



William Cass, P.E.
Commissioner

**THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION**

District 6 Office, PO Box 740, Durham, NH 03824



David Rodrigue, P.E.
Assistant Commissioner

DRIVEWAY PERMIT

To: Paul Thibodeau	City/Town: Barrington	Permit #: 06-027-614
Thibodeau Family Revocable Trust	Route/Road: NH 9 (S0000009)	District: 06
76 Young Road	Patrol Section: 603	Permit Date 3/13/2023
Barrington, NH 03825	Tax Map: 234	
	Lot: 77	
	Development: Residential / Commercial	

Permission is hereby granted to construct (alter) a driveway, entrance, exit or approach adjoining NH 9 (S0000009), pursuant to the location and specifications as described below. Failure to adhere to the standards and engineering drawings previously approved shall render this instrument null and void. Failure to start or complete construction of said facility within one calendar year of the date of this permit shall require application for permit extension or renewal in accordance with the Driveway Access Rules. Facilities constructed in violation of the permit specifications or the rules, shall be corrected immediately upon notification by a Department representative. Any cost by the State to correct deficiencies shall be fully borne by the landowner. The landowner shall defend, indemnify and hold harmless the Department and its duly appointed agents and employees against any action for personal injury and/or property damage sustained by reason of the exercise of this permit.

06-027-614

Drive 1

Location: Approximately 0.15 miles west of Mallego Road on the north side of NH 9 (S0000009).
GPS: 43.214116 N 71.002592 W.

Specifications: This permit authorizes a paved access to be used as a Multi-Family Residential drive. Any change in use, increase in use or reconstruction of the driveway requires reapplication.

The right-of-way line is located at the stonewall.
The entrance shall be graded so that the surface of the drive drops 6 inches at a point 12 feet from NH 9 (S0000009) edge of pavement to create a drainage swale.

The driveway shall not exceed 24 feet in width. The entrance of the drive may be flared; typically the flare radius is one half the driveway width.

Other Conditions:

No structures, including buildings, permanent or portable signs, lights, displays, fences, walls, etc. shall be permitted on, over or under the Highway Right of Way.

No parking, catering or servicing shall be conducted within the Highway Right of Way.

The applicant shall comply with all applicable ordinances and regulations of the municipality or other State Agencies.

The Department has relied on the title and subdivision information provided by the landowner. The Department has not performed additional title research and makes no warranty or representation concerning landowner's legal right to access. In the event of a dispute about the landowner's legal right to the access provided herein, the landowner will defend and indemnify the Department.

All excavated topsoil, or in the absence of topsoil the top 6 inches of soil, within the limits of state ROW shall be properly re-used within the limits of the state ROW. All temporary stockpiles of the re-use material shall be located within the state ROW, or as otherwise approved by the District Engineer.

The Contractor shall be solely responsible for the handling, transport and disposal of any surplus material generated by their project and shall comply with all federal, state and local laws, ordinances and rules in doing so.

I/We, the contractor/Owner, certify that the property will not have any illicit unauthorized drainage connections to the NHDOT storm water drainage system. An illicit discharge is any direct or indirect discharge to the NHDOT drainage system that is not composed entirely of storm water. Illicit discharges include, without limitation, sewage, process wastewater, or wash water and any connections from floor drains, sinks, or toilets.

1. This permit is for access to 6- Single-Family Residences with 6- Commercial Spaces on the lower walk-out level

2. The construction of one mixed use residential / commercial driveway entrance is permissible. Construct per "Mixed-Use Development Plans" Tax Map 234, Lot 77, N.H. Route 9, Barrington, N.H., prepared for The Thibodeau Family Rev. Trust, Paul F. & Linda A. Thibodeau Trustees, by Beals Associates, LLC, dated August 2022, and revised on November 16, 2022 and February 2, 2023, on file with this office.

3. Drive 1 (access to lot 77), the existing drive to lot 74 (permit # 06-027-194), the existing drive to lot 75, and the existing drive to lot 76 (permit # 06-027-191) are the only points of access allowed for this lot of record. There shall be no additional points of access permitted within the frontage of this parcel of property. Other access to the highway is to be prevented. No part of the right-of-way may be used for any purpose other than travel.

4. A culvert with a flared end section at each end is required to maintain existing highway drainage and shall be maintained by the landowner. Minimum pipe diameter shall be 12 inches. Minimum depth of cover is to be per manufacturer's specifications.

5. All season safe sight distance shall be maintained by the landowner as per RSA 236:13. The applicant's two abutters to the east (Kay and Henderson) and his one abutter to the west (Morrison), have a sightline easement agreement on their properties in favor of the applicant (lot 77) whether it is needed or not as described in the "Agreement between adjoining owners creating sight line easement", recorded at the Strafford County Registry of Deeds on June 2, 2021, in Book 4937, Page 298. (attached)

6. This permit supersedes permit 06-027-594, dated October 4, 2021, (temp logging) and permit 06-027-448, dated November 8, 2005.

7. Interruptions to traffic shall be kept to a minimum and be maintained in accordance with the most current edition of the Manual on Uniform Traffic Control Devices (M.U.T.C.D.). When conditions warrant, flaggers and or uniformed officers shall be utilized and be of a competent nature.

8. The applicant will be responsible for mitigation should the future use of this driveway unfavorably impact the highway.

9. Contact the NHDOT District 6 office at 868-1133 at least 72 hours prior to driveway construction activities to allow NHDOT the opportunity to review driveway layout prior to paving.

Approved



Assistant District Engineer
For Director of Administration

Copies: District, Town, Patrolman

NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION

District 1, 641 Main St, Lancaster, NH 03584
District 2, 8 Eastman Hill Road, Enfield, NH 03748
District 3, 2 Sawmill Rd, Gilford, NH 03249

District 4, 19 Base Hill Road, Swanzy, NH 03446
District 5, 16 East Point Drive, Bedford, NH 03110
District 6, PO Box 740, Durham, NH 03824

8995

APPLICATION FOR DRIVEWAY PERMIT

Pursuant to the provisions of Revised Statutes Annotated, Chapter 236, Section 13 (printed on reverse of application) and amendments thereto, and Declaratory Ruling 2000-01, permission is requested to: (select one): Construct / Alter (Indicate quantity of) 1 driveway entrance(s) to my property on the (select): North / South / East / West side of NH Route 9 or Street/Road: FRANKLIN PIERCE HWY In the Town of BARRINGTON at a location which will meet the requirements for safety specified in said statutes.

The driveway entrance(s) requested is (are) for access to: 400 sq ft office space basement each? Residence / Industry, Business, Subdivision, Other

Describe nature and size of industry, business or subdivision: 6 Single Family Condo units + office 25' Feet (select) North / South / East / West of Utility Pole Number: PSNH 3/274 NET 1044 723' Feet (select Feet or Miles): North / South / East / West of Road or Junction: MALEGO ROAD

Town Tax Map # 234 and Lot # 77

As the landowner (or designated applicant) I agree to the following:

- 1. To construct driveway entrance(s) only for the bonafide purpose of securing access to private property such that the highway right-of-way is used for no purpose other than travel.
2. To construct driveway entrance(s) at permitted location(s).
3. To construct driveway entrance(s) in accordance with statutes, rules, standard drawings, and permit specifications as issued by the New Hampshire Department of Transportation.
4. To defend, indemnify and hold harmless the New Hampshire Department of Transportation and its duly appointed agents and employees against any action for personal injury and/or property damage sustained by reason of the exercise of this permit.
5. To furnish and install drainage structures that are necessary to maintain existing highway drainage and adequately handle increased runoff resulting from the land development and obtain all easements thereto.
6. I am the owner or a duly authorized agent of the owner of the parcel upon which the driveway will be constructed. I have provided accurate and complete title and subdivision information concerning the parcel to the Department. I understand that the Department is relying on this information in considering this application and that the Department does not perform independent title research or make judgments about title or access disputes.
• For new driveway(s), include copy of current deed and, if not the same, previous deed dated prior to July 1, 1971 of the parcel. If this parcel is part of a larger tract subdivided after July 1, 1971, then provide complete subdivision plans and deed history dating back to at least July 1, 1971.
• Attach sketch or plan showing existing and proposed driveway(s) and the adjacent highway indicating distance to town road, town line, or other readily identifiable feature or landmark and also to the nearest utility pole (including pole numbers)

THIBODEAU FAMILY REVOCABLE TRUST
Signature of Landowner (Applicant): Paul Thibodeau
Mailing Address: 76 Young Road, BARRINGTON NH 03825
Printed Name of Landowner: PAUL THIBODEAU
Town/City, State, Zip Code: BARRINGTON NH 03825
Date: 1/25/2023
Telephone Number(s): 603-767-3552
Contact /Agent, if not Landowner: paul.thibodeau1@gmail.com

FOR OFFICE USE ONLY: RECEIVED
GPS N = _____ GPS W = _____ JAN 25 2023
Section: _____ Width: _____ Speed: _____
Right of Way: _____ Drainage: _____ SLD: _____
Conditions: _____ NHDOT DISTRICT 6
Permit Number Assigned: _____

3/25

§ 236:13 Driveways and Other Accesses to the Public Way. – I. It shall be unlawful to construct, or alter in any way that substantially affects the size or grade of, any driveway, entrance, exit, or approach within the limits of the right-of-way of any class I or class III highway or the state-maintained portion of a class II highway that does not conform to the terms and specifications of a written permit issued by the Commissioner of transportation.

II. Pursuant to this section, a written construction permit application must be obtained from and filed with the department of transportation by any abutter affected by the provisions of paragraph I. Before any construction or alteration work is commenced, said permit application shall have been reviewed, and a construction permit issued by said department. Said permit shall:

- (a) Describe the location of the driveway, entrance, exit, or approach. The location shall be selected to most adequately protect the safety of the traveling public.
- (b) Describe any drainage structures, traffic control devices, and channelization islands to be installed by the abutter.
- (c) Establish grades that adequately protect and promote highway drainage and permit a safe and controlled approach to the highway in all seasons of the year.
- (d) Include any other terms and specifications necessary for the safety of the traveling public.

III. For access to a proposed commercial or industrial enterprise, or to a subdivision, all of which for the purposes of this section shall be considered a single parcel of land, even though acquired by more than one conveyance or held nominally by more than one owner:

- (a) Said permit application shall be accompanied by engineering drawings showing information as set forth in paragraph II.
- (b) Unless all season safe sight distance of 400 feet in both directions along the highway can be obtained, the commissioner shall not permit more than one access to a single parcel of land, and this access shall be at that location which the commissioner determines to be safest. The commissioner shall not give final approval for use of any additional access until it has been proven to him that the 400-foot all season safe sight distance has been provided.
- (c) For the purposes of this section, all season safe sight distance is defined as a line which encounters no visual obstruction between 2 points, each at a height of 3 feet 9 inches above the pavement, and so located as to represent the critical line of sight between the operator of a vehicle using the access and the operator of a vehicle approaching from either direction.

IV. No construction permit shall allow:

- (a) A driveway, entrance, exit, or approach to be constructed more than 50 feet in width, except that a driveway, entrance, exit, or approach may be flared beyond a width of 50 feet at its junction with the highway to accommodate the turning radius of vehicles expected to use the particular driveway, entrance, exit or approach.
- (b) More than 2 driveways, entrances, exits or approaches from any one highway to any one parcel of land unless the frontage along that highway exceeds 500 feet.

V. The same powers concerning highways under their jurisdiction as are conferred upon the commissioner of transportation by paragraphs I, II, III and IV shall be conferred upon the planning board in cities and towns in which the planning board has been granted the power to regulate the subdivision of land as provided in RSA 674:35, and they shall adopt such regulations as are necessary to carry out the provisions of this section. Such regulations may delegate administrative duties, including actual issuance of permits, to a highway agent, board of selectmen, or other qualified official or body. Such regulations, or any permit issued under them, may contain provisions governing the breach, removal, and reconstruction of stone walls or fences within, or at the boundary of, the public right of way, and any landowner or landowner's agent altering a boundary in accordance with such provisions shall be deemed to be acting under a mutual agreement with the city or town pursuant to RSA 472:6, II (a).

VI. The commissioner of transportation or planning board shall retain continuing jurisdiction over the adequacy and safety of every existing driveway, entrance, exit, and approach to a highway, whether or not such access was constructed or installed pursuant to a permit under this section, and, unless the access is a public highway, the owners of property to which the access is appurtenant shall have continuing responsibility for the adequacy of the access and any grades, culverts, or other structures pertaining to such access, whether or not located within the public right of way. If any such access is or becomes a potential threat to the integrity of the highway or its surface, ditches, embankments, bridges, or other structures, or a hazard to the safety of the traveling public, by reason of siltation, flooding, erosion, frost action, vegetative growth, improper grade, or the failure of any culvert, traffic control device, drainage structure, or any other feature, the commissioner of transportation or planning board or their designee may issue an order to the landowner or other party responsible for such access to repair or remove such hazardous condition and to obtain any and all permits required therefor. The order shall describe the hazard, prescribe what corrective action or alteration in the location or configuration of such access shall be required, and set a reasonable time within which the action shall be completed. Such an order shall be sent by certified mail, and shall be enforceable to the same extent as a permit issued under this section. If the order is not complied with within the time prescribed, the commissioner or planning board or their designee may cause to be taken whatever action is necessary to protect the highway and the traveling public, and the owner or other responsible party shall be civilly liable to the state or municipality for its costs in taking such action.

§ 236:14 Penalty. – Any person who violates any provision of this subdivision or the rules and regulations made under authority thereof shall be guilty of a violation if a natural person, or guilty of a misdemeanor if any other person; and, in addition, shall be liable for the cost of restoration of the highway to a condition satisfactory to the person empowered to give such written permission.

RECEIVED

JAN 23 2023

NHDOT DISTRICT 6

REGISTER OF DEEDS
STRAFFORD COUNTY

TOWN OF BARRINGTON, NH
NOTICE OF VOLUNTARY MERGER PURSUANT TO RSA 674:39-a

Property Owner(s) Name: David R. Henderson, Trustee of The David R. Henderson Living Revocable Trust, and Glenda J. Henderson, Trustee of The Glenda J. Henderson Living Revocable Trust

Address: 174 Route 9, Barrington, New Hampshire 03825

Telephone: 603-664-9005

Parcels Affected By This Merger:

1371/0290

Map & Lot # 234:78 Book & Page 2981/0499 ~~and new book/page~~
Map & Lot # 234:77 Book & Page 2039:0055

Location of Parcel(s): Route 9, Barrington, New Hampshire.

I (We) understand that no such merged parcels shall thereafter be separately transferred without subdivision approval.

I (We) understand that I (we) must file a copy of this notice with the Registry of Deeds and a copy of the same will be forwarded to the assessing officials of Barrington, NH.

Signature of Property Owner(s)	Date
<u>David R. Henderson</u>	<u>May 12, 2006</u>
<u>Glenda J. Henderson</u>	<u>May 12, 2006</u>

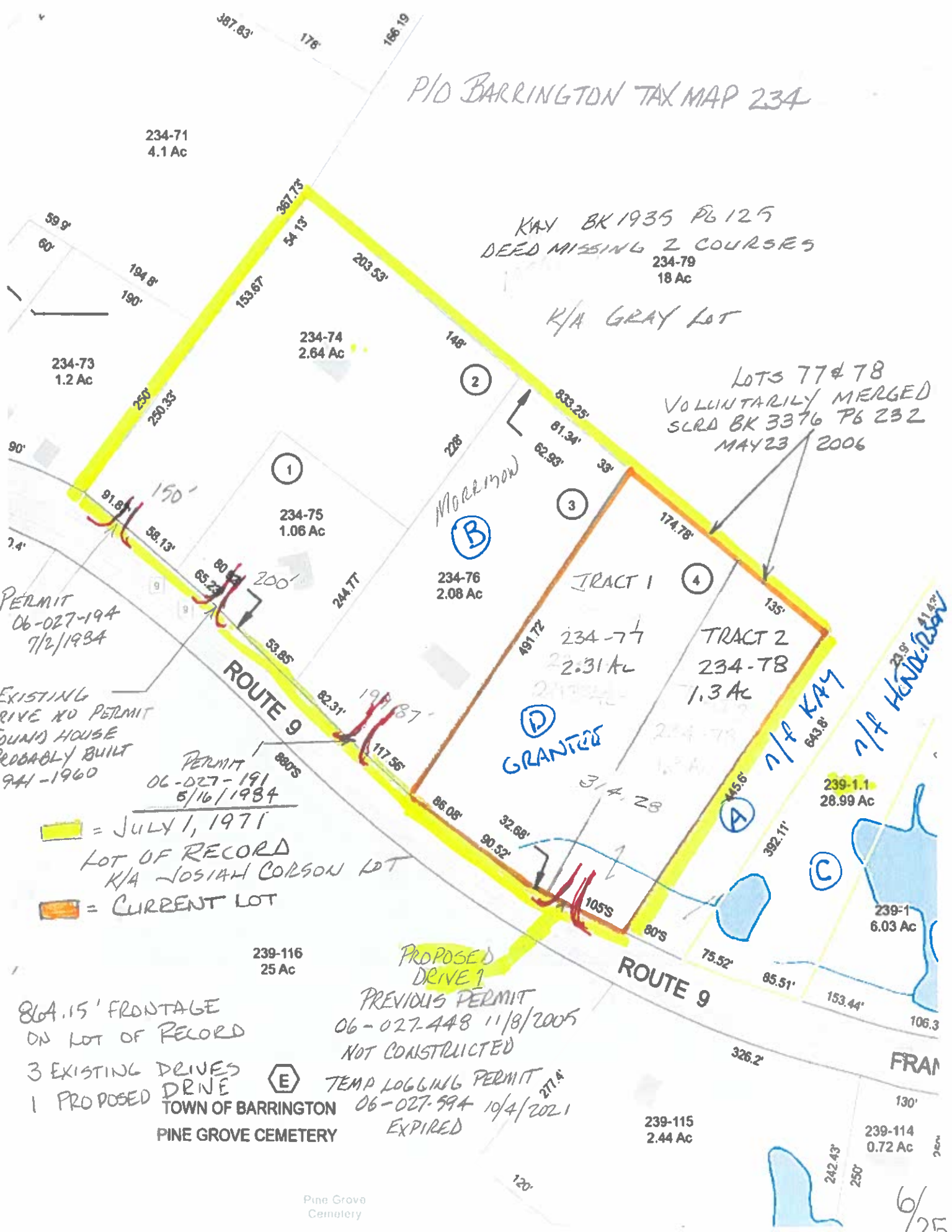
FOR OFFICE USE ONLY

Date Received: May 18, 2006 Date Reviewed: May 18, 2006

Endorsed By: David H. [Signature] for the Barrington Planning Board.

8K3376PG0232

P/D BARRINGTON TAX MAP 234



KAY BK 1935 Pg 125
DEED MISSING 2 COURSES
234-79
18 Ac

K/A GRAY LOT

LOTS 77 & 78
VOLUNTARILY MERGED
SLRD BK 3376 Pg 232
MAY 23 2006

PERMIT
06-027-194
7/2/1984

EXISTING
DRIVE NO PERMIT
FOUND HOUSE
PROBABLY BUILT
1941-1960

PERMIT
06-027-191
5/16/1984

= JULY 1, 1971
LOT OF RECORD
K/A JOSIAH CORSON LOT
 = CURRENT LOT

864.15' FRONTAGE
ON LOT OF RECORD

3 EXISTING DRIVES
1 PROPOSED DRIVE
TOWN OF BARRINGTON
PINE GROVE CEMETERY

PROPOSED
DRIVE 1
PREVIOUS PERMIT
06-027-448 11/8/2005
NOT CONSTRUCTED

TEMP LOGGING PERMIT
06-027-594 10/4/2021
EXPIRED

Pine Grove
Cemetery

6/25

Return To:
Paul Thibodeau
76 Young Road
Barrington, NH

RECEIVED

FEB 17 2023

NHDOT DISTRICT 6

E-Doc # 210015550
Book 4937 Page 298

08/02/2021 10:03:27 AM
Page 1 of 7

Catherine A. Berube
Register of Deeds, Strafford County
LCHIP STA183527 25.00
TRANS TAX ST855424 40.00

AGREEMENT BETWEEN ADJOINING OWNERS CREATING
SIGHT LINE EASEMENT

Agreement made on the 28th day of July, 2021, between, Richard W. Kay and Anna R. Kay, as Trustees of the Kay Family Revocable Trust of 2020 of 21 Littleworth Road, Dover, Strafford County, New Hampshire; Ray Morrison and Susan Morrison of 687 Franklin Pierce Highway, Barrington, Strafford, New Hampshire; and David R. Henderson, Trustee of the David R. Henderson Living Revocable Trust and Glenda J. Henderson, Trustee of the Glenda J. Henderson Living Revocable Trust of 1237 Winged Foot Lane, Denver, North Carolina (collectively "GRANTORS") and Paul Thibodeau of 76 Young Road, Barrington, Strafford County, New Hampshire ("GRANTEE")

The parties recite and declare as follows:

- A. Richard W. Kay and Anna R. Kay, Trustees of the Kay Family Revocable Trust of 2020 are the owners of land in Barrington, Strafford County, New Hampshire bounded and described as follows: Beginning at the south corner of land formerly owned by Andrew T. Meserve and running S. 12 degrees W 10 rods; thence running S. 40 degrees W 48 rods; thence running S. 43 degrees E 50 ½ rods; thence running S 40 degrees W to the road leading by the house n/f of John H. Waldron to Dover 27 rods; thence running easterly by said road 4 rods; thence running N. 22 degrees E 3 rods; thence running N. 42 degrees W. 50 rods to the bounds begun at.
- B. Ray Morrison and Susan Morrison are the Owners of land in Barrington, Strafford County, New Hampshire shown as Lot No. 3 on a plan entitled "Plan of Sub-Division, Madeline A. Trela, Barrington, New Hampshire" dated August, 1974 and recorded March 31, 1976 in the Strafford County Registry of Deeds as Plan #16A-64.
- C. David R. Henderson, Trustee of the David R. Henderson Living Revocable Trust and Glenda J. Henderson, Trustee of the Glenda J. Henderson Living Revocable Trust are the Owners of land in Barrington, Strafford County, New Hampshire shown as Lot 1-1 on a plan entitled: "Subdivision Plan Prepared

7/25

for David R & Glenda J Henderson of Tax Map 239/Lot 1 Located at NH Route 9 County of Strafford, Barrington, NH" and recorded in the Strafford County Registry of Deeds as Plan No. 87-37.

- D. Paul Thibodeau is the owner of land in Barrington, Strafford County, New Hampshire shown as Lot 4 on a plan entitled "Plan of Sub-Division, Madeline A. Trela, Barrington, New Hampshire" dated August, 1974 and recorded March 31, 1976 in the Strafford County Registry of Deeds as Plan #16A-64 and a parcel of land in said Barrington, Strafford County, New Hampshire bounded and described as follows: Beginning at an iron post found at the southwestern-most point of the premises herein conveyed on the northerly side of Route 9, so-called; thence running N 42° 21' 45" E for a distance of four hundred seventy five and five hundredths feet (475.05'), more or less, along Lot 4 as shown on said Plan, to an iron post found; thence turning and running on a southeasterly course for a distance of one hundred thirty five feet (135'), more or less, to a point, thence turning and running on a southwesterly course along a stone wall to a point on the northerly side of a stone wall and Route 9, so-called; thence turning and running southwesterly along said stone wall and Route 9 to the point of beginning.

In consideration of the above recitals and the terms and covenants of this agreement, the parties agree as follows:

An easement for a reciprocal 400' sight line easement that shall run from the driveway to be installed in Grantee's land across land of the Grantor's. The proposed driveway location will have a center that is approximately 100' west of the land of Richard W. Kay and Anna R. Kay, Trustees of the Kay Family Revocable Trust of 2020. Said driveway is expected to be approximately 25' wide.

Each party agrees to maintain that portion of the easement lying and being on their side of the boundary line, provided however that the parties agree that should any portion of the sight view easement area become overgrown with brush and vegetation, any owner may prune the same and the brush shall be hauled away.

Each party agrees to keep that portion of the easement lying and being on their side of the boundary line free from any and all obstructions.

This agreement shall run with the land and be binding upon and inure to the benefit of the parties hereto and their respective heirs, legal representatives, successors and assigns.

The easement created by this agreement is superior and paramount to the rights of either of the parties to this agreement in the respective servient estates so created, and the parties further agree that it is a covenant that shall run with the land.

RECEIVED

FEB 17 2023

NHDOT DISTRICT 6

WITNESS our signatures as of the 27th day of July, 2021.

Richard W. Kay
Richard W. Kay, Trustee of the Kay Family Revocable Trust of 2020

Anna R. Kay
Anna R. Kay, Trustee of the Kay Family Revocable Trust of 2020

State of New Hampshire
County of Strafford; ss:

Personally appeared the above named Richard W. Kay and Anna R. Kay, Trustees of the Kay Family Revocable Trust of 2020, before me this 27 day of July, 2021 known to be the persons whose names are subscribed to the foregoing instrument and acknowledged that they executed the same for the purposes therein contained.

VICTORIA M. HORAN
NOTARY PUBLIC
State of New Hampshire
My Commission Expires
September 27, 2022

[Signature]
Notary Public/Justice of the Peace
My Commission Expires:

9/25

WITNESS our signatures as of the 27th day of July, 2021.


Ray Morrison

RECEIVED

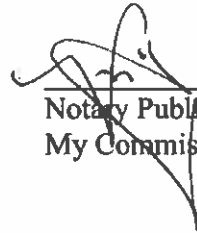
FEB 17 2023

NHDOT DISTRICT 6

State of New Hampshire
County of Strafford; ss:

Personally appeared the above named Ray Morrison before me this 27th day of July, 2021 known to be he person whose name is subscribed to the foregoing instrument and acknowledged that they executed the same for the purposes therein contained.

VICTORIA M. HORAN
NOTARY PUBLIC
State of New Hampshire
My Commission Expires
September 27, 2022


Notary Public/Justice of the Peace
My Commission Expires:

10/25

WITNESS our signatures as of the 28th day of July, 2021.


Susan Morrison

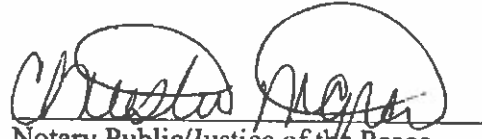
RECEIVED

FEB 17 2023

NHDOT DISTRICT 6

State of New Hampshire
County of Strafford; ss:

Personally appeared the above named Susan Morrison before me this 28th day of July, 2021 known to be the person whose name is subscribed to the foregoing instrument and acknowledged that she executed the same for the purposes therein contained.


Notary Public/Justice of the Peace

My Commission Expires: December 19, 2023

Christine MC Nigro
Notary Public, State of New Hampshire
My Commission Expires Dec. 19, 2023

11/25

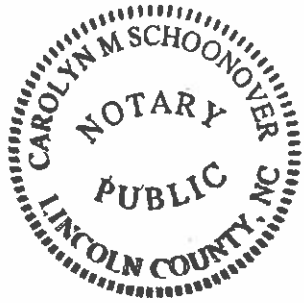
WITNESS our signatures as of the 27th day of July, 2021.

David R. Henderson
David R. Henderson, Trustee
David R. Henderson Living Revocable Trust

Glenda J. Henderson
Glenda J. Henderson, Trustee
Glenda J. Henderson Living Revocable Trust

County of Lincoln State of N.C.; ss:

Personally appeared the above named **David R. Henderson, Trustee of the David R. Henderson Living Revocable Trust** and **Glenda J. Henderson, Trustee of the Glenda J. Henderson Living Revocable Trust**, before me this 27 day of July, 2021 known to be the persons whose names are subscribed to the foregoing instrument and acknowledged that they executed the same for the purposes therein contained.



Carolyn M. Schoonover
Notary Public/Justice of the Peace
My Commission Expires: Aug 9, 2022

RECEIVED

FEB 17 2023

NHDOT DISTRICT 6

12/25

WITNESS our signatures as of the 30th day of July, 2021.

Thibodeau Family Revocable Trust

Paul F. Thibodeau
Paul F. Thibodeau, Trustee

Linda A. Thibodeau
Linda A. Thibodeau, Trustee

State of New Hampshire
County of Rockingham; ss:

Personally appeared the above named **Paul F. Thibodeau and Linda, A. Thibodeau, Trustees of the Thibodeau Family Revocable Trust** before me this 30th day of July, 2021 known to be the persons whose names are subscribed to the foregoing instrument and acknowledged that they executed the same for the purposes therein contained.

VICTORIA M. HORAN
NOTARY PUBLIC
State of New Hampshire
My Commission Expires
September 27, 2022

[Signature]
Notary Public/Justice of the Peace
My Commission Expires:

RECEIVED

FEB 17 2023

NHDOT DISTRICT 6

13/
25

BA BEALS ASSOCIATES, PLLC

Land Planning - Civil Engineering
Landscape Architecture - Septic Design & Evaluation
Stratham, NH

February 3, 2023

Re: Thibodeau - Route 9, Barrington

C/O James Hewitt
NHDOT Bureau of Highway Maintenance
PO Box 740
Durham, NH 03824

RECEIVED

FEB 03 2023

NHDOT DISTRICT 6

Jim,

The following is in response to your request for further information pertaining to the referenced project. Please be aware that the office/commercial trip generation numbers may be inflated as the most likely occupants of these spaces would be the homeowners. Finally, for the office use, fitted curve equations were not provided by ITE and the data was computed from the graphs provided in the ITE Manual.

Each of the 6-residential units will be 2-bedroom single-family dwellings with 480 s.f. commercial/office space in the bottom floor. Using the current ITE Trip Generation Manual we have developed the following.

DAILY TRAFFIC TRIP ENDS:

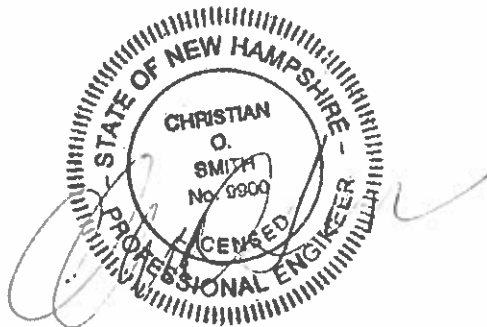
	Residential	Office/Commercial	Total
Weekday	78	44	122
Peak a.m. Weekday	9	5	14
Peak p.m. weekday	7	7	14

Please see attached calculations and Select pages from the ITE Trip Generation Manual 10th Edition - Volume 2.

Very Truly Yours,
BEALS ASSOCIATES, PLLC

Christian O. Smith

Christian O. Smith, PE
Principal



BA BEALS

ASSOCIATES, PLLC

Land Planning • Civil Engineering
Landscape Architecture • Septic Design & Evaluation
Stratham, NH

NH-1387 - NH Route 9, Barrington, NH
Traffic Generation Calculations
ITE Trip Generation Manual 10th Edition

February 3, 2023

RECEIVED

FEB 03 2023

NHDOT DISTRICT 6

Residential Use:

Weekday:

Avg. vehicle trip ends vs. Dwelling units on a Weekday;

Fitted Curve Equation: $\ln(T)=0.92x\ln(X)+2.71$ (where T = Trip Ends & X = Number of dwelling units)

$$\ln(T)=0.92x\ln(6)+2.71$$

$$\ln(T)=1.6484+2.71$$

$$\ln(T)=4.3584$$

$$T=e^{4.3584}$$

$$T=78.13; \text{ 78 trips per day (39 exiting, 39 entering)}$$

A.M. peak hour on Weekday (One hour between 7 a.m. - 9 a.m.):

Fitted Curve Equation: $T=0.71x(X)+4.80$ (where T = Trip Ends & X = Number of dwelling units)

$$T=0.71x(6)+4.80$$

$$T=4.26+4.80=9.06; \text{ 9 trips per hour (5 exiting, 4 entering)}$$

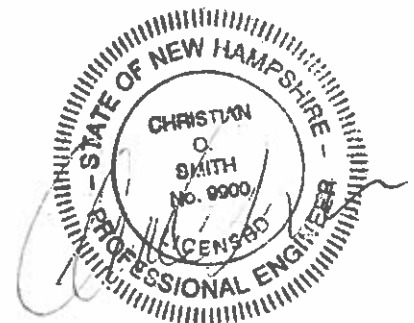
P.M. peak hour on Weekday (One hour between 4 p.m. - 6 p.m.):

Fitted Curve Equation: $\ln(T)=0.96x\ln(X)+0.20$ (where T = Trip Ends & X = Number of dwelling units)

$$\ln(T)=0.96x\ln(6)+0.20$$

$$\ln(T)=1.72+0.20=1.92$$

$$T=e^{1.92}=6.82; \text{ 7 trips per hour (3 exiting, 4 entering)}$$



Hewitt, James

From: Paul <paulthibodeau1@gmail.com>
Sent: Wednesday, March 08, 2023 2:14 PM
To: Christian Smith
Cc: Hewitt, James; Locke, Kerry
Subject: Re: Barrington, NH 9, Map 234 Lot 77

EXTERNAL: Do not open attachments or click on links unless you recognize and trust the sender.

Christian is correct. I have a sight easement through the west side abutter's property whether it is needed or not. Same is true for 2 abutters to the east.

On Mar 8, 2023, at 1:53 PM, Christian Smith <CSmith@bealsassociates.com> wrote:

Hi Jim, I believe this is an existing easement that simply may become unnecessary with the driveway upgrade. I will let Paul chime in if that is not correct.



Christian O. Smith, P.E.

Principal

Beals Associates, PLLC.

70 Portsmouth, Ave. 3rd Floor

Stratham, NH 03885

603-583-4860

603-583-4863

csmith@bealsassociates.com

From: Hewitt, James <James.A.Hewitt@dot.nh.gov>
Sent: Wednesday, March 8, 2023 8:40 AM
To: 'paulthibodeau1@gmail.com' <paulthibodeau1@gmail.com>
Cc: Christian Smith <csmith@bealsassociates.com>; Locke, Kerry <Kerry.W.Locke@dot.nh.gov>
Subject: RE: Barrington, NH 9, Map 234 Lot 77

Paul:

The permit is assembled and ready for final review / signature. We noted there is a driveway sightline easement in favor of lot 77 on the 2 abutting properties to the east and one abutting property to the west.

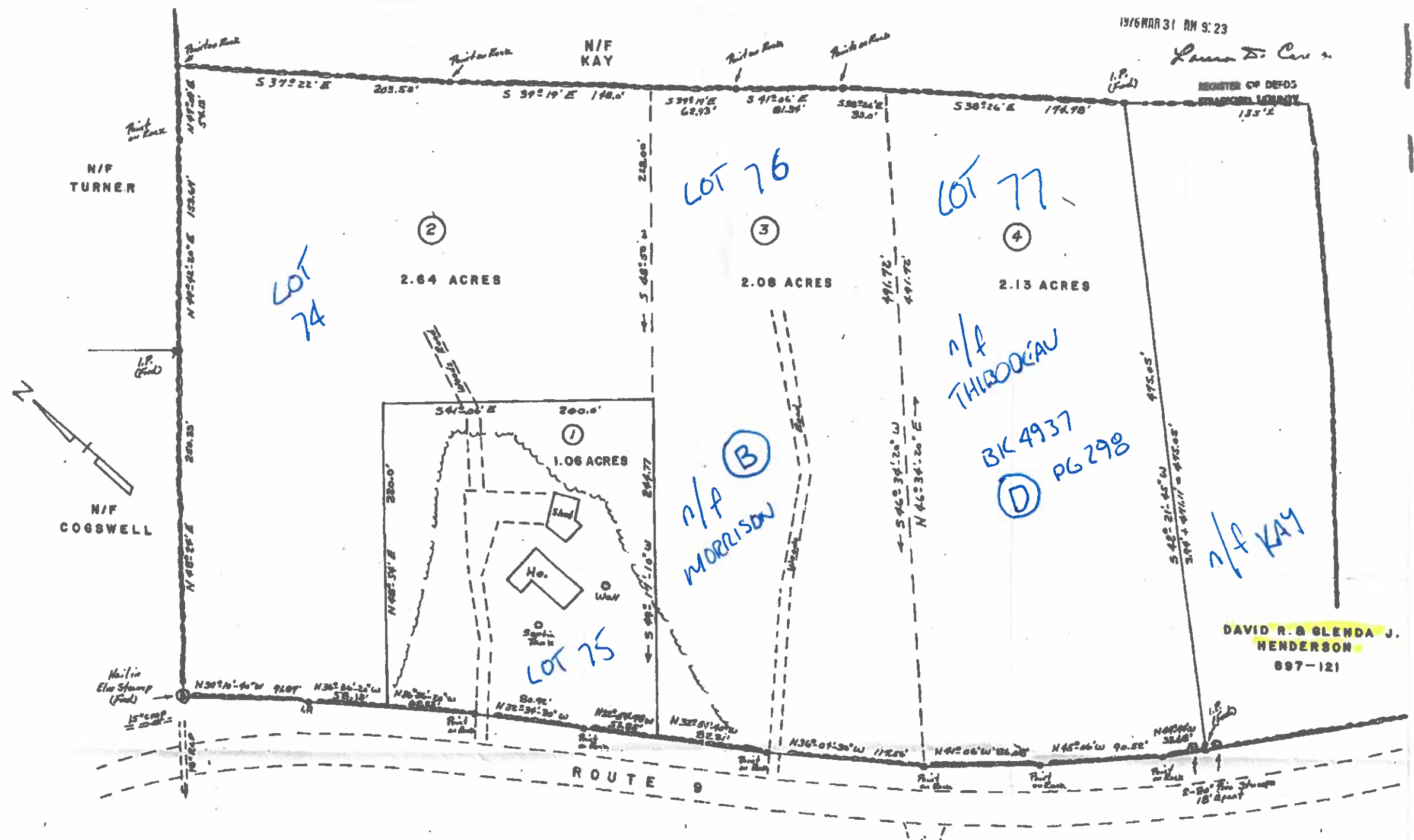
The 400-foot sightline for the proposed driveway as shown on the Beals plans appears to stay within the NH 9 right of way and not cross over abutting properties.

Did we misunderstand something ?

ISA/25

1976 MAR 31 AM 9:23

Laura D. Carr



DAVID R. & GLENDA J. HENDERSON
697-121

PLAN OF SUB-DIVISION
MADLINE A. TRELA
BARRINGTON, NEW HAMPSHIRE

K.E. Moore
 Land Surveyor
 Dover, New Hampshire
 Scale 1" = 50'
 Date **AUG. 1974**

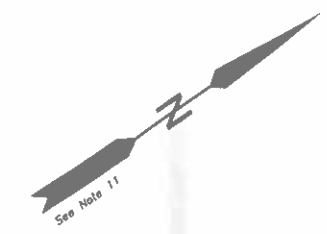
PLANNING BOARD
 BARRINGTON, N.H.
-APPROVED- 17
 File Number 4022
 Date 1975
 Chairman Will Wallace



16/25

- Legend:**
- SCRD Stafford County Registry of Deeds
 - Iron Pipe Found
 - Iron Rod Found
 - ⊙ Drill Hole Found
 - ⊕ Utility Pole
 - Culvert
 - Stone Wall
 - Building Setback
 - Septic System Setback
 - Edge of Wetlands

- Notes:**
- 1.) This plan does not represent a determination of title and the purpose of this plan is to depict the existing conditions of the subject property per the boundaries depicted on a plan entitled, "Existing Features Plan for Thomas Ermerling, NH Route 9, Barrington, NH," dated August 2005, prepared by Norway Plans Associates Inc. of Rochester NH, File No. 308. Existing conditions shown hereon are as field located May/June 2021.
 - 2.) Field Procedure: Topcon (DM-105) Electronic Total Station Instrument & Carlson Surveyor 4 Data Collector, Adjusted Closed Traverse Performed May 2021, Least Squares Balance.
 - 3.) Error of Closure Better than 1:20,000.
 - 4.) Parcel is shown as Lot 77 on the Town of Barrington Assessor's Map 234.
 - 5.) Parcel is located in the Town Center District and a portion of the parcel is located in the Wetlands Protection District Overlay and Aquifer Protection Zone.
 - 6.) Owners of Record: The Thibodeau Family Revocable Trust
Paul F. & Linda A. Thibodeau Trustees
76 Young Road
Barrington, NH 03825
SCRD Bl. 4937, Pg. 292
Also See SCRD Bl. 3376, Pg. 232
 - 7.) 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 that no such easements exist.
 - 8.) Parcel is not located in a Flood Hazard Zone as depicted on Flood Insurance Rate Map, No. 33017C0285D, Strafford County, NH, (All Jurisdictions), Effective Date: May 17, 2005.
 - 9.) The wetland boundaries shown hereon were field delineated John P. Hayes, III, NH Wetland Scientist #18 of 7 Limestone Way, North Hampton, NH 03882.
 - 10.) Record Lot Area: 148,935 square feet or 3.42 Acres
 - 11.) Horizontal Datum is based upon NAD83-86 New Hampshire State Plane Coordinates and Vertical Datum is based upon NAVD88.



Map 239 / Lot 116
Town of Barrington
Pine Grove Cemetery
PD Box 660
Barrington, NH 03825

BM Elev = 207.52
Nad Base of Pole

Map 234 / Lot 76
Ray & Susan Morrison
687 Franklin Pierce Highway
Barrington, NH 03825

Map 234 / Lot 79
Kay Family Revocable Trust of 2020
Richard W. & Anna R. Kay Trustees
45 Littleworth Road
Dover, NH 03820

Map 234 / Lot 79
Kay Family Revocable Trust of 2020
Richard W. & Anna R. Kay Trustees
45 Littleworth Road
Dover, NH 03820

Map 239 / Lot 116
Barrington Historical Society
87 Macbods Drive
Barrington, NH 03825

The licensed surveyor of this plan does not warrant or guarantee the location of utilities shown or not shown on this plan. Pursuant to New Hampshire Statute RSA 374, Sections 47-58, the contractor, prior to the commencement of any construction, shall verify the location of all utilities and contact "DigSafe" at 1-800-344-7233 or dot 811.

ZONING REQUIREMENTS

ZONE	TOWN CENTER
LOT AREA MIN.	20,000 S.F.
LOT FRONTAGE WIDTH MIN.	40 FT.
FRONT YARD	50 FT.
SIDE & REAR YARD	15 FT.*
WETLAND BUFFER	50 FT.
MAX. BUILDING HEIGHT	40 FT.
MAX. BUILDING STORIES	3
MAX. LOT COVERAGE	80%

*Buffer for Existing Residential Uses
Any proposed non-residential development that abuts a parcel containing an existing residential structure(s) must have a buffer of at least fifty (50) feet between the existing residential structure(s) and the proposed non-residential structure(s). Said buffer shall contain sufficient vegetation or other barrier (e.g. fencing) that will provide visual screening between the adjoining land uses. Said buffer may include portions of the existing residential lot if adequate screening already exists there.

- Construction Notes:**
- 1.) If, during construction, it becomes apparent that deficiencies exist in the approved design drawings, the Contractor shall be required to correct the deficiencies to meet the requirements of the regulations at no expense to the Town.
 - 2.) Required erosion control measures shall be installed prior to any disturbance of the site's surface area and shall be maintained through the completion of all construction activities. If, during construction, it becomes apparent that additional erosion control measures are required to stop any erosion on the construction site due to actual site conditions, the Owner shall be required to install the necessary erosion protection at his expense to the Town.
 - 3.) All materials and methods of construction shall conform to Town of Barrington Subdivision Regulations and the latest edition of the New Hampshire Department of Transportation's Standard Specifications for Road & Bridge Construction.

EXISTING CONDITIONS PLAN
PREPARED FOR
THIBODEAU FAMILY REVOCABLE TRUST
OF
TAX MAP 234 / LOT 77
LOCATED AT
FRANKLIN PIERCE HIGHWAY
(NH ROUTE 9)
COUNTY OF STRAFFORD
BARRINGTON, NH



SCALE: 1" = 40' DATE: AUGUST 23, 2022

DAVID W. VINCENT, LLS
LAND SURVEYING SERVICES
PO BOX 1622
DOVER, NH 03821
TEL (603) 664-5786

NO.	DATE	DESCRIPTION	BY
4			
3			
2			
1	10/24/22	add aquifer protection zone	dsv

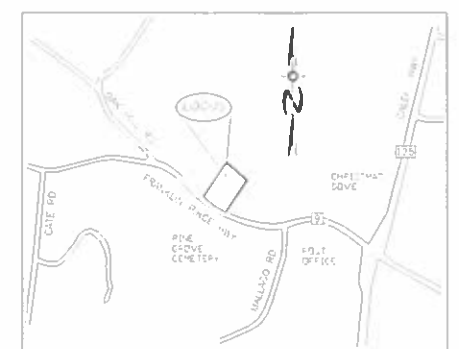
17/25

NOT FOR CONSTRUCTION

MIXED-USE DEVELOPMENT ROUTE 9 TAX MAP 234, LOT 77

PLAN INDEX

TITLE SHEET	
EXISTING CONDITIONS PLAN	1
PARKING & PAVEMENT PLAN	2
GRADING PLAN	3
DRAINAGE & PROFILE PLAN	4
CONSTRUCTION DETAILS	5
CISTERN DETAIL SHEET	6
EROSION & SEDIMENT CONTROL DETAILS	7
HIGHWAY ACCESS PLAN	8



LOCATION MAP

PLANNING BOARD APPROVAL BLOCK

RECEIVED
FEB 02 2023
NHDOT DISTRICT 6



WETLAND/SOIL CONSULTANT:
JOHN P. HAYES III CSS, CWS
 7 LIMESTONE WAY
 NORTH HAMPTON, NH 03820
 PHONE: 603-205-4396
 JOHNPHAYES@COMCAST.NET



LAND SURVEYORS:
DAVID W. VINCENT, LLS
 LAND SURVEYING SERVICES
 PO BOX 1622
 DOVER, NH 03821
 1-603-664-5786



CIVIL ENGINEERS:
BA BEALS ASSOCIATES, INC.
 70 PORTSMOUTH AVE,
 THIRD FLOOR, SUITE 2
 STRATHAM, N.H. 03885
 PHONE: 603-583-4860,
 FAX: 603-583-4863

OWNER OF RECORD
THIBODEAU PAUL & LINDA
 THIBODEAU FAMILY REV TRUST
 76 YOUNG RD.
 BARRINGTON, NH 03825

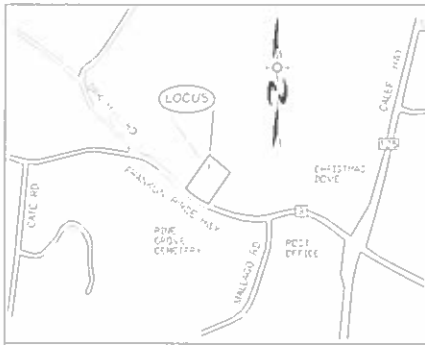
SIGNATURE _____ DATE _____

REQUIRED PERMITS
 NHDES WETLANDS BUREAU APPROVAL NUMBER: (PENDING)
 NHDES SEPTIC APPROVAL NUMBER: (PENDING)
 NHDOT PERMIT NUMBER: (PENDING)

REVISIONS:	DATE
REVISED PER ENGINEERING REVIEW	10/21/22
REVISED PER ENGINEERING REVIEW	11/16/22

NH-1387 SITE PLAN
ISSUED AUG. 2022

18/25



LOCATION MAP
1"=1000'

ZONING REQUIREMENTS

ZONE TOWN CENTER

MIN. LOT SIZE = 20,000 SF
 MIN. FRONTAGE = 40'
 MAX. HEIGHT = 40'

BUILDING SETBACKS:
 FRONT = 50'
 SIDE & REAR = 15'
 SETBACKS PPE 03/11/1997

LEACH FIELD SETBACKS:
 POORLY DRAINED SOILS = 50'
 VERY POORLY DRAINED SOILS = 75'

LOT COVERAGE:
 37,031 SF. UNPROPOSED
 37,031/145,335 = 25.5%
 MAX. ALLOWED = 30%

BUILDING HEIGHT:
 PROPOSED 35'
 MAX. ALLOWED = 40'

PROPOSED 3-STORY UNITS:
 MAX. ALLOWED 3

LEGEND

- UTILITY POLE
- TEST PIT w/ NO
- FIRE CISTERN
- STONE WALL
- TREE LINE
- EXISTING CONTOUR - 10'
- EXISTING CONTOUR - 2'
- OVERHEAD UTILITIES
- SOILS BOUNDARY LINE
- BUILDING SETBACK LINE
- SEPTIC SETBACK LINE
- STREAM
- WETLAND BOUNDARY
- ABUTTING PROPERTY LINE
- EXISTING PROPERTY LINE



PARKING CALCULATIONS:
 OFFICE SPACE = 2,880 SF (420 SF/UNIT)
 1/300 SF = 2,880 SF/300 = 9.6
 PROVIDED = 17
 RESIDENTIAL USE
 2/UNIT = 6.2 = 12
 PROVIDED = 12

TOTAL SPACES REQUIRED = 21
 TOTAL SPACES PROVIDED = 29

RECEIVED
FEB 02 2023
NH DOT DISTRICT 6



PREPARED FOR:
THE THIBODEAU FAMILY REV TRUST
 PAUL F. & LINDA A. THIBODEAU TRUSTEES
 76 YOUNG ROAD
 BARRINGTON, NH 03825

BA BEALS ASSOCIATES PLLC
 70 PORTSMOUTH AVE.,
 THIRD FLOOR, SUITE 2
 STRATHAM, N.H. 03885
 PHONE: 603-583-4860,
 FAX: 603-583-4863

UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN LOCATED FROM FIELD OBSERVATIONS AND THEIR LOCATIONS MUST BE CONSIDERED RESPONSIBLE ONLY BEALS ASSOCIATES OR ANY OF THEIR EMPLOYEES THAT IS RESPONSIBLE FOR THE LOCATION OF ALL UNDERGROUND STRUCTURES OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND UTILITIES OR STRUCTURES LOCATED PRIOR TO EXCAVATION WORK. BY CALLING 1-888-600-SAFE

THIS PLAN HAS BEEN PREPARED FOR MUNICIPAL AND STATE AGENCIES AND FOR CONSTRUCTION BASED ON DATA OBTAINED FROM ON-SITE FIELD SURVEY AND EXISTING MUNICIPAL RECORDS THROUGHOUT THE CONSTRUCTION PROCESS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY FIELD OBSERVATIONS FROM DATA AS SHOWN ON THE DESIGN PLANS THAT INCLUDES AN UNFORSEEN CONDITION, SUBSURFACE OR OTHER ASPECTS FOR EVALUATION AND RECOMMENDATIONS. ANY CONSTRUCTION BETWEEN ITEMS OF THIS PLAN AND SITE OR BETWEEN THE PLANS AND ON-SITE CONDITIONS MUST BE RESOLVED BEFORE RELATED CONSTRUCTION HAS BEEN INITIATED.

ALL BENCHMARKS AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR.

ALL ROAD AND DRAINAGE WORK TO CONFORM TO TODAY STANDARD SPECIFICATIONS FOR CONSTRUCTION.

ALL PROPOSED SIGNS SHALL CONFORM TO THE TODAY ZONING REGULATIONS.

PROJECT IS BASED ON USGS DATUM (NAD 1983 REFERENCE BENCHMARK).

THE LANDOWNER IS RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL WETLAND REGULATIONS, INCLUDING ANY PERMITS AND SETBACK REQUIREMENTS REQUIRED UNDER THESE REGULATIONS.

SEE DETAIL SHEET FOR STANDARD CONSTRUCTION NOTES AND DETAILS.

A TYPICAL OF TERRAIN PER 425 A-17 IS NOT REQUIRED AS THE TOTAL LAND DISTURBANCE IS LESS THAN 100,000 SF.

THIS SITE IS NOT LOCATED IN THE 100 YEAR FLOOD ZONE. THE APPLICANT SHALL PROVIDE THE TOWN WITH THREE COPIES OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND ALSO ENSURE THAT ONE COPY REMAINS ON SITE.

THE CONSTRUCTION SITE OPERATOR AND OWNER SHALL SUBMIT A NOTICE OF INTENT (NOI) TO USFSA, WASHINGTON, DC, STORMWATER NOTICE PROCESSING CENTER AT LEAST FOURTEEN (14) DAYS PRIOR TO COMMENCEMENT OF WORK ON THE SITE. THE NOI MUST BE POSTED ON THE NOI AT: <http://www.usfws.gov/epa/stormwater/noticeofintent.asp>. AUTHORIZATION IS GRANTED UNDER THE PERMIT ONCE THE NOI IS SHOWN IN "ACTIVE STATUS".

IF DURING CONSTRUCTION IT BECOMES APPARENT THAT DEFICIENCIES EXIST IN THE APPROVED DESIGN DRAWINGS, THE OWNER SHALL BE REQUIRED TO CORRECT THE DEFICIENCIES TO MEET THE REQUIREMENTS OF THE REGULATORY AGENCIES TO THE TOWN.

IF DURING CONSTRUCTION IT BECOMES APPARENT THAT ADDITIONAL EROSION CONTROL MEASURES ARE REQUIRED TO STOP ANY EROSION ON THE CONSTRUCTION SITE DUE TO ACTUAL SITE CONDITIONS, THE OWNER SHALL BE REQUIRED TO INSTALL THE NECESSARY EROSION CONTROL MEASURES TO STOP EROSION TO THE TOWN.

ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL COMPLY TO TOWN REGULATIONS AND THE LATEST EDITION OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AS APPROVED WITH TOWN REGULATIONS AND PERMITS. ALL IMPROVEMENTS SPECIFIED ON THESE SITE PLANS SHALL BE COMPLETED, INSPECTED AND APPROVED BY THE TOWN OF BARRINGTON PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER BEALS ASSOCIATES, NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ALL UNDERGROUND STRUCTURES OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION.

WORK BY CALLING 1-888-600-SAFE (1-888-344-7233)

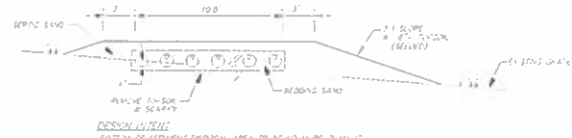


REVISED PER ENGINEERING REVIEW	11/16/22
REVISED PER ENGINEERING REVIEW	10/21/22
REVISIONS:	DATE:
PARKING & PAVEMENT PLAN	
FOR: MIXED-USE DEVELOPMENT ROUTE 9 BARRINGTON, NH	
DATE: AUG., 2022	SCALE: 1"=30'
PROJ NO: NH-1387	SHEET NO: 2

19/25

ENVIRO-SEPTIC DESIGN CALCULATIONS

PROPOSED LOADING = 372 GPD/UNIT (2-EP HOUSE WITH 120 SF COMMERCIAL)
 1-10 M.I./M. DESIGN PERC RATE
 PER PRESSURE MAIN: 133 LF REQUIRED/UNIT
 210 LF UNIT PROVIDED: 7 ROWS @ 1.5' OC @ 30' PER ROW
 (FIELD FOR UNITS 1 & 2 = 7 ROWS @ 1.5' OC @ 60' PER ROW)



NOTES
 1. SEE SITE PREPARATION AND FILL NOTES
 2. 2" WASH W/VEL EXTENSION AND AMPLIFIER IS 5'
 3. ALL FILL MUST BE BASED SYSTEMS DESIGN
 4. ALL FILL MUST BE CLEAN W/VEL SAND
 5. ALL FILL MUST BE CLEAN W/VEL SAND
 6. ALL CONCRETE ITEMS ARE TO BE MANUFACTURED BY A LICENSED
 7. ALL CONCRETE ITEMS ARE TO BE MANUFACTURED BY A LICENSED
 8. ALL CONCRETE ITEMS ARE TO BE MANUFACTURED BY A LICENSED

- SITE PREPARATION AND FILL**
- CHECK DESIGN POINT AND VERIFY THE LOCATION OF EXISTING (GROUND ELEVATION) BEFORE OBTAINING THE "DESIGN POINT" MUST BE MAINTAINED
 - REMOVE ALL TREES, BUSH, SHRUBS, AND GRASS FROM THE AREA TO BE FILLED. STUMPS NOT TO BE BURIED WITHIN 25' OF EXISTING EXHAUST AREA. LINES UNDERLINE (30' MIN)
 - REMOVE TYPICAL LEACH BEDDING IN PLACE. DO NOT CONTACT BEDDING WITH HIGH-VELOCITY SCHEMATIC WITH TEETH OF EXCAVATOR OR OTHER PLACING TOOL. SCHEMATIC SHALL BE WITH CONTIGUOUS LAYERS WITHIN THE CENTER OUTLINE. SOIL MUST BE EXCAVATED TO PREPARATION
 - MINIMUM BEDDING NOTES**
 1. 1" OF CLEAN LEACH TO BE PLACED AS A LAYER ON TOP AND SIDE SLOPES.
 2. CLEAN FILL: PERMEABLE SOIL FREE OF ROOTS, DEBRIS, ORGANICS, AND STONES GREATER THAN 1" SIZE.
 3. FILL TO RAISE THE SYSTEM AND FOR THE SOIL SLOPES AS SHOWN ON THE SCHEMATIC. THE SLOPE MUST BE TO MEET THE FILLING AND SPECIFICATIONS. METHOD TO COARSE TEXTURED SAND, NO GREATER THAN 1/4" PASSING THE NUMBER 200 SIEVE, AND NO PARTICLES LARGER THAN 3".
 4. BEDDING SAND: USE CLEAN COARSE SAND MEETING ASTM STANDARD C-33 (CONCRETE SAND). BEDDING SAND USED BETWEEN 6" W/VEL AROUND, ABOVE & BELOW TUBES.
 5. SAND FILL TO BE PUSHED OVER PREPARED SURFACE FROM THE SOLE. DO NOT ALLOW EQUIPMENT ON THE SCARFED SOIL SURFACE. FILL BETWEEN TUBES TO BE CAREFULLY PLACED WITH EXCAVATOR
 - WHEN FILL IS REQUIRED TO EXTEND BED BOTTOM BEYOND ORIGINAL GRADE, PLACE FILL IN 12" LOOSE LAYERS USING A 12" TYPICAL PRACTICE WITH BLADE. ALWAYS KEEP A MINIMUM OF 3" OF FILL MATERIAL BETWEEN LAYERS OF TUBES. TO ENSURE COMPACTED OF MATERIAL SOIL. EACH LAYER TO BE SPREAD IN 6" THICKNESS FIRST TO PLACING NEXT LAYER. CONTIGUOUS EXCAVATION AND SHIMMING SHALL BE CARRIED OUT TO ASSURE UNIFORM DENSITY THROUGHOUT EACH LAYER
 - LEACH FIELD AREA SHOULD BE COVERED WITH TYPICAL, RECESSED AND VENTED HOODS AFTER WITH FILLING TO PREVENT ANOSMOY
 - MINIMUM COVER OVER SYSTEM TO BE 12" MIN. TO PROVIDE SUFFICIENT SYSTEM WITH FILL WITH MORE THAN 12" MUST BE USED

NH DOT DISTRICT 6

FEB 02 2023

RECEIVED

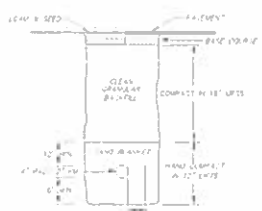
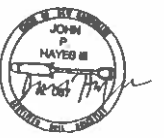
THIS MAP PRODUCT IS WITHIN THE TECHNICAL STANDARDS OF THE NATIONAL COOPERATIVE SOIL SURVEY. IT IS A SPECIAL PURPOSE PRODUCT, INTENDED FOR INFILTRATION. IT WAS PRODUCED BY A PROFESSIONAL SOIL SCIENTIST, AND IS NOT A PRODUCT OF THE USDA NATURAL RESOURCES CONSERVATION SERVICE. THERE IS A REPORT THAT ACCOMPANIES THIS MAP.

THE SITE SPECIFIC SOIL SURVEY WAS PRODUCED FEBRUARY 9, 2022, AND WAS PREPARED BY JOHN P. HAYES III, CSS, CBS.

SOILS WERE IDENTIFIED WITH THE NEW HAMPSHIRE STATE-WIDE NUMERICAL SOILS LEGEND, USDA NRCS, DUFFHAM, 1st EDITION, 10, JANUARY, 2011.

SOIL SERIES	MAP UNIT	SOIL NO.	HYDROLOGIC GROUP
DESPIELO	Ds	(113)	B
CONJUCSTER	Os	(111)	A
SABOANUC	Ss	(116)	C
SABKATUC	Sb/P	(116)	C

SLOPE CLASS	PERCENT CLASS	PERCENT CLASS
0-3%	E	VERY POORLY DRAINED SOIL
3-15%	C	POORLY DRAINED SOIL
15-25%	D	POORLY DRAINED SOIL
25-50%	E	POORLY DRAINED SOIL
>50%	F	POORLY DRAINED SOIL



NOTES
 1. ALL FILL MUST BE CLEAN W/VEL SAND
 2. ALL FILL MUST BE CLEAN W/VEL SAND
 3. ALL FILL MUST BE CLEAN W/VEL SAND
 4. ALL FILL MUST BE CLEAN W/VEL SAND
 5. ALL FILL MUST BE CLEAN W/VEL SAND
 6. ALL FILL MUST BE CLEAN W/VEL SAND
 7. ALL FILL MUST BE CLEAN W/VEL SAND
 8. ALL FILL MUST BE CLEAN W/VEL SAND
 9. ALL FILL MUST BE CLEAN W/VEL SAND
 10. ALL FILL MUST BE CLEAN W/VEL SAND

PLANNING BOARD APPROVAL BLOCK

ZONING REQUIREMENTS

ZONE: TOWN CENTER	
MIN. LOT SIZE =	20,000 SF
MIN. FRONTAGE =	40'
MAX. HEIGHT =	10'
BUILDING SETBACKS	50'
FRONT	50'
SIDE & REAR	15'
WETLANDS	PRE 03/11/1977
LEACH FIELD SETBACKS	50'
POORLY DRAINED SOILS	50'
VERY POORLY DRAINED SOILS	75'

PREPARED FOR
THE THIBODEAU FAMILY REV TRUST
PAUL F & LINDA THIBODEAU TRUSTEES
 76 YOUNG ROAD
 BARRINGTON, NH 03825

BA BEALS ASSOCIATES PLLC

70 PORTSMOUTH AVE,
 THIRD FLOOR, SUITE 2
 STRATFORD, N.H. 03885
 PHONE: 603-583-4860,
 FAX: 603-583-4863

- NOTES**
- UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN LOCATED FROM FIELD OBSERVATIONS AND THEIR LOCATIONS MUST BE CONSIDERED APPROPRIATE ONLY. BEALS ASSOCIATES OR ANY OF THEIR EMPLOYEES TAKE NO RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE ALL UNDERGROUND UTILITIES OR STRUCTURES LOCATED PRIOR TO EXCAVATION. AGENT: BY GUILTY (1988-00-000)
 - THIS PLAN HAS BEEN PREPARED FOR MUNICIPAL AND STATE APPROVALS AND FOR CONSTRUCTION. BASED ON DATA OBTAINED FROM ON-SITE FIELD SURVEY AND EXISTING MUNICIPAL RECORDS THROUGHOUT THE CONSTRUCTION PERIODS, THE CONTRACTOR SHALL VERIFY THE EXISTENCE, DEPTH AND LOCATION OF ALL UTILITIES, STRUCTURES AND STRUCTURES. THIS INCLUDES ALL UNFORSEEN CONDITIONS, SUBSURFACE OR OTHERWISE, FOR EXCAVATION AND RECOMMENDATIONS. ANY CONTRADICTION BETWEEN ITEMS OF THIS MUNICIPAL SET OR BETWEEN THE PLANS AND ON-SITE CONDITIONS MUST BE RESOLVED BEFORE RELATED CONSTRUCTION HAS BEEN INITIATED.
 - A LIDAR SURVEY AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR.
 - ALL ROAD AND EASEMENT MUST CONFORM TO TODAY STANDARD SPECIFICATIONS FOR CONSTRUCTION.
 - ALL PROPOSED SIGNS SHALL CONFORM TO THE TOWN ZONING REGULATIONS.
 - PROJECT IS BASED ON USGS DATUM (NAD 1983) REFERENCE BENCHMARK.
 - THE LANDOWNER IS RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS, INCLUDING ALL PERMITTING AND SETBACK REQUIREMENTS REQUIRED UNDER THESE REGULATIONS.
 - SEE DETAIL SHEET FOR STANDARD CONSTRUCTION NOTES AND DETAILS.
 - EXCAVATION OF TERRAIN PERMIT AREA 185 A-17 IS NOT REQUIRED AS THE TOTAL LATERAL DISTURBANCE IS LESS THAN 100,000 SF.
 - THIS SITE IS NOT LOCATED IN THE 100 YEAR FLOOD ZONE.

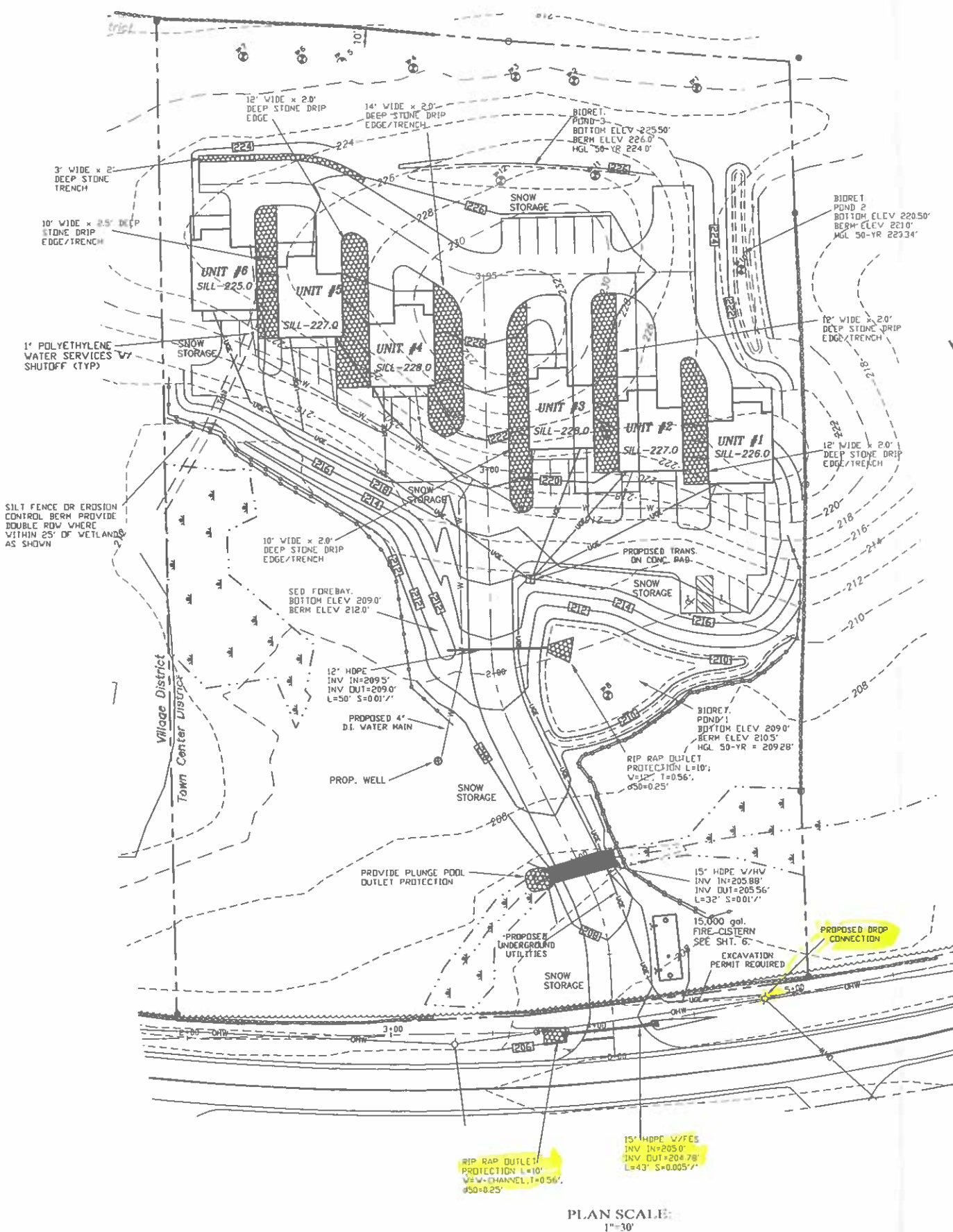
LEGEND

UTILITY POLE	UTILITY POLE
TEST PIT W/ 1/2"	TEST PIT W/ 1/2"
STONE WALL	STONE WALL
TREE LINE	TREE LINE
EXISTING CONTOUR - 10'	EXISTING CONTOUR - 10'
EXISTING CONTOUR - 2'	EXISTING CONTOUR - 2'
OVERHEAD UTILITIES	OVERHEAD UTILITIES
SOILS BOUNDARY LINE	SOILS BOUNDARY LINE
BUILDING SETBACK LINE	BUILDING SETBACK LINE
WETLAND SETBACK LINE	WETLAND SETBACK LINE
WETLAND BOUNDARY	WETLAND BOUNDARY
EXISTING PROPERTY LINE	EXISTING PROPERTY LINE
EXISTING PROPERTY LINE	EXISTING PROPERTY LINE
4000 SF SEPTIC RESERVE AREA	4000 SF SEPTIC RESERVE AREA
PROP. WELL W/ 125' PROTECTIVE RAD.	PROP. WELL W/ 125' PROTECTIVE RAD.



REVISED PER ENGINEERING REVIEW	11/16/22
REVISED PER ENGINEERING REVIEW	10/21/22
REVISIONS:	DATE:
GRADING PLAN	
FOR: MIXED-USE DEVELOPMENT ROUTE 9 BARRINGTON, NH	
DATE: AUG. 2022	SCALE: 1"=30'
PROJ. NO. NH-1387	SHEET NO. 3

20/25



d50 SIZE=	0.25 FEET	3 INCHES
% OF WEIGHT SMALLER THAN THE GIVEN d50 SIZE	SIZE OF STONE(INCHES) FROM	TO
100%	5	6
85%	4	5
50%	3	5
15%	1	2

PLANNING BOARD APPROVAL BLOCK

PREPARED FOR:
 THE THIBODEAU FAMILY REV. TRUST
 PAUL F. & LINDA A. THIBODEAU TRUSTEES
 76 YOUNG ROAD
 BARRINGTON, NH 03825

BA BEALS ASSOCIATES, PLLC
 70 PORTSMOUTH AVE,
 THIRD FLOOR, SUITE 2
 STRATHAM, N.H. 03885
 PHONE: 603-583-4860.
 FAX: 603-583-4863

NOTES

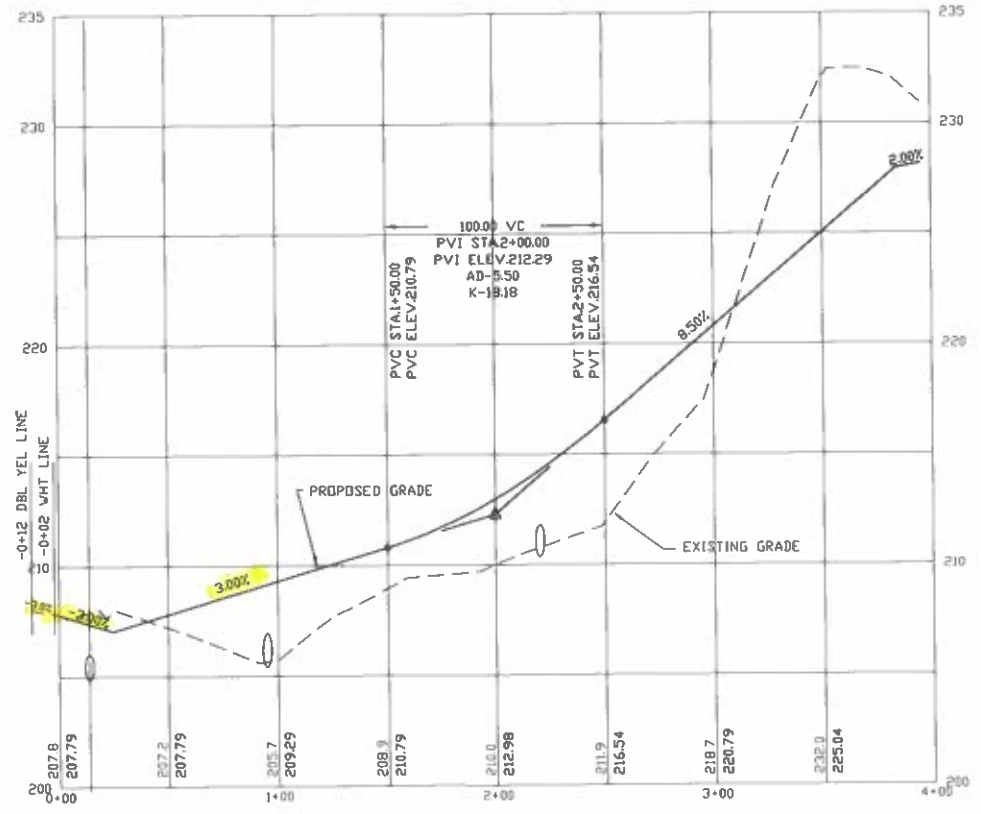
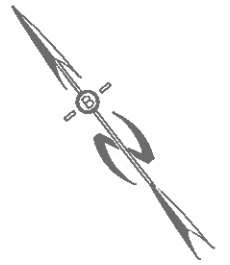
THE APPLICANT HAS DESIGNED THIS SITE TO SAFELY ACCOMMODATE MAXIMUM LENGTH VEHICLES AND TRUCKS (BOX TRUCK/FIRE TRUCK), EITHER DELIVERING TO, OR USING THE PROPERTY.

ALL SNOW SHALL BE STORED IN THE AREA(S) DEPICTED ON THIS PLAN AS SNOW STORAGE AREAS. IN THE EVENT THAT THE AREA(S) APPROVED FOR SNOW STORAGE BECOME FULL, THE OWNER SHALL REASONABLY REMOVE EXCESS SNOW FROM THE SITE, AND SHALL NOT ALLOW SNOW TO BE STORED WITHIN PARKING LOTS OR TRAVEL AISLES.

ALL WASTE MATERIALS AND RECYCLABLE SHALL BE CONTAINED WITHIN THE BUILDING(S) OR APPROVED STORAGE FACILITIES AND SHALL NOT BE OTHERWISE STORED ON THE PROPERTY.

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

TEMPORARY STONE CHECK DAM LOCATIONS
 STATION 2+50 TO 5+00 L&R- EVERY 23'
 (SEE SHEET 7 FOR DETAIL)



PROFILE SCALES:
 HORIZONTAL: 1"=40' VERTICAL: 1"=4'

RECEIVED
 MAR 03 2023
 NHDOT DISTRICT 6

PIPE STA	SIZE	INV IN	INV OUT	HGL 25-YR STORM
0+13	15" HDPE	205.0'	204.78'	205.62'
0+95	15" HDPE	205.88'	205.56'	206.62'
2+11	12" HDPE	209.50'	209.00'	210.08'



PER NHDOT REVIEW	3-2-23
REVISED PER ENGINEERING REVIEW	11/16/22
REVISED PER ENGINEERING REVIEW	10/21/22
REVISIONS:	DATE:

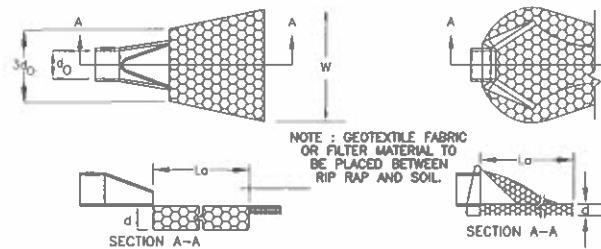
DRAINAGE & PROFILE PLAN

FOR:
 MIXED-USE DEVELOPMENT
 ROUTE 9
 BARRINGTON, NH

DATE: AUG, 2022 SCALE: 1"=30'
 PROJ. NO: NH-1387 SHEET NO. 4

PLAN SCALE:
 1"=30'

21/
25



NOTE: GEOTEXTILE FABRIC OR FILTER MATERIAL TO BE PLACED BETWEEN RIP RAP AND SOIL.

PIPE OUTLET TO FLAT AREA WITH NO DEFINED CHANNEL PIPE OUTLET TO WELL-DEFINED CHANNEL

CONSTRUCTION SPECIFICATIONS

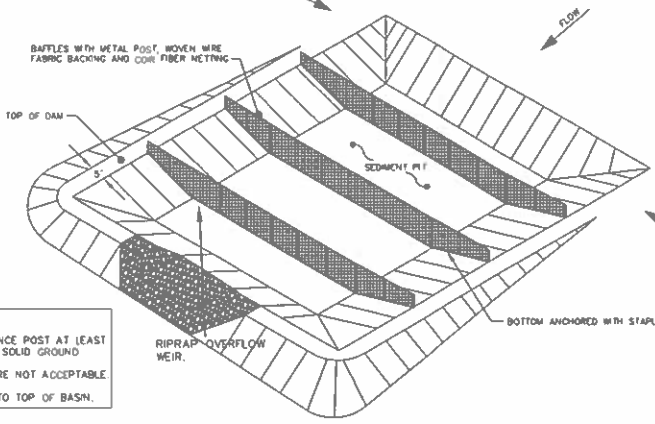
1. THE SUB GRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC, AND RIP RAP SHALL BE PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.
2. THE ROCK OR GRAVEL USED FOR FILTER OF RIP RAP SHALL CONFORM TO THE SPECIFIED GRADATION 3. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE ROCK RIP RAP. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
3. STONE FOR THE RIP RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.
4. STONE FOR RIPRAP SHALL BE ANGULAR OR SUBANGULAR. THE STONES SHOULD BE SHAPED SO THAT THE LEAST DIMENSION OF THE STONE FRAGMENT SHALL BE NOT LESS THAN ONE-THIRD OF THE GREATEST DIMENSION OF THE FRAGMENT.
5. FLAT ROCKS SHALL NOT USED FOR RIP RAP. VOIDS IN THE ROCK RIPRAP SHOULD BE FILLED WITH SPALLS AND SMALLER ROCKS.

MAINTENANCE

1. THE OUTLET PROTECTION SHOULD BE CHECKED AT LEAST ANNUALLY AND AFTER EVERY MAJOR STORM. IF THE RIP RAP HAS BEEN DISPLACED, UNDERMINED OR DAMAGED, IT SHOULD BE REPAIRED IMMEDIATELY. THE CHANNEL IMMEDIATELY BELOW THE OUTLET SHOULD BE CHECKED TO SEE THAT EROSION IS NOT OCCURRING. THE DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, DEBRIS, AND SEDIMENT THAT COULD CHANGE FLOW PATTERNS AND/OR TAILWATER DEPTHS ON THE PIPES. REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE TO OUTLET PROTECTION.

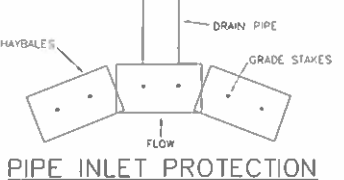
TABLE 7-24-RECOMMENDED RIP RAP GRADATION RANGES

d50 SIZE=	0.25 FEET	3 INCHES
% OF WEIGHT SMALLER THAN THE GIVEN d50 SIZE	SIZE OF STONE(INCHES) FROM	TO
100%	5	6
85%	4	5
50%	3	5
15%	1	2



PERSPECTIVE VIEW
TEMPORARY SEDIMENT BASIN

- NOTES:
1. DRIVE STEEL FENCE POST AT LEAST 18 INCHES INTO SOLID GROUND
 2. WOOD POSTS ARE NOT ACCEPTABLE
 3. DIRECT WATER TO TOP OF BASH.



PIPE INLET PROTECTION

SPECIFICATIONS

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

BALES SHOULD BE PLACED IN A SINGLE ROW, LENGTHWISE ON THE CONTOUR, WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER. THE ENDS OF THE BARRIER SHOULD BE FLARED UP SLOPE.

BARRIERS SHOULD NOT BE CONSTRUCTED MORE THAN ONE BALE HIGH.

ALL BALES SHOULD BE EITHER WIRE-BOUND OR STRING-TIED. BALES SHOULD BE INSTALLED SO THAT BROWNS ARE ORIENTED AROUND THE SIDES, PARALLEL TO THE GROUND SURFACE TO PREVENT DEGRADATION OF THE BROWNS.

THE BARRIER SHOULD BE ENTRENCHED AND BACKFILLED. A TRENCH SHOULD BE EXCAVATED THE WIDTH OF A BALE AND THE LENGTH OF THE PROPOSED BARRIER TO A MINIMUM DEPTH OF 4 INCHES.

AFTER THE BALES ARE STAKED AND CHIPPED, THE EXCAVATED SOIL SHOULD BE BACKFILLED AGAINST THE BARRIER. BACKFILL SOIL SHOULD CONFORM TO THE GROUND LEVEL ON THE DOWNHILL SIDE AND SHOULD BE BUILT UP 4 INCHES AGAINST THE UPHILL SIDE OF THE BARRIER. BALES SHOULD BE PLACED 10 FEET AWAY FROM THE TOE OF SLOPE.

AT LEAST TWO STAKES SHOULD PENETRATE THROUGH THE BALE AND PENETRATING AT LEAST 18 INCHES INTO THE GROUND. SHOULD SECURELY ANCHOR EACH BALE.

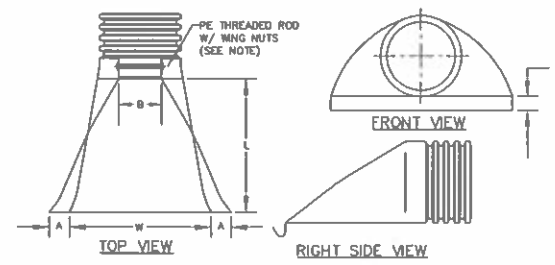
THE FIRST STAKE IN EACH BALE SHOULD BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE TO FORCE THE BALES TOGETHER. STAKES SHOULD BE DRIVEN DEEP ENOUGH INTO THE GROUND TO SECURELY ANCHOR THE BALES. THE GAPS BETWEEN BALES SHOULD BE CHOKED (FILLED) WITH MUD TO PREVENT WATER FROM ESCAPING BETWEEN THE BALES.

INSPECTION SHOULD BE FREQUENT AND REPAIR OR REPLACEMENT SHOULD BE MADE PROMPTLY AS NEEDED. BALE BARRIERS SHOULD BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS, BUT NOT BEFORE THE UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED.

TRAFFIC CONTROL SCHEDULE

SIGN NUMBER	SIGN	SIZE OF SIGN WIDTH HEIGHT	DESCRIPTION	MOUNT TYPE	MOUNT HEIGHT	REMARKS
R1-1	STOP	30" x 30"	WHITE ON RED	CHANNEL	7'-0"	REFLECTORIZED SIGN
R2-1	SPEED LIMIT 25	18" x 24"	BLACK ON WHITE	CHANNEL	7'-0"	REFLECTORIZED SIGN
R7-8	ACCESSIBILITY	12" x 18"	BLUE & GREEN	CHANNEL	7'-0"	REFLECTORIZED SIGN

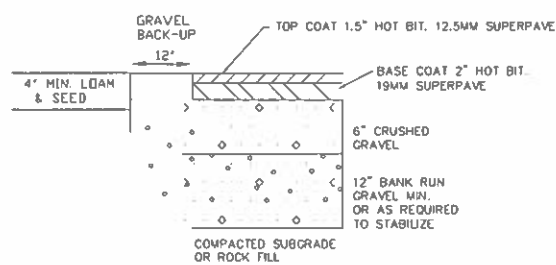
PIPE OUTLET PROTECTION



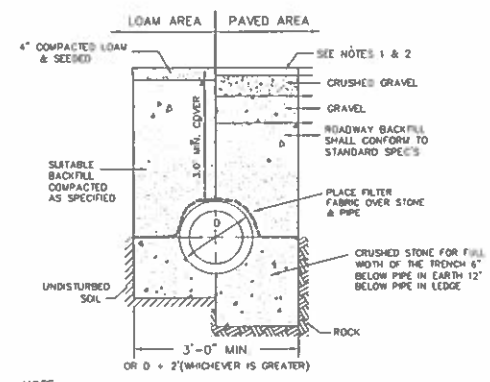
PART No.	PIPE SIZE	A	B(MAX)	H	L	W
1510-NP	15"	375 mm	165 mm	6.5"	25"	29"
1810-NP	18"	450 mm	190 mm	7.5"	32"	35"
2410-NP	24"	600 mm	190 mm	7.5"	36"	45"
3010-NP	30"	750 mm	266 mm	10.5"	53"	68"
3610-NP	36"	900 mm	266 mm	10.5"	53"	68"

NOTE: PE THREADED ROD W/ WING NUTS PROVIDED FOR END SECTIONS 15"-24". 30" & 36" END SECTIONS TO BE WELDED PER MANUFACTURER'S RECOMMENDATIONS.

ADS N-12 FLARED END SECTIONS
NOT TO SCALE (ALL DIMENSIONS ARE NOMINAL)

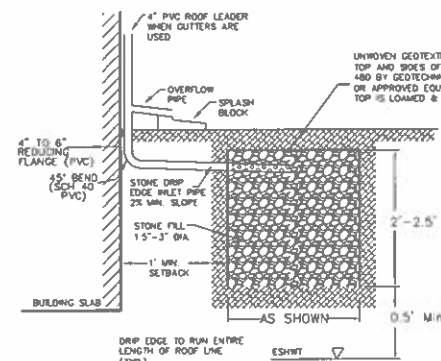


TYPICAL PAVEMENT SECTION
NEW ASPHALT - NTS



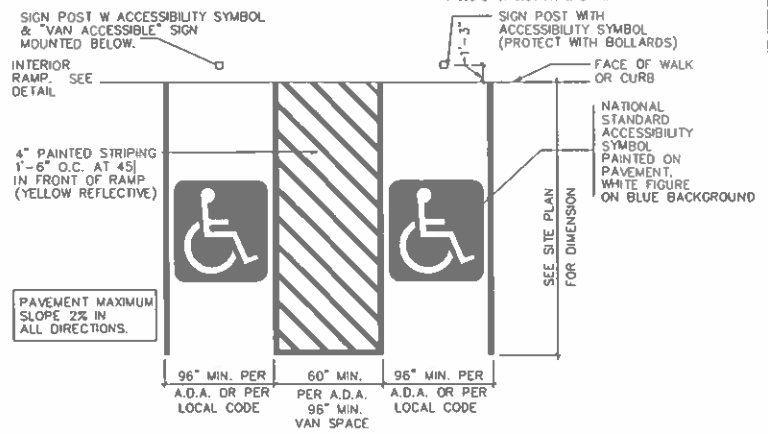
- NOTE:
1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REGULATIONS.
 2. NEW ROADWAY CONSTRUCTION SHALL CONFORM TO SUBDIVISION SPECS.
 3. BACKFILL MATERIALS SHALL BE SCREENED GRAVEL WITH NO STONES LARGER THAN 6".

TYPICAL DRAINAGE TRENCH DETAIL

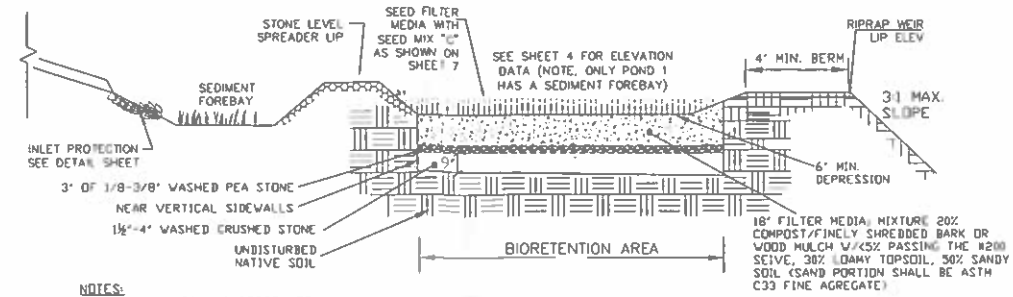


- NOTE:
- STONE DRIP EDGE MAINTENANCE:
- THE DRIP EDGES WILL BE INSPECTED WITHIN THE FIRST THREE MONTHS AFTER CONSTRUCTION, THEREAFTER THE DRIP EDGES WILL BE INSPECTED 2 TIMES PER YEAR TO ENSURE THAT THEY ARE DRAINING WITHIN 72 HOURS OF A RAIN EVENT EQUIVALENT TO 2.5" OR MORE.
- REMOVE AND DISPOSE OF SEDIMENTS OR DEBRIS AS NEEDED.
- TOTAL REHABILITATION OF A DRIP EDGE SHOULD BE CONDUCTED TO MAINTAIN STORAGE CAPACITY WITHIN 2/3 OF THE DESIGN VOLUME AND 72-HOUR INFILTRATION RATE LIMIT. TRENCH WALLS SHOULD BE EXCAVATED TO EXPOSE CLEAN SOIL UPON FAILURE, AND THE SOIL SCARIFIED PRIOR TO REPLACEMENT OF CLEAN STONE.

STONE DRIP EDGE SECTION
NOT TO SCALE



PARKING STALL FOR THE PHYSICALLY CHALLENGED
NOT TO SCALE



- NOTE:
1. SCARIFY SIDES AND BOTTOM OF BIORETENTION AREA TO FACILITATE NATURAL INFILTRATION RATES.
 2. POND SURFACE TO BE FINISHED WITH 4" LOAM & SEED.

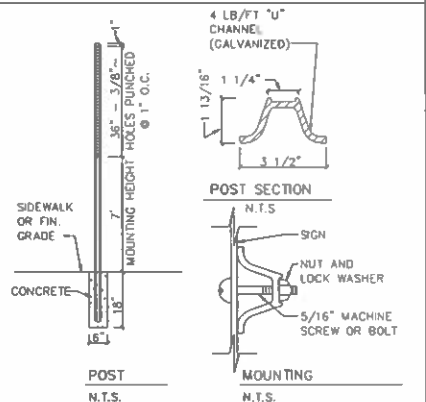
BIORETENTION POND PROFILE DETAIL
NOT TO SCALE

RECEIVED
FEB 02 2023
NHDOT DISTRICT 6

PREPARED FOR:
THE THIBODEAU FAMILY REV. TRUST I
PAUL F & LINDA THIBODEAU TRUSTEES
76 YOUNG ROAD
BARRINGTON, NH 03825



70 PORTSMOUTH AVE.
THIRD FLOOR, SUITE 2
STRATHAM, N.H. 03885
PHONE: 603-583-4860.
FAX: 603-583-4863



STREET SIGN DETAIL
NOT TO SCALE



REVISED PER ENGINEERING REVIEW	10/21/22
REVISIONS:	DATE:
CONSTRUCTION DETAILS	
FOR: MIXED-USE DEVELOPMENT ROUTE 9 BARRINGTON, NH	
DATE: AUG. 2022	SCALE: N/A
PROJ. NO: NH-1387	SHEET NO: 5

22/25

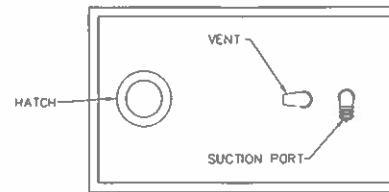
PREPARED FOR:
 THE THIBODEAU FAMILY REV TRUST
 PAUL F & LINDA A THIBODEAU TRUSTEES
 76 YOUNG ROAD
 BARRINGTON, NH 03825



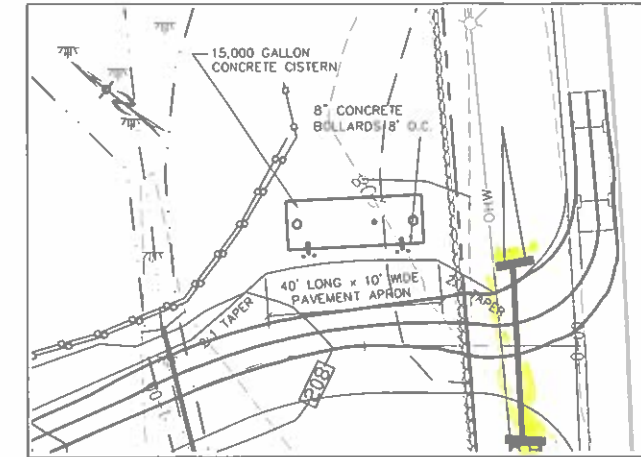
70 PORTSMOUTH AVE.
 THIRD FLOOR, SUITE 2
 STRATIHAM, N.H. 03885
 PHONE: 603-583-4860,
 FAX: 603-583-4863

CISTERN SPECIFICATIONS

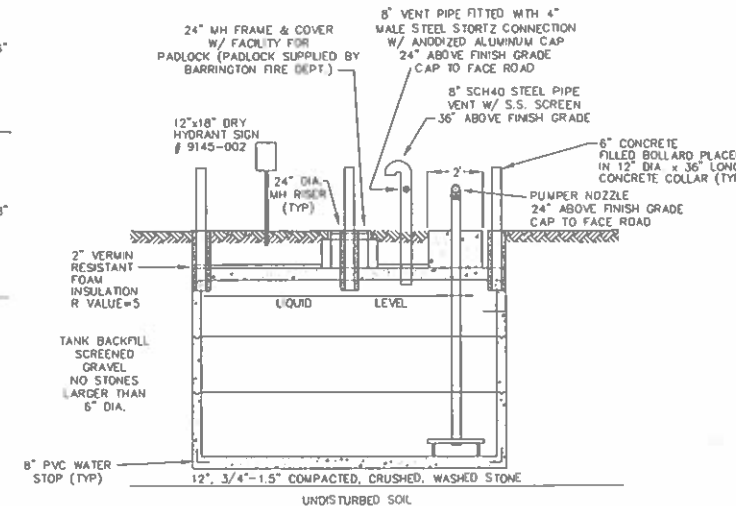
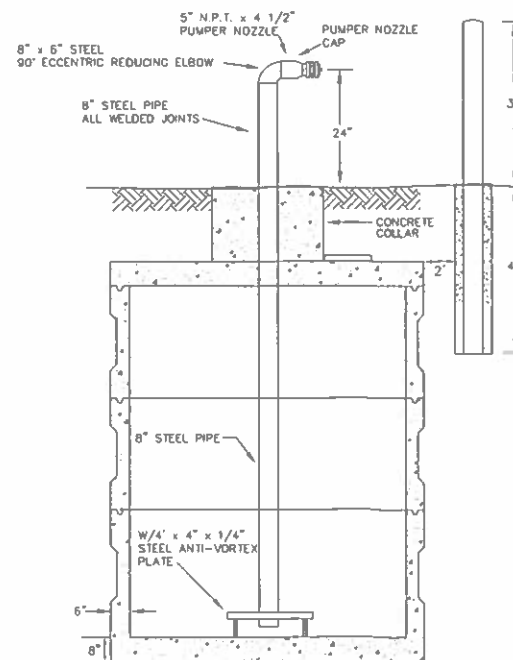
1. THE CISTERN SHALL BE DESIGNED TO BE TROUBLE FREE, AND IT SHALL BE DESIGNED TO LAST 50 YEARS.
2. THE MINIMUM CAPACITY SHALL BE 10,000 GALLONS DEPENDING ON THE DEVELOPMENT LAYOUT/CONFIGURATION, ADDITIONAL GALLON REQUIREMENTS MAY BE IMPOSED AT THE DISCRETION OF THE FIRE CHIEF. ALL EXCEPTIONS, ADDITIONS, OR DELETIONS WILL BE IN WRITING.
3. THE SUCTION CAPACITY SHALL BE CAPABLE OF DELIVERING 1,000 GALLONS PER MINUTE (GPM) FOR THREE-QUARTERS OF THE CISTERN CAPACITY.
4. THE ENTIRE CISTERN AND APPURTENANCES SHALL BE RATED FOR HS-20 HIGHWAY LOADING.
5. DRAWINGS OF THE DESIGN ARE FOR ESTIMATING GENERAL REQUIREMENT AND DESIGN PURPOSES ONLY AND ARE NOT INTENDED FOR USE AS DESIGN.
6. EACH CISTERN SHALL BE DESIGNED, SITED TO THE PARTICULAR LOCATION, STAMPED BY A REGISTERED ENGINEER, AND APPROVED BY THE FIRE CHIEF.
7. ALL SUCTION AND FILL PIPING SHALL BE AMERICAN SOCIETY FOR TESTING MATERIALS (ASTM) SCHEDULE 40 STEEL. ALL VENT PIPING SHALL BE ASTM SCHEDULE 40 STEEL WITH WELDED JOINTS. ALL PIPING LOCATED WITHIN THE TANK SHALL BE ASTM SCHEDULE 40 STEEL WITH WELDED JOINTS. ALL PIPING LEADING FROM THE TANK TO THE HYDRANT SHALL BE ASTM SCHEDULE 40 STEEL.
8. THE FINAL SUCTION CONNECTION SHALL BE FIVE INCH PUMPER NOZZLE WITH A CAP. THE SUCTION PIPE SHALL BE BRACED TO ENSURE DURABILITY DURING PUMPING OPERATIONS. THE FIRE CHIEF SHALL APPROVE BRACE CONFIGURATION AND INSTALLATION. THE SUCTION PIPE CONNECTION SHALL BE TWENTY-FOUR INCHES ABOVE THE LEVEL OF THE VEHICLE PAD WHERE VEHICLE WHEELS WILL BE LOCATED WHEN THE CISTERN IS IN USE.
9. THE FILLER CONNECTION SHALL BE INSTALLED INTO THE EIGHT INCH VENT WITH 4" MALE STEEL STORTZ FITTING. THIS FITTING SHALL BE 24" ABOVE FINISH GRADE AND FACE THE ROAD. A THIRTY-TWO INCH DIAMETER MANHOLE WITH COVER WILL BE LOCATED ON TOP OF THE CISTERN. THE CONFIGURATION OF THIS MANHOLE SHALL ALLOW THE UNIT TO BE SECURED WITH TWO PADLOCKS AND SHALL BE APPROVED BY THE FIRE CHIEF. THE PADLOCKS WILL BE SUPPLIED BY THE FIRE DEPARTMENT.
10. THE DISTANCE FROM THE BOTTOM OF THE SUCTION PIPE TO THE PUMPER CONNECTION SHALL NOT EXCEED FOURTEEN FEET VERTICAL.
11. ALL HORIZONTAL SUCTION PIPING SHALL SLOPE SLIGHTLY UPHILL TOWARD THE PUMPER CONNECTION.
12. BEDDING FOR THE CISTERN SHALL CONSIST OF A MINIMUM OF TWELVE INCHES OF 3/4" TO 1 1/2" WASHED PEA STONE, COMPACTED. NO FILL SHALL BE USED UNDER THE STONE OVER EXCAVATION SHALL BE FILLED WITH THE SAME STONE BEDDING MATERIAL.
13. ALL BACKFILL MATERIALS SHALL BE SCREENED GRAVEL WITH NO STONES LARGER THAN SIX INCHES AND SHALL BE COMPACTED TO 95 PERCENT OF ITS ORIGINAL VOLUME IN ACCORDANCE WITH ASTM D 1557. 16. THE TOP OF CISTERN SHALL BE INSULATED WITH VERMIN RESISTANT FOAM INSULATION AND TWO FEET OF BACKFILL WITH A MINIMUM WEIGHT OF 120 PCF. COMPACTED FOAM USED FOR THIS INSTALLATION SHALL BE CLOSED CELL POLYURETHANE FOAM WITH AN INSULATION FACTOR OF R=5 PER INCH. ALL BACKFILL SHALL EXTEND TEN FEET BEYOND THE EDGE OF THE VEHICLE PAD AND THEN HAVE A MAXIMUM OF 3:1 SLOPE. LOAM AND SEED.
14. BEFORE ANY BACKFILLING IS DONE THE ENTIRE CISTERN SHALL BE COMPLETED AND INSPECTED BY THE FIRE CHIEF.
15. AFTER BACKFILLING, BOLLARDS OR LARGE STONES SHALL BE PLACED TO PROTECT THE TANK AND APPURTENANCES.
16. THE PITCH OF THE SHOULDER AND VEHICLE PAD FROM THE EDGE OF THE PAVEMENT TO THE PUMPER SUCTION CONNECTION SHALL BE ONE PERCENT TO THREE PERCENT DOWNGRADE.
17. THE SHOULDER AND VEHICLE PAD SHALL BE OF A SUFFICIENT LENGTH TO ALLOW CONVENIENT ACCESS TO THE SUCTION CONNECTION WHEN THE PUMPER IS SET AT 45 DEGREES TO THE ROAD. THE SHOULDER AND VEHICLE PAD SECTION SHALL CONSIST OF 3" BITUMINOUS PAVING, REFER TO SITE PLAN FOR REQUIREMENTS.
18. THE SUCTION FITTING SHALL BE LOCATED BETWEEN 22 AND 24 FEET FROM THE NEAREST RUNNING EDGE OF ROAD PAVEMENT. TWO CONCRETE FILLED STEEL BOLLARDS SHALL BE PLACED IN A MANNER TO PROTECT THE HYDRANT. THE BASE OF THESE BOLLARDS SHALL EXTEND BELOW THE FROST LINE. THE UPPER PORTION OF THE BOLLARDS SHALL EXTEND THIRTY SIX INCHES ABOVE THE LEVEL OF THE VEHICLE PAD WHERE VEHICLE WHEELS WILL BE LOCATED WHEN THE CISTERN IS IN USE.
19. ALL CONSTRUCTION, BACKFILL, AND GRADING MATERIALS SHALL BE IN ACCORDANCE WITH PROPER CONSTRUCTION PRACTICES AND SHALL BE ACCEPTABLE TO THE FIRE CHIEF.
20. THE FIRE CHIEF (OR REPRESENTATIVE) AND THE ENGINEER'S INSPECTOR WILL BE NOTIFIED BY THE CONTRACTOR TO OBSERVE THE FOLLOWING POINTS OF INSTALLATION:
 - A. EXCAVATION COMPLETE.
 - B. CRUSHED STONE INSTALLED AND COMPACTED.
 - C. BACKFILLING COMPLETE PRIOR TO PLACEMENT OF INSULATION.
 - D. PLACEMENT OF INSULATION.
 - E. START AND FINISH OF LEAKAGE TEST.
 - F. PIPING MANWAYS AND BOLLARDS IN PLACE AND PAINTED.
 - G. ALL BACKFILLING LOAM, SEED, ETC. COMPLETE WITH TURNOUT PLACE AND GRADED.
 - H. PAVEMENT COMPLETE, AND ALL OTHER WORK 100% COMPLETE.
21. THE FIRE CHIEF SHALL BE NOTIFIED OF THE DATE THAT SITE WORK IS TO BEGIN.
22. ANY EXCEPTION, ADDITIONS, OR DELETIONS ARE DATED AND NOTED BELOW.
23. CONCRETE MUST HAVE A MINIMUM OF 150 PCF.
24. STONE AND GRAVEL BACKFILL MUST HAVE A MINIMUM OF 120 PCF.



CISTERN DETAILS
NOT TO SCALE

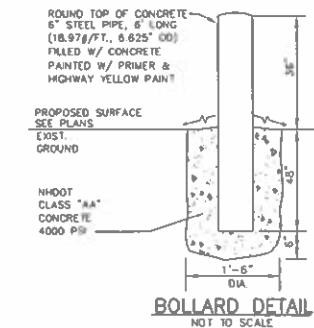


CISTERN PLAN

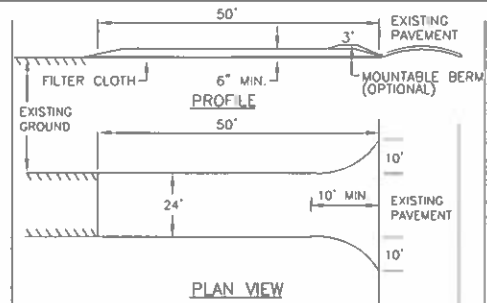


- NOTES:
- 1.) 15,000 GAL CONCRETE TANK AVAILABLE AT WILIAM N LAMARRE CONCRETE PRODUCTS, INC OR EQUIV.
 - 2.) HYDRANT STRUCTURE AVAILABLE FROM GOULD SUPPLY OR EQUIV.
 - 3.) THE INSTALLER IS RESPONSIBLE FOR FILLING THE TANKS AFTER INSTALLATION.
 - 4.) TANK CAPACITY: 10' x 29' x 8' = 2,320 Cu Ft x 7.48 = 17,353 GALS.
 - 5.) SEE TOWN OF BARRINGTON FIRE PROTECTION CISTERN SPECIFICATIONS (40 PARAGRAPH LISTING)

RECEIVED
FEB 02 2023
NHDOT DISTRICT 6



REVISED PER FIRE DEPT REVIEW	10/21/22
REVISIONS:	DATE:
CISTERN DETAIL SHEET	
FOR: MIXED-USE DEVELOPMENT ROUTE 9 BARRINGTON, NH	
DATE: AUG. 2022	SCALE: NONE
PROJ NO: NH-1387	SHEET NO: 6



- STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 3 INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
- THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.
- THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.
- THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICH EVER IS GREATER.
- GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT.
- ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.

STABILIZED CONSTRUCTION ENTRANCE

TEMPORARY EROSION CONTROL MEASURES

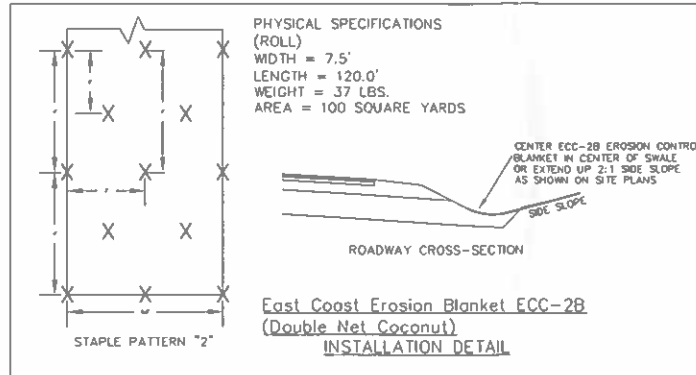
- THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT NO MORE THAN 5 ACRES OF LAND SHALL BE EXPOSED BEFORE DISTURBED AREAS ARE STABILIZED.
 - PERIMETER CONTROLS MUST BE INSTALLED PRIOR TO ANY MOVING OPERATIONS.
 - STORMWATER PONDS, INFILTRATION BASINS AND SWALES MUST BE INSTALLED BEFORE ROUGH GRADING THE SITE.
 - RUNOFF MUST BE DIRECTED TO TEMPORARY PRACTICES UNTIL STORMWATER BMPs ARE STABILIZED.
 - STORMWATER PONDS, INFILTRATION BASINS AND SWALES MUST BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
 - EROSION CONTROL PRACTICES ARE TO BE INSPECTED WEEKLY AND AFTER EACH RAINFALL.
 - CUT AND FILL SLOPES MUST BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.
 - ROADWAYS AND PARKING AREAS MUST BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.
- EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND AT LOCATIONS AS REQUIRED OR DIRECTED BY THE ENGINEER. ALL DISTURBED AREAS SHALL BE RETURNED TO ORIGINAL GRADES AND ELEVATIONS.
- DISTURBED AREAS SHALL BE LOADED WITH A MINIMUM OF 4" OF LOAM AND SEEDED WITH NOT LESS THAN 1.10 POUNDS OF SEED PER 1000 SQUARE FEET OF AREA. (48 POUNDS PER ACRE) SEE SEED SPECIFICATIONS THIS SHEET.
- SILT FENCES AND OTHER EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY RAIN EVENT GREATER THAN 0.5" DURING THE LIFE OF THE PROJECT. ALL DAMAGED AREAS SHALL BE REPAIRED, SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED AND DISPOSED OF.
- AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, THE TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED AND THE AREA DISTURBED BY THE REMOVAL SMOOTHED AND RE-VEGETATED.
- AREAS MUST BE SEED AND MULCHED WITHIN 3 DAYS OF FINAL GRADING, PERMANENTLY STABILIZED WITHIN 15 DAYS OF FINAL GRADING, OR TEMPORARILY STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE OF SOIL.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - IN AREAS TO BE PAVED, BASE COURSE GRAVELS MEETING THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, 2016 ITEM 304.2 HAVE BEEN INSTALLED.
 - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED.
 - A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL SUCH AS RIPRAP HAS BEEN INSTALLED.
 - EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

CONSTRUCTION SPECIFICATIONS

- STRUCTURES SHALL BE INSTALLED ACCORDING TO THE DIMENSIONS SHOWN ON THE PLANS AT THE APPROPRIATE SPACING.
- CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER SO THAT EROSION AND AIR AND WATER POLLUTION WILL BE MINIMIZED.
- WHEN TIMBER STRUCTURES ARE USED, THE TIMBER SHALL EXTEND AT LEAST 18" INTO THE SOIL.
- STRAW BALES SHALL BE ANCHORED INTO THE SOIL USING 2" X 2" STAKES DRIVEN THROUGH THE BALES AND AT LEAST 18 INCHES IN TO THE SOIL.
- SEEDING, FERTILIZING, AND MULCHING SHALL CONFORM TO THE RECOMMENDATIONS IN THE APPROPRIATED VEGETATIVE BMP.
- STRUCTURES SHALL BE REMOVED FROM THE CHANNEL WHEN THEIR USEFUL LIFE HAS BEEN COMPLETED.
- THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES THE CONTRACTOR SHALL TAKE PRECAUTIONS AND INSTRUCTIONS FROM THE PLANNING DEPARTMENT IN ORDER TO PREVENT, ABATE AND CONTROL THE EMISSION OF FUGITIVE DUST INCLUDING BUT NOT LIMITED TO WETTING, COVERING, SHIELDING, OR VACUUMING.
- THE NH COMMISSIONER OF AGRICULTURE PROHIBITS THE COLLECTION, POSSESSION, IMPORTATION, TRANSPORTATION, SALE, PROPAGATION, TRANSPLANTATION, OR CULTIVATION OF PLANTS BANNED BY NH LAW RSA 430:53 AND NH CODE ADMINISTRATIVE RULES AGR 3800. THE PROJECT SHALL MEET ALL REQUIREMENTS AND THE INTENT OF RSA 430:53 AND AGR 3800 RELATIVE TO INVASIVE SPECIES.
- IN THE EVENT THAT GREATER THAN ONE ACRE OF CONTIGUOUS DISTURBANCE OCCURS, THE CONSTRUCTION SITE OPERATOR AND OWNER SHALL SUBMIT A NOTICE OF INTENT (NOI) TO USEPA, WASHINGTON, DC, STORMWATER NOTICE PROCESSING CENTER AT LEAST FOURTEEN DAYS PRIOR TO COMMENCEMENT OF WORK ON SITE. EPA WILL POST THE NOI AT <http://ctpubl.epa.gov/npdas/stormwater/notice/noisearch.cfm>. AUTHORIZATION IS GRANTED UNDER THE PERMIT ONCE THE NOI IS SHOWN IN "ACTIVE STATUS".

CONSTRUCTION SEQUENCE

- CUT AND REMOVE TREES IN CONSTRUCTION AREAS AS REQUIRED OR DIRECTED.
- CONSTRUCT AND/OR INSTALL TEMPORARY AND PERMANENT EROSION AND DETENTION CONTROL FACILITIES AS REQUIRED. EROSION, SEDIMENT AND DETENTION CONTROL FACILITIES SHALL BE INSTALLED AND STABILIZED PRIOR TO ANY EARTH MOVING OPERATION AND PRIOR TO DIRECTING RUNOFF TO THEM.
- CLEAR, CUT, GRUB AND DISPOSE OF DEBRIS IN APPROVED FACILITIES, STUMPS AND DEBRIS ARE TO BE REMOVED FROM SITE AND DISPOSED OF PER STATE AND LOCAL REGULATIONS.
- EXCAVATE AND STOCKPILE TOPSOIL/LOAM. ALL AREAS SHALL BE STABILIZED IMMEDIATELY AFTER GRADING.
- CONSTRUCT TEMPORARY CULVERTS AS REQUIRED OR DIRECTED.
- CONSTRUCT THE ROADWAY AND ITS ASSOCIATED DRAINAGE STRUCTURES. ALL ROADWAYS, AND CUT/FILL SLOPES SHALL BE STABILIZED AND/OR LOADED AND SEEDED WITHIN 72-HOURS OF ACHIEVING FINISH GRADE AS APPLICABLE.
- INSTALL PIPE AND CONSTRUCTION ASSOCIATED APPURTENANCES AS REQUIRED OR DIRECTED. ALL DISTURBED AREAS SHALL BE STABILIZED IMMEDIATELY AFTER GRADING.
- BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES AND DISTURBED AREAS SHALL BE SEED OR MULCHED AS REQUIRED, OR DIRECTED.
- DAILY OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINAGE CHECK DAMS, DITCHES, SEDIMENT TRAPS, ETC. TO PREVENT EROSION ON THE SITE AND PREVENT ANY SITUATION OF ABUTTING WATERS OR PROPERTY.
- INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.
- COMPLETE PERMANENT SEEDING AND LANDSCAPING.
- REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER SEEDING AREAS HAVE ESTABLISHED THEMSELVES AND SITE IMPROVEMENTS ARE COMPLETE. SWALES AND REVEGETATED DISTURBED AREAS.
- ALL SWALES AND DRAINAGE STRUCTURES WILL BE CONSTRUCTED AND STABILIZED PRIOR TO HAVING RUNOFF DIRECTED TO THEM.
- FINISH PAVING ALL ROADWAYS.
- LOT DISTURBANCE OTHER THAN THAT SHOWN ON THE APPROVED PLANS SHALL NOT COMMENCE UNTIL THE ROADWAY HAS BEEN CRUSHED STONE COURSE TO DESIGN ELEVATION/REQUIRED COMPACTION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.

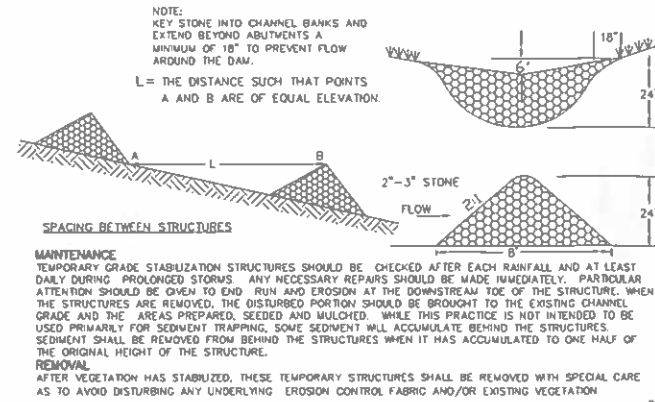


WINTER MAINTENANCE

- ALL DISTURBED AREAS THAT DO NOT HAVE AT LEAST 85% VEGETATIVE COVERAGE PRIOR TO OCTOBER 15TH, SHALL BE STABILIZED BY APPLYING MULCH AT A RATE OF 3-4 TONS PER ACRE. ALL SIDE SLOPES, STEEPER THAN 4:1, THAT ARE NOT DIRECTED TO SWALES OR DETENTION BASINS, SHALL BE LINED WITH BIODEGRADABLE/PHOTODEGRADABLE "JUTE MATTING" (EXCELSIOR'S CURLEX II OR EQUAL). ALL OTHER SLOPES SHALL BE MULCHED AND TACKED AT A RATE OF 3-4 TONS PER ACRE. THE APPLICATION OF MULCH AND/OR JUTE MATTING SHALL NOT OCCUR OVER EXISTING SNOW COVER. IF THE SITE IS ACTIVE AFTER NOVEMBER 15TH, ANY SNOW THAT ACCUMULATES ON DISTURBED AREAS SHALL BE REMOVED PRIOR TO SPRING THAW. ALL AREAS WILL BE STABILIZED, AS DIRECTED ABOVE.
- ALL SWALES THAT DO NOT HAVE FULLY ESTABLISHED VEGETATION SHALL BE EITHER LINED WITH TEMPORARY JUTE MATTING OR TEMPORARY STONE CHECK DAMS (APPROPRIATELY SPACED). STONE CHECK DAMS WILL BE MAINTAINED THROUGHOUT THE WINTER MONTHS. IF THE SWALES ARE TO BE MATTED WITH PERMANENT LINERS OR RIPRAP WITH ENGINEERING FABRIC, THIS SHALL BE COMPLETED PRIOR TO WINTER SHUTDOWN OR AS SOON AS THEY ARE PROPERLY GRADED AND SHAPED.
- PRIOR TO OCT. 15TH ALL ROADWAY AND PARKING AREAS SHALL BE BROUGHT UP TO AND THROUGH THE BANK RUN GRAVEL APPLICATION. IF THESE AREAS ELEVATIONS ARE PROPOSED TO REMAIN BELOW THE PROPOSED SUBGRADE ELEVATION, THE SUBGRADE MATERIAL SHALL BE ROUGHLY CROWNED AND A 3" LAYER OF CRUSHED GRAVEL SHALL BE PLACED AND COMPACTED. THIS WILL ALLOW THE SUBGRADE TO SHED RUNOFF AND WILL REDUCE ROADWAY EROSION. THIS CRUSHED GRAVEL DOES NOT HAVE TO CONFORM TO NH DOT 304.3, BUT SHALL HAVE BETWEEN 15-25% PASSING THE #200 SIEVE AND THE LARGEST STONE SIZE SHALL BE 2". IF THE SITE IS ACTIVE AFTER NOVEMBER 15TH, ANY ACCUMULATED SNOW SHALL BE REMOVED FROM ALL ROADWAY AND PARKING AREAS.
- AFTER OCTOBER 15TH, THE END OF NEW HAMPSHIRE'S AVERAGE GROWING SEASON, NO ADDITIONAL LOAM SHALL BE SPREAD ON SIDE SLOPES AND SWALES. THE STOCKPILES THAT WILL BE LEFT UNDISTURBED UNTIL SPRING SHALL BE SEED BY THIS DATE. AFTER OCTOBER 15TH, ANY NEW OR DISTURBED PILES SHALL BE MULCHED AT A RATE OF 3-4 TONS PER ACRE. ALL STOCKPILES THAT WILL REMAIN THROUGHOUT THE WINTER SHALL BE SURROUNDED WITH SILT FENCING.

SEEDING SPECIFICATIONS

- GRADING AND SHAPING
 - SLOPES SHALL NOT BE STEEPER THAN 2:1-3:1 SLOPES OR FLATTER ARE PREFERRED. WHERE MOWING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE RECOMMENDED.
- SEEDING PREPARATION
 - SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.
 - STONES LARGER THAN 4 INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF ABOUT 4 INCHES TO PREPARE A SEEDBED AND MIX FERTILIZER AND LIME INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.
- ESTABLISHING A STAND
 - LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL. KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:
 - AGRICULTURAL LIMESTONE, 2 TONS PER ACRE OR 100 LBS PER 1,000 SQ. FT.
 - NITROGEN(N), 50 LBS PER ACRE OR 1.1 LBS PER 1,000 SQ.FT.
 - PHOSPHATE(P2O5), 100 LBS PER ACRE OR 2.2 LBS PER 1,000 SQ.FT.
 - POTASH(K2O), 100 LBS PER ACRE OR 2.2 LBS PER 1,000 SQ.FT.
 (NOTE: THIS IS THE EQUIVALENT OF 500 LBS PER ACRE OF 10-20-20 FERTILIZER OR 1,000 LBS PER ACRE OF 5-10-10.)
 - SEED SHOULD BE SPREAD UNIFORMLY BY THE METHOD MOST APPROPRIATE FOR THE SITE. METHODS INCLUDE BROADCASTING, DRILLING AND HYDROSEEDING WHERE BROADCASTING IS USED. COVER SEED WITH .25 INCH OF SOIL, OR LESS, BY CULTIPACKING OR RAKING.
 - REFER TO TABLE(G-E1 THIS SHEET) FOR APPROPRIATE SEED MIXTURES AND TABLE(H-E1 THIS SHEET) FOR RATES OF SEEDING ALL LEGUMES (CROWN VETCH, BIRDS FOOT TREFLOL, AND FLAT PEA) MUST BE INOCULATED WITH THEIR SPECIFIC INOCULANT.
 - WHEN SEEDS ARE NOT MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDS ARE MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 10 TO SEPTEMBER 1.
- MULCH
 - MULCH, STRAW, OR OTHER MULCH, WHEN NEEDED, SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING.
 - MULCH WILL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE BEST MANAGEMENT PRACTICE FOR MULCHING. HAY OR STRAW MULCH SHALL BE PLACED AT A RATE OF 90 LBS PER 1000 SQ. FT.
- MAINTENANCE TO ESTABLISH A STAND
 - PLANTED AREA SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH.
 - FERTILIZATION NEEDS SHOULD BE DETERMINED BY ONSITE INSPECTIONS. SUPPLEMENTAL FERTILIZER IS USUALLY THE KEY TO FULLY COMPLETE THE ESTABLISHMENT OF THE STAND BECAUSE MOST PERENNIAL STAKE 2 TO 3 YEARS TO BECOME ESTABLISHED.
 - IN WATERWAYS, CHANNELS, OR SWALES WHERE UNIFORM FLOW CONDITIONS ARE ANTICIPATED, OCCASIONAL MOWING MAY BE NECESSARY TO CONTROL GROWTH OF WOODY VEGETATION.

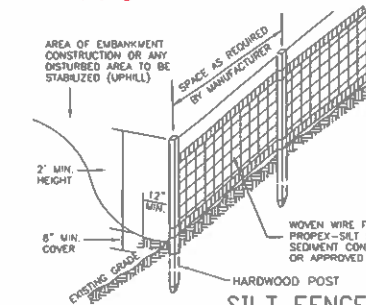


TEMPORARY STONE CHECK DAM

RECEIVED

FEB 02 2023

NHDOT DISTRICT 6



SILT FENCE

- #### CONSTRUCTION SPECIFICATIONS
- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES AND FILTER CLOTH SHALL BE FASTENED TO WOVEN WIRE EVERY 24" AT TOP AND BOTTOM SECTIONS AND BE EMBEDDED INTO GROUND A MINIMUM OF 8". THE FENCE POSTS SHALL BE A MINIMUM 48" LONG, SPACED A MAXIMUM 10' APART, AND DRIVEN A MINIMUM OF 16" INTO THE GROUND.
 - WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THE ENDS OF THE FABRIC SHALL BE OVERLAPPED BY SIX INCHES, FOLDED AND STAPLED TO PREVENT SEDIMENT FROM BY-PASSING.
 - MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SEDIMENT REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE AND PROPERLY DISPOSED OF.
 - PLACE THE ENDS OF THE SILT FENCE UP CONTOUR TO PROVIDE FOR SEDIMENT STORAGE.
 - SILT FENCES SHALL BE REMOVED WHEN NO LONGER NEEDED AND THE SEDIMENT COLLECTED SHALL BE DISPOSED AS DIRECTED BY THE ENGINEER. THE AREA DISTURBED BY THE REMOVAL SHALL BE SMOOTHED AND RE-VEGETATED.
- #### MAINTENANCE
- SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
 - IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.
 - SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER.
 - SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.

SEEDING GUIDE

USE	SEEDING MIXTURE 1/	DROUGHTY	WELL DRAINED	MODERATELY WELL DRAINED	POORLY DRAINED
STEEP CUTS AND FILLS, BORROW AREAS	A	FAIR	GOOD	GOOD	FAIR
ROADWAYS AND DISPOSL AREAS	B	POOR	GOOD	EXCELLENT	GOOD
ROADWAYS, EMERGENCY	C	FAIR	FAIR	EXCELLENT	EXCELLENT
WATERWAYS, EMERGENCY	D	GOOD	GOOD	GOOD	FAIR
WATERWAYS, EMERGENCY	E	GOOD	EXCELLENT	EXCELLENT	FAIR
SLIPWAYS AND OTHER FLOWING WATER	F	GOOD	GOOD	GOOD	FAIR
LIGHTLY USED PARKING LOTS, ODD AREAS, UNPAVED LANDS, AND LOW TRAFFIC LIST RECREATION SITES	G	GOOD	GOOD	EXCELLENT	EXCELLENT
PLAY AREAS AND ATHLETIC FIELDS	H	FAIR	EXCELLENT	EXCELLENT	EXCELLENT
SPORTS FACILITIES (FOR GOOD TURF)	I	FAIR	EXCELLENT	EXCELLENT	EXCELLENT

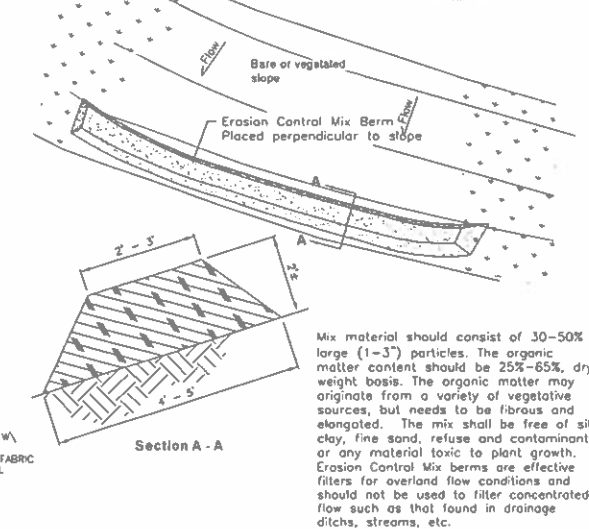
GRAVEL PITS, SEE 104-PN-24 IN APPENDIX FOR RECOMMENDATION REGARDING RECLAMATION OF SAND AND GRAVEL PITS.

1/ REFER TO SEEDING MIXTURES AND RATES IN TABLE 7-36

2/ POORLY DRAINED SOILS ARE NOT DESIRABLE FOR USE AS PLAYING AREA AND ATHLETIC FIELDS.

PREPARED FOR:
THE THIBODEAU FAMILY REV TRUST
PAUL F. & LINDA A THIBODEAU TRUSTEES
76 YOUNG ROAD
BARRINGTON, NH 03825

70 PORTSMOUTH AVE.
THIRD FLOOR, SUITE 2
STRATHAM, N.H. 03885
PHONE: 603-583-4860,
FAX: 603-583-4863



Erosion Control Mix Berm

Mix material should consist of 30-50% large (1-3") particles. The organic matter content should be 25%-65%, dry weight basis. The organic matter may originate from a variety of vegetative sources, but needs to be fibrous and elongated. The mix shall be free of silt, clay, fine sand, refuse and contaminants or any material toxic to plant growth. Erosion Control Mix berms are effective filters for overland flow conditions and should not be used to filter concentrated flow such as that found in drainage ditches, streams, etc.

MIXTURE	SEEDING RATES	
	POUNDS PER ACRE	POUNDS PER 1,000 SQ. FT.
A. TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
RED TOP	2	0.05
TOTAL	42	0.95
B. TALL FESCUE	15	0.35
CREEPING RED FESCUE	10	0.25
CROWN VETCH	15	0.35
OR FLAT PEA	30	0.75
TOTAL	40 OR 55	0.95 OR 1.35
C. TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
BIRDS FOOT TREFLOL	8	0.20
TOTAL	48	1.10
D. TALL FESCUE	20	0.45
FLAT PEA	30	0.75
TOTAL	50	1.20
E. CREEPING RED FESCUE 1/	50	1.15
KENTUCKY BLUEGRASS 1/	100	2.30
TOTAL	150	3.45
F. TALL FESCUE 1	150	3.60

1/ FOR HEAVY USE ATHLETIC FIELDS CONSULT THE UNIVERSITY OF NEW HAMPSHIRE COOPERATIVE EXTENSION TURF SPECIALIST FOR CURRENT VARIETIES AND SEEDING RATES.

REVISED PER ENGINEERING REVIEW	10/21/22
REVISIONS:	DATE:
EROSION & SEDIMENTATION	
FOR MIXED-USE DEVELOPMENT ROUTE 9 BARRINGTON, NH	
DATE: AUG, 2022	SCALE: NONE
PROJ. NO: NH-1387	SHEET NO. 7

24/25

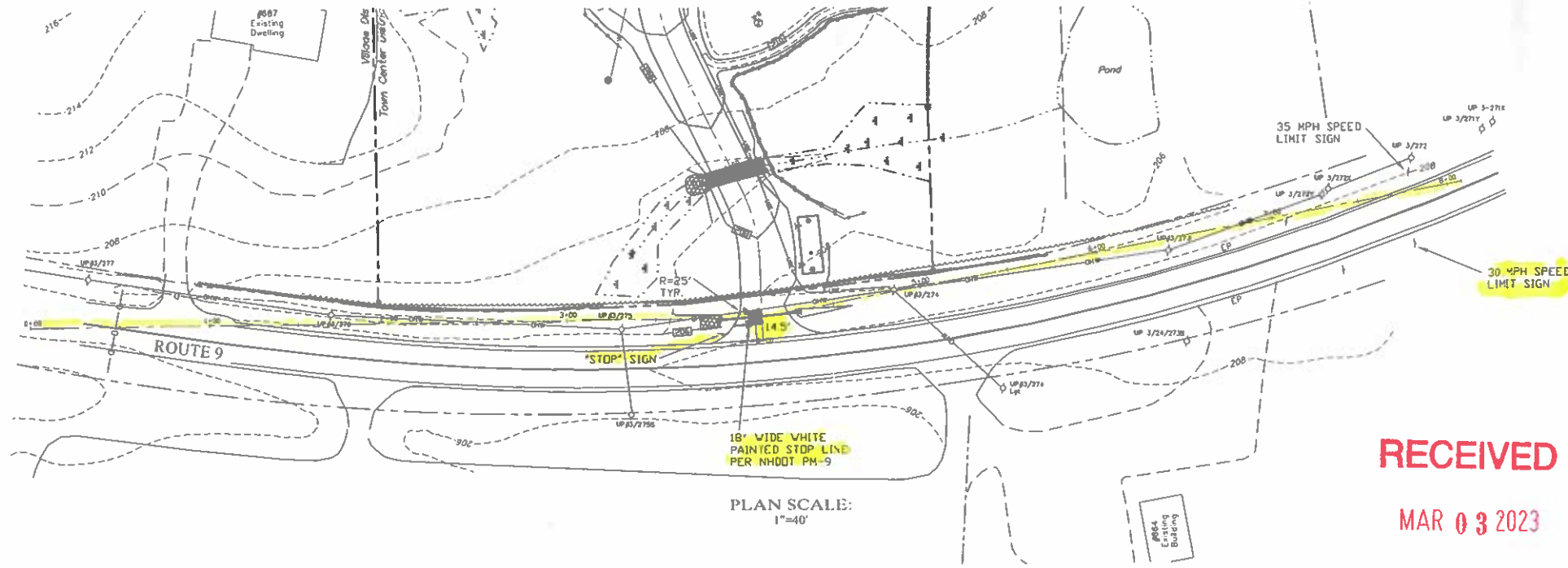
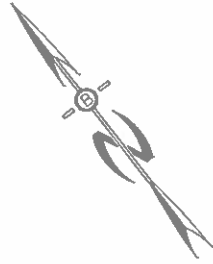
PLANNING BOARD APPROVAL BLOCK

PREPARED FOR:

THE THIBODEAU FAMILY REV. TRUST
 PAUL F. & LINDA A. THIBODEAU TRUSTEES
 76 YOUNG ROAD
 BARRINGTON, NH 03825

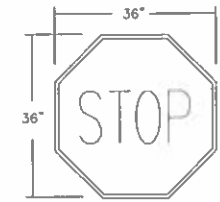


70 PORTSMOUTH AVE.
 THIRD FLOOR, SUITE 2
 STRATHAM, N.H. 03885
 PHONE: 603-583-4860,
 FAX: 603-583-4863

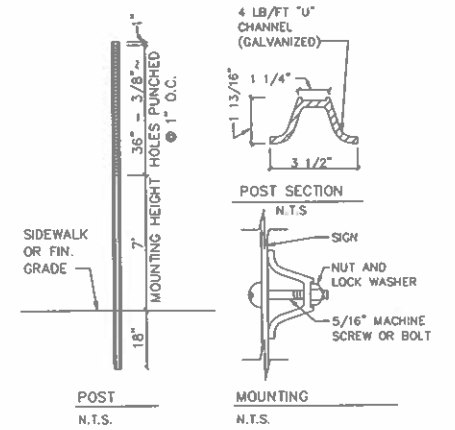


PLAN SCALE:
 1"=40'

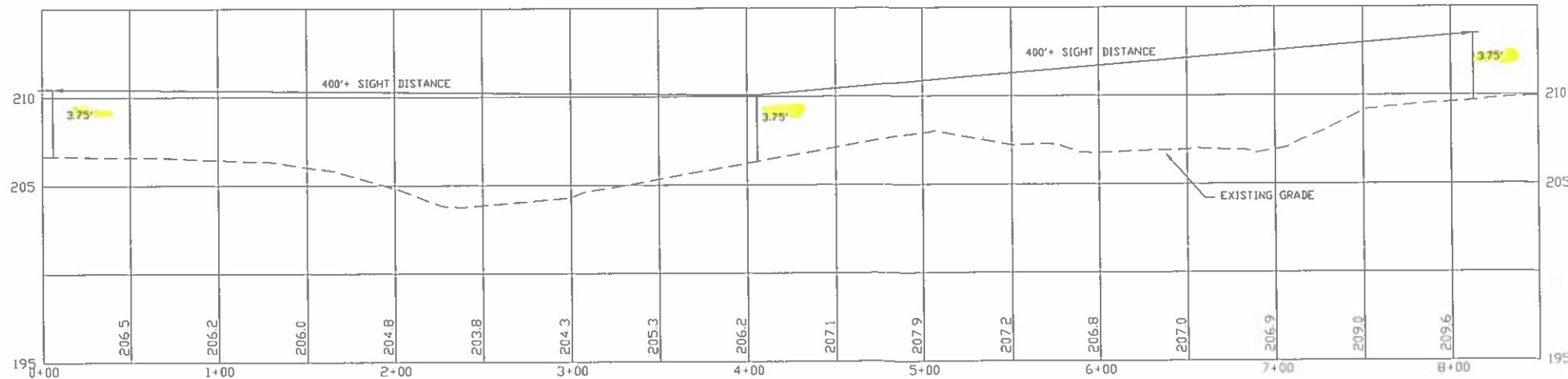
RECEIVED
 MAR 03 2023
 NHDOT DISTRICT 6



R1-1
 WHITE LETTERING
 ON RED



SIGN DETAIL



PROFILE SCALES:
 HORIZONTAL: 1"=40' VERTICAL: 1"=4'

PER NHDOT REVIEW	3-2-23
REVISIONS:	DATE:

HIGHWAY ACCESS PLAN-H1

FOR:
 MIXED-USE DEVELOPMENT
 ROUTE 9
 BARRINGTON, NH

DATE:	DEC 2022	SCALE	1"=40'
PROJ. NO:	NH-1388	SHEET NO.	8

25/
 /25