? 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is the property within a Designated River corridor? If yes, provide the following information:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> Name of Local River Management Advisory Committee (LAC): <input type="text"/> A copy of the application was sent to the LAC on Month: <input type="text"/> Day: <input type="text"/> Year: <input type="text"/> 	

lrn@des.nh.gov or (603) 271-2147

NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

www.des.nh.gov

For dredging projects, is the subject property contaminated? • If yes, list contaminant: <input type="text"/>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is there potential to impact impaired waters, class A waters, or outstanding resource waters?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
For stream crossing projects, provide watershed size (see WPPT or Stream Stats): <input type="text"/> N/A	
SECTION 2 - PROJECT DESCRIPTION (Env-Wt 311.04(i)) Provide a brief description of the project and the purpose of the project, outlining the scope of work to be performed and whether impacts are temporary or permanent. DO NOT reply "See attached"; please use the space provided below.	
The property is being utilized for a gravel pit in accordance with RSA 155E. The total area of the proposed excavation and disturbance/regrading is 19.2 acres. A 3,475 sq. ft. Palustrine Forested wetland is situated in the middle of the proposed pit. The wetland application is to excavate and regrade this wetland as a part of the gravel pit. If the wetland is left undisturbed it would become an an isolated, hydrologically disconnected high area, with the ground around it sloping away. It is anticipated that some exposed ledge will remain in the westerly edge of the pit after excavation is complete. Therefore, as part of the reclamation and regrading of the site, there will be two depressions formed within the site to provide runoff detention.	
SECTION 3 - PROJECT LOCATION Separate wetland permit applications must be submitted for each municipality within which wetland impacts occur.	
ADDRESS: <input type="text"/> 243 Daniel Webster Highway	
TOWN/CITY: <input type="text"/> Boscawen	
TAX MAP/BLOCK/LOT/UNIT: <input type="text"/> Map 47 Lot 6	
US GEOLOGICAL SURVEY (USGS) TOPO MAP WATERBODY NAME: <input type="text"/>	
<input checked="" type="checkbox"/> N/A	
(Optional) LATITUDE/LONGITUDE in decimal degrees (to five decimal places):	
	43.34389° North
	-71.64778° West

SECTION 4 - APPLICANT (DESIRED PERMIT HOLDER) INFORMATION (Env-Wt 311.04(a))

If the applicant is a trust or a company, then complete with the trust or company information.

NAME: R.S. Audley, Inc. - Ryan Audley, Principal

MAILING ADDRESS: 11 Vaughn Road

TOWN/CITY: Bow

STATE: NH

ZIP CODE: 03304

EMAIL ADDRESS: raudley@audleyconstruction.com

FAX:

PHONE: (603)-224-7724

ELECTRONIC COMMUNICATION: By initialing here: , I hereby authorize NHDES to communicate all matters relative to this application electronically.

SECTION 5 - AUTHORIZED AGENT INFORMATION (Env-Wt 311.04(c))☐ N/A

LAST NAME, FIRST NAME, M.I.: Bernier, Timothy F.

COMPANY NAME: T.F. Bernier, INC

MAILING ADDRESS: P.O. Box 3464

TOWN/CITY: Concord

STATE: NH

ZIP CODE: 03302

EMAIL ADDRESS: tim@tfbinc.com

FAX: none

PHONE: (603)-224-4148

ELECTRONIC COMMUNICATION: By initialing here TFB, I hereby authorize NHDES to communicate all matters relative to this application electronically.

SECTION 6 - PROPERTY OWNER INFORMATION (IF DIFFERENT THAN APPLICANT) (Env-Wt 311.04(b))

If the owner is a trust or a company, then complete with the trust or company information.

☐ Same as applicant

NAME: Ryan Stacy LLC (sister company of R.S. Audley, Inc.), same contact- Ryan Audley

MAILING ADDRESS: 11 Vaughn Road

TOWN/CITY: Bow

STATE: NH

ZIP CODE: 03304

EMAIL ADDRESS: raudley@audleyconstruction.com

FAX:

PHONE: (603)-224-7724

ELECTRONIC COMMUNICATION: By initialing here , I hereby authorize NHDES to communicate all matters relative to this application electronically.

SECTION 7 - RESOURCE-SPECIFIC CRITERIA ESTABLISHED IN Env-Wt 400, Env-Wt 500, Env-Wt 600, Env-Wt 700, OR Env-Wt 900 HAVE BEEN MET (Env-Wt 313.01(a)(3))

Describe how the resource-specific criteria have been met for each chapter listed above (please attach information about stream crossings, coastal resources, prime wetlands, or non-tidal wetlands and surface waters):

This will be a minor impact wetland filling project for a gravel pit. Excavating and filling the wetland will allow the property owners to excavate the sand & gravel on their property. If the wetland were to be left undisturbed, it is likely that the already minimal functions and values would cease over time due to the grading around the wetland. The wetland has limited value other than providing detention within the watershed. This value will be replaced on the property.

Ledge has been found in this area and the wetland has probably been formed by water running over the ledge beneath the gravel and becoming trapped in this small depression at the bottom of the slope. This depression is small and shallow and will not hold much water before spilling over to the slopes beneath. This would typically not be considered an outlet as there are no wet areas below and the area where water is released from the wetland is not considered jurisdictional wetland.

There is potential that this wetland may be a vernal pool based on its hydrological characteristics, location in the watershed, and vegetation that may support the indicator species of a vernal pool. While it has not been confirmed as a vernal pool, a survey has been scheduled for the spring of 2022. Any vernal pool characteristics are reliant on the water coming from upslope areas that are to be excavated, which will cause the area to become dry over time and lose its value as a vernal pool.

There are many other similar wetlands spotted throughout the property that maintain the functions and values of the wetland to be excavated.

SECTION 8 - AVOIDANCE AND MINIMIZATION

Impacts within wetland jurisdiction must be avoided to the maximum extent practicable (Env-Wt 313.03(a)).* Any project with unavoidable jurisdictional impacts must then be minimized as described in the [Wetlands Best Management Practice Techniques For Avoidance and Minimization](#) and the [Wetlands Permitting: Avoidance, Minimization and Mitigation Fact Sheet](#). For minor or major projects, a functional assessment of all wetlands on the project site is required (Env-Wt 311.03(b)(10)).*

Please refer to the application checklist to ensure you have attached all documents related to avoidance and minimization, as well as functional assessment (where applicable). Use the [Avoidance and Minimization Checklist](#), the [Avoidance and Minimization Narrative](#), or your own avoidance and minimization narrative.

**See Env-Wt 311.03(b)(6) and Env-Wt 311.03(b)(10) for shoreline structure exemptions.*

SECTION 9 - MITIGATION REQUIREMENT (Env-Wt 311.02)

If unavoidable jurisdictional impacts require mitigation, a mitigation [pre-application meeting](#) must occur at least 30 days but not more than 90 days prior to submitting this Standard Dredge and Fill Permit Application.

Mitigation Pre-Application Meeting Date: Month: Day: Year:

☒ N/A - Mitigation is not required

SECTION 10 - THE PROJECT MEETS COMPENSATORY MITIGATION REQUIREMENTS (Env-Wt 313.01(a)(1)c)

Confirm that you have submitted a compensatory mitigation proposal that meets the requirements of Env-Wt 800 for all permanent unavoidable impacts that will remain after avoidance and minimization techniques have been exercised to the maximum extent practicable: ☐ I confirm submittal.

☒ N/A – Compensatory mitigation is not required

SECTION 11 - IMPACT AREA (Env-Wt 311.04(g))

For each jurisdictional area that will be/has been impacted, provide square feet (SF) and, if applicable, linear feet (LF) of impact, and note whether the impact is after-the-fact (ATF; i.e., work was started or completed without a permit).

For intermittent and ephemeral streams, the linear footage of impact is measured along the thread of the channel. *Please note, installation of a stream crossing in an ephemeral stream may be undertaken without a permit per Rule Env-Wt 309.02(d), however other dredge or fill impacts should be included below.*

For perennial streams/ivers, the linear footage of impact is calculated by summing the lengths of disturbances to the channel and banks.

Permanent impacts are impacts that will remain after the project is complete (e.g., changes in grade or surface materials).

Temporary impacts are impacts not intended to remain (and will be restored to pre-construction conditions) after the project is completed.

JURISDICTIONAL AREA		PERMANENT			TEMPORARY		
		SF	LF	ATF	SF	LF	ATF
Wetlands	Forested Wetland	3,475		<input type="checkbox"/>			<input type="checkbox"/>
	Scrub-shrub Wetland			<input type="checkbox"/>			<input type="checkbox"/>
	Emergent Wetland			<input type="checkbox"/>			<input type="checkbox"/>
	Wet Meadow			<input type="checkbox"/>			<input type="checkbox"/>
	Vernal Pool			<input type="checkbox"/>			<input type="checkbox"/>
	Designated Prime Wetland			<input type="checkbox"/>			<input type="checkbox"/>
	Duly-established 100-foot Prime Wetland Buffer			<input type="checkbox"/>			<input type="checkbox"/>
Surface Water	Intermittent / Ephemeral Stream			<input type="checkbox"/>			<input type="checkbox"/>
	Perennial Stream or River			<input type="checkbox"/>			<input type="checkbox"/>
	Lake / Pond			<input type="checkbox"/>			<input type="checkbox"/>
	Docking - Lake / Pond			<input type="checkbox"/>			<input type="checkbox"/>
	Docking - River			<input type="checkbox"/>			<input type="checkbox"/>
Banks	Bank - Intermittent Stream			<input type="checkbox"/>			<input type="checkbox"/>
	Bank - Perennial Stream / River			<input type="checkbox"/>			<input type="checkbox"/>
	Bank / Shoreline - Lake / Pond			<input type="checkbox"/>			<input type="checkbox"/>
Tidal	Tidal Waters			<input type="checkbox"/>			<input type="checkbox"/>
	Tidal Marsh			<input type="checkbox"/>			<input type="checkbox"/>
	Sand Dune			<input type="checkbox"/>			<input type="checkbox"/>
	Undeveloped Tidal Buffer Zone (TBZ)			<input type="checkbox"/>			<input type="checkbox"/>
	Previously-developed TBZ			<input type="checkbox"/>			<input type="checkbox"/>
	Docking - Tidal Water			<input type="checkbox"/>			<input type="checkbox"/>
TOTAL		3,475					

SECTION 12 - APPLICATION FEE (RSA 482-A:3, I)

☐ **MINIMUM IMPACT FEE:** Flat fee of \$400.

☐ **NON-ENFORCEMENT RELATED, PUBLICLY-FUNDED AND SUPERVISED RESTORATION PROJECTS, REGARDLESS OF IMPACT CLASSIFICATION:** Flat fee of \$400 (refer to RSA 482-A:3, 1(c) for restrictions).

☒ **MINOR OR MAJOR IMPACT FEE:** Calculate using the table below:

Permanent and temporary (non-docking):	3,475 SF	×	\$0.40 =	\$ 1,390
Seasonal docking structure:	SF	×	\$2.00 =	\$
Permanent docking structure:	SF	×	\$4.00 =	\$
Projects proposing shoreline structures (including docks) add \$400 =				\$
Total =				\$

The application fee for minor or major impact is the above calculated total or \$400, whichever is greater = \$ 1,390

lrn@des.nh.gov or (603) 271-2147

NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

www.des.nh.gov

SECTION 13 - PROJECT CLASSIFICATION (Env-Wt 306.05)

Indicate the project classification.

☐ Minimum Impact Project☒ Minor Project☐ Major Project**SECTION 14 - REQUIRED CERTIFICATIONS (Env-Wt 311.11)**

Initial each box below to certify:

Initials:

RA
JB

To the best of the signer's knowledge and belief, all required notifications have been provided.

Initials:

RA
JB

The information submitted on or with the application is true, complete, and not misleading to the best of the signer's knowledge and belief.

Initials:

RA
JB

The signer understands that:


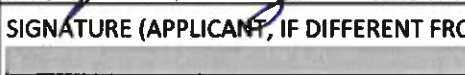
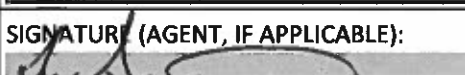
- The submission of false, incomplete, or misleading information constitutes grounds for NHDES to:
 1. Deny the application.
 2. Revoke any approval that is granted based on the information.
 3. If the signer is a certified wetland scientist, licensed surveyor, or professional engineer licensed to practice in New Hampshire, refer the matter to the joint board of licensure and certification established by RSA 310-A:1.
- The signer is subject to the penalties specified in New Hampshire law for falsification in official matters, currently RSA 641.
- The signature shall constitute authorization for the municipal conservation commission and the Department to inspect the site of the proposed project, except for minimum impact forestry SPN projects and minimum impact trail projects, where the signature shall authorize only the Department to inspect the site pursuant to RSA 482-A:6, II.

Initials:

RA
JB





If the applicant is not the owner of the property, each property owner signature shall constitute certification by the signer that he or she is aware of the application being filed and does not object to the filing.

SECTION 15 - REQUIRED SIGNATURES (Env-Wt 311.04(d); Env-Wt 311.11)

SIGNATURE (OWNER): 	PRINT NAME LEGIBLY: Ryan Audley	DATE: 4/6/2022
SIGNATURE (APPLICANT, IF DIFFERENT FROM OWNER): 	PRINT NAME LEGIBLY: Timothy Bernier	DATE: 4/6/2022
SIGNATURE (AGENT, IF APPLICABLE): 	PRINT NAME LEGIBLY: Timothy Bernier	DATE: 4/6/2022

SECTION 16 - TOWN / CITY CLERK SIGNATURE (Env-Wt 311.04(f))

As required by RSA 482-A:3, I(a)(1), I hereby certify that the applicant has filed four application forms, four detailed plans, and four USGS location maps with the town/city indicated below.

TOWN/CITY CLERK SIGNATURE: 	PRINT NAME LEGIBLY: 
TOWN/CITY: 	DATE: 

DIRECTIONS FOR TOWN/CITY CLERK:

Per RSA 482-A:3, I(a)(1)

1. IMMEDIATELY sign the original application form and four copies in the signature space provided above.
2. Return the signed original application form and attachments to the applicant so that the applicant may submit the application form and attachments to NHDES by mail or hand delivery.
3. 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.
4. Retain one copy of the application form and one complete set of attachments and make them reasonably accessible for public review.

DIRECTIONS FOR APPLICANT:

Submit the original permit application form bearing the signature of the Town/City Clerk, additional materials, and the application fee to NHDES by mail or hand delivery at the address at the bottom of this page. Make check or money order payable to "Treasurer – State of NH".

Keep this checklist for your reference; do not submit with your application.

APPLICATION CHECKLIST

Unless specified, all items below are required. Failure to provide the required items will delay a decision on your project and may result in denial of your application. Please reference statute RSA 482-A, Fill and Dredge in Wetlands, and the [Wetland Rules Env-Wt 100-900](#).

- ☒ The completed, dated, signed, and certified application (Env-Wt 311.03(b)(1)).
- ☒ Correct fee as determined in RSA 482-A:3, I(b) or (c), subject to any cap established by RSA 482-A:3, X (Env-Wt 311.03(b)(2)). Make check or money order payable to "Treasurer – State of NH".
- ☒ The Required Planning actions required by Env-Wt 311.01(a)-(c) and Env-Wt 311.03(b)(3).
- ☒ [US Army Corps of Engineers \(ACE\) "Appendix B, New Hampshire General Permits \(GPs\), Required Information and Corps Secondary Impacts Checklist"](#) and its required attachments (Env-Wt 307.02). This includes the [US Fish and Wildlife Service IPAC review](#) and [Section 106 Historic/Archaeological Resource review](#).
- ☒ Project plans described in Env-Wt 311.05 (Env-Wt 311.03(b)(4)).
- ☒ Maps, or electronic shape files and meta data, and other attachments specified in Env-Wt 311.06 (Env-Wt 311.03(b)(5)).
- ☒ Explanation of the methods, timing, and manner as to how the project will meet standard permit conditions required in Env-Wt 307 (Env-Wt 311.03(b)(7)).
- ☐ If applicable, the information regarding proposed compensatory mitigation specified in Env-Wt 311.08 and Chapter Env-Wt 800 - [Permittee Responsible Mitigation Project Worksheet](#), unless not required under Env-Wt 313.04 (Env-Wt 311.03(b)(8); Env-Wt 311.08; Env-Wt 313.04).
- ☐ Any additional information specific to the **type of resource** as specified in Env-Wt 311.09 (Env-Wt 311.03(b)(9); Env-Wt 311.04(j)).
- ☒ Project specific information required by Env-Wt 500, Env-Wt 600, and Env-Wt 900 (Env-Wt 311.03(b)(11)).
- ☒ A list containing the name, mailing address and tax map/lot number of each abutter to the subject property (Env-Wt 311.03(b)(12)).
- ☒ Copies of certified postal receipts or other proof of receipt of the notices that are required by RSA 482-A:3, I(d) (Env-Wt 311.03(b)(13)).
- ☒ Project design considerations required by Env-Wt 313 (Env-Wt 311.04(j)).
- ☒ Town tax map showing the subject property, the location of the project on the property, and the location of properties of abutters with each lot labeled with the name and mailing address of the abutter (Env-Wt 311.06(a)).
- ☒ Dated and labeled color photographs that:
 - (1) Clearly depict:
 - a. All jurisdictional areas, including but not limited to portions of wetland, shoreline, or surface water where impacts have or are proposed to occur.
 - b. All existing shoreline structures.
 - (2) Are mounted or printed no more than 2 per sheet on 8.5 x 11 inch sheets (Env-Wt 311.06(b)).
- ☒ A copy of the appropriate US Geological Survey map or updated data based on LiDAR at a scale of one inch equals 2,000 feet showing the location of the subject property and proposed project (Env-Wt 311.06(c)).
- ☒ A narrative that describes the work sequence, including pre-construction through post-construction, and the relative timing and progression of all work (Env-Wt 311.06(d)).

- ☐ For all projects in the protected tidal zone, a copy of the recorded deed with book and page numbers for the property (Env-Wt 311.06(e)).
- ☐ If the applicant is not the owner in fee of the subject property, documentation of the applicant's legal interest in the subject property, provided that for utility projects in a utility corridor, such documentation may comprise a list that:
 - (1) Identifies the county registry of deeds and book and page numbers of all of the easements or other recorded instruments that provide the necessary legal interest; and
 - (2) Has been certified as complete and accurate by a knowledgeable representative of the applicant (Env-Wt 311.06(f)).
- ☒ The NHB memo containing the NHB identification number and results as well as any written follow-up communications such as additional memos or email communications with either NHB or NHF&G (Env-Wt 311.06(g)). See [Wetlands Permitting: Protected Species and Habitat Fact Sheet](#).
- ☒ A statement of whether the applicant has received comments from the local conservation commission and, if so, how the applicant has addressed the comments (Env-Wt 311.06(h)).
- ☐ For projects in LAC jurisdiction, a statement of whether the applicant has received comments from the LAC and, if so, how the applicant has addressed the comments (Env-Wt 311.06(i)).
- ☒ If the applicant is also seeking to be covered by the state general permits, a statement of whether comments have been received from any federal agency and, if so, how the applicant has addressed the comments (Env-Wt 311.06(j)).
- ☒ [Avoidance and Minimization Written Narrative](#) or the [Avoidance and Minimization Checklist](#), or your own avoidance and minimization narrative (Env-Wt 311.07).
- ☐ For after-the-fact applications: information required by Env-Wt 311.12.
- ☐ [Coastal Resource Worksheet](#) for coastal projects as required under Env-Wt 600.
- ☐ Prime Wetlands information required under Env-Wt 700. See [WPPT](#) for prime wetland mapping.

Required Attachments for Minor and Major Projects

- ☒ [Attachment A: Minor and Major Projects](#) (Env-Wt 313.03).
- ☒ [Functional Assessment Worksheet](#) or others means of documenting the results of actions required by Env-Wt 311.10 as part of an application preparation for a standard permit (Env-Wt 311.03(b)(3); Env-Wt 311.03(b)(10)). See [Functional Assessments for Wetlands and Other Aquatic Resources Fact Sheet](#). For shoreline structures, see shoreline structures exemption in Env-Wt 311.03(b)(10)).

Optional Materials

- ☐ [Stream Crossing Worksheet](#) which summarizes the requirements for stream crossings under Env-Wt 900.
- ☐ Request for [concurrent processing of related shoreland / wetlands permit applications](#) (Env-Wt 313.05).



**AVOIDANCE AND MINIMIZATION
WRITTEN NARRATIVE**
Water Division/Land Resources Management
Wetlands Bureau
[Check the Status of your Application](#)



RSA/ Rule: RSA 482-A/ Env-Wt 311.04(j); Env-Wt 311.07; Env-Wt 313.01(a)(1)b; Env-Wt 313.01(c)

APPLICANT'S NAME: R.S. Audley, Inc

TOWN NAME: Boscawen

An applicant for a standard permit shall submit with the permit application a written narrative that explains how all impacts to functions and values of all jurisdictional areas have been avoided and minimized to the maximum extent practicable. This attachment can be used to guide the narrative (attach additional pages if needed). Alternatively, the applicant may attach a completed [Avoidance and Minimization Checklist \(NHDES-W-06-050\)](#) to the permit application.

SECTION 1 - WATER ACCESS STRUCTURES (Env-Wt 311.07(b)(1))

Is the primary purpose of the proposed project to construct a water access structure?

No

SECTION 2 - BUILDABLE LOT (Env-Wt 311.07(b)(1))

Does the proposed project require access through wetlands to reach a buildable lot or portion thereof?

No

SECTION 3 - AVAILABLE PROPERTY (Env-Wt 311.07(b)(2))*

For any project that proposes permanent impacts of more than one acre, or that proposes permanent impacts to a PRA, or both, are any other properties reasonably available to the applicant, whether already owned or controlled by the applicant or not, that could be used to achieve the project's purpose without altering the functions and values of any jurisdictional area, in particular wetlands, streams, and PRAs?

**Except as provided in any project-specific criteria and except for NH Department of Transportation projects that qualify for a categorical exclusion under the National Environmental Policy Act.*

Not Applicable. The project impacts < one acre and does not impact a PRA.

SECTION 4 - ALTERNATIVES (Env-Wt 311.07(b)(3))

Could alternative designs or techniques, such as different layouts, different construction sequencing, or alternative technologies be used to avoid impacts to jurisdictional areas or their functions and values as described in the [Wetlands Best Management Practice Techniques For Avoidance and Minimization](#)?

The project has been designed using Best Management Practice Techniques to avoid the major wetlands in the area. Several larger wetlands were delineated and have been avoided in order to protect the continued functionality of these watersheds.

The wetland to be excavated is a small isolated depression sitting at the bottom of a slope higher up in the watershed and functions as a small amount of detention for the surrounding area. Due to its location in the center of the proposed mining area, avoiding this wetland during excavation would leave a substantial downward slope on all sides of the wetland. This would leave it on an elevated, hydrologically isolated area causing its value in detention to cease over time.

As part of the reclamation and regrading of the site after mining is complete, there will be two depressions formed within the site to provide runoff detention to replace the function and value of the wetland to be excavated.

There is a substantial amount of sand and gravel in the area around the wetland to be excavated that would not be attainable if the wetland is left undisturbed.

SECTION 5 - CONFORMANCE WITH Env-Wt 311.10(c) (Env-Wt 311.07(b)(4))**

How does the project conform to Env-Wt 311.10(c)?

***Except for projects solely limited to construction or modification of non-tidal shoreline structures only need to complete relevant sections of Attachment A.*

In the design of the gravel pit, we have selected the location having the least impact to wetland functions. The pit is designed to avoid impacts to wetlands with the highest and most valuable function. The driveway was diverted around a larger forested wetland to access the sand and gravel upslope. Two other larger forested wetlands having their own watersheds border the area to be mined and also will not be impacted. These three larger watersheds have the highest and most valuable function in the project area.

The impacts to wetland functions on site have been limited to a small isolated wetland in the center of the pit as it presents the least valuable functions. It is located fairly high in the watershed and functions as very little detention for the watershed downslope. As there has been ledge found in the area upslope, this wetland was probably formed by water running down the bedrock under the gravel only to be trapped at a depression at the bottom of the slope. If left undisturbed, this wetland would lose its functional value altogether due to the surrounding grading. Due to this small impact, two large depressions will be constructed to provide detention and regain the functional value lost by excavating the wetland.

There are two small wetlands on the property that have potential of being a vernal pools based on the area's hydrological characteristics and vegetation. One of these wetlands has been avoided during the design of the gravel pit while the other is the centrally located wetland which is proposed to be excavated. While this wetland may have vernal pool characteristics, it has not been confirmed as such and a vernal pool survey has been scheduled for the spring of 2022. Under the circumstances that this wetland holds indicator species of a vernal pool, it should be noted that by excavating the area around the wetland, the vernal pool will no longer attain saturation from runoff in the spring and the pool's functions and values will cease to exist.



AVOIDANCE AND MINIMIZATION CHECKLIST

Water Division/Land Resources Management

Wetlands Bureau

[Check the Status of your Application](#)



RSA/Rule: RSA 482-A/ Env-Wt 311.07(c)

This checklist can be used in lieu of the written narrative required by Env-Wt 311.07(a) to demonstrate compliance with requirements for Avoidance and Minimization (A/M), pursuant to RSA 482-A:1 and Env-Wt 311.07(c).

For the construction or modification of non-tidal shoreline structures over areas of surface waters without wetland vegetation, complete only Sections 1, 2, and 4 (or the applicable sections in [Attachment A: Minor and Major Projects \(NHDES-W-06-013\)](#)).

The following definitions and abbreviations apply to this worksheet:

- “A/M BMPs” stands for [Wetlands Best Management Practice Techniques for Avoidance and Minimization](#) dated 2019, published by the New England Interstate Water Pollution Control Commission (Env-Wt 102.18).
- “Practicable” means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes (Env-Wt 103.62).

SECTION 1 - CONTACT/LOCATION INFORMATION

APPLICANT LAST NAME, FIRST NAME, M.I.: R.S. Audley, Inc - Ryan Audley, Principal

PROJECT STREET ADDRESS: Daniel Webster Highway

PROJECT TOWN: Boscawen

TAX MAP/LOT NUMBER: Map 47 Lot 6

SECTION 2 - PRIMARY PURPOSE OF THE PROJECT

Env-Wt 311.07(b)(1)	Indicate whether the primary purpose of the project is to construct a water-access structure or requires access through wetlands to reach a buildable lot or the buildable portion thereof.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
---------------------	---	---

If you answered “no” to this question, describe the purpose of the “non-access” project type you have proposed:

The purpose of this project is to mine sand and gravel. The wetland lies in the center of the proposed gravel pit and by mining the surrounding area, it will lose any significant value. The project proposes to eliminate the wetland and replace it with two depressions at the completion of the project.

lrn@des.nh.gov or (603) 271-2147

NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

www.des.nh.gov

SECTION 3 - A/M PROJECT DESIGN TECHNIQUES

Check the appropriate boxes below in order to demonstrate that these items have been considered in the planning of the project. Use N/A (not applicable) for each technique that is not applicable to your project.

Env-Wt 311.07(b)(2)	For any project that proposes new permanent impacts of more than one acre or that proposes new permanent impacts to a Priority Resource Area (PRA), or both, whether any other properties reasonably available to the applicant, whether already owned or controlled by the applicant or not, could be used to achieve the project's purpose without altering the functions and values of any jurisdictional area, in particular wetlands, streams, and PRAs.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 311.07(b)(3)	Whether alternative designs or techniques, such as different layouts, construction sequencing, or alternative technologies could be used to avoid impacts to jurisdictional areas or their functions and values.	<input checked="" type="checkbox"/> Check <input type="checkbox"/> N/A
Env-Wt 311.07(b)(4) Env-Wt 311.10(c)(1) Env-Wt 311.10(c)(2)	The results of the functional assessment required by Env-Wt 311.03(b)(10) were used to select the location and design for the proposed project that has the least impact to wetland functions.	<input checked="" type="checkbox"/> Check <input type="checkbox"/> N/A
Env-Wt 311.07(b)(4) Env-Wt 311.10(c)(3)	Where impacts to wetland functions are unavoidable, the proposed impacts are limited to the wetlands with the least valuable functions on the site while avoiding and minimizing impacts to the wetlands with the highest and most valuable functions.	<input checked="" type="checkbox"/> Check <input type="checkbox"/> N/A
Env-Wt 313.01(c)(1) Env-Wt 313.01(c)(2) Env-Wt 313.03(b)(1)	No practicable alternative would reduce adverse impact on the area and environments under the department's jurisdiction and the project will not cause random or unnecessary destruction of wetlands.	<input checked="" type="checkbox"/> Check <input type="checkbox"/> N/A
Env-Wt 313.01(c)(3)	The project would not cause or contribute to the significant degradation of waters of the state or the loss of any PRAs.	<input checked="" type="checkbox"/> Check <input type="checkbox"/> N/A
Env-Wt 313.03(b)(3) Env-Wt 904.07(c)(8)	The project maintains hydrologic connectivity between adjacent wetlands or stream systems.	<input checked="" type="checkbox"/> Check <input type="checkbox"/> N/A
Env-Wt 311.10 A/M BMPs	Buildings and/or access are positioned away from high function wetlands or surface waters to avoid impact.	<input checked="" type="checkbox"/> Check <input type="checkbox"/> N/A
Env-Wt 311.10 A/M BMPs	The project clusters structures to avoid wetland impacts.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 311.10 A/M BMPs	The placement of roads and utility corridors avoids wetlands and their associated streams.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
A/M BMPs	The width of access roads or driveways is reduced to avoid and minimize impacts. Pullouts are incorporated in the design as needed.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
A/M BMPs	The project proposes bridges or spans instead of roads/driveways/trails with culverts.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A

irm@des.nh.gov or (603) 271-2147

NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

www.des.nh.gov

A/M BMPs	The project is designed to minimize the number and size of crossings, and crossings cross wetlands and/or streams at the narrowest point.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 500 Env-Wt 600 Env-Wt 900	Wetland and stream crossings include features that accommodate aquatic organism and wildlife passage.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 900	Stream crossings are sized to address hydraulic capacity and geomorphic compatibility.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
A/M BMPs	Disturbed areas are used for crossings wherever practicable, including existing roadways, paths, or trails upgraded with new culverts or bridges.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
SECTION 4 - NON-TIDAL SHORELINE STRUCTURES		
Env-Wt 313.03(c)(1)	The non-tidal shoreline structure has been designed to use the minimum construction surface area over surfaces waters necessary to meet the stated purpose of the structure.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 313.03(c)(2)	The type of construction proposed for the non-tidal shoreline structure is the least intrusive upon the public trust that will ensure safe navigation and docking on the frontage.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 313.03(c)(3)	The non-tidal shoreline structure has been designed to avoid and minimize impacts on the ability of abutting owners to use and enjoy their properties.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 313.03(c)(4)	The non-tidal shoreline structure has been designed to avoid and minimize impacts to the public's right to navigation, passage, and use of the resource for commerce and recreation.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 313.03(c)(5)	The non-tidal shoreline structure has been designed, located, and configured to avoid impacts to water quality, aquatic vegetation, and wildlife and finfish habitat.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 313.03(c)(6)	The non-tidal shoreline structure has been designed to avoid and minimize the removal of vegetation, the number of access points through wetlands or over the bank, and activities that may have an adverse effect on shoreline stability.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A

New Hampshire Natural Heritage Bureau

NHB DataCheck Results Letter

To: Jonathan Crowdes
P.O. Box 3464
Concord, NH 03302-3464

From: NH Natural Heritage Bureau

Date: 10/25/2021 (This letter is valid through 10/25/2022)

Re: Review by NH Natural Heritage Bureau of request dated 10/25/2021

Permit Type: Alteration of Terrain Permit

NHB ID: NHB21-3324

Applicant: Jonathan Crowdes

Location: Boscawen
Tax Map: 47, Tax Lot: 6
Address: Daniel Webster Highway

Proj. Description: The proposed project is a new gravel pit located on Daniel Webster Highway in Boscawen, NH. The new pit is 2.26 Acres and will be accessed by an existing driveway. There will be no new buildings.

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.

New Hampshire Natural Heritage Bureau
NHB DataCheck Results Letter

MAP OF PROJECT BOUNDARIES FOR: NHB21-3324





**US Army Corps
of Engineers®**
New England District

Appendix B

New Hampshire General Permits (GPs) Required Information and Corps Secondary Impacts Checklist

In order for the Corps of Engineers to properly evaluate your application, applicants must submit the following information along with the New Hampshire DES Wetlands Bureau application or permit notification forms. Some projects may require more information. For a more comprehensive checklist, go to <https://www.nae.usace.army.mil/Missions/Regulatory/> “Useful Documents, Forms and Publications” and then “Corps Application Form and Guidance.” Check with the Corps at (978) 318-8832 for project-specific requirements. For your convenience, this Appendix B is also attached to the State of New Hampshire DES Wetlands Bureau application and Permit by Notification forms.

All Projects:

- New Hampshire Department of Environmental Services (DES) Wetlands Permit Application.
- Request for Project Review Form by the New Hampshire Division of Historical Resources (DHR)
<https://www.nh.gov/nhdhr/review/rpr.htm>.
- Photographs of wetland/waterway to be impacted.
- Purpose of the project.
- Legible, reproducible plans no larger than 11”x17” with bar scale. Provide locus map and plan views of the entire property.
- Typical cross-section views of all wetland and waterway fill areas and wetland replication areas.
- In navigable waters, show mean low water (MLW) and mean high water (MHW) elevations. Show the high tide line (HTL) elevations when fill is involved. In other waters, show ordinary high water (OHW) elevation.
- On each plan, show the following for the project:
 - Vertical datum and the NAVD 1988 equivalent with the vertical units as U.S. feet. In coastal waters this may be mean higher high water (MHHW), mean high water (MHW), mean low water (MLW), mean lower low water (MLLW) or other tidal datum with the vertical units as U.S. feet. MLLW and MHHW are preferred. Provide the correction factor detailing how the vertical datum (e.g., MLLW) was derived using the latest National Tidal Datum Epoch for that area, typically 1983-2001.
 - Horizontal state plane coordinates in U.S. survey feet based on the Traverse Mercator Grid system for the State of New Hampshire (Zone 2800) NAD 83.
 - Project limits with existing and proposed conditions.
 - Limits of any Federal Navigation Project in the vicinity of the project area and horizontal State Plane Coordinates in U.S. survey feet for the limits of the proposed work closest to the Federal Navigation Project;
 - Volume, type, and source of fill material to be discharged into waters and wetlands, including the area(s) (in square feet or acres) of fill in wetlands, below the OHW in inland waters and below the HTL in coastal waters.
 - Delineation of all waterways and wetlands on the project site,;
- Use Federal delineation methods and include Corps wetland delineation data sheets (GC 2).
- For activities involving discharges of dredged or fill material into waters of the U.S., include a statement describing how impacts to waters of the U.S. are to be avoided and minimized, and either a statement describing how impacts to waters of the U.S. are to be compensated for (or a conceptual or detailed mitigation plan) or a statement explaining why compensatory mitigation should not be required for the proposed impacts. Please contact the Corps for guidance.



**US Army Corps
of Engineers**®
New England District

**New Hampshire General Permits (GPs)
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 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 to determine if there is an impaired water in the vicinity of your work area.*		X
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, special wetlands. Applicants may obtain information from the NH Department of Resources and Economic Development Natural Heritage Bureau (NHB) DataCheck Tool for information about resources located on the property at https://www2.des.state.nh.us/nhb_datacheck/ . The book Natural Community Systems of New Hampshire also contains specific information about the natural communities found in NH.		X
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 banks. They are also called vegetated buffer zones.)		X
2.5 The overall project site is more than 40 acres?		X
2.6 What is the area of the previously filled wetlands?	0 Sq. Ft	
2.7 What is the area of the proposed fill in wetlands?	3,475 Sq. Ft.	
2.8 What is the % of previously and proposed fill in wetlands to the overall project site?	0.41%	
3. Wildlife	Yes	No
3.1 Has the NHB & USFWS 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 the proposed project? (All projects require an NHB ID number & a USFWS IPAC determination.) NHB DataCheck Tool: https://www2.des.state.nh.us/nhb_datacheck/ USFWS IPAC website: https://ecos.fws.gov/ipac/location/index	X	

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: <ul style="list-style-type: none"> • PDF: https://wildlife.state.nh.us/wildlife/wap-high-rank.html. • Data Mapper: www.granit.unh.edu. • GIS: www.granit.unh.edu/data/downloadfreedata/category/databycategory.html. 	X	
3.3 Would the project impact more than 20 acres of an undeveloped land block (upland, wetland/waterway) on the entire project site and/or on an adjoining property(s)?		X
3.4 Does the project propose more than a 10-lot residential subdivision, or a commercial or industrial development?	X	
3.5 Are stream crossings designed in accordance with the GC 21?	N/A	
4. Flooding/Floodplain Values	Yes	No
4.1 Is the proposed project within the 100-year floodplain of an adjacent river or stream?		X
4.2 If 4.1 is yes, will compensatory flood storage be provided if the project results in a loss of flood storage?		
5. Historic/Archaeological Resources		
For a minimum, minor or major impact project - a copy of the Request for Project Review (RPR) Form (www.nh.gov/nhdhr/review) with your DES file number shall be sent to the NH Division of Historical Resources as required on Page 11 GC 8(d) of the GP document**		

*Although this checklist utilizes state information, its submittal to the Corps is a Federal requirement.

** If your project is not within Federal jurisdiction, coordination with NH DHR is not required under Federal law.



United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104
<http://www.fws.gov/newengland>



In Reply Refer To:
Project Code: 2022-0016908
Project Name: Boscawen - Audley Gravel Pit

March 08, 2022

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

Please review this letter each time you request an Official Species List, we will continue to update it with additional information and links to websites may change.

About Official Species Lists

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Federal and non-Federal project proponents have responsibilities under the Act to consider effects on listed species.

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested by returning to an existing project's page in IPaC.

Endangered Species Act Project Review

Please visit the “**New England Field Office Endangered Species Project Review and Consultation**” website for step-by-step instructions on how to consider effects on listed

species and prepare and submit a project review package if necessary:

<https://www.fws.gov/newengland/endangeredspecies/project-review/index.html>

NOTE Please do not use the **Consultation Package Builder** tool in IPaC except in specific situations following coordination with our office. Please follow the project review guidance on our website instead and reference your **Project Code** in all correspondence.

Additional Info About Section 7 of the Act

Under section 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to determine whether projects may affect threatened and endangered species and/or designated critical habitat. If a Federal agency, or its non-Federal representative, determines that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Federal agency also may need to consider proposed species and proposed critical habitat in the consultation. 50 CFR 402.14(c)(1) specifies the information required for consultation under the Act regardless of the format of the evaluation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

In addition to consultation requirements under Section 7(a)(2) of the ESA, please note that under sections 7(a)(1) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species. Please contact NEFO if you would like more information.

Candidate species that appear on the enclosed species list have no current protections under the ESA. The species' occurrence on an official species list does not convey a requirement to consider impacts to this species as you would a proposed, threatened, or endangered species. The ESA does not provide for interagency consultations on candidate species under section 7, however, the Service recommends that all project proponents incorporate measures into projects to benefit candidate species and their habitats wherever possible.

Migratory Birds

In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see:

<https://www.fws.gov/birds/policies-and-regulations.php>

Please feel free to contact us at **newengland@fws.gov** with your **Project Code** in the subject line if you need more information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat.

Attachment(s): Official Species List

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office

70 Commercial Street, Suite 300

Concord, NH 03301-5094

(603) 223-2541

Project Summary

Project Code: 2022-0016908

Event Code: None

Project Name: Boscawen - Audley Gravel Pit

Project Type: Subsurface Extraction - Non Energy Materials

Project Description: The project will be a gravel pit on Daniel Webster Highway in Boscawen, New Hampshire. The proposed area of disturbance is 19.2 acres of mostly forested land. The proposed project area will be cut, stripped and regraded for the purposes of mining sand and gravel.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@43.343271900000005,-71.6472842513316,14z>



Counties: Merrimack County, New Hampshire

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS
Small Whorled Pogonia <i>Isotria medeoloides</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1890	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPaC User Contact Information

Agency: T.F. Bernier, INC
Name: Jonathan Crowdes
Address: P.O. Box 3464
Address Line 2: 50 Pleasant Street
City: Concord
State: NH
Zip: 03301
Email: jon@tfbinc.com
Phone: 6032244148



United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104
<http://www.fws.gov/newengland>



In Reply Refer To:
Project code: 2022-0016908
Project Name: Boscawen - Audley Gravel Pit

March 08, 2022

Subject: Consistency letter for the 'Boscawen - Audley Gravel Pit' project indicating that any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Dear Jonathan Crowdes:

The U.S. Fish and Wildlife Service (Service) received on March 08, 2022 your effects determination for the 'Boscawen - Audley Gravel Pit' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. You indicated that no Federal agencies are involved in funding or authorizing this Action. This IPaC key assists users in determining whether a non-Federal action may cause “take”^[1] of the northern long-eared bat that is prohibited under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the Action is not likely to result in unauthorized take of the northern long-eared bat.

Please report to our office any changes to the information about the Action that you entered into IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation.

If your Action proceeds as described and no additional information about the Action’s effects on species protected under the ESA becomes available, no further coordination with the Service is required with respect to the northern long-eared bat.

The IPaC-assisted determination for the northern long-eared bat **does not** apply to the following ESA-protected species that also may occur in your Action area:

- Monarch Butterfly *Danaus plexippus* Candidate

- Small Whorled Pogonia *Isotria medeoloides* Threatened

You may coordinate with our Office to determine whether the Action may cause prohibited take of the animal species listed above.

[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

Boscawen - Audley Gravel Pit

2. Description

The following description was provided for the project 'Boscawen - Audley Gravel Pit':

The project will be a gravel pit on Daniel Webster Highway in Boscawen, New Hampshire. The proposed area of disturbance is 19.2 acres of mostly forested land. The proposed project area will be cut, stripped and regraded for the purposes of mining sand and gravel.

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@43.343271900000005,-71.6472842513316,14z>

**Determination Key Result**

This non-Federal Action may affect the northern long-eared bat; however, any take of this species that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o).

Determination Key Description: Northern Long-eared Bat 4(d) Rule

This key was last updated in IPaC on **May 15, 2017**. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for non-Federal actions is to assist determinations as to whether proposed actions are excepted from take prohibitions under the northern long-eared bat 4(d) rule.

If a non-Federal action may cause prohibited take of northern long-eared bats or other ESA-listed animal species, we recommend that you coordinate with the Service.

Determination Key Result

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?

No

2. Will your activity purposefully **Take** northern long-eared bats?

No

3. [Semantic] Is the project action area located wholly outside the White-nose Syndrome Zone?

Automatically answered

No

4. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases and other sources of information on the locations of northern long-eared bat roost trees and hibernacula is available at www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html.

Yes

5. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?

No

6. Will the action involve Tree Removal?

Yes

7. Will the action only remove hazardous trees for the protection of human life or property?

No

8. Will the action remove trees within 0.25 miles of a known northern long-eared bat hibernaculum at any time of year?

No

9. Will the action remove a known occupied northern long-eared bat maternity roost tree or any trees within 150 feet of a known occupied maternity roost tree from June 1 through July 31?

No

Project Questionnaire

If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.

1. Estimated total acres of forest conversion:

19

2. If known, estimated acres of forest conversion from April 1 to October 31

0

3. If known, estimated acres of forest conversion from June 1 to July 31

0

If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

0

6. If known, estimated acres of timber harvest from June 1 to July 31

0

If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July 31

0

If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?

0

IPaC User Contact Information

Agency: T.F. Bernier, INC
Name: Jonathan Crowdes
Address: P.O. Box 3464
Address Line 2: 50 Pleasant Street
City: Concord
State: NH
Zip: 03301
Email: jon@tfbinc.com
Phone: 6032244148

From: [Tyler Heinrich](#)
To: susi_vonoettingen@fws.gov
Subject: IPaC Project Code 2022-0016908 Audley Gravel Pit in Boscawen
Date: Friday, April 1, 2022 1:31:00 PM

Susi,

I am writing in reference to the proposed Audley Gravel Pit in Boscawen, NH. We are applying for a wetland Dredge and Fill Permit to fill a small forested wetland that is located in the center of the proposed gravel pit. If left undisturbed, the grading around the wetland would slope away on all sides, leaving the wetland isolated on an elevated plateau.

I have received a Consistency Letter in regards to the northern long-eared bat from the Fish and Wildlife Service stating that no further coordination with the Service is required with respect to that species. The species list that came up in the IPaC also included the Small Whorled Pogonia and the Monarch Butterfly. What is the protocol for determining the presence of these two species on site?

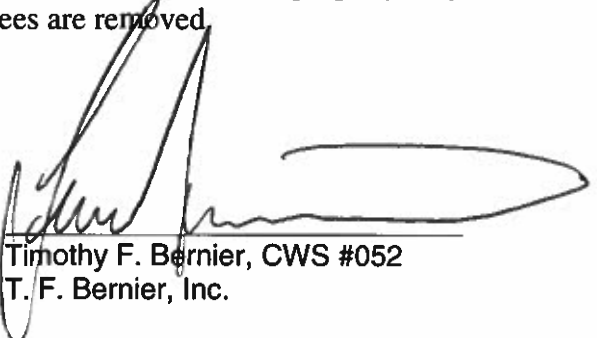
Thank you,

Tyler

**Habitat Assessment for Small Whorled Pogonia
Daniel Webster Highway, Boscawen, NH
Tax Map 47 Lot 6**

The current mining proposal for the property represents less than 8% of the total land area, much of which has already been clearcut in preparation for mining. Most of the remaining forest on the property is made up of Hemlock Hardwood Pine Forest which has been selective cut estimated in the last 15 years. Based on the property deeds, plans of record and local history, this property has been used as a managed forest lot for over 100 years. The understory is dominated by shade tolerant woody plants and saplings with thicker young growth in the selective cut areas. Despite the lack of sunlight reaching the forest floor in most areas, an extensive field survey was conducted of the anticipated mining area and no occurrences of the pogonia were found.

It is our opinion that the property in its current tree growth cycle does not provide likely habitat for the Small Whorled Pogonia. Most of the area of proposed mining that remains forested offers a dense canopy with minimal understory. The remainder of the property may have habitat potential in the future if the more mature trees are removed.



Timothy F. Bernier, CWS #052
T. F. Bernier, Inc.

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	
R&C #	13656
Log In Date	3/18/22
Response Date	3/25/22
Sent Date	3/28/22

**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 Boscawen - Audley Gravel Pit

Project Location Daniel Webster Highway

City/Town Boscawen Tax Map 47 Lot # 6

NH State Plane - Feet Geographic Coordinates: Easting 989292 Northing 307543
(See RPR Instructions and R&C FAQs for guidance.)

Lead Federal Agency and Contact (if applicable) US ACE
(Agency providing funds, licenses, or permits)
Permit Type and Permit or Job Reference # Appendix B, RGP

State Agency and Contact (if applicable) NHDES Wetlands Bureau

Permit Type and Permit or Job Reference # Wetland Permit

APPLICANT INFORMATION

Applicant Name R.S. Audley, Inc - Ryan Audley, Principal

Mailing Address 11 Vaughn Road Phone Number 603-224-7724

City Bow State NH Zip 03304 Email raudley@audleyconstruction.com

CONTACT PERSON TO RECEIVE RESPONSE

Name/Company Timothy Bernier

Mailing Address P.O. Box 3464 Phone Number 6032244148

City Concord State NH Zip 03302 Email tim@tfbinc.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. Please include a self-addressed stamped envelope. 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: www.nh.gov/nhdhr/review or contact the R&C Specialist at marika.s.labash@dncr.nh.gov or 603.271.3558.

PROJECTS CANNOT BE PROCESSED WITHOUT THIS INFORMATION

Project Boundaries and Description

- ☒ Attach the Project Mapping **using EMMIT or relevant portion of a 7.5' USGS Map.** (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 records search must be conducted to identify properties within or adjacent to the project area. Provide records search results via EMMIT or in Table 1. (Blank table forms are available on the DHR website.) Please note, using EMMIT Guest View for an RPR records search does not provide the necessary information needed for DHR review.
EMMIT or in-house records search conducted on 3/14/2022.

Architecture

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):

- ☐ Photographs of **each** resource or streetscape located within the project area, with captions, along with a mapped photo key. (Digital photographs are accepted. All photographs must be clear, crisp and focused.)
- ☐ 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.)

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.

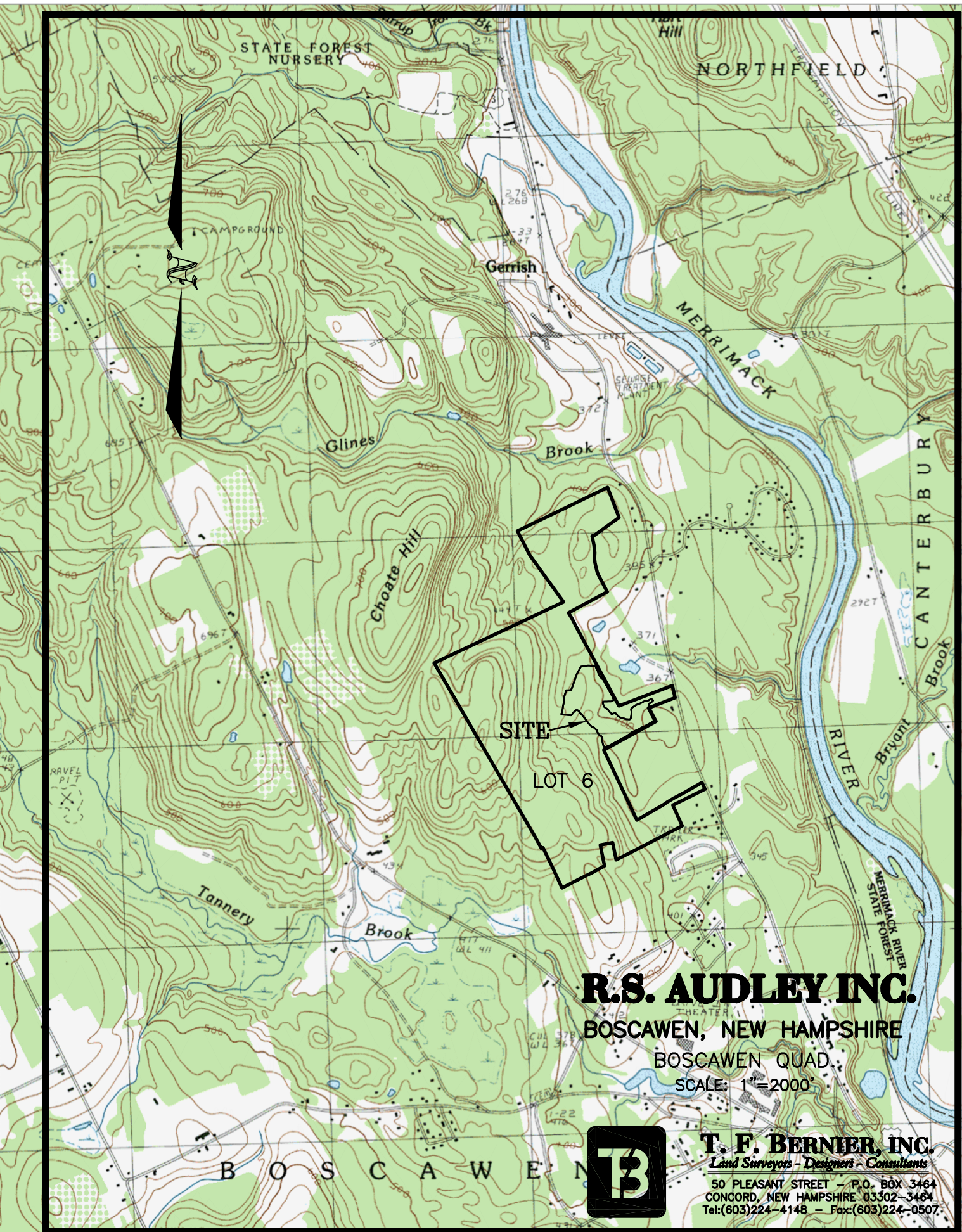
☐ No Potential to cause Effects ☒ No Historic Properties Affected ☐ No Adverse Effect ☐ Adverse Effect

Comments: _____

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: 3/25/22



R.S. AUDLEY INC.
BOSCAWEN, NEW HAMPSHIRE
BOSCAWEN QUAD.
SCALE: 1"=2000'



T. F. BERNIER, INC.
Land Surveyors - Designers - Consultants

50 PLEASANT STREET - P.O. BOX 3464
CONCORD, NEW HAMPSHIRE 03302-3464
Tel: (603) 224-4148 - Fax: (603) 224-0507

PHOTOGRAPHS March 2022
R.S. Audley, Inc – Boscawen Gravel Pit - Wetland Permit
Boscawen, NH



Photo A



Photo B



Photo C

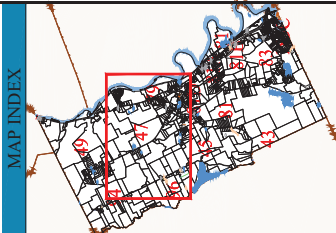
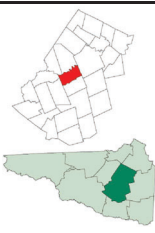


Photo D

Terra Map
 Andrew J. Broussard
 of New Hampshire, Inc.
 Phone: 603.786.4444
 Fax: 603.786.4444
 Email: info@terra-map.com
 Website: www.terra-map.com

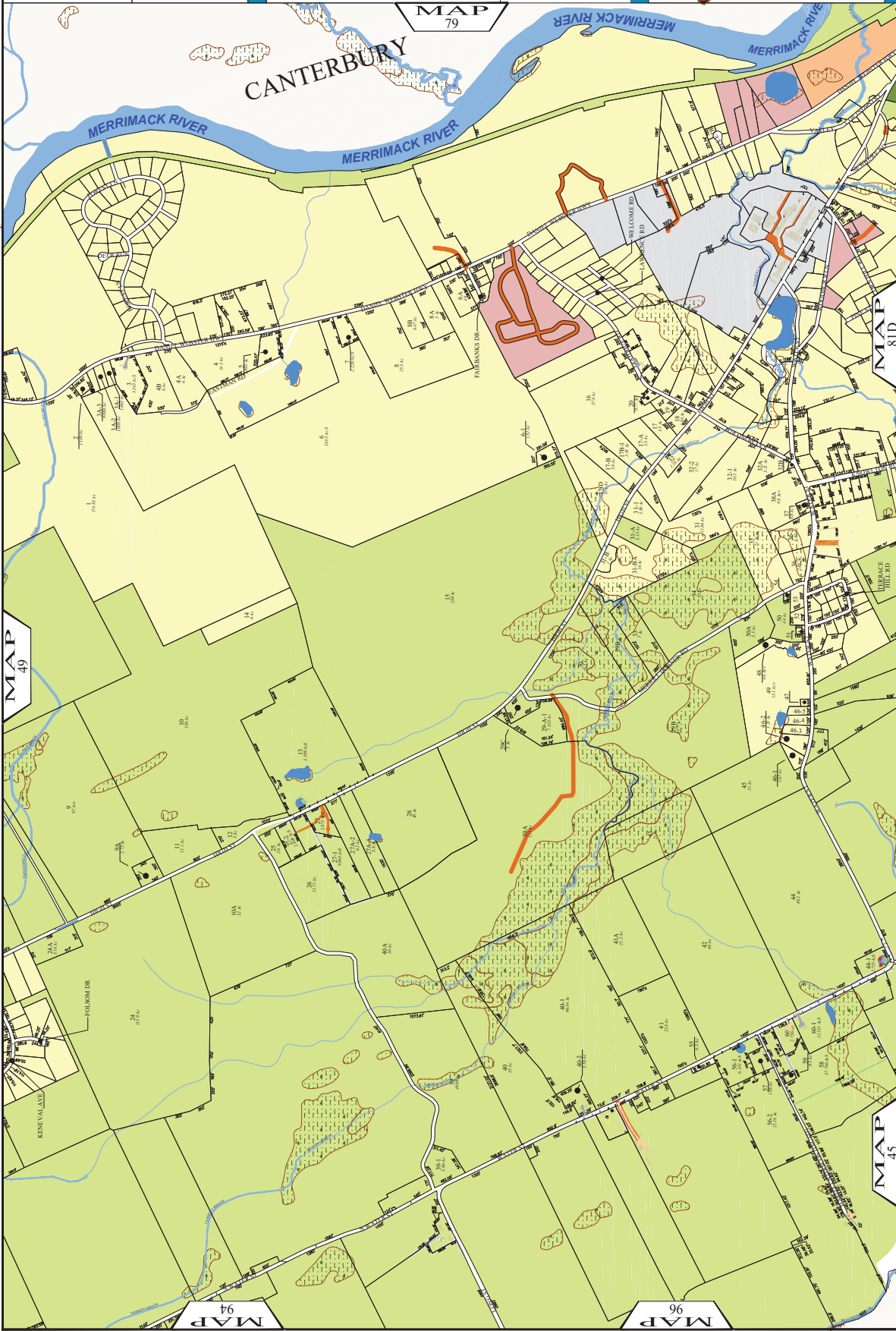
Town of BOSCAWEN
 Merrimack County
 New Hampshire

- LEGEND**
- Lot-Sub 12-1
 - Acreage 200 AcS
 - Survey Calculated 150.00'
 - Dimensions (Feet)
 - Private & ROW Access
 - River
 - Wetland
 - Lake or Pond
 - Transmission Line
 - Conservation Easement
 - Exempt Property
 - Town Owned Land
 - Structure
 - Mill Redevelopment District
 - Agricultural - Residential
 - Residential Low Density
 - Residential Medium Density
 - Commercial
 - Industrial
 - Village District



MAP NUMBER

47



MAP NOTES

81D

MAP 49

MAP 96

MAP 45

THE HORIZONTAL DATUM IS THE NEW HAMPSHIRE STATE PLANE COORDINATE SYSTEM, NAD 83.

FOR ASSESSMENT PURPOSES
 NOT TO BE USED FOR CONVEYANCES

REVISED APRIL 1, 2020

SCALE

1"=600'

METERS	0	150	300	450	600	750	900	1050	1200	1350	1500	1650
FEET	0	150	300	450	600	750	900	1050	1200	1350	1500	1650





T.F. BERNIER, INC.

Land Surveyors~Designers~Consultants

50 Pleasant Street, P.O. Box 3464
Concord, NH 03302-3464

Environmental Permitting
State and Local Permitting
Land Surveying
Aerial Mapping
Aerial Photography

Tel. (603) 224-4148

Fax (603) 224-0507

**Abutters List
R. S. Audley, Inc.
Wetland Application
Tax Map 47 Lot 6**

<u>MAP</u>	<u>LOT</u>	<u>OWNER</u>
47	6	Ryan Stacy, LLC 11 Vaughn Road Bow, NH 03304
47	1	Integrity Holdings, LLC 49 Cunningham Road Freeport, ME 04032
47	4A	Samantha A. & Matthew D. Butler 273 Daniel Webster Highway Boscawen, NH 03303
47	4	L. F. McAllister 2010 Revocable Trust 269 Daniel Webster Highway Boscawen, NH 03303
47	6-2	Shirley McKerley Revocable Trust 2012 510 Random Road Hillsville, VA 24343
47	7	Tami B. Porter 239 Daniel Webster Highway Boscawen, NH 03303
47	8	Association of Bosniaks of New Hampshire 125 Londonderry Turnpike Hooksett, NH 03106
47	8A	Warren R. Campbell III & Rea Ann Havlock Campbell 225 Daniel Webster Highway Boscawen, NH 03303



T.F. BERNIER, INC.
Land Surveyors~Designers~Consultants

50 Pleasant Street, P.O. Box 3464
Concord, NH 03302-3464

Environmental Permitting
State and Local Permitting
Land Surveying
Aerial Mapping
Aerial Photography

Tel. (603) 224-4148
Fax (603) 224-0507

April 7, 2022

SAMPLE ABUTTER LETTER

Abutter Name & Address

Re: Wetlands Permit Application

Dear Abutter:

On behalf of the applicant, Ryan Audley, we are writing to notify you that an application has been made to the Wetlands Bureau of the State of New Hampshire. You are being notified as an abutter to the subject parcel per the requirements of the State of New Hampshire Wetlands Bureau under RSA 482-A. The site is located on Daniel Webster Highway, (Tax Map 47 Lot 6). The application being made is for fill in a wetland associated with the construction of a new gravel pit. Copies of the plans and wetland application are on file with the Town Clerk at the Boscawen Town Office for public review.

Sincerely,
T.F. BERNIER, INC.

Jonathan Crowdes
Project Manager

cc: file 143-05

7020 0640 0001 9437 7983

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only
For delivery information, visit our website at www.usps.com®.

Bow, NH 03304

OFFICIAL USE

Certified Mail Fee	\$3.75
Extra Services & Fees (check box, add fee as appropriate)	\$0.00
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00
<input type="checkbox"/> Return Receipt (electronic)	\$0.00
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00
<input type="checkbox"/> Adult Signature Required	\$0.00
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00

Postage \$0.58

Total Postage and Fees \$4.33

0301
3Postmark
Here

04/07/2022

Sent

 Street Ryan Stacy, LLC
 11 Vaughn Road
 City, Bow, NH 03304

PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

7020 0640 0001 9437 7990

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only
For delivery information, visit our website at www.usps.com®.

Freeport, ME 04032

OFFICIAL USE

Certified Mail Fee	\$3.75
Extra Services & Fees (check box, add fee as appropriate)	\$0.00
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00
<input type="checkbox"/> Return Receipt (electronic)	\$0.00
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00
<input type="checkbox"/> Adult Signature Required	\$0.00
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00

Postage \$0.58

Total Postage and Fees \$4.33

0301
3Postmark
Here

04/07/2022

Sent

 Street Integrity Holdings, LLC
 49 Cunningham Road
 City, Freeport, ME 04032

PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

7020 0640 0001 9437 8003

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only
For delivery information, visit our website at www.usps.com®.

Concord, NH 03302

OFFICIAL USE

Certified Mail Fee	\$3.75
Extra Services & Fees (check box, add fee as appropriate)	\$0.00
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00
<input type="checkbox"/> Return Receipt (electronic)	\$0.00
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00
<input type="checkbox"/> Adult Signature Required	\$0.00
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00

Postage \$0.58

Total Postage and Fees \$4.33

0301
3Postmark
Here

04/07/2022

Sent

 Street Samantha A. & Matthew D. Butler
 273 Daniel Webster Highway
 City, Boscawen, NH 03303

PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

7020 0640 0001 9437 8010

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only
For delivery information, visit our website at www.usps.com®.

Concord, NH 03302

OFFICIAL USE

Certified Mail Fee	\$3.75
Extra Services & Fees (check box, add fee as appropriate)	\$0.00
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00
<input type="checkbox"/> Return Receipt (electronic)	\$0.00
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00
<input type="checkbox"/> Adult Signature Required	\$0.00
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00

Postage \$0.58

Total Postage and Fees \$4.33

0301
3Postmark
Here

04/07/2022

Sent

 Street L. F. McAllister 2010 Revocable Trust
 269 Daniel Webster Highway
 City, Boscawen, NH 03303

PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

7020 0640 0001 9437 8027

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only
For delivery information, visit our website at www.usps.com®.

Hillsville, VA 24344

OFFICIAL USE

Certified Mail Fee	\$3.75
Extra Services & Fees (check box, add fee as appropriate)	\$0.00
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00
<input type="checkbox"/> Return Receipt (electronic)	\$0.00
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00
<input type="checkbox"/> Adult Signature Required	\$0.00
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00

Postage \$0.58

Total Postage and Fees \$4.33

0301
3Postmark
Here

04/07/2022

Sent To

 Street Shirley McKerley Revocable Trust 2012
 510 Random Road
 City, Hillsville, VA 24344

PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

7020 0640 0001 9437 8034

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only
For delivery information, visit our website at www.usps.com®.

Concord, NH 03302

OFFICIAL USE

Certified Mail Fee	\$3.75
Extra Services & Fees (check box, add fee as appropriate)	\$0.00
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00
<input type="checkbox"/> Return Receipt (electronic)	\$0.00
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00
<input type="checkbox"/> Adult Signature Required	\$0.00
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00

Postage \$0.58

Total Postage and Fees \$4.33

0301
3Postmark
Here

04/07/2022

Sent

 Street Tami B. Porter
 239 Daniel Webster Highway
 City, Boscawen, NH 03303

PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

7020 0640 0001 9437 8041

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

Hooksett, NH 03106

OFFICIAL USE

Certified Mail Fee \$3.75
\$0.00
Extra Services & Fees (check box, add fee as appropriate)
☐ Return Receipt (hardcopy) \$0.00
☐ Return Receipt (electronic) \$0.00
☐ Certified Mail Restricted Delivery \$0.00
☐ Adult Signature Required \$0.00
☐ Adult Signature Restricted Delivery \$0.00

Postage \$0.58

Total Postage and Fees \$4.33

0301
3

Postmark
Here

04/07/2022

Sent
Street Association of Bosniaks of New Hampshire
City 125 Londonderry Turnpike
Hooksett, NH 03106

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7020 0640 0001 9437 8058

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

Concord, NH 03301

OFFICIAL USE

Certified Mail Fee \$3.75
\$0.00
Extra Services & Fees (check box, add fee as appropriate)
☐ Return Receipt (hardcopy) \$0.00
☐ Return Receipt (electronic) \$0.00
☐ Certified Mail Restricted Delivery \$0.00
☐ Adult Signature Required \$0.00
☐ Adult Signature Restricted Delivery \$0.00

Postage \$0.58

Total Postage and Fees \$4.33

0301
3

Postmark
Here

04/07/2022

Warren R. Campbell III & Rea Ann Havlock
Campbell, 225 Daniel Webster Highway
Boscawen, NH 03303

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions