



# TOWN OF EXETER, NEW HAMPSHIRE

10 FRONT STREET • EXETER, NH • 03833-3792 • (603) 778-0591 • FAX 772-4709

[www.exeternh.gov](http://www.exeternh.gov)

## PUBLIC NOTICE EXETER CONSERVATION COMMISSION Site Walk

The Exeter Conservation Commission will be conducting a site walk on Tuesday August 8<sup>th</sup>, 2023 beginning at 5:00 PM at 8 Commerce Way, Exeter.

### Monthly Meeting

The Exeter Conservation Commission will meet in the Nowak Room, Exeter Town Offices at 10 Front Street, Exeter on **Tuesday, August 8<sup>th</sup>, 2023 at 7:00 P.M.**

### Call to Order:

1. Introduction of Members Present
2. Public Comment

### NON PUBLIC SESSION

1. Non-Public Session pursuant to RSA 91-A:3, II (d) for consideration of the acquisition, sale or lease of real or personal property.

### Action Items:

1. Continued review of Wetland Conditional Use Permit for the construction of a single-family house at **24 Powdermill Rd** for Chrissy Rupp– Tax Map 102-04 (Daniel Coons)
2. Wetland Conditional Use Permit Application for a subdivision and single-family house and driveway for the Maloney family at **18 Beech Hill Rd – Tax Map 32-11** (John Hayes)
3. Shoreland Conditional Use Permit application for a 3 lot subdivision for the Hewsons at **45 Pine Street – Tax Map 83-59** (Henry Boyd)
4. Wetland and Shoreland Conditional Use Permit Application for the expansion of an existing building, parking and stormwater structures at **8 Commerce Way** for C3i – Tax Map 48-3 (Jack McTigue)
5. Expenditure Request
  - a. Commemorative Bench at Raynes Farm (Dave Short, Bill Campbell)
  - b. Approval of Mowing Funds
  - c. ESRLAC - \$150
6. 2024 Budget Planning
7. Funding request to foundations (CC auth to reach out)
8. Committee Reports
  - a. Property Management
  - b. Trails
  - c. Outreach Events
  - d. Other Committee Reports (River Study, Sustainability, Energy/CPAC, Tree, CC Roundtable)
9. Approval of Minutes: July 11<sup>th</sup>, 2023 Meeting
10. Correspondence
11. Other Business
12. Next Meeting: Date Scheduled 9/12/23, Submission Deadline 9/1/23)

*Trevor Mattera*

*Vice-Chair, Exeter Conservation Commission*

*Posted August 4<sup>th</sup>, 2023 Exeter Town Website [www.exeternh.gov](http://www.exeternh.gov) and Town Office kiosk.*

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### ZOOM Public Access Information:

Virtual Meetings can be watched on Ch 22 or Ch 98 and YouTube.

To access the meeting, click this link: <https://us02web.zoom.us/j/89691128042>

To access the meeting via telephone, call: +1 646 558 8656 and enter the Webinar ID: 896 9112 8042

Please join the meeting with your full name if you want to speak.

Use the "Raise Hand" button to alert the chair you wish to speak. On the phone, press \*9.

More instructions for how to access the meeting can be found here:

<https://www.exeternh.gov/townmanager/virtual-town-meetings>

**Contact us at [extvg@exeternh.gov](mailto:extvg@exeternh.gov) or 603-418-6425 with any technical issues.**

**TOWN OF EXETER  
PLANNING DEPARTMENT MEMORANDUM**

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Date: August 4<sup>th</sup>, 2023  
To: Conservation Commission Board Members  
From: Kristen Murphy, Natural Resource Planner  
Subject: August 8<sup>th</sup> Conservation Commission Meeting

**NOTE SITE WALK ON AGENDA AT 5PM BEFORE MEETING**

**24 Powdermill Rd:**

This application was before you in July. Based on site walk conditions, the wetland scientist revisited the property to evaluate prior wetland delineation in the location of the driveway and located an additional wetland pocket. The driveway has been moved east to minimize impacts.

- The applicant is scheduled for the August 24<sup>th</sup> Planning Board meeting.

***Suggested Motion for Wetland Conditional Use Permit:***

\_\_\_\_ We reviewed this application and feel the need to **table the application to a date certain** due to insufficient information on criteria necessary for the Commission to make a recommendation to the planning board as noted below: We recommend the required information be submitted by the next meeting submission deadline of \_\_\_\_\_ to be heard at the \_\_\_\_\_ conservation commission meeting date.

\_\_\_\_ We have reviewed this application and have **no objection** to the approval of the conditional use permit as proposed.

\_\_\_\_ We have reviewed this application and recommend that the wetland conditional use permit be **(approved with conditions) (denied)** as noted below:

**18 Beech Hill Rd:**

Wetland Conditional Use Permit for the subdivision and development of a single-family house and driveway.

- No TRC is scheduled for this project.
- The applicant is scheduled for the August 24<sup>th</sup> Planning Board meeting.
- Application shows 40' buffer (PD soils) on existing conditions but 50' buffer (VPD soils) on proposed conditions and table indicates PD. Clarification needed.
- Applicant calculations necessary to determine compliance with 9.1.8 in separate email. *"The total proposed lot area is 2.94 acres. The wetlands on the proposed lot total 0.67 acres."*
- Condition: Final plans require buffer correction, wetland lot calculations, wetland scientist stamp.

***Suggested Motion for Wetland Conditional Use Permit:***

\_\_\_\_ We reviewed this application and feel the need to **table the application to a date certain** due to insufficient information on criteria necessary for the Commission to make a recommendation to the planning board as noted below: We recommend the required information be submitted by the next meeting submission deadline of \_\_\_\_\_ to be heard at the \_\_\_\_\_ conservation commission meeting date.

\_\_\_\_ We have reviewed this application and have **no objection** to the approval of the conditional use permit as proposed.

\_\_\_\_ We have reviewed this application and recommend that the wetland conditional use permit be **(approved with conditions) (denied)** as noted below:

**45 Pine Street:**

The applicant is proposing to subdivide an existing house lot into 3 separate lots. Development of the 2 newly created lots requires a conditional use permit as they fall within the shoreland district of the Little River based on a wetland delineation associated with the Scanlon property on Nelson Drive in 2020.

- No TRC is scheduled for this project.
- The applicant is scheduled for the August 24<sup>th</sup> Planning Board meeting.
- The proposal shows impervious cover at 15.8% and 20.7% for lots 2 and 3 respectively (10% limit without CUP). It is unclear from the application if site conditions ruled out the possibility of pervious pavement.
- Fertilizer limits imposed by section 9.3.4.F.12 are not cited on the plans. I recommend adding these restrictions as a note on the plans.

**Suggested Motion for Shoreland Conditional Use Permit:**

\_\_\_\_\_ We reviewed this application and feel the need to **table the application to a date certain** due to insufficient information on criteria necessary for the Commission to make a recommendation to the planning board as noted below: We recommend the required information be submitted by the next meeting submission deadline of \_\_\_\_\_ to be heard at the \_\_\_\_\_ conservation commission meeting date.

\_\_\_\_\_ We have reviewed this application and have **no objection** to the approval of the conditional use permit as proposed.

\_\_\_\_\_ We have reviewed this application and recommend that the wetland conditional use permit be **(approved with conditions) (denied)** as noted below:

**8 Commerce Way:**

The applicant is looking to expand the building, parking and stormwater structures associated with the existing building for C3i.

- TRC & PB Date TBD
- This portion of Norris Brook shoreland district is 150' (beyond confluence with Watson Bk) and wetlands report in 2016 application stated wetlands were determined to not be contiguous.

**Suggested Motion for Shoreland Conditional Use Permit:**

\_\_\_\_\_ We reviewed this application and feel the need to **table the application to a date certain** due to insufficient information on criteria necessary for the Commission to make a recommendation to the planning board as noted below: We recommend the required information be submitted by the next meeting submission deadline of \_\_\_\_\_ to be heard at the \_\_\_\_\_ conservation commission meeting date.

\_\_\_\_\_ We have reviewed this application and have **no objection** to the approval of the conditional use permit as proposed.

\_\_\_\_\_ We have reviewed this application and recommend that the wetland conditional use permit be **(approved with conditions) (denied)** as noted below:

**Suggested Motion for Wetland Conditional Use Permit:**

\_\_\_\_\_ We reviewed this application and feel the need to **table the application to a date certain** due to insufficient information on criteria necessary for the Commission to make a recommendation to the planning board as noted below: We recommend the required information be submitted by the next meeting submission deadline of \_\_\_\_\_ to be heard at the \_\_\_\_\_ conservation commission meeting date.

\_\_\_\_\_ We have reviewed this application and have **no objection** to the approval of the conditional use permit as proposed.

\_\_\_\_\_ We have reviewed this application and recommend that the wetland conditional use permit be **(approved with conditions) (denied)** as noted below:

**Expenditure Request at Raynes**

Dave to present potential project for purchasing materials to build and install as a committee, 3 Leopold benches at the top of the knoll at Raynes Farm. Metal plates will be installed recognizing members who served significant (10+ years) on the Commission.

**Suggested Motion:**

\_\_\_\_\_ Approve the expenditure of \$XXX from the Conservation Land Administration budget line item for the purposes of purchasing materials & supplies to construct and install Leopold Benches and add names at Raynes Farm.

**Expenditure Request Mowing**

Will have 2023 Estimate by meeting date  
Morrissette (1/2 or full field??) – (last year \$475)  
Perry/Whites Meadow - (last year \$850)  
Irvine - (last year \$500)

**Suggested Motion:**

\_\_\_\_\_ Approve the expenditure of \$XXX from the Roadside Mowing line item for grassland field maintenance.

**Expenditure Request Dues**

ESRLAC \$150

**Suggested Motion:**

\_\_\_\_\_ Approve the expenditure of \$150 from the Dues line item.



## 2024 Budget Planning:

Town of Exeter									
2024 General Fund Preliminary Budget									
Prepared: July 21, 2023									
									Version #1
Org	Object	Description	2022 Actual	2023 Budget	2023 Actual: June	2024 Preliminary Budget	2024 Preliminary Budget vs. 2023 Budget \$ Increase/-(Decrease)	2024 Preliminary Budget vs. 2023 Budget % Difference	Explanation (PLEASE UPDATE)
01461105	51200	CC- Sal/Wages PT	368	1,000	165	504	(496)	-49.6%	Recording secretaries @ \$18/hr avg about 6 hr/mtg
01461105	51210	CC- Sal/Wages Temp	-	2,520	-	2,520	-	0.0%	Interns 2@12/hr, 15 hrs/wk for 7 wks
		<b>Salaries Total</b>	<b>368</b>	<b>3,520</b>	<b>165</b>	<b>3,024</b>	<b>(496)</b>	<b>-14.1%</b>	
01461105	52200	CC- FICA	23	218	10	187	(31)	-14.1%	Based on wages: 6.2%
01461105	52210	CC- Medicare	5	51	2	44	(7)	-14.1%	Based on wages: 1.45%
		<b>Benefits Total</b>	<b>28</b>	<b>269</b>	<b>13</b>	<b>231</b>	<b>(38)</b>	<b>-14.1%</b>	
									Covers costs for outreach activities (Spring Tree program, pollinator projects, star gazing event, etc), trail maintenance (bridge, signs, paint, etc) and conservation land administration work such as property monitoring and maintenance needs like invasive brush removal, and supplies such as tools, gloves and equipment.
01461105	55051	CC- Conservation Land Administration	3,602	2,050	-	-	(2,050)	-100.0%	
01461105	55058	CC- Contract Services	993	1,000	-	-	(1,000)	-100.0%	Raynes minor maintenance repair needs.
01461105	55088	CC- Dues	1,050	1,200	1,050	-	(1,200)	-100.0%	For board to join related organizations: ESRLAC (\$150), NHACC (\$900), SELT (\$150)
01461105	55091	CC- Education/Training	70	250	-	-	(250)	-100.0%	Training for board members and/or Cons & Sust planner (NHACC-3 members and other workshops)
01461105	55171	CC- Legal/Public Notices	-	50	-	-	(50)	-100.0%	Covers approx 1 legal notice typ in newspaper
01461105	55224	CC- Postage	-	20	-	-	(20)	-100.0%	Mailings to ConCom members (mostly elect distr)
01461105	55247	CC- Registry of Deeds	-	30	-	-	(30)	-100.0%	Fee for registry of deeds (typically printing plans, deeds)
01461105	55254	CC- Roadside Mowing	1,775	1,700	-	-	(1,700)	-100.0%	Mowing White, Perry, Irvine and 1/2 of Morrisette. This is paid out Oct-Dec
		<b>General Expenses Total</b>	<b>7,490</b>	<b>6,300</b>	<b>1,050</b>	<b>-</b>	<b>(6,300)</b>	<b>-100.0%</b>	
		<b>Conservation Commission Total</b>	<b>7,886</b>	<b>10,089</b>	<b>1,228</b>	<b>3,255</b>	<b>(6,834)</b>	<b>-67.7%</b>	

In addition, this year the CC is considering  
CIP – Raynes \$56,200 if Mooseplate \$20k is awarded

Other discussion items – 2 potential conservation projects  
\$5.2M Full project, Estimated Exeter portion 1.1M  
\$1.2 M total project cost, Exeter portion TBD

Other possible major projects in Aug special meeting and draft CIP:  
\*3.5M sewer siphons, \$2.5M Surface water treatment plant, \$17.6M public safety complex,

## Foundations

Valorie has done significant research and found foundations whose missions may align with the Commissions for Raynes Farm and recommends reaching out to them.

- 1) Cogswell Benevolent Trust --- [info@cogswellbenevolenttrust.org](mailto:info@cogswellbenevolenttrust.org).
- 2) Fred J Brotherton Charitable Foundation-- [info@fjbcf.org](mailto:info@fjbcf.org)

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*Subject Line: Conservation Commission of Exeter Historic Building request*

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*On behalf of the Conservation Commission of Exeter, I am inquiring about possible funding for the historic preservation of Raynes Barn. The Raynes farm property has been identified on early maps as the original Town Landing, and also served as the center of the Exeter Cattle Market. The barn is listed on the NH Register of Historic Places.*

*Since acquisition, our vision has been to continue agricultural use and create an educational center celebrating historic and natural features of the farm. Though we have made great progress in preserving the barn and making repairs to stabilize its structural integrity, we do not have sufficient funding to complete exterior clapboard and paint repair.*

*We have an active and engaged Raynes Farm Stewardship Committee that includes the expertise of farmers, historians, recreation managers, event planners, structural engineers, natural resource specialists and carpenters who ensure repairs and uses are appropriate and highlight the historical and natural value of the barn and property.*

*Our goal is to make Raynes Barn a vibrant community center. We've already had success at our events such as our full moon snow shoe, winter solstice lantern parade, pumpkin toss/fall festival, owl prowls, historic tours, and kites for cancer. With additional funding for barn repair, we could exponentially grow the number and breadth of uses of the barn and property and preserve the historic Raynes Barn for future generations.*

*Thank you for your consideration.*

## Suggested Motion:

*\_\_\_\_\_ Authorize (Chair, V-Chair or Kristen?) to send the above email inquiry on behalf of the Commission for funding to support repairs at Raynes Barn.*

**Committee Reports** – I will be happy to speak to any of these in detail if requested at the meeting.

### a) Trails

- Sign at Garrison Ln Replaced with No Winter Parking
- Installed kiosk at Brickyard Park
- Tree removal across trail at EHS
- Morrissette: Passport Post re-installed, tree in field removed, perimeter path mowed
- Eversource ROW Oaklands Trail Network Partial Closure/Signage Planning

### b) Outreach Events

- PREP SOOE Presentation
- RMAC Meeting – Hosting, Dam Presentation

### c) Property Maintenance

- Stone Property Mowing – too wet to mow left of entrance. More grass less brush than last year. Request load of gravel at entrance.

### d) Other Committee Reports (River Study, Sustainability, Energy/CPAC, Tree, CC Roundtable)

- CPAC Opt Up Campaign
  - New rates effective 8/1, Clean 100 (15.2) slightly less than last periods Granite Basic (15.8) rate.
- Energy:
  - Working on EECB grant application for \$200,000 to fund \$2k match requirement for ButtonUp NH/ NHSaves for low income residents in Exeter's 5 manufactured housing parks.
  - Considering stretch code component to incentivize energy efficient construction
- Tree:
  - Presented status report to SB
  - Received notice of 15 Liberty Elms for planting
  - Encouraged to submit budget request, considering stand-alone committee
- River:
  - Healthy Lawns Clean Water lawncare pledge opportunity. Commit to 5 easy steps (plant natives, mow high, leave clippings, test soil, water wisely), get lawn sign.
  - PREP SOOE presentation – [available online](#)
  - May [video](#) and [presentation](#) of Pickpocket Dam Feasibility Study progress report
- SAC
  - [Plastic Free July](#) (and Beyond)
  - Partner with CPAC on Opt Up campaign
  - Collab with EC on Stretch code consideration



Ilex Wetlands Consultants  
PO Box 2185  
Wolfeboro, New Hampshire 03894  
Phone: (603) 520-8533  
email: ilexwetlands@gmail.com

July 12, 2023

Doug & Chrissy Rupp  
69 Newburyport Turnpike  
Newbury, MA 01951

Re: Wetlands Assessment/Delineation  
Location: 24 Powder Mill Rd, Exeter  
Tax map/Lot: 102 - 004  
Our File #: 2023 - 1509

This report is being submitted to you to detail the field assessment performed July 11, 2023. At the request of the Conservation Commission on July 10<sup>th</sup>, we returned to the site to evaluate the delineation done by Gove Environmental Services (GES). In specific, they requested that we review the frontage along Powder Mill Road. We also evaluated the parcel side property line along the Boston and Maine Railway property. As we noted at the Conservation Commission meeting on July 10<sup>th</sup>, our prior evaluations were more limited to the rear of the subdivided parcel as well as the area of your parents property between the proposed house site, and your parents house.

As a result of our further investigation, we found one small approximately 100-150 sf wetland pocket, and also made adjustments to the wetlands boundary along Powder Mill Road, and also along the Boston and Maine side the property.

The small wetland pocket has been flagged with pink pin flags and the location has been added to the most recent plans developed by Millenium Engineering as flag numbers 101 thru 105.

We have added additional pin flags along Powder Mill Road, used new arctic pink surveyors flagging labelled "Wetland Boundary" to redefine our opinion of the wetland boundary as it does differ somewhat from the boundary noted by GES.

By the means of this letter, and the plans with our own lines sketched upon it, we are providing a copy of this information to Millenium Engineering, so that they can redo the wetlands boundary on the plans, and direct wetland impacts and buffer impacts can be used to calculate the least impactful place to locate the proposed driveway. Once this has been established, we will send a letter to NHDES to advise of the revisions, and to get their approval on such. In any event, the amount of wetland impact will not significantly change the nature of or amount of wetland impacts being requested of NHDES.

Ilex Wetlands Consultants

PO Box 2185

Wolfeboro, New Hampshire 03894

Phone: (603) 520-8533 Fax (615) 676-3495

email: [ilexwetlands@gmail.com](mailto:ilexwetlands@gmail.com)

Once we have the revised plans, we will then submit these to the Town of Exeter Conservation Commission, and Planning Board for a revised Conditional Use Permit.

This on-site analysis was performed using the three factor approach of soils, vegetation and hydrology in accordance with the "Army Corps of Engineers Wetland Delineation Manual, Technical Report Y-87-1" January 1987, as well as other protocols accepted by the Army Corps of Engineers, and the New Hampshire Department of Environmental Services.

No trees or shrubs were found in the wet meadow where the additional wetland pocket was noted. I think that we are in agreement that when we inspected this location a month ago, not only was this area not saturated to the surface, but sedges had not started to fill in for the growing season. Herbs present include: Canada rush (*Juncus canadensis*), spike rush (*Eleocharis acicularis*), timothy (*Phleum pratense*), sweet vernal grass (*Anthoxanthum odoratum*), red top (*Agrostis alba*), rye (*Lolium perenne*). The dominance of some of these species, such as the rushes and red top will indicate a wetlands, while the dominance of others such as timothy and sweet vernal grass will indicate the area is an upland. Soils present within the wetland were a clayey soil, with a color of 2.5y 5/2 at the soil surface. The soil colors were uniformly mixed here, indicating that the field was, at one point, routinely plowed. The wetland indicator for this soils is F3 Depleted matrix.

A sketch is attached to this letter, and we will continue to communicate as the process continues

Regards,



Daniel Coons, NH Certified Wetland Scientist #264  
Ilex Wetlands Consultants



**Town of Exeter  
 Planning Board Application  
 Conditional Use Permit: Wetland Conservation Overlay District**

Detailed Proposal including intent, project description, and use of property: (Use additional sheet as needed)

The proposed project is the construction of a driveway to access a building and septic envelope found in an upland area. As wetlands span the entire frontage of the parcel, a dredge and fill application has been submitted to NHDES. No other alternative exists which would allow driveway access without wetland impacts. The proposed location is the location on the parcel which provides the most minimal impacts to both the wetland and the wetland buffer.

**Wetland Conservation Overlay District Impact (in square footage):**

Temporary Impact	Wetland: (SQ FT.)	Buffer: (SQ FT.)
	<input type="checkbox"/> Prime Wetlands _____	<input type="checkbox"/> Prime Wetlands _____
	<input type="checkbox"/> Exemplary Wetlands _____	<input type="checkbox"/> Exemplary Wetlands _____
	<input type="checkbox"/> Vernal Pools (>200SF) _____	<input type="checkbox"/> Vernal Pools (>200SF) _____
	<input type="checkbox"/> VPD _____	<input type="checkbox"/> VPD _____
	<input checked="" type="checkbox"/> PD <u>40 sf</u>	<input checked="" type="checkbox"/> PD <u>80 sf</u>
	<input type="checkbox"/> Inland Stream _____	<input type="checkbox"/> Inland Stream _____
Permanent Impact	Wetland:	Buffer:
	<input type="checkbox"/> Prime Wetlands _____	<input type="checkbox"/> Prime Wetlands _____
	<input type="checkbox"/> Exemplary Wetlands _____	<input type="checkbox"/> Exemplary Wetlands _____
	<input type="checkbox"/> Vernal Pools (>200SF) _____	<input type="checkbox"/> Vernal Pools (>200SF) _____
	<input type="checkbox"/> VPD _____	<input type="checkbox"/> VPD _____
	<input checked="" type="checkbox"/> PD <u>631 sf</u>	<input checked="" type="checkbox"/> PD <u>560 sf</u>
	<input type="checkbox"/> Inland Stream _____	<input type="checkbox"/> Inland Stream _____

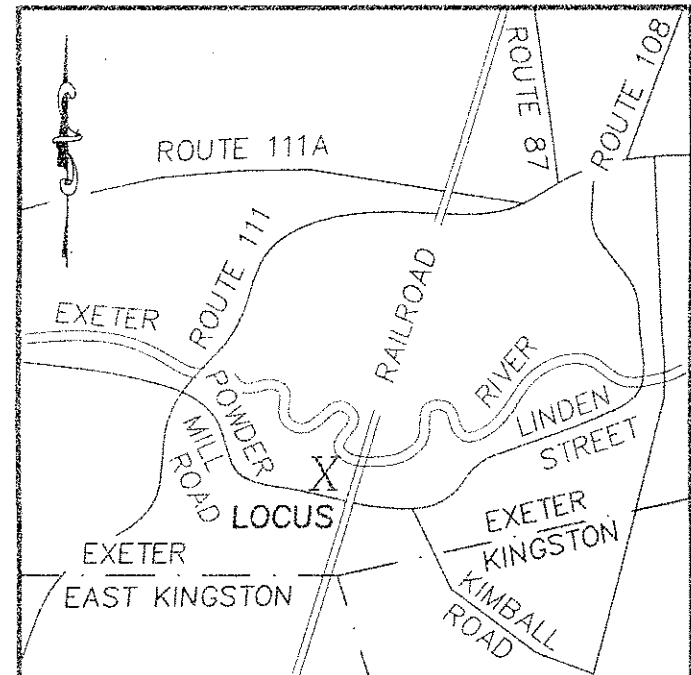
List any variances/special exceptions granted by Zoning Board of Adjustment including dates:

No variance for the construction or the driveway have been requested of the ZBA

Describe how the proposal meets conditions in **Article 9.1.6.B** of the Zoning Ordinance (attached for reference):

Residential construction is allowed in this zone. NHDES allows for driveways to cross a wetland for construction of a building within the upland. This lot has no frontage which allows for the driveway to avoid wetlands. The location chosen for the driveway minimizes as much as possible wetland and buffer impacts. Any loss of wetland function or value has been minimized as much as possible. The design will minimize any detrimental wetland or buffer impacts from the driveway construction. No temporary impacts are anticipated except for the toeing in of the silt fence. The area will be restored following construction. We anticipate no hazard or impact to the public health or safety from the approval of this project. Permit application has been submitted to NHDES, and notification provided to the Army Corps of Engineers.



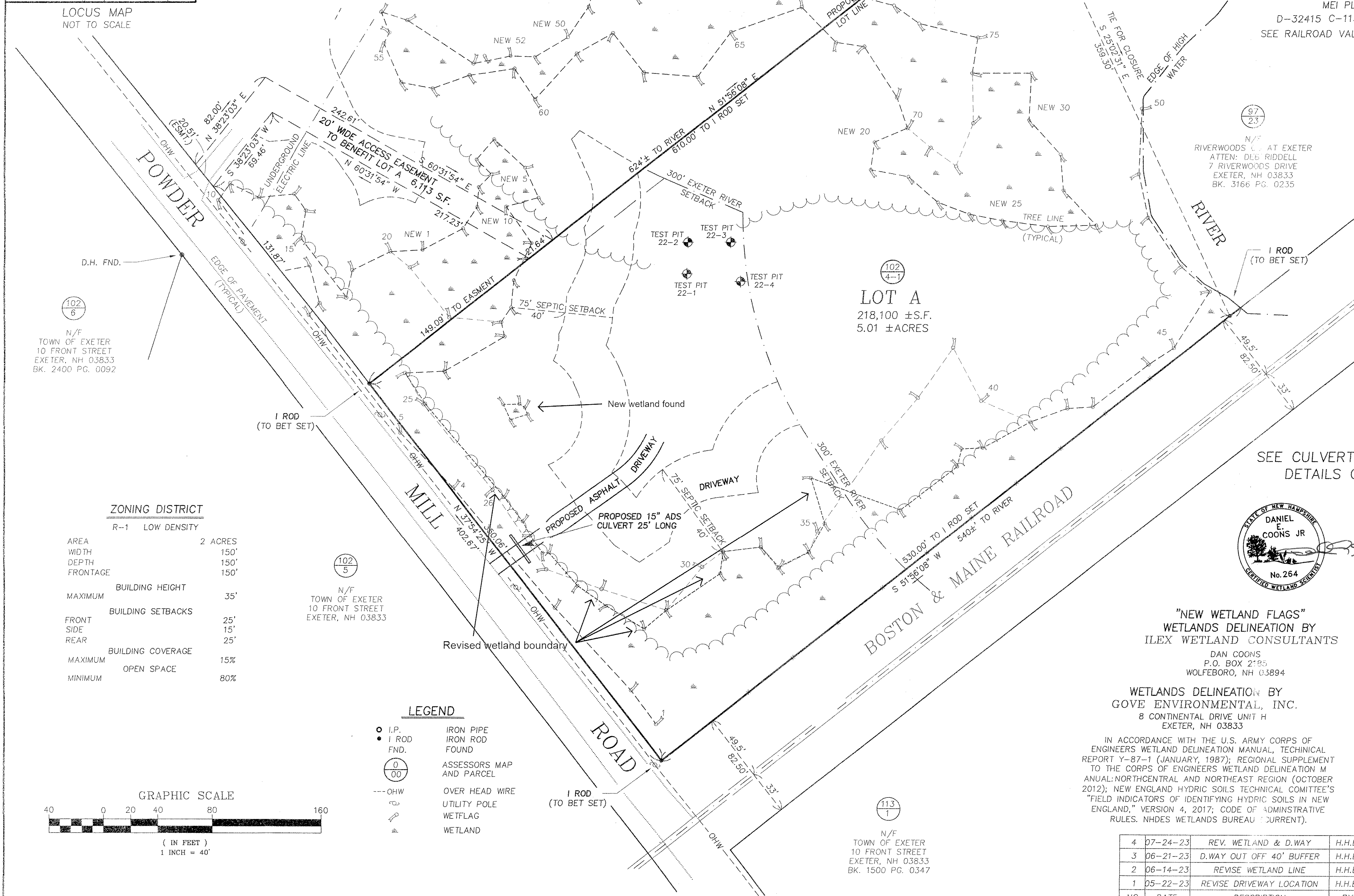


**NOTES:**

- 1) THIS PLAN DOES NOT SHOW ANY UNRECORDED OR UNWRITTEN EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT VISIBLE USES OF THE LAND; HOWEVER, THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.
- 2) THIS PARCEL LIES PARTIALLY WITHIN A FLOOD ZONE, 0.2% ANNUAL FLOOD CHANCE ZONE AND THE REGULATORY FLOOD WAY. SEE F.I.R.M. COMMUNITY PANEL 330135C 0403 E EFFECTIVE DATE MAY 17, 2005. SEE LOMR 18-01-0144P EFFECTIVE: 11-05-2018.
- 3) ELEVATIONS ARE BASED ON NAVD29.
- 4) PROPOSED HOME MUST BE BUILT TO PLAIN DEVELOPMENT ORDINANCE 9.4 WITHIN THE TOWN ZONING REGULATIONS.

**RECORD OWNERS**  
 SCHAEFER FAMILY REV. TRUST  
 RICHARD C. & DEBBI L. SCHAEFER TRUSTEES  
 24 POWDER MILL ROAD  
 EXETER, NH 03833  
 BK. 4329 PG. 1795  
**LOT A**  
 218,100 ±S.F.  
 5.01 ±ACRES

**PLAN REFERENCES**  
 MEI PLAN  
 D-32415 C-11567 D-10095  
 SEE RAILROAD VAL. PLAN V2NH/47



102/6  
 N/F  
 TOWN OF EXETER  
 10 FRONT STREET  
 EXETER, NH 03833  
 BK. 2400 PG. 0092

97/23  
 N/F  
 RIVERWOODS CO. AT EXETER  
 ATTN: DLB RIDDELL  
 7 RIVERWOODS DRIVE  
 EXETER, NH 03833  
 BK. 3166 PG. 0235

73/47  
 N/F  
 BOSTON & MAINE RAILROAD  
 1700 IRON HORSE PARK  
 NORTH BILLERICA, MA 01862

102/4-1  
**LOT A**  
 218,100 ±S.F.  
 5.01 ±ACRES

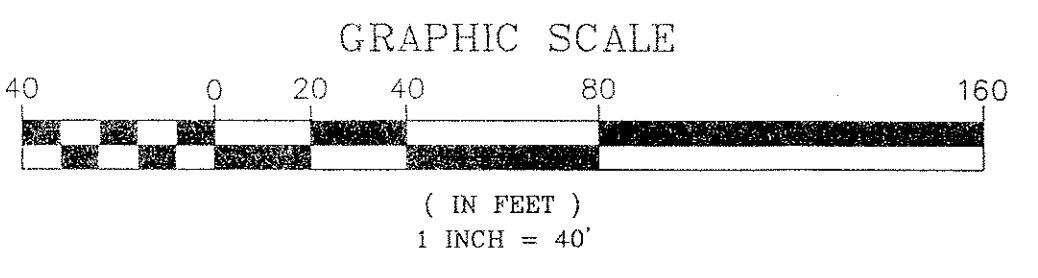
**ZONING DISTRICT**  
 R-1 LOW DENSITY

AREA	2 ACRES
WIDTH	150'
DEPTH	150'
FRONTAGE	150'
MAXIMUM BUILDING HEIGHT	35'
FRONT BUILDING SETBACKS	25'
SIDE REAR	15'
REAR BUILDING SETBACKS	25'
MAXIMUM BUILDING COVERAGE	15%
MINIMUM OPEN SPACE	80%

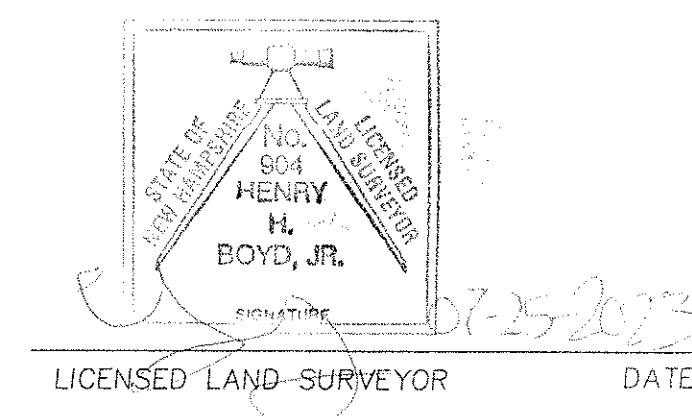
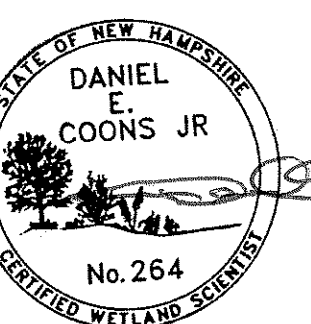
102/5  
 N/F  
 TOWN OF EXETER  
 10 FRONT STREET  
 EXETER, NH 03833

**LEGEND**

● I.P.	IRON PIPE FOUND
● I ROD	IRON ROD FOUND
○ FND.	FOUND
○	ASSESSORS MAP AND PARCEL
---	OVER HEAD WIRE
○	UTILITY POLE
○	WETFLAG
▲	WETLAND



I CERTIFY:  
 THAT THIS ACTUAL SURVEY WAS MADE ON THE GROUND BETWEEN JANUARY AND JULY 2023.  
 THAT THIS SURVEY CONFORMS TO THE REQUIREMENTS FOR ACCURACY FOR N.H. URBAN SURVEY.



SEE CULVERT AND CROSSING DETAILS ON SHEET 2

**"NEW WETLAND FLAGS"**  
 WETLANDS DELINEATION BY ILEX WETLAND CONSULTANTS  
 DAN COONS  
 P.O. BOX 2185  
 WOLFEBORO, NH 03894

WETLANDS DELINEATION BY GOVE ENVIRONMENTAL, INC.  
 8 CONTINENTAL DRIVE UNIT H  
 EXETER, NH 03833  
 IN ACCORDANCE WITH THE U.S. ARMY CORPS OF ENGINEERS WETLAND DELINEATION MANUAL, TECHNICAL REPORT Y-87-1 (JANUARY, 1987); REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTH CENTRAL AND NORTHEAST REGION (OCTOBER 2012); NEW ENGLAND HYDRIC SOILS TECHNICAL COMMITTEE'S "FIELD INDICATORS OF IDENTIFYING HYDRIC SOILS IN NEW ENGLAND," VERSION 4, 2017; CODE OF ADMINISTRATIVE RULES, NHDES WETLANDS BUREAU (CURRENT).

**Existing Conditions NHDES WETLAND PLAN**  
 IN EXETER, NH  
 SHOWING A DRIVEWAY CROSSING AT 24 POWDER MILL ROAD (ASSESSORS MAP 102 LOT 4)

RECORD OWNER  
 SCHAEFER FAMILY TRUST  
 RICHARD C. & DEBBI L. SCHAEFER TRUSTEES  
 24 POWDER MILL ROAD EXETER, NH 03833

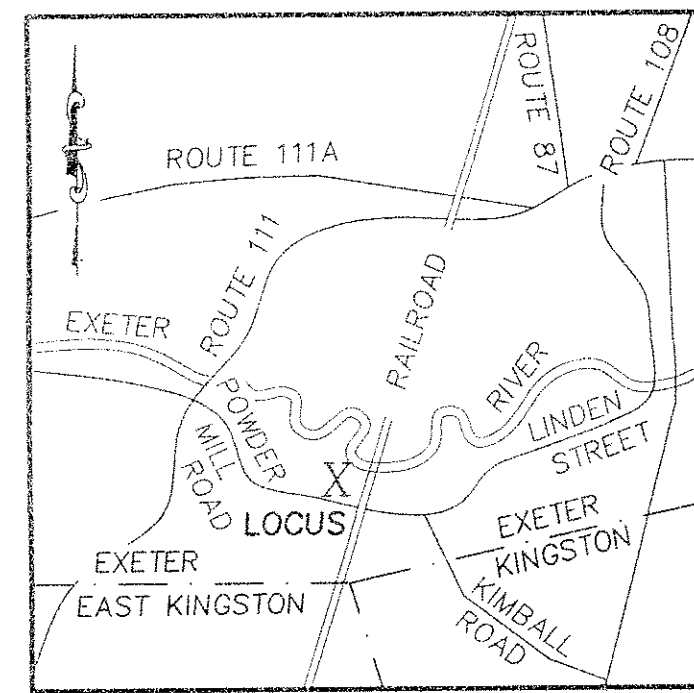
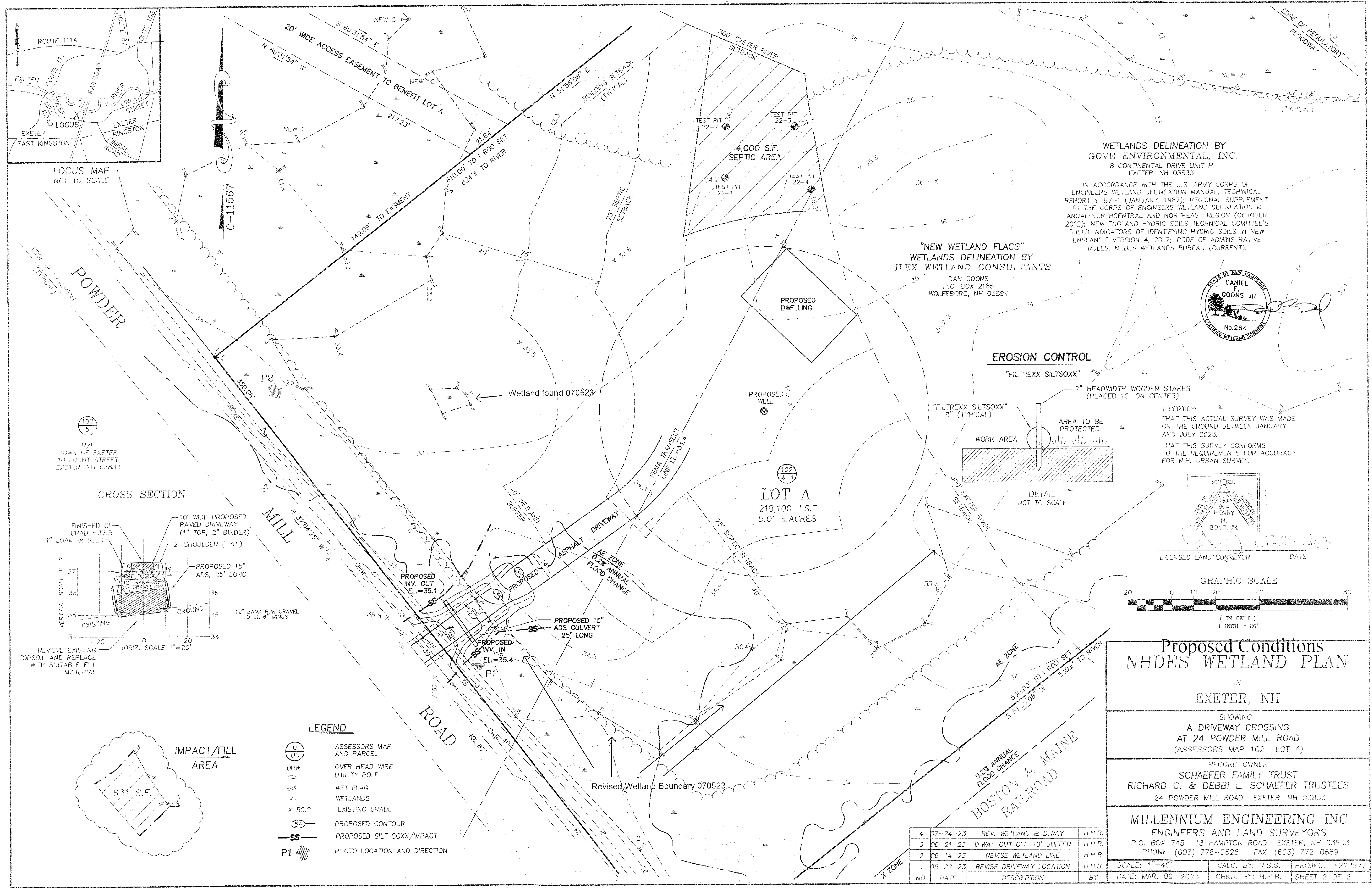
MILLENNIUM ENGINEERING INC.  
 ENGINEERS AND LAND SURVEYORS  
 P.O. BOX 745 13 HAMPTON ROAD EXETER, NH 03833  
 PHONE: (603) 778-0528 FAX: (603) 772-0689

4	07-24-23	REV. WETLAND & D.WAY	H.H.B.
3	06-21-23	D.WAY OUT OFF 40' BUFFER	H.H.B.
2	06-14-23	REVISE WETLAND LINE	H.H.B.
1	05-22-23	REVISE DRIVEWAY LOCATION	H.H.B.
NO.	DATE	DESCRIPTION	BY

SCALE: 1"=40'  
 DATE: MAR. 09, 2023  
 CALC. BY: R.S.G.  
 CHKD. BY: H.H.B.  
 PROJECT: E222977  
 SHEET 1 OF 2

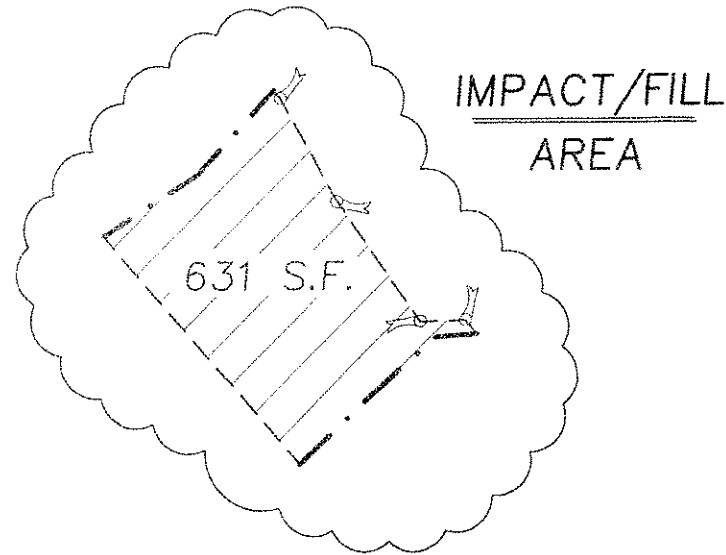
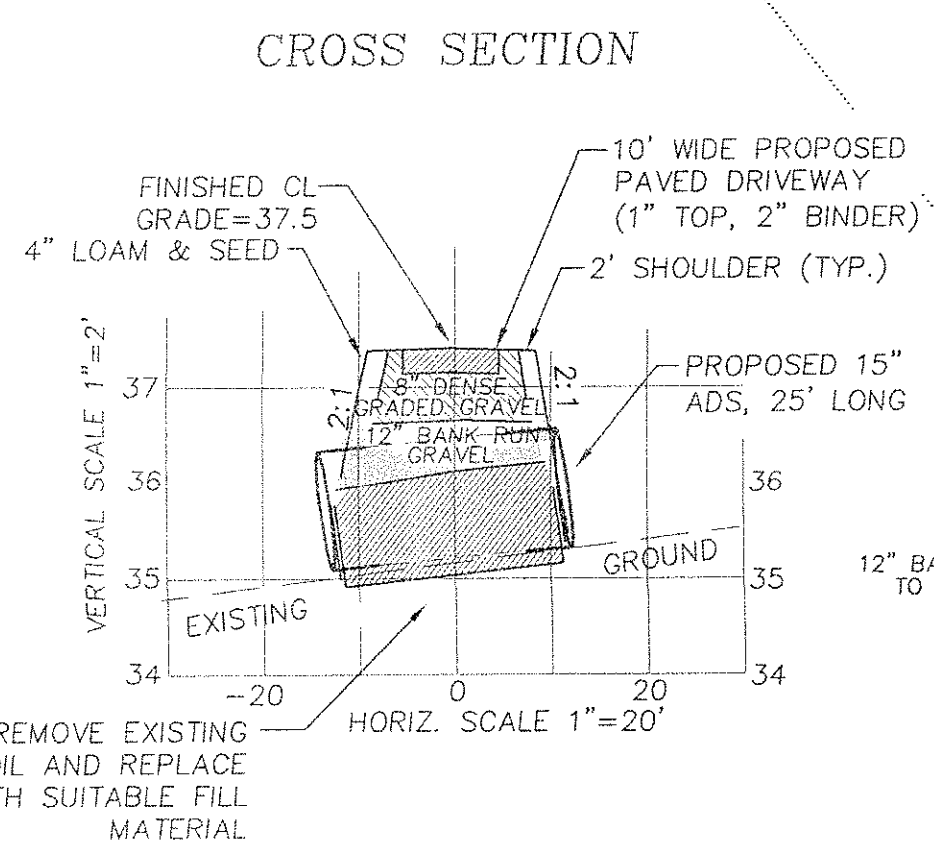
113/1  
 N/F  
 TOWN OF EXETER  
 10 FRONT STREET  
 EXETER, NH 03833  
 BK. 1500 PG. 0347





LOCUS MAP  
NOT TO SCALE

N/F  
TOWN OF EXETER  
10 FRONT STREET  
EXETER, NH 03833

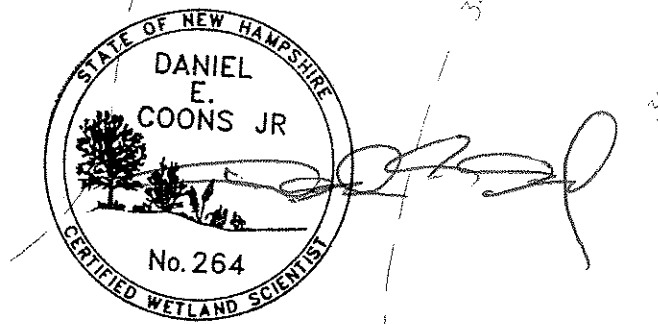


- LEGEND**
- ASSESSORS MAP AND PARCEL
  - OVER HEAD WIRE UTILITY POLE
  - WET FLAG
  - WETLANDS
  - EXISTING GRADE
  - PROPOSED CONTOUR
  - PROPOSED SILT SOXX/IMPACT
  - PHOTO LOCATION AND DIRECTION

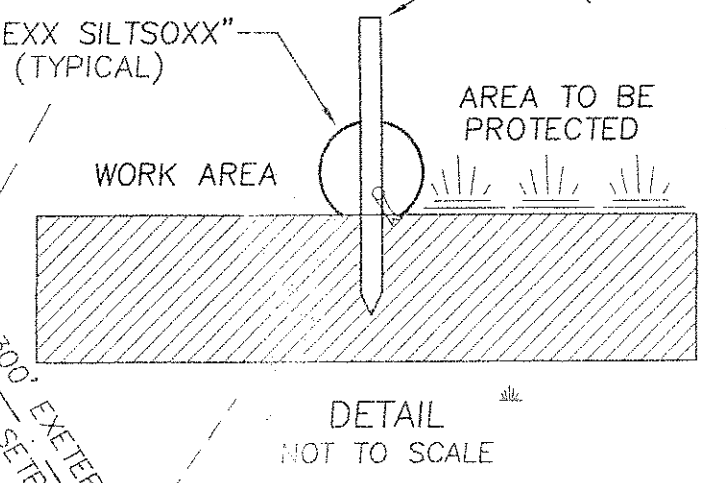
WETLANDS DELINEATION BY  
GOVE ENVIRONMENTAL, INC.  
8 CONTINENTAL DRIVE UNIT H  
EXETER, NH 03833

IN ACCORDANCE WITH THE U.S. ARMY CORPS OF ENGINEERS WETLAND DELINEATION MANUAL, TECHNICAL REPORT Y-87-1 (JANUARY, 1987); REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTH-CENTRAL AND NORTHEAST REGION (OCTOBER 2012); NEW ENGLAND HYDRIC SOILS TECHNICAL COMMITTEE'S "FIELD INDICATORS OF IDENTIFYING HYDRIC SOILS IN NEW ENGLAND," VERSION 4, 2017; CODE OF ADMINISTRATIVE RULES, NHDES WETLANDS BUREAU (CURRENT).

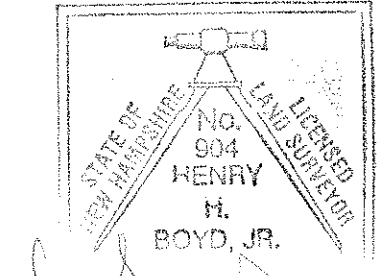
"NEW WETLAND FLAGS"  
WETLANDS DELINEATION BY  
ILEX WETLAND CONSULTANTS  
DAN COONS  
P.O. BOX 2185  
WOLFEBORO, NH 03894



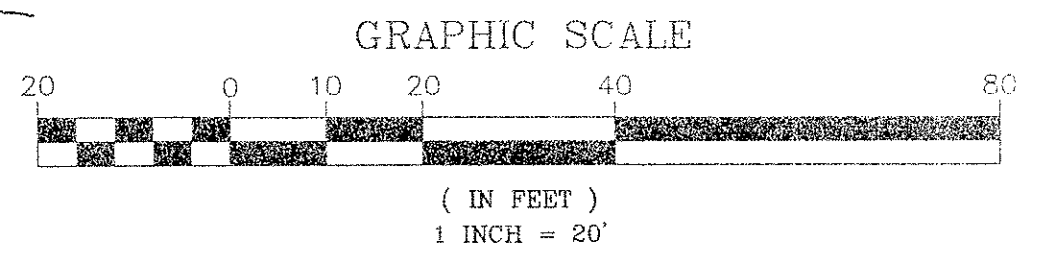
**EROSION CONTROL**  
"FILTRREXX SILTSOXX"  
2" HEADWIDTH WOODEN STAKES (PLACED 10' ON CENTER)



I CERTIFY:  
THAT THIS ACTUAL SURVEY WAS MADE ON THE GROUND BETWEEN JANUARY AND JULY 2023.  
THAT THIS SURVEY CONFORMS TO THE REQUIREMENTS FOR ACCURACY FOR N.H. URBAN SURVEY.



LICENSED LAND SURVEYOR DATE



**Proposed Conditions  
NHDES WETLAND PLAN**

IN  
EXETER, NH

SHOWING  
A DRIVEWAY CROSSING  
AT 24 POWDER MILL ROAD  
(ASSESSORS MAP 102 LOT 4)

RECORD OWNER  
SCHAEFER FAMILY TRUST  
RICHARD C. & DEBBI L. SCHAEFER TRUSTEES  
24 POWDER MILL ROAD EXETER, NH 03833

MILLENNIUM ENGINEERING INC.  
ENGINEERS AND LAND SURVEYORS  
P.O. BOX 745 13 HAMPTON ROAD EXETER, NH 03833  
PHONE: (603) 778-0528 FAX: (603) 772-0689

NO.	DATE	DESCRIPTION	BY
4	07-24-23	REV. WETLAND & D.WAY	H.H.B.
3	06-21-23	D.WAY OUT OFF 40' BUFFER	H.H.B.
2	06-14-23	REVISE WETLAND LINE	H.H.B.
1	05-22-23	REVISE DRIVEWAY LOCATION	H.H.B.

SCALE: 1"=40' CALC. BY: R.S.G. PROJECT: E222977  
DATE: MAR. 09, 2023 CHKD. BY: H.H.B. SHEET 2 OF 2

18 Beech Hill Rd

# Town of Exeter



## **Planning Board Application for Conditional Use Permit: Wetlands Conservation Overlay District**

*March 2020*



**Town of Exeter**  
**Planning Board Application**  
**Conditional Use Permit: Wetland Conservation Overlay District**

Detailed Proposal including intent, project description, and use of property: (Use additional sheet as needed)

THE INTENT IS TO SUBDIVIDE A 2.94 ACRE LOT FROM MAP 32 LOT 11, WHICH CURRENTLY HAS 8.74 ACRES.

THE DEVELOPMENT OF THE LOT IS TO INCLUDE A 3 BEDROOM RESIDENTIAL HOME, WELL, SEPTIC SYSTEM, DRIVEWAY AND THE ASSOCIATED SITE WORK WITH SUCH A PROJECT. PORTIONS OF THE HOME AND DRIVEWAY WILL BE WITHIN THE 75' PARKING AND STRUCTURAL BUFFER. THE SEPTIC SYSTEM WILL MEET TOWN AND STATE SETBACKS.

THE USE WILL BE RESIDENTIAL AND IS INTENDED FOR THE MALONEYS SON, BRICE, AND HIS WIFE.

**Wetland Conservation Overlay District Impact (in square footage):**

Temporary Impact	Wetland:	(SQ FT.)	Buffer:	(SQ FT.)
	<input type="checkbox"/> Prime Wetlands	_____	<input type="checkbox"/> Prime Wetlands	_____
	<input type="checkbox"/> Exemplary Wetlands	_____	<input type="checkbox"/> Exemplary Wetlands	_____
	<input type="checkbox"/> Vernal Pools (>200SF)	_____	<input type="checkbox"/> Vernal Pools (>200SF)	_____
	<input type="checkbox"/> VPD	_____	<input type="checkbox"/> VPD	_____
	<input type="checkbox"/> PD	_____	<input checked="" type="checkbox"/> PD	<u>4,000</u>
	<input type="checkbox"/> Inland Stream	_____	<input type="checkbox"/> Inland Stream	_____
Permanent Impact	Wetland:	(SQ FT.)	Buffer:	(SQ FT.)
	<input type="checkbox"/> Prime Wetlands	_____	<input type="checkbox"/> Prime Wetlands	_____
	<input type="checkbox"/> Exemplary Wetlands	_____	<input type="checkbox"/> Exemplary Wetlands	_____
	<input type="checkbox"/> Vernal Pools (>200SF)	_____	<input type="checkbox"/> Vernal Pools (>200SF)	_____
	<input type="checkbox"/> VPD	_____	<input type="checkbox"/> VPD	_____
	<input type="checkbox"/> PD	_____	<input checked="" type="checkbox"/> PD	<u>1,350</u>
	<input type="checkbox"/> Inland Stream	_____	<input type="checkbox"/> Inland Stream	_____

List any variances/special exceptions granted by Zoning Board of Adjustment including dates:

Describe how the proposal meets conditions in **Article 9.1.6.B** of the Zoning Ordinance (attached for reference):

SEE ATTACHED



Franklin Associates, LLC  
143 Raymond Rd, Unit 4  
Candia, NH 03034

CONDITIONAL USE PERMIT  
ARTICLE 9.1.6.B CONDITIONS

June 9, 2023

Town of Exeter Planning Board  
10 Front St  
Exeter, NH 03833

RE: Subdivision:  
S&T Maloney Rev. Trust  
18 Beech Hill Rd  
Exeter, NH 03833  
Tax Map 32 Lot 11

CONDITIONS:

1. The underlying zone is residential, R-1 and lies within the Wetland Conservation Overlay District due to the wetlands on the property. The proposed use will be for residential purposes and is allowed in this District.
2. We chose the area of development, for which this Conditional Use Permit is being submitted, because we believe that it is the least impactful to the wetlands. While an alternative area does exist on the lot where we can meet all the buffer distances, access to this area would require two wetland crossing permits and would be more detrimental to the wetlands than what we are proposing.
3. See "Functions and Values" report by John P. Hayes.
4. The proposed development of the lot includes a modestly sized 3 bedroom home with an attached garage, an Advanced Enviro-Septic system, well and driveway. The Advanced Enviro-Septic leachfield has a reduced bacterial output in comparison to other types of leachfields, a smaller footprint and is allowed to be constructed closer to the water table than any other system due to its reduced bacterial output. Appropriate sediment and erosion control methods will be used to reduce the impact to the wetlands during construction.
5. The proposed use will not create any hazards to "individuals, public health, safety and welfare due to the loss of wetlands or contamination of ground water, or other reasons" as we are proposing to meet all current State of NH DES subsurface regulations and are not proposing any loss of wetlands or wetland crossings. Under NH Wetlands Law RSA 482-A, there are no wetland setbacks.
6. At this time we are not proposing increasing any wetland buffers elsewhere on the site.



Franklin Associates, LLC  
143 Raymond Rd, Unit 4  
Candia, NH 03034

CONDITIONAL USE PERMIT  
ARTICLE 9.1.6.B CONDITIONS

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RE: Subdivision:  
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18 Beech Hill Rd  
Exeter, NH 03833  
Tax Map 32 Lot 11

7. The proposed use within the buffer is permanent. Areas adjacent to the house, driveway and leachfield, which are disturbed during construction will be loamed and seeded for future lawn areas.

8. The proposed subdivision will require two State permits; a subdivision approval for the creation of a lot with less than 5 acres and a construction approval for septic system design. These State applications have not yet been submitted pending the outcome of the Conditional Use Permit and Subdivision application.

Sincerely,

Jason Franklin





# WETLANDS FUNCTIONAL ASSESSMENT WORKSHEET

Water Division/Land Resource Management  
Wetlands Bureau



[Check the Status of your Application](#)

**RSA/Rule:** RSA 482-A / Env-Wt 311.03(b)(10); Env-Wt 311.10

**APPLICANT LAST NAME, FIRST NAME, M.I.:** **Maloney, Brice**

As required by Env-Wt 311.03(b)(10), an application for a standard permit for minor and major projects must include a functional assessment of all wetlands on the project site as specified in Env-Wt 311.10. This worksheet will help you compile data for the functional assessment needed to meet federal (US Army Corps of Engineers (USACE); if applicable) and NHDES requirements. Additional requirements are needed for projects in tidal area; please refer to the [Coastal Area Worksheet \(NHDES-W-06-079\)](#) for more information.

Both a desktop review and a field examination are needed to accurately determine surrounding land use, hydrology, hydroperiod, hydric soils, vegetation, structural complexity of wetland classes, hydrologic connections between wetlands or stream systems or wetland complex, position in the landscape, and physical characteristics of wetlands and associated surface waters. The results of the evaluation are to be used to select the location of the proposed project having the least impact to wetland functions and values (Env-Wt 311.10). This worksheet can be used in conjunction with the [Avoidance and Minimization Written Narrative \(NHDES-W-06-089\)](#) and the [Avoidance and Minimization Checklist \(NHDES-W-06-050\)](#) to address Env-Wt 313.03 (Avoidance and Minimization). If more than one wetland/ stream resource is identified, multiple worksheets can be attached to the application. All wetland, vernal pools, and stream identification (ID) numbers are to be displayed and located on the wetlands delineation of the subject property.

<b>SECTION 1 - LOCATION (USACE HIGHWAY METHODOLOGY)</b>	
ADJACENT LAND USE: <b>FORESTED, RESIDENTIAL</b>	
CONTIGUOUS UNDEVELOPED BUFFER ZONE PRESENT? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
DISTANCE TO NEAREST ROADWAY OR OTHER DEVELOPMENT (in feet): <b>+/- 100'</b>	
<b>SECTION 2 - DELINEATION (USACE HIGHWAY METHODOLOGY; Env-Wt 311.10)</b>	
CERTIFIED WETLAND SCIENTIST (if in a non-tidal area) or QUALIFIED COASTAL PROFESSIONAL (if in a tidal area) who prepared this assessment: <b>JOHN P. HAYES, CWS 018</b>	
DATE(S) OF SITE VISIT(S): <b>6/12/23</b>	DELINEATION PER ENV-WT 406 COMPLETED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
CONFIRM THAT THE EVALUATION IS BASED ON: <input checked="" type="checkbox"/> Office and <input checked="" type="checkbox"/> Field examination.	
METHOD USED FOR FUNCTIONAL ASSESSMENT (check one and fill in blank if "other"): <input checked="" type="checkbox"/> USACE Highway Methodology. <input type="checkbox"/> Other scientifically supported method (enter name/ title): <span style="background-color: #cccccc; padding: 2px 20px;"> </span>	

[irm@des.nh.gov](mailto:irm@des.nh.gov) or (603) 271-2147

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

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<b>SECTION 3 - WETLAND RESOURCE SUMMARY (USACE HIGHWAY METHODOLOGY; Env-Wt 311.10)</b>	
WETLAND ID: <b>1</b>	LOCATION: (LAT/ LONG) <b>43.008767/-70.981492</b>
WETLAND AREA: <b>UNKNOWN. WETLAND GOES OUTSIDE OF SUBJECT AREA</b>	DOMINANT WETLAND SYSTEMS PRESENT: <b>FORESTED</b>
HOW MANY TRIBUTARIES CONTRIBUTE TO THE WETLAND? <b>2</b>	COWARDIN CLASS: <b>PFO 1/4E</b>
IS THE WETLAND A SEPARATE HYDRAULIC SYSTEM? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No if not, where does the wetland lie in the drainage basin? <b>THE END</b>	IS THE WETLAND PART OF: <input type="checkbox"/> A wildlife corridor or <input type="checkbox"/> A habitat island? IS THE WETLAND HUMAN-MADE? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
IS THE WETLAND IN A 100-YEAR FLOODPLAIN? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	ARE VERNAL POOLS PRESENT? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If yes, complete the Vernal Pool Table)
ARE ANY WETLANDS PART OF A STREAM OR OPEN-WATER SYSTEM? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	ARE ANY PUBLIC OR PRIVATE WELLS DOWNSTREAM/ DOWNGRADIENT? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
PROPOSED WETLAND IMPACT TYPE: <b>REQUEST FOR WETLAND BUFFER REDUCTION</b>	PROPOSED WETLAND IMPACT AREA: <b>[REDACTED]</b>

#### **SECTION 4 - WETLANDS FUNCTIONS AND VALUES (USACE HIGHWAY METHODOLOGY; Env-Wt 311.10)**

The following table can be used to compile data on wetlands functions and values. The reference numbers indicated in the "Functions/ Values" column refer to the following functions and values:

1. Ecological Integrity (from RSA 482-A:2, XI)
2. Educational Potential (from USACE Highway Methodology: Educational/Scientific Value)
3. Fish & Aquatic Life Habitat (from USACE Highway Methodology: Fish & Shellfish Habitat)
4. Flood Storage (from USACE Highway Methodology: Floodflow Alteration)
5. Groundwater Recharge (from USACE Highway Methodology: Groundwater Recharge/Discharge)
6. Noteworthiness (from USACE Highway Methodology: Threatened or Endangered Species Habitat)
7. Nutrient Trapping/Retention & Transformation (from USACE Highway Methodology: Nutrient Removal)
8. Production Export (Nutrient) (from USACE Highway Methodology)
9. Scenic Quality (from USACE Highway Methodology: Visual Quality/Aesthetics)
10. Sediment Trapping (from USACE Highway Methodology: Sediment /Toxicant Retention)
11. Shoreline Anchoring (from USACE Highway Methodology: Sediment/Shoreline Stabilization)
12. Uniqueness/Heritage (from USACE Highway Methodology)
13. Wetland-based Recreation (from USACE Highway Methodology: Recreation)
14. Wetland-dependent Wildlife Habitat (from USACE Highway Methodology: Wildlife Habitat)

First, determine if a wetland is suitable for a particular function and value ("Suitability" column) and indicate the rationale behind your determination ("Rationale" column). Please use the rationale reference numbers listed in Appendix A of USACE *The Highway Methodology Workbook Supplement*. Second, indicate which functions and values are principal ("Principal Function/value?" column). As described in *The Highway Methodology Workbook Supplement*, "functions and values can be principal if they are an important physical component of a wetland ecosystem (function only) and/or are considered of special value to society, from a local, regional, and/or national perspective".

"Important Notes" are to include characteristics the evaluator used to determine the principal function and value of

[irm@des.nh.gov](mailto: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](http://www.des.nh.gov)



FUNCTION S/VALUES	SUITABILITY (Y/N)	RATIONALE (Reference #)	PRINCIPAL FUNCTION/VALUE?	IMPORTANT NOTES
1	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	ECOLOGICAL INTEGRITY FROM NH METHOD	<input type="checkbox"/> Yes <input type="checkbox"/> No	PERFORMED ON 6/12/23
2	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	13	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	AREA IS RESIDENTIAL ONLY ONE WETLAND TYPE
3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1, 15	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	AREA NOT ASSOCIATED WITH ANY WATER COURSE
4	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5, 6, 7, 8, 9, 11	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	THE SUBJECT AREA OF THE WETLAND IS FLAT SOIL TEXTURES ARE SANDY
5	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12, 4, 5, 15, 16	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	SUBJECT WETLAND AREA ABUTS A RESIDENTIAL AREA SOIL TEXTURES ARE SANDY
6	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	SUBJECT WETLAND AREA IS NOT A GOOD WILDLIFE HABITAT
7	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3, 4, 9	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	SUBJECT AREA IS NOT ASSOCIATED WITH ANY WATER COURSE SANDY SOIL VEGETATION CONSISTS OF PINE, HEMLOCK AND FERNS FEW NOTED RESOURCES
8	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	8	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	NO ACCESSIBLE VIEWING LOCATIONS NO UNIQUE ASTHETIC QUALITY
9	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	11	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	SUBJECT AREA HAS NO ASSOCIATED WATER COURSES SANDY SOIL TEXTURES
10	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6, 8, 9, 13	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	SUBJECT AREA IS FLAT AND LOW FLOW VOLUME SANDY SOIL TEXTURES
11	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3, 8	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	SUBJECT WETLAND AREA IS NOT UNIQUE
12	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	10	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	NO ACCESSIBILITY NO RECREATIONAL VALUE
13	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	SUBJECT AREA IS RESIDENTIAL WITH FEW FOOD SOURCES
14	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1, 3, 7, 8	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

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](http://www.des.nh.gov)

# NH METHOD FOR THE EVALUATION OF FRESHWATER WETLANDS (revised December, 2015)

Wetland Name/Code: # 1 Evaluation Date: 6/12/23 Evaluator: JOHN HAYES  
CWS # 018

## 1 – ECOLOGICAL INTEGRITY

Evaluation Questions	Observations & Notes	Answers	Score
1. Are there land uses in the wetland's watershed that could degrade water quality in the wetland?	ABUTTING MOBILE HOME PARK	a. Less than 5% of the watershed has land uses that could degrade water quality. b. 5-10% of the watershed has land uses that could degrade water quality. c. > 10% of the watershed has land uses that could degrade water quality.	10 5 1
2. Is there evidence of fill in the wetland?	NONE	a. Less than 1 % b. From 1-3 % c. More than 3 %	10 5 1
3. What percentage of the wetland has been altered by agricultural activities?	NONE	a. Less than 5 % b. From 5 to 25 % c. More than 25 %	10 5 1
4. What percentage of the wetland has been adversely impacted by logging activity within the last 10 years?	NONE	a. Less than 1% b. From 1 to 10 % c. More than 10 %	10 5 1
5. How much human activity is taking place in the wetland (e.g. ATV use, trails, cars, dumping of brush and garbage, etc.)?	2 WOODROADS IN THE SUBJECT WETLAND AREA	a. Low: Few trails in use, little or no traffic, and little or no litter. b. Moderate: Some used trails, roads, litter c. High: Many trails, roads, and/or litter	10 5 1
6. What percentage of the wetland is occupied by invasive plant species?	NONE	a. None b. 1-5% of the wetland has invasive species c. > 5% of the wetland has invasive species	10 5 1
7. Are there roads, driveways and/or railroads crossing or adjacent to the wetland or come within 500 ft. of the wetland?	MOBILE HOME PARK ABUTS THE PROPERTY BEECH HILL ROAD IS WITHIN 500'	a. No roads, driveways or railroads. within 500 ft. of, or in the wetland b. Roads, driveways, railroads are within 500 ft of the wetland c. Roads, driveways, railroads cross, or are adjacent to, the wetland	10 5 1
8. How much human activity is taking place in the upland within 500 feet of the wetland edge?	SEVERAL HOUSE LOTS AND MOBILE HOME PARK WITHIN 500'	a. Less than 5% or no activity b. Human activity evident in up to 25% of the 500 ft zone c. Human activity evident in more than 25% of the 500 ft zone	10 5 1
9. What is the percent of impervious surface within 500 feet of the wetland edge?	BEECH HILL RD AND ROAD IN MOBILE HOME PARK	a. Less than 3% impervious area within 500 ft of the wetland edge b. 3-10% impervious area within 500 ft of the wetland edge c. Greater than 10% impervious area within 500 ft of the wetland edge	10 5 1
10. Is there a human-made structure that regulates the flow of water through the wetland?	2 INLET CULVERTS FROM ABUTTING LOT AND BEECH HILL RD	a. No human made structures present upstream of, or in the wetland. b. One or more human made structures present upstream of, or in the wetland but hydrologic modification is slight c. One or more human made structures present upstream of, or in the wetland that severely block or alter surface water hydrology	10 5 1

**AVERAGE SCORE FOR ECOLOGICAL INTEGRITY**  
 (Add scores for each question and divide by 10)

7.2



Franklin Associates, LLC  
143 Raymond Rd, Unit 4  
Candia, NH 03034

LETTER OF INTENT

June 2, 2023

Town of Exeter Planning Board  
10 Front St  
Exeter, NH 03833

RE: Subdivision:  
S&T Maloney Rev. Trust  
18 Beech Hill Rd  
Exeter, NH 03833  
Tax Map 32 Lot 11

Dear Planning Board,

This letter serves as an explanation that the Maloney's wish to create a residential lot for their son, Brice, from Map 32 Lot 11. Lot 11 currently has 8.74 acres.

The proposed acreages after subdividing are:

Lot 11: 5.79  
Lot 11-1: 2.94

Proposed lot 11-1 will require State subdivision approval due it being less than the required 5 acres. Lot 11 will not require State subdivision approval.

Sincerely,

Jason Franklin



Franklin Associates, LLC  
143 Raymond Rd, Unit 4  
Candia, NH 03034

April 4, 2023

Town of Exeter Planning Board  
10 Front St  
Exeter, NH 03833

RE: Subdivision:  
S&T Maloney Rev. Trust  
18 Beech Hill Rd  
Exeter, NH 03833  
Tax Map 32 Lot 11

**WAIVER REQUESTS**

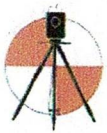
Dear Planning Board,

As part of the subdivision application, we are requesting to reduce the Town of Exeter's "Parking and Structure Buffer" as found in the Exeter Zoning Ordinance 2023, Wetlands Conservation District Article 9.1.3 "Boundaries and Setbacks" from 75' to 50'. Granting this waiver would allow construction of a residential home, driveway, septic system and well in the location as shown on the Subdivision plan and the attached septic system design. The septic system design plan meets all current State requirements without waivers.

We are also requesting to waive the requirement for two test pits due to the limited area in which the leachfield could be placed and maintain the Wastewater System Setback as found in Article 9.1.3.

Sincerely,

Jason Franklin



Franklin Associates, LLC  
143 Raymond Rd, Unit 4  
Candia, NH 03034

## PROFESSIONALS

Subject Lot:     Map 32 Lot 11  
                      18 Beech Hill Rd  
                      Exeter, NH 03833

### Wetland Scientist:

John P. Hayes, III, CWS, CSS  
7 Limestone Way  
North Hampton, NH 03820

### Surveyor:

James E. Franklin, LLS  
143 Raymond Rd, Unit 4  
Candia, NH 03034



## TEST PIT LOG

**Inspected by:** Mike Cuomo, CWS, CSS  
Jason Franklin

**Lot Owner:** S&T Maloney Family Revocable Trust  
**Location:** Map 32 Lot 11  
18 Beech Hill Rd  
Exeter, NH 03833

Test pits inspected on October 5, 2022  
**Soil Type:** 313A Deerfield Loamy Fine Sand  
**Source:** [www.websoilsurvey.com](http://www.websoilsurvey.com)

### Test Pit 1-

0-7"	10YR 2/2	Loamy Sand	Granular	Friable
7-24"	10YR 6/6	Loamy Sand	Granular	Friable
24-76"	2.5Y 6/3	Fine Sand	Massive	Loose

### Notes:

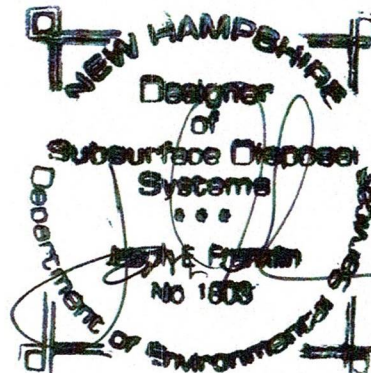
ESHWT = 24"

Obs. Water @ 66"; No Refusal

Estimated Perc Rate: 8min/1"

## LOT LOADING

Total area lot 11-1: 2.94 Acres  
Soil Type:  
313A Deerfield Fine Sandy Loam 0.44 Acres (550 GPD)  
140C Chatfield Hollis Canton 0.45 Acres (562 GPD)  
Total Loading: 1,112 GPD  
(Lot loading totals do not include area within proposed well radii or any wetland areas)





# National Flood Hazard Layer FIRMette

70°59'14"W 43°0'46"N



SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

## Legend

**SPECIAL FLOOD HAZARD AREAS**

- Without Base Flood Elevation (BFE)  
*Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

**OTHER AREAS OF FLOOD HAZARD**

- 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

**OTHER AREAS**

- NO SCREEN
- Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone*

**GENERAL STRUCTURES**

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

**OTHER FEATURES**

- Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

**MAP PANELS**

- Digital Data Available
- No Digital Data Available
- Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/23/2023 at 1:49 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is valid if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



0 250 500 1,000 1,500 2,000 Feet 1:6,000  
 Basemap: 11SCS National Map: OrthoImagery. Data refreshed October 2020



PLAN REFERENCES:  
 1. SEE LOT LINE ADJUSTMENT PLAN D-30550 BY TOM BROUILLETTE, DATED 9/26/02 ON FILE AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS  
 2. SEE SUBDIVISION PLAN D-12478 BY RSL LAYOUT AND DESIGN, DATED 9/23/81 ON FILE AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS

THE BOUNDARY INFORMATION WAS COPIED FROM PLAN REF. 1  
 AREA OF LOT 11 PRIOR TO SUBDIVISION: 8.73± ACRES

THE INTENT OF THIS PLAN IS TO SUBDIVIDE A SINGLE RESIDENTIAL LOT FROM THE PARENT TRACT 11

THIS LAND IS ZONED R-1, LOW DENSITY, RESIDENTIAL  
 MINIMUM REQUIREMENTS: LOT SIZE ~ 2 ACRES; FRONTAGE ~ 150';  
 FRONT & REAR YARD SETBACK ~ 25'; SIDE SETBACK ~ 15'  
 WETLAND SETBACKS ~ 75'; LIMITED USE WETLAND BUFFER ~ 40'  
 FOR ADDITIONAL RESTRICTIONS, REQUIREMENTS AND PERMITS, REFER TO THE EXETER ZONING ORDINANCE AND SUBDIVISION REGULATIONS.

STATE SUBDIVISION APPROVAL NUMBER:

THE WETLANDS WERE DELINEATED BY JOHN P. HAYES, III, CWS#18 IN OCTOBER 2021 & OCTOBER 2022.

THE LAND OWNER IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL WETLANDS REGULATIONS, INCLUDING ANY PERMITTING AND SETBACK REQUIREMENTS REQUIRED UNDER THESE REGULATIONS.

EOP DENOTES EDGE OF PAVEMENT  
 RBTBS DENOTES LOCATION OF REBAR TO BE SET  
 RBF DENOTES LOCATION OF REBAR FOUND  
 CBF DENOTES LOCATION OF CONCRETE BOUND FOUND  
 GBS DENOTES LOCATION OF GRANITE BOUND SET  
 CB DENOTES LOCATION OF CONCRETE BOUND PER PLAN REFERENCE 1.

UTILITY POLE  
 PROPOSED WELL  
 EDGE OF WETLANDS  
 BUILDING SETBACKS  
 STATE OF NH DES 4K AREA

PER FEMA FIRM PANEL 33015C0238F WITH AN EFFECTIVE DATE OF 1/29/21, LOT 11 IS LOCATED IN ZONE X, AN AREA OF MINIMAL FLOOD HAZARD.

**ABUTTERS**

MAP 32 LOT 6  
 PAUL SLEMP  
 5 STELLA WAY  
 EXETER, NH 03833

MAP 32 LOT 10  
 JACOB FREEDMAN  
 16 BEECH HILL RD  
 EXETER, NH 03833

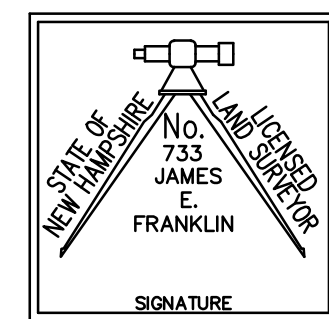
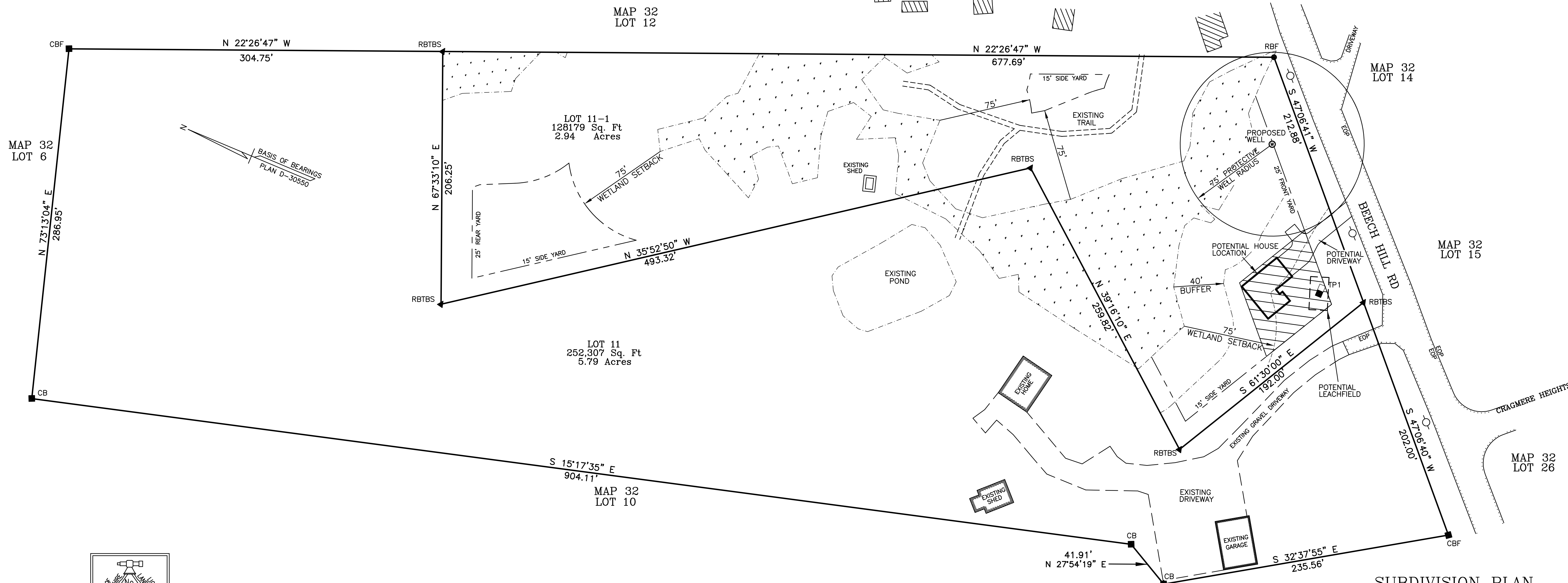
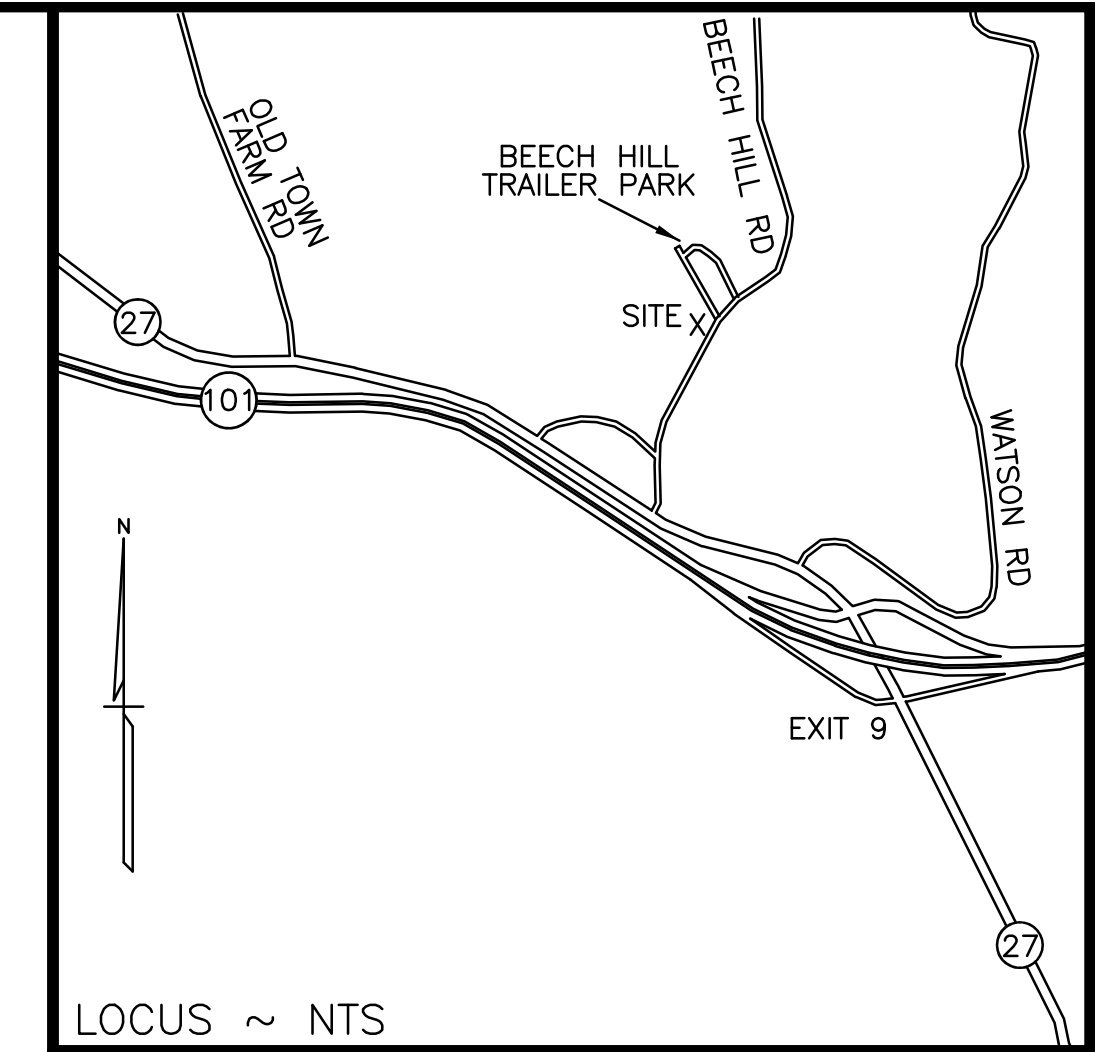
MAP 32 LOT 14  
 STEPHEN & MARY O'DONNELL  
 19 BEECH HILL RD  
 EXETER, NH 03833

MAP 32 LOT 26  
 ERIC & MARIA SHERER  
 3 CRAGMERE HEIGHTS  
 EXETER, NH 03833

MAP 32 LOT 12  
 BEECH TREE COOP, INC  
 C/O CARDINAL POINT  
 PROPERTY MGMT  
 520B PORTSMOUTH AVE  
 GREENLAND, NH 03840

MAP 32 LOT 15  
 CRAGMERE HEIGHTS  
 HOMEOWNERS ASSOC., INC  
 C/O MATTHEW BEZREH  
 14 CRAGMERE HEIGHTS  
 EXETER, NH 03833

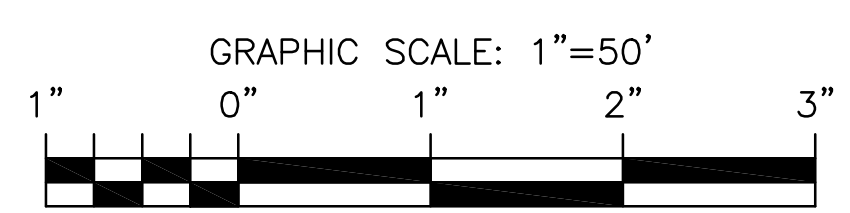
OWNER OF RECORD:  
 MAP 32 LOT 11  
 S&T MALONEY FAMILY REVOC. TRUST  
 STEVEN & TERRY MALONEY, TRUSTEES  
 18 BEECH HILL RD  
 EXETER, NH 03833  
 RCRD BK. 5603 PG. 558



FRANKLIN ASSOCIATES, LLC  
 New Hampshire ~ Massachusetts ~ Connecticut  
 Land Surveyors & Septic System Designers  
 143 RAYMOND ROAD, CANDIA, NH 03034  
 Tel. (603) 483-3096  
 www.JEFLS.com

TOWN OF EXETER, PLANNING BOARD

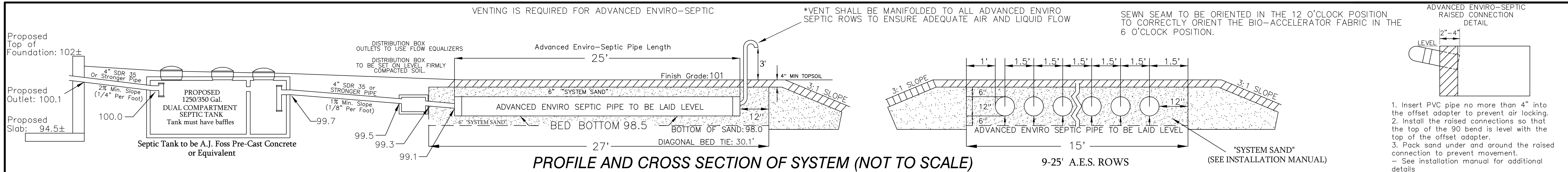
CHAIRPERSON \_\_\_\_\_ DATE: \_\_\_\_\_



TO CONVERT DISTANCES SHOWN TO METERS, MULTIPLY BY 0.3048006

SUBDIVISION PLAN  
 LAND OF  
 S&T MALONEY FAMILY  
 REVOCABLE TRUST  
 Tax Map 32 Lot 11  
 18 BEECH HILL RD  
 EXETER, NH  
 SCALE: 1"=40' JUNE 2, 2023





**TEST PIT 1**

0-7"	10YR 2/2 Loamy Sand Granular Friable
7-24"	10YR 6/6 Loamy Sand Granular Friable
24-76"	2.5Y 6/3 Fine Sand Massive Loose

ESHWT @ 24"  
Obs. Water @ 66"  
No Refusal  
Redox @ 24"

**SITE DATA:**  
SOIL TYPE: 313A DEERFIELD, LOAMY FINE SAND  
SOURCE: <http://websoilsurvey.sc.egov.usda.gov>

**TEST PIT DATA:**  
Date of test pits: October 5, 2022  
Inspected by: Michael Cuomo, CSS, CWS  
Jason Franklin

**BENCHMARKS:**  
1. NAIL SET IN ROOT 12" HEMLOCK  
ELEV: 100.2  
2. NAIL SET IN ROOT 24" WH.PINE  
ELEV: 98.7

**LEACH BED REQUIREMENTS**  
Estimated Perc Rate: 8min/1"  
PROPOSED 3 BEDROOM HOME  
TOTAL LOADING: 450 GPD

**ADVANCED ENVIRO-SEPTIC SIZING:**  
LINEAR FEET REQUIRED: 210 LF  
LINEAR FEET PROVIDED: 225 LF  
Install 9-25' Lines, Spaced 1.5' On Center  
Bed Size: 15' x 27'

**DESIGN INTENT:**  
HIGH CONTOUR: 98.5  
THE BOTTOM OF THE EFFLUENT DISPOSAL SYSTEM  
SHALL BE CONSTRUCTED AT 98.5  
ELEVATION AND IS APPROXIMATELY AT ORIGINAL  
GROUND ON THE HIGH CONTOUR OF THE  
DESIGNED EFFLUENT DISPOSAL SYSTEM.

**GENERAL NOTES:**

- Franklin Associates/ Jason Franklin assumes no liability in the preparation of this plan with respect to the installation and operation of the system unless contracted to inspect and approve the materials and procedures used to install this system.
- The contractor is responsible for verifying and observing all State and Local regulations, restrictions and setbacks prior to and during construction.
- No vehicle traffic shall pass over this system or any of its components unless otherwise noted.
- No VPD soils within 75' feet of the proposed system.
- No permanent structures shall be built upon the leachfield area.
- In the case of leachfield failure, the replacement system is to be constructed in the same place, after proper removal and disposal of any sludge or solids from beneath the failed system.
- There was no observed burial site or cemetery within 100 ft. of any component of the ISDS.
- Subdivision Approval # - Pending
- See subdivision plan by this office.
- The wetlands were identified and delineated in accordance with Env-Wq 1014.06 by John P. Hayes, CWS, CSS in October 2020 & October 2021

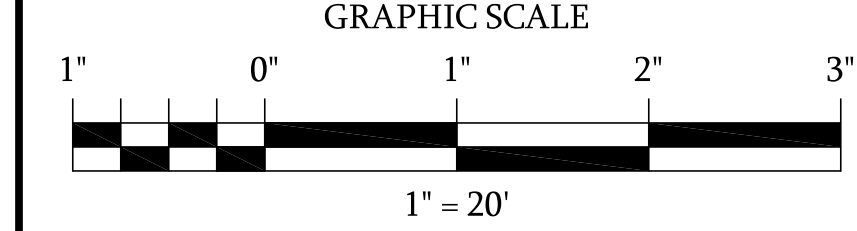
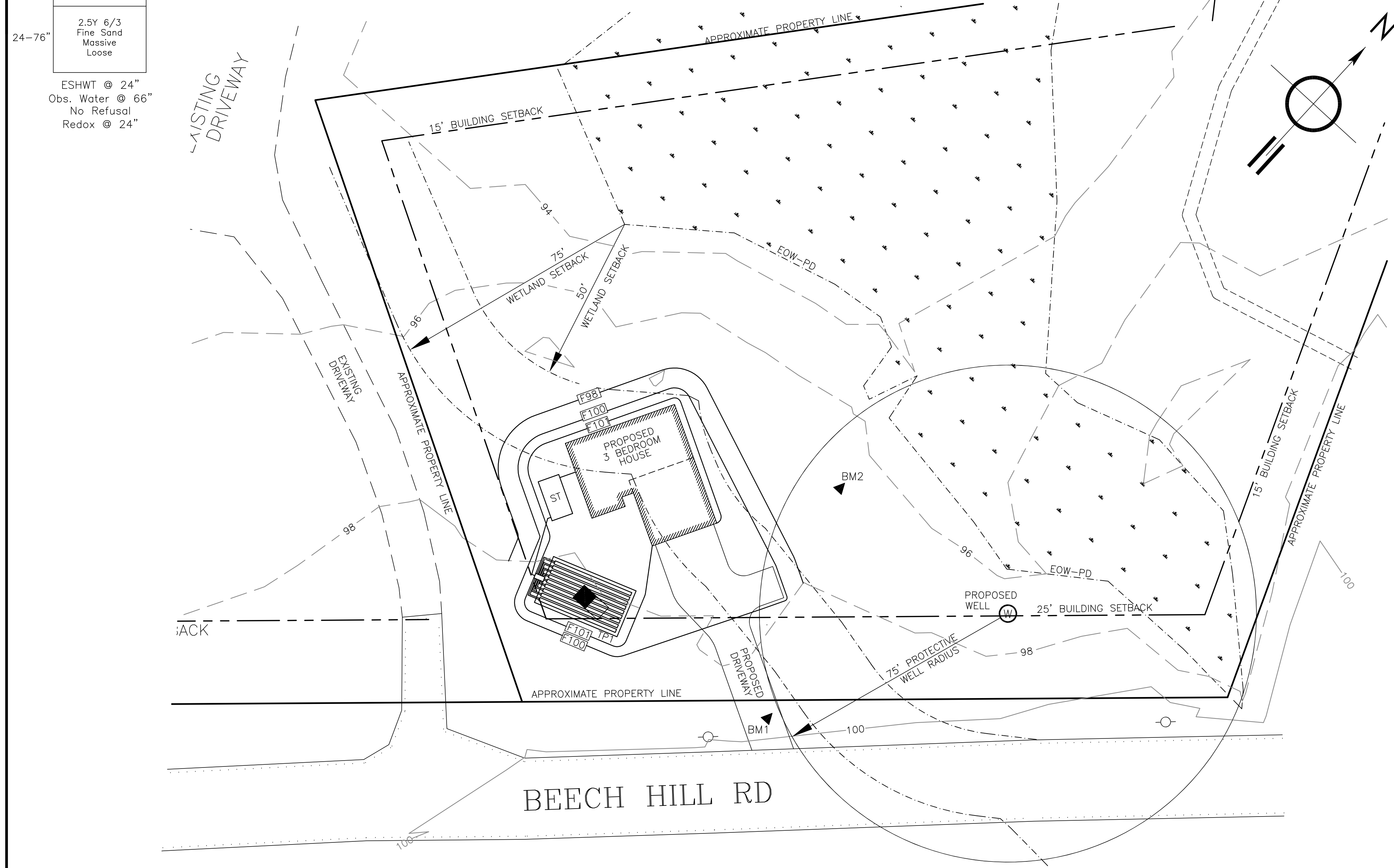
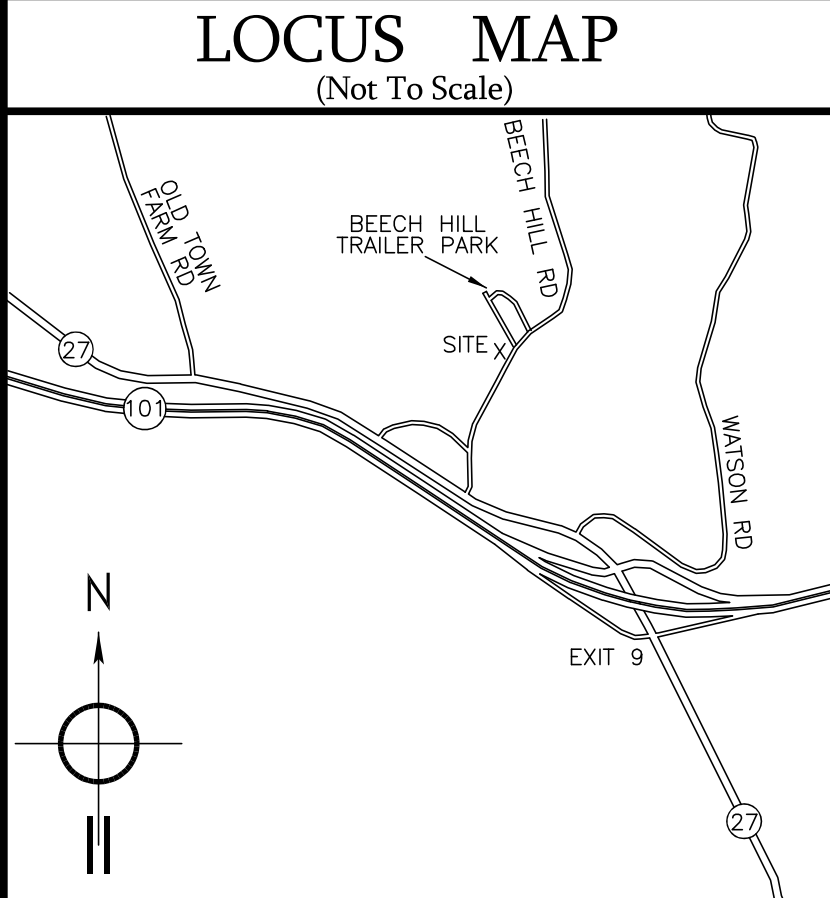
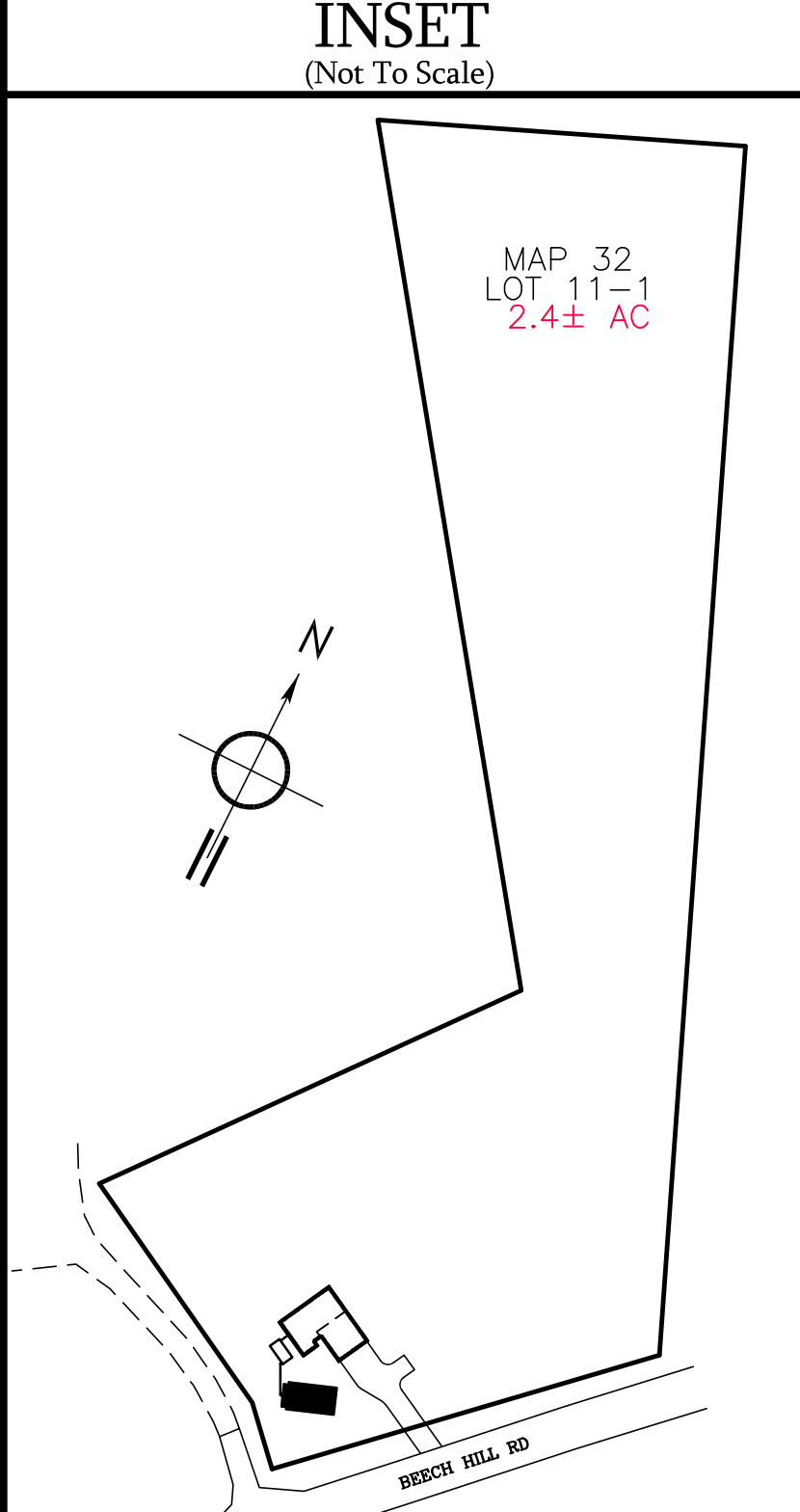
**LOT LOADING:**

313A-DEERFIELD- .44ac	550 GPD
140C-CHATFIELD-HOLLIS-CANTON- 0.45ac	562GPD
<b>TOTAL LOADING:</b>	<b>1,112 GPD</b>

(LOT LOADING TOTALS DO NOT INCLUDE AREA WITHIN WELL RADIi OR ANY WETLAND AREAS.)

**SYSTEM NOTES:**

- This system MUST be installed in strict accordance with the approved plan. ANY change MUST be approved by the designer and may require additional State and local approvals prior to construction.
- The 2019 Advanced Enviro-Septic System Design and Installation manual is part of this design. The Manual can be downloaded at <http://presbyeco.com/> or contact designer.
- Advanced Enviro-Septic System shall be installed and maintained per published Advanced Enviro-Septic System guidelines. (See manual)
- ANY discrepancies between the approved plans and/or site conditions SHALL be reported by the installer to the designer prior to construction.
- This septic system has not been designed for the use of garbage disposals or water treatment systems. The discharge of any or all into the system may result in premature failure.
- All trees, bushes, boulders, topsoil and debris must removed prior to the installation of the system
- Soil surfaces to be raked prior to placing fill throughout the leachfield area.
- 2019 Advanced Enviro-Septic "system sand" must meet specific requirements. ASTM C-33, or "concrete sand", MAY be acceptable provided that no more than 3% can pass a #200 sieve. For further specifications, please see the 2019 Advanced Enviro Septic Installation and Design Manual.
- Sand used to raise the elevation of the system, as well as the surrounding back fill material, shall meet Env-Wq 1021.03 requirements.
- The "bed bottom" for Enviro-Septic Systems is the bottom of the Enviro-Septic Pipe.
- Sewn seam must be oriented in the 12 O'Clock position. This correctly orients the Bio-Accelerator fabric in the 6 O'Clock position.
- All setback distances are measured from the outside perimeter of the Advanced Enviro-System Pipe.
- Venting is required for the Advanced Enviro System
- All connections in and out of septic tank shall be sealed with a watertight, flexible joint connector in accordance with Env-Wq 1010.08(A)
- The septic tank should be tested for water tightness and resealed if necessary prior to inspection and back filling.
- Access to the interior of the septic tank shall conform to Env-Wq 1010.05
- The septic tank should be pumped out regularly for proper operation.
- D-Box to have a minimum of 9 outlets.



This plan is NOT a boundary survey and should not be considered as such. The property lines shown are approximate only and are shown only for the purposes of this septic system design. A licensed land surveyor should be contacted if verification of the boundary lines is needed.



**LEGEND**

ST Septic Tank	Test Pit
Tree (typ.)	Benchmark
Pine Tree	Well
90 Existing Elev.	Utility Pole
F90 Finished Elev.	

**ADVANCED ENVIRO-SEPTIC SEPTIC SYSTEM PLAN**  
Tax Map 32 Lot 11-1  
18 Beech Hill Rd  
Exeter, NH,  
Prepared For  
Brice Maloney  
18 Beech Hill Rd  
Exeter, NH

**APPLICANT:** Franklin Associates, LLC  
143 Raymond Rd, Unit 4, Candia, NH 03034  
jefranklin@atlanticb.net 603-860-0016

DATE: 3-13-22

# Millennium Engineering, Inc.

---

P.O. Box 745  
(603) 778-0528

Exeter, NH 03833  
FAX (603) 772-0689

June 27, 2023

Town of Exeter  
Planning Board  
10 Front Street  
Exeter, NH 03833


Re: Application for Minor Subdivision Map 83 Lot 59, 45 Pine Street Exeter, NH.

Dear Chairman:

The request is made to divide this 3.2-acre parcel into 3 lots. The existing dwelling will reside on Lot 1 which will be 56,758 s.f. in size. Lot 2 shall contain 20,700 s.f. and Lot 3 shall contain 22,701 s.f.

This proposal also has a Conditional Use Permit application as the parcel falls within the 300' setback from wetlands contiguous to the Little River.

Respectfully,

  
Henry H. Boyd, Jr., LLS  
Millennium Engineering Inc.





# Town of Exeter Planning Board Application

RECEIVED

Conditional Use Permit: Shoreland Protection District  
In accordance with Zoning Ordinance Article: 9.3

JUN 28 2023

P/H date 8/24/23

EXETER PLANNING OFFICE

### SUBMITTAL REQUIREMENTS:

(see Conservation Commission and Planning Board meeting dates and submission deadlines)

- One (1) electronic copy of full application, including plans (color copy if available)
- Fifteen (15) copies of the Application
- Fifteen (15) 11"x17" and three (3) full sized copies of the plan which must include:

#### Existing Conditions

- Property Boundaries
- Edge of Shoreland and associated Buffer (Shoreland Protection District - SPD)
- Structures, roads/access ways, parking, drainage systems, utilities, wells and wastewater disposal systems and other site improvements

#### Proposed Conditions

- Edge of Shoreland and Shoreland Buffers and distances to the following:
    - Edge of Disturbance
    - Structures, roads/access ways, parking, drainage systems, utilities, wells and wastewater disposal systems and other site improvements
  - Name and phone number of all individuals whose professional seal appears on the plan
- If applicant and/or agent is not the owner, a letter of authorization must accompany this application
  - Supporting documents i.e. Letters from the Department of Environmental Services, Standard Dredge and Fill Application and Photos of the property
  - A Town of Exeter Assessors list of names and mailing addresses of all abutters

Required Fees:
Planning Board Fee: <b>\$50.00</b> Abutter Fee: <b>\$10.00</b> Recording Fee (if applicable): <b>\$25.00</b>

(included w/ subdivision application)

pt. 6/28/23 ✓ # 8229 \$50.00

The Planning Office must receive the completed application, plans and fees on the day indicated on the Planning Board Schedule of Deadlines and Public Hearings.

APPLICANT	Name: ELIZABETH A. HEWSON REV. TRUST
	Address: 45 PINE STREET EXETER, NH 03833
	Email Address:
	Phone:
PROPOSAL PROPOSED →	Address: NELSON DRIVE
	Tax Map # 83    Lot#    Zoning District: R-2
	Owner of Record: SAME    59-2 & 59-3
Person/Business performing work outlined in proposal N/A	Name:
	Address:
	Phone:
Professional that delineated wetlands ★	Name:
	Address:
	Phone:

NO WETLANDS ON SITE. RESOURCE LINE USED WAS TAKEN FROM PLAN FOR THOMAS SCANLON FOR WORK AT MAP 83 LOT 56.

**Town of Exeter  
Planning Board Application  
Conditional Use Permit: Shoreland Protection District**

Detailed Proposal including intent, project description, and use of property: (Use additional sheet as needed)

THERE IS NO INTENT AT THIS TIME TO BUILD THE WORK PROPOSED ON THE PLANSET (PROPOSED DWELLING, DRIVEWAY & GRADING FOR LOTS 2 & 3), THIS C. U. P. IS TO DEMONSTRATE COMPLIANCE WITH THE REGULATIONS WITHIN THE SHORELAND PROTECTION DISTRICT.

Shoreland Protection District Impact (in square footage):

Water Body		LOT 2	LOT 3
Temporary Impact	<input checked="" type="checkbox"/> 300 Foot SPD	3,237	5,390
	<input checked="" type="checkbox"/> 150 foot SPD	837	3,145
	<input checked="" type="checkbox"/> SPD Building Setback	N/A	1,136
	<input checked="" type="checkbox"/> 75 Vegetative Buffer	N/A	406
Permanent Impact	<input checked="" type="checkbox"/> 300 Foot SPD	3,596	4,275
	<input checked="" type="checkbox"/> 150 foot SPD	818	2,100
	<input type="checkbox"/> SPD Building Setback	N/A	789
	<input type="checkbox"/> 75 Vegetative Buffer	N/A	349
Impervious Lot Coverage	SF of Lot within District	22,701	20,700
	SF of Impervious within District	3,596	4,275
	% of Impervious within District	15.8	20.7

List any variances/special exceptions granted by Zoning Board of Adjustment including dates:

Describe how your proposal meets the conditions of Article 9.3.4.G.2 of the Zoning Ordinance (attached for reference): a. THE ROOFTOP AREAS AND DRIVEWAY RUNOFF WILL BE DIRECTED TO INFILTRATION TRENCHES. b. PROPOSAL WILL NOT DISCHARGE WASTEWATER OR TOXIC WASTE. c. PROPOSAL IS SEPARATED FROM RIVER BY A ROADWAY AND IS CURRENTLY LAWN AREA. d. COMPLIES. e. SEE a. ABOVE,



ABUTTERS: PLEASE LIST ALL PERSONS WHOSE PROPERTY IS LOCATED IN NEW HAMPSHIRE AND ADJOINS OR IS DIRECTLY ACROSS THE STREET OR STREAM FROM THE LAND UNDER CONSIDERATION BY THE BOARD. THIS LIST SHALL BE COMPILED FROM THE EXETER TAX ASSESSOR'S RECORDS.

TAX MAP 83-8 & 83-1  
NAME PHILLIPS EXETER ACADEMY  
ADDRESS 20 MAIN STREET  
EXETER, NH 03833

TAX MAP 83-82  
NAME LISA & KEVIN PARMALEE  
ADDRESS 83 COURT STREET  
EXETER, NH 03833

TAX MAP 83-9  
NAME JENNIS FRIZZELL  
ADDRESS 84 COURT STREET  
EXETER, NH 03833

TAX MAP \_\_\_\_\_  
NAME Millennium Engineering  
ADDRESS 13 Hampton Road POB 745  
Exeter NH. 03833

TAX MAP 83-10  
NAME CHRISTOPHER & HERYL DION TRUST  
ADDRESS 86 COURT STREET  
EXETER, NH 03833

TAX MAP \_\_\_\_\_  
NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_

TAX MAP 83-14  
NAME 92 COURT STREET REALTY TRUST  
ADDRESS 92 COURT STREET  
EXETER, NH 03833

TAX MAP \_\_\_\_\_  
NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_

TAX MAP 83-15  
NAME MARK DIFABIO  
ADDRESS 94 COURT STREET  
EXETER, NH 03833

TAX MAP \_\_\_\_\_  
NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_

TAX MAP 83-55  
NAME NORTH COURT STREET COND  
ADDRESS 95 COURT STREET  
EXETER, NH 03833

TAX MAP \_\_\_\_\_  
NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_

TAX MAP 83-56  
NAME THOMAS SCANLON TRUST  
ADDRESS 87 SOUTH ROAD  
NORTH HAMPTON, NH 03862

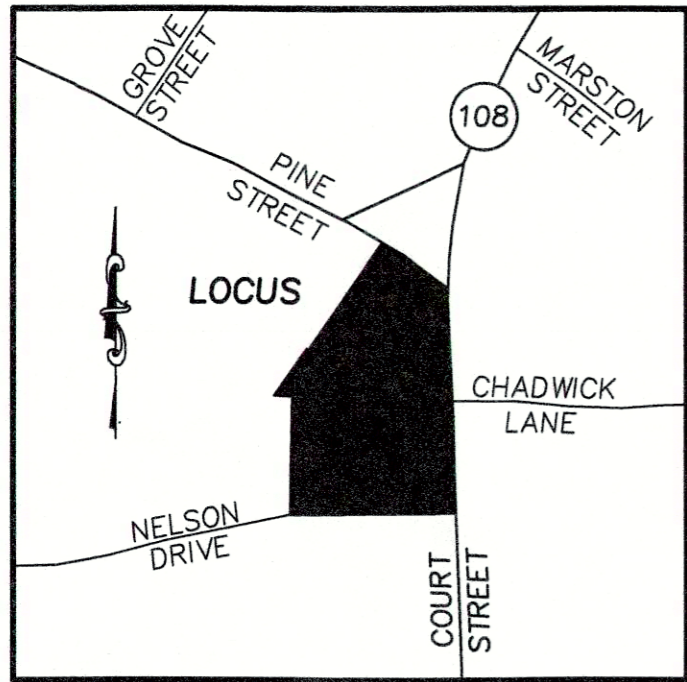
TAX MAP \_\_\_\_\_  
NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_

TAX MAP 83-60  
NAME CHRIST CHURCH OF EXETER  
ADDRESS 43 PINE STREET  
EXETER, NH 03833

TAX MAP \_\_\_\_\_  
NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_

**Please attach additional sheets if needed**





**PLAN REFERENCES**

"BOUNDARY SURVEY - MACDONALD PROPERTY  
 PINE STREET & COURT STREET EXETER, NH"  
 SCALE: 1"=40' DATE: FEB. 29, 2001  
 BY: GERRIT CONSULTING  
 NOT RECORDED

"PLAN OF LAND FOR CHRIST EPISCOPAL CHURCH  
 EXETER, NH"  
 SCALE: 1"=40' DATE: DEC. 1963  
 BY: JOHN W. DURGIN CIVIL ENGINEERS  
 #953

**PLAN NOTE**

THE PURPOSE OF THIS PLAN IS TO SHOW  
 THE DIVISION OF THIS PARCEL INTO 3 LOTS  
 FOR RESIDENTIAL PURPOSES.

TOWN OF EXETER PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

**ZONING DISTRICT**

**R-2 RESIDENTIAL**

**MINIMUM REQUIREMENTS**

AREA	15,000 S.F.
AREA (TWO FAMILY)	24,000 S.F.
LOT WIDTH	100'
LOT DEPTH	100'
<b>BUILDING SETBACKS</b>	
FRONT	25'
SIDE	15'
REAR	25'
<b>BUILDING COVERAGE</b>	
MAXIMUM	25%
MINIMUM	40%

83 59-2      83 59-3  
**LOT 2      LOT 3**  
 20,700 S.F.    22,701 S.F.  
 0.48 ACRES    0.52 ACRES

**RECORD OWNERS**

ELIZABETH A. HEWSON REV.  
 TRUST OF 2002  
 ELIZABETH A. HEWSON,  
 TRUSTEE  
 45 PINE STREET  
 EXETER, NH 03833  
 BK. 6248 PG. 0565  
 SEE ALSO  
 BK. 5967 PG. 1511

83 8  
 N/F  
 PHILLIPS EXETER ACADEMY  
 20 MAIN STREET  
 EXETER, NH 03833  
 BK. 5867 PG. 1407

83 9  
 N/F  
 JENISS FRIZZELL  
 84 COURT STREET  
 EXETER, NH 03833  
 BK. 5468 PG. 2192

83 10  
 N/F  
 CHRISTOPHER & SHERYL K. DION REV. TRUST  
 CHRISTOPHER & SHERYL DION, TRUSTEES  
 86 COURT STREET  
 EXETER, NH 03833  
 BK. 6125 PG. 2908

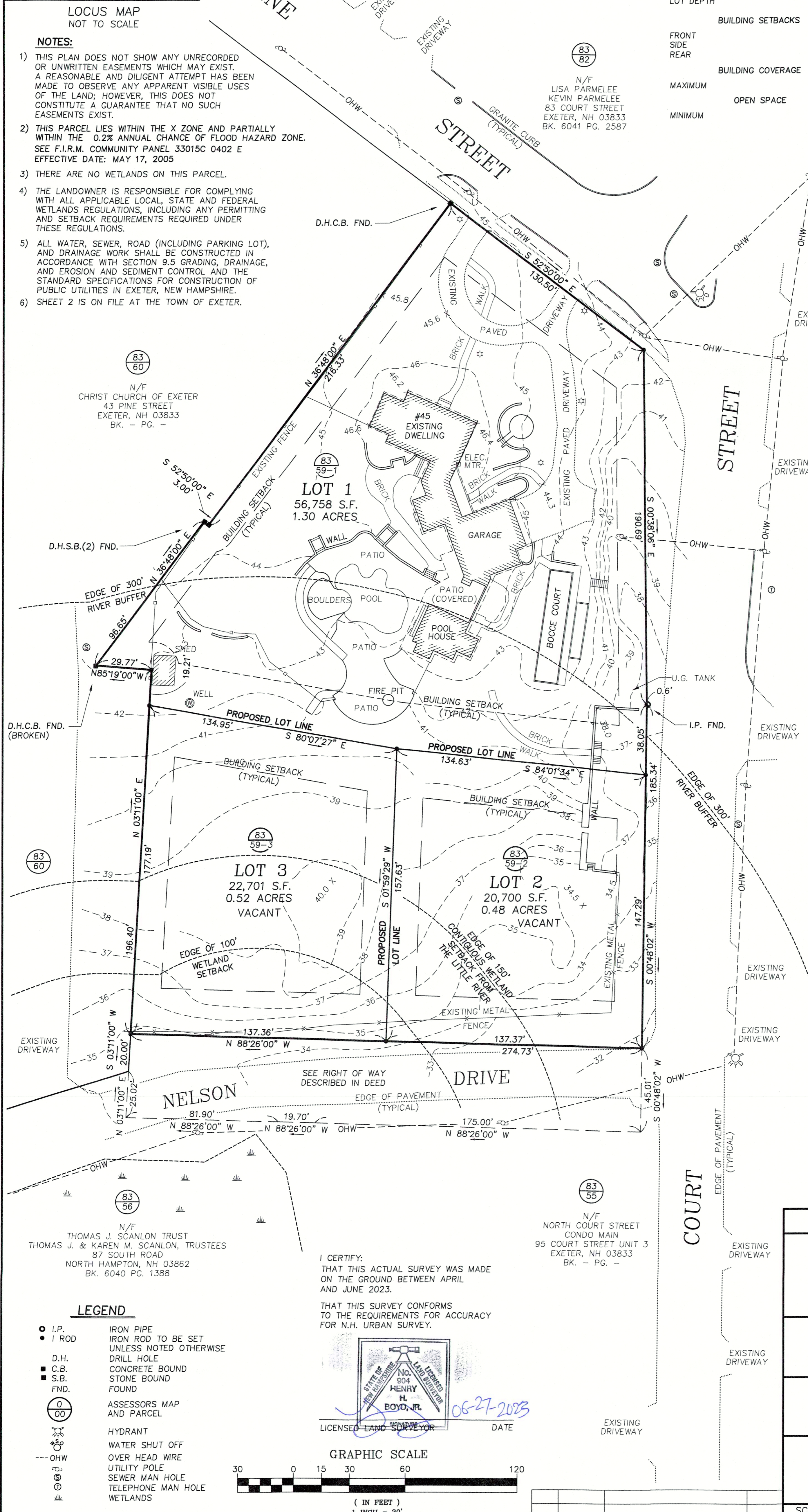
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 N/F  
 PHILLIPS EXETER ACADEMY  
 20 MAIN STREET  
 EXETER, NH 03833  
 BK. 0612 PG. 0240

83 14  
 N/F  
 92 COURT STREET REALTY TRUST  
 MAGGIE D. & KYLE J., TRUSTEES  
 92 COURT STREET  
 EXETER, NH 03833  
 BK. 6168 PG. 2889

83 15  
 N/F  
 MARK J. DIFABIO  
 KATHY A. BUSCHER DIFABIO  
 94 COURT STREET  
 EXETER, NH 03833  
 BK. 4829 PG. 0881

**NOTES:**

- THIS PLAN DOES NOT SHOW ANY UNRECORDED OR UNWRITTEN EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT VISIBLE USES OF THE LAND; HOWEVER, THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.
- THIS PARCEL LIES WITHIN THE X ZONE AND PARTIALLY WITHIN THE 0.2% ANNUAL CHANGE OF FLOOD HAZARD ZONE. SEE F.I.R.M. COMMUNITY PANEL 33015C 0402 E EFFECTIVE DATE: MAY 17, 2005
- THERE ARE NO WETLANDS ON THIS PARCEL.
- THE LANDOWNER IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL WETLANDS REGULATIONS, INCLUDING ANY PERMITTING AND SETBACK REQUIREMENTS REQUIRED UNDER THESE REGULATIONS.
- ALL WATER, SEWER, ROAD (INCLUDING PARKING LOT), AND DRAINAGE WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 9.5 GRADING, DRAINAGE, AND EROSION AND SEDIMENT CONTROL AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION OF PUBLIC UTILITIES IN EXETER, NEW HAMPSHIRE.
- SHEET 2 IS ON FILE AT THE TOWN OF EXETER.



83 60  
 N/F  
 CHRIST CHURCH OF EXETER  
 43 PINE STREET  
 EXETER, NH 03833  
 BK. - PG. -

83 82  
 N/F  
 LISA PARMELEE  
 KEVIN PARMELEE  
 83 COURT STREET  
 EXETER, NH 03833  
 BK. 6041 PG. 2587

953

83 60

83 59-3

83 59-2

83 14

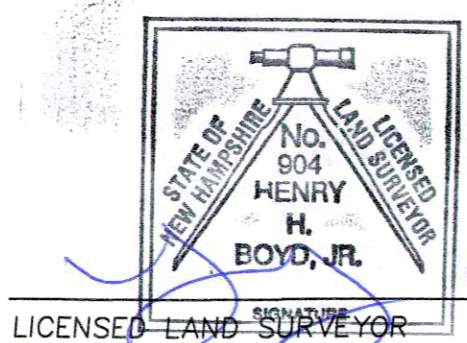
83 15

83 56  
 N/F  
 THOMAS J. SCANLON TRUST  
 THOMAS J. & KAREN M. SCANLON, TRUSTEES  
 87 SOUTH ROAD  
 NORTH HAMPTON, NH 03862  
 BK. 6040 PG. 1388

83 55  
 N/F  
 NORTH COURT STREET  
 CONDO MAIN  
 95 COURT STREET UNIT 3  
 EXETER, NH 03833  
 BK. - PG. -

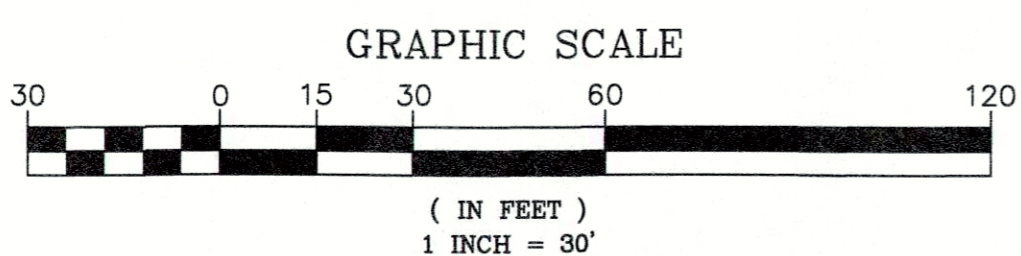
I CERTIFY:  
 THAT THIS ACTUAL SURVEY WAS MADE  
 ON THE GROUND BETWEEN APRIL  
 AND JUNE 2023.

THAT THIS SURVEY CONFORMS  
 TO THE REQUIREMENTS FOR ACCURACY  
 FOR N.H. URBAN SURVEY.



**LEGEND**

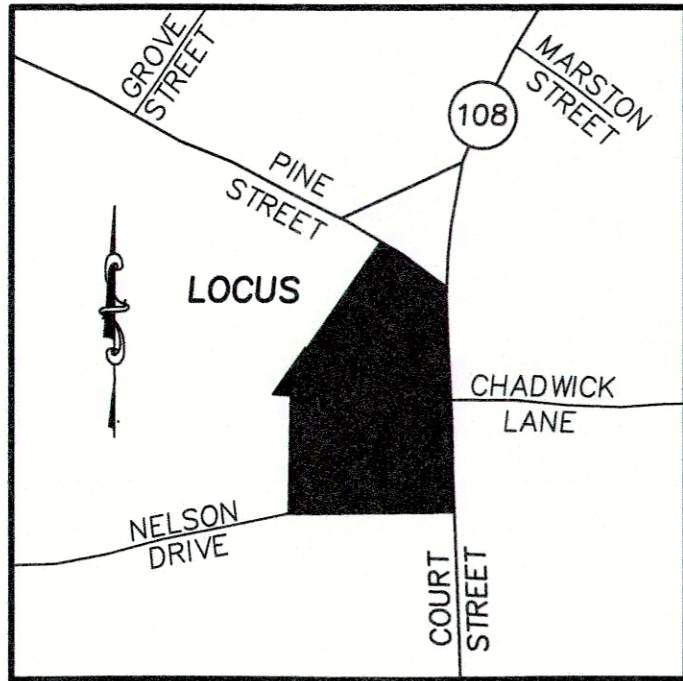
- I.P. IRON PIPE
- I ROD IRON ROD TO BE SET UNLESS NOTED OTHERWISE
- D.H. DRILL HOLE
- C.B. CONCRETE BOUND
- S.B. STONE BOUND
- FND. FOUND
- ASSESSORS MAP AND PARCEL
- HYDRANT
- WATER SHUT OFF
- OHW OVER HEAD WIRE
- UTILITY POLE
- SEWER MAN HOLE
- TELEPHONE MAN HOLE
- WETLANDS



EXISTING CONDITIONS SHEET		
<b>PLAT OF LAND</b>		
IN EXETER, NH		
SHOWING <b>PROPOSED LOT DEVELOPMENT AT LOTS 2 &amp; 3 NELSON DRIVE</b> (ASSESSORS MAP 83 LOTS 59-2 & 59-3)		
RECORD OWNERS <b>ELIZABETH A. HEWSON REVOCABLE TRUST JAMES T. HEWSON REVOCABLE TRUST</b> 45 PINE STREET EXETER, NH 03833		
<b>MILLENNIUM ENGINEERING INC.</b> ENGINEERS AND LAND SURVEYORS P.O. BOX 745 13 HAMPTON ROAD EXETER, NH 03833 PHONE: (603) 778-0528 FAX: (603) 772-0689		
SCALE: 1"=30'	CALC. BY: R.S.G.	PROJECT: E233045
DATE: JUNE 21, 2023	CHKD. BY: H.H.B.	SHEET 1 OF 2

NO.	DATE	DESCRIPTION	BY





**NOTES:**

- THIS PLAN DOES NOT SHOW ANY UNRECORDED OR UNWRITTEN EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT VISIBLE USES OF THE LAND; HOWEVER, THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.
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- THE LANDOWNER IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL WETLANDS REGULATIONS, INCLUDING ANY PERMITTING AND SETBACK REQUIREMENTS REQUIRED UNDER THESE REGULATIONS.
- ALL WATER, SEWER, ROAD (INCLUDING PARKING LOT), AND DRAINAGE WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 9.5 GRADING, DRAINAGE, AND EROSION AND SEDIMENT CONTROL AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION OF PUBLIC UTILITIES IN EXETER, NEW HAMPSHIRE.
- ELEVATIONS SHOWN ARE BASED ON N.A.V.D.88.

TOWN OF EXETER PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

83 59-2      83 59-3  
**LOT 2      LOT 3**  
 20,700 S.F.      22,701 S.F.  
 0.48 ACRES      0.52 ACRES

**RECORD OWNERS**

ELIZABETH A. HEWSON REV. TRUST OF 2002  
 ELIZABETH A. HEWSON, TRUSTEE  
 45 PINE STREET  
 EXETER, NH 03833  
 BK. 6248 PG. 0565  
 SEE ALSO  
 BK. 5967 PG. 1511

**LOT 2**

20,700 S.F.  
 PROPOSED LOT COVERAGE  
 3,516 S.F. = 17.0% OF LOT AREA  
 OPEN SPACE = 83.0% OF LOT AREA

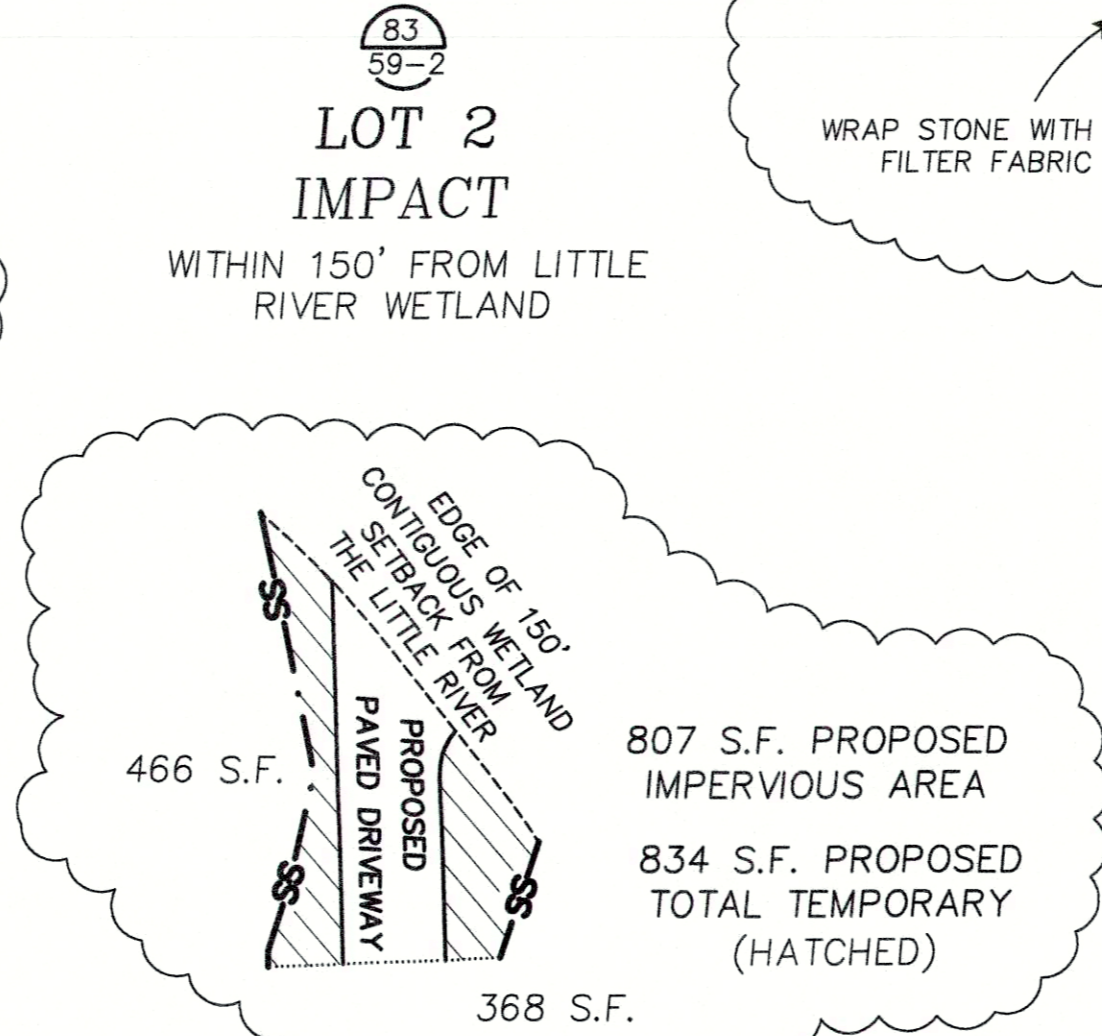
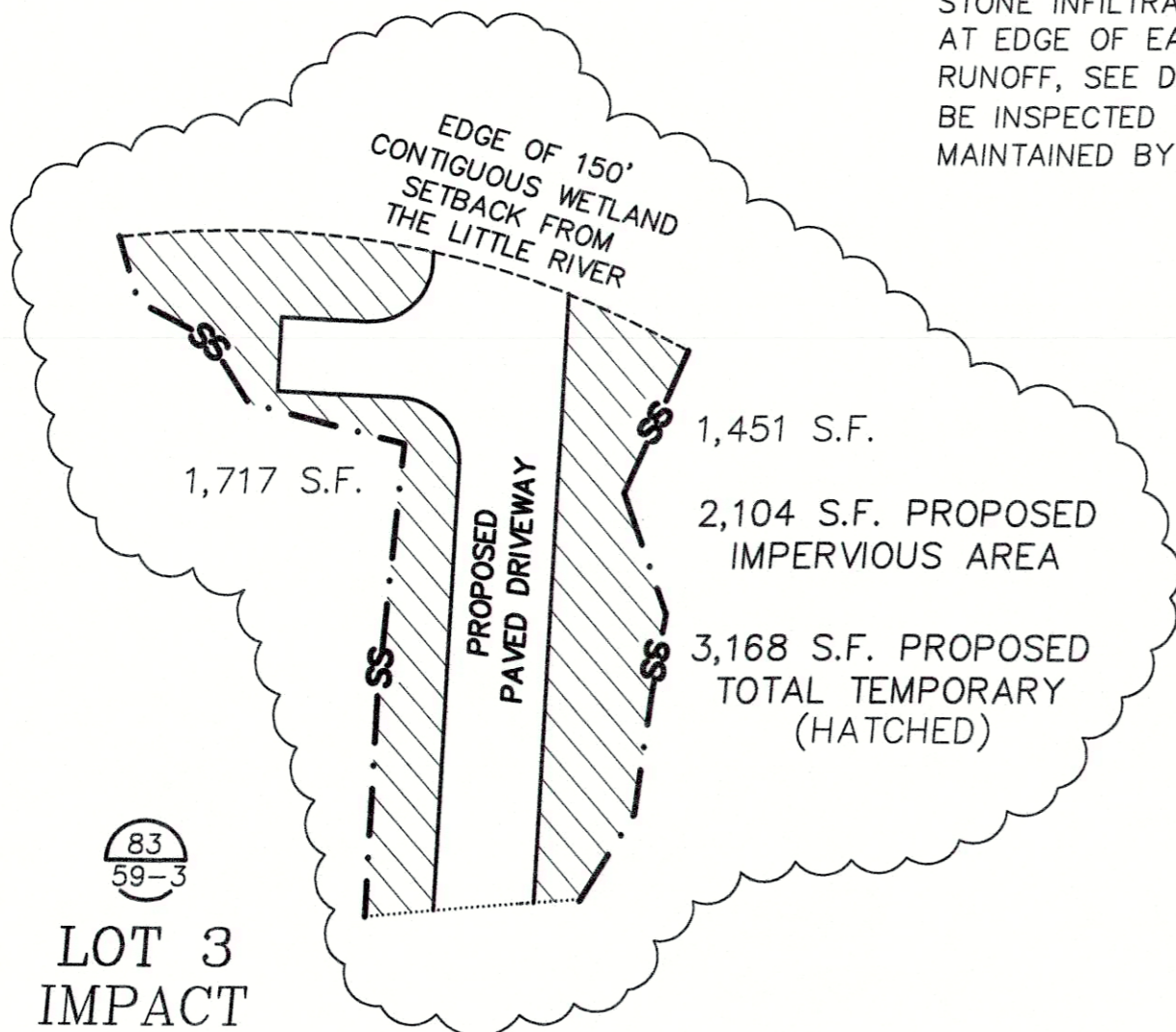
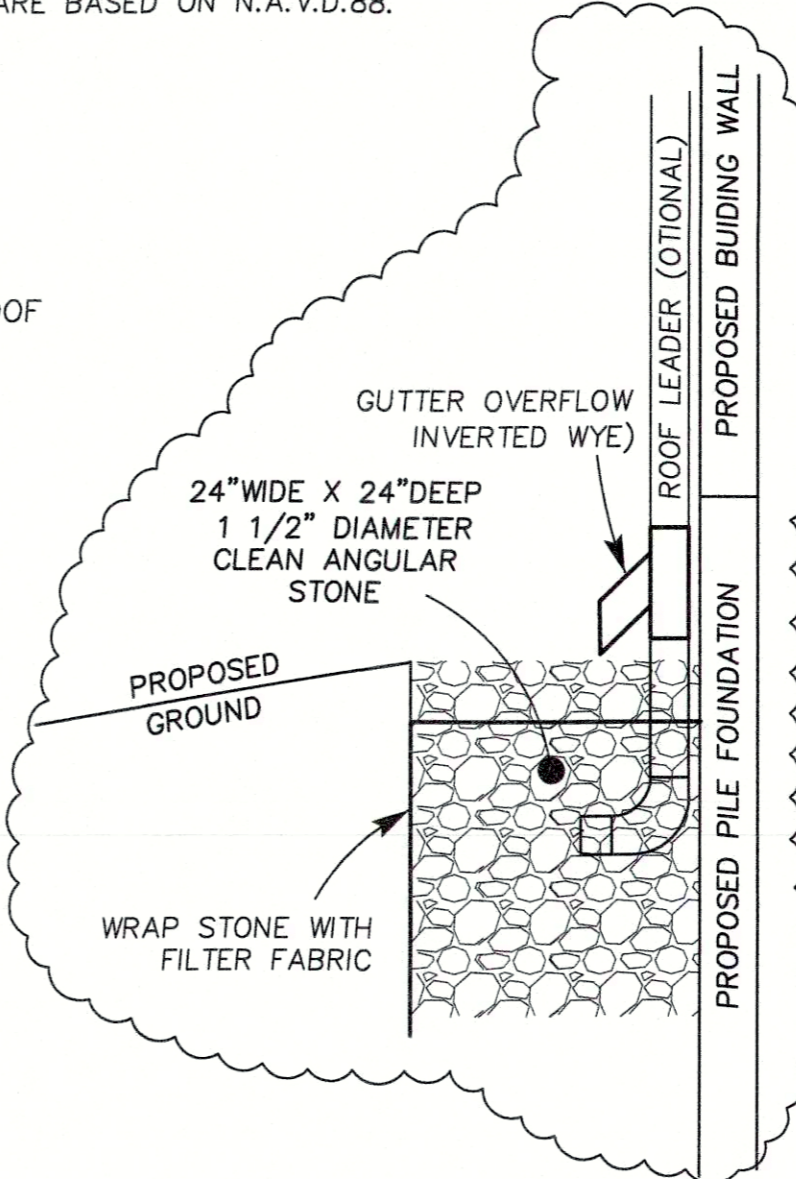
**LOT 3**

22,701 S.F.  
 PROPOSED LOT COVERAGE  
 4,109 S.F. = 18.1% OF LOT AREA  
 OPEN SPACE = 89.1% OF LOT AREA

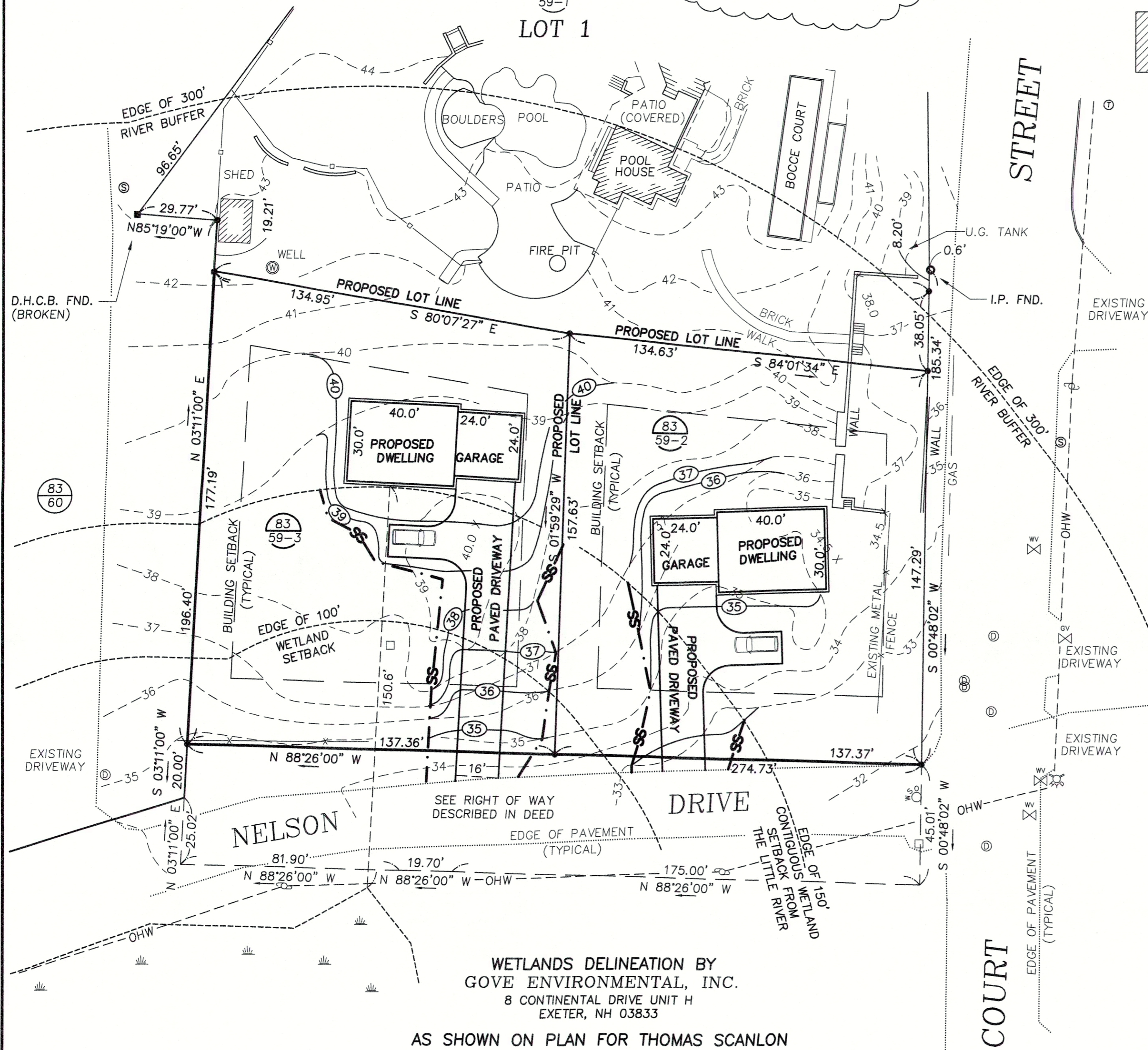
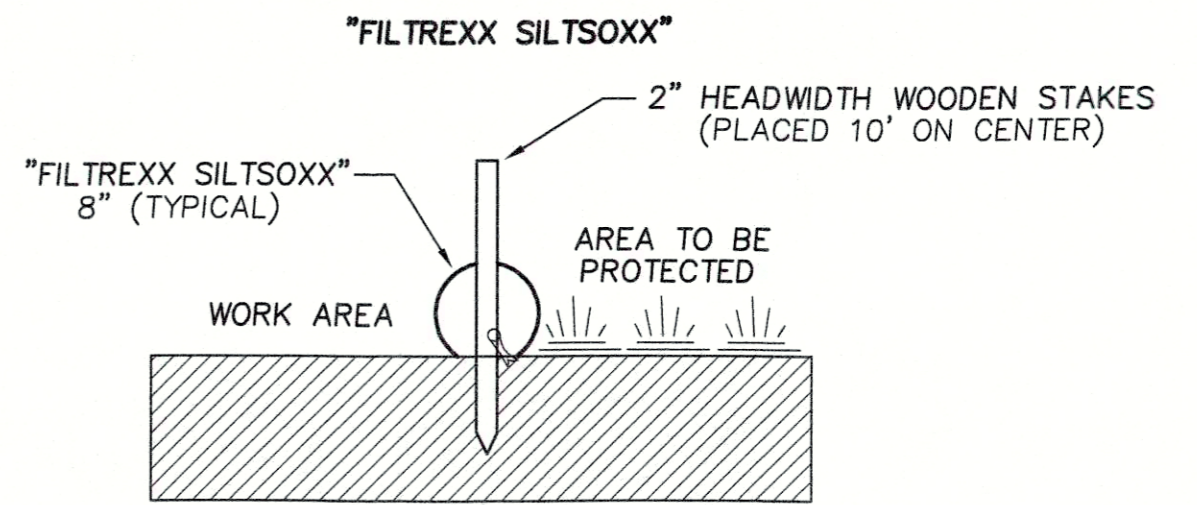
**PROPOSED DWELLING/  
 PROPOSED DRIVEWAY  
 INFILTRATION NOTE**

STONE INFILTRATION TRENCHES ARE TO BE PLACED AS APPROPRIATE AT EDGE OF FOUNDATION TO RECEIVE ROOF RUNOFF, SEE DETAIL AT RIGHT. THESE TRENCHES ARE TO BE INSPECTED TWICE PER YEAR (SPRING & FALL) AND MAINTAINED BY REMOVING ANY DEBRIS AND VACUUMING.

STONE INFILTRATION TRENCHES ARE ALSO TO BE PLACED AT EDGE OF EACH DRIVEWAY (BOTH SIDES) TO RECEIVE RUNOFF, SEE DETAIL AT RIGHT. THESE TRENCHES ARE TO BE INSPECTED TWICE PER YEAR (SPRING & FALL) AND MAINTAINED BY REMOVING ANY DEBRIS AND VACUUMING.



**EROSION CONTROL**

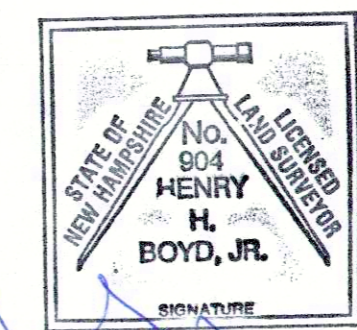


**ZONING DISTRICT**

**R-2 RESIDENTIAL**

MINIMUM REQUIREMENTS	
AREA	15,000 S.F.
AREA (TWO FAMILY)	24,000 S.F.
LOT WIDTH	100'
LOT DEPTH	100'
<b>BUILDING SETBACKS</b>	
FRONT	25'
SIDE	15'
REAR	25'
<b>BUILDING COVERAGE</b>	
MAXIMUM	25%
<b>OPEN SPACE</b>	
MINIMUM	40%

I CERTIFY:  
 THAT THIS ACTUAL SURVEY WAS MADE ON THE GROUND BETWEEN APRIL AND JUNE 2023.  
 THAT THIS SURVEY CONFORMS TO THE REQUIREMENTS FOR ACCURACY FOR N.H. URBAN SURVEY.



6-27-2023  
 LICENSED LAND SURVEYOR      DATE

WETLANDS DELINEATION BY  
 GOVE ENVIRONMENTAL, INC.  
 8 CONTINENTAL DRIVE UNIT H  
 EXETER, NH 03833

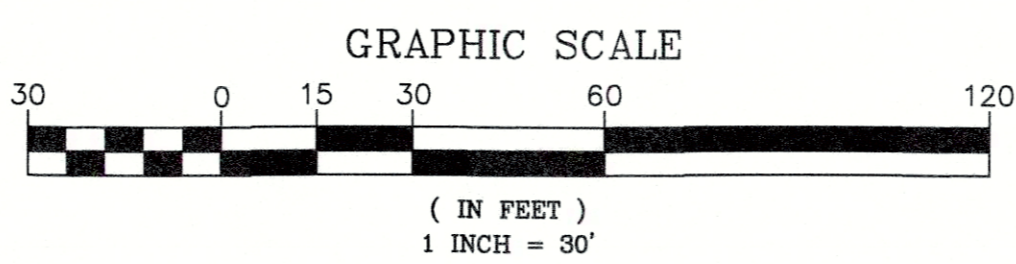
AS SHOWN ON PLAN FOR THOMAS SCANLON

**UTILITIES NOTE**

THE LOCATION OF UTILITIES SHOWN HEREON IS BASED ON INFORMATION PROVIDED BY OTHERS, AND WHERE POSSIBLE FROM MEASUREMENTS TAKEN IN THE FIELD, AND ARE FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR SHALL CONTACT "DIGSAFE" AT 1-888-344-7233 AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST MARKING OF UNDERGROUND UTILITIES. MILLENNIUM ENGINEERING, INC., ASSUMES NO RESPONSIBILITY FOR ANY DAMAGES INCURRED DIRECTLY OR INDIRECTLY RESULTING THEREFROM.

**LEGEND**

- I.P. IRON PIPE
- I ROD IRON ROD TO BE SET UNLESS NOTED OTHERWISE
- D.H. DRILL HOLE
- C.B. CONCRETE BOUND
- S.B. STONE BOUND
- FND. FOUND
- ⊕ HYDRANT
- ⊕ WATER SHUT OFF
- OHW OVER HEAD WIRE
- UTILITY POLE
- SEWER MAN HOLE
- TELEPHONE MAN HOLE
- SS PROPOSED SILT SOXX/IMPACT



NO.	DATE	DESCRIPTION	BY

**PROPOSED CONDITIONS SHEET**

**PLAT OF LAND**  
 IN  
**EXETER, NH**

SHOWING  
**PROPOSED LOT DEVELOPMENT**  
**AT LOTS 2 & 3 NELSON DRIVE**  
 (ASSESSORS MAP 83 LOTS 59-2 & 59-3)

RECORD OWNERS  
**ELIZABETH A. HEWSON REVOCABLE TRUST**  
**JAMES T. HEWSON REVOCABLE TRUST**  
 45 PINE STREET EXETER, NH 03833

**MILLENNIUM ENGINEERING INC.**  
 ENGINEERS AND LAND SURVEYORS  
 P.O. BOX 745 13 HAMPTON ROAD EXETER, NH 03833  
 PHONE: (603) 778-0528 FAX: (603) 772-0689

SCALE: 1"=30'	CALC. BY: R.S.G.	PROJECT: E233045
DATE: JUNE 21, 2023	CHKD. BY: H.H.B.	SHEET 2 OF 2





Civil Engineers  
 Structural Engineers  
 Traffic Engineers  
 Land Surveyors  
 Landscape Architects  
 Scientists

8 Commerce



July 28, 2023

Kristen Murphy  
 Conservation and Sustainability Planner  
 Town of Exeter  
 10 Front Street  
 Exeter, NH 03833  
 KMurphy@ExeterNH.gov

**Re: C3I – 8 Commerce Way – August 8, 2023: Conservation Commission Meeting - CUP Application  
 TFMoran Project: 47201.03**

Dear Kristen:

On behalf of our client C-Marine Dynamics Realty, LLC, we respectfully request a meeting with the Conservation Commission on August 8, 2023. Included in this letter are the following materials:

- One Copy – Letter of Authorization;
- Fourteen copies – Enhanced Biofiltration with Internal Storage Reservoir BMP Performance Curve;
- Fourteen copies – Conditional Use Permit Application;
- Fourteen copies – 11” x 17” copy of the Site Development Plans Prepared for C-Marine Dynamics Realty, LLC, 8 Commerce Way, Exeter, NH, County of Rockingham, Owned by C-Marines Dynamic Realty, LLC, dated April 14, 2023;
- One copy – 22” x 34” copy of the Site Development Plans Prepared for C-Marine Dynamics Realty, LLC, 8 Commerce Way, Exeter, NH, County of Rockingham, Owned by C-Marines Dynamic Realty, LLC, dated April 14, 2023.

Our project consists of an expansion of the existing facility, including additional parking and stormwater improvements, at 8 Commerce Way, Exeter, NH (Tax Map 48. Lot 3). This is a 6.26 acre parcel in the Industrial (I) Zoning District, Wetland Conservation District and Exeter Shoreland Protection District. The majority of this property abuts existing wetland areas. There are no proposed wetland impacts as part of this project, however there are some impacts proposed to the wetland and shoreland buffer. Except for a small portion of the parking area in the wetland and shoreland buffers, the majority of the proposed buffer impacts are for stormwater Best Management Practices (BMP’s) to treat and attenuate stormwater flows.

To provide high nitrogen treatment, bioretention areas with internal storage reservoirs (IRS) are being proposed. These systems provided a water quality volume (WQV), the total nitrogen (TN) removal efficiency (RE) is greater than the required 75%. The total phosphorous (TP) removal efficiency is greater than 75% and the total suspended solids (TSS) is in the high 98% removal efficiency. We have attached the BMP performance curve with the removal efficiencies for this system. These treatment efficiencies all meet or exceed the Town standards.

TFMoran, Inc.  
 48 Constitution Drive, Bedford, NH 03110  
 T(603) 472-4488      www.tfmoran.com



TFMoran, Inc. Seacoast Division  
 170 Commerce Way–Suite 102, Portsmouth, NH 03801  
 T(603) 431-2222



Kristen Murphy  
July 27, 2023

We would like to schedule a site walk with you. Tuesday, August 1 at 4:00PM would work well with our schedules. If this does not work out for you, we are also free to meet on Wednesday or Thursday around the same time. Please reach out to us to coordinate a time that fits everyone's schedule.

We look forward to discussing this project with the Conservation Commission on August 8, 1012.

Sincerely,  
**TFMoran, Inc.**

Jack McTigue, PE, CPESC  
Project Manager

Project Manager/Typist

cc: Charles Wagner, Joe Ricci




Civil Engineers  
 Structural Engineers  
 Traffic Engineers  
 Land Surveyors  
 Landscape Architects  
 Scientists



Authorization

On behalf of C-Marine Dynamics Realty, LLC., owner of land located at 8 Commerce Way, Exeter, New Hampshire, identified as Tax Map 48, Lot 3, this is to confirm authorization for TFMoran, Inc. (TFM) to sign applications as the applicant and represent the owner as an authorized representative. TFM is an authorized representative to join in the application of C-Marine Dynamics Realty, LLC. before the Town of Exeter Technical Review Committee, Town of Exeter Planning Board, and/or any other local, state or federal government or entity.

C-Marine Dynamics Realty, LLC.  
 Exeter, Tax Map 48, Lot 3

Signature:   
 Printed Name: Charles J. Wiggner  
 Date: 4/7/23

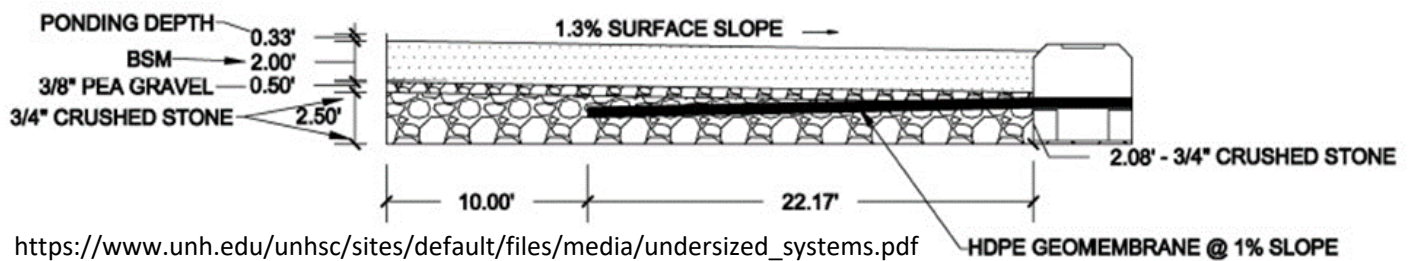
TFMoran, Inc.  
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 T(603) 472-4488      www.tfmoran.com



TFMoran, Inc. Seacoast Division  
 170 Commerce Way--Suite 102, Portsmouth, NH 03801  
 T(603) 431-2222

## Enhanced Biofiltration with Internal Storage Reservoir (ISR) Factsheet

**Enhanced Biofiltration** is a practice that provides temporary storage of runoff for filtering through an engineered soil media, augmented for enhanced phosphorus removal, followed by detention and denitrification in a subsurface internal storage reservoir (ISR) comprised of gravel. Runoff flows are routed through filter media and directed to the underlying ISR via an impermeable membrane for temporary storage. An elevated outlet control at the top of the ISR is designed to provide a retention time of at least 24 hours in the system to allow for sufficient time for denitrification and nitrogen reduction to occur prior to discharge. The design storage capacity for using the cumulative performance curves is comprised of void spaces in the filter media, temporary ponding at the surface of the practice and the void spaces in the gravel ISR. The cumulative phosphorus load reduction curve for this control is intended to be used for systems in which the filter media has been augmented with materials designed and/or known to be effective at capturing phosphorus. If the filter media is not augmented to enhance phosphorus capture, then the phosphorus performance curve for the Bio-Filter should be used for estimating phosphorus load reductions. The University of New Hampshire Stormwater Center (UNHSC) developed the design of this control practice and a design templated can be found at UNHSC's website.



### Pollutant Export Rate by Land Use<sup>1</sup>

Source Category by Land Use	Land Surface Cover	P Load Export Rate <sup>1</sup> (lbs./acre/year)	N Load Export Rate <sup>2</sup> (lbs./acre/year)
Commercial (COM) and Industrial (IND)	Directly connected impervious	1.78	15
Multi-Family (MFR) and High-Density Residential (HDR)	Directly connected impervious	2.32	14.1
Medium-Density Residential (MDR)	Directly connected impervious	1.96	14.1
Low-Density Residential (LDR) - "Rural"	Directly connected impervious	1.52	14.1

### General Equations

<sup>1</sup> From NH Small MS4 General Permit, Appendix F

Physical Storage Capacity: Depth of Runoff * Drainage Area
Cost: Physical Storage Capacity * Cost Index * Adjustment Factor <sup>1</sup>
Yearly Pollutant Removal: Pollutant Load Export Rate * Drainage Area * Efficiency

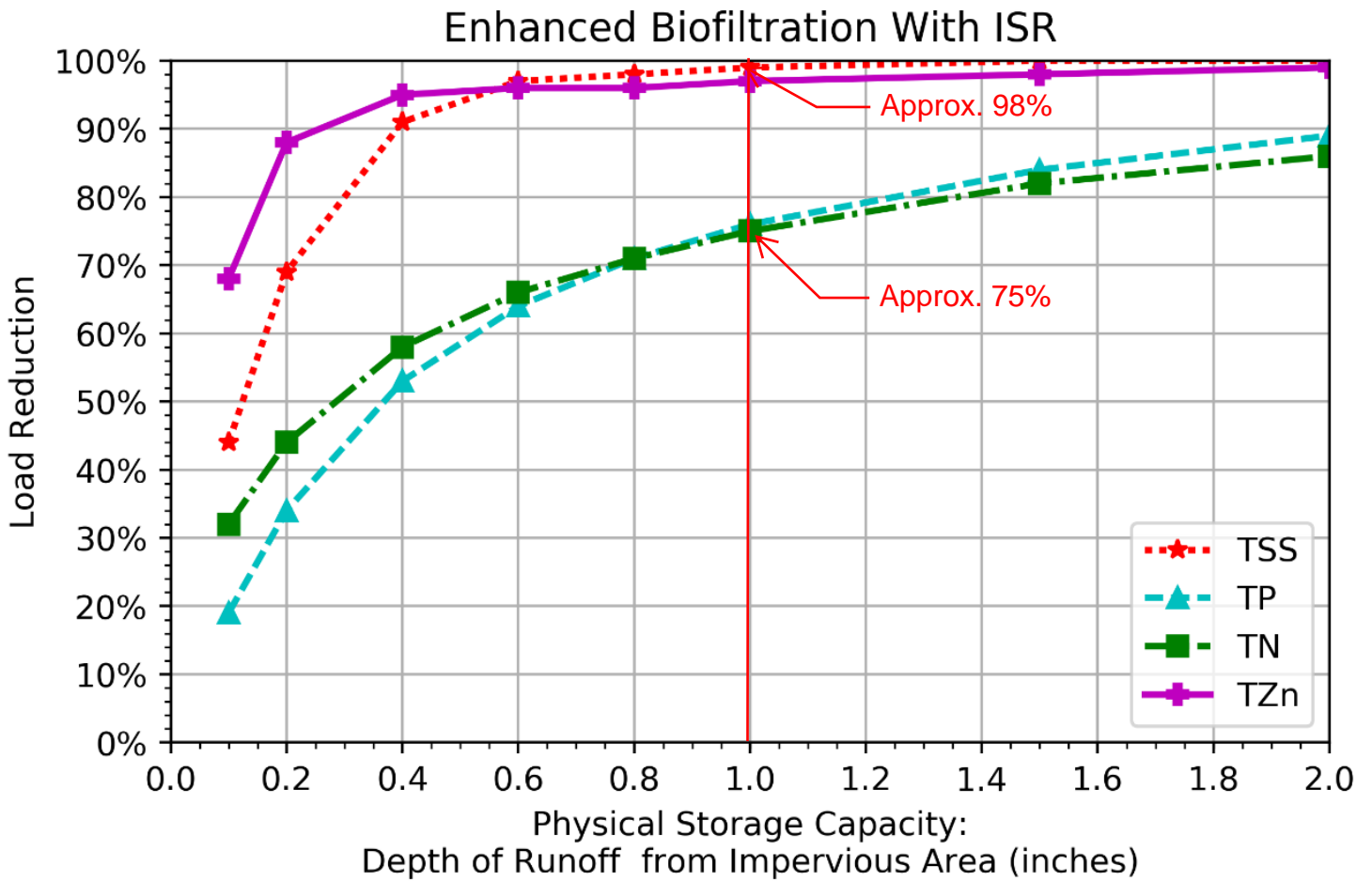
### Cost (2023)<sup>1,2</sup>

	Materials and Installation Cost (\$/ft <sup>3</sup> )	Design Cost (\$/ft <sup>3</sup> )	Total Cost (\$/ft <sup>3</sup> )
Rural	12.12	6.52	18.64
Mixed	24.23	13.05	37.28
Urban	36.35	19.57	55.92

<sup>1</sup> EPA Memorandum "Methodology for developing cost estimates for Opti-Tool." February 20, 2016

<sup>2</sup> Converted from 2010 to 2023 dollars using U.S. Department of Labor (USDOL). (2012). Bureau of Labor Statistics consumer price index inflation calculator. [http://www.bls.gov/data/inflation\\_calculator.htm](http://www.bls.gov/data/inflation_calculator.htm)

# BMP Performance Curve for Enhanced Biofiltration w/ ISR



BMP Capacity: Depth of Runoff from Impervious Area (inches)	0.1	0.2	0.4	0.6	0.8	1.0	1.5	2.0
Cumulative TSS Phosphorus Load Reduction	44%	69%	91%	97%	98%	99%	100%	100%
Cumulative Phosphorus Load Reduction	19%	34%	53%	64%	71%	76%	84%	89%
Cumulative Nitrogen Load Reduction	32%	44%	58%	66%	71%	75%	82%	86%
Cumulative Zinc Phosphorus Load Reduction	68%	88%	95%	96%	96%	97%	98%	99%



# Town of Exeter



## Planning Board Application for Conditional Use Permit: Shoreland Protection District

*July 2023*

**Town of Exeter  
Planning Board Application  
Conditional Use Permit: Shoreland Protection District**

**SUBMITTAL REQUIREMENTS:**

1. Refer to the Land Use Board Meeting Schedule and Deadlines for Submission Requirements.
2. Plans Must Include:

Existing Conditions

- a. Property Boundaries
- b. Exeter Shoreland Protection District (ESPD): Edge of seasonal high-water mark (HWM) including contiguous wetlands and associated buffer as described in 9.3.3 A-C.
 

--Exeter, Fresh, Squamscott River and Major Tributaries: <b>300'</b>	--Upland Extent of Tidal Marsh adj. to Squamscott River: <b>150'</b>
--Mean High Water Level of Perennial Brooks and Streams in the Exeter, Fresh and Squamscott River Watersheds: <b>150'</b>	-- Building Setbacks as defined in 9.3.4.C: <b>300', 150', or 100'</b>
	--Vegetative Buffer: <b>75'</b>
- c. Structures, roads/access ways, parking, drainage systems, utilities, wells and wastewater disposal systems and other site improvements

Proposed Conditions

- a. Edge of Shoreland and Shoreland Buffers and distances to the following:
    - i. Edge of Disturbance
    - ii. Structures, roads/access ways, parking, drainage systems, utilities, wells and wastewater disposal systems and other site improvements
  - b. Percent of impervious surface in ESPD
  - c. Name and phone number of all individuals whose professional seal appears on the plan
3. If applicant and/or agent is not the owner, a letter of authorization must accompany this application
  4. Supporting documents i.e. Letters from the Department of Environmental Services, Standard Dredge and Fill Application and Photos of the property
  5. A Town of Exeter Assessors list of names and mailing addresses of all abutters

**Required Fees:**

Planning Board Fee: **\$50.00**      Abutter Fee: **\$10.00**      Recording Fee (if applicable): **\$25.00**

The Planning Office must receive the completed application, plans and fees NO LATER THAN 4:00 PM on the day indicated on the Planning Board Schedule of Deadlines and Public Hearings.

<b>APPLICANT</b>	Name: Jack McTigue/TFMoran, Inc.
	Address: 170 Commerce Way, Suite 102, Portsmouth, NH 03801
	Email Address: <a href="mailto:jmctigue@tfmoran.com">jmctigue@tfmoran.com</a>
	Phone: 603-431-2222
<b>PROPOSAL</b>	Address: 8 Commerce Way, Exeter, NH 03833
	Tax Map # <u>48</u> Lot# <u>3</u> Zoning District: <u>Industrial</u>
	Owner of Record: C-Marine Dynamics Realty, LLC
Person/Business performing work outlined in proposal	Name: Ricci Construction, LLC
	Address: 225 Banfield Rd. Portsmouth, NH 03801
	Phone: (603)-436-3112
Professional that delineated wetlands	Name: Gove Environmental Services
	Address: 8 Continental Drive, Exeter, NH 03833
	Phone: (603)-778-0644

**Town of Exeter**  
**Planning Board Application**  
**Conditional Use Permit: Wetland Conservation Overlay District**

**Detailed Proposal including intent, project description, and use of property: (Use additional sheet as needed)**

C3i, Inc. is a business located at 8 Commerce Way in Exeter, NH. The existing building is a 2-story, 8,000 square foot footprint building composed of office space and light industrial work. It was previously permitted by MSC Engineers and constructed in 2016. The land was previously vacant, and the driveway required a wetland crossing with a bridge over Norris Brook. Four stormwater systems were designed to accommodate the development. The building is secluded from surrounding properties and highly screened by native vegetation. It is proposed to add two, 2-story, 4,000 square foot footprint additions to the site. The additions will also be light industrial and office space. It is anticipated that 22 parking spaces will be required to accommodate that additional space. Some existing drainage areas will be removed, and new drainage areas will be constructed to accommodate the increase in impervious areas. A New Hampshire Department of Environmental Services Alteration of Terrain permit is required, as the cumulative area of impact in the past 10 years exceeds 100,0000 square feet.

**Shoreland Protection District Impact (in square footage):**

District Impacted: Exeter River  Fresh River  Squamscott River

Buffer Impact	Temporary: (SQ FT.)		Permanent: (SQ FT.)	
	<input type="checkbox"/> 300' Buffer	_____	<input type="checkbox"/> 300' Buffer	_____
<input type="checkbox"/> 150 Buffer	_____	<input checked="" type="checkbox"/> 150 Buffer	<u>16332</u>	
<input type="checkbox"/> Building Setback	_____	<input type="checkbox"/> Building Setback	_____	
<input type="checkbox"/> Veg Buffer	_____	<input type="checkbox"/> Veg Buffer	_____	
		<input checked="" type="checkbox"/> % Impervious Cover	PRE <u>4.6</u> POST <u>6.7</u>	

**Project Proposal Does Not Include Any Prohibited Uses as Defined By 9.3.4.F.**

No Prohibited Uses Proposed

Is a State Shoreland Permit Required?  Yes  No

If YES, include filing date or expected filing date:

List any variances/special exceptions granted by Zoning Board of Adjustment including dates:

Indicate whether your proposal meets the conditions of Article 9.3.4.G.2 of the Town of Exeter Zoning Ordinance.

**Note: Written justification for each criterion must be provided to be deemed administratively complete.**

- YES  No a. The proposed use will not detrimentally affect the surface water quality of the adjacent river or tributary, or otherwise result in unhealthful conditions.
- YES  No b. The proposed use will discharge no waste water on site other than that normally discharged by domestic waste water disposal systems and will not involve on-site storage or disposal of hazardous or toxic wastes as herein defined.
- YES  No c. The proposed use will not result in undue damage to spawning grounds and other wildlife habitat.
- YES  No d. The proposed use complies with the use regulations identified in Article 9.3.4 Exeter Shoreland Protection District Ordinance – Use Regulations and all other applicable sections of this article.
- YES  No e. The design and construction of the proposed use will be consistent with the intent of the purposes set forth in Article 9.3.1 Exeter Shoreland Protection District Ordinance – Authority and Purpose.



Civil Engineers  
Structural Engineers  
Traffic Engineers  
Land Surveyors  
Landscape Architects  
Scientists



July 28, 2023

Kristen Murphy  
Conservation and Sustainability Planner  
Town of Exeter  
10 Front Street  
Exeter, NH 03833  
KMurphy@ExeterNH.gov

**Re: C3I – Exeter, NH – Shoreland CUP Responses to 9.3.4.G  
TFMoran Project: 47201.03**

Dear Kristen:

Below is our response to the Conditional Use criteria for impacts to the Shoreland Protection District.

- a. The proposed use will not detrimentally affect the surface water quality of the adjacent river or tributary, or otherwise result in unhealthful conditions.
  - *The proposed pavement in the shoreland setback is being captured and treated by stormwater best management practices (BMP's).*
  - *The (BMP's) proposed in these areas are to treat stormwater prior to it flowing into the wetlands and stream. The primary purpose of these BMP's is to protect the water quality. These BMP's meet NHDES standards for stormwater treatment.*
- b. The proposed use will discharge no waste water on site other than that normally discharged by domestic waste water disposal systems and will not involve on-site storage or disposal of hazardous or toxic wastes as herein defined.
  - *Wastewater on the site is managed by an existing sewer line extended from Commerce Way, and no hazardous or toxic wastes will be stored or disposed of on-site. The proposed use will not result in undue damage to spawning grounds and other wildlife habitat.*
- c. The proposed use complies with the use regulations identified in Article 9.3.4 Exeter Shoreland Protection District Ordinance – Use Regulations and all other applicable sections of this article.
  - *The project meets regulations identified in Article 9.3.4 – Minimum Lot Site, Maximum Lot Coverage, Structures Meeting Conditional Use, Alteration of Terrain Meeting Conditional Use, Vegetated Buffer Impact Meeting Conditional Use, and no prohibited use. Fertilizer restrictions shall be observed in the shoreland 100' setback, except as granted by the planning board for the establishment of new landscaping.*
- d. The design and construction of the proposed use will be consistent with the intent of the purposes set forth in Article 9.3.1 Exeter Shoreland Protection District Ordinance – Authority and Purpose.
  - *The project is consistent with purposes set forth in Article 9.3.1. Stormwater BMP's are proposed to protect and maintain the water quality. The proposed BMP's are effective in reducing the emission of*

TFMoran, Inc.  
48 Constitution Drive, Bedford, NH 03110  
T(603) 472-4488      www.tfmoran.com



TFMoran, Inc. Seacoast Division  
170 Commerce Way–Suite 102, Portsmouth, NH 03801  
T(603) 431-2222



Kristen Murphy  
July 28, 2023

*total nitrogen, total phosphorus and total suspended solids. Thus, aquatic and terrestrial habitats in this area will be preserved. The site also includes bike paths for recreation that run close to the river and within the natural shoreline (which will still be available for use following construction).*

We trust the above responses satisfy any concerns about the shoreland setback impacts. We look forward to presenting this project to you at the August 8, 2023 Conservation Commission Meeting.

Sincerely,  
**TFMoran, Inc.**

A handwritten signature in black ink, appearing to read "Jack McTigue". The signature is written in a cursive, flowing style.

Jack McTigue, PE, CPESC  
Project Manager

cc: Charles Wagner, Joe Ricci

# **Town of Exeter**



## **Planning Board Application for Conditional Use Permit: Wetlands Conservation Overlay District**

*July 2023*



**Town of Exeter  
 Planning Board Application  
 Conditional Use Permit: Wetland Conservation Overlay District**

Detailed Proposal including intent, project description, and use of property: (Use additional sheet as needed)  
 C3i, Inc. is a business located at 8 Commerce Way in Exeter, NH. The existing building is a 2-story, 8,000 square foot footprint building composed of office space and light industrial work. It was previously permitted by MSC Engineers and constructed in 2016. The land was previously vacant, and the driveway required a wetland crossing with a bridge over Norris Brook. Four stormwater systems were designed to accommodate the development. The building is secluded from surrounding properties and highly screened by native vegetation. It is proposed to add two, 2-story, 4,000 square foot footprint additions to the site. The additions will also be light industrial and office space. It is anticipated that 22 parking spaces will be required to accommodate that additional space. Some existing drainage areas will be removed, and new drainage areas will be constructed to accommodate the increase in impervious areas. A New Hampshire Department of Environmental Services Alteration of Terrain permit is required, as the cumulative area of impact in the past 10 years exceeds 100,000 square feet.

**Wetland Conservation Overlay District Impact (in square footage):**

Temporary Impact	Wetland: (SQ FT.)	Buffer: (SQ FT.)
	<input type="checkbox"/> Prime Wetlands _____	<input type="checkbox"/> Prime Wetlands _____
	<input type="checkbox"/> Exemplary Wetlands _____	<input type="checkbox"/> Exemplary Wetlands _____
	<input type="checkbox"/> Vernal Pools (>200SF) _____	<input type="checkbox"/> Vernal Pools (>200SF) _____
	<input type="checkbox"/> VPD _____	<input type="checkbox"/> VPD _____
	<input type="checkbox"/> PD _____	<input type="checkbox"/> PD _____
	<input type="checkbox"/> Inland Stream _____	<input type="checkbox"/> Inland Stream _____
Permanent Impact	Wetland: (SQ FT.)	Buffer: (SQ FT.)
	<input type="checkbox"/> Prime Wetlands _____	<input type="checkbox"/> Prime Wetlands _____
	<input type="checkbox"/> Exemplary Wetlands _____	<input checked="" type="checkbox"/> Exemplary Wetlands <u>9424</u>
	<input type="checkbox"/> Vernal Pools (>200SF) _____	<input type="checkbox"/> Vernal Pools (>200SF) _____
	<input type="checkbox"/> VPD _____	<input type="checkbox"/> VPD _____
	<input type="checkbox"/> PD _____	<input type="checkbox"/> PD _____
	<input type="checkbox"/> Inland Stream _____	<input checked="" type="checkbox"/> Inland Stream <u>16332</u>

List any variances/special exceptions granted by Zoning Board of Adjustment including dates:

Describe how the proposal meets conditions in **Article 9.1.6.B** of the Zoning Ordinance (attached for reference):

The proposal meets Article 9.1.6.B, because the use of the addition is permitted in the underlying zoning district. Much of the addition onto the building and parking lot will be located in places that have been disturbed in the past. The project will also add two additional bioretention areas in order to provide proper stormwater management for the property.

9.1.6.B. Prior to issuance of a conditional use permit, the Planning Board shall conclude and make a part of the record, compliance with the following criteria:

1. That the proposed use is permitted in the underlying zoning district;
2. No alternative design which does not impact a wetland or wetland buffer or which has less detrimental impact on the wetland or wetland buffer is feasible;
3. A wetland scientist has provided an impact evaluation that includes the “functions and values” of the wetland(s), an assessment of the potential project-related impacts and concluded to the extent feasible, the proposed impact is not detrimental to the value and function of the wetland(s) or the greater hydrologic system.
4. That the design, construction and maintenance of the proposed use will, to the extent feasible, minimize detrimental impact on the wetland or wetland buffer;
5. That the proposed use will not create a hazard to individual or public health, safety and welfare due to the loss of wetland, the contamination of groundwater, or other reasons;
6. The applicant may propose an increase in wetland buffers elsewhere on the site that surround a wetland of equal or greater size, and of equal or greater functional value than the impacted wetland
7. In cases where the proposed use is temporary or where construction activity disturbs areas adjacent to the immediate use, the applicant has included a restoration proposal revegetating any disturbed area within the buffer with the goal to restore the site as nearly as possible to its original grade and condition following construction.
8. That all required permits shall be obtained from the New Hampshire Department of Environmental Services Water Supply and Pollution Control Division under NH RSA §485-A: 17, the New Hampshire Wetlands Board under NH RSA §483-A, and the United States Army Corps of Engineers under Section 404 of the Clean Water Act.;





Civil Engineers  
Structural Engineers  
Traffic Engineers  
Land Surveyors  
Landscape Architects  
Scientists



July 28, 2023

Kristen Murphy  
Conservation and Sustainability Planner  
Town of Exeter  
10 Front Street  
Exeter, NH 03833  
KMurphy@ExeterNH.gov

**Re: C3I – Exeter, NH - Responses to 9.1.6.B  
TFMoran Project: 47201.03**

Dear Kristen:

Below is our response to the Conditional Use criteria for impacts to the Wetland Buffer.

1. That the proposed use is permitted in the underlying zoning district;
  - *Buffer impacts are limited to stormwater management areas, parking areas and access to the parking areas. Conditions use permits can be granted for "Site development such as but not limited to construction of roads and other access ways, parking areas, utilities, structures, drainage systems, water impoundment and other site improvements that impact the Wetlands Conservation Overlay District." (9.1.6(A)(1)). The proposed use falls within this category.*
2. No alternative design which does not impact a wetland or wetland buffer, or which has less detrimental impact on the wetland or wetland buffer is feasible;
  - *This site is bounded by wetlands. While drainage facilities could be located behind (north of) the proposed addition, this would also encroach upon the wetlands. The impacts would equal or exceed the proposed impacts in the current location.*
3. A wetland scientist has provided an impact evaluation that includes the "functions and values" of the wetland(s), an assessment of the potential project-related impacts and concluded to the extent feasible, the proposed impact is not detrimental to the value and function of the wetland(s) or the greater hydrologic system.
  - *See Attached.*
4. That the design, construction and maintenance of the proposed use will, to the extent feasible, minimize detrimental impact on the wetland or wetland buffer;
  - *We have minimized impacts to the wetland buffer to the extent feasible. The majority of the proposed buffer impacts are to provide stormwater treatment. The stormwater treatment areas will still act as a buffer to the wetland areas.*

TFMoran, Inc.  
48 Constitution Drive, Bedford, NH 03110  
T(603) 472-4488      www.tfmoran.com



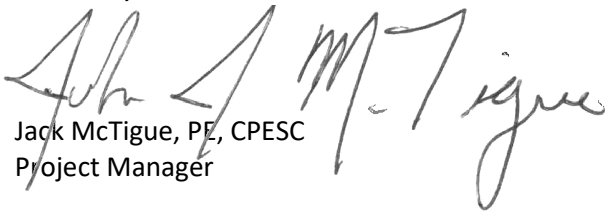
TFMoran, Inc. Seacoast Division  
170 Commerce Way–Suite 102, Portsmouth, NH 03801  
T(603) 431-2222

Kristen Murphy  
July 28, 2023

5. That the proposed use will not create a hazard to individual or public health, safety and welfare due to the loss of wetland, the contamination of groundwater, or other reasons;
  - *The (BMP's) proposed in these areas are to treat stormwater prior to it flowing into the wetlands. The primary purpose of these BMP's is to protect the water quality. These BMP's meet NHDES standards for stormwater treatment.*
6. The applicant may propose an increase in wetland buffers elsewhere on the site that surround a wetland of equal or greater size, and of equal or greater functional value than the impacted wetland;
  - *The site occupies the majority of the available space outside of the wetland buffers. While our client is open to this, there is not much non-buffer area available to offer for wetland buffers.*
7. In cases where the proposed use is temporary or where construction activity disturbs areas adjacent to the immediate use, the applicant has included a restoration proposal revegetating any disturbed area within the buffer with the goal to restore the site as nearly as possible to its original grade and condition following construction;
  - *The Proposed use is permanent, no restoration plan is required in this instance.*
8. That all required permits shall be obtained from the New Hampshire Department of Environmental Services Water Supply and Pollution Control Division under NH RSA §485-A: 17, the New Hampshire Wetlands Board under NH RSA §483-A, and the United States Army Corps of Engineers under Section 404 of the Clean Water Act. ;
  - *Alteration of Terrain permit, EPA NPDES ENOI CGP and SWPPP will be acquired before the project is constructed.*

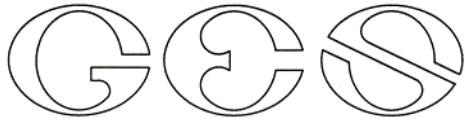
We trust the above responses satisfy any concerns about the wetland buffer impacts. We look forward to presenting this project to you at the August 8, 2023 Conservation Commission Meeting.

Sincerely,  
**TFMoran, Inc.**



Jack McTigue, PE, CPESC  
Project Manager

cc: Charles Wagner, Joe Ricci



## GOVE ENVIRONMENTAL SERVICES, INC

August 1, 2023

Jack McTigue  
TFMoran, Inc.  
48 Constitution Drive,  
Bedford, NH 03110

**Subject: Wetland Delineation & Function-Value Report  
C3i, Inc.  
8 Commerce Way  
Exeter, NH**

Dear Mr. McTigue:

This wetland report is provided in connection with the proposed expansion of the existing C3i facilities at 8 Commerce Way in Exeter, NH. The report documents the delineation and functional assessment of wetland resources in the vicinity of the proposed work as well as an evaluation of the proposed work within the context Section 9.1 of the Exeter Zoning Ordinance (Wetland Conservation District).

### **WETLAND DELINEATION**

Resource areas on this property were delineated on February 13, 2023 by Brendan Quigley, NHCWS #249 utilizing the following standards:

1. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region*, (Version 2.0) January 2012, U.S. Army Corps of Engineers.
2. *Field Indicators of Hydric Soils in the United States, A Guide for Identifying and Delineating Hydric Soils*, Version 8.2. United States Department of Agriculture (2018).
3. *New England Hydric Soils Technical Committee. 2019 Version 4, Field Indicators for Identifying Hydric Soils in New England*. New England Interstate Water Pollution Control Commission, Lowell, MA.
4. *National Wetland Plant List*, Version 3.2 (2016).

Wetland boundaries were surveyed by TFMoran, Inc. and are depicted on the plans submitted separately for the Site Plan Approval and a Conditional Use Permit.

There are two main areas of wetland on the property. A large semi-permanently flooded marsh complex (PEM1F) <sup>1</sup> occupies the northwest corner of the property and forms the headwater of Norris Brook which flows south. Several areas of forested poorly drained forested wetland also extend onto the property along the eastern and southern property boundaries. These wetlands are dominated by red maple and highbush blueberry (PFO1E) and are portions of a larger interconnected wetland complex which also drains to Norris Brook off-site to the south. A vernal pool survey was conducted during April of 2023 during which no vernal pools were identified on the property.

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<sup>1</sup> *Classification of Wetlands and Deepwater Habitats of the United States*. USFW Manual FWS/OBS-79/31 (1979).

## FUNCTION & VALUE ASSESSMENT

A functional assessment was conducted using the US Army Corps Highway Methodology guidelines. Functions are self-sustaining properties of wetlands, which exist in the absence of human involvement. Values refers to the benefits gained by society from a given wetland or ecosystem and their inherent functions. Functions and values identified as “primary” have been determined to be significant features of the wetland being evaluated. An important distinction is that the primary functions and values of a particular wetland does not necessarily indicating the wetland supports them at a significant *level* in comparison to other wetlands in the region or even near the site.

The Highway Methodology considers 13 functions and values:

1. **Groundwater recharge/discharge:** This function considers the potential for a wetland to serve as a groundwater recharge and/or discharge area. Recharge should relate to the potential for the wetland to contribute water to an aquifer. Discharge should relate to the potential for the wetland to serve as an area where ground water can be discharged to the surface.
2. **Floodflow Alteration:** This function considers the effectiveness of the wetland in reducing flood damage by attenuation of floodwaters for prolonged periods following precipitation events.
3. **Fish and Shellfish Habitat:** This function considers the effectiveness of seasonal or permanent water bodies associated with the wetland in question for fish and shellfish habitat.
4. **Sediment/Toxicant/Pathogen Retention:** This function reduces or prevents degradation of water quality. It relates to the effectiveness of the wetland as a trap for sediments, toxicants or pathogens.
5. **Nutrient Removal/Retention/Transformation:** This function relates to the effectiveness of the wetland to prevent adverse effects of excess nutrients entering aquifers or surface waters such as ponds, lakes, streams, rivers or estuaries.
6. **Production Export:** This function relates to the effectiveness of the wetland to produce food or usable products for human, or other living organisms.
7. **Sediment/Shoreline Stabilization:** This function relates to the effectiveness of a wetland to stabilize stream banks and shorelines against erosion.
8. **Wildlife Habitat:** This function considers the effectiveness of the wetland to provide habitat for various types and populations of animals typically associated with wetlands and the wetland edge. Both resident and or migrating species must be considered.
9. **Recreation:** This value considers the effectiveness of the wetland and associated watercourses to provide recreational opportunities such as canoeing, boating, fishing, hunting and other active or passive recreational activities. Consumptive opportunities consume or diminish the plants, animals or other resources that are intrinsic to the wetland, whereas non-consumptive opportunities do not.
10. **Educational/Scientific Value:** This value considers the effectiveness of the wetland as a site for an “outdoor classroom” or as a location for scientific study or research.
11. **Uniqueness/Heritage:** This value relates to the effectiveness of the wetland or its associated water bodies to produce certain special values. Special values may include such things as archeological sites, unusual aesthetic quality, historical events, or unique plants, animals, or geological features.
12. **Visual Quality/Aesthetics:** This value relates to the visual and aesthetic qualities of the wetland.
13. **Threatened or Endangered Species Habitat:** This value relates to the effectiveness of the wetland or associated water bodies to support threatened or endangered species.

The wetlands on the site support a number of functions and values by virtue of their association with both a perennial stream (Norris Brook) and the large protected forest block that constitutes the Henderson Swasey Town Forest. Based on the characteristics of the wetlands and their location in the landscape it



was determined that wildlife habitat, water quality, and flood flow alteration are the principal functions of the wetlands on the site. Significant secondary values include public recreation and aesthetic value. The following sections provide more detail on each of the two main areas of wetland. The ACOE Evaluation forms are attached to this letter.

### **Marsh Complex**

The large marsh complex that forms the headwaters of Norris Brook is predominantly a marsh but contains a diversity of wetland types ranging from aquatic bed to scrub shrub wetland and forested wetland at its edge. This diversity supports significant wetland specific habitat as well as general wildlife habitat in the landscape. Its habitat function is elevated by the large block of unfragmented forest and waterway. Water quality function and flood attenuation are also principal functions of the wetland. These functions are both enabled by its large basin, restricted outlet, dense emergent vegetation, and direct association with Norris Brook. The diverse and expansive character of the wetland combined with easy public access make aesthetics and recreation important secondary values.

### **Forested Wetland**

The forested wetland on the site also supports a primary wildlife function through its association with a protected forest block, Norris Brook, and other nearby wetlands including the marsh complex described above. Since surface water in the poorly drained forested wetland is limited to Norris Brook and brief periods during the spring, the wildlife supported on this site is more general in nature. No vernal pools were identified in the areas of forested wetland on or adjacent to the site. Though comparatively less than the large marsh, water quality function has also been considered a primary function of the forested wetland. This is due to the network of wetland on undulating terrain which creates a diffuse drainage pattern toward Norris Brook. These characteristics may also support flood attenuation function but since its storage capacity appears limited this has been considered a secondary function. Recreation and aesthetic value have been considered secondary because they are more closely associated with the general forest and location in a town forest than with wetland characteristics.

## **RELATION TO THE PROPOSED DEVELOPMENT**

Wetland buffer impacts occur at two main locations located east and west of the existing building. No direct wetland impact is proposed. The functional assessment indicates that the primary functions of the resource areas are related to wildlife habitat, water quality, and flood attenuation, with public aesthetic and recreational value being important secondary values. The potential effects of the proposed buffer impact on these functions and values have been mitigated by the layout of the project and several important project elements.

### **Wildlife Habitat**

The function of the wetland buffer with respect to wildlife habitat on this site is largely one of screening. The project utilizes buffer areas at the edges of the current developed site, some of which consist of maintained lawn or existing stormwater BMPs. At the eastern impact area, the proposed work takes place almost entirely within the limits of the perimeter erosion control established for the original construction and expands over the existing trail at the edge of the wetland. The potential effect on wildlife due to proximity impacts at this location will therefore be virtually the same as existing conditions. Repurposing



existing lawn or stormwater areas in the buffer will have no effect on wildlife habitat in the wetland. Where impact to intact buffer is proposed (mostly at the western impact area) the impacts do not further segment wildlife habitat or create significant impediments to wildlife movement beyond what is presented by the existing development. Additionally, the more sensitive area directly north of the existing building which contains a long stretch of intact buffer along the large marsh has been avoided. The small potential effects from loss of intact buffer can be further mitigated by restoration of the outer slopes of the proposed stormwater BMPs using native plantings and seed mixes to replace screening to the extent practicable. This effort would be best focused on the on the western impact area where there is comparatively greater loss of intact buffer.

### **Water Quality**

Wetland buffers offer water quality benefits to wetlands directly as well as supplement this wetland function. The potential effects of the buffer impacts proposed by this project will be mitigated by erosion control best management practices and inclusion of highly effective stormwater management. The modest loss of intact buffer along forested wetland or densely vegetated marsh wetland will have little direct effect on the water quality in the wetland or its water quality function.

### **Flood Attenuation**

This function is supported primarily in the large marsh wetland and to a lesser degree in the forested wetland. The modest impacts proposed in the buffer will have no direct impact on the flood attenuation function of the wetlands which will not be impacted or restricted by segmentation. The proposed stormwater management system will mitigate any potential effects of increased runoff from the project.

### **Aesthetic and Recreational Value**

The main aesthetic value lies in the large marsh area. The proposed impacts will have no effect on the view-scape or public access to the area. The recreational value of wetlands is traditionally associated with activities like fishing, hunting, or boating. While those do not apply to this site, Henderson Swansea Town Forest does provide for the enjoyment of the forest and its diverse wetlands through a network of trails. Access to the Town Forest at this location will be maintained and the trail which will be impacted at the eastern impact area will be relocated to the top of the stormwater basin slope. The project will therefore have no overall effect on the aesthetic or recreational value of the wetlands.

This concludes the wetland delineation and wetland functional assessment report. If I can be of further assistance, please feel free to contact me at (603) 778-0644.

Sincerely,



Brendan Quigley, NHCWS  
Gove Environmental Services, Inc.

Enc. ACOE Wetland Function Evaluation Forms



# Wetland Function-Value Evaluation Form

Total area of wetland >20ac Human made? no Is wetland part of a wildlife corridor? YES or a "habitat island"? NO

Adjacent land use Town Forest Distance to nearest roadway or other development ~30'

Dominant wetland systems present PFO1E Contiguous undeveloped buffer zone present NO

Is the wetland a separate hydraulic system? NO If not, where does the wetland lie in the drainage basin? HIGH

How many tributaries contribute to the wetland? 0 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Forested Wetland













Latitude see sketch Longitude and plans

Prepared by: BJQ Date 8/1/23

Wetland Impact:  
Type BUFFER Area ~7000 SF

Evaluation based on:  
Office  Field

Corps manual wetland delineation completed? Y  N

Function/Value	Suitability Y / N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
 Groundwater Recharge/Discharge	N	6		<b>signs of bedrock and low permeability soils</b>
 Floodflow Alteration	Y	2,3,7,9,15		not directly assoc. with waterway or floodplain, minimal storage overall in wetland
 Fish and Shellfish Habitat	N			<b>no surface water</b>
 Sediment/Toxicant Retention	Y	1,3,4,7	X	receives runoff from surrounding devel. diffuse flow to Norris Brk
 Nutrient Removal	Y	3,4,7,8,9	X	receives runoff from surrounding devel. diffuse flow to Norris Brk
 Production Export	Y	1,4,7,12		<b>wildlife food sources, berry prod. shrubs, oak</b>
 Sediment/Shoreline Stabilization	N			<b>not associated with surface water</b>
 Wildlife Habitat	Y	4,8,10,11	X	
 Recreation	Y	1,4,5,7,10		assoc with town forest trails, good access, largely unrelated to wetland
 Educational/Scientific Value	N			<b>private, extensive opportunity in public area off site</b>
 Uniqueness/Heritage	N			<b>forested wetland only</b>
 Visual Quality/Aesthetics	Y			<b>associated with town forest, limited wetland types</b>
<b>ES</b> Endangered Species Habitat	N			<b>none identified</b>
Other				

Notes:

\* Refer to backup list of numbered considerations.

# Wetland Function-Value Evaluation Form

Total area of wetland >20ac Human made? no Is wetland part of a wildlife corridor? YES or a "habitat island"? NO

Adjacent land use Town Forest Distance to nearest roadway or other development ~140'

Dominant wetland systems present PEM1F Contiguous undeveloped buffer zone present YES

Is the wetland a separate hydraulic system? NO If not, where does the wetland lie in the drainage basin? HIGH

How many tributaries contribute to the wetland? 0 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Marsh Wetland













Latitude see sketch Longitude and plans

Prepared by: BJQ Date 8/1/23

Wetland Impact:  
Type BUFFER Area ~8500 SF

Evaluation based on:  
Office  Field

Corps manual wetland delineation completed? Y  N

Function/Value	Suitability Y / N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
 Groundwater Recharge/Discharge	Y	7		not located in aquifer, GW interaction unclear
 Floodflow Alteration	Y	1,2,4,5,7,11,13	X	storage potential, headwater area to Norris
 Fish and Shellfish Habitat	N			marsh, stream headwater area
 Sediment/Toxicant Retention	Y	1,3,4,5,10,12,14,15	X	storage, dense veg, deep organic, constricted outlet, headwater to Norris
 Nutrient Removal	Y	3,4,5,6,7,8,10,11,13,14, 15	X	storage, dense veg, deep organic, constricted outlet, nut. attenuation, headwater to Norris
 Production Export	Y	1,4,7,12		wildlife food sources
 Sediment/Shoreline Stabilization	N			wetland does not border surface water/bank
 Wildlife Habitat	Y	1,3,4,5,6,7,8,9,10,11,13,19,21,	X	intact marsh, diverse veg, connectivity with upl and wet habitats, low development
 Recreation	Y	1,4,5,7,10		assoc with town forest trails, good access, largely passive enjoyment
 Educational/Scientific Value	N			private, extensive opportunity in public area off site
 Uniqueness/Heritage	N			none identified
 Visual Quality/Aesthetics	Y	1,2,3,5,6,8		associated with town forest, wildlife habitat, good access and views, diverse open wetland
<b>ES</b> Endangered Species Habitat	N			potential, not confirmed
Other				

Notes:

\* Refer to backup list of numbered considerations.

**GENERAL INFORMATION**

**OWNER**  
 MAP 48 LOT 3  
 C-MARINE DYNAMIC REALTY  
 11 FIFIELD LN  
 STRATHAM, NH 03885

**ASSOCIATED WITH ENVIRONMENTAL SERVICES**  
 GOVE ENVIRONMENTAL SERVICES, INC.  
 8 CONTINENTAL DRIVE, BUILDING 2, UNIT H  
 EXETER, NH 03833-7507  
 (603) 778-0644

**APPLICANT**  
 C3I, INC  
 4 MERRILL INDUSTRIAL DRIVE  
 SUITE 108  
 HAMPTON, NH 03842

**ARCHITECT**  
 BRANDON M. HOLBEN, AIA  
 WINTER HOLBEN ARCHITECTURE + DESIGN  
 7 WALLINGFORD SQUARE UNIT 2099  
 KITTERY, ME 03904  
 (207) 994-3104

**RESOURCE LIST**  
**PLANNING/ ZONING DEPARTMENT**  
 10 FRONT STREET  
 EXETER, NH 03833  
 (603) 773-6112  
 DAVE SHARPLES, TOWN PLANNER

**BUILDING DEPARTMENT**  
 10 FRONT STREET  
 EXETER, NH 03833  
 (603) 773-6112  
 DOUGLAS EASTMAN, INSPECTOR

**PUBLIC WORKS**  
 13 NEWFIELDS ROAD  
 EXETER, NH 03833  
 (603) 773-1355  
 PAUL VLASICH, TOWN ENGINEER

**POLICE DEPARTMENT**  
 20 COURT STREET  
 EXETER, NH 03833  
 (603) 778-772-1212  
 CHIEF STEPHAN POULAN

**FIRE DEPARTMENT**  
 20 COURT STREET  
 EXETER, NH 03833  
 (603) 772-6128  
 CHIEF ERIC WILKING

**ABUTTERS**  
 MAP 48 LOT 3  
 C-MARINE DYNAMICS REALTY LLC  
 11 FIFIELD LANE  
 STRATHAM, NH 03885

MAP 39 LOT 2  
 TOWN OF EXETER CONSERVATION COMMISSION  
 10 FRONT STREET  
 EXETER, NH 03833

MAP 39 LOT 3  
 TOWN OF EXETER CONSERVATION COMMISSION  
 10 FRONT STREET  
 EXETER, NH 03833

MAP 47 LOT 9  
 CKT ASSOCIATES  
 158 SHATTUCK WAY  
 NEWINGTON, NH 03801

MAP 47 LOT 11  
 BOAT OF GARTEN LLC  
 PO BOX 4430  
 MANCHESTER, NH 03108

MAP 48 LOT 2  
 NORTHEAST DISTRIBUTION LTD  
 11 COMMERCE WAY  
 EXETER, NH 03833

MAP 48 LOT 4-1  
 JAMRIS REALTY LLC  
 6 COMMERCE WAY  
 EXETER, NH 03833

MAP 49 LOT 8  
 TOWN OF EXETER HENDERSON SWASEY FOREST  
 10 FRONT STREET  
 EXETER, NH 03833

# SITE DEVELOPMENT PLANS

PREPARED FOR:

## C-MARINE DYNAMICS REALTY, INC.

**8 COMMERCE WAY  
 EXETER, NEW HAMPSHIRE**

**INDEX OF SHEETS**

SHEET	SHEET TITLE
C-0	COVER SHEET
C-1	NOTES
S-1	EXISTING CONDITIONS PLAN
C-2	WETLAND IMPACT PLAN
C-3	SITE PREPARATION PLAN
C-4	SITE PLAN
C-5	GRADING & DRAINAGE PLAN
C-6	EROSION CONTROL PLAN
C-7	EROSION CONTROL NOTES
C-8	LIGHTING PLAN
C-9	LANDSCAPE PLAN
C-10	DETAILS-1
C-11	DETAILS-2
C-12	DETAILS-3

**VICINITY PLAN**



**PERMITS / APPROVALS**

	NUMBER	APPROVED	EXPIRES
TOWN CONDITIONAL USE PERMIT			
TOWN SITE PLAN			
NHDES WETLANDS			
NHDES ALTERATION OF TERRAIN			
EPA NPDES ENOI CGP & SWPPP			

THESE PLANS ARE PERMIT DRAWINGS ONLY AND NOT INTENDED FOR CONSTRUCTION OR BIDDING

APPROVED BY THE TOWN OF EXETER PLANNING BOARD

ON \_\_\_\_\_  
 BOARD MEMBER \_\_\_\_\_ AND  
 BOARD MEMBER \_\_\_\_\_

**SITE DEVELOPMENT PLANS**

TAX MAP 48 LOT 3  
**COVER SHEET**  
 C3I, INC.  
**8 COMMERCE WAY**  
**EXETER, NH**  
**COUNTY OF ROCKINGHAM**  
 OWNED BY  
**C-MARINE DYNAMICS REALTY, LLC**

**SCALE: NTS** **APRIL 14, 2023**

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REV	DATE	DESCRIPTION	DR	CK

**TFM** Civil Engineers  
 Structural Engineers  
 Traffic Engineers  
 Land Surveyors  
 Landscape Architects  
 Scientists

48 Constitution Drive  
 Bedford, NH 03110  
 Phone (603) 472-4488  
 Fax (603) 472-9747  
 www.tfmoran.com

FILE	47201.03	DR	CK	FB	CADFILE	47201-03 COVER	C-0
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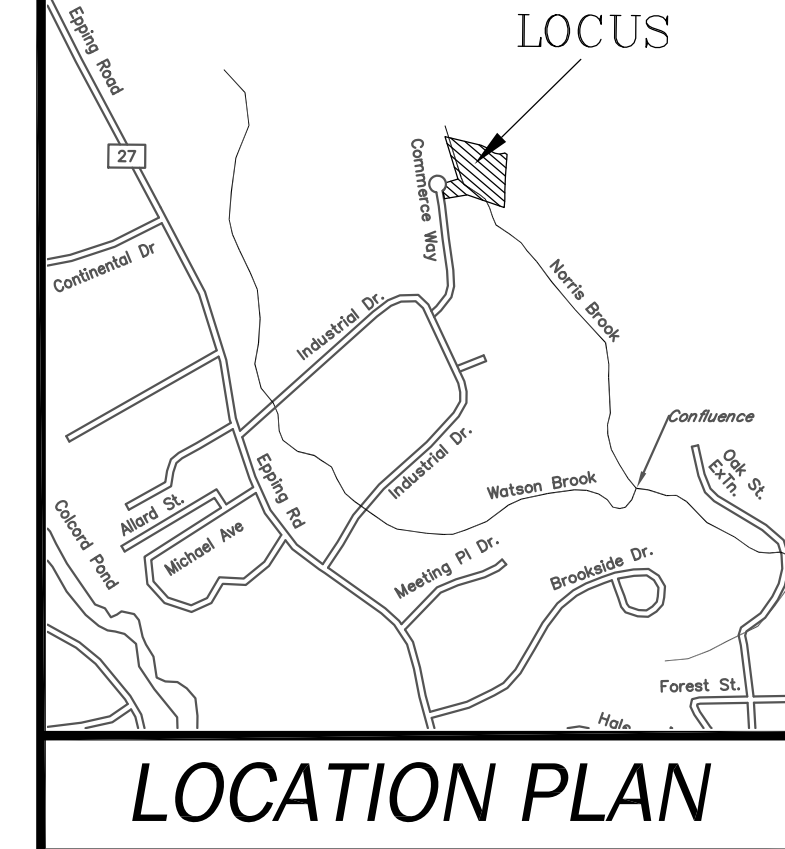
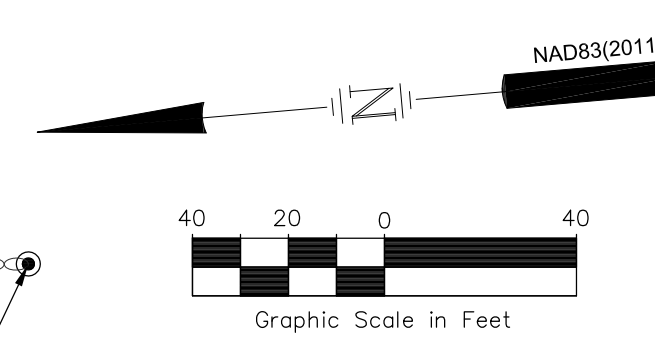
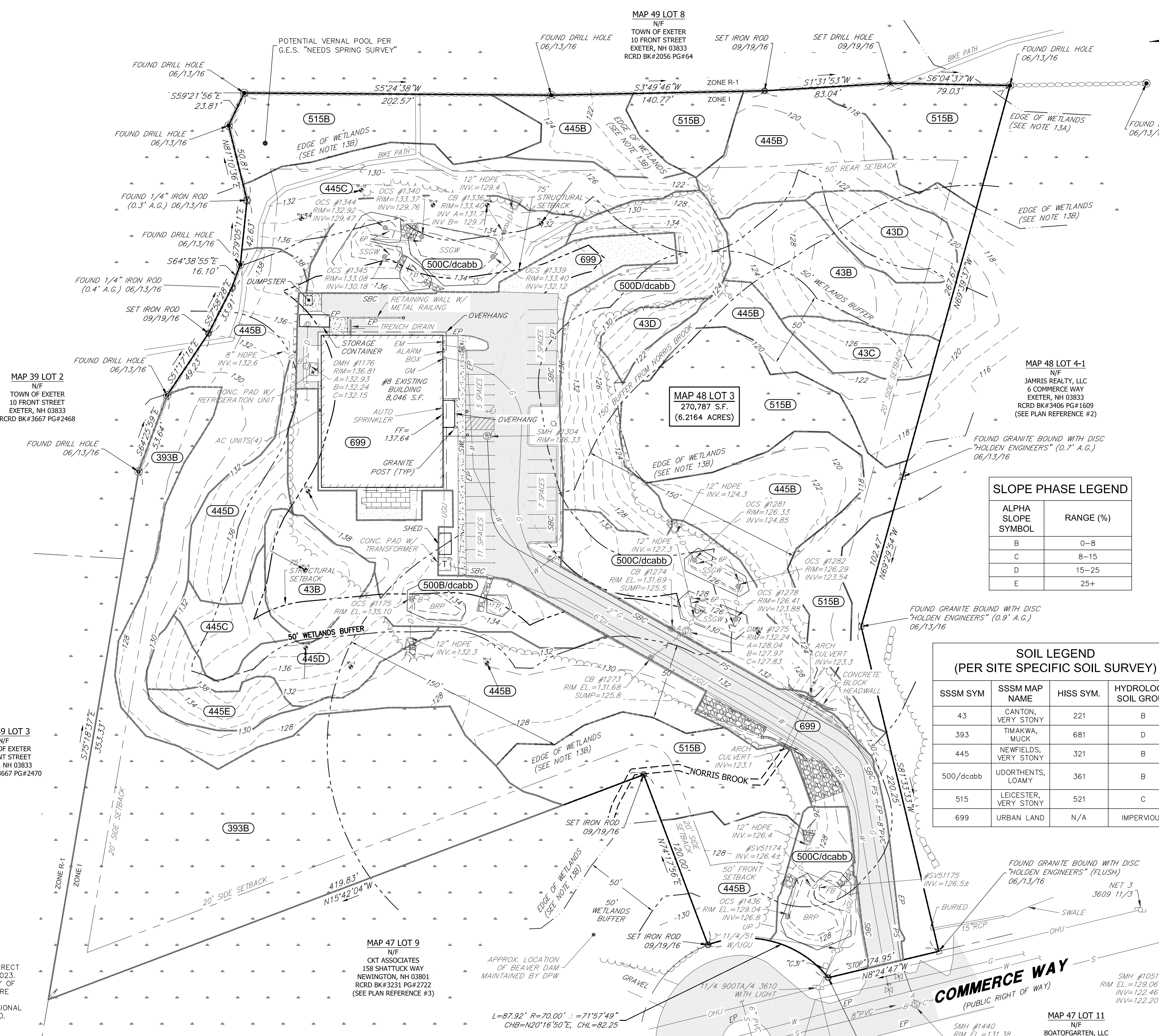






LEGEND:

Table with 2 columns: Symbol/Line Style and Description. Includes items like AC (Assessor's Map/Lot Number), ACP (Air Conditioning Unit), A.G. (Above Grade), BK. PG. (Book/Page), BRP (Bio-Retention Pond), CB (Catch Basin), CHD (Chord Bearing), CHL (Chord Length), CONC. (Concrete), DI (Ductile Iron), DMH (Drain Manhole), ELEV. (Elevation), EM (Electric Meter), EP (Edge of Pavement), FB (Fore Bay), FF (Finished Floor), GM (Gas Meter), HDPE (High Density Polyethylene), INV. (Invert), L (Length), NET (New England Telephone), N/F (Now or Formerly), PS (Pressure Sewer), PVC (Polyvinyl Chloride), RCP (Reinforced Concrete Pipe), RCRD (Rockingham County Registry of Deeds), SBC (Slope Bituminous Curve), S.F. (Square Feet), SGC (Sloped Granite Curb), SMH (Sewer Manhole), SSGW (Sub-Surface Gravel Wetland), SWL (Single White Line), UG (Underground Utilities), UP (Utility Pole), 6" (6 inch Vertical Pipe), DRILL HOLE (Drill Hole Found/Set), IRON PIPE (Iron Pipe Found), FOUND (Bound Found), BOLLARD (Bollard), AIR CONDITIONER (Air Conditioner), GUY WIRE (Guy Wire), LIGHT POLE (Light Pole), UTILITY POLE (Utility Pole), DRAIN MANHOLE (Drain Manhole), CATCH BASIN (Catch Basin), TRANSFORMER (Transformer), SEWER MANHOLE (Sewer Manhole), GAS VALVE (Gas Valve), HANDICAP PARKING (Handicap Parking), HYDRANT (Hydrant), WATER SHUT OFF (Water Shut Off), WATER GATE VALVE (Water Gate Valve), SIGN (Sign), FLARED END SECTION (Flared End Section), BOUNDARIES (Boundaries), BOUNDARY LINE (Boundary Line), STRUCTURE SETBACK (Structure Setback), SETBACK LINE (Setback Line), 150' NORRIS BROOK BUFFER (150' Norris Brook Buffer), WETLAND BUFFER (Wetland Buffer), EDGE OF WETLAND (Edge of Wetland), TREE LINE (Tree Line), OVERHEAD UTILITIES (Overhead Utilities), WATER LINE (Water Line), DRAIN LINE (Drain Line), SEWER LINE (Sewer Line), GAS LINE (Gas Line), EXISTING CONTOUR (Existing Contour), GUARDRAIL (Guardrail), STONE WALL (Stone Wall), CONCRETE (Concrete), CRUSHED STONE (Crushed Stone), RIP RAP (Rip Rap), PAVEMENT (Pavement), PAVERS (Pavers), WETLANDS (Wetlands).



NOTES:

- 1. THE PARCEL IS LOCATED IN THE INDUSTRIAL (I) ZONING DISTRICT, AND THE WETLANDS CONSERVATION AND EXETER SHORELAND PROTECTION DISTRICTS.
2. THE PARCEL IS SHOWN ON THE TOWN OF EXETER ASSESSOR'S MAP 48 AS LOT 3.
3. THE PARCEL IS LOCATED IN FLOOD ZONE X (AREAS OF MINIMAL FLOODING) AS SHOWN ON THE NATIONAL FLOOD INSURANCE PROGRAM (NFIP) FLOOD INSURANCE RATE MAP (FIRM) ROCKINGHAM COUNTY, NEW HAMPSHIRE, PANEL 402 OF 661, MAP NUMBER 3301500402E WITH AN EFFECTIVE DATE OF MAY 17, 2005.
4. DIMENSIONAL REQUIREMENTS: MINIMUM LOT SIZE: 40,000 S.F.; LOT WIDTH: 150'; LOT DEPTH: 200'; MINIMUM YARD DIMENSIONS: FRONT: 50'; SIDE: 20'; REAR: 50'; MAXIMUM STRUCTURE DIMENSIONS: BUILDING HEIGHT: 50'; BUILDING COVERAGE: 40%; MINIMUM OPEN SPACE: 25%.
5. OWNER OF RECORD: MAP 48 LOT 3; C-MARINE DYNAMICS REALTY, LLC; 11 FIFIELD LANE; STRATHAM, NH 03885; RCRD BK#5772 PG#587.
6. PARCEL AREA: MAP 48 LOT 3; 270,787 S.F. (6.2164 ACRES).
7. THE INTENT OF THIS PLAN IS TO SHOW THE LOCATION OF BOUNDARIES IN ACCORDANCE WITH THE LEGAL DESCRIPTIONS. IT IS NOT AN ATTEMPT TO DEFINE UNWRITTEN RIGHTS, DETERMINE THE EXTENT OF OWNERSHIP OR DEFINE THE LIMITS OF TITLE.
8. THE PURPOSE OF THIS PLAN IS TO SHOW THE BOUNDARY, TOPOGRAPHY AND CURRENT SITE FEATURES OF MAP 48 LOT 3.
9. FIELD SURVEY WAS COMPLETED BY TGE IN MARCH 2023, WITH A LEICA TS-16 AND CARLSON RT4 DATA COLLECTOR, AND TOPCON HIPER-V.
10. HORIZONTAL DATUM IS NAD83 (NORTH AMERICAN DATUM OF 1983) AND THE VERTICAL DATUM IS NAVD83 (NORTH AMERICAN VERTICAL DATUM OF 1988). THE CONTOUR INTERVAL IS 2 FEET.
11. EASEMENTS, RIGHTS, AND RESTRICTIONS SHOWN OR IDENTIFIED ARE THOSE WHICH WERE FOUND DURING RESEARCH PERFORMED AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS. OTHER RIGHTS, EASEMENTS, OR RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF SUBJECT PARCEL(S) WOULD DETERMINE.
12. UTILITIES SHOWN HEREON ARE A COMPILATION OF FIELD LOCATIONS AND RECORD PLANS. THEY ARE APPROXIMATE LOCATIONS ONLY. CONTACT DIGSAFE @ 1-888-DIG-SAFE AND DPW TO VERIFY UTILITIES.
13. A: WETLANDS SHOWN IN THE SOUTHEAST CORNER OF THIS PARCEL HEREON ARE TAKEN FROM 'WATSON BROOK COMPILATION MAP OF TAX MAP 47, LOTS 8 & 9, TAX MAP 48, LOT 3 & TAX MAP 55, LOT 68' ROUTE 27 (EPPING ROAD), INDUSTRIAL DR. & COMMERCE WAY EXETER, NEW HAMPSHIRE' PROVIDED BY DOUCET SURVEY, INC. B: WETLAND DELINEATION WAS COMPLETED BY GOVE ENVIRONMENTAL SERVICES (G.E.S.) IN FEBRUARY 13, 2023, IN ACCORDANCE WITH THE 1987 ARMY CORP OF ENGINEERS WETLAND MANUAL AND THE 2012 REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION. FIELD LOCATED BY TFMORAN, INC.
14. THE LANDOWNER IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, STATE, AND GENERAL WETLANDS REGULATIONS, INCLUDING ANY PERMITTING AND SETBACK REQUIREMENTS REQUIRED UNDER THESE REGULATIONS.
15. ALL MONUMENTS SHOWN HEREON WERE OBSERVED OR SET AS PART OF THIS SURVEY.
16. DEBRIS TRAPS WITH INACCESSIBLE INVERTS WERE MEASURED TO THEIR SUMP.

SLOPE PHASE LEGEND table with columns: ALPHA SLOPE SYMBOL, RANGE (%). Rows: B (0-8), C (8-15), D (15-25), E (25+).

SOIL LEGEND (PER SITE SPECIFIC SOIL SURVEY) table with columns: SSSM SYM, SSSM MAP NAME, HISS SYM., HYDROLOGIC SOIL GROUP. Rows: 43 (CANTON, VERY STONY), 393 (TIMAKWA, MUCK), 445 (NEWFIELDS, VERY STONY), 500/dcab (UDORTHENTS, LOAMY), 515 (LEICESTER, VERY STONY), 699 (URBAN LAND).

SOILS NOTE:

- THIS MAP PRODUCT IS WITHIN THE TECHNICAL STANDARDS OF THE NATIONAL COOPERATIVE SOIL SURVEY. IT IS A SPECIAL PURPOSE PRODUCT, INTENDED FOR INFILTRATION REQUIREMENTS BY THE NH DES ALTERATION OF TERRAIN BUREAU. IT WAS PRODUCED BY A PROFESSIONAL SOIL SCIENTIST AND IS NOT A PRODUCT OF THE USDA NATURAL RESOURCES CONSERVATION SERVICE. THERE IS A REPORT THAT ACCOMPANIES THIS MAP.
THE SITE-SPECIFIC SOIL MAP (SSSM) WAS PRODUCED 04-27-2023, AND WAS PREPARED BY JAMES P. GOVE, CSS #004, GOVE ENVIRONMENTAL SERVICES, INC. THE SURVEY AREA IS LOCATED AT 8 COMMERCE WAY, EXETER, NH.
SOILS WERE IDENTIFIED WITH THE NEW HAMPSHIRE STATE-WIDE NUMERICAL SOILS LEGEND, USDA NRCS, DURHAM, NH, ISSUE #10, JANUARY 2011. THE NUMERIC LEGEND WAS AMENDED TO IDENTIFY THE CORRECT SOIL COMPONENTS OF THE COMPLEX.
HYDROLOGIC SOIL GROUP FROM KSAT VALUES FOR NEW HAMPSHIRE SOILS, SOCIETY OF SOIL SCIENTISTS OF NEW ENGLAND, SPECIAL PUBLICATION NO. 5, SEPTEMBER, 2009.

PLAN REFERENCES:

- "TAX MAP 48 LOT 3, AS-BUILT, C3I INC., IN EXETER NH COUNTY OF ROCKINGHAM, OWNED BY C-MARINE DYNAMICS REALTY, LLC." BY TFMORAN INC., DATED APRIL 18, 2018. PLAN NOT RECORDED.
"EXETER INDUSTRIAL PARK SUBDIVISION OF LAND FOR EXETER DEVELOPMENT COMMISSION IN EXETER, N.H." BY PARKER SURVEY ASSOC., INC. DATED: JULY 1976. RCRD PLAN #0-6158.
"CONSOLIDATION & RESUBDIVISION PLAN EXETER INDUSTRIAL PARK PREPARED FOR WILLEY CREEK DEVELOPMENT COMPANY EXETER, NH" BY HOLDEN ENGINEERING & SURVEYING, INC. DATED 6-20-06. RCRD PLAN #D-16204.
"LOT LINE REVISION OF TAX MAP 48, LOT 2 AND TAX MAP 47, LOT 9 FOR J.S.S. & ASSOCIATES EXETER INDUSTRIAL PARK COMMERCE WAY EXETER, NEW HAMPSHIRE" BY DOUCET SURVEY, INC. DATED JULY 1, 1999, WITH REVISION 1 DATED 9/7/99. RCRD PLAN #D-27641.
"PLAT OF LAND FOR EXETER INDUSTRIAL COMMISSION IN EXETER, N.H." BY PARKER SURVEY ASSOC., INC. DATED: JAN. 1980. RCRD PLAN #D-10206.
"SUBDIVISION OF LAND FOR J.S.S. & ASSOCIATES, EXETER INDUSTRIAL PARK, INDUSTRIAL DRIVE, EXETER, NEW HAMPSHIRE" BY DOUCET SURVEY, INC. RCRD PLAN #D-27302.
"SITE DEVELOPMENT PLANS TAX MAP 48 LOT 3" DATED: AUGUST 9, 2016 WITH REVISION 5 DATED 12/29/16 BY MSC A DIVISION OF TFMORAN, INC.

FOR REVIEW



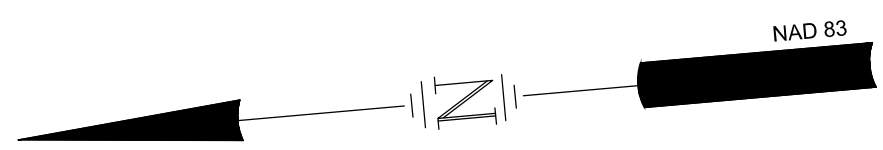
LICENSED LAND SURVEYOR DATE
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CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

TAX MAP 48 LOT 3 EXISTING CONDITIONS PLAN C3I INC. 8 COMMERCE WAY EXETER, NEW HAMPSHIRE COUNTY OF ROCKINGHAM OWNED BY C-MARINE DYNAMICS REALTY, LLC
SCALE: 1" = 40' (22x34) 1" = 80' (11x17)
MAY 3, 2023

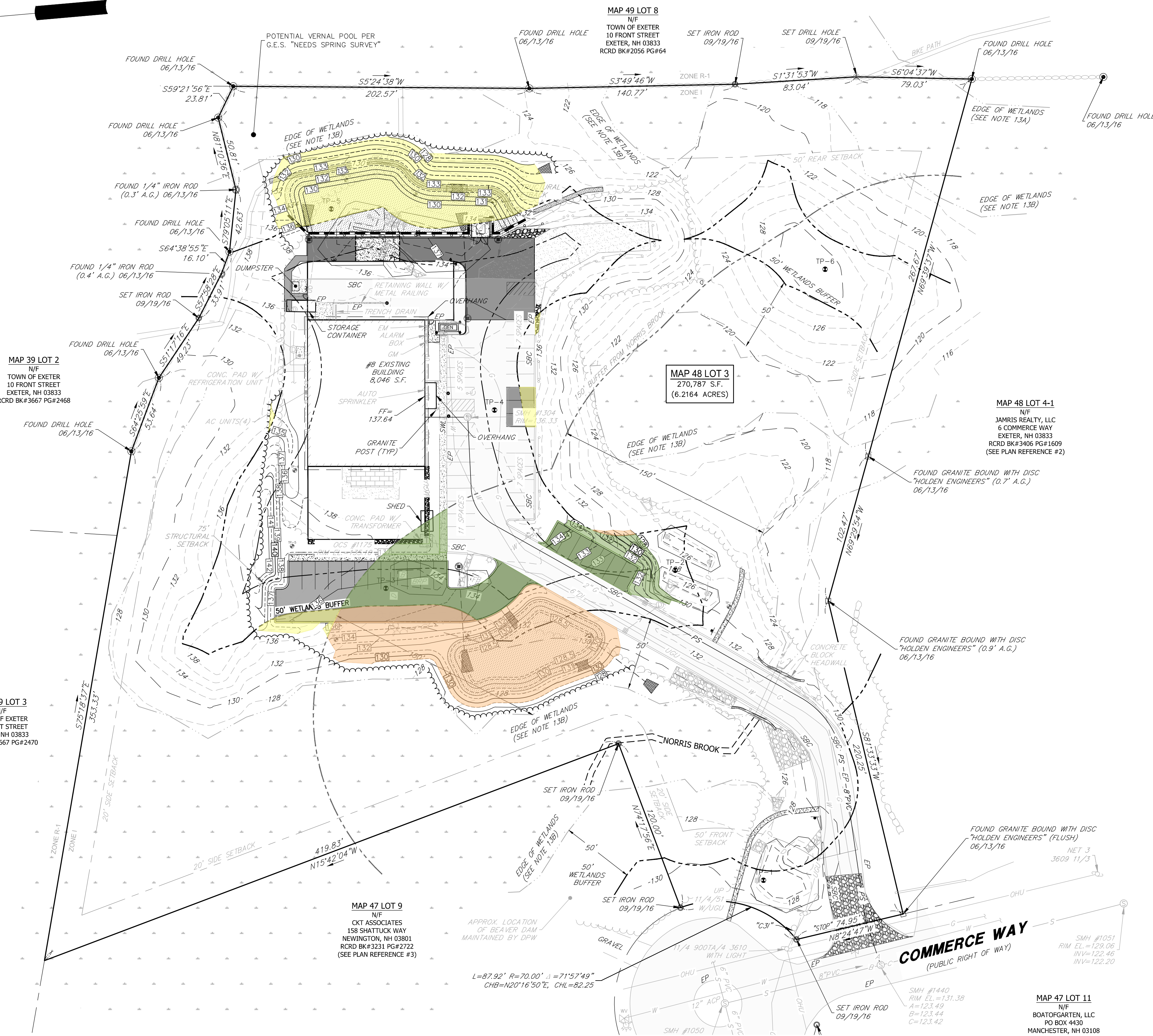
Table with columns: FIRM, DR, RJB, FB, 541, CK, BMK, CADFILE, SEE MARGIN, S-1. Includes Seacoast Division and TFM logos.

10/27/2023 - 12:14pm F:\MSC Projects\47201-03 - Commerce Way - Exeter\47201-03 - Ricad Construction - C3i-8 Commerce Way\Cartoon Survey\Bwgs\47201-03 Survey.dwg





NAD 83



**LEGEND**

EP	PROPOSED EDGE OF PAVEMENT		PROPOSED WETLAND BUFFER IMPACT
LF	LINEAR FEET		PROPOSED INLET STREAM BUFFER IMPACT
TYP	TYPICAL		PROPOSED INLET STREAM AND WETLAND BUFFER IMPACT
LP	PROPOSED LIGHT POLE		PROPOSED GRAVEL
---	PROPERTY LINE		PROPOSED CONCRETE
---	EXISTING TREELINE		
---	PROPOSED TREELINE		
---	EXISTING EDGE OF WETLANDS		
---	EDGE OF WETLANDS BUFFER		
---	PROPERTY LINE		
	EXISTING WETLANDS		

**WETLAND IMPACT SUMMARY**

DIRECT WETLAND IMPACT	0 S.F.
PERENNIAL STREAM IMPACT (36 LF X 3)	0 S.F.
50' WETLAND BUFFER IMPACT PERMANENT	9424 S.F.
50' WETLAND BUFFER IMPACT TEMPORARY	0 S.F.
100' INLAND STREAM BUFFER IMPACT PERMANENT	6418 S.F.
100' INLAND STREAM BUFFER IMPACT TEMPORARY	0 S.F.
STREAM AND WETLAND BUFFER IMPACT PERMANENT	9914 S.F.
STREAM AND WETLAND BUFFER IMPACT TEMPORARY	0 S.F.

**NOTES:**

- A: WETLANDS SHOWN IN THE SOUTHEAST CORNER OF THIS PARCEL HEREON ARE TAKEN FROM 'WATSON BROOK COMPILATION MAP OF TAX MAP 47, LOTS 8 & 9, TAX MAP 48, LOT 3 & TAX MAP 55, LOT 68' ROUTE 27 (EPPING ROAD), INDUSTRIAL DR. & COMMERCE WAY EXETER, NEW HAMPSHIRE' PROVIDED BY DOUCET SURVEY, INC.
- B: WETLAND DELINEATION WAS COMPLETED BY GOVE ENVIRONMENTAL SERVICES (G.E.S.) IN FEBRUARY 13, 2023, IN ACCORDANCE WITH THE 1987 ARMY CORP OF ENGINEERS WETLAND MANUAL AND THE 2012 REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION. FIELD LOCATED BY TFMORAN, INC.

**MAP 39 LOT 2**  
N/F  
TOWN OF EXETER  
10 FRONT STREET  
EXETER, NH 03833  
RCRD BK#3667 PG#2468

**MAP 39 LOT 3**  
N/F  
TOWN OF EXETER  
10 FRONT STREET  
EXETER, NH 03833  
RCRD BK#3667 PG#2470

**MAP 47 LOT 9**  
N/F  
OXT ASSOCIATES  
158 SHATTUCK WAY  
NEWINGTON, NH 03801  
RCRD BK#3231 PG#2722  
(SEE PLAN REFERENCE #3)

**MAP 49 LOT 8**  
N/F  
TOWN OF EXETER  
10 FRONT STREET  
EXETER, NH 03833  
RCRD BK#2056 PG#64

**MAP 48 LOT 3**  
270,787 S.F.  
(6.2164 ACRES)

**MAP 48 LOT 4-1**  
N/F  
JAMRIS REALTY, LLC  
6 COMMERCE WAY  
EXETER, NH 03833  
RCRD BK#3406 PG#1609  
(SEE PLAN REFERENCE #2)

**MAP 47 LOT 11**  
N/F  
BOATGARTEN, LLC  
PO BOX 4430  
MANCHESTER, NH 03108

### SITE DEVELOPMENT PLANS

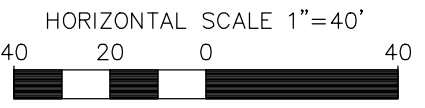
TAX MAP 48 LOT 3  
**WETLAND IMPACT PLAN**  
C3I, INC.  
8 COMMERCE WAY  
EXETER, NH  
COUNTY OF ROCKINGHAM  
OWNED BY  
C-MARINE DYNAMICS REALTY, LLC

SCALE: APRIL 14, 2023



Civil Engineers  
Structural Engineers  
Traffic Engineers  
Land Surveyors  
Landscape Architects  
Scientists

48 Constitution Drive  
Bedford, NH 03110  
Phone (603) 472-4488  
Fax (603) 472-9747  
www.tfmoran.com



REV	DATE	DESCRIPTION	DR	CK

FILE	47201.03	DR	FB	CADFILE	47201-03 WETLAND IMPACT	C-2
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Jul 27, 2023 - 4:52pm F:\MISC Projects\47201 - Commerce Way - Exeter\47201-03 - Fiscal Construction - C3I-8 commerce way\Design\PRODUCTION DRAWINGS\47201-03 Wetland Impact.dwg

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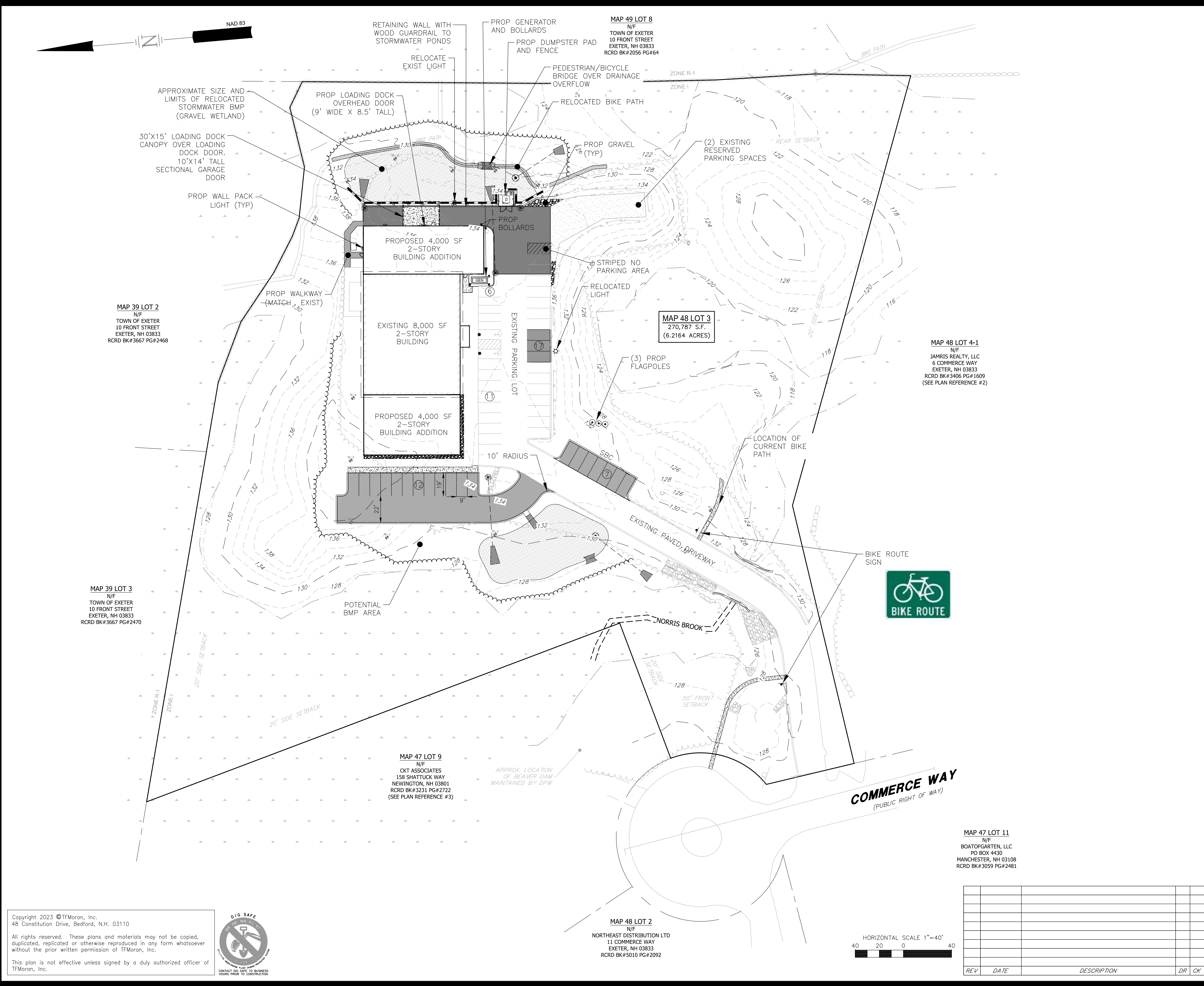








Jul 27, 2023 - 12:32pm  
 F:\MISC Projects\47201 - Commerce Way - Exeter\47201-03 - Rical Construction - C3I-8 commerce way\Design\PRODUCTION DRAWINGS\47201-03 Site.dwg



**SITE DATA**

OWNER OF RECORD OF MAP 48 LOT 3: C-MARINE DYNAMICS REALTY, LLC.  
 AREA OF PARCEL = 270,787± SF OR 6.22± ACRES

ZONED: INDUSTRIAL (I) ZONE  
 EXISTING USE: LIGHT INDUSTRIAL/PROFESSIONAL OFFICE  
 PROPOSED USE: LIGHT INDUSTRIAL/PROFESSIONAL OFFICE

THE PURPOSE OF THIS PLAN IS TO CONSTRUCT TWO, 2-STORY, 4,000 SQUARE FOOT FOOTPRINT BUILDING ADDITIONS. ASSOCIATED IMPROVEMENTS INCLUDE AND ARE NOT LIMITED TO PARKING, GRADING, STORMWATER MANAGEMENT SYSTEMS, LIGHTING, AND LANDSCAPING.

**DIMENSIONAL REQUIREMENTS (CURRENT ZONING)**

	REQUIRED:	PROVIDED:
MINIMUM LOT DIMENSIONS:		
LOT AREA	40,000'	270,787 SF
LOT FRONTAGE	150'	162'
MIN LOT DEPTH	200'	450'
MINIMUM YARD DIMENSIONS:		
FRONT	50'	>50'
SIDE	20'	>20'
REAR	50'	>50'
MAXIMUM STRUCTURE DIMENSIONS:		
STRUCTURE HEIGHT	50 FT	<50 FT
MAXIMUM LOT COVERAGE	40%	3%
MINIMUM OPEN SPACE	25%	>80%

**PARKING CALCULATIONS**

TOTAL REQUIRED:	PROFESSIONAL OFFICE - 1 SPACE PER 300 SF
	LIGHT INDUSTRIAL - 1 SPACE FOR EACH EMPLOYEE ON MAX. SHIFT
	PROFESSIONAL OFFICE: 13,650 SF X 1/300 = 46 SPACES
	LIGHT INDUSTRIAL: 9 MANUFACTURING EMPLOYEES = 9 SPACES
	TOTAL REQUIRED = 55 SPACES
TOTAL PROVIDED:	55 SPACES

**NOTES**

- SEE NOTES ON SHEET C-01.
- ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS NOTED OTHERWISE.
- LIGHTING, SIGNAGE, LANDSCAPING, AND SCREENING SHALL MEET THE REQUIREMENTS OF THE CITY/TOWN ZONING ORDINANCE AND SITE PLAN REGULATIONS.
- SNOW SHALL NOT BE STOCKPILED IN STORMWATER BMP'S, WETLAND BUFFERS, OR WETLANDS. SEE SNOW STORAGE LOCATIONS. IN THE EVENT THAT THE SNOW STORAGE AREAS PROVIDED ON THE SITE ARE COMPLETELY UTILIZED, EXCESS SNOW SHALL BE TRANSPORTED OFF SITE FOR DISPOSAL IN ACCORDANCE WITH NHDES REGULATION. IF SNOW IS STORED WITHIN PARKING AREA, KEEP CATCH BASINS CLEAR.

**SITE DEVELOPMENT PLANS**

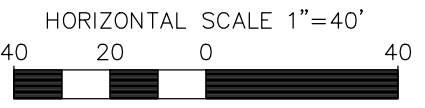
TAX MAP 48 LOT 3  
**SITE PLAN**  
**C3I, INC.**  
**8 COMMERCE WAY**  
**EXETER, NH**  
**COUNTY OF ROCKINGHAM**  
 OWNED BY  
**C-MARINE DYNAMICS REALTY, LLC**

**SCALE: 1"=40'** **APRIL 14, 2023**

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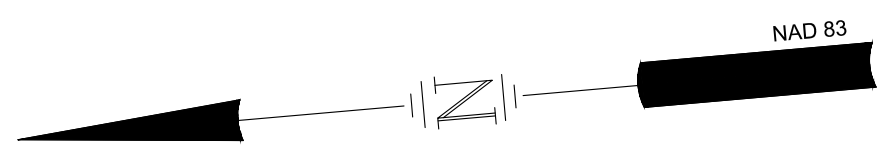
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REV	DATE	DESCRIPTION	DR	CK

	Civil Engineers Structural Engineers Traffic Engineers Land Surveyors Landscape Architects Scientists	48 Constitution Drive Bedford, NH 03110 Phone (603) 472-4488 Fax (603) 472-9747 www.tfmoran.com
	F I L E: 47201.03 DR MM FB CK CR CADFILE	47201-03 SITE





MAP 49 LOT 8  
N/F  
TOWN OF EXETER  
10 FRONT STREET  
EXETER, NH 03833  
RCRD BK#2056 PG#64

MAP 39 LOT 2  
N/F  
TOWN OF EXETER  
10 FRONT STREET  
EXETER, NH 03833  
RCRD BK#3667 PG#2468

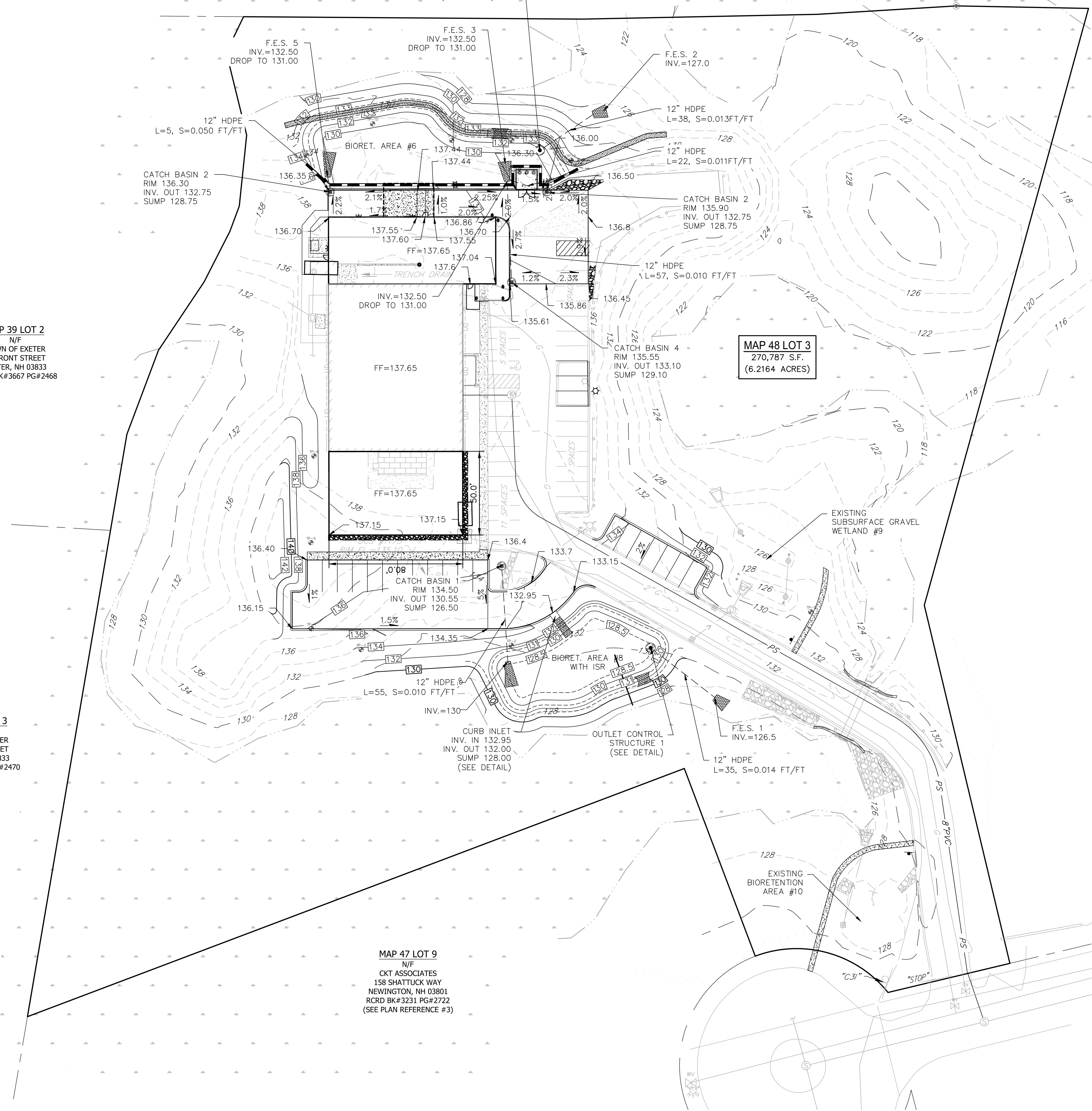
MAP 48 LOT 3  
270,787 S.F.  
(6.2164 ACRES)

MAP 48 LOT 4-1  
N/F  
JAMRIS REALTY, LLC  
6 COMMERCE WAY  
EXETER, NH 03833  
RCRD BK#3406 PG#1609  
(SEE PLAN REFERENCE #2)

MAP 39 LOT 3  
N/F  
TOWN OF EXETER  
10 FRONT STREET  
EXETER, NH 03833  
RCRD BK#3667 PG#2470

MAP 47 LOT 9  
N/F  
CKT ASSOCIATES  
158 SHATTUCK WAY  
NEWINGTON, NH 03801  
RCRD BK#3231 PG#2722  
(SEE PLAN REFERENCE #3)

MAP 47 LOT 11  
N/F  
BOATOPGARTEN, LLC  
PO BOX 4430  
MANCHESTER, NH 03108  
RCRD BK#3059 PG#2481



**NOTES**

- SEE NOTES ON SHEET C-01.
- ALL DOORS AND GARAGE ENTRANCES SHALL BE AT FINISHED FLOOR ELEVATION UNLESS OTHERWISE NOTED.
- PROPOSED SPOT GRADES ON PAVEMENT ARE PROVIDED TO THE NEAREST 0.05. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE FINISHED GRADES MEET ADA STANDARDS FOR WHEEL CHAIR RAMPS, HANDICAP SPACES AND ACCESS AISLES, CROSSWALKS, SIDEWALKS, ETC.
- ALL ELEVATIONS SHOWN AT CURB ARE TO THE BOTTOM OF CURB UNLESS OTHERWISE NOTED. CURBS HAVE A 6" REVEAL UNLESS OTHERWISE NOTED.
- LENGTH OF PIPE IS FOR CONVENIENCE ONLY. ACTUAL PIPE LENGTH SHALL BE DETERMINED IN THE FIELD.
- ALL PROPOSED DRAINAGE PIPES SHALL BE 12" AND HDPE, UNLESS OTHERWISE NOTED ON THE PLAN.
- DRAINAGE PIPES WITH LESS THAN 3' COVER SHALL BE INSULATED (SEE UTILITY TRENCH DETAIL) AND DRAINAGE CATCH BASINS WITH LESS THAN 3.5' OF COVER OVER INVERTS SHALL USE SLAB TOP CATCH BASIN (SEE DETAILS).
- THE CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT AND ARCHITECTURAL PLANS FOR SUBDRAINAGE SYSTEMS FOR THE BUILDING FOUNDATION. SUBDRAINAGE MUST DAYLIGHT OR TIE INTO THE STORMWATER MANAGEMENT SYSTEM. COORDINATE SUBDRAINAGE SYSTEM DESIGN WITH THE ENGINEER OF RECORD.

- NOTE:
- ALL TEST PITS ARE TO BE TESTED FOR INFILTRATION RATES AT THE GIVEN INFILTRATION ELEVATIONS.
  - TEST PITS ARE TO BE EXCAVATED UNTIL SEASONAL HIGH WATER TABLE OR THE LOCATION OF LEDGE IS ENCOUNTERED. TEST PIT DEPTHS LISTED ARE MINIMUM DEPTHS. IF SEASONAL HIGH WATER OR LEDGE ARE ENCOUNTERED, THE TEST PIT CAN BE STOPPED.
  - INFILTRATION TESTS ARE FOR INFILTRATION ONLY. THEY CAN BE DISCONTINUED IF SEASONAL HIGH WATER OR LEDGE IS ENCOUNTERED WITHIN THE TESTING RANGE FOR THE INFILTRATION.
  - INFILTRATION TESTS SHALL BE PERFORMED ACCORDING TO ENV-WQ 1504.14 (e) (AOT STANDARDS).

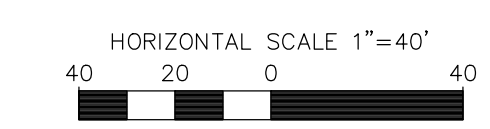
SOIL LEGEND (PER SITE SPECIFIC SOIL SURVEY)		
SYMBOL	DESCRIPTION	HYDROLOGIC SOIL GROUP
313	DEERFIELD	B
546/P	WALPPOLE POORLY DRAINED	C

**SITE DEVELOPMENT PLANS**

TAX MAP 48 LOT 3  
**GRADING & DRAINAGE PLAN**  
C3I, INC.  
8 COMMERCE WAY  
EXETER, NH  
COUNTY OF ROCKINGHAM  
OWNED BY  
**C-MARINE DYNAMICS REALTY, LLC**

**SCALE:** **APRIL 14, 2023**

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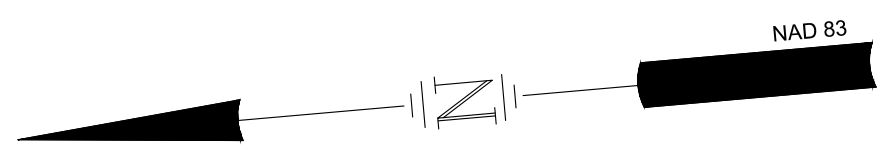


REV	DATE	DESCRIPTION	DR	CK

	Civil Engineers Structural Engineers Traffic Engineers Land Surveyors Landscape Architects Scientists	48 Constitution Drive Bedford, NH 03110 Phone (603) 472-4488 Fax (603) 472-9747 www.tfmoran.com		
	47201.03	DR CK	FB CADFILE	47201-03 GRADING & DRAIN

Jul 27, 2023 - 12:32pm  
 F:\MISC Projects\47201 - Commerce Way - Exeter\47201-03 - Rical Construction - C3I-8 Commerce Way\Design\PRODUCTION DRAWINGS\47201-03 Grading & Drain.dwg





MAP 49 LOT 8  
N/F  
TOWN OF EXETER  
10 FRONT STREET  
EXETER, NH 03833  
RCRD BK#2056 PG#64

MAP 39 LOT 2  
N/F  
TOWN OF EXETER  
10 FRONT STREET  
EXETER, NH 03833  
RCRD BK#3667 PG#2468

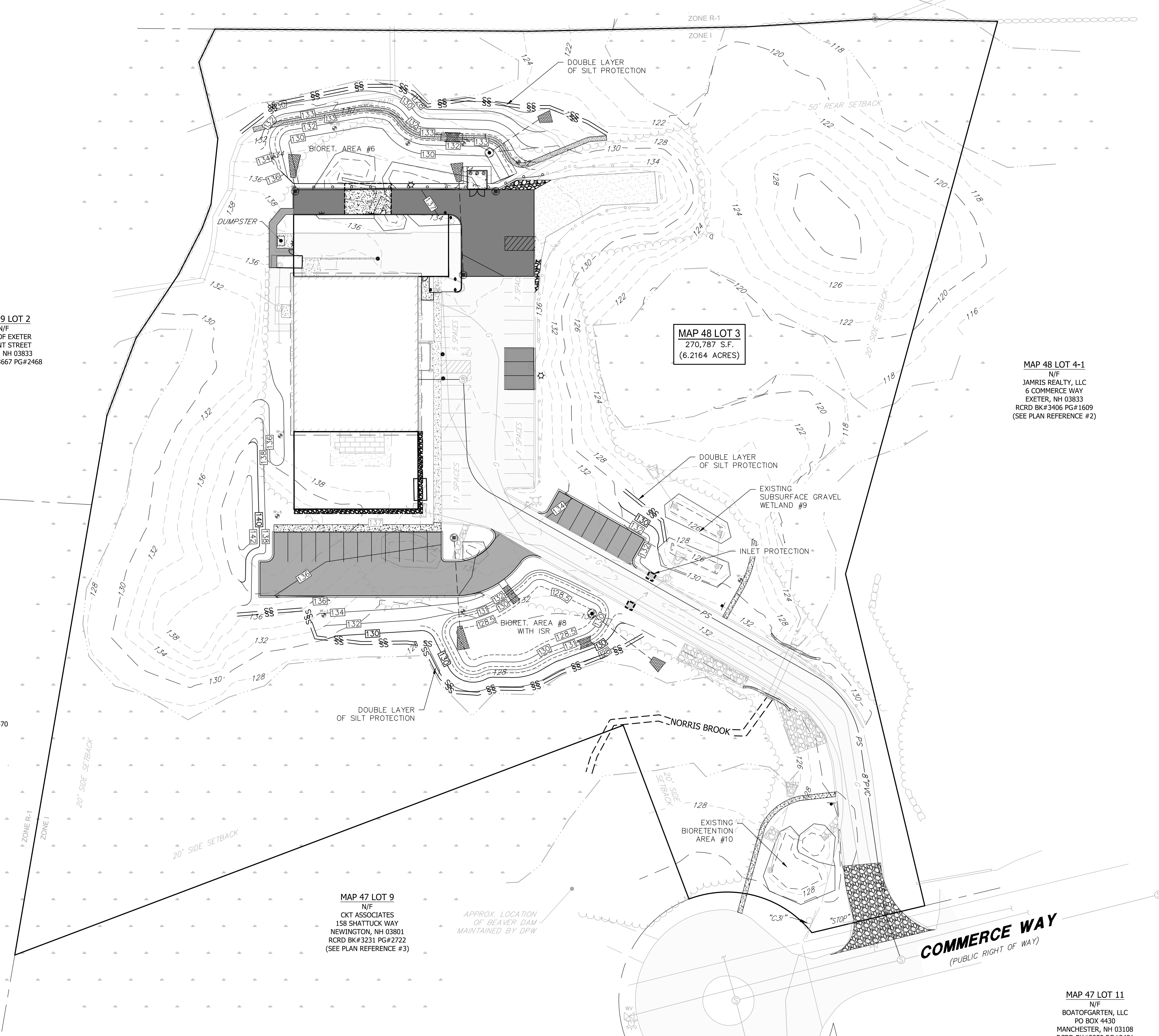
MAP 48 LOT 3  
270,787 S.F.  
(6.2164 ACRES)

MAP 48 LOT 4-1  
N/F  
JAMRIS REALTY, LLC  
6 COMMERCE WAY  
EXETER, NH 03833  
RCRD BK#3406 PG#1609  
(SEE PLAN REFERENCE #2)

MAP 39 LOT 3  
N/F  
TOWN OF EXETER  
10 FRONT STREET  
EXETER, NH 03833  
RCRD BK#3667 PG#2470

MAP 47 LOT 9  
N/F  
CXT ASSOCIATES  
158 SHATTUCK WAY  
NEWINGTON, NH 03801  
RCRD BK#3231 PG#2722  
(SEE PLAN REFERENCE #3)

MAP 47 LOT 11  
N/F  
BOATPARKTEN, LLC  
PO BOX 4430  
MANCHESTER, NH 03108  
RCRD BK#3059 PG#2481



**NOTES**

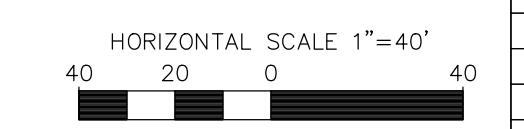
- SEE NOTES ON SHEET C-01, EROSION CONTROL NOTES AND DETAILS ON SHEET C-08, AND THE APPROVED SWPPP, AS APPLICABLE.
- INSTALL SILT BARRIER ALONG THE PERIMETER OF THE AREA TO BE DISTURBED AS FIRST ORDER OF WORK.
- PROVIDE INLET PROTECTION BARRIERS AROUND ALL EXISTING AND PROPOSED STORM DRAINAGE INLETS WITHIN THE WORK LIMITS AND MAINTAIN FOR THE DURATION OF THE PROJECT UNTIL PAVEMENT HAS BEEN INSTALLED. INLET PROTECTION BARRIERS SHALL BE IN PLACE AT ALL CATCH BASINS PRIOR TO THE DISTURBANCE OF SOIL.
- DUST CONTROL SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. IT SHALL BE ACCOMPLISHED BY THE UNIFORM APPLICATION OF CALCIUM CHLORIDE AT THE RATE OF 1-1/2 POUNDS PER SQUARE YARD BY MEANS OF A LIME SPREADER OR OTHER APPROVED METHOD. WATER MAY ALSO BE USED FOR DUST CONTROL, AND APPLIED BY SPRINKLING WITH WATER TRUCK DISTRIBUTORS, AS REQUIRED.
- THE SITE WILL REQUIRE A USEPA NPDES PERMIT FOR STORMWATER DISCHARGE FOR THE SITE CONSTRUCTION IF THE DISTURBANCE EXCEEDS ONE ACRE. THE CONSTRUCTION SITE OPERATOR SHALL DEVELOP AND IMPLEMENT A CONSTRUCTION STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH EPA REGULATIONS AND THE CONSTRUCTION GENERAL PERMIT WHICH SHALL REMAIN ON SITE AND MADE ACCESSIBLE TO THE PUBLIC. THE SITE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO SUBMIT AN NOI AT LEAST 14 DAYS IN ADVANCE OF ANY EARTHWORK ACTIVITIES AT THE SITE. A COMPLETED NOTICE OF TERMINATION (NOTI) SHALL BE SUBMITTED TO NPDES PERMITTING AUTHORITY WITHIN 30 DAYS AFTER EITHER OF THE FOLLOWING CONDITIONS HAVE BEEN MET: FINAL STABILIZATION HAS BEEN ACHIEVED ON ALL PORTIONS OF THE SITE FOR WHICH THE PERMITTEE IS RESPONSIBLE FOR, OR ANOTHER OPERATOR/PERMITTEE HAS ASSUMED CONTROL OVER ALL AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED.
- SILT PROTECTION MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS CONTAINED IN THIS PLAN SET.
- CONSTRUCT JUTE MATTING ON ALL SLOPES STEEPER THAN 3:1, DISTURBED AREAS SLOPING TOWARDS WETLANDS AND ALL LOCATIONS SHOWN ON PLAN.
- INSPECT EROSION CONTROL MEASURES WEEKLY AND AFTER EACH RAIN STORM OF 0.10" OR GREATER. REPAIR/MODIFY SILT BARRIER AS NECESSARY TO MAXIMIZE FILTER EFFICIENCY. REMOVE SEDIMENT WHEN SEDIMENT IS 1/3 THE STRUCTURE HEIGHT.
- PROVIDE SILT BARRIERS AT THE BASE OF CUT AND FILL SLOPES UNTIL COMPLETION OF THE PROJECT OR UNTIL VEGETATION BECOMES ESTABLISHED ON SLOPES. EROSION PROTECTION BELOW FILL SLOPES SHALL BE PLACED IMMEDIATELY AFTER CLEARING, PRIOR TO EMBANKMENT CONSTRUCTION.
- ALL DISTURBED AREAS SHALL BE REVEGETATED AS QUICKLY AS POSSIBLE. ALL CUT AND FILL SLOPES SHALL BE SEEDED WITHIN 72 HOURS AFTER GRADING.
- ALL WORK AREAS TO BE STABILIZED AT THE END OF EACH WORK DAY AND PRIOR TO ANY PREDICTED SIGNIFICANT RAIN EVENT.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
  - BASE COURSE GRAVELS, WHICH MEET THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM 304.2, ARE INSTALLED IN AREAS TO BE PAVED
  - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
  - A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED
  - EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED
- ALL CATCH BASINS, MANHOLES, AND DRAIN LINES SHALL BE THOROUGHLY CLEANED OF ALL SEDIMENT AND DEBRIS AFTER ALL AREAS HAVE BEEN STABILIZED.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SLOPE STABILITY DURING CONSTRUCTION.
- THE EROSION CONTROL PRACTICES SHOWN ON THESE PLANS ARE ILLUSTRATIVE ONLY AND SHALL BE SUPPLEMENTED BY THE SITE CONTRACTOR AS NEEDED.

**SITE DEVELOPMENT PLANS**

TAX MAP 48 LOT 3  
**EROSION CONTROL PLAN**  
C3I, INC.  
8 COMMERCE WAY  
EXETER, NH  
COUNTY OF ROCKINGHAM  
OWNED BY  
**C-MARINE DYNAMICS REALTY, LLC**

SCALE: APRIL 14, 2023

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REV	DATE	DESCRIPTION	DR	CK

	Civil Engineers	48 Constitution Drive Bedford, NH 03110 Phone (603) 472-4488 Fax (603) 472-9747 www.tfmoran.com
	Structural Engineers Traffic Engineers Landscape Architects Scientists	
FILE: 47201.03 DR: CK FB: - CADFILE: 47201-03 EROSION CONTROL PLAN	C-6	

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SOIL CHARACTERISTICS

THE SOIL IN THE VICINITY OF THE SITE DEVELOPMENT CONSIST OF URBAN LAND AND UDORTHANTS, LOAMY SOIL, THE MAJORITY OF THE SOIL IS HSG TYPE B.

DISTURBED AREA

THE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY 34,454 SQUARE FEET (0.790 ACRES). CONSTRUCTION SHALL BE PHASED TO LIMIT DISTURBED AREAS TO LESS THAN 5 ACRES.

CRITICAL NOTE: THIS DRAWING IS PROVIDED FOR GENERAL GUIDANCE. ALL SPECIAL EROSION CONTROL MEASURES MUST BE EXECUTED IN ACCORDANCE WITH APPLICABLE CURRENT STATE AND LOCAL REGULATIONS, APPROVED SWPPP, AND PERMIT REQUIREMENTS.

SEQUENCE OF MAJOR ACTIVITIES

- 1. INSTALL PERIMETER CONTROLS, STABILIZED CONSTRUCTION ENTRANCE, AND TEMPORARY EROSION CONTROL MEASURES PER APPROVED SITE DEVELOPMENT PLANS, PERMITS, OR SWPPP IF REQUIRED, PRIOR TO EARTH MOVING OPERATIONS.
2. DEMOLISH EXISTING SITE WORK DESIGNATED FOR REMOVAL.
3. INSTALL STORMWATER TREATMENT PONDS AND SWALES BEFORE ROUGH GRADING THE SITE.
4. COMPLETE MAJOR GRADING OF SITE.
5. CONSTRUCT BUILDING PAD, STORMWATER SYSTEM, AND SITE UTILITIES.
6. CONSTRUCT PARKING AREAS.
7. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND SITE IS STABILIZED, REMOVE ALL INLET PROTECTION, SILT BARRIERS, AND SEDIMENT THAT HAS BEEN TRAPPED BY THESE DEVICES.
8. CONSULT APPLICABLE REGULATIONS, PERMITS, CONDITIONS, AND APPROVED SWPPP FOR CONDITIONS RELATED TO NOTICE OF TERMINATION, IF REQUIRED.

EROSION AND SEDIMENT CONTROLS AND STABILIZATION PRACTICES

STABILIZATION SHALL BE INITIATED ON ALL LOAM STOCKPILES AND DISTURBED AREAS WHERE CONSTRUCTION ACTIVITY WILL NOT OCCUR FOR MORE THAN TWENTY ONE (21) CALENDAR DAYS BY THE FOURTEENTH (14TH) DAY AFTER CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED IN THAT AREA. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:

- 1. BASE COURSE GRAVELS, WHICH MEET THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM 304.2, HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
2. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
3. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
4. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

DURING CONSTRUCTION, RUNOFF WILL BE DIVERTED AROUND THE SITE WITH EARTH DIKES, PIPING OR STABILIZED CHANNELS WHERE POSSIBLE. SHEET RUNOFF FROM THE SITE WILL BE FILTERED THROUGH SILT BARRIERS. ALL STORM DRAIN INLETS SHALL BE PROVIDED WITH BARRIER FILTERS. STONE RIPRAP SHALL BE PROVIDED AT THE OUTLETS OF DRAINAGE PIPES WHERE EROSION VELOCITIES ARE ENCOUNTERED.

OFF SITE VEHICLE TRACKING

STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED.

INSTALLATION, MAINTENANCE, AND INSPECTION OF EROSION AND SEDIMENT CONTROLS

A. GENERAL

THESE ARE THE GENERAL INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO IMPLEMENT THE PLAN.

- 1. STABILIZATION OF ALL SWALES, DITCHES, AND PONDS IS REQUIRED PRIOR TO DIRECTING FLOW TO THEM.
2. THE SMALLEST PRACTICAL PORTION OF THE SITE WILL BE DENUDE AT ONE TIME. (5 AC MAX)
3. ALL CONTROL MEASURES WILL BE INSPECTED IN ACCORDANCE WITH APPLICABLE REGULATIONS, PERMITS, AND FOR PROJECTS REQUIRING A NHDES AOT PERMIT AND NHDES EPA COP, DISCHARGING TO A SENSITIVE WATERBODY, AT LEAST EVERY 7 DAYS AND AFTER A 0.25 INCH RAIN EVENT OR GREATER, AND INSPECTIONS SHALL BE CONDUCTED BY THE ENVIRONMENTAL MONITOR IF ONE IS REQUIRED, PURSUANT TO ENV-WQ 1505.03(B).
4. ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER. IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.
5. BUILT UP SEDIMENT WILL BE REMOVED FROM SILT BARRIER WHEN IT HAS REACHED ONE THIRD THE HEIGHT OF THE BARRIER.
6. ALL DIVERSION DIKES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.
7. TEMPORARY SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND UNHEALTHY GROWTH.
8. A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION.
9. THE CONTRACTOR WILL BE RESPONSIBLE FOR ENSURING AN ENVIRONMENTAL MONITOR, IF ONE IS REQUIRED, PURSUANT TO ENV-WQ 1505.03(B), IS CONTRACTED.

B. FILTERS / BARRIERS

- 1. SILT SOCKS
A. KNOTTED MESH NETTING MATERIAL SHALL BE DELIVERED TO SITE IN A 5 MIL CONTINUOUS, TUBULAR, HDPE 3/8" MATERIAL, FILLED WITH COMPOST CONFORMING TO THE FOLLOWING REQUIREMENTS:

Table with 3 columns: PHYSICAL PROPERTY, TEST, REQUIREMENTS. Rows include PH, PARTICLE SIZE, and MOISTURE CONTENT.

MATERIAL SHALL BE RELATIVELY FREE OF INERT OR FOREIGN MAN-MADE MATERIALS. MATERIAL SHALL BE WEED FREE AND DERIVED FROM A WELL-DECOMPOSED SOURCE OF ORGANIC MATTER, FREE FROM ANY REFUSE, CONTAMINANTS OR OTHER MATERIALS TOXIC TO PLANT GROWTH.

- B. SEDIMENT COLLECTED AT THE BASE OF THE SILT SOCK SHALL BE REMOVED ONCE IT HAS REACHED 1/3 OF THE EXPOSED HEIGHT OF THE SILT SOCK.

- C. SILT BARRIER SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREAS HAS BEEN PERMANENTLY STABILIZED.

- 2. SEQUENCE OF INSTALLATION

SEDIMENT BARRIERS SHALL BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM.

3. MAINTENANCE

- A. SILT BARRIERS SHALL BE INSPECTED WEEKLY AND IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. THEY SHALL BE REPAIRED IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM, SEDIMENT BARRIERS SHALL BE REPLACED WITH A TEMPORARY CHECK DAM.
B. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL IS NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
C. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE THIRD (1/3) THE HEIGHT OF THE BARRIER.
D. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFIRM WITH THE EXISTING GRADE, PREPARED AND SEEDDED.

C. MULCHING

- 1. TIMING

IN ORDER FOR MULCH TO BE EFFECTIVE, IT MUST BE IN PLACE PRIOR TO MAJOR STORM EVENTS. THERE ARE TWO (2) TYPES OF STANDARDS WHICH SHALL BE USED TO ASSURE THIS:

- A. APPLY MULCH PRIOR TO ANY STORM EVENT.

THIS IS APPLICABLE WHEN WORKING WITHIN 100' OF WETLANDS. IT WILL BE NECESSARY TO CLOSELY MONITOR WEATHER PREDICTIONS, USUALLY BY CONTACTING THE NATIONAL WEATHER SERVICE, TO HAVE ADEQUATE WARNING OF SIGNIFICANT STORMS.

- B. REQUIRED MULCHING WITHIN A SPECIFIED TIME PERIOD.

THE TIME PERIOD CAN RANGE FROM 14 TO 21 DAYS OF INACTIVITY ON AN AREA, WHERE THE LENGTH OF TIME VARIES WITH SITE CONDITIONS. PROFESSIONAL JUDGMENT SHALL BE USED TO EVALUATE THE INTERACTION OF SITE CONDITIONS (SOIL ERODIBILITY, SEASON OF YEAR, EXTENT OF DISTURBANCE, PROXIMITY TO SENSITIVE RESOURCES, ETC.) AND THE POTENTIAL IMPACT OF EROSION ON ADJACENT AREAS TO CHOOSE AN APPROPRIATE TIME RESTRICTION.

- 2. GUIDELINES FOR WINTER MULCH APPLICATION.

WHEN MULCH IS APPLIED TO PROVIDE PROTECTION OVER WINTER (PAST THE GROWING SEASON) IT SHALL BE AT A RATE OF 6,000 POUNDS OF HAY OR STRAW PER ACRE. A TACKIFIER MAY BE ADDED TO THE MULCH.

- 3. MAINTENANCE

ALL MULCHES MUST BE INSPECTED PERIODICALLY, IN PARTICULAR AFTER RAINSTORMS, TO CHECK FOR RILL EROSION. IF LESS THAN 90% OF THE SOIL SURFACE IS COVERED BY MULCH, ADDITIONAL MULCH SHALL BE IMMEDIATELY APPLIED.

D. VEGETATIVE PRACTICE

- 1. AFTER ROUGH GRADING OF THE SUBGRADE HAS BEEN COMPLETED AND APPROVED, THE SUB GRADE SURFACE SHALL BE SCARIFIED TO A DEPTH OF 4", THEN, FURNISH AND INSTALL A LAYER OF LOAM PROVIDING A ROLLED THICKNESS AS SPECIFIED IN THESE PLANS. ANY DEPRESSIONS WHICH MAY OCCUR DURING ROLLING SHALL BE FILLED WITH ADDITIONAL LOAM, REGRADED AND REROLLED UNTIL THE SURFACE IS TRUE TO THE FINISHED LINES AND GRADES. ALL LOAM NECESSARY TO COMPLETE THE WORK UNDER THIS SECTION SHALL BE SUPPLIED BY THE SITE SUBCONTRACTOR.

- 2. ALL LARGE STIFF CLODS, LUMPS, BRUSH, ROOTS, DEBRIS, GLASS, STUMPS, LITTER, AND OTHER FOREIGN MATERIAL, AS WELL AS STONES OVER 1" IN DIAMETER, SHALL BE REMOVED FROM THE LOAM AND DISPOSED OF OFF SITE. THE LOAM SHALL BE RAKED SMOOTH AND EVEN.

- 3. THE LOAM SHALL BE PREPARED TO RECEIVE SEED BY REMOVING STONES, FOREIGN OBJECTS AND GRADING TO ELIMINATE WATER POCKETS AND IRREGULARITIES PRIOR TO PLACING SEED. FINISH GRADING SHALL RESULT IN STRAIGHT UNIFORM GRADES AND SMOOTH, EVEN SURFACES WITHOUT IRREGULARITIES TO LOW POINTS.

- 4. SHAPE THE AREAS TO THE LINES AND GRADES REQUIRED. THE SITE SUBCONTRACTOR'S ATTENTION IS DIRECTED TO THE SCHEDULING OF LOAMING AND SEEDING OF GRADED AREAS TO PERMIT SUFFICIENT TIME FOR THE STABILIZATION OF THESE AREAS. IT SHALL BE THE SITE SUBCONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE AREAS DURING THE CONSTRUCTION PERIOD AND REGRADE, LOAM AND RESEED ANY DAMAGED AREAS.

- 5. ALL AREAS DISTURBED BY CONSTRUCTION WITHIN THE PROPERTY LINES AND NOT COVERED BY STRUCTURES, PAVEMENT, OR MULCH SHALL BE LOAMED AND SEEDED.

- 6. LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF 2 TONS PER ACRE IN ORDER TO PROVIDE A PH VALUE OF 5.5 TO 6.5.

- 7. FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAM AND WORKED INTO THE SURFACE. FERTILIZER APPLICATION RATE SHALL BE 500 POUNDS PER ACRE OF 10-20-20 FERTILIZER.

- 8. SOIL CONDITIONERS AND FERTILIZER SHALL BE APPLIED AT THE RECOMMENDED RATES AND SHALL BE THOROUGHLY WORKED INTO THE LOAM. LOAM SHALL BE RAKED UNTIL THE SURFACE IS FINELY PULVERIZED, SMOOTH AND EVEN, AND THEN COMPACTED TO AN EVEN SURFACE CONFORMING TO THE REQUIRED LINES AND GRADES WITH APPROVED ROLLERS WEIGHING BETWEEN 4 1/2 POUNDS AND 5 1/2 POUNDS PER INCH OF WIDTH.

- 9. SEED SHALL BE SOWN AT THE RATE SHOWN BELOW. SOWING SHALL BE DONE ON A CALM, DRY DAY, PREFERABLY BY MACHINE, BUT IF BY HAND, ONLY BY EXPERIENCED WORKMEN, IMMEDIATELY BEFORE SEEDING. THE SOIL SHALL BE LIGHTLY RAKED. ONE HALF THE SEED SHALL BE SOWN IN ONE DIRECTION AND THE OTHER HALF AT RIGHT ANGLES TO THE ORIGINAL DIRECTION. IT SHALL BE LIGHTLY RAKED INTO THE SOIL TO A DEPTH NOT OVER 1/4" AND ROLLED WITH A HAND ROLLER WEIGHING NOT OVER 100 POUNDS PER LINEAR FOOT OF WIDTH.

- 10. HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AT A RATE OF 1.5 TO 2 TONS PER ACRE. MULCH THAT BLOWS OR WASHES AWAY SHALL BE REPLACED IMMEDIATELY AND ANCHORED USING APPROPRIATE TECHNIQUES FROM THE EROSION AND SEDIMENT CONTROL HANDBOOK.

- 11. THE SURFACE SHALL BE WATERED AND KEPT MOIST WITH A FINE SPRAY AS REQUIRED, WITHOUT WASHING AWAY THE SOIL, UNTIL THE GRASS IS WELL ESTABLISHED. ANY AREAS WHICH ARE NOT SATISFACTORILY COVERED WITH GRASS SHALL BE RESEDED, AND ALL NOXIOUS WEEDS REMOVED.

- 12. THE SITE SUBCONTRACTOR SHALL PROTECT AND MAINTAIN THE SEEDED AREAS UNTIL ACCEPTED, INCLUDING CUTTING, AS SPECIFIED HEREIN AFTER UNDER MAINTENANCE AND PROTECTION.

- 13. UNLESS OTHERWISE APPROVED, SEEDING SHALL BE DONE DURING THE APPROXIMATE PERIODS OF EARLY SPRING TO SEPTEMBER 30, WHEN SOIL CONDITIONS AND WEATHER ARE SUITABLE FOR SUCH WORK. IN NO CASE SHALL THE WEED CONTENT EXCEED 1 PERCENT BY WEIGHT. ALL SEED SHALL COMPLY WITH STATE AND FEDERAL SEED LAWS. FOR TEMPORARY PLANTINGS AFTER SEPTEMBER 30, TO EARLY SPRING AND FOR TEMPORARY PROTECTION OF DISTURBED AREAS:

- A. FOLLOW ABOVE SLOPE, LOAM DEPTH AND GRADING REQUIREMENTS.
B. FERTILIZER SHALL BE SPREAD AND WORKED INTO THE SURFACE AT A RATE OF 500 POUNDS PER ACRE.

MULCHING AND SEEDING SHALL BE APPLIED AT THE FOLLOWING RATES: WINTER RYE (FALL SEEDING) 2.5 LBS/1,000 SF, OATS (SPRING SEEDING) 2.0 LBS/1,000 SF, MULCH 1.5 TONS/ACRE

E. CATCH BASIN INLET PROTECTION

- 1. INLET BASKET STRUCTURE

- A. INLET PROTECTION SHALL BE INSTALLED IMMEDIATELY PRIOR TO DISTURBING PAVEMENT AND SHALL REMAIN

IN PLACE AND MAINTAINED UNTIL PAVEMENT BINDER COURSE IS COMPLETE.

- B. SECURE 6X6, 42 LB. WIRE SUPPORT AROUND INLET FRAME AND GRATE AND EXTEND 6" BEYOND SIDES. MOLD FILTER FABRIC TO WIRE SUPPORT.

- C. THE FILTER FABRIC SHALL BE A GEOTEXTILE FABRIC; POLYESTER, POLYPROPYLENE, STABILIZED NYLON, POLYETHYLENE OR POLYVINYLIDENE CHLORIDE MEETING THE FOLLOWING SPECIFICATIONS:

GRAB STRENGTH: 45 LB. MINIMUM IN ANY PRINCIPAL DIRECTION (ASTM D1682)

MULLEN BURST STRENGTH: MIN. 60PSI (ASTM D774)

- D. THE FABRIC SHALL HAVE AN OPENING NO GREATER THAN A NUMBER 20 U.S. STANDARD SIEVE AND A MINIMUM PERMEABILITY OF 120 GPM.

- E. THE INLET PROTECTION SHALL BE INSPECTED WITHIN 24 HOURS AFTER EACH RAINFALL OR DAILY DURING EXTENDED PERIODS OF PRECIPITATION. REPAIRS SHALL BE MADE IMMEDIATELY, AS NECESSARY, TO PREVENT PARTICLES FROM REACHING THE DRAINAGE SYSTEM AND/OR CAUSING SURFACE FLOODING.

- F. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT, OR MORE OFTEN IF THE FABRIC BECOMES CLOGGED.

F. WINTER CONSTRUCTION SEQUENCE

- 1. ALL PROPOSED POST-DEVELOPMENT LANDSCAPED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, 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 PLACEMENT 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 EVENT.
2. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
3. AFTER OCTOBER 15TH, INCOMPLETE PARKING AREAS WHERE ACTIVE CONSTRUCTION HAS STOPPED FOR THE WINTER ALL TRAVEL SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3" OF CRUSHED GRAVEL PER NHOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOWFALL AFTER EACH STORM EVENT.

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, SILT BARRIERS SHALL BE INSTALLED PRIOR TO COMMENCING ANY CLEARING OR GRADING OF THE SITE. STRUCTURAL CONTROLS SHALL BE INSTALLED CONCURRENTLY WITH THE APPLICABLE ACTIVITY. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN TWENTY ONE (21) DAYS WILL BE STABILIZED WITH A TEMPORARY SEED AND MULCH WITHIN FOURTEEN (14) DAYS OF THE LAST DISTURBANCE. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, SILT BARRIERS AND ANY EARTH/DIKES WILL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED.

FOR SINGLE/DUPLEX FAMILY SUBDIVISIONS, WHEN LOT DEVELOPMENT IS NOT PART OF THE PERMIT, THEN 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.

WASTE DISPOSAL

- 1. WASTE MATERIALS
ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN SECURELY LIDDED RECEPTACLES. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN A DUMPSTER. NO CONSTRUCTION WASTE MATERIALS WILL BE BURIED ON SITE. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE SUPERINTENDENT.
2. HAZARDOUS WASTE
ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES BY THE SUPERINTENDENT.
3. SANITARY WASTE
ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

SPILL PREVENTION

- 1. MATERIAL MANAGEMENT PRACTICES
THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES DURING CONSTRUCTION TO STORMWATER RUNOFF:

GOOD HOUSEKEEPING: THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ON SITE DURING THE CONSTRUCTION PROJECT:

- A. AN EFFORT WILL BE MADE TO STORE ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB.
B. ALL MATERIALS STORED ON SITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR PROPER (ORIGINAL IF POSSIBLE) CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
C. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.
D. THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS.
E. SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
F. WHENEVER POSSIBLE ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.

HAZARDOUS PRODUCTS: THE FOLLOWING PRACTICES WILL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:

- A. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
B. ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION.
C. SURPLUS PRODUCT THAT MUST BE DISPOSED OF WILL BE DISCARDED ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS OF DISPOSAL.

- 2. PRODUCT SPECIFICATION PRACTICES
THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ON SITE:

PETROLEUM PRODUCTS: ALL ON SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT BASED SUBSTANCES USED ON SITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FERTILIZERS: FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE SPECIFICATIONS. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER. STORAGE WILL BE IN A COVERED SHED OR ENCLOSED TRAILERS. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

PAINTS: ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE DISPOSED OF PROPERLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE TRUCKS: CONCRETE TRUCKS WILL DISCHARGE AND WASH OUT SURPLUS CONCRETE OR DRUM WASH WATER IN A CONTAINED AREA DESIGNATED ON SITE.

SPILL CONTROL PRACTICES

IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTION THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

- A. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
B. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ON SITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC OR METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.
C. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
D. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
E. SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE.
F. THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM RECURRING AND HOW TO CLEANUP THE SPILL IF IT RECURS. A DESCRIPTION OF THE SPILL, ITS CAUSE, AND THE CLEANUP MEASURES WILL BE INCLUDED.
G. THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR.

DUST CONTROL

THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST THROUGHOUT THE CONSTRUCTION PERIOD. DUST CONTROL METHODS SHALL INCLUDE, BUT NOT LIMITED TO SPRINKLING WATER ON EXPOSED AREAS, COVERING LOADED DUMP TRUCKS LEAVING THE SITE, AND TEMPORARY MULCHING. DUST CONTROL MEASURES SHALL BE UTILIZED SO AS TO PREVENT THE MIGRATION OF DUST FROM THE SITE TO ADJUTING AREAS.

Jul 27, 2023 - 12:33pm F:\MISC Projects\47201 - Commerce Way - Exeter\47201-03 - Rical Construction - C3I-8 Commerce Way\Design\PRODUCTION DRAWINGS\47201-03 Erosion Ctrl Notes.dwg

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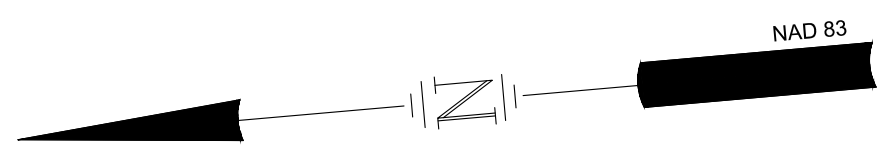


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Table with 4 columns: REV, DATE, DESCRIPTION, DR, CK. Contains revision information.

SITE DEVELOPMENT PLANS TAX MAP 48 LOT 3 EROSION CONTROL NOTES C3I, INC. 8 COMMERCE WAY EXETER, NH COUNTY OF ROCKINGHAM OWNED BY C-MARINE DYNAMICS REALTY, LLC SCALE: NTS APRIL 14, 2023. Includes TFM logo and contact information for Civil Engineers, Structural Engineers, Traffic Engineers, Land Surveyors, Landscape Architects, Scientists.





MAP 49 LOT 8  
N/F  
TOWN OF EXETER  
10 FRONT STREET  
EXETER, NH 03833  
RCRD BK#2056 PG#64

MAP 39 LOT 2  
N/F  
TOWN OF EXETER  
10 FRONT STREET  
EXETER, NH 03833  
RCRD BK#3667 PG#2468

MAP 48 LOT 3  
270,787 S.F.  
(6.2164 ACRES)

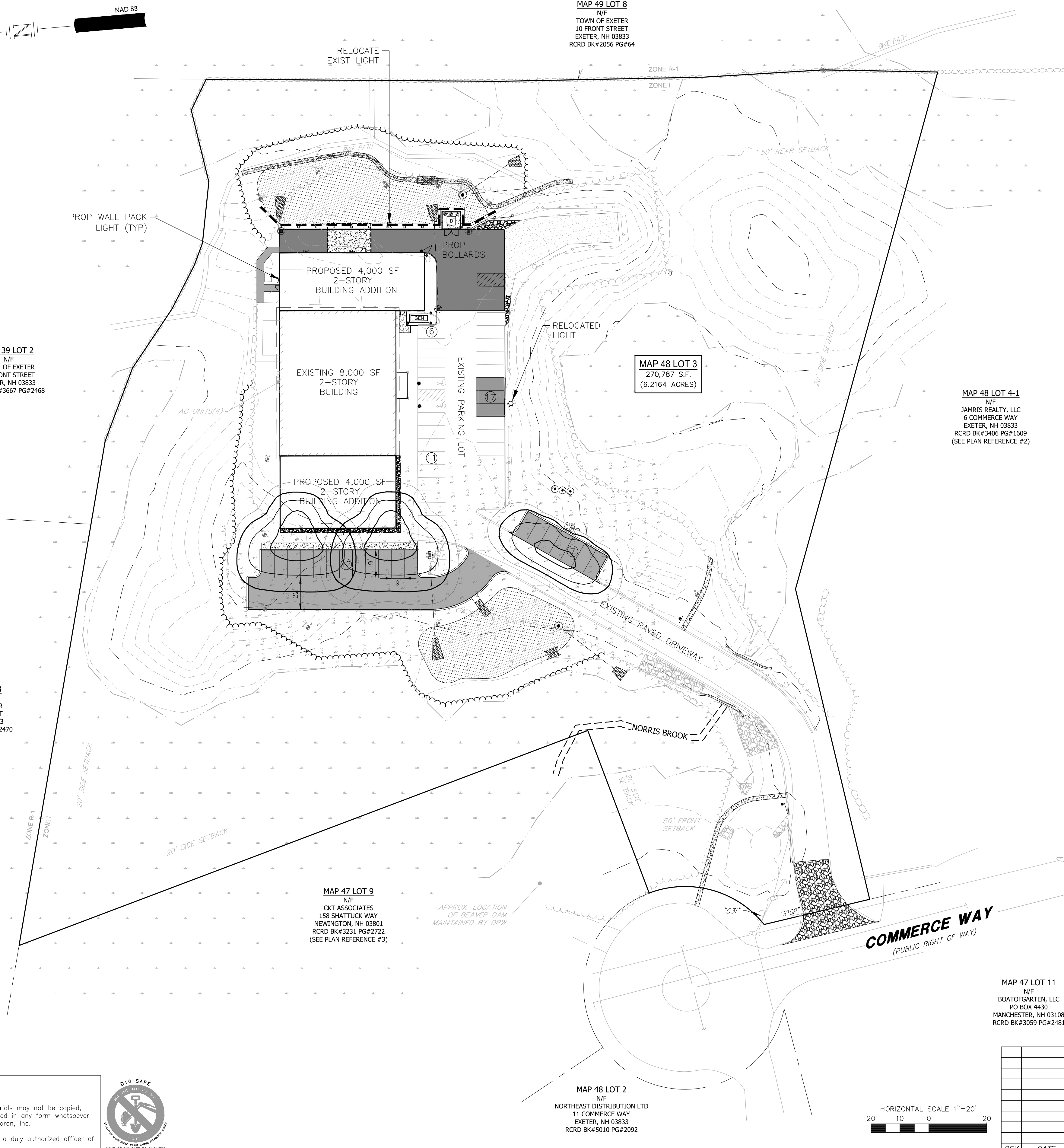
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N/F  
JAMRIS REALTY, LLC  
6 COMMERCE WAY  
EXETER, NH 03833  
RCRD BK#3406 PG#1609  
(SEE PLAN REFERENCE #2)

MAP 39 LOT 3  
N/F  
TOWN OF EXETER  
10 FRONT STREET  
EXETER, NH 03833  
RCRD BK#3667 PG#2470

MAP 47 LOT 9  
N/F  
CKT ASSOCIATES  
158 SHATTUCK WAY  
NEWINGTON, NH 03801  
RCRD BK#3231 PG#2722  
(SEE PLAN REFERENCE #3)

MAP 47 LOT 11  
N/F  
BOATOGARTEN, LLC  
PO BOX 4430  
MANCHESTER, NH 03108  
RCRD BK#3059 PG#2481

MAP 48 LOT 2  
N/F  
NORTHEAST DISTRIBUTION LTD  
11 COMMERCE WAY  
EXETER, NH 03833  
RCRD BK#5010 PG#2092



Symbol	Qty	Label	Arrangement	Description	[MANUFAC]
☐	1	S3	Single	MRS-LED-06L-SIL-3-UNV-DIM-30-70CRI-IL-CXX / 48Q B3 S11G 20 S GA 4BC (20' AFG)	LSI INDUSTRIES, INC.
☐	2	W	Single	XWS-LED-08L-SIL-FT-UNV-DIM-30-70CRI-CXX / WALL MTD 18' AFG	LSI INDUSTRIES, INC.

NEW PARKING LOT  
Illuminance (Fc)  
Average = 1.08  
Maximum = 2.5  
Minimum = 0.3  
Avg/Min Ratio = 3.60  
Max/Min Ratio = 8.33

NEW SMALL PARKING SPACES  
ALONG ENTRANCE DRIVE  
Illuminance (Fc)  
Average = 1.43  
Maximum = 2.3  
Minimum = 0.7  
Avg/Min Ratio = 2.04  
Max/Min Ratio = 3.29

**Mirada Small Area (MRS)**  
Outdoor LED Area Light



**POLE FIXTURE**

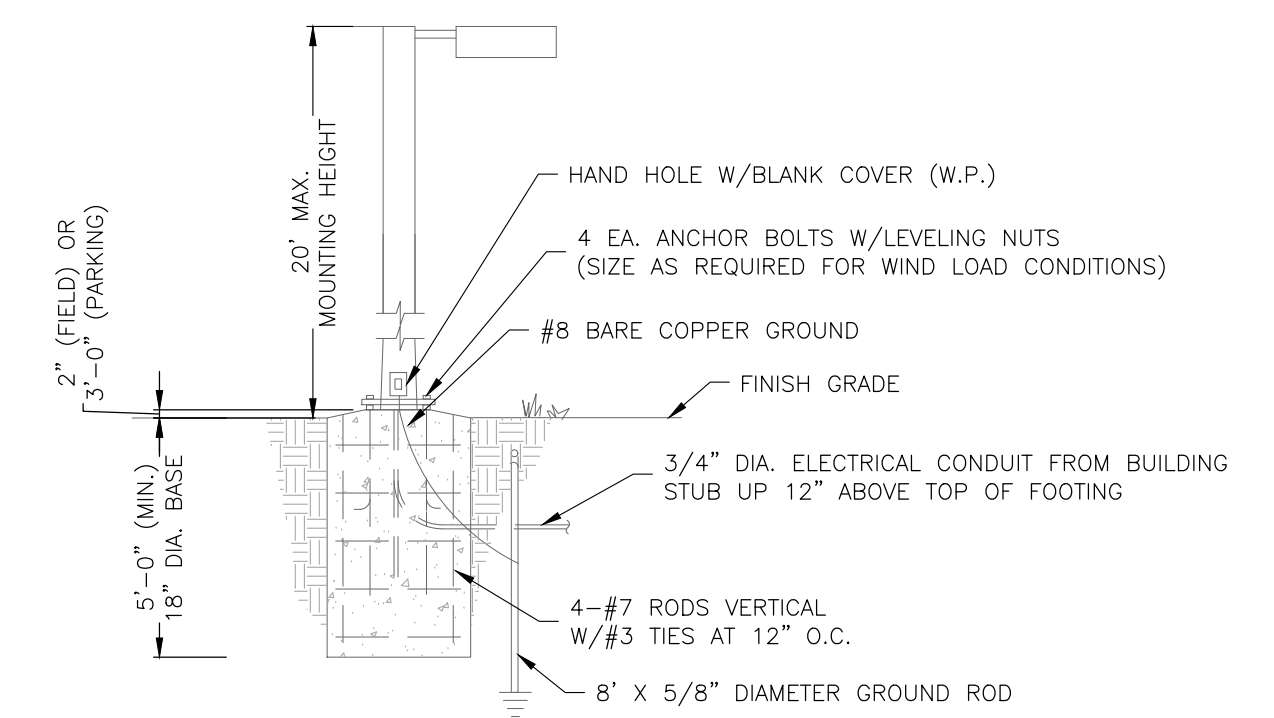
MRS-LED-18L-SIL-2-40-70CRI

**Mirada Small Wall Sconce Silicone (XWS SIL)**  
Outdoor LED Wall Light



**WALL MOUNT FIXTURE**

XWS-LED-6L-SIL-2-40-70CRI



**NOTES**

1. BASE SHOWN IS PROTOTYPICAL. VERIFY THAT LIGHT POLE BASE INSTALLED MEETS LIGHT POLE MANUFACTURER'S SPECIFICATIONS. COORDINATE WITH ELECTRICAL CONTRACTOR.
2. WHERE LIGHT POLE BASES ARE PLACED IN AREAS NOT PROTECTED BY CURBING, A 3'-0" REVEAL OF BASE IS REQUIRED WITH REVEAL TO BE PAINTED SAFETY YELLOW. WHERE LIGHT POLE BASES ARE PLACED IN FIELD APPLICATIONS OR PROTECTED BY CURBING, THE BASE IS TO BE PLACED 2" ABOVE FINISHED GRADE.
3. BASE CONCRETE TO BE 4,000 PSI, SMOOTH FINISH.
4. POLES SHALL BE FACTORY CUT TO PROVIDE REQUIRED MOUNTING HEIGHTS.
5. POLES AND LIGHT FIXTURES TO BE BRONZE.

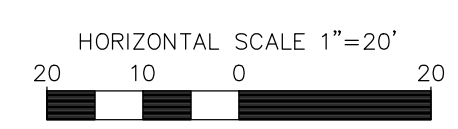
**LIGHT POLE BASE**  
NOT TO SCALE

**SITE DEVELOPMENT PLANS**

TAX MAP 48 LOT 3  
**LIGHTING PLAN**  
C3I, INC.  
8 COMMERCE WAY  
EXETER, NH  
COUNTY OF ROCKINGHAM  
OWNED BY  
**C-MARINE DYNAMICS REALTY, LLC**

SCALE: \_\_\_\_\_ APRIL 14, 2023

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REV	DATE	DESCRIPTION	DR	CK

**TFM** Civil Engineers  
Structural Engineers  
Traffic Engineers  
Land Surveyors  
Landscape Architects  
Scientists

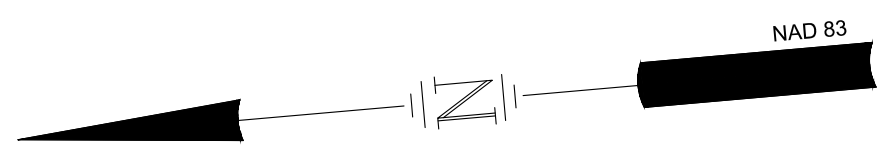
48 Constitution Drive  
Bedford, NH 03110  
Phone (603) 472-4488  
Fax (603) 472-9747  
www.tfmoran.com

FILE: 47201.03 DR: FB  
CK: CADFILE 47201-03 LIGHTING

C-8

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MAP 49 LOT 8  
N/F  
TOWN OF EXETER  
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EXETER, NH 03833  
RCRD BK#2056 PG#64

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N/F  
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10 FRONT STREET  
EXETER, NH 03833  
RCRD BK#3667 PG#2468

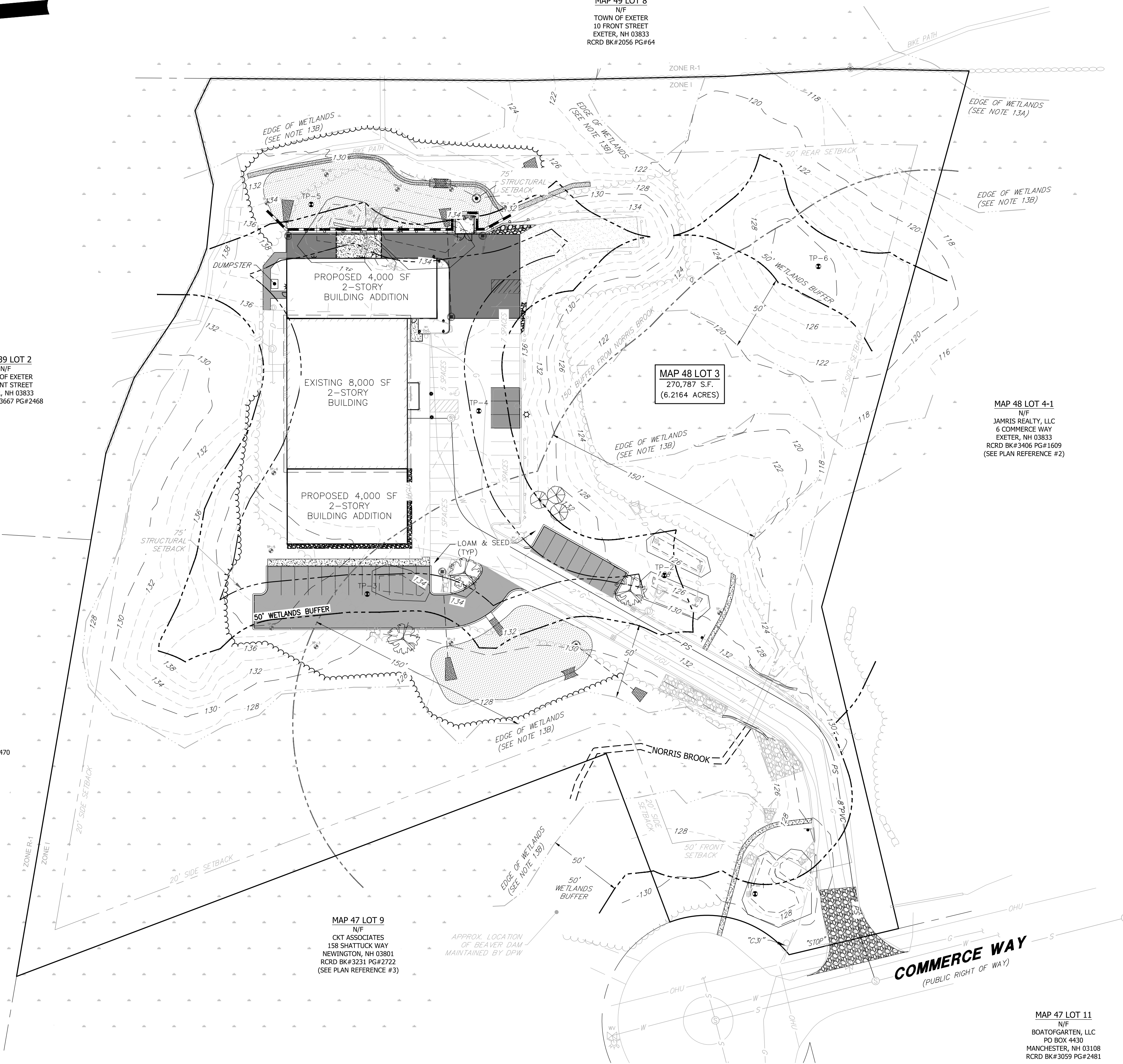
MAP 39 LOT 3  
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RCRD BK#3231 PG#2722  
(SEE PLAN REFERENCE #3)

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N/F  
JAMRIS REALTY, LLC  
6 COMMERCE WAY  
EXETER, NH 03833  
RCRD BK#3406 PG#1609  
(SEE PLAN REFERENCE #2)

MAP 47 LOT 11  
N/F  
BOATGARTEN, LLC  
PO BOX 4430  
MANCHESTER, NH 03108  
RCRD BK#3059 PG#2481



**LANDSCAPE LEGEND**

SYMBOL	QTY	BOTANICAL NAME COMMON NAME	SIZE	REMARKS
	3	ACER RUBRUM "OCTOBER GLORY" OCTOBER GLORY RED MAPLE	2 1/2" TO 3" CAL.	B&B
	3	MALUS APPLE - TO BE SELECTED BY CLIENT	7 GAL.	B&B

**LANDSCAPE NOTES**

(SEE DETAILS FOR ADDITIONAL NOTES)

**GENERAL**

1. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE RULES, REGULATIONS, LAWS, AND ORDINANCES HAVING JURISDICTION OVER THIS PROJECT SITE.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND NOTIFY OWNER'S REPRESENTATIVE OF CONFLICTS.
3. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON PLANS BEFORE PRICING THE WORK. ANY DIFFERENCE IN QUANTITIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT FOR CLARIFICATION. LANDSCAPE QUANTITIES SHOWN ON THE PLAN SHALL SUPERCEDE QUANTITIES LISTED IN LANDSCAPE LEGEND.
4. THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT PRIOR TO STARTING WORK AND VERIFY THAT THE PLANS IN THE CONTRACTOR'S POSSESSION ARE THE MOST CURRENT PLANS AVAILABLE AND ARE THE APPROVED PLAN SET FOR USE IN CONSTRUCTION.
5. ALL PLANT MATERIALS INSTALLED SHALL MEET OR EXCEED THE SPECIFICATIONS OF THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION (ANLA) [FORMERLY THE AMERICAN ASSOCIATION OF NURSERYMEN] IN THE AMERICAN STANDARD FOR NURSERY STOCK (AS AMENDED) [ANSI Z60.1-1996].
6. ALL PLANTS SHALL BE FIRST CLASS AND SHALL BE REPRESENTATIVE OF THEIR NORMAL SPECIES AND/OR VARIETIES. ALL PLANTS MUST HAVE GOOD, HEALTHY, WELL-FORMED UPPER GROWTH AND A LARGE, FIBEROUS, COMPACT ROOT SYSTEM.
7. ALL PLANTS SHALL BE FREE FROM DISEASE AND INSECT PESTS AND SHALL COMPLY WITH ALL APPLICABLE STATE AND FEDERAL LAWS PERTAINING TO PLANT DISEASES AND INFESTATIONS.
8. ALL TREES SHALL BE BALLED AND BURLAPPED (B & B) UNLESS OTHERWISE NOTED OR APPROVED BY LANDSCAPE ARCHITECT.
9. IF APPLICABLE, THE CONTRACTOR SHALL HAVE ALL FALL TRANSPLANTING HAZARD PLANTS DUG IN THE SPRING AND STORED FOR FALL PLANTING.
10. ALL INVASIVE PLANT SPECIES FROM THE "NEW HAMPSHIRE PROHIBITED INVASIVE PLANT SPECIES LIST", TO BE REMOVED SHALL BE DONE SO IN ACCORDANCE WITH THE "INVASIVE SPECIES ACT, HB 1258-FN".

**GUARANTEE**

THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL LANDSCAPE WORK FOR A PERIOD OF ONE YEAR, BEGINNING AT THE START OF THE MAINTENANCE PERIOD.

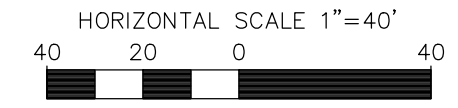
**SITE DEVELOPMENT PLANS**

TAX MAP 48 LOT 3  
**LANDSCAPE PLAN**  
C3I, INC.  
8 COMMERCE WAY  
EXETER, NH  
COUNTY OF ROCKINGHAM  
OWNED BY  
C-MARINE DYNAMICS REALTY, LLC

SCALE:

APRIL 14, 2023

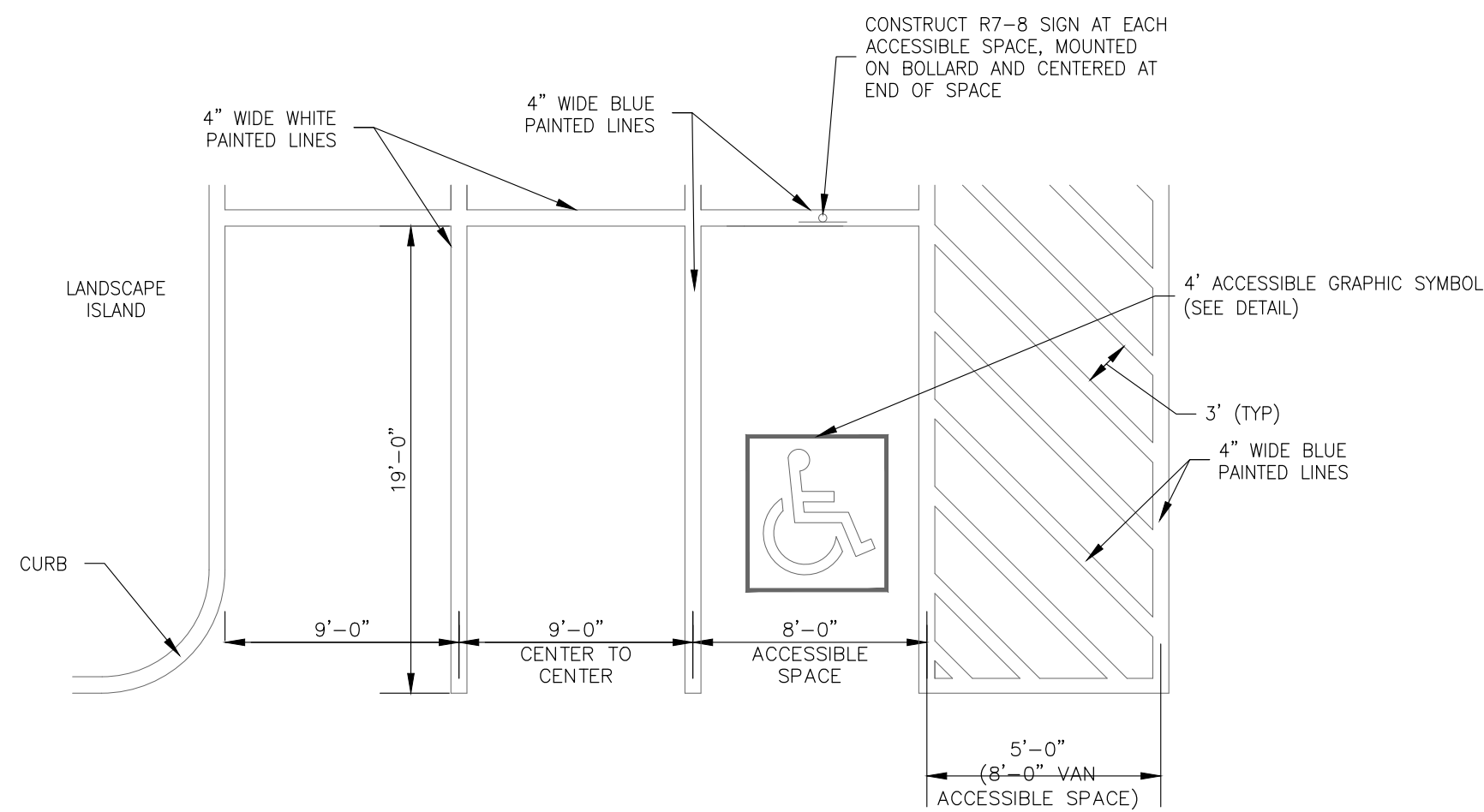
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REV	DATE	DESCRIPTION	DR	CK

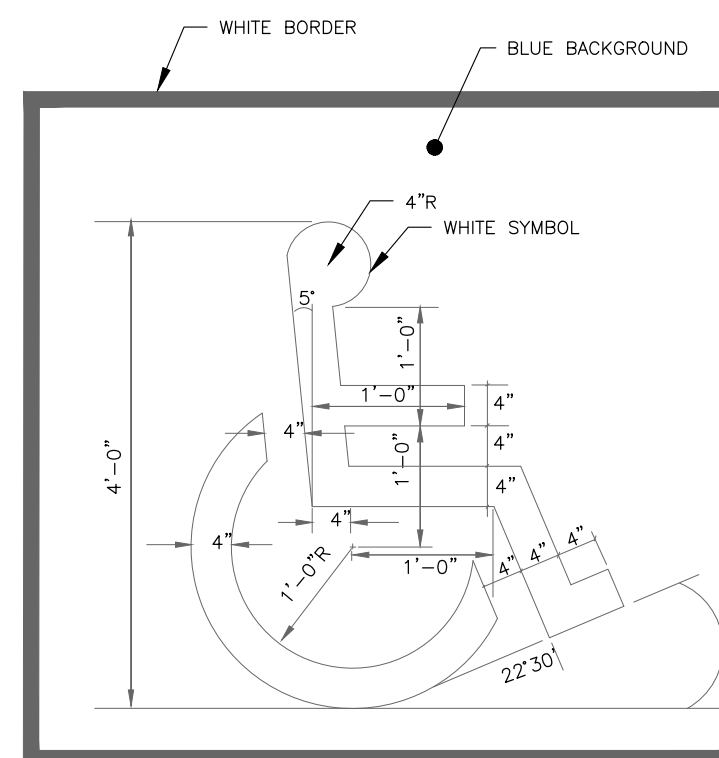
	Civil Engineers Structural Engineers Traffic Engineers Land Surveyors Landscape Architects Scientists	48 Constitution Drive Bedford, NH 03110 Phone (603) 472-4488 Fax (603) 472-9747 www.tfmoran.com		
	47201.03	DR CK	FB CADFILE	47201-03 LANDSCAPE

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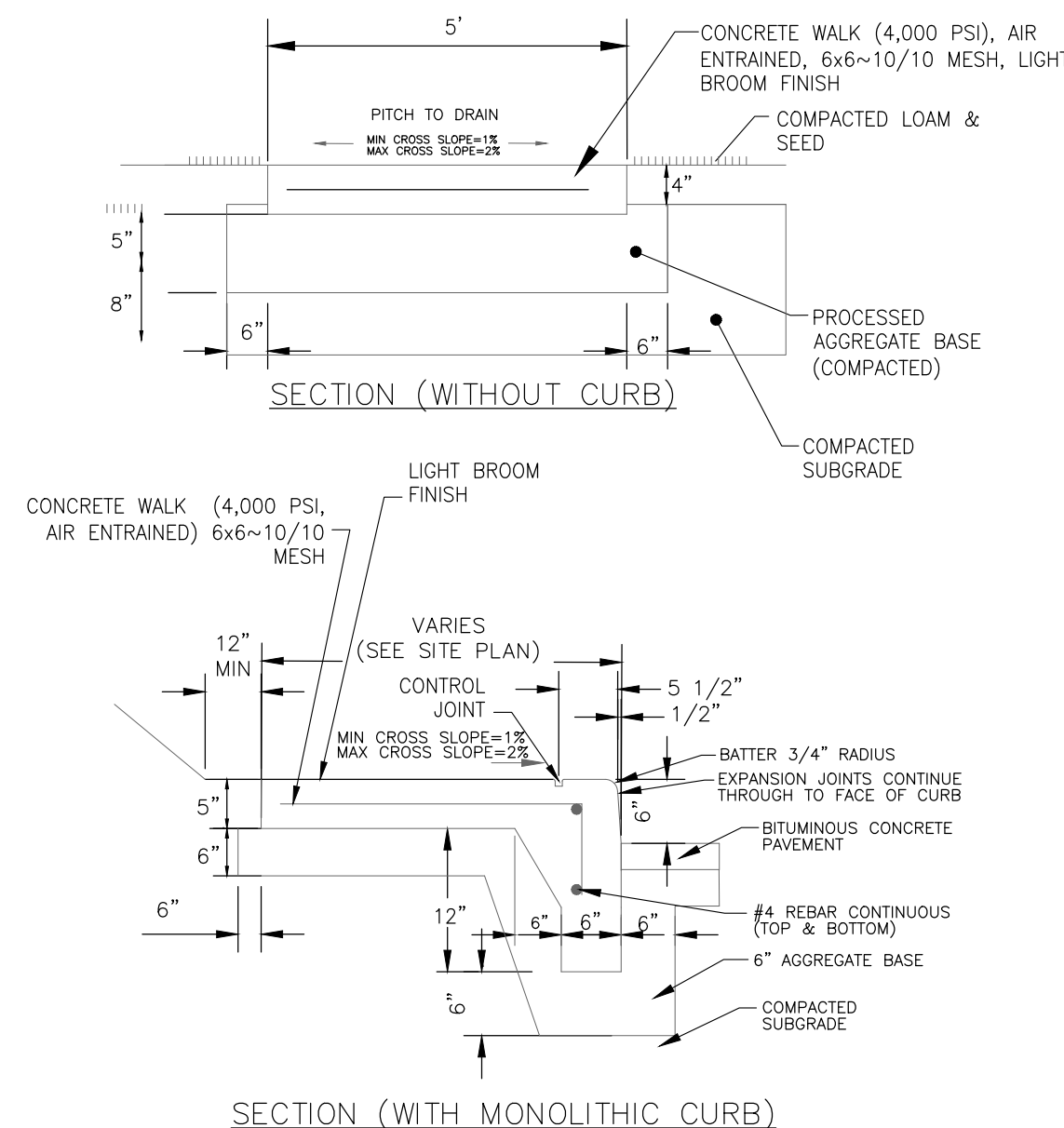
- NOTE**
1. TRAFFIC PAINT SHALL BE APPLIED AS SPECIFIED BY THE MANUFACTURER AND SHALL MEET THE REQUIREMENTS OF AASHTO M248 TYPE "F". APPLY TWO COATS.
  2. SYMBOLS & PARKING STALLS SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT, LATEST EDITION.
  3. ALL PAINTED ISLANDS SHALL BE 4" WIDE DIAGONAL LINES AT 3'-0" OC BORDERED BY 4" WIDE LINES.
  4. 2% MAXIMUM CROSS SLOPE ALLOWED IN ACCESSIBLE PARKING SPACES AND ACCESS AISLES.

**TYPICAL PARKING LAYOUT**  
NOT TO SCALE

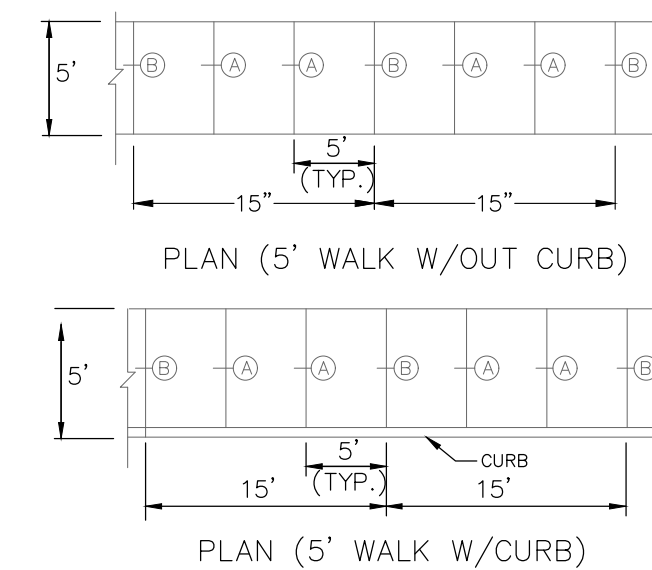
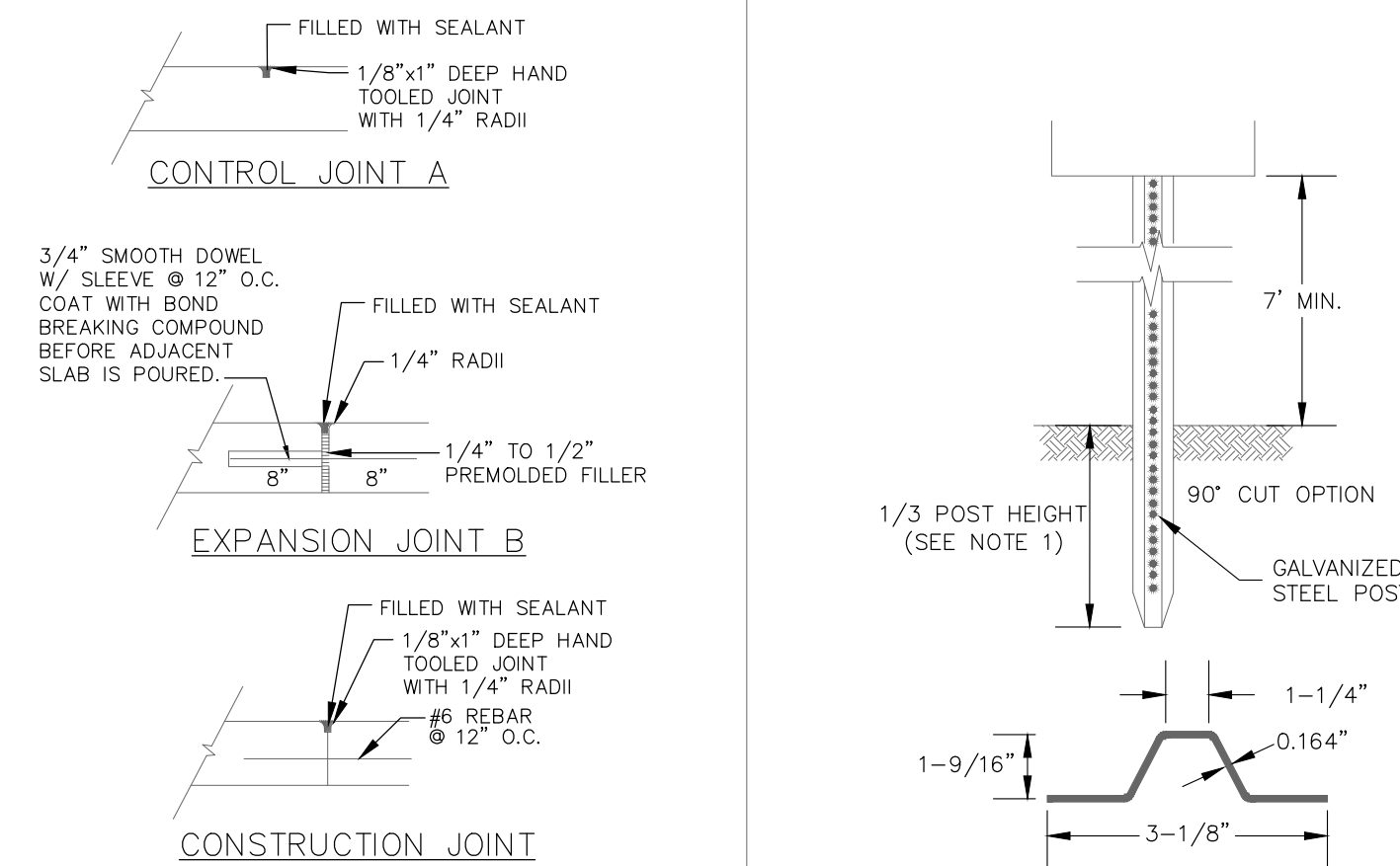


- NOTES**
1. TRAFFIC PAINT SHALL BE APPLIED AS SPECIFIED BY THE MANUFACTURER AND SHALL MEET THE REQUIREMENTS OF AASHTO M248 TYPE "F". APPLY TWO COATS.
  2. SYMBOLS AND PARKING STALLS SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT, LATEST EDITION.

**ACCESSIBLE GRAPHIC SYMBOL**  
NOT TO SCALE

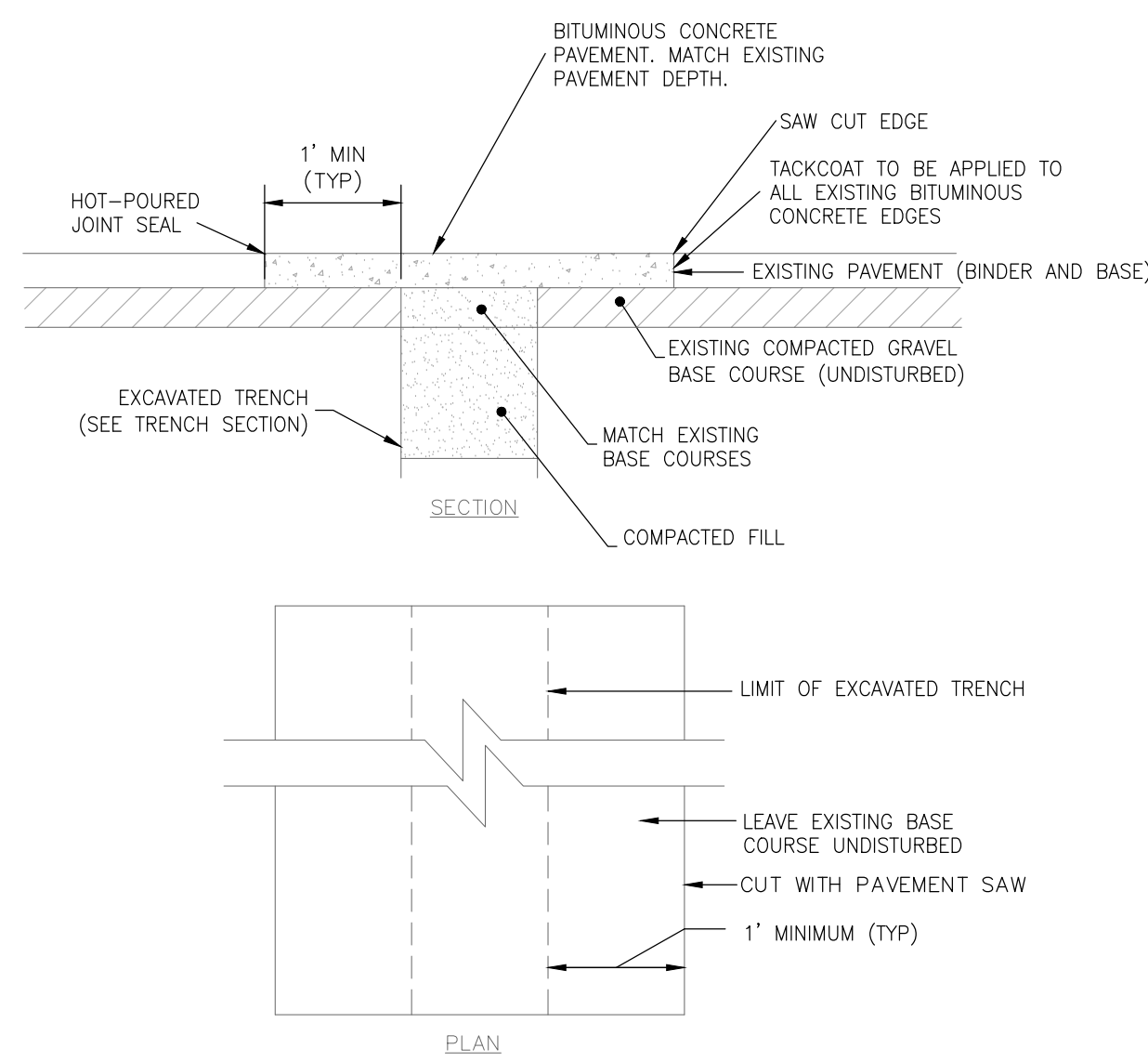


**CONCRETE SIDEWALK**  
NOT TO SCALE

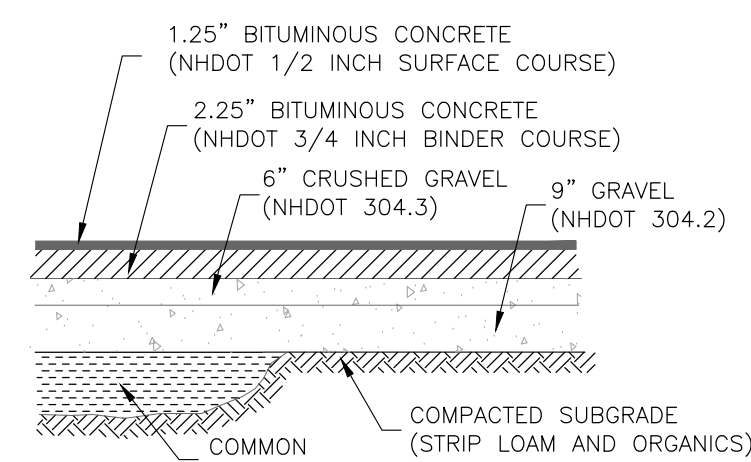


- LENGTH:** AS REQUIRED  
**WEIGHT PER LINEAR FOOT:** 2.50 LBS (MIN)  
**HOLES:** 3/8" DIAMETER, 1" C-C FULL LENGTH  
**STEEL:** SHALL CONFORM TO ASTM A-499 (GRADE 60) OR ASTM A-576 (GRADE 1070 - 1080)  
**FINISH:** SHALL BE PAINTED WITH 2 COATS OF AN APPROVED MEDIUM GREEN BAKED-ON OR AIR-DRIED PAINT OF WEATHER RESISTANT QUALITY. ALL FABRICATION SHALL BE COMPLETE BEFORE PAINTING.
- NOTE:**  
 1. WHERE LEDGE APPLICATION EXISTS, DRILL & GROUT TO A MINIMUM OF 2'.

**SIGN POST**  
NOT TO SCALE

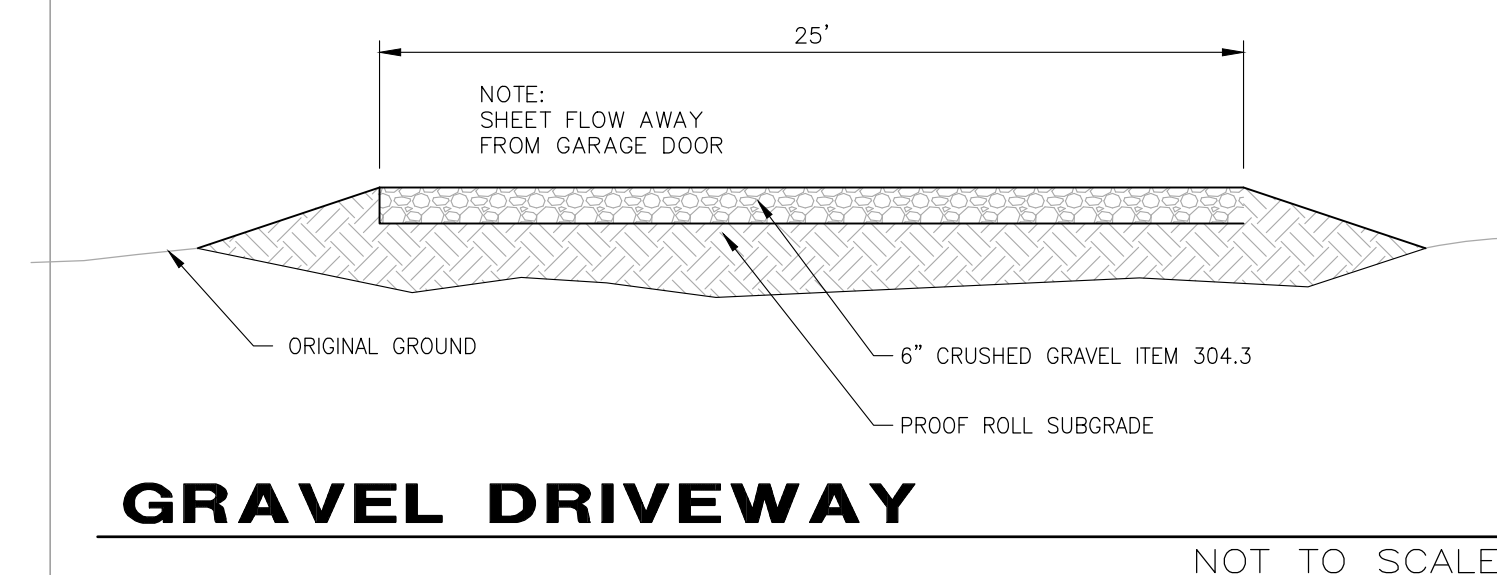


**TRENCH PATCH**  
NOT TO SCALE

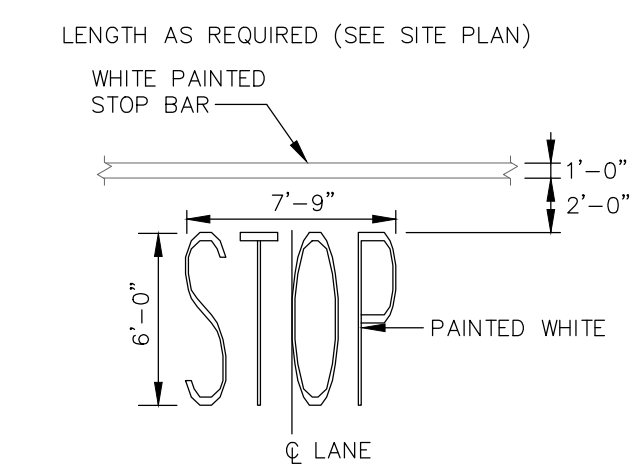


- NOTES**
1. SEE GRADING & EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS-SLOPE.
  2. PROVIDE CLEAN BUTT TO EXISTING PAVEMENT- USE TACK COAT. A TACK COAT SHALL ALSO BE PLACED BETWEEN GRAVEL COURSE AND SUCCESSIVE LAYERS OF BITUMINOUS CONCRETE. SPECIFICALLY, A TACK COAT SHALL BE PLACED ATOP THE BINDER COURSE PAVEMENT PRIOR TO PLACING THE WEARING COURSE.
  3. REMOVE ALL LOAM AND/OR YIELDING MATERIAL BELOW PAVEMENT.
  4. BITUMINOUS MATERIALS SHALL CONFORM TO NHDOT SPECIFICATION SECTION 401.
  5. BITUMINOUS CONCRETE SHALL BE COMPACTED TO AT LEAST 92.5% OF THEORETICAL MAXIMUM DENSITY AS DETERMINED BY ASTM D2041 OR AASHTO T209. PLACEMENT TEMPERATURES OF BITUMINOUS CONCRETE MIXES, IN GENERAL, RANGE BETWEEN 270 AND 310 DEGREES FAHRENHEIT.
  6. PAVEMENT BASE COURSE AGGREGATE SHALL CONFORM TO NHDOT SPECIFICATION SECTION 304, ITEM 304.3 AND COMPACTED TO A MINIMUM OF 95% OF MODIFIED PROCTOR MAXIMUM DRY DENSITY.
  7. PAVEMENT SUBBASE COURSE AGGREGATE AND AGGREGATE FOR SUBGRADE REPAIR AREAS SHALL BE SUITABLE FOR USE AS STRUCTURAL FILL AND BE PROOF ROLLED AND COMPACTED TO 95% MODIFIED PROCTOR MAXIMUM DRY DENSITY.
  8. THE EXPOSED SOIL SUBGRADE SHOULD BE PROOF ROLLED PRIOR TO THE PLACEMENT OF SUBBASE GRAVEL, AND SOFT AREAS SHOULD BE REPAIRED AND REPLACED.

**PAVEMENT SECTIONS**  
NOT TO SCALE



**GRAVEL DRIVEWAY**  
NOT TO SCALE



- NOTES**
1. TRAFFIC PAINT SHALL BE APPLIED AS SPECIFIED BY THE MANUFACTURER AND SHALL MEET THE REQUIREMENTS OF AASHTO M248 TYPE "F". APPLY TWO COATS.
  2. SYMBOLS AND PARKING STALLS SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT, LATEST EDITION.

**STOP BAR & LEGEND**  
NOT TO SCALE

**SITE DEVELOPMENT PLANS**

TAX MAP 48 LOT 3

**DETAILS-1**  
**C3I, INC.**

**8 COMMERCE WAY**  
**EXETER, NH**  
**COUNTY OF ROCKINGHAM**  
OWNED BY  
**C-MARINE DYNAMICS REALTY, LLC**

SCALE: NTS

APRIL 14, 2023



Civil Engineers  
Structural Engineers  
Traffic Engineers  
Land Surveyors  
Landscape Architects  
Scientists

48 Constitution Drive  
Bedford, NH 03110  
Phone (603) 472-4488  
Fax (603) 472-9747  
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FILE	47201.03	DR	FB	-	C-10
REV	DATE	DESCRIPTION	DR	CK	

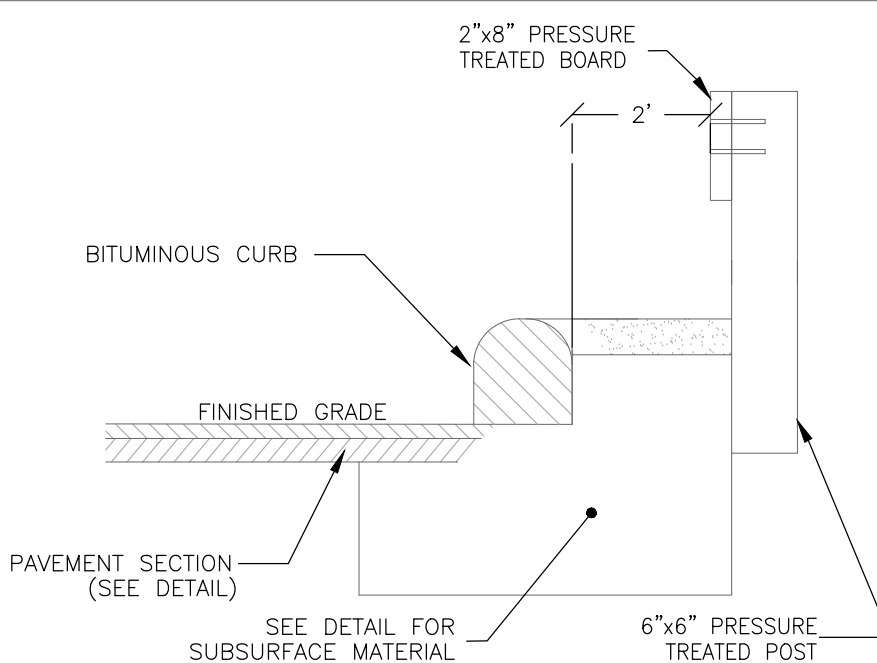
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**WOODEN GUARDRAIL DETAIL**  
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**SITE AND SOIL PREPARATION**

- WHEN CONDITIONS DETRIMENTAL TO PLANT GROWTH ARE ENCOUNTERED, SUCH AS RUBBLE FILL, ADVERSE DRAINAGE CONDITIONS, OR LEDGE, NOTIFY LANDSCAPE ARCHITECT/ENGINEER BEFORE PLANTING.
- ALL DISTURBED AREAS & PLANTING AREAS, INCLUDING AREAS TO BE SODDED, SHALL RECEIVE THE FOLLOWING SOIL PREPARATION PRIOR TO PLANTING: A MINIMUM OF 6 INCHES OF LIGHTLY COMPACTED TOPSOIL SHALL BE INSTALLED OVER THE SUBSOIL IF TOPSOIL HAS BEEN REMOVED OR IS NOT PRESENT.
- LOAM SHALL CONSIST OF LOOSE FRABLE TOPSOIL WITH NO ADMIXTURE OF REFUSE OR MATERIAL TOXIC TO PLANT GROWTH. LOAM SHALL BE FREE FROM STONES, LUMPS, STUMPS, OR SIMILAR OBJECTS LARGER THAN TWO INCHES (2") IN GREATEST DIAMETER, SUBSOIL, ROOTS, AND WEEDS. THE MINIMUM AND MAXIMUM PH VALUE SHALL BE FROM 5.5 TO 7.0. LOAM SHALL CONTAIN A MINIMUM OF TWO PERCENT (2%) AND A MAXIMUM OF FIVE PERCENT (5%) ORGANIC MATTER AS DETERMINED BY LOSS BY IGNITION. SOIL TEXTURE SHALL BE SANDY CLAY LOAM OR SANDY LOAM WITH CLAY CONTENT BETWEEN 15 AND 25%, AND A COMBINED CLAY/SILT CONTENT OF NO MORE THAN 55%. NOT MORE THAN SIXTY-FIVE PERCENT (65%) SHALL PASS A NO. 200 SIEVE AS DETERMINED BY THE WASH TEST IN ACCORDANCE WITH ASTM D1140. IN NO INSTANCE SHALL MORE THAN 20% OF THAT MATERIAL PASSING THE #4 SIEVE CONSIST OF CLAY SIZE PARTICLES.
- NATURAL TOPSOIL NOT CONFORMING TO THE PARAGRAPH ABOVE OR CONTAINING EXCESSIVE AMOUNTS OF CLAY OR SAND SHALL BE TREATED BY THE CONTRACTOR TO MEET THOSE REQUIREMENTS.
- SUBMIT TEST RESULTS OBTAINED FROM SOURCE TO ENGINEER/LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL, PRIOR TO SPREADING OPERATIONS.
- APPROVAL BY THE ENGINEER/LANDSCAPE ARCHITECT TO USE THE TOPSOIL WILL DEPEND UPON THE RESULTS OF THE SOIL TESTS.
- THE BURDEN OF PROOF OF SOIL AMENDMENT INSTALLATION RESTS WITH THE CONTRACTOR. SOIL TESTS MAY BE REQUIRED AT THE CONTRACTOR'S EXPENSE IN ORDER TO CONFIRM AMENDMENT INSTALLATION.

**SEEDING**

- ROUGH GRADING SHALL BE COMPLETED PRIOR TO THE START OF PLANTING IN ANY GIVEN AREA OF THE PROJECT SITE.
- SEEDING SHALL BE DONE BETWEEN APRIL 1 TO JUNE 15 OR AUGUST 15 TO OCTOBER 15, EXCEPT FOR RESEEDING OF BARE SPOTS AND MAINTENANCE. ALL DISTURBED AREAS NOT COVERED BY BUILDINGS, PAVING OR AREAS THAT HAVE NOT BEEN OTHERWISE DEVELOPED SHALL BE SEEDED OR SODDED. SLOPES GREATER THAN 3:1 SHALL BE PROTECTED WITH AN EROSION CONTROL BLANKET. AFTER OCTOBER 15 DISTURBED SOILS SHALL BE PROTECTED IN ACCORDANCE WITH THE WINTER CONSTRUCTION NOTES.

ACCEPTABLE SEED MIXES ARE AS FOLLOWS:

**PARK SEED MIX (NHDOT TYPE 44) MIN. 135 LBS/ACRE:**  
 33% CREEPING RED FESCUE (MIN. 45 LBS/ACRE)  
 42% PERENNIAL RYEGRASS (MIN. 55 LBS/ACRE)  
 21% KENTUCKY BLUEGRASS (MIN. 30 LBS/ACRE)  
 4% REDTOP (MIN. 5 LBS/ACRE)

**TEMPORARY LAWN MIX: (MIN. 47 LBS/ACRE)**  
 100% ANNUAL RYE

**SLOPE SEED (WF) (NHDOT TYPE 45) MIX 3:1 OR GREATER SLOPES (MIN. 105 LBS/ACRE):**

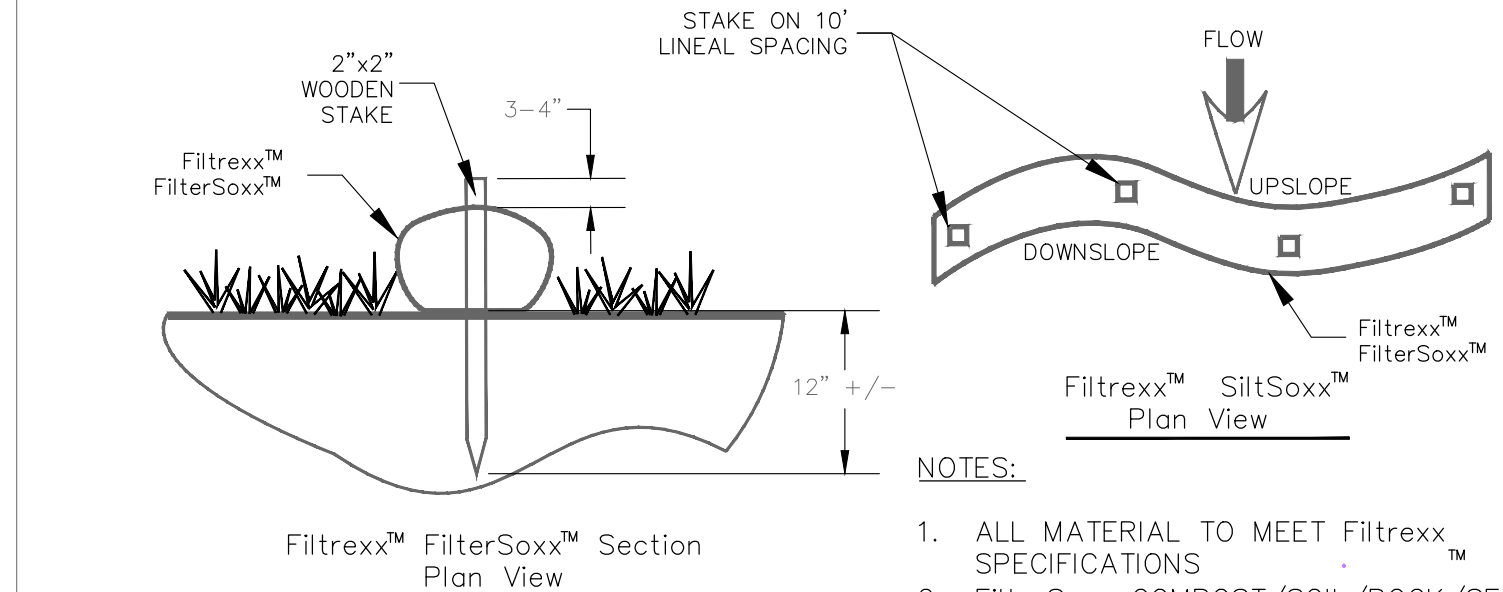
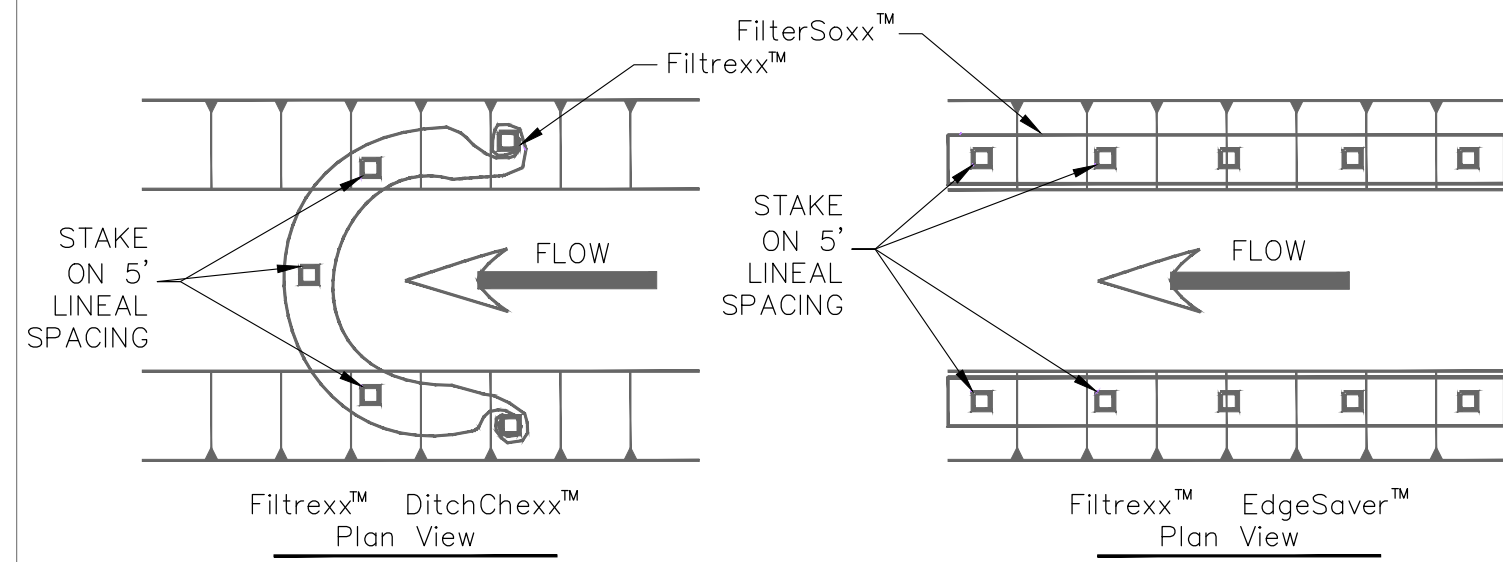
38% CREEPING RED FESCUE (MIN. 40 LBS/ACRE)  
 32% PERENNIAL RYEGRASS (MIN. 35 LBS/ACRE)  
 5% REDTOP (MIN. 5 LBS/ACRE)  
 5% ALSIKE CLOVER (MIN. 5 LBS/ACRE)  
 5% BIRDSFOOT TREFOL (MIN. 5 LBS/ACRE)  
 3% LANCE-LEAF COREOPSIS (MIN. 3 LBS/ACRE)  
 3% OXEYE DAISY (MIN. 3 LBS/ACRE)  
 3% BUTTERFLY WEED (MIN. 3 LBS/ACRE)  
 3% BLACKKEY SUSAN (MIN. 3 LBS/ACRE)  
 3% WILD LUPINE (MIN. 3 LBS/ACRE)

**SLOPE SEED (NHDOT TYPE 44) MIX 3:1 OR GREATER SLOPES (MIN. 90 LBS/ACRE):**

44% CREEPING RED FESCUE (MIN. 40 LBS/ACRE)  
 38% PERENNIAL RYEGRASS (MIN. 35 LBS/ACRE)  
 6% REDTOP (MIN. 5 LBS/ACRE)  
 6% ALSIKE CLOVER (MIN. 5 LBS/ACRE)  
 6% BIRDSFOOT TREFOL (MIN. 5 LBS/ACRE)

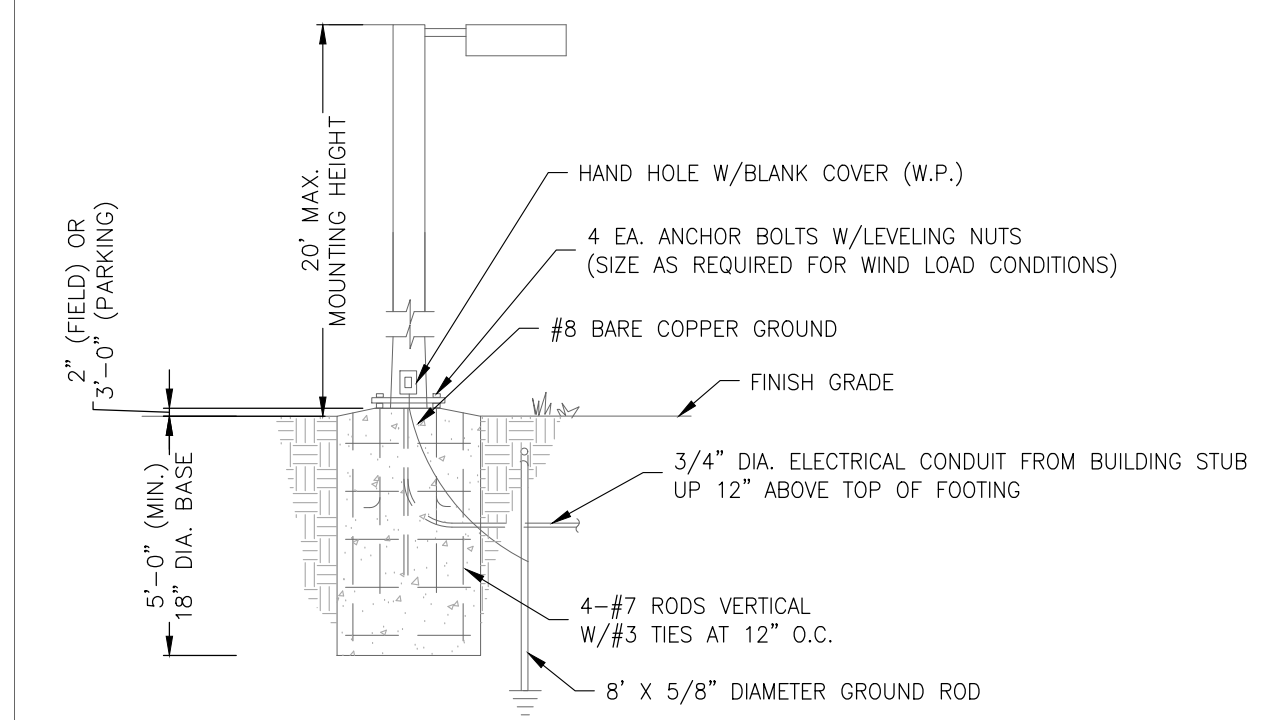
**PLANTING**

- EXCAVATE PITS, PLANTERS, BEDS AND TRENCHES WITH VERTICAL SIDES AND WITH BOTTOM OF EXCAVATION SLIGHTLY RAISED AT CENTER TO PROVIDE PROPER DRAINAGE. LOOSEN HARD SUBSOIL IN BOTTOM OF EXCAVATION.
- ANY LEDGE OR RUBBLE MATERIAL SHALL BE FRACTURED TO A DEPTH OF 3 FEET AND EXCAVATED TO A DEPTH OF 30 INCHES FOR TREE POCKETS AND 18 INCHES FOR SHRUB BEDS. THIS PROCEDURE SHALL BE HANDLED BY THE SITE CONTRACTOR. SITE TOPSOIL SHALL BE DEPOSITED IN ALL EXCAVATED POCKETS.
- DISPOSE OF SUBSOIL REMOVED FROM PLANTING EXCAVATIONS. DO NOT MIX WITH PLANTING SOIL OR USE AS BACKFILL.
- FILL EXCAVATIONS FOR TREES AND SHRUBS WITH WATER AND ALLOW TO PERCOLATE OUT BEFORE PLANTING.
- DISH TOP OF BACKFILL TO ALLOW FOR MULCH - PLANT SAUCERS SHALL BE AS SHOWN ON DETAIL SHEETS; 6" DIAMETER FOR ALL DECIDUOUS TREES, AND FOR EVERGREEN TREES A RADIUS 2' BEYOND THE OUTER MOST BRANCHES.
- MULCH TREES, SHRUBS, PLANTERS AND BEDS. PROVIDE NOT LESS THAN 3" THICKNESS OF BARK MULCH, 3/8"-2" OF WIDTH, AND WORK INTO TOP OF BACKFILL. FINISH LEVEL WITH ADJACENT FINISH GRADES AS DIRECTED IN THE FIELD.
- STAKE AND GUY TREES IMMEDIATELY AFTER PLANTING (TREE SUPPORT STAKES SHALL BE 2" X 3" X 8', WOOD STAKES. GUYING WIRE SHALL BE NO. 12 GAUGE GALVANIZED SOFT STEEL WIRE. HOSE FOR COVERING WIRE SHALL BE NEW OR USED TWO PLY RUBBER HOSE NOT LESS THAN 1/2 INCH INSIDE DIAMETER. (PLASTIC "CINCH-TIES" OR EQUIVALENT FASTENING DEVICE MAY BE AN ACCEPTABLE GUY WIRE AND HOSE PROTECTOR SUBSTITUTE.)
- TREEGATOR WATERING SYSTEM OR APPROVED EQUAL SHALL BE INSTALLED FOR ALL DECIDUOUS TREES AT TIME OF PLANTING AND REMOVED BEFORE FROST. WATERING RATE TO BE APPLIED PER MANUFACTURER'S SPECIFICATIONS.
- ALL PLANT MATERIALS SHALL HAVE DEAD OR DAMAGED BRANCHES REMOVED AT TIME OF PLANTING. ALL TAGS AND RIBBONS SHALL BE REMOVED AT THIS TIME.
- TREES TO REMAIN STAKED FOR 1 FULL GROWING SEASON.
- THE CONTRACTOR SHALL REQUEST A FINAL OBSERVATION BY THE OWNER'S REPRESENTATIVE UPON COMPLETION OF INSTALLATION.



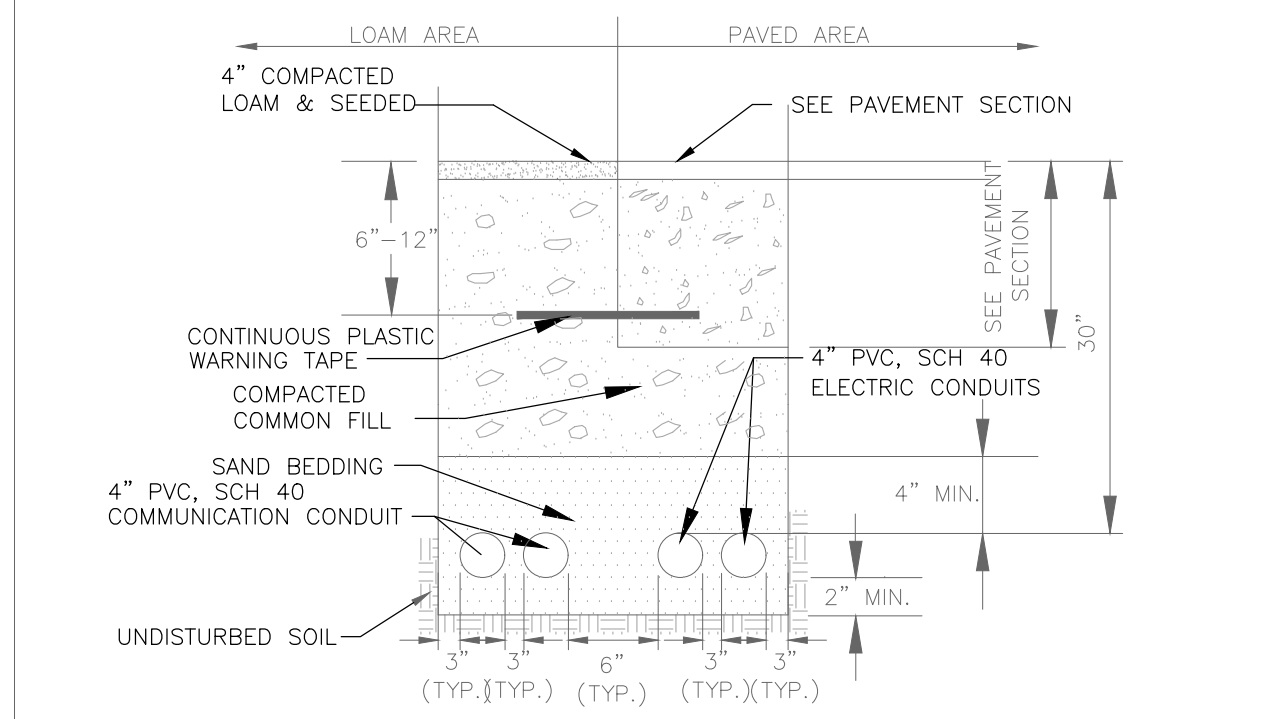
- NOTES:**
- ALL MATERIAL TO MEET Filtrex SPECIFICATIONS
  - Filtrex COMPOST/SOIL/ROCK/SEED FILL TO MEET APPLICATION REQUIREMENTS.
  - COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

**Filtrex FilterSoxx Staking**  
NOT TO SCALE



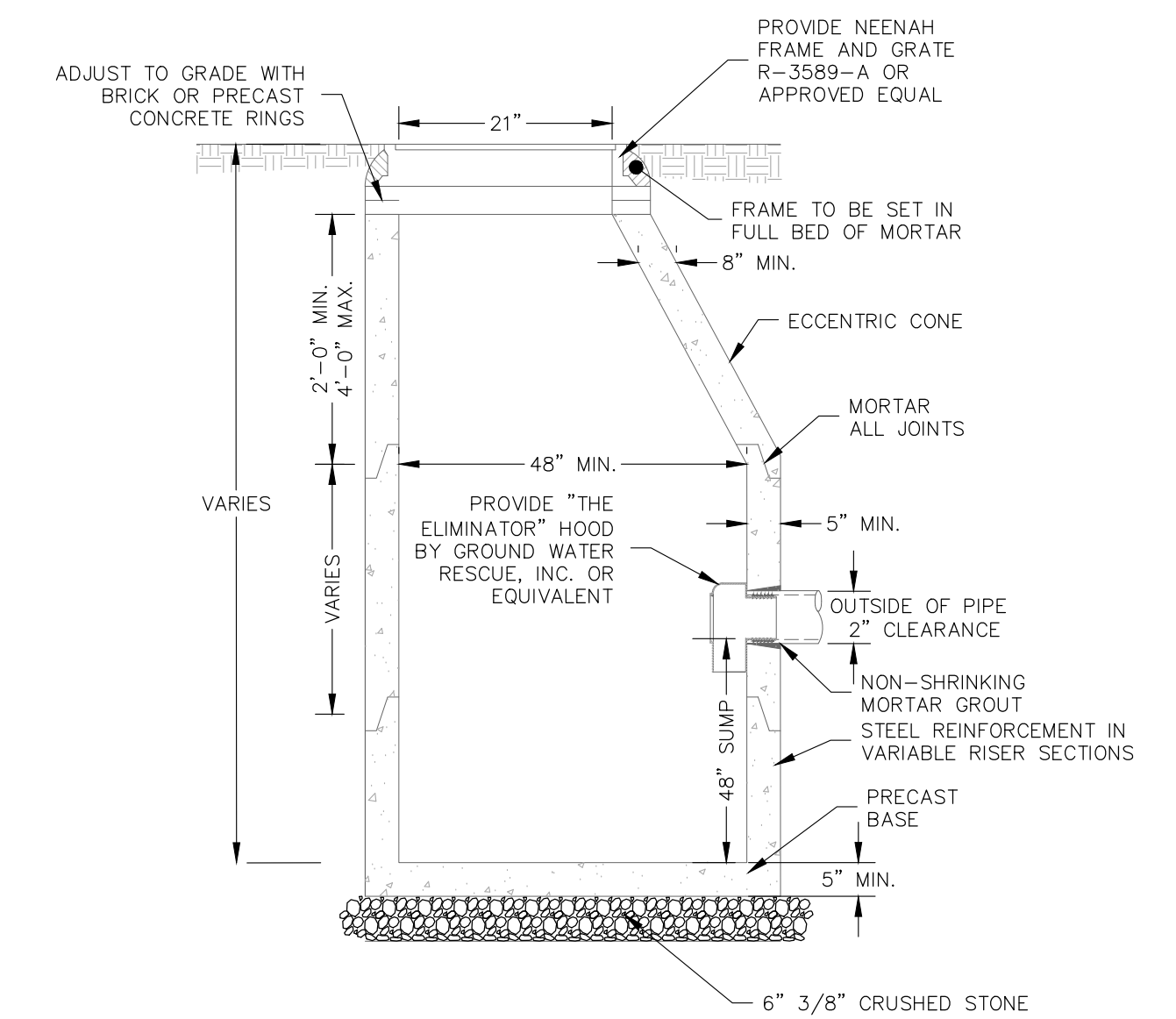
- NOTES**
- BASE SHOWN IS PROTOTYPICAL. VERIFY THAT LIGHT POLE BASE INSTALLED MEETS LIGHT POLE MANUFACTURER'S SPECIFICATIONS. COORDINATE WITH ELECTRICAL CONTRACTOR.
  - WHERE LIGHT POLE BASES ARE PLACED IN AREAS NOT PROTECTED BY CURBING, A 3'-0" REVEAL OF BASE IS REQUIRED WITH REVEAL TO BE PAINTED SAFETY YELLOW. WHERE LIGHT POLE BASES ARE PLACED IN FIELD APPLICATIONS OR PROTECTED BY CURBING, THE BASE IS TO BE PLACED 2" ABOVE FINISHED GRADE.
  - BASE CONCRETE TO BE 4,000 PSI, SMOOTH FINISH.
  - POLES SHALL BE FACTORY CUT TO PROVIDE REQUIRED MOUNTING HEIGHTS.
  - POLES AND LIGHT FIXTURES TO BE BRONZE.

**LIGHT POLE BASE**  
NOT TO SCALE



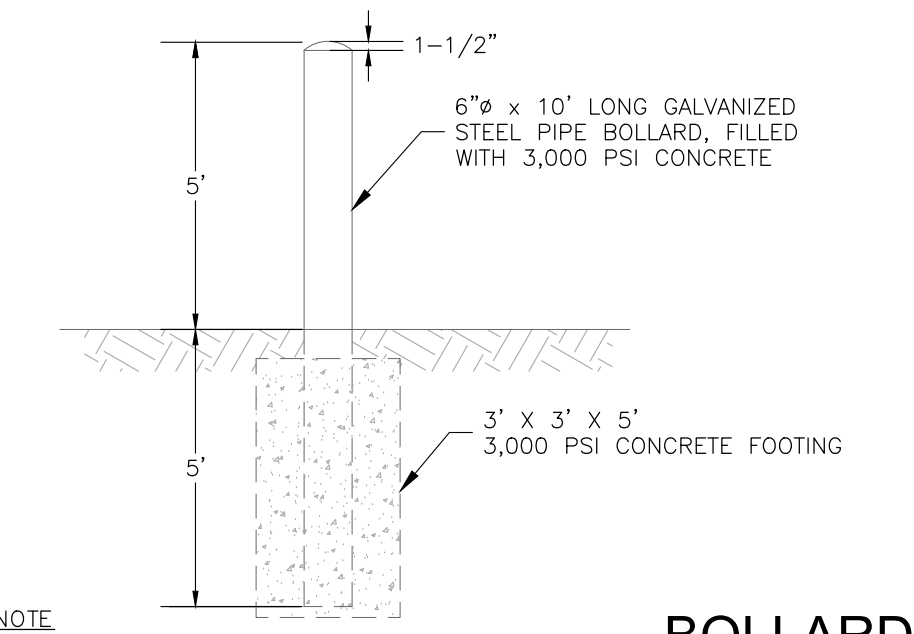
- NOTES**
- ELECTRIC SERVICE INSTALLATION AND STANDARD DIMENSIONAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL CODES.
  - COMMUNICATION SERVICE INSTALLATION SHALL MEET ALL CONSTRUCTION REQUIREMENTS.
  - SEE UTILITIES PLAN OF NUMBER OF CONDUITS.

**ELECTRIC/COMMUNICATIONS CONDUIT**  
NOT TO SCALE



- NOTES**
- ALL SECTIONS SHALL BE PRECAST CONCRETE NHDOT CLASS AA, 4,000 PSI.
  - CATCH BASINS SHALL MEET NHDOT SPECIFICATIONS.
  - ALL COMPONENTS SHALL BE DESIGNED FOR HS-20 LOADING.
  - LARGER DIAMETER STRUCTURES SHALL BE USED AS REQUIRED DUE TO NUMBER, ANGLE OR SIZE OF PIPES AT THE STRUCTURE.
  - ALL CASTINGS SHALL BE MADE IN THE USA.

**ECCENTRIC CATCH BASIN WITH HOODED OUTLET**  
NOT TO SCALE



- NOTE**
- BOLLARD SHALL BE PAINTED WITH PRIMER & 2 COATS OF SAFETY YELLOW PAINT.

**BOLLARD**  
NOT TO SCALE

**SITE DEVELOPMENT PLANS**

TAX MAP 48 LOT 3  
**DETAILS-2**  
**C3I, INC.**  
**8 COMMERCE WAY**  
**EXETER, NH**  
**COUNTY OF ROCKINGHAM**  
 OWNED BY  
**C-MARINE DYNAMICS REALTY, LLC**

SCALE: NTS APRIL 14, 2023

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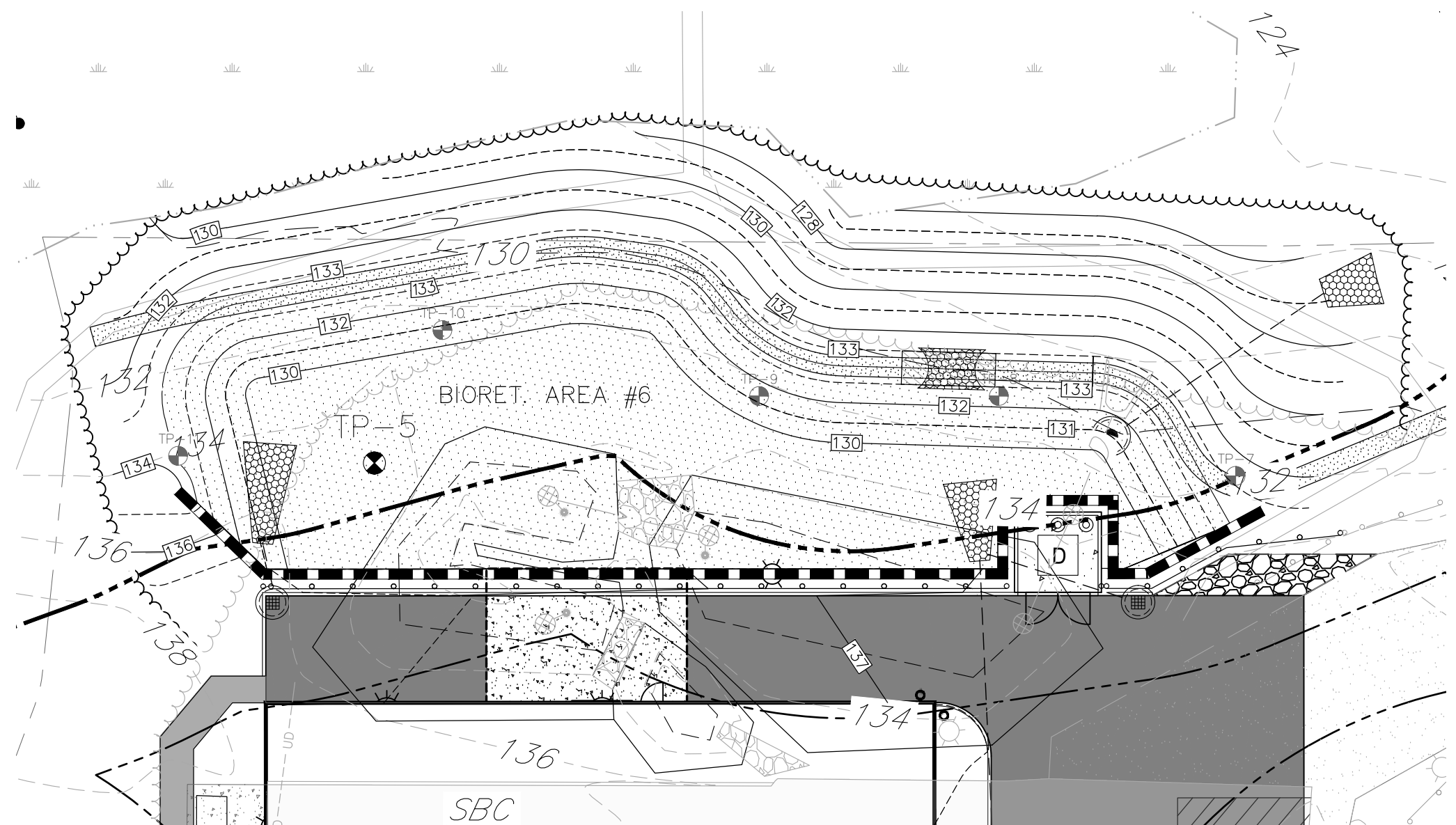


REV	DATE	DESCRIPTION	DR	CK

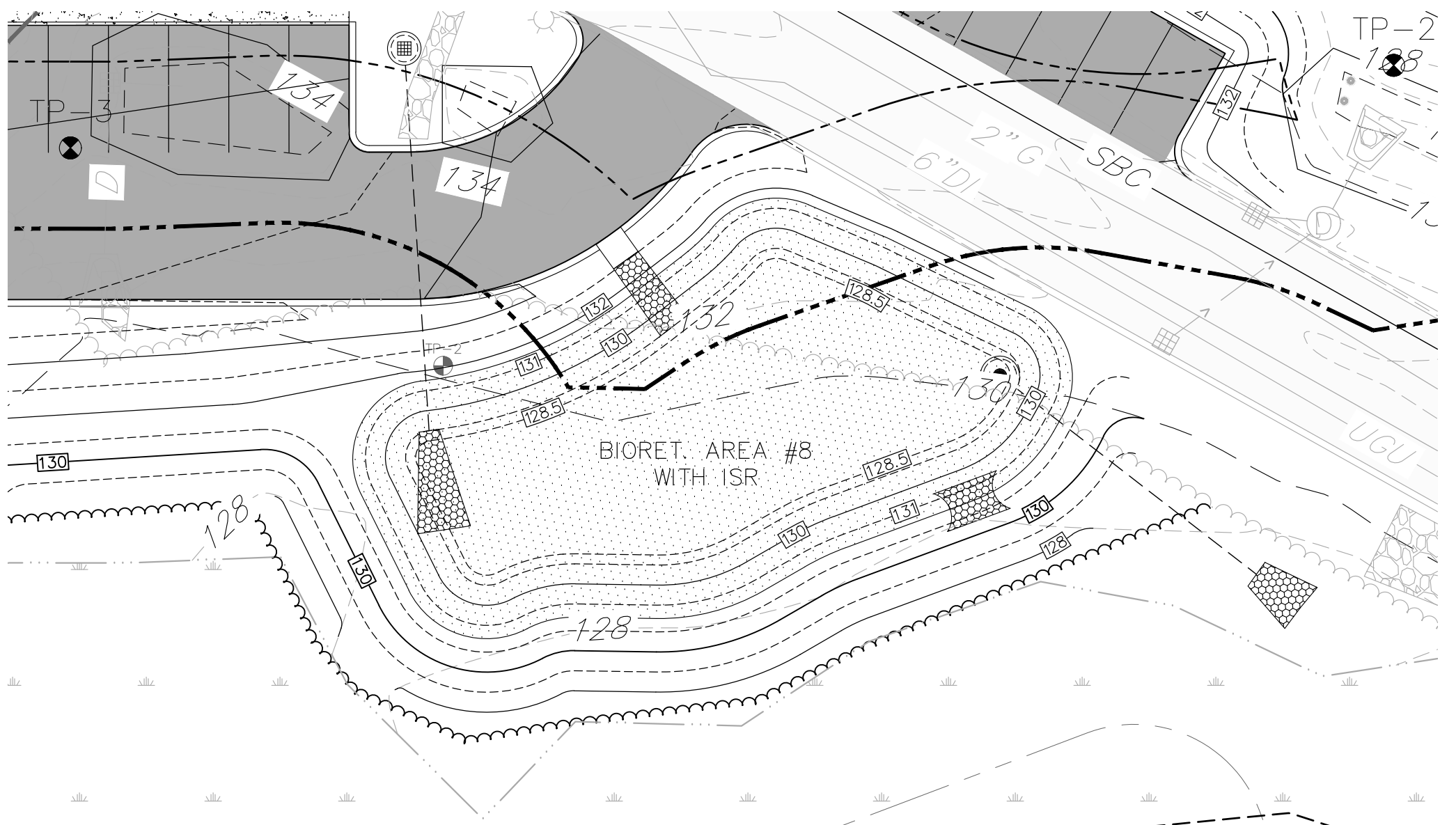
	Civil Engineers Structural Engineers Traffic Engineers Land Surveyors Landscape Architects Scientists	48 Constitution Drive Bedford, NH 03110 Phone (603) 472-4488 Fax (603) 472-9747 www.tfmoran.com
	F I L E: 47201.03 DR CK:                      FB CADFILE: 47201-03 DETAILS	C-11

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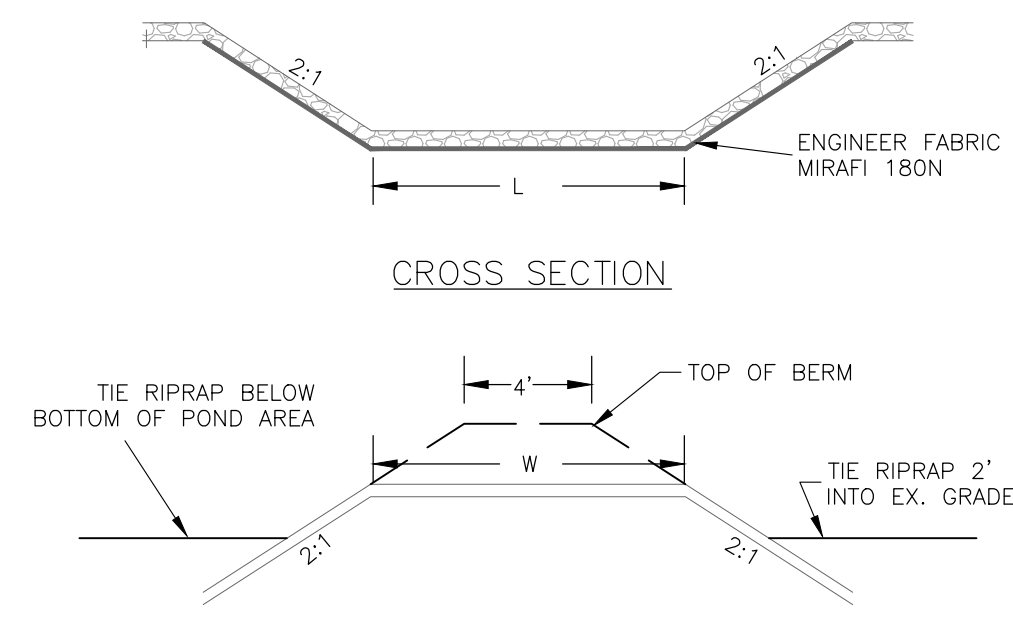


BIORETENTION AREA #1  
SCALE 1"=20'

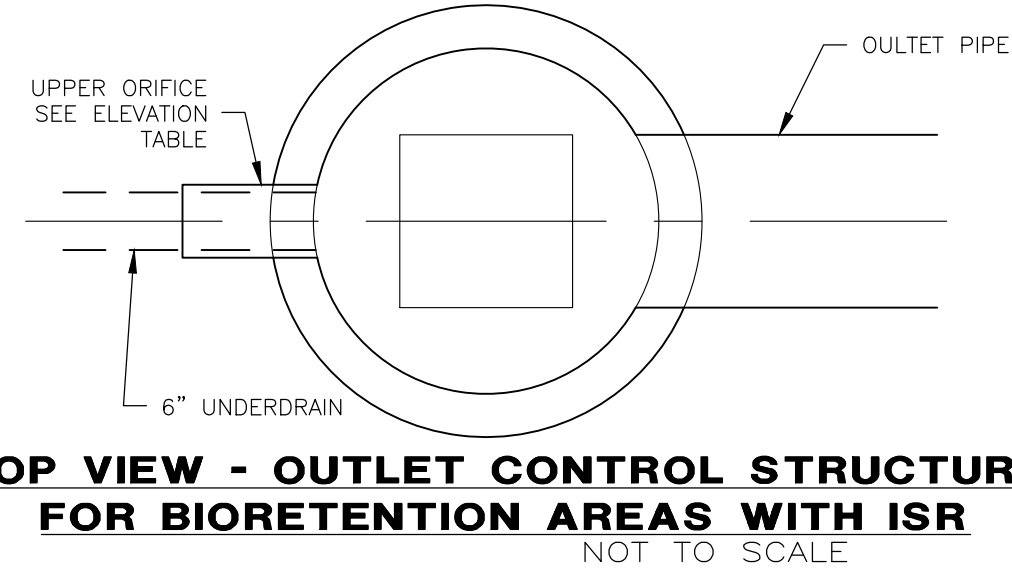


BIORETENTION AREA #2  
SCALE 1"=20'

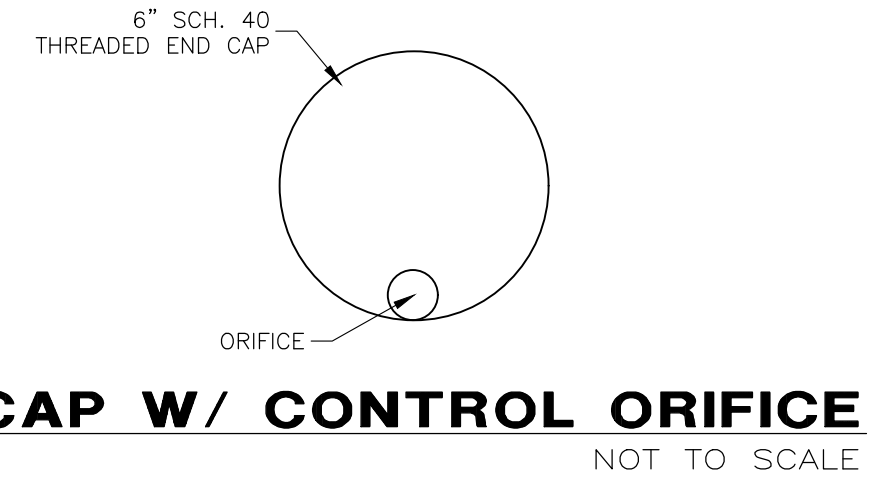
INV.	DESCRIPTION	BIORETENTION AREA ELEVATION	
		BIORETENTION AREA #1	BIORETENTION AREA #2 WITH ISR
A	BOT. BASIN	130.00	128.50
B	BOT. FLTR MEDIA	128.50	126.75
C	BOT. OF 3" PEA STONE	0	126.75
D	BOT. OF CRUSHED STONE	128.25	125.75
E	GRATE	132.25	130.50
F	UPPER ORIFICE	127.50	126.75
G	NOT USED	0	0
H	NOT USED	0	0
J	NOT USED	0.00	0.00
K	TOP OF BERM	133.25	131.25
L	EMERGENCY SPILLWAY	132.50	130.75
M	OUTLET PIPE INVERT	127.50	126.75
N	END OF PIPE INVERT	127.00	126.25



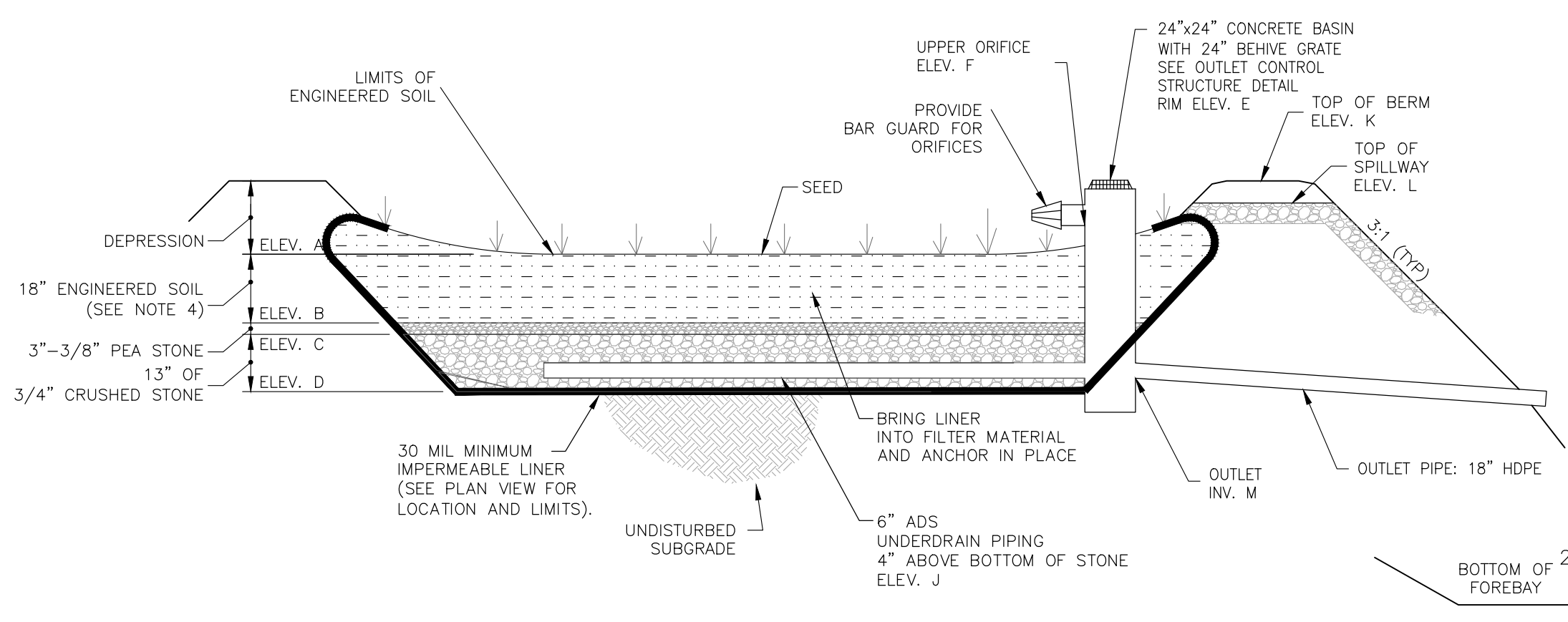
BMP'S	L	W
BIORETENTION AREA #1	5'	10'
BIORETENTION AREA #2	5'	10'
BIORETENTION AREA #3	12'	28'



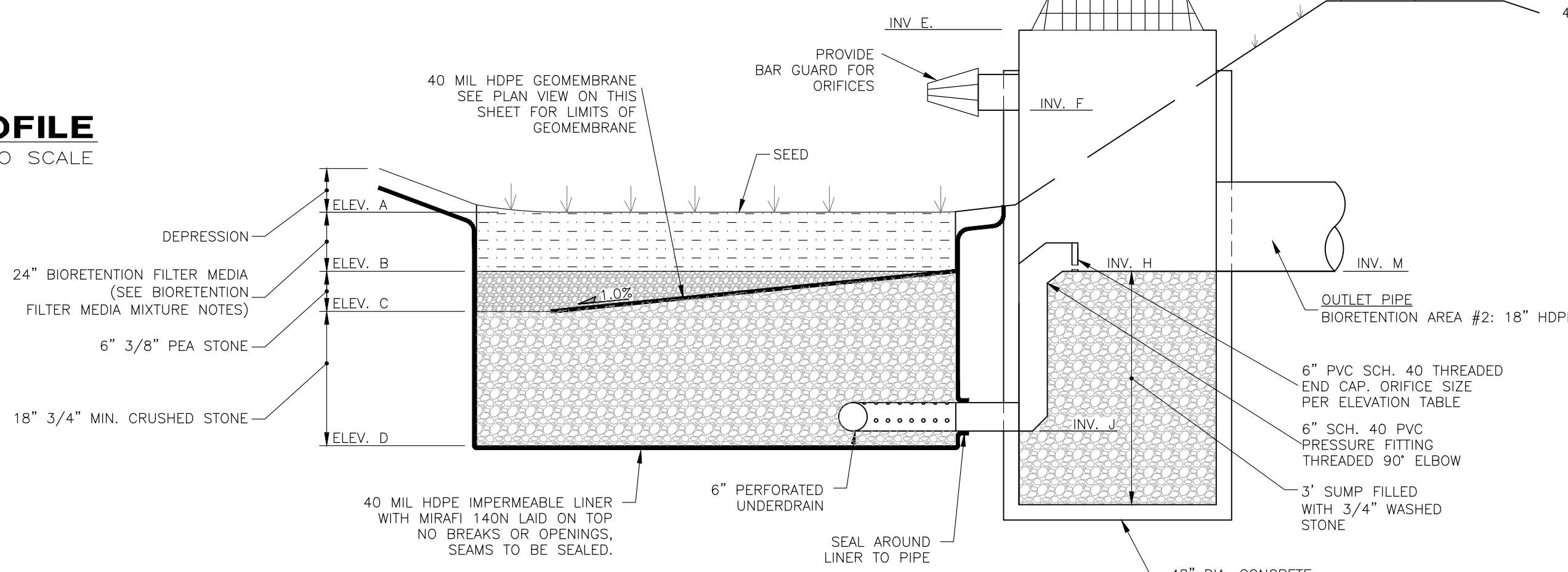
TOP VIEW - OUTLET CONTROL STRUCTURE FOR BIORETENTION AREAS WITH ISR  
NOT TO SCALE



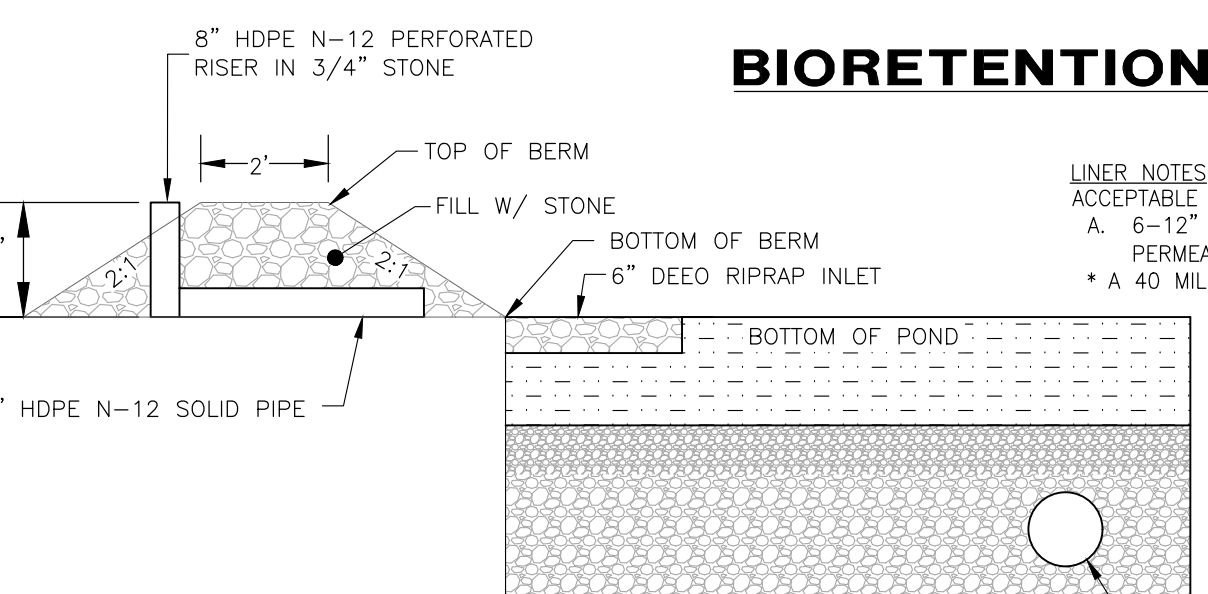
CAP W/ CONTROL ORIFICE  
NOT TO SCALE



BIORETENTION AREA  
NOT TO SCALE



BIORETENTION AREA (WITH ISR)  
NOT TO SCALE



RIPRAP SEDIMENT FOREBAY SPILLWAY PROFILE FOR BIORETENTION AREA  
NOT TO SCALE

COMPONENT MATERIAL	% OF MIXTURE BY VOLUME	GRADATION OF MATERIAL	
		SIEVE NO.	% BY WEIGHT PASSING STANDARD SIEVE
BIORETENTION FILTER MEDIA OPTION A			
ASTM C-33 CONCRETE SAND	50-55		
LOAMY SAND TOPSOIL WITH FINES AS INDICATED	20-30	200	15 TO 25
MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH WITH FINES AS INDICATED	20-30	200	<5
3/8" WASHED CRUSHED STONE*			
SIEVE SIZE	% PASSING BY WEIGHT	SIEVE SIZE	% PASSING BY WEIGHT
1/2"	100	1"	100
3/8"	95-100	3/4"	90-100
#4	22-55	1/2"	15-55
#10	0-10	#10	0-5
*EQUIVALENT TO STANDARD WASHED STONE-SECTION 702 OF NHDOT STANDARD SPECIFICATIONS			
3/4" WASHED CRUSHED STONE*			
SIEVE SIZE	% PASSING BY WEIGHT	SIEVE SIZE	% PASSING BY WEIGHT
1/2"	100	1"	100
3/8"	95-100	3/4"	90-100
#4	22-55	1/2"	15-55
#10	0-10	#10	0-5
*EQUIVALENT TO STANDARD WASHED STONE-SECTION 702 OF NHDOT STANDARD SPECIFICATIONS			

HYBRID BIORETENTION AREA MIX:  
THE GRASS THAT IS PLANTED WITHIN A BIO-FILTRATION SYSTEM WITHIN THE BIO-MEDIA MUST CONSIST OF A COMBINATION OF WARM SEASON GRASS SEED AND COLD SEASON GRASS SEED IN ORDER FOR THE GRASS TO START GROWING FOR STABILIZATION AND CONTINUE GROWING IN THE SANDY WELL-DRAINED ENVIRONMENT. PLANTING SPECIFICATION WILL MEET REQUIREMENTS AS OUTLINED IN 'VEGETATION NEW HAMPSHIRE SAND AND GRAVEL PITS' MIX 1 (WARM SEASON GRASSES) (15 LBS/AC) AND INCLUDE ANNUAL AND PERENNIAL RYE GRASS SEED (15 LBS/AC); THE NEW ENGLAND NATIVE WARM SEASON GRASS MIX (23 LBS/AC) BY NEW ENGLAND WETLAND PLANTS, INC.; RAIN GARDEN MIX 180 (15 LBS/AC & 15 LBS/AC OF RYE)/RAIN GARDEN GRASS MIX 180 (20 LBS/AC & 10 LBS/AC OF RYE) BY ERNST CONSERVATION SEEDS, OR APPROVED EQUAL.

- MAINTENANCE REQUIREMENTS
1. WHEN CONTRACTOR EXCAVATES BIORETENTION AREA TO SUBGRADE, DESIGN ENGINEER SHALL PERFORM SUBSURFACE EVALUATION PRIOR TO THE PLACEMENT OF ANY SELECT MATERIAL OR OTHER BACKFILL.
  2. SOIL BIORETENTION FILTER MEDIA SHALL BE AS SHOWN ABOVE. "BIO-MEDIA" MEANS BIORETENTION FILTER MEDIA.
  3. DO NOT PLACE THE BIORETENTION SYSTEM INTO SERVICE UNTIL THE BMP HAS BEEN PLANTED AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
  4. DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF WATER FROM EXCAVATION) TO THE BIORETENTION AREA DURING ANY STAGE OF CONSTRUCTION.
  5. DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF INFILTRATION COMPONENTS OF THE SYSTEM.
  6. WHERE BIORETENTION AREA BOTTOM IS UNLINED, IT TO BE ROTOTILLED PRIOR TO INSTALLING PEA GRAVEL OR COARSE SAND.
  7. A PROFESSIONAL ENGINEER SHALL BE PRESENT DURING THE CONSTRUCTION OF THE RAIN GARDENS TO ENSURE THAT ALL OF THE CRITERIA ARE MET AND THAT A REPORT BE SUBMITTED TO NHDES WHEN CONSTRUCTION OF THE BIORETENTION AREAS ARE COMPLETED.

- DESIGN REFERENCES:
1. UNH STORMWATER CENTER
  2. NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 2, DECEMBER 2008 AS AMENDED.

BIORETENTION AREA NOTES

1. SYSTEMS SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND FOLLOWING ANY RAINFALL EXCEEDING 2.5 INCHES IN A 24-HOUR PERIOD, WITH MAINTENANCE OR REHABILITATION CONDUCTED AS A WARRANTED SUCH INSPECTION.
2. PRETREATMENT MEASURES SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND CLEANED OF ACCUMULATED SEDIMENT AS WARRANTED BY INSPECTION, BUT NO LESS THAN ONCE ANNUALLY.
3. AT LEAST ONCE ANNUALLY, SYSTEM SHOULD BE INSPECTED FOR DRAINAGE TIME. IF BIORETENTION SYSTEM DOES NOT DRAIN WITHIN 72-HOURS FOLLOWING A RAINFALL EVENT, THEN A QUALIFIED PROFESSIONAL SHOULD ASSESS THE CONDITION OF THE FACILITY TO DETERMINE MEASURES REQUIRED TO RESTORE FILTRATION FUNCTION OR INFILTRATION FUNCTION, INCLUDING BUT NOT LIMITED TO REMOVAL OF ACCUMULATED OF SEDIMENTS OR RECONSTRUCTION OF FILTER MEDIA.
4. VEGETATION SHOULD BE INSPECTED AT LEAST ANNUALLY AND MAINTAINED IN HEALTHY CONDITION, INCLUDING PRUNING, REMOVAL, AND REPLACEMENT OF DEAD OR DISEASED VEGETATION, AND REMOVAL OF INVASIVE SPECIES.

**SITE DEVELOPMENT PLANS**  
TAX MAP 48 LOT 3  
**DETAILS-3**  
C3I, INC.  
8 COMMERCE WAY  
EXETER, NH  
COUNTY OF ROCKINGHAM  
OWNED BY  
C-MARINE DYNAMICS REALTY, LLC  
SCALE: NTS  
APRIL 14, 2023

**TFM** Civil Engineers, Structural Engineers, Traffic Engineers, Land Surveyors, Landscape Architects, Scientists  
48 Constitution Drive, Bedford, NH 03110, Phone (603) 472-4488, Fax (603) 472-9747, www.tfmoran.com  
REV DATE DESCRIPTION DR CK  
47201.03 DR FB  
CADFILE 47201-03 DETAILS C-12

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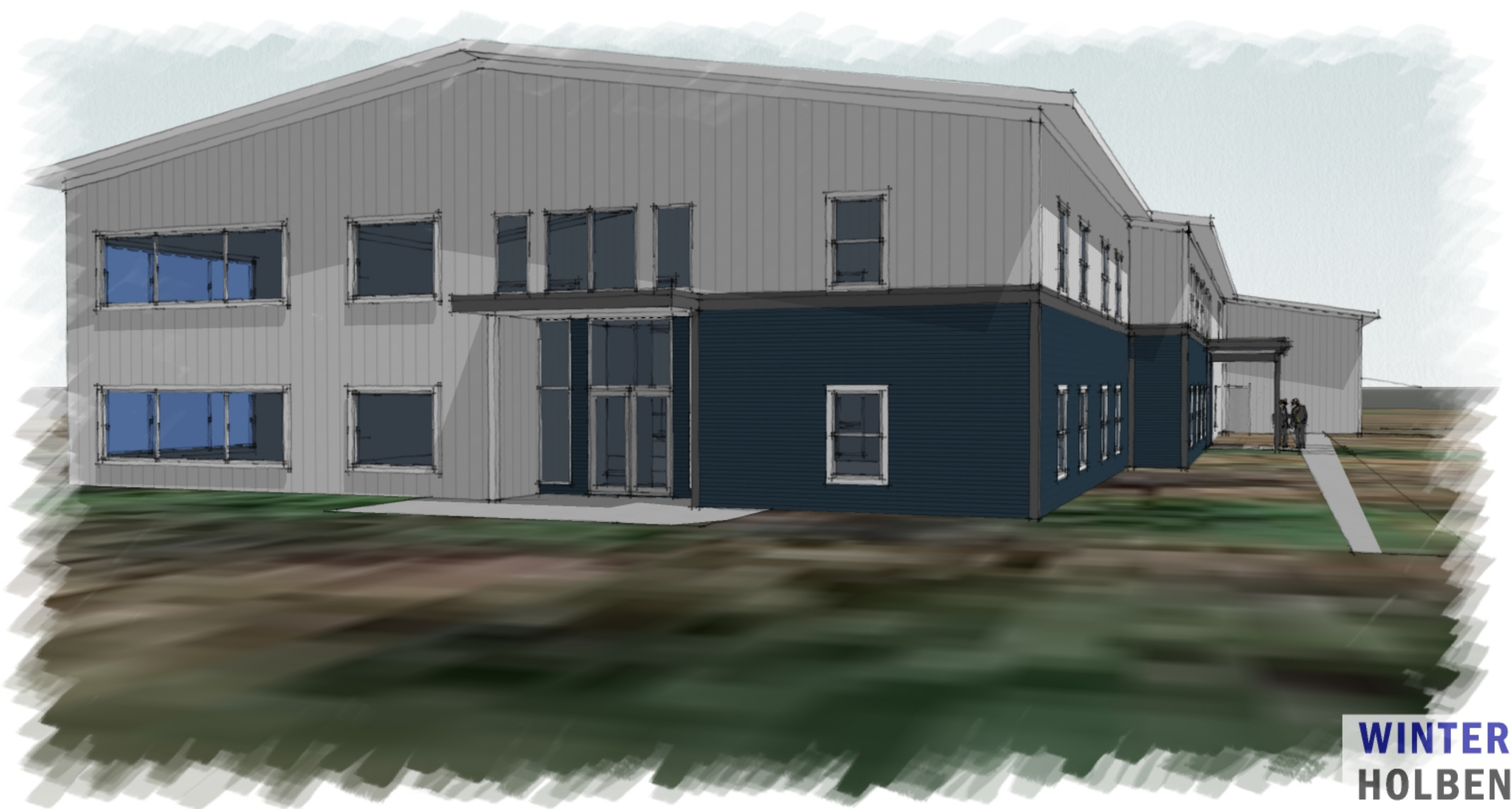
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Exeter Conservation Commission  
July 11, 2023  
Nowak Room  
10 Front Street  
7:00 PM  
Draft Minutes

**Call to Order**

1. Introduction of Members Present (by Roll Call)

Present at tonight’s meeting were by roll call, Chair Andrew Koff, Vice-Chair Trevor Mattera, Connor Madison, Alternate Valorie Fanger and Alternate Keith Whitehouse

Staff Present: Kristen Murphy, Conservation and Sustainability Planner

Mr. Koff called the meeting to order at 7:00 PM and activated Alternates Fanger and Whitehouse. He introduced the members and noted that there were two open positions.

2. Public Comment

Mr. Koff asked if there was any public comment unrelated to agenda items and there was none.

**Action Items**

1. Drinking Water Trust Fund Grant Application for Conservation Land (Southeast Land Trust/Trust for Public Lands)

Lynnette Batt project manager, representing the non-profit Trust for Public Land appeared with Duane Hyde of Southeast Land Trust to present the proposal to acquire 148 acres from the Rugg family, of which 46 acres are located in Exeter and the remaining acreage in Newfields for a community forest. She is asking the Conservation Commission for a letter of support addressed to the State which she can add to the grant application.

Ms. Batt presented proposals for pre-applications for grants for Newfields and Exeter, with a \$500,000 Drinking Water and Groundwater Trust Fund grant to assist with the purchase cost for the Town of Exeter as the parcel in Exeter is in the public water supply protection area. She is recommending the balance of \$1,141,500 be funded through a Town bond. Fundraising and private donations will go towards the associated costs of the purchase. She will get feedback from the Select Board and Fort Rock Riders for what she hopes will become a community forest with 12-13 miles of trails.

Ms. Batt noted there are some title and boundary issues to be cleared up in the next two months and Don Wilson has been hired for that. Ms. Murphy noted that legal counsel will then look over the title



44 report and field work summary. Applications for grants will be submitted in the fall. The Town vote for  
45 the bond would be next March. Closing would be the first half of 2025. Phase 2 would be creating a  
46 new parking area on Piscassic Road.

47

48 **Proposed Funding Sources Amount Source**

49 ***Newfields***

50 USFS Community Forest Program (CFP) \$600,000 Federal

51 NH Land and Community Heritage Investment Program (LCHIP) \$500,000 State

52 NH DES Clean Water State Revolving Fund (SRF) Loan (with some  
53 principal forgiven)

54 \$2,424,500 State/ Local

55 Town of Newfields bond Only if SRF

56 not awarded

57 Local

58 NH Parks & Recreation Land and Water Conservation Fund (LWCF)\* \$500,000 Federal

59 **Total Estimated Land Cost: Newfields \$3,524,500**

60 ***Exeter***

61 NH DES Drinking Water and Groundwater Trust Fund (DWGTF) \$500,000 State

62 Town of Exeter bond \$1,141,500 Local

63 **Total Estimated Land Cost: Exeter \$1,641,500**

64 *\*The LWCF grant is a backup, as the timeline may not work for the project – TBD after further consultation with the LWCF program.*

65

66 Mr. Koff asked if there were any comments from the public at 7:25 PM and there were none.

67

68 MOTION: Mr. Koff motioned that a letter of support be issued for the proposal. Mr. Mattera seconded  
69 the motion. A vote was taken, all were in favor, the motion passed 5-0-0.

70

71 2. Wetland Dredge and Fill application for the Bank Stabilization along the Exeter River at River Run at  
72 Exeter Tax Map 105 Lot 79 (Paige Libbey)

73

74 Paige Libbey with Jones & Beach Engineers presented the application for stabilization of the three areas  
75 of bank erosion at River Run which has frontage on the Exeter River. There were water main failures  
76 which caused erosion several years ago.

77

78 Ms. Libbey described Area #1 which had two units removed and the proposal to use Gabion baskets and  
79 conservation seed mix.

80

81 Ms. Libbey described Area #2 which she described as a peninsula on Camelot Road with limited access  
82 and sheds located between the units. Coir logs and plantings are proposed here.

83

84 Ms. Libbey described Area #3 which she noted was similar to Area #1.

85

86 Ms. Libbey noted she met with NH DES on site and attended a meeting of the local advisory committee.

87

88 Mr. Koff asked who was doing what with what equipment. Ms. Libbey indicated a contractor has not  
89 been chosen yet. The NH DES application has not been submitted yet. The local advisory committee

90 had concerns with stormwater runoff being a contributing factor. Ms. Murphy indicated she visited the  
91 site with Doug Eastman, took photos and all homes are prohibited from being put back. The private  
92 water system is proposed for be replaced. Ms. Murphy noted it was very obvious from the gushing  
93 plume of water that stormwater was not the cause and she shared that information with Theresa.  
94

95 Mr. Mattera asked for more information on the Gabions. Ms. Libbey described the front pockets for  
96 revegetation, the metal cube with fabric surrounding it and exposed face. Mr. Mattera asked if water  
97 would permeate the baskets and Ms. Libbey indicated it would and downed trees will be used for  
98 buttresses.  
99

100 Ms. Fanger noted the proximity of the buildings to the river and asked if that would change. Ms. Libbey  
101 indicated she did not know. Ms. Murphy indicated the Building Inspector would not make that  
102 recommendation unless there was imminent risk.  
103

104 Mr. Koff asked if equipment would enter the river for Area #2 and Ms. Libbey was uncertain at this time  
105 but if that needed to be the case she would come back before the Commission to describe the work.  
106 Mr. Mattera asked if there was any active channel erosion and Ms. Libbey indicated not that she was  
107 aware of.  
108

109 Mr. Koff commented that the proposed trails could reduce success. Mr. Mattera agreed that people  
110 needed to be funneled the way they would like and encouraged with perhaps some kind of barrier to  
111 stay off the Gabions and plantings. Ms. Libbey described the proposal for the access trail with slope, flat  
112 area and slope. Mr. Mattera asked if the bank would be raised up. Ms. Libbey noted she believed  
113 material would be moved around but will check whether there is any intent to fill in.  
114

115 Mr. Koff opened the hearing to the public.  
116

117 Susan Hansen noted she was an abutter across the river. She reviewed the history from 40 years ago  
118 when the cliff was man made and filled in with gravel. She expressed concerns with the affect on her  
119 property across the river and the wetland on the opposite side upriver.  
120

121 Mr. Koff asked if the peninsular area was fill or natural and Ms. Libbey indicated it has been that way for  
122 quite a while. He asked if she saw any bricks or rubble in the eroded area or materials leaching into the  
123 river. Ms. Libbey indicated she did not have geotechnical data.  
124

125 Ms. Murphy asked about FEMA analysis and Ms. Libbey indicated the area was not encroaching into the  
126 floodway, the flood plain across was much lower. Mr. Mattera described the workings of the inside of  
127 the bow and natural mechanisms of the river. He reminded that there was unfortunately no regulation  
128 over what happened 40 years ago, however the scope of the project before them was to stabilize the  
129 bank.  
130

131 MOTION: Mr. Mattera motioned to send a memo to the State stating that the Commission had no  
132 objection to the project as proposed.  
133

134 Mr. Koff noted concerns with limited access and potential foot traffic being addressed through signage  
135 or limiting the area.

136

137 Mr. Mattera amended his motion. Mr. Madison seconded the motion. A vote was taken, all were in  
138 favor, the motion passed 5-0-0.

139

140 3. Minimum Impact Expedited Wetland Dredge and Fill application for 772 square feet of wetlands  
141 impact and a Wetland Conditional Use Permit associated with the construction of a residential driveway  
142 for a new single-family house at 24 Powdermill Road – Tax Map 102 Lot 04 (Daniel Coons)

143

144 Mr. Koff noted that a site walk was done at 5 PM today.

145

146 Dan Coons of Ilex Wetlands Consultants of Wolfeboro presented the proposal for the wetland  
147 conditional use permit for the driveway. He noted the state had already approved the Expedite Dredge  
148 and Fill application. He indicated that the 20-acre parcel will be subdivided so that a five-acre parcel can  
149 have a single-family home built for the daughter of the owners. Initially a ROW easement was proposed  
150 for access, to avoid buffer impacts but wetlands were found on both sides, and it was determined that  
151 the buffer impact coming in from the road would be much less than the ROW. The wetland parallels the  
152 road.

153

154 Mr. Madison asked the amount of impact on the ROW versus the road access and Mr. Coons stated that  
155 the ROW had 720 SF and the road access would be 624 with buffer impacts in the ROW 2,240 and the  
156 road 1,040. The ROW has wetlands on both sides up the middle.

157

158 Mr. Madison asked when the application was going to the Planning Board and Mr. Coons indicated on  
159 Thursday. Mr. Madison indicated that he struggled with the difference between the stamps of the  
160 certified wetland scientists' delineations and questioned whether third party review may be required.  
161 Mr. Koff agreed the open wet meadow was hard to delineate. Mr. Mattera noted the difference  
162 between what was observed during the site walk and what was noted on the plan. He questioned the  
163 validity of the boundaries based on what was seen in the field today. Mr. Coons indicated he could go  
164 out and take another look to see if the area in question warrants flagging as an additional wetland  
165 pocket. Ms. Murphy described the three criteria for wetlands to the applicant: plants, soil and  
166 hydrology and noted that while the applicants noted it looks different every time all three of those don't  
167 change from day to day. Mr. Coons indicated that he could check the delineation before Thursday but  
168 would not have time to change the plan before then, if that became the case.

169

170 MOTION: Mr. Koff motioned to draft a memo to the Planning Board describing the additional potential  
171 wetland not shown on the plan that was observed during the site walk and that the Commission has  
172 asked that the area be reviewed and if determined to be a wetland then the proposed plan would need  
173 to be reviewed to determine if the design is the least impactful. If no additional wetland are found then  
174 the Commission is supportive of the plan.

175

176 Mr. Koff noted he could attend the Planning Board meeting on Thursday.

177



178 Mr. Mattera seconded the motion. A vote was taken, all were in favor, the motion passed 5-0-0.

179

180 4. Minimum Impact Expedited Wetland application for Epping Road Expansion

181

182 Greg Backus presented the proposal for extending the center lines on Epping Road and widening on  
183 both sides for 1500.’ He described the impact as 886 SF permanent and 700+/- SF temporary impact,  
184 mostly roadside ditches. There will be sidewalks and drainage improvements. The town project will  
185 improve safety and traffic flow. He described an Iris of concern which was found not to be the species  
186 of concern and will close the loop with DES on that. He described the sidewalks to Gateway and the  
187 Mobil station and one break due to a ROW. He described stormwater management and catch basins.  
188 Detention basins will be expanded and have deep sumps in the catch basins.

189

190 MOTION: Mr. Koff motioned to sign the expedited application. Mr. Mattera seconded the motion. A  
191 vote was taken, all were in favor, the motion passed 5-0-0.

192

193 5. Conceptual discussion on the construction of commercial vehicle storage area for Foss Motors at Tax  
194 Map 52 Lot 112.2 (Christian Smith)

195

196 Brendan Quigley of Gove Environmental presented the application on behalf of Foss Motors and  
197 indicated that Tim Foss was present. He indicated the location of the parcel south of the prior Sylvania  
198 property. He indicated the reservoir location and location of the brook. He proposed a parking area out  
199 front for storage and display of inventory and a potential building to the rear for offices. He described  
200 three potential wetland impacts and the location of the 300’ and 150’ shoreland protection buffers. The  
201 impact would be substantial, 80,000 SF. He did not have a lot of detail concerning stormwater  
202 management but described it would be robust in this location.

203

204 Ms. Murphy reminded this was a non-binding, conceptual, review and the Commission would be  
205 entitled to differing opinions when reviewing the final plans.

206

207 Mr. Koff indicated he was not in favor of this proposal for the use or the design, due to the sensitive  
208 area of the Exeter drinking water source and amount of wetland and shoreland impacts. Mr. Madison  
209 agreed and indicated a tree line of some sort should be maintained. Ms. Fanger noted she was no in  
210 favor of the proposal either.

211

212 Mr. Madison asked the dimensions of the office space – 22,000 SF.

213

214 Mr. Mattera described the buffer impacts right next to the reservoir.

215

216 Mr. Foss described how long his family had owned the growing business and a desire not to leave Exeter  
217 in order to expand but they are maximized and have to grow.

218

219 Mr. Mattera described the purpose of the buffer to protect the water quality and indicated he would  
220 need to be shown that the water coming out is cleaner than when it started in terms of stormwater  
221 management. Mr. Madison agreed. Ms. Fanger was skeptical that anything could be done to protect

222 the water. Mr. Mattera questioned whether they were putting off the inevitable. Mr. Koff asked if  
223 they had considered off-site properties and Mr. Foss described the importance of the display location,  
224 and off-site security and maintenance concerns.

225

226 6. Committee Reports

227

228 7. Approval of Minutes

229

230 i. June 13, 2023 Meeting

231

232 MOTION: Mr. Koff motioned to approve the June 13, 2023 meeting minutes. Mr. Mattera  
233 seconded the motion. A vote was taken, all were in favor, the motion passed 5-0-0.

234

235 8. Correspondence

236

237 9. Other Business

238

239 10. Next Meeting: Date Scheduled (8/8/23), Submission Deadline (7/28/23)

240

241 11. Adjournment

242

243 MOTION: Mr. Koff moved to adjourn the meeting at 9:41 PM seconded by Mr. Madison. A vote was  
244 taken, all were in favor, the motion passed unanimously.

245

246 Respectfully submitted,

247

248 Daniel Hoijer, Recording Secretary

249 Via Exeter TV

250 Zoom ID 815 4715 1492