



# TOWN OF HUDSON

## Planning Board

George Hall, Chairman

Rick Maddox, Selectmen Liaison



12 School Street • Hudson, New Hampshire 03051 • Tel: 603-886-6008 • Fax: 603-594-1142

### **PUBLIC MEETING TOWN OF HUDSON, NH JANUARY 27, 2016**

The Town of Hudson Planning Board will hold a regularly scheduled meeting on Wednesday, January 27, 2016 at 7:00 p.m. in the "Buxton Community Development Conference Room" at Town Hall. The following items will be on the agenda:

- I. CALL TO ORDER BY CHAIRPERSON AT 7:00 P.M.
- II. PLEDGE OF ALLEGIANCE
- III. ROLL CALL
- IV. SEATING OF ALTERNATES
- V. **ELECTION OF OFFICERS**
- VI. MINUTES OF PREVIOUS MEETING(S)
- VII. CASES REQUESTED FOR DEFERRAL
- VIII. CORRESPONDENCE
- IX. PERFORMANCE SURETIES
- X. ZBA INPUT ONLY

- A. Breckenridge Estates  
ZI# 03-15

50 Speare Road  
Map 186/Lot 013

Purpose of Petition: Work within Wetland Buffer Zone, requiring Conservation Commission and Planning Board Input to the Zoning Board of Adjustment (ZBA), relative to the ZBA conducting a public hearing for a Wetland Buffer Impact Special Exception, per Section 334-35 of the most recent Town Zoning Ordinance.

- XI. PUBLIC HEARINGS
- XII. OLD BUSINESS/PUBLIC HEARINGS
- XIII. DESIGN REVIEW PHASE
- XIV. CONCEPTUAL REVIEW ONLY
- XV. NEW BUSINESS/PUBLIC HEARINGS
  
- XVI. OTHER BUSINESS

- A. Review of the Zoning Amendment Warrant Articles for the 2016 March Town Meeting.
- B. Discussion on the Zoning Ordinance Review Committee's (ZORC) Efforts-to-Date on Updating the Town's Zoning Ordinance.
- C. Review of the Updated Planning Board Land Use Regulations.

XVII. ADJOURNMENT

All plans and applications are available for review in the Planning Office. Comments may be submitted in writing until 10:00 a.m. on the Tuesday prior to the day of the meeting.

The public is invited to attend.

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John M. Cashell  
Town Planner

POSTED: Town Hall, Library & Post Office – 01-15-16

# ELECTION OF NEW OFFICERS FOR CALENDAR YEAR 2016

**Acting Chairman, Glenn Della Monica shall address the need to elect new officers for reorganization of the Board, and shall first ask for a nomination for the position of Chairman.**

## **DRAFT MOTIONS FOR ELECTION OF OFFICERS:**

### **MOTION FOR CHAIRMAN:**

I move to nominate \_\_\_\_\_ to be Chairman.

Second: \_\_\_\_\_.

If there are no other nominations for this office, the next motion is:

### **MOTION:**

There being no other nominations, I move to close the nominations and to elect  
\_\_\_\_\_ as Chairman by acclamation.

Motion by: \_\_\_\_\_ Second: \_\_\_\_\_ Motion carried/failed: \_\_\_\_\_.

### **MOTION FOR VICE-CHAIRMAN:**

I move to nominate \_\_\_\_\_ to be Vice-Chairman.

Second: \_\_\_\_\_.

If there are no other nominations for this office, the next motion is:

### **MOTION:**

There being no other nominations, I move to close the nominations and to elect  
\_\_\_\_\_ as Vice-Chairman by acclamation.

Motion by: \_\_\_\_\_ Second: \_\_\_\_\_ Motion carried/failed: \_\_\_\_\_.

**MOTION FOR SECRETARY:**

I move to nominate \_\_\_\_\_ to be Secretary.

Second: \_\_\_\_\_.

If there are no other nominations for this office, the next motion is:

**MOTION:**

There being no other nominations, I move to close the nominations and to elect

\_\_\_\_\_ as Secretary by acclamation.

Motion by: \_\_\_\_\_ Second: \_\_\_\_\_ Motion carried/failed: \_\_\_\_\_.

**Breckenridge Estates – 50 Speare Road ZBA**  
**Input Only**  
**Staff Report**  
27 January 2016

**SITE:** Breckenridge Estates -- 50 Speare Rd. -- Map 186/Lot013 -- ZI# 03-15

**ZONING:** General (G) Minimum Lot Size w/out sewer and water 43,560 sf for a duplex and 43,560 sf (1 acre) for a single-family dwelling and 150 ft. of frontage.

**PURPOSE OF PETITION:** Work within Wetland Buffer Zone, requiring Conservation Commission and Planning Board Input to the Zoning Board of Adjustment (ZBA), relative to the ZBA conducting a public hearing for a Wetland Buffer Impact Special Exception, per Section 334-35 of the most recent Town Zoning Ordinance.

**PLANS UNDER REVIEW ENTITLED:** Open Space Development Breckenridge Estates Map 186 Lot 13, Speare Road, Hudson, New Hampshire, prepared by Jones & Beach Engineers, Inc. 85 Portsmouth Ave., PO Box 219, Stratham, NH, dated 10 JUL 15 and revised thru 18 DEC 16, consisting of Sheets 1 – 19 (CS, Y1 -Y2, OV1, A1 – A3, C1 – C4, P1, H1, X1 – X2, D1 – D3 & E1) and Notes 1 – 21 on Sheet A1 (said plans are attached hereto).

**ATTACHMENTS:**

1. ZBA Input Only application, and Letter from the Project Eng., Joseph Coronati, date stamped 3 NOV 15 – Attachment “A”.
2. Zoning Determination by Interim Zoning Admin., Dave Hebert, dated 30 SEP 15 – “B”.
3. Zoning Determination by Interim Zoning Admin., Dave Hebert, dated 21 AUG 15 – “C”.
4. Conservation Commission’s “Motion to Recommend a Wetlands Special Exception”, dated 14 DEC 15 – “D”.

**OUTSTANDING ISSUES/STAFF COMMENTS:**

Although this review concerns wetlands and the proposed impacts thereto, which in turn require the Planning Board to forward input to the ZBA on same, there are important issues relating to future Planning Board action regarding this OSD Subdivision, which should be reviewed in conjunction with this present ZBA Input Only application:

- 1) The Board previously reviewed this proposed OSD Subdivision as a Conceptual Plan, and during that review the board advised the Applicant, that in order to create 9-lots on this parcel, he should consider reconfiguring the frontages of the proposed lots, so that the building envelopes for proposed Lots 13 and 13-6 be located north of the wetland, which exists beyond the rear borders of these two lots. As you can see in the attached Plan set, the Applicant still proposes to create 9-lots south of said wetland, resulting in the same highly concentrated OSD subdivision, which may “technically” meet the dimensional OSD subdivision provisions (see Article XI – Open Space Development of the Zoning Ordinance), but not meet the spirit and intent provisions, of the Zoning Ordinance, i.e., §334-2.D. – Prevent the overcrowding of land and E. – Avoid undue concentration of population. Staff cites the foregoing concern, based on the Plans showing

multiple well protective radii encroachments, and the potential inadequacy of well water supply these encroachments may pose upon the future inhabitants of this development, as well as the potential of well water contamination that may result from the concentration of septic systems. Further, the proposed number of lots in such a relatively small area of land, creates a more concentrated (deeper) stormwater management retention area (base elevation 278 ft. rim elevation 292 ft. = 14 ft.), which creates a more direct impact on the abutting wetland. That is, as opposed to spreading the development area out throughout the 34 acre parcel, and thus, being able to design a larger and shallower retention basin, and, perhaps, located farther away from the subject abutting wetland.

- 2) The Lot Detail Charts found on the Yield Plan (Y1) and Cluster Plan (Conceptual) (C1) show: Gross Lot Area, minus (-) Wetlands, Slopes Greater than 25% (SF) equaling (=) Net Area (i.e., contiguous upland) for each proposed lot. Note: each lot shown meets or exceeds the minimum OSD lot requirements for the subject zoning district (i.e., G, min. OSD lot size = 21,780 sf ). Please refer to Article XI – Open Space Development – of the Zoning Ordinance for all of the OSD provisions. NOTE: although each proposed lot appears to have the minimum required OSD lot frontage of 75 ft., the specific frontage for each lot is not indicated along the front lot line of each lot. Rather, the frontage and other lot line measurements are included in chart form on Sheet A2. For the Definitive OSD Subdivision Plan submission, staff will remind the Applicant to provide the lot line measurements for each lot on at least one Plan sheet.
- 3) The Yield Plans (Y1 & Y2) show a looped road design, which in the past, some board members have considered a means of usurping the 1,000 ft. maximum allowable cul-de-sac length. This issue can be further discussed by board members at the meeting. That is, relative to determining the actual lot yield for this property. On the other hand, the Applicant for this Plan has reduced the Standard Subdivision Lot Yield down from 16 lots to 9 OSD lots. In effect, the Applicant has not maximized the total number of potential lots. The only problem is, as previously cited in above outstanding item #1, the attached plans continue to create too many lots in too small of an area of the development parcel. This issue is more evident, when one reads the comments in Mr. Hebert's attached letter. Wherein, Mr. Hebert cites in the 3d para. of his letter, the following:

“Another concern would be the well protective radii. Numerous lots out of the proposed nine show the well protective radius to be nonconforming by the State of New Hampshire Water Well Board and the Department of Environmental Services. Whenever a protective radius is nonconforming, NHDES requires a release form for protective well radii. The Water Well Board requires a nonconforming well location form to be submitted.”

NOTE: the scenario posed by the Applicant with this proposed development is a perfect example of a land development “Catch-22”. That is, yes the Applicant proposes to leave an exorbitant amount of the 34 acre parcel as permanent open space – 27 acres, which is a good thing. On the other hand, the Applicant clearly proposes to overly develop the remaining 7 acres. Thus, which is more important: more or less open space, which as proposed by the Applicant, is created by his proposal to overly concentrate the development on a smaller portion of the total parcel?

- 4) §334-51. Lot sizes, Sub-section C. of the Zoning Ordinance reads:

“C. All subsurface sewage disposal and water supply requirements for individual or community systems shall be compiled [sic] (should state “complied”) with, or Town water and sewer shall be provided.”

Note: the above Sub-section is referred to , herein, because of the above-cited well protective radii encroachments, i.e., clearly these encroachments are considered as not being in compliance with said Sub-section C., which in turn requires the Applicant to provide Town water and sewer to the development parcel.

- 5) Since the Conceptual Plan submittal, the Applicant has addressed the following issue: the proposed narrow strip of “Open Space” between Speare Rd. and Lots 13-1 & 13-8 has been widened from 15 ft. to 30 ft. In regard to this widening, board members may determine that the spirit and intent of §334-51.B. and §334-52.A. of the Open Space ordinances have been met with this proposed widening. Said sections of the ZO are in bold-print below read as follows:

§334-51. The area of individual lots within an OSD may be reduced by up to 50% of the minimum lot size requirements established in Article **VII**, as provided herein.

A. An area of land, equal to or greater than the difference between the size of each open space lot and the minimum lot size, shall be dedicated to permanent open space, conservation land or recreation land.

**B. No reduced area residential lots shall be arranged to front or abut preexisting streets, roads or highways.**

C. All subsurface sewage disposal and water supply requirements for individual or community systems shall be complied with, or Town water and sewer shall be provided.

§§334-52. Dimensional requirements.

[Amended 3-13-2001 by Amdt. No. 2]

Frontage and setback requirements for individual lots within an OSD may be reduced up to 50% of the minimum frontage and setback requirements established in Article **VII**, as provided herein, if approved by the Planning Board.

**A. No reduced frontage lots shall be allowed to front on preexisting streets, roads or highways.**

B. Setback reductions shall not be permitted along property lines that abut non-OSD residentially developed properties.

- 6) The required 400 ft. of all season, safe-sight distance (in each direction at the proposed intersection) has been delineated in the attached Plan set. Please see Sheet H1, which indicates that a section of Speare Rd., approximately 150 ft. west of the proposed intersection, needs to be reduced in height in order to provide the proposed 400 ft. of sight distance. Note: the issue of altering Speare Rd. falls within the jurisdiction of the BOS to decide. As such, the Applicant will be advised to seek BOS approval to alter Speare Rd., i.e., prior to submitting the Definitive OSD subdivision plan. Also in regard to this issue, per the recent Land Use Regulations amendments on sight distance, i.e., meeting AASHTO requirements v. 400 ft., please note, again, that the plans indicate that a small portion of Speare Rd. needs to be lowered approx. 150 ft. west of the proposed intersection. This distance is less than the AASHTO sight distance requirement of 250 ft., at 35 mph – the posted maximum speed for Speare Rd.
- 7) In accordance with the attached Conservation Commission’s “Motion to Recommend a Wetlands Special Exception”, please note that the attached Plan set, specifically, Sheet C4, still refers to the “permanent” wetland buffer impact as “temporary”. This discrepancy does not comply with Condition #5 of said attachment.

- 8) The issue of “No cut/No disturb” Conservation markers along the perimeter of the Conservation District boundaries is addressed in the Conservation Commission’s attached “Motion to Recommend....”, please see Condition #4.

**RECOMMENDATION:** With this present application being a ZBA Input Only, after the Applicant’s presentation at the meeting, and it, perhaps, addressing each of the above-cited outstanding issues, answering questions from the board and audience members, the board may want to provide the following ZBA Input, as provided in DRAFT MOTION form below. If the board does not agree with the below DRAFT MOTION or wishes to amend it, please feel free to discuss and do so at the meeting.

**APPLICATION TRACKING:**

- 3 NOV 15 – ZBA Input Only Application submitted.
- 18 NOV 15 – Per the written request of the Applicant, the ZBA Input Only Application Hearing was postponed until the 27 JAN 16 Meeting.
- 27 JAN 16 – Initial ZBA Input Hearing scheduled.

**DRAFT MOTION:**

I move to forward the following input to the Zoning Board of Adjustment, concerning the ZBA Input Only Plan-of-Record, entitled: Open Space Development Breckenridge Estates Map 186 Lot 13, Speare Road, Hudson, New Hampshire, prepared by Jones & Beach Engineers, Inc. 85 Portsmouth Ave., PO Box 219, Stratham, NH, dated 10 JUL 15 and revised thru 18 DEC 16, consisting of Sheets 1 – 19 (CS,Y1 -Y2, OV1, A1 – A3, C1 – C4, P1, H1, X1 – X2, D1 – D3 & E1) and Notes 1 – 21 on Sheet A1:

- 1) Although the above-cited Plan may “technically” meet the dimensional OSD subdivision provisions (see Article XI – Open Space Development of the Zoning Ordinance), it does not meet the requirements set forth in Sub-Section C., §334-51., Article XI, which reads:

“C. All subsurface sewage disposal and water supply requirements for individual or community systems shall be compiled [sic] (should state “complied”) with, or Town water and sewer shall be provided.”

Note: this Sub-section is referred, herein, because of the multiple well protective radii encroachments included in this proposed development. In this regard, please refer to Sheet C4 of the Plan, which depicts said encroachments for all of the proposed lots. In turn, such encroachments are considered noncompliant with cited Sub-section C., which requires the Applicant to either amend the plan accordingly (i.e., create lots not having such encroachments) or provide Town water and sewer to the development parcel.

- 2) Said well protective radii encroachments also lead to the determination that the proposed nine lots do not meet the spirit and intent provisions, of the Zoning Ordinance, i.e., §334-2.D. – Prevent the overcrowding of land and E. – Avoid undue concentration of population.

Note: the above-cited Sections of the Zoning Ordinance are referenced, herein, relative to the multiple protective well radii encroachments, but also because such encroachments may result in: (i) an inadequate well water supply within this development, and (ii) substandard quality of well water. Further, the proposed number of lots in such a relatively small area of land, creates a more



concentrated stormwater management retention area (base elevation 278 ft. rim elevation 292 ft. = 14 ft.), which creates a more direct impact on the abutting wetland. That is, as opposed to expanding the development area out throughout the 34 acre parcel, and thus, being able to design a larger shallower retention basin, and, perhaps, farther away from the subject abutting wetland.

Motion by: \_\_\_\_\_ Second: \_\_\_\_\_ Carried/Failed: \_\_\_\_\_.

# JONES & BEACH ENGINEERS, INC.

85 Portsmouth Avenue  
Post Office Box 219  
Stratham, NH 03875  
Telephone: (603) 772-4746  
Fax: (603) 772-0227  
Email: jbe@jonesandbeach.com

"A"

Post Office Box 484  
Alton, NH 03809  
Fax: (603) 875-8907  
www.jonesandbeach.com

October 20, 2015

Hudson Planning Board  
Attn: George Hall, Chairman  
12 School Street  
Hudson, NH 03051



**RE: Request for Placement on Planning Board Agenda  
50 Speare Road, Hudson, NH  
Tax Map 186 Lot 13  
JBE Project No. 15031**

Dear Mr. Hall,

On behalf of our client, Tuck Realty Corp., Jones & Beach Engineers, Inc. would like to request placement on the next Planning Board agenda to discuss the proposed subdivision and wetland buffer impacts associated with the project referenced above. We are including eight copies of the plan set for review.

Please place us on the next available Conservation Commission agenda and notify us of the date scheduled. Please contact our office with any questions.

Very truly yours,  
**JONES & BEACH ENGINEERS, INC.**

Joseph Coronati

Joseph A. Coronati  
Vice President

KS

cc: Tuck Realty Corp.

11/18/15  
1 cont

ZBA INPUT ONLY  
APPLICATION FOR REVIEW  
TOWN OF HUDSON, NEW HAMPSHIRE

Date of Application: 11/3/15 Tax Map # 186 Lot # 13

Name of Project: BRECKENRIDGE ESTATES

Zoning District: General General Zoning ID# 03-15  
(For Office Use) (For Office Use)

ZBA Action: \_\_\_\_\_

PROPERTY OWNER:

Name: DOUGLAS SANDERSON  
Address: 11 NERLSTON WAY  
Address: Hampden, NH 03842  
Telephone # \_\_\_\_\_  
Fax # \_\_\_\_\_  
Email: \_\_\_\_\_

DEVELOPER:

TUCK REALTY CORP.  
149 EPPER ROAD, SUITE 2A  
EXETER, NH 03833  
602-944-7530  
\_\_\_\_\_  
mgarroff@gmail.com

PROJECT ENGINEER

Name: JONES + BEACH ENGINEERS  
Address: 118 PORTSMOUTH AVE.  
Address: Stratham, NH 03885

Telephone # 603-772-4746  
Fax # \_\_\_\_\_  
Email: JCARONATI@jonesandbeach.com

PURPOSE OF PLAN:

NINE LOT OPEN SPACE SUBMISSION WITH 27 ACRES OF OPEN SPACE.  
PROPOSED 17,650 S.F. OF TEMPORARY WETLAND BUFFER IMPACT.

(For Office Use)	
Plan Routing Date: <u>11/3/15</u>	Plan Date: <u>11/18/15</u>
<input type="checkbox"/> I have no comments	<input type="checkbox"/> I have comments (attach to form)
Title: _____	Date: _____
(Initials)	
Department:	
<input type="checkbox"/> Zoning	<input type="checkbox"/> Engineering
<input type="checkbox"/> Assessor	<input type="checkbox"/> Police
<input type="checkbox"/> Fire	<input type="checkbox"/> Planning
<input type="checkbox"/> Highway	<input type="checkbox"/> Consultant Review
<input type="checkbox"/> Fees Paid	

**APPLICATION FOR ZBA INPUT ONLY REVIEW  
TOWN OF HUDSON, NEW HAMPSHIRE**

I hereby apply for ZBA Input Only Review and acknowledge I will comply with all of the Ordinances of the Town of Hudson, New Hampshire State Laws, as well as any stipulations of the Planning Board, in development and construction of this project. I understand that if any of the items listed under the *ZBA Input Only* specifications or application form are incomplete, the application will be considered rejected.

Pursuant to RSA 674:1-IV, the owner(s), by the filing of this application as indicated above, hereby give permission for any member of the Hudson Planning Board, the Town Engineer, the Conservation Commission and such agents or employees of the Town or other persons as the Planning Board may authorize, to enter upon the property which is the subject of this application at all reasonable times for the purpose of such examinations, surveys, tests and inspections as may be appropriate. The owner(s) release(s) any claim or right he/she (they) may now or hereafter possess against any of the above individuals as a result of any examinations, surveys, tests and inspections conducted on his/her (their) property in connection with this applications.

Signature of Owner: SEE LOA ATTACHED

- ❖ If other than an individual, indicate name of organization and its principal owner, partners, or corporate officers.

Signature of Developer: 

- ❖ The developer/individual in charge must have control over all project work and be available to the Code Enforcement Officer/Building Inspector during the construction phase of the project. The individual in charge of the project must notify the Code Enforcement Officer/Building Inspector within two (2) working days of any change.

Technical Review Signature: \_\_\_\_\_

Planner Approval Signature: 

Twenty-one days prior to the scheduled Planning Board Meeting, a complete subdivision, or site plan application including all supporting materials/documents must be submitted in final form to the Town Planner's Office.

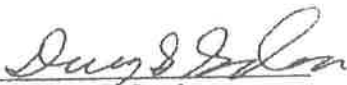
- ❖ Please schedule an appointment with the Town Planner for initial plan submittal.
- ❖ Revisions are due on Tuesday the week prior to the Planning Board deferral date by 10:00AM. Any application/materials received after that time will be deferred until the next available meeting date.

**Letter of Authorization**

I, Douglas S. Sanderson, 11 Nersesian Way, Hampton, NH 03842, owner of property located in Hudson, NH, known as Tax Map 186, Lot 13, do hereby authorize Jones & Beach Engineers, Inc., PO Box 219, Stratham, NH, to act on my behalf concerning the previously mentioned property. The parcel is located on Speare Road in Hudson, NH.

I hereby appoint Jones & Beach Engineers, Inc., as my agent to act on my behalf in the review process, to include any required signatures.

\_\_\_\_\_  
Witness

  
Douglas S. Sanderson

  
Date



# TOWN OF HUDSON

FIRE DEPARTMENT

INSPECTIONAL SERVICES DIVISION

12 SCHOOL STREET, HUDSON, NEW HAMPSHIRE 03051

"B" OCT 15 2015



Emergency 911  
Business 603-886-6005  
Fax 603-594-1142

Robert M. Buxton  
Chief of Department

## ZONING DETERMINATION

September 30, 2015

Joe Coronati  
Breckenridge Estates Subdivision  
Hudson, NH, 03051



Re: Breckenridge Estates Subdivision, Hudson, NH (Map 186/ Lot 013)

Dear Mr. Coronati,

Your request for zoning review and determination to construct a drainage pond that will impact 17,650 square feet of permanent wetland buffer has been completed.

A Special Exception from the Zoning Board of Adjustment will be required.

Article IX §334-35 (B). Uses within Wetland Conservation District. Uses permitted by special exception. Exceptions are considered upon review by the Conservation Commission and the Planning Board for input to the Zoning Board of Adjustment. The Natural Resources Conservation Service and the State Wetland Board, where applicable as determined by the Conservation Commission, shall also be requested to review any proposed use to assess its environmental effect upon the wetland in question. The Zoning Board of Adjustment shall conduct a review and findings of fact.

Article IX §334-35 (C). All construction activity is expressly prohibited in wetlands and in the Wetland Conservation District, unless the proposed use meets the criteria for a special exception and such a permit has been issued.

This determination may be appealed within 30 days of the receipt of this letter to the Hudson Zoning Board of Adjustment. Please contact me at 886-6005 or via email at [dhebert@hudsonnh.gov](mailto:dhebert@hudsonnh.gov) if you have any questions.

Thank you,

David Hebert  
Acting Zoning Administrator / Code Enforcement Officer



# TOWN OF HUDSON

FIRE DEPARTMENT

INSPECTIONAL SERVICES DIVISION



12 SCHOOL STREET, HUDSON, NEW HAMPSHIRE 03051

Emergency 911  
Business 603-886-6005  
Fax 603-594-1142

Robert M. Buxton  
Chief of Department

## ZONING DETERMINATION

August 21, 2015

Town Planner  
Mr. John Cashell

RE: Conceptual site plan (Breckenridge Estates Subdivision) Spere Road, Hudson, NH  
03051 (Map 186 / Lot 013)

Upon review of the conceptual plans I have the following concerns before determining full compliance with the Town of Hudson zoning ordinance.

### Article XI 334-53 B (Open Space Requirements)

Upon review of the calculations on the conceptual plans, it has been determined the calculation chart is incomplete.

Roadways, driveways, right-of-way, utility easements, parking areas may not be included as part of the open space requirements. The square footages for these areas are not depicted.

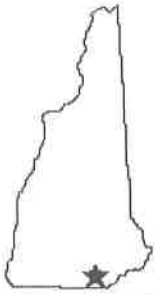
Another concern would be the well protective radii. Numerous lots out of the proposed nine show the well protective radius to be nonconforming by the State of New Hampshire Water Well Board and the Department of Environmental Services. Whenever a protective radius is nonconforming, NHDES requires a release form for protective well radii. The Water well board requires a nonconforming well location form to be submitted.

The proposed driveway for lot 13-2 shows the driveway only six feet wide in areas. The following lots show the driveways in the side setbacks 13-3, 13-4, 13-5, 13-8.

If I may be of further assistance, please contact me at (603) 886-1271 or [Dhebert@hudsonnh.gov](mailto:Dhebert@hudsonnh.gov).

Thank you,

David Hebert  
Acting Zoning Administrator / Code Enforcement Officer



“D”



# TOWN OF HUDSON

## Conservation Commission

Ken Dickinson, Chairman

Nancy Brucker, Selectmen Liaison

12 School Street • Hudson, New Hampshire 03051 • Tel: 603-886-6008 • Fax: 603-816-1291

### Motion to Recommend a Wetlands Special Exception

**Date:** December 14, 2015

**Case:** Breckenridge Estates Subdivision  
50 Spear Road  
Map 186, Lot 013

**Description of work to be performed:** The proposed project entails the construction of a nine lot Open Space residential subdivision along with a new roadway, driveways and associated utilities. Permanent wetland buffer impacts are required to facilitate proper site drainage and pretreatment of storm water prior to discharge into the surrounding area. The permanent buffer impact is approximately 17,650 square feet in total.

Members Present: Ken Dickinson, James Battis, Michael Tranfaglia, Raimundo Matos, William Collins

Conservation Members Stepping Down: None

Alternates Seated: None

**This motion is to recommend approval of the Wetlands Special Exception Application filed by persons representing the proposed Breckenridge Estates Open Space Subdivision. This WSE is for a proposed permanent wetlands buffer impact of approximately 17,650 square feet along the back of proposed map 186: lot 13-1, lot 13-2 and lot 13-3 (Reference Grading, Drainage and Utility Plan; Drawing C4) with the following stipulations as noted below.**

With Stipulations:

1. Construction and restoration shall comply with: BEST MANAGEMENT PRACTICES TO CONSTROL NON-POINT SOURCE POLLUTION: A GUIDE FOR CITIZENS AND TOWN OFFICIALS (NH Department of Environmental Services-Current Issue.)
2. During Construction and restoration erosion control barriers shall be installed and maintained to the satisfaction of the Town Engineer.



("Breckenridge Wetlands Special Exception" motion stipulations continued from page 1.

3. All notes found on the Grading, Drainage and Utility Plan, drawing no. C4 and the Erosion and Sediment Control Details, drawing No. E1 of the construction plan that pertain to alteration of terrain and storm water runoff will be strictly adhered to during all phases of construction.
4. Install approved "Do not cut/Do not disturb town conservation markers along the conservation districts boundaries.
5. Change the current wording from "Temporary Wetlands Buffer Impact" to "Permanent Wetlands Buffer Impact" to better represent what the scope of the project entails.
6. The Foot Bridge that was proposed to facilitate a stream crossing to gain access the "open space" behind future lot 13 and lot 13-6 of map186 shall have no temporary or permanent footings installed and there shall be no permanent disturbance to the surrounding terrain.

**Motion By:** William Collins

**Second By:** James Battis

**Vote:** Favorable: 6 Unfavorable: 0 Abstaining: 0

**Dissent Reason(s):** (see below)

**Approved**

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Ken Dickinson, Chairman

Reason for an unfavorable decision:

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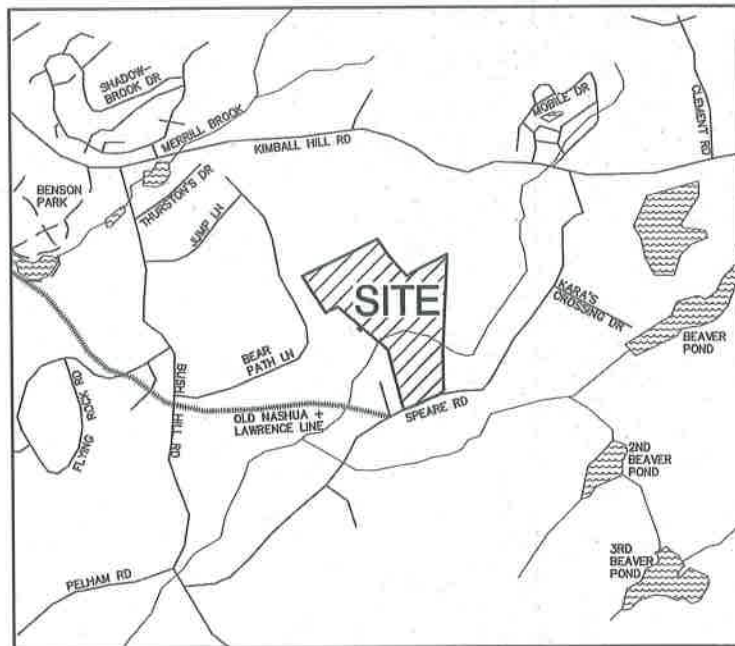
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# OPEN SPACE DEVELOPMENT "BRECKENRIDGE ESTATES" TAX MAP 186, LOT 13 SPEARE ROAD, HUDSON, NH

## GENERAL LEGEND

EXISTING	PROPOSED	DESCRIPTION
---	---	PROPERTY LINES
---	---	SETBACK LINES
---	---	CENTERLINE
---	---	FRESHWATER WETLANDS LINE
---	---	TIDAL WETLANDS LINE
---	---	STREAM CHANNEL
---	---	TREE LINE
---	---	STONEWALL
---	---	BARBED WIRE
---	---	FENCE
---	---	STOCKADE FENCE
---	---	SOIL BOUNDARY
---	---	AQUIFER PROTECTION LINE
---	---	FLOOD PLAIN LINE
---	---	ZONELINE
---	---	EASEMENT
---	---	MAJOR CONTOUR
---	---	MINOR CONTOUR
---	---	EDGE OF PAVEMENT
---	---	VERTICAL GRANITE CURB
---	---	SLOPE GRANITE CURB
---	---	CAPE COD BERM
---	---	POURED CONCRETE CURB
---	---	SILT FENCE
---	---	DRAINAGE LINE
---	---	SEWER LINE
---	---	SEWER FORCE MAIN
---	---	GAS LINE
---	---	WATER LINE
---	---	WATER SERVICE
---	---	OVERHEAD ELECTRIC
---	---	UNDERGROUND ELECTRIC
---	---	GUARDRAIL
---	---	UNDERDRAIN
---	---	FIRE PROTECTION LINE
---	---	THRUST BLOCK
---	---	IRON PIPE/IRON ROD
---	---	DRILL HOLE
---	---	IRON ROD/DRILL HOLE
---	---	STONE/GRANITE BOUND
---	---	SPOT GRADE
---	---	PAVEMENT SPOT GRADE
---	---	CURB SPOT GRADE
---	---	BENCHMARK (TBM)
---	---	DOUBLE POST SIGN
---	---	SINGLE POST SIGN
---	---	WELL
---	---	TEST PIT
---	---	FAILED TEST PIT
---	---	MONITORING WELL
---	---	PERC TEST
---	---	PHOTO LOCATION
---	---	TREES AND BUSHES
---	---	UTILITY POLE
---	---	LIGHT POLES
---	---	DRAIN MANHOLE
---	---	SEWER MANHOLE
---	---	HYDRANT
---	---	WATER GATE
---	---	WATER SHUT OFF
---	---	REDUCER
---	---	SINGLE GRATE CATCH BASIN
---	---	DOUBLE GRATE CATCH BASIN
---	---	TRANSFORMER
---	---	CULVERT W/WINGWALLS
---	---	CULVERT W/FLARED END SECTION
---	---	CULVERT W/STRAIGHT HEADWALL
---	---	STONE CHECK DAM
---	---	DRAINAGE FLOW DIRECTION
---	---	4K SEPTIC AREA
---	---	WETLAND IMPACT
---	---	VEGETATED FILTER STRIP
---	---	RIPRAP
---	---	OPEN WATER
---	---	FRESHWATER WETLANDS
---	---	TIDAL WETLANDS
---	---	STABILIZED CONSTRUCTION ENTRANCE
---	---	CONCRETE
---	---	GRAVEL
---	---	SNOW STORAGE
---	---	RETAINING WALL



LOCUS MAP  
SCALE 1" = 1000'

## SHEET INDEX

CS	COVER SHEET
Y1-Y2	YIELD PLANS
OV1	OVERVIEW SUBDIVISION PLAN
A1-A3	SUBDIVISION PLAN
C1-C3	EXISTING CONDITIONS PLAN
C4	GRADING, DRAINAGE AND UTILITY PLAN
P1	PLAN AND PROFILE
H1	HIGHWAY PLAN
X1-X2	CROSS SECTIONS
D1-D3	DETAIL SHEETS
E1	EROSION AND SEDIMENT CONTROL DETAILS

**CIVIL ENGINEER AND SURVEYOR**  
**JONES & BEACH ENGINEERS, INC.**  
 85 PORTSMOUTH AVENUE  
 PO BOX 219  
 STRATHAM, NH 03885  
 (603) 772-4746  
 CONTACT: JOSEPH CORONATI  
 EMAIL: JCORONATI@JONESANDBEACH.COM

**ELECTRIC**  
 PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE  
 74 OLD DOVER ROAD  
 ROCHESTER, NH 03867  
 (603) 332-4227

**TELEPHONE**  
 FAIRPOINT COMMUNICATIONS  
 1575 GREENLAND ROAD  
 GREENLAND, NH 03840  
 (603) 427-5525  
 CONTACT: JOE CONSIDINE

**WETLAND CONSULTANT**  
 GOVE ENVIRONMENTAL SERVICES, INC.  
 8 CONTINENTAL DRIVE, UNIT H  
 EXETER, NH 03833  
 (603) 778-0644  
 CONTACT: JIM GOVE, CSS, CWS  
 JGOVE@GESINC.BIZ

**TELEPHONE**  
 FAIRPOINT COMMUNICATIONS  
 100 TRI CITY ROAD  
 SOMERWORTH, NH 03878  
 ATTN:DAVE KESTNER  
 (603) 743-1114

**CABLE TV**  
 COMCAST COMMUNICATION CORPORATION  
 334-B CALEF HIGHWAY  
 EPPING, NH 03042-2325  
 (603) 679-5695



**APPLICANT**  
 TUCK REALTY CORP.  
 149 EPPING ROAD, SUITE 2A  
 EXETER, NH 03833

**TOTAL LOT AREA**  
 1,447,050 SQ. FT.  
 33.22 ACRES

APPROVED -- HUDSON, NH  
 PLANNING BOARD

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

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Design: JAC Draft: PBL Date: 7/10/15  
 Checked: JAC Scale: AS NOTED Project No.: 15031  
 Drawing Name: 15031-PLAN SET.dwg  
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0	7/10/15	ISSUED FOR REVIEW	PSL

Designed and Produced In NH

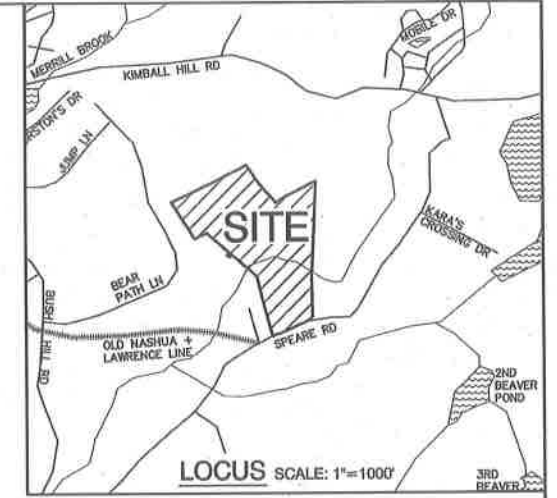
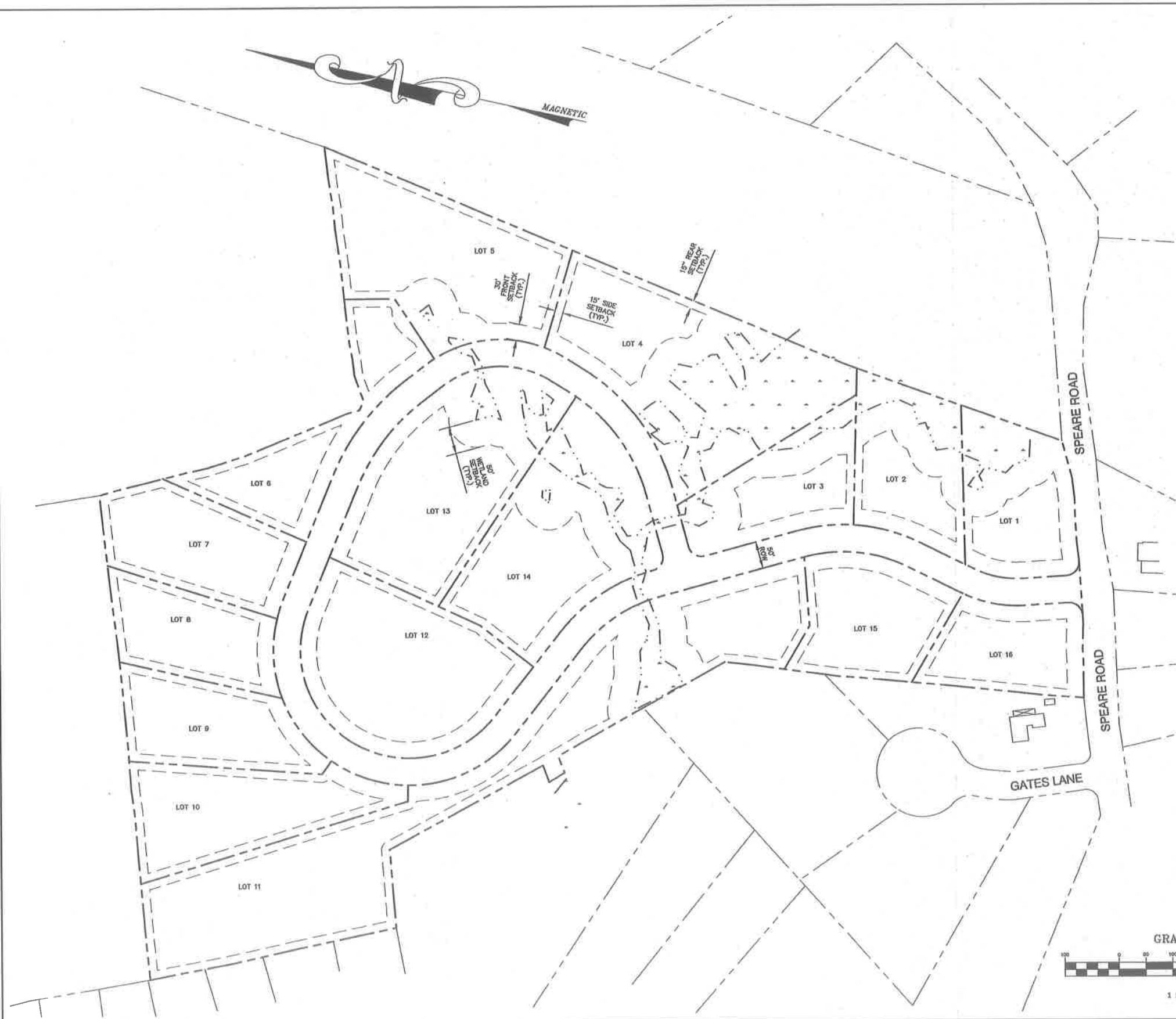
**J/B Jones & Beach Engineers, Inc.**  
 Civil Engineering Services  
 85 Portsmouth Ave. PO Box 219 Stratham, NH 03885  
 603-772-4746 FAX: 603-772-0227 E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: **COVER SHEET**  
 Project: **BRECKENRIDGE ESTATES SUBDIVISION  
SPEARE ROAD, HUDSON, NH 03051**  
 Owner of Record: **DOUGLAS S. SANDERSON  
11 NERSESIAN WAY, HAMPTON, NH 03842**

DRAWING No.  
**CS**  
 SHEET 1 OF 16  
 JBE PROJECT NO. 15031

BRECKENRIDGE ESTATES, HUDSON, NH  
 JBE # 15031 REVISION 5, 12/7/15

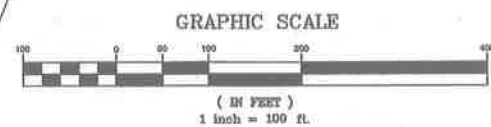
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LOT NO.	GROSS AREA (SF)	WETLANDS (SF)	SLOPES GREATER THAN 25% (SF)	NET AREA (SF)
1	56216	11473	728	44016
2	56672	12326	90	44255
3	53064	7173	912	44979
4	128240	49868	3394	74979
5	101081	793	3108	97180
6	58313	0	5900	52412
7	59524	0	12313	47211
8	47341	0	1219	46122
9	52132	0	1539	50593
10	68048	0	3140	64909
11	202574	7531	56683	138361
12	101488	0	5196	96291
13	107041	5787	5947	95307
14	102790	9604	17053	76123
15	55256	0	4709	50547
16	44779	0	541	44238

**SUBDIVISION NOTES:**

- THE INTENT OF THIS PLAN IS TO PROVIDE A YIELD PLAN TO SHOW A CONVENTIONAL SUBDIVISION OF 16 LOTS ON THIS PROPERTY TO DETERMINE THE BASE DENSITY FOR A CONSERVATION SUBDIVISION.
- ZONING DISTRICT: GENERAL  
 LOT AREA MINIMUM = 43,660 SF CONTIGUOUS UPLAND WITHOUT WATER AND ONSITE SEWAGE DISPOSAL  
 LOT FRONTAGE MINIMUM = 100'  
 BUILDING SETBACKS (MINIMUM):  
 FRONT SETBACK = 30'  
 SIDE SETBACK = 30'  
 REAR SETBACK = 15'  
 WETLAND SETBACK FOR IMPERVIOUS = 50'  
 WETLAND SETBACK FOR SEPTIC = 100'  
 MAXIMUM BUILDING HEIGHT = 38'
- SUBJECT PROPERTY IS NOT LOCATED WITHIN FEDERALLY DESIGNATED 100 YEAR FLOOD HAZARD ZONE.



APPROVED -- HUDSON, NH  
PLANNING BOARD

---

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

APPLICANT  
TUCK REALTY CORP.  
140 EPPING ROAD, SUITE 2A  
EXETER, NH 03833

TOTAL LOT AREA  
1,447,060 SQ. FT.  
33.22 ACRES

Design: JAC    Draft: PSL    Date: 7/10/16  
 Checked: JAC    Scale: AS SHOWN    Project No.: 15031  
 Drawing Name: 15031-PLAN SET.dwg

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0	7/10/15	ISSUED FOR REVIEW	PSL

Designed and Produced in NH

**J/B Jones & Beach Engineers, Inc.**  
 Civil Engineering Services

85 Portsmouth Ave.    603-772-4746  
 PO Box 219    Stratham, NH 03885    FAX: 603-772-0227  
 E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: **YIELD PLAN**  
MAP 186, LOT 13

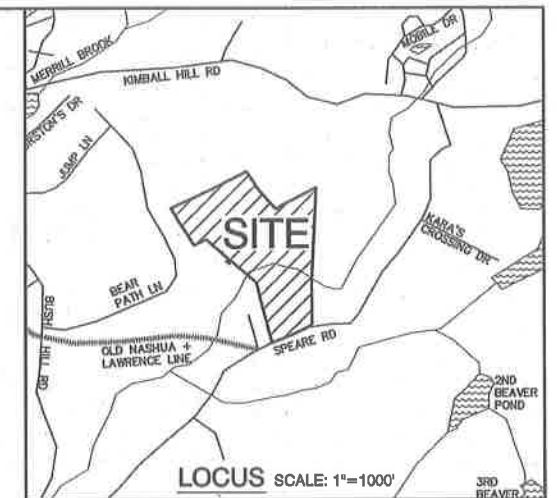
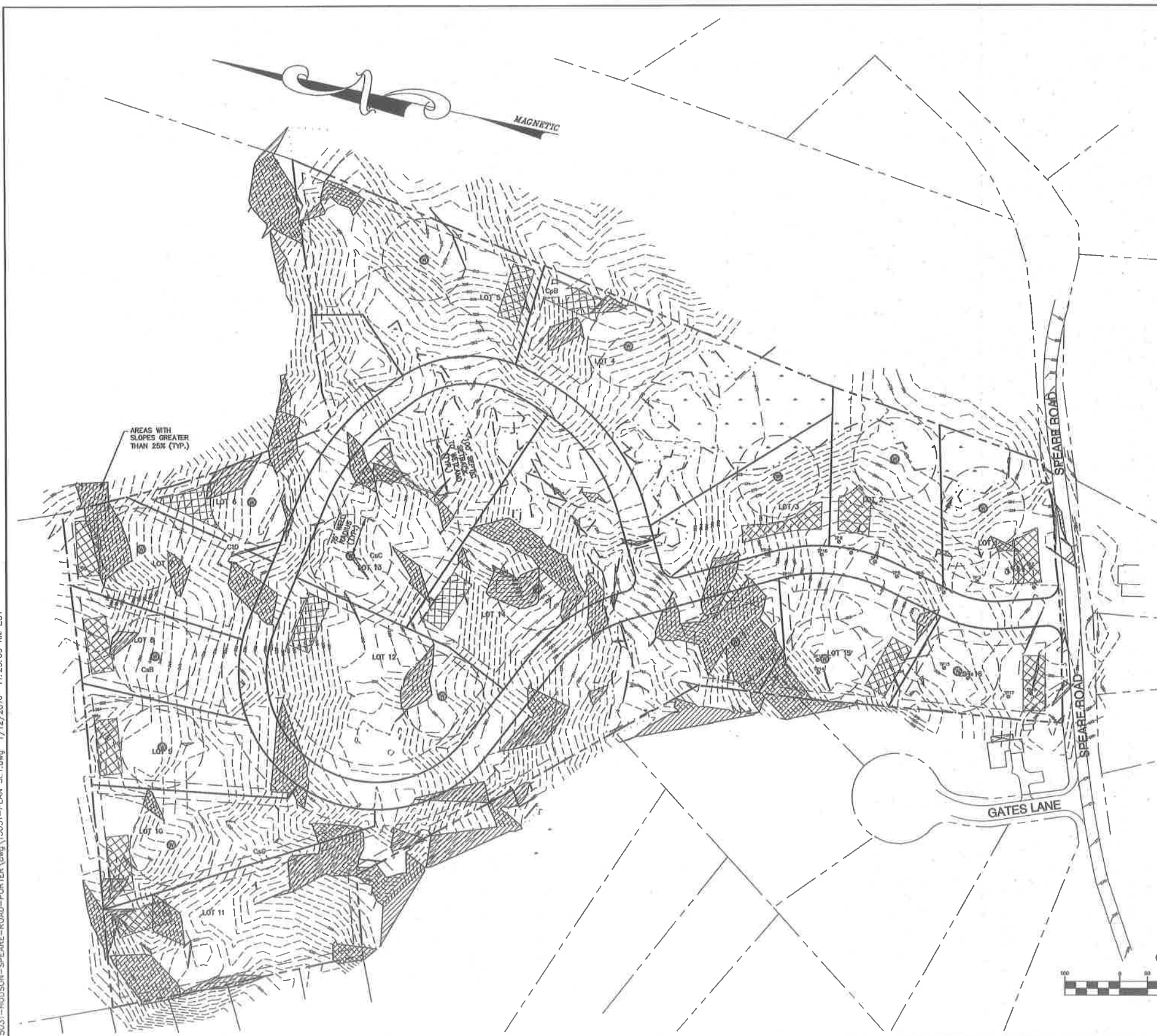
Project: **BRECKENRIDGE ESTATES SUBDIVISION**  
SPEARE ROAD, HUDSON, NH 03051

Owner of Record: **DOUGLAS S. SANDERSON**  
11 NERSESIAN WAY, HAMPTON, NH 03842

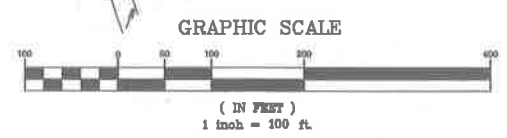
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**Y1**

SHEET 2 OF 10  
JBE PROJECT NO. 15031

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**SCS SOILS**  
 CpB-CHATFIELD-HOLLIS-CANTON COMPLEX  
 3 TO 8 PERCENT SLOPES  
 CpC-CHATFIELD-HOLLIS-CANTON COMPLEX  
 8 TO 15 PERCENT SLOPES  
 CaC - CHATFIELD-HOLLIS COMPLEX,  
 8 TO 15 PERCENT SLOPES  
 Cu- CHOCORUA MUCKY PEAT  
 8 TO 15 PERCENT SLOPES  
 SCS SOILS TAKEN FROM SOIL SURVEY OF  
 HILLSBOROUGH COUNTY  
 EASTERN PLAN, DATED OCT. 81, 1" = 1667'



APPROVED - HUDSON, NH  
 PLANNING BOARD

---

DATE:

APPLICANT  
 TUCK REALTY CORP.  
 148 EPPING ROAD, SUITE 2A  
 EXETER, NH 03833

---

TOTAL LOT AREA  
 1,447,060 SQ. FT.  
 33.22 ACRES

Design: JAC    Draft: PSL    Date: 7/10/15  
 Checked: JAC    Scale: AS SHOWN    Project No.: 15031  
 Drawing Name: 15031-PLAN SET.dwg  
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**J/B Jones & Beach Engineers, Inc.**

85 Portsmouth Ave.    Civil Engineering Services    603-772-4746  
 PO Box 219    Stratham, NH 03885    FAX: 603-772-0227  
 E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: **YIELD PLAN**  
**MAP 188, LOT 13**

Project: **BRECKENRIDGE ESTATES SUBDIVISION**  
**SPEARE ROAD, HUDSON, NH 03051**

Owner of Record: **DOUGLAS S. SANDERSON**  
**11 NERSESIAN WAY, HAMPTON, NH 03842**

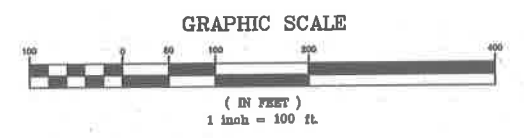
DRAWING No.  
**Y2**  
 SHEET 3 OF 19  
 JBE PROJECT NO. 15031

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**GENERAL LEGEND**

EXISTING	PROPOSED	DESCRIPTION
---	---	PROPERTY LINES
---	---	SETBACK LINES
---	---	FRESHWATER WETLANDS LINE
---	---	FRESHWATER WETLANDS



**APPLICANT**  
 TUCK REALTY CORP.  
 149 EPPING ROAD, SUITE 2A  
 EXETER, NH 03833

**TOTAL LOT AREA**  
 1,447,050 SQ. FT.  
 33.22 ACRES

Design: JAC    Draft: PSL    Date: 7/10/15  
 Checked: JAC    Scale: AS SHOWN    Project No.: 15031  
 Drawing Name: 15031-PLAN SET.dwg

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1	8/18/15	REVISED PER TOWN COMMENTS AND NEW WETLANDS	PSL
0	7/10/15	ISSUED FOR REVIEW	PSL
REV.	DATE	REVISION	BY

Designed and Produced in NH

**J/B Jones & Beach Engineers, Inc.**

85 Portsmouth Ave.    Civil Engineering Services    603-772-4746  
 PO Box 219    Stratham, NH 03885    FAX: 603-772-0227  
 E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: **OVERVIEW SUBDIVISION PLAN**  
 MAP 186, LOT 13

Project: **BRECKENRIDGE ESTATES SUBDIVISION**  
 SPEARE ROAD, HUDSON, NH 03051

Owner of Record: **DOUGLAS S. SANDERSON**  
 11 NERSESIAN WAY, HAMPTON, NH 03842

DRAWING No.  
**OV1**

SHEET 4 OF 19  
 JBE PROJECT NO. 15031

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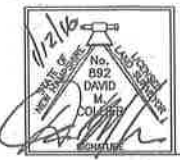
**GENERAL LEGEND**

EXISTING	PROPOSED	DESCRIPTION
		PROPERTY LINES
		SETBACK LINES
		FRESHWATER WETLANDS LINE
		STONEWALL
		IRON PIPE/IRON ROD
		DRILL HOLE
		IRON ROD/DRILL HOLE
		STONE/GRANITE BOUND
		FRESHWATER WETLANDS

**CERTIFICATION:**

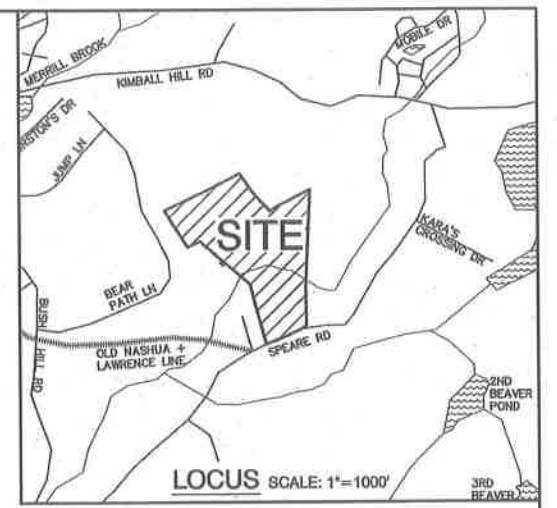
I CERTIFY THAT THIS PLAT WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN UNADJUSTED LINEAR ERROR OF CLOSURE THAT EXCEEDS BOTH THE MINIMUM OF 1:10,000 AS DEFINED IN SECTION 603.04 OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES AND THE MINIMUM OF 1:15,000 AS DEFINED IN SECTION 4.2 OF THE N.H.L.S.A. ETHICS AND STANDARDS.

THIS SURVEY CONFORMS TO A CATEGORY 1 CONDITION 1 SURVEY AS DEFINED IN SECTION 4.1 OF THE N.H.L.S.A. ETHICS AND STANDARDS.



DAVID M. COLLIER, LLS 892  
ON BEHALF OF JONES & BEACH ENGINEERS, INC.

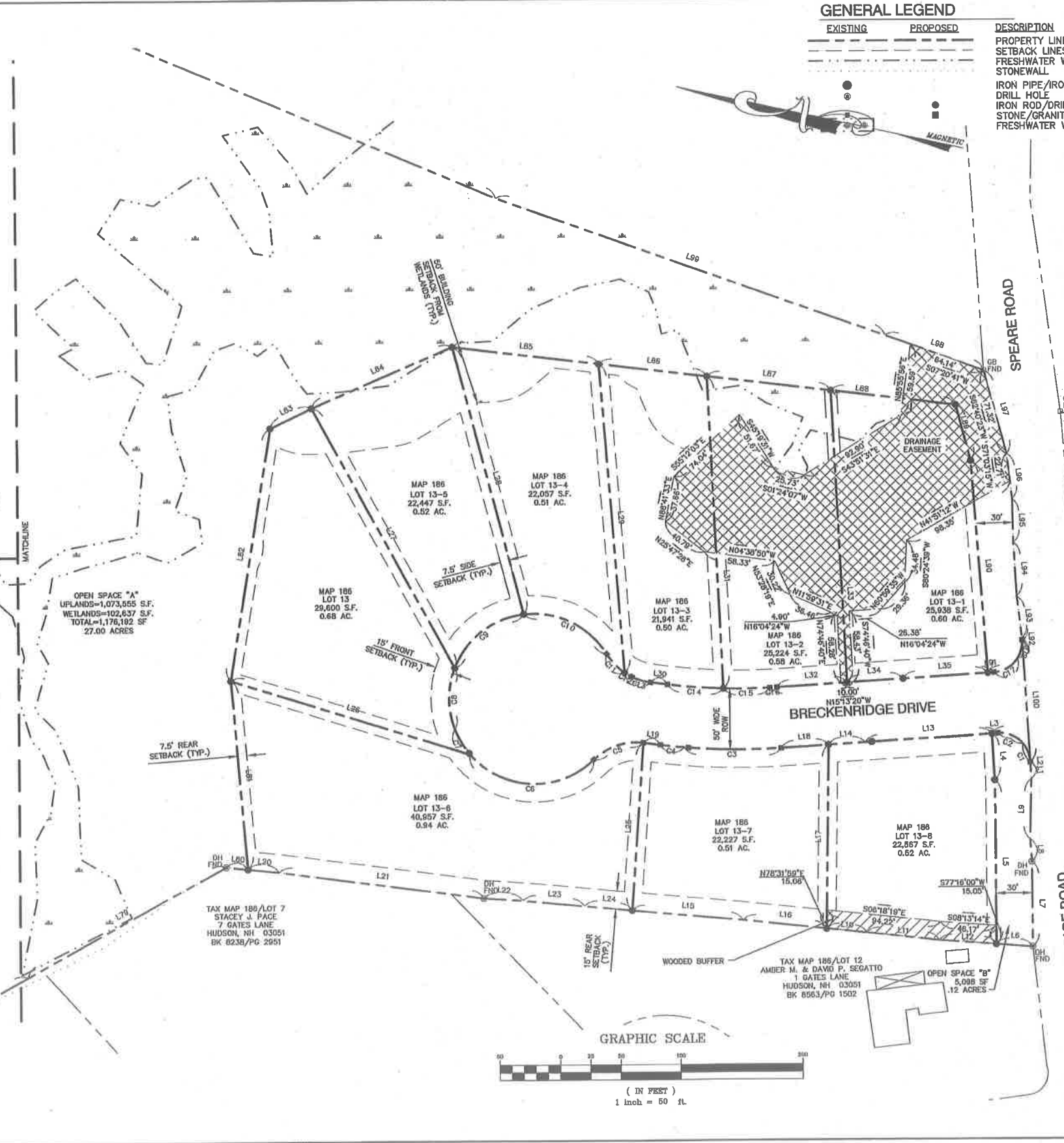
1/12/16  
DATE:



**SUBDIVISION NOTES:**

- THE INTENT OF THIS PLAN IS TO SUBDIVIDE TAX MAP 186, LOT 13 INTO AN OPEN SPACE DEVELOPMENT SUBDIVISION ON THIS PROPERTY, CONSISTING OF 9 LOTS WITH INDIVIDUAL SANITARY SEWER DISPOSAL SYSTEMS AND INDIVIDUAL ON SITE WELLS.
- ZONING DISTRICT: GENERAL. LOT AREA MINIMUM = 50% OF CONVENTIONAL LOT AREA MINIMUM = 21,780 SF. CONTIGUOUS UPLAND NOT CONTAINING SLOPES GREATER THAN 25%. LOT FRONTAGE MINIMUM = 50% OF CONVENTIONAL LOT FRONTAGE MINIMUM = 75'. BUILDING SETBACKS (MINIMUM) = 50% OF CONVENTIONAL BUILDING SETBACKS (EXCEPT WHERE PROPERTY ABUTS A NON-OSD RESIDENTIAL LOT): FRONT SETBACK = 15', SIDE SETBACK = 7.5', REAR SETBACK = 7.5'. WETLAND SETBACK FOR IMPERVIOUS = 50'. WETLAND SETBACK FOR SEPTIC = 100'. MAXIMUM BUILDING HEIGHT = 38'.
- SHDES APPROVAL FOR SUBDIVISION PERMIT NO. \_\_\_\_\_ DATED \_\_\_\_\_.
- THIS PLAN SET HAS BEEN PREPARED BY JONES & BEACH ENGINEERS, INC. FOR MUNICIPAL AND STATE APPROVALS AND FOR CONSTRUCTION BASED ON DATA OBTAINED FROM ON-SITE FIELD SURVEY AND EXISTING MUNICIPAL RECORDS. THROUGHOUT THE CONSTRUCTION PROCESS, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY OF ANY FIELD DISCREPANCY FROM DATA AS SHOWN ON THE DESIGN PLANS, INCLUDING ANY UNFORESEEN CONDITIONS, SUBSURFACE OR OTHERWISE, FOR EVALUATION AND RECOMMENDATIONS. ANY CONTRADICTION BETWEEN ITEMS ON THIS PLAN/PLAN SET, OR BETWEEN THE PLANS AND ON-SITE CONDITIONS, MUST BE RESOLVED BEFORE RELATED CONSTRUCTION HAS BEEN INITIATED.
- SUBJECT PROPERTY IS NOT LOCATED WITHIN FEDERALLY DESIGNATED 100 YEAR FLOOD HAZARD ZONE. REFERENCE FEMA COMMUNITY PANEL NO. 3301C05190, DATED SEPTEMBER 25, 2008.
- ALL CONSTRUCTION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (S.W.P.P.), THIS DOCUMENT IS TO BE KEPT ON-SITE AT ALL TIMES AND UPDATED AS REQUIRED.
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER, ARCHITECT AND/OR OWNER, IN ORDER TO OBTAIN AND/OR PAY ALL THE NECESSARY LOCAL PERMITS, FEES AND BONDS.
- ALL CONSTRUCTION WILL CONFORM TO TOWN STANDARDS AND REGULATIONS, AND NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, WHICHEVER IS MORE STRINGENT.
- ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) RULES AND REGULATIONS.
- GRANITE BOUNDS TO BE SET AT ALL ROADWAY POINTS OF CURVATURE AND TANGENCY. IRON RODS WITH SURVEY CAPS TO BE SET AT ALL PROPERTY CORNERS AND ANGLE POINTS, UNLESS OTHERWISE INDICATED. ALL MONUMENTS SET ARE 5/8" IRON RODS WITH ALUMINUM CAPS MARKED "JONES & BEACH ENGINEERS BOUNDARY, DO NOT DISTURB, STRATHAM, N.H." AS SHOWN.
- LANDOWNERS ARE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL WETLAND REGULATIONS, INCLUDING PERMITTING REQUIRED UNDER THESE REGULATIONS.
- UPON APPROVAL BY THE TOWN, THE PROPOSED ROAD WILL BE CONVEYED TO THE TOWN.
- ALL UTILITIES SHALL BE INSTALLED UNDERGROUND.
- ALL BOOK AND PAGE NUMBERS REFER TO THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS.
- THE TAX MAP AND LOT NUMBERS AND ABUTTING OWNERS ARE BASED ON THE TOWN OF HUDSON TAX RECORDS AND ARE SUBJECT TO CHANGE.
- RESEARCH WAS PERFORMED AT THE TOWN OF HUDSON ASSESSORS OFFICE AND THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS.
- THIS SURVEY IS NOT A CERTIFICATION TO OWNERSHIP OR TITLE OF LANDS SHOWN. OWNERSHIP AND ENCUMBRANCES ARE MATTERS OF TITLE EXAMINATION NOT OF A BOUNDARY SURVEY. THE INTENT OF THIS PLAN IS TO RETRACE THE BOUNDARY LINES OF DEEDS REFERENCED HEREON. OWNERSHIP OF ADJOINING PROPERTIES IS ACCORDING TO ASSESSOR'S RECORDS. THIS PLAN MAY OR MAY NOT INDICATE ALL ENCUMBRANCES EXPRESSED, IMPLIED OR PRESCRIPTIVE.
- ANY USE OF THIS PLAN AND OR ACCOMPANYING DESCRIPTIONS SHOULD BE DONE WITH LEGAL COUNSEL TO BE CERTAIN THAT TITLES ARE CLEAR, THAT INFORMATION IS CURRENT, AND THAT ANY NECESSARY CERTIFICATES ARE IN PLACE FOR A PARTICULAR CONVEYANCE, OR OTHER USES.
- OPEN SPACE CALCULATION:  
TOTAL PARCEL = 33.22 ACRES  
50% OPEN SPACE = 16.61 ACRES REQUIRED  
TOTAL OPEN SPACE PROVIDED = 27.11 ACRES (81.6%)
- ALL HOMES TO HAVE A CRUSHED STONE DRIP EDGE FOR INFILTRATION OF STORMWATER. A DETAIL IS PROVIDED ON SHEET D3 OF THIS PLAN SET AND NEEDS TO BE IN PLACE AND FAVORABLY INSPECTED PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY.

LOT NO.	GROSS AREA (SF)	WETLANDS (SF)	SLOPES GREATER THAN 25% (SF)	NET AREA (SF)
13	29600	0	7144	22456
13-1	25938	1769	922	23247
13-2	25224	2515	208	22500
13-3	21941	78	0	21864
13-4	22057	0	9	22048
13-5	22447	413	0	22034
13-6	40957	0	18577	22380
13-7	22227	0	172	22055
13-8	22567	0	212	22355



APPROVED - HUDSON, NH  
PLANNING BOARD

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

APPLICANT  
TUCK REALTY CORP.  
149 EPPING ROAD, SUITE 2A  
EXETER, NH 03833

TOTAL LOT AREA  
1,447,060 SQ. FT.  
33.22 ACRES

Design: JAC    Draft: PSL    Date: 7/10/16  
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Drawing Name: 15031-PLAN SET.dwg

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0	7/10/16	ISSUED FOR REVIEW	PSL
REV.	DATE	REVISION	BY

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**J/B Jones & Beach Engineers, Inc.**

85 Portsmouth Ave.    Civil Engineering Services    603-772-4748  
PO Box 219    Stratham, NH 03885    FAX: 603-772-0227  
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: **SUBDIVISION PLAN**  
MAP 186, LOT 13

Project: **BRECKENRIDGE ESTATES SUBDIVISION**  
SPEARE ROAD, HUDSON, NH 03051

Owner of Record: **DOUGLAS S. SANDERSON**  
11 NERSESIAN WAY, HAMPTON, NH 03842

DRAWING No.  
**A1**  
SHEET 5 OF 19  
JBE PROJECT NO. 15031

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LINE	LENGTH	BEARING
L1	14.08'	N75°05'42"E
L2	0.46'	N74°02'33"E
L3	4.97'	N18°02'08"W
L4	38.38'	S74°24'16"W
L5	135.35'	S77°20'27"W
L6	30.09'	S08°13'14"E
L7	79.11'	N77°16'00"E
L8	18.54'	N73°40'00"E
L9	49.85'	N78°48'33"E
L10	33.26'	S06°18'19"E
L11	59.85'	S06°18'19"E
L12	47.80'	S08°13'14"E
L13	105.01'	N18°02'08"W
L14	30.10'	N18°02'08"W
L15	91.83'	S07°09'23"E
L16	68.90'	S06°18'19"E
L17	101.76'	N78°31'59"E
L18	36.81'	N18°02'08"W
L19	14.31'	N05°09'02"W
L20	25.40'	S06°21'33"E
L21	189.38'	S04°48'11"E
L22	32.13'	S08°31'41"E
L23	60.94'	S06°58'30"E
L24	39.89'	S07°09'23"E
L25	138.87'	N81°45'12"E
L26	308.34'	N03°02'28"E
L27	243.47'	S49°12'43"W
L28	227.61'	N63°04'48"E
L29	255.20'	N73°10'06"E
L30	14.31'	S05°09'02"E
L31	257.30'	S74°56'51"W
L32	67.62'	S16°02'08"E
L33	246.75'	S74°48'40"W
L34	46.03'	S18°02'08"E
L35	70.44'	S18°02'08"E
L36	1039.78'	N10°40'03"E
L37	18.08'	S71°30'41"W
L38	38.69'	S71°44'22"W
L39	30.89'	S89°25'33"W
L40	23.36'	S87°59'41"W
L41	43.01'	S72°42'26"W
L42	88.06'	S89°34'13"W
L43	90.12'	S71°50'18"W
L44	85.02'	S71°13'31"W
L45	31.10'	S86°46'10"W
L46	30.39'	S71°36'01"W
L47	48.78'	S58°23'31"W
L48	19.03'	N78°52'23"W
L49	24.54'	N27°45'31"W
L50	21.33'	N35°00'40"W
L51	72.86'	N34°42'00"W
L52	108.07'	N34°18'21"W
L53	9.89'	N20°58'33"W
L54	64.92'	N29°56'13"W
L55	36.29'	N24°45'01"W
L56	81.54'	N26°25'41"W
L57	56.97'	N26°20'33"W
L58	29.66'	N28°42'58"W
L59	177.38'	S71°21'36"W
L60	107.69'	S70°25'38"W
L61	81.88'	S71°58'39"W
L62	104.98'	S72°35'08"W
L63	75.99'	S73°33'14"W
L64	40.85'	S70°04'58"W
L65	40.32'	S72°42'13"W
L66	41.42'	S73°21'36"W
L67	159.59'	S72°47'19"W
L68	71.30'	S71°43'09"W
L69	53.24'	S23°46'27"E
L70	105.00'	S24°34'24"E
L71	125.33'	S24°43'10"E
L72	160.10'	S24°11'58"E
L73	142.53'	N73°14'03"E
L74	323.68'	S41°06'02"E
L75	32.99'	S87°33'47"W
L76	33.61'	S43°11'41"E
L77	33.00'	N88°28'16"E
L78	168.08'	S41°42'01"E
L79	183.94'	S41°22'12"E
L80	17.98'	S06°21'33"E
L81	158.97'	N72°48'10"E
L82	210.16'	N88°31'06"E
L83	37.88'	S38°07'02"E
L84	128.19'	S36°47'58"E
L85	121.05'	S02°33'21"E
L86	90.17'	S02°33'21"E
L87	102.05'	S09°33'21"E
L88	103.36'	S09°33'21"E
L89	47.68'	S82°42'23"W
L90	178.19'	S73°18'57"W
L91	5.03'	S18°02'08"E
L92	2.75'	N74°02'33"E
L93	35.01'	N70°31'42"E
L94	44.31'	N74°18'10"E
L95	38.00'	N78°16'47"E
L96	37.22'	N71°03'15"E
L97	71.32'	N82°40'23"E
L98	85.47'	N07°20'41"E
L99	338.88'	N07°20'41"E
L100	100.00'	N74°02'33"E

CURVE	DELTA	RADIUS	LENGTH
C1	36°52'12"	25.00'	16.09'
C2	53°12'29"	25.00'	23.22'
C3	8°41'43"	825.00'	79.66'
C4	2°11'23"	825.00'	29.06'
C5	51°18'04"	50.00'	44.78'
C6	23°15'18"	70.00'	113.93'
C7	18°59'25"	70.00'	24.42'
C8	42°09'08"	70.00'	51.90'
C9	62°01'01"	70.00'	75.77'
C10	66°13'16"	70.00'	79.85'
C11	25°00'30"	50.00'	21.82'
C12	7°43'24"	50.00'	6.75'
C13	18°34'40"	50.00'	16.21'
C14	5°35'28"	475.00'	46.35'
C15	43°41'13"	475.00'	37.89'
C16	0°43'28"	475.00'	6.00'
C17	53°03'08"	25.00'	23.15'
C18	33°39'16"	25.32'	14.87'

**CERTIFICATION:**  
 I CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN UNADJUSTED LINEAR ERROR OF CLOSURE THAT EXCEEDS BOTH THE MINIMUM OF 1:10,000 AS DEFINED IN SECTION 503.04 OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES AND THE MINIMUM OF 1:15,000 AS DEFINED IN SECTION 4.2 OF THE N.H.L.S.A. ETHICS AND STANDARDS.

THIS SURVEY CONFORMS TO A CATEGORY 1 CONDITION 1 SURVEY AS DEFINED IN SECTION 4.1 OF THE N.H.L.S.A. ETHICS AND STANDARDS.



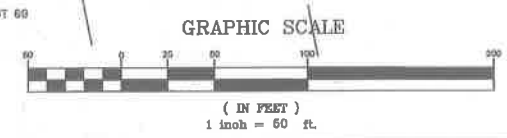
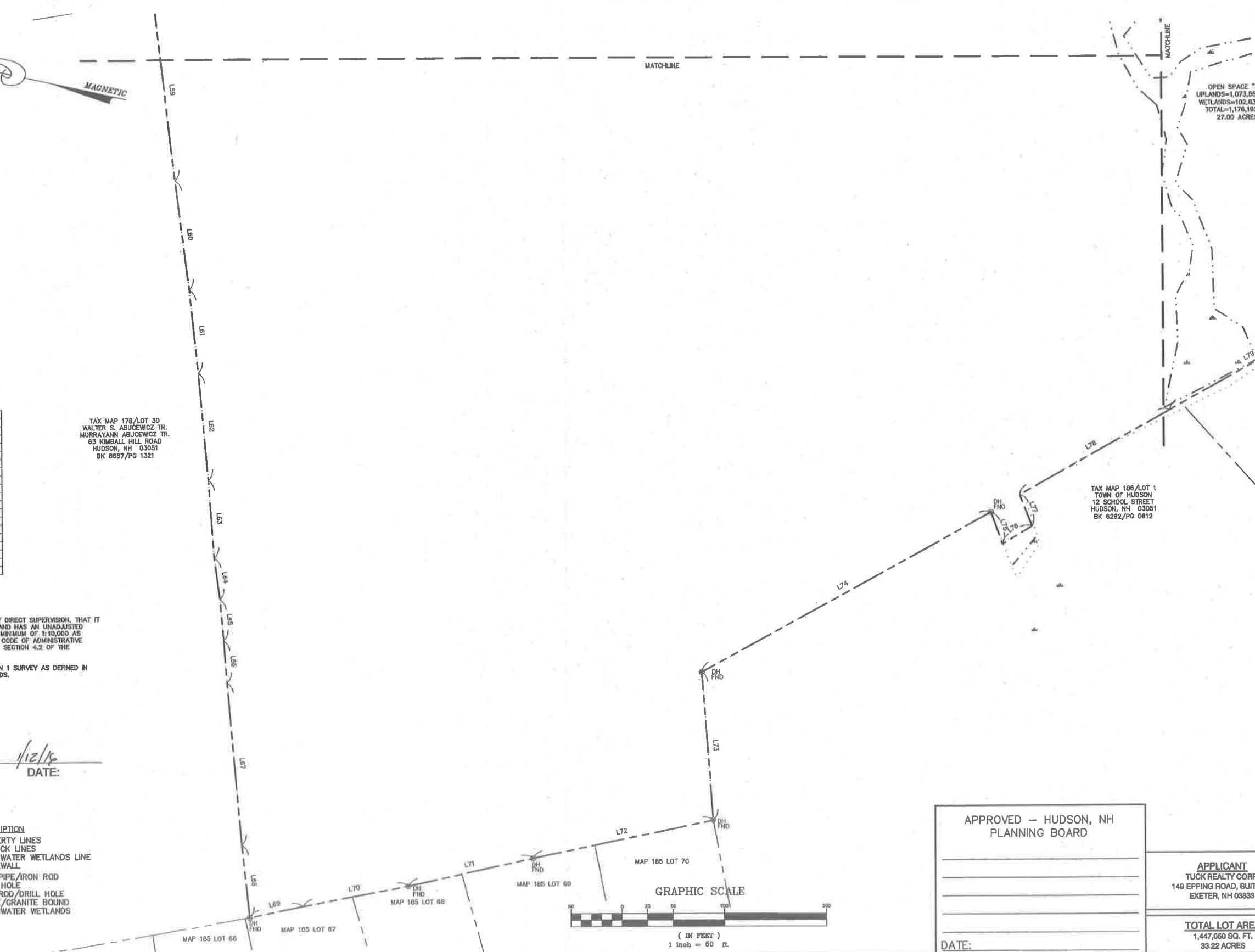
**DAVID M. COLLIER, LLS 892**  
 ON BEHALF OF JONES & BEACH ENGINEERS, INC.

DATE: 1/12/16

EXISTING	PROPOSED	DESCRIPTION
---	---	PROPERTY LINES
---	---	SETBACK LINES
---	---	FRESHWATER WETLANDS LINE
---	---	STONEWALL
●	●	IRON PIPE/IRON ROD
○	○	DRILL HOLE
○	○	IRON ROD/DRILL HOLE
■	■	STONE/GRANITE BOUND
■	■	FRESHWATER WETLANDS

TAX MAP 178/LOT 30  
 WALTER S. ABUCWICZ TR.  
 MURRAYANN ABUCWICZ TR.  
 83 KIMBALL HILL ROAD  
 HUDSON, NH 03051  
 BK 8867/PG 1321

TAX MAP 186/LOT 1  
 TOWN OF HUDSON  
 12 SCHOOL STREET  
 HUDSON, NH 03051  
 BK 6282/PG 0612



APPROVED - HUDSON, NH  
 PLANNING BOARD

DATE:

APPLICANT  
 TUCK REALTY CORP.  
 140 EPPING ROAD, SUITE 2A  
 EXETER, NH 03833

TOTAL LOT AREA  
 1,447,060 SQ. FT.  
 33.22 ACRES

Design: JAC	Draft: PSL	Date: 7/10/15
Checked: JAC	Scale: AS SHOWN	Project No.: 15031
Drawing Name: 15031-PLAN SET.dwg		
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.		



REV.	DATE	REVISION	BY
4	12/18/15	REVISED PER CONSERVATION COMMISSION COMMENTS	PSL
3	12/7/15	MINOR REVISIONS	PSL
2	9/25/15	PREPARED FOR PLANNING BOARD SUBMISSION	PBL
1	8/18/15	REVISED PER TOWN COMMENTS AND NEW WETLANDS	PBL
0	7/10/15	ISSUED FOR REVIEW	PSL

Designed and Produced in NH

**J/B Jones & Beach Engineers, Inc.**

85 Portsmouth Ave. Civil Engineering Services 603-772-4746  
 PO Box 219 Stratham, NH 03885 FAX: 603-772-0227  
 E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: **SUBDIVISION PLAN**  
 MAP 186, LOT 13

Project: **BRECKENRIDGE ESTATES SUBDIVISION**  
 SPEARE ROAD, HUDSON, NH 03051

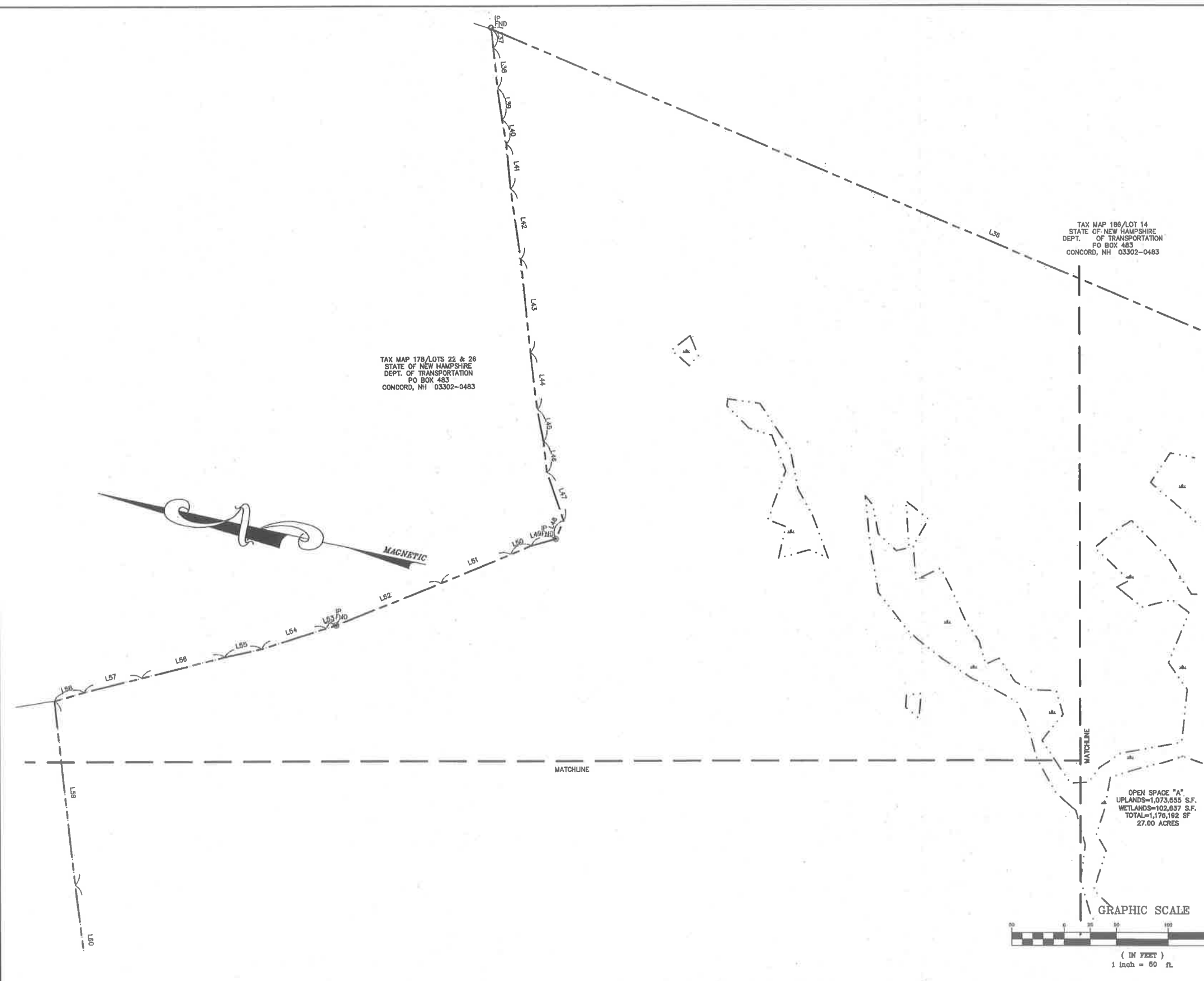
Owner of Record: **DOUGLAS S. SANDERSON**  
 11 NERSESIAN WAY, HAMPTON, NH 03842

DRAWING NO.

**A2**

SHEET 6 OF 19  
 JBE PROJECT NO. 15031

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**ADDITIONAL ABUTTERS:**

- TAX MAP 177 LOT 48  
ELAINE P. & FRANK W. YEN  
51 BEAR PATH LANE  
HUDSON, NH 03051  
BK 6171/PG 0047
- TAX MAP 177 LOT 50  
ROBERT F. & JEAN M. MILKIE  
49 BEAR PATH LANE  
HUDSON, NH 03051  
BK 6180/PG 1993
- TAX MAP 177 LOT 51  
KANSTANTIN AUSIANNIKAU  
47 BEAR PATH LANE  
HUDSON, NH 03051  
BK 6009/PG 1798
- TAX MAP 177 LOT 52  
TODD J. & KATHRYN H. COPPI  
45 BEAR PATH LANE  
HUDSON, NH 03051  
BK 7008/PG 1938
- TAX MAP 177 LOT 53  
GREGORY M. & TIFFANY A. GAGNON  
46 BEAR PATH LANE  
HUDSON, NH 03051  
BK 8263/PG 1914
- TAX MAP 177 LOT 54  
MARINELLI REVOCABLE TRUST  
CARMINE MARINELLI, TRUSTEE  
PO BOX 8103  
NASHUA, NH 03080-8103  
BK 8589/PG 2000
- TAX MAP 185/LOT 66  
MATTHEW H. MEDEROS  
LAURE SCODRIS  
43 BEAR PATH LANE  
HUDSON, NH 03051  
BK 8573/PG 1640
- TAX MAP 185/LOT 67  
ROBERT J. FLOHR, SR.  
JEANNE A. FLOHR  
41 BEAR PATH LANE  
HUDSON, NH 03051  
BK 6377/PG 0218
- TAX MAP 185/LOT 68  
ANDREAS DOMINGUEZ  
27 BEAR PATH LANE  
HUDSON, NH 03051  
BK 8861/PG 0614
- TAX MAP 185/LOT 70  
LEE A. & JULIE A. SHAPPY  
35 BEAR PATH LANE  
HUDSON, NH 03051  
BK 6188/PG 0680
- TAX MAP 185/LOT 71  
CLAUDIA E. GOLDA-DOMINGUEZ  
27 BEAR PATH LANE  
HUDSON, NH 03051  
BK 8861/PG 0614
- TAX MAP 186/LOT 2  
JAMIE L. WHITMAN  
146 MEADOWSWEET COURT  
WINSTON SALEM, NC 27107  
BK 6686/PG 0835
- TAX MAP 186/LOT 3  
JAMES A. & LISA L. STEJSKAL  
29 BEAR PATH LANE  
HUDSON, NH 03051  
BK 8208/PG 2322
- TAX MAP 186/LOT 4  
VINCENT J. GNATEK  
38 1/2 SPEARE ROAD  
HUDSON, NH 03051  
BK 8208/PG 0286
- TAX MAP 186/LOT 5  
JAMES D. & KRISTIN M. PAQUETTE  
2 GATES LANE  
HUDSON, NH 03051  
BK 7303/PG 0438
- TAX MAP 186/LOT 6  
JAMES E. & RM M. NORMAND  
4 GATES LANE  
HUDSON, NH 03051  
BK 7328/PG 0842
- TAX MAP 186/LOT 15  
THOMAS P. & SUSAN L. DUVAL  
80 SPEARE ROAD  
HUDSON, NH 03051  
BK 6877/PG 0404
- TAX MAP 186/LOT 16  
RONALD A. & CARLA A. FRASER  
64 SPEARE ROAD  
HUDSON, NH 03051  
BK 6958/PG 0485
- TAX MAP 186/LOT 17  
BRIAN M. MALING  
88 SPEARE ROAD  
HUDSON, NH 03051  
BK 8511/PG 0343
- TAX MAP 186/LOT 24  
EAGLES NEST ESTATES LLC  
2 MAJESTIC AVENUE  
PELHAM, NH 03078-5005  
BK 8221/PG 0189
- TAX MAP 186/LOT 28  
JOSEPH R. & ALINE T. BOUTIN  
61 SPEARE ROAD  
HUDSON, NH 03051  
BK 8327/PG 0234
- TAX MAP 186/LOT 27  
STEVEN A. & TRISHA H. GAGNON  
51 SPEARE ROAD  
HUDSON, NH 03051  
BK 8921/PG 0788
- TAX MAP 186/LOT 28  
NORMAN & KENDALL GALLER  
47 SPEARE ROAD  
HUDSON, NH 03051  
BK 6007/PG 0333
- TAX MAP 186/LOT 29  
MATTHEW & CHARLENE BROWN  
45 SPEARE ROAD  
HUDSON, NH 03051  
BK 6608/PG 0039
- TAX MAP 186/LOT 30  
DAVID & KAREN BURNELL  
41 SPEARE ROAD  
HUDSON, NH 03051  
BK 2791/PG 0105

**CERTIFICATION:**

I CERTIFY THAT THIS PLAT WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN UNADJUSTED LINEAR ERROR OF CLOSURE THAT EXCEEDS BOTH THE MINIMUM OF 1:10,000 AS DEFINED IN SECTION 803.04 OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES AND THE MINIMUM OF 1:15,000 AS DEFINED IN SECTION 4.2 OF THE N.H.L.S.A. ETHICS AND STANDARDS.

THIS SURVEY CONFORMS TO A CATEGORY 1 CONDITION 1 SURVEY AS DEFINED IN SECTION 4.1 OF THE N.H.L.S.A. ETHICS AND STANDARDS.



DAVID M. COLLIER, LLS 892  
ON BEHALF OF JONES & BEACH ENGINEERS, INC.

DATE: 1/12/16

**GENERAL LEGEND**

EXISTING	PROPOSED	DESCRIPTION
---	---	PROPERTY LINES
---	---	SETBACK LINES
---	---	FRESHWATER WETLANDS LINE
---	---	STONEWALL
●	●	IRON PIPE/IRON ROD
○	○	DRILL HOLE
■	■	IRON ROD/DRILL HOLE
■	■	STONE/GRANITE BOUND
■	■	FRESHWATER WETLANDS

APPROVED -- HUDSON, NH  
PLANNING BOARD

DATE:

APPLICANT  
TUCK REALTY CORP.  
149 EPPING ROAD, SUITE 2A  
EXETER, NH 03833

TOTAL LOT AREA  
1,447,050 SQ. FT.  
33.22 ACRES

Design: JAC	Draft: PSL	Date: 7/10/15
Checked: JAC	Scale: AS SHOWN	Project No.: 15031
Drawing Name: 15031-PLAN SET.dwg		
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.		



REV.	DATE	REVISION	BY
4	12/18/15	REVISED PER CONSERVATION COMMISSION COMMENTS	PSL
3	12/7/15	MINOR REVISIONS	PSL
2	9/25/15	PREPARED FOR PLANNING BOARD SUBMISSION	PSL
1	8/18/15	REVISED PER TOWN COMMENTS AND NEW WETLANDS	PSL
0	7/10/15	ISSUED FOR REVIEW	PSL

Designed and Produced in NH

**J/B Jones & Beach Engineers, Inc.**

85 Portsmouth Ave. Civil Engineering Services 603-772-4748  
PO Box 219 Stratham, NH 03885 FAX: 603-772-0227  
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: **SUBDIVISION PLAN**  
MAP 186, LOT 13

Project: **BRECKENRIDGE ESTATES SUBDIVISION**  
SPEARE ROAD, HUDSON, NH 03051

Owner of Record: **DOUGLAS S. SANDERSON**  
11 NERSESIAN WAY, HAMPTON, NH 03842

DRAWING No.  
**A3**  
SHEET 7 OF 19  
JBE PROJECT NO. 15031



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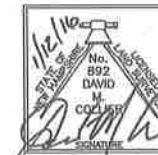
**PLAN REFERENCES:**

1. LOT LINE RELOCATION PLAN-SPEARE ROAD, HUDSON, N.H. FOR FIR REALTY DATED JUNE 1985 AND REDORDED AS PLAN #19065 H.C.R.D.
2. NHDOT R.O.W. PLAN - NASHUA - HUDSON CIRCUMFERENTIAL HIGHWAY, N.H. TURNPIKE PROJECT 10625-J, #10644A SOUTHERN SEGMENT, FILE 55139 APPROVAL DATE 5-14-91. PROJECT 10625-J, #10644A SOUTHERN SEGMENT, FILE 65139 APPROVAL DATE 5-14-91.

**CERTIFICATION:**

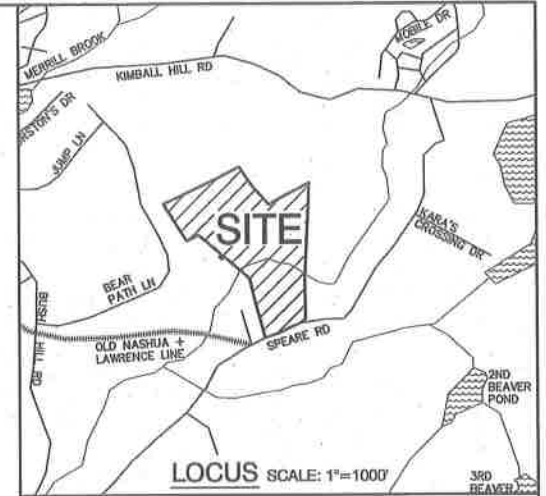
I CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN UNADJUSTED LINEAR ERROR OF CLOSURE THAT EXCEEDS BOTH THE MINIMUM OF 1:10,000 AS DEFINED IN SECTION 603.04 OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES AND THE MINIMUM OF 1:15,000 AS DEFINED IN SECTION 4.2 OF THE N.H.L.S.A. ETHICS AND STANDARDS.

THIS SURVEY CONFORMS TO A CATEGORY 1 CONDITION 1 SURVEY AS DEFINED IN SECTION 4.1 OF THE N.H.L.S.A. ETHICS AND STANDARDS.



DAVID M. COLLIER, LLS 892  
ON BEHALF OF JONES & BEACH ENGINEERS, INC.

1/12/16  
DATE:



**EXISTING CONDITIONS NOTES:**

1. UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER JONES & BEACH ENGINEERS, INC., NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY 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-DIG-SAFE (1-888-344-7233).
2. VERTICAL DATUM: ASSUMED. HORIZONTAL DATUM: ASSUMED
3. SUBJECT PROPERTY IS NOT LOCATED WITHIN FEDERALLY DESIGNATED 100 YEAR FLOOD HAZARD ZONE. REFERENCE FEMA COMMUNITY PANEL NO. 3301C00516D, DATED SEPTEMBER 26, 2008.
4. THE LIMITS OF JURISDICTIONAL WETLANDS WERE DELINEATED BY JIM GOVE, CWS, CSS OF GOVE ENVIRONMENTAL SERVICES, INC. DURING SUMMER, 2015, IN ACCORDANCE WITH THE FOLLOWING GUIDANCE DOCUMENTS:
  - a. THE CORPS OF ENGINEERS FEDERAL MANUAL FOR IDENTIFYING AND DELINEATING JURISDICTIONAL WETLANDS.
  - b. THE NORTH CENTRAL & NORTHEAST REGIONAL SUPPLEMENT TO THE FEDERAL MANUAL.
  - c. THE CURRENT VERSION OF THE FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND, AS PUBLISHED BY THE NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION AND/OR THE CURRENT VERSION OF THE FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, AS PUBLISHED BY THE USDA, NRCS, AS APPROPRIATE.
  - d. THE CURRENT NATIONAL LIST OF PLANT SPECIES THAT OCCUR IN WETLANDS, AS PUBLISHED BY THE US FISH AND WILDLIFE SERVICE.
5. TEST PITS PERFORMED BY SANDRA BRETON, JONES & BEACH ENGINEERS, INC., 3/27/03.
6. WETLAND BOUNDARIES AND CONSTRUCTION LIMITS ARE TO BE CLEARLY MARKED PRIOR TO THE START OF CONSTRUCTION.

**GENERAL LEGEND**

EXISTING	DESCRIPTION
---	PROPERTY LINES
---	SETBACK LINES
---	FRESHWATER WETLANDS LINE
---	TREE LINE
---	STONEWALL
---	SOIL BOUNDARY
---	MAJOR CONTOUR
---	MINOR CONTOUR
---	EDGE OF PAVEMENT
---	OVERHEAD ELECTRIC
---	IRON PIPE/IRON ROD
---	DRILL HOLE
---	STONE/GRANITE BOUND
---	BENCHMARK (TBM)
---	TEST PIT
---	UTILITY POLE
---	FRESHWATER WETLANDS
---	SLOPES OVER 25%

APPROVED - HUDSON, NH  
PLANNING BOARD

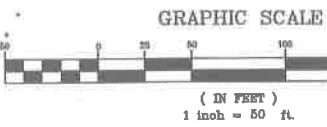
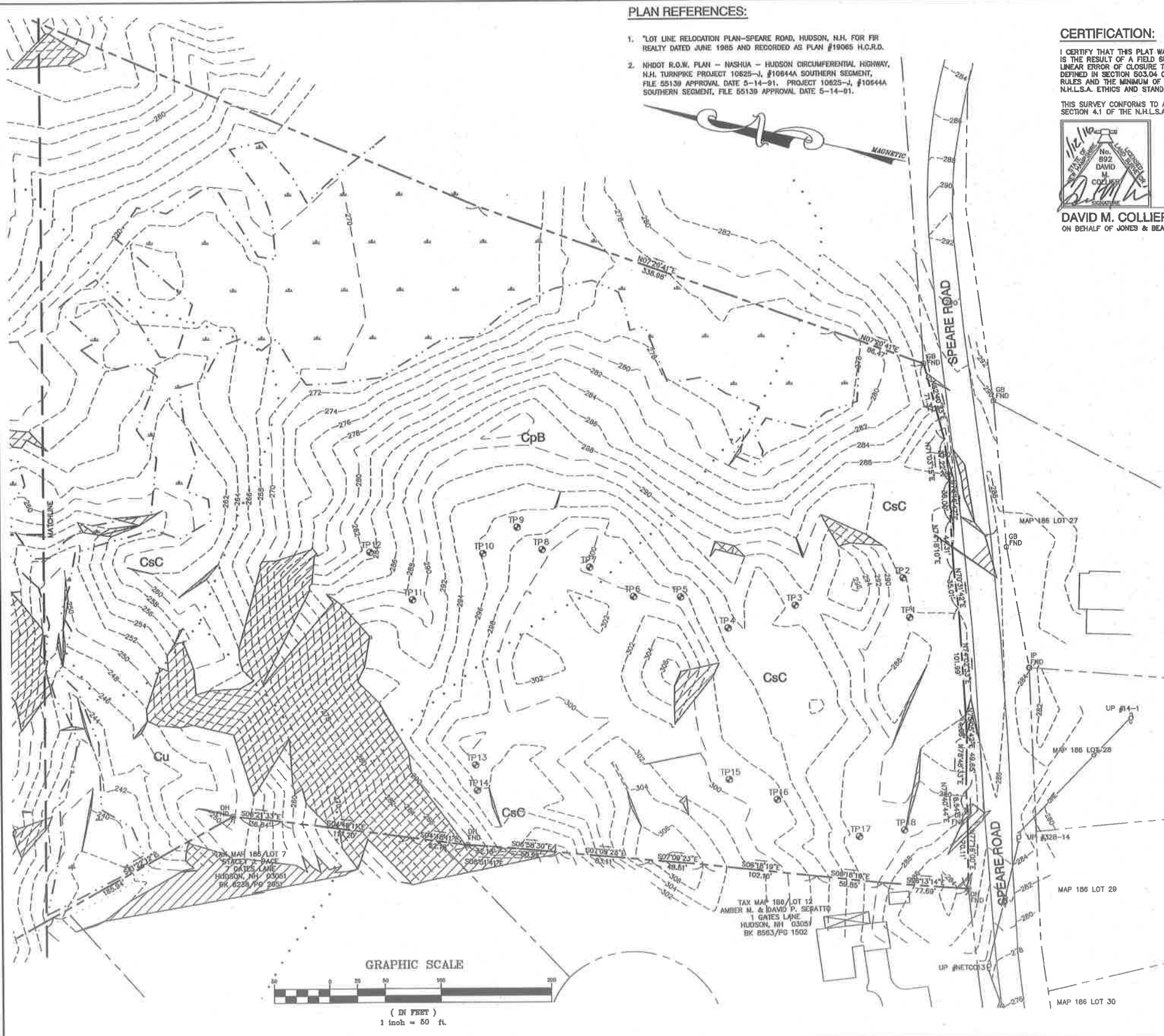
DATE:

APPLICANT  
TUCK REALTY CORP.  
149 EPPING ROAD, SUITE 2A  
EXETER, NH 03833

TOTAL LOT AREA  
1,447,080 SQ. FT.  
33.22 ACRES

SCS SOILS:  
CpB-CHATFIELD-HOLLIS-CANTON COMPLEX  
3 TO 8 PERCENT SLOPES  
CpC-CHATFIELD-HOLLIS-CANTON COMPLEX  
8 TO 15 PERCENT SLOPES  
CwC-CHATFIELD-HOLLIS COMPLEX  
8 TO 15 PERCENT SLOPES  
Cu-CHOCORUA MUCKY PEAT  
8 TO 15 PERCENT SLOPES

SCS SOILS TAKEN FROM SOIL SURVEY OF HILLSBOROUGH COUNTY EASTERN PLAN, DATED OCT. 81, 1" = 1667'



Design: JAC	Draft: PBL	Date: 7/10/15
Checked: JAC	Scale: AS SHOWN	Project No.: 15031
Drawing Name: 15031-PLAN SET.dwg		
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REV.	DATE	REVISION	BY
4	12/18/15	REVISED PER CONSERVATION COMMISSION COMMENTS	PSL
3	12/7/15	MINOR REVISIONS	PSL
2	9/25/15	PREPARED FOR PLANNING BOARD SUBMISSION	PSL
1	8/18/15	REVISED PER TOWN COMMENTS AND NEW WETLANDS	PSL
0	7/10/15	ISSUED FOR REVIEW	PSL

Designed and Produced in NH

**J/B Jones & Beach Engineers, Inc.**

85 Portsmouth Ave. PO Box 219 Stratham, NH 03885

Civil Engineering Services

603-772-4748 FAX: 603-772-0227 E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	<b>EXISTING CONDITIONS PLAN</b>
Project:	<b>BRECKENRIDGE ESTATES SUBDIVISION SPEARE ROAD, HUDSON, NH 03051</b>
Owner of Record:	<b>DOUGLAS S. SANDERSON 11 NERSESIAN WAY, HAMPTON, NH 03842</b>

DRAWING No.  
**C1**  
SHEET 8 OF 19  
JBE PROJECT NO. 15031

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TAX MAP 178/LOT 30  
WALTER S. ABRUCEWICZ TR.  
MURRAYANN ABRUCEWICZ TR.  
63 KIMBALL HILL ROAD  
HUDSON, NH 03051  
BK 8687/PG 1321

TAX MAP 185/LOT 1  
TOWN OF HUDSON  
12 SCHOOL STREET  
HUDSON, NH 03051  
BK 6292/PG 0612

**CERTIFICATION:**

I CERTIFY THAT THIS PLAT WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN UNADJUSTED LINEAR ERROR OF CLOSURE THAT EXCEEDS BOTH THE MINIMUM OF 1:10,000 AS DEFINED IN SECTION 503.04 OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES AND THE MINIMUM OF 1:15,000 AS DEFINED IN SECTION 4.2 OF THE N.H.L.S.A. ETHICS AND STANDARDS.

THIS SURVEY CONFORMS TO A CATEGORY 1 CONDITION 1 SURVEY AS DEFINED IN SECTION 4.1 OF THE N.H.L.S.A. ETHICS AND STANDARDS.



DAVID M. COLLIER, LLS 892  
ON BEHALF OF JONES & BEACH ENGINEERS, INC.

DATE:

**GENERAL LEGEND**

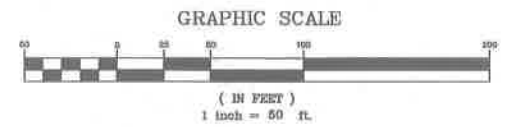
EXISTING	DESCRIPTION
---	PROPERTY LINES
---	SETBACK LINES
---	FRESHWATER WETLANDS LINE
---	TREE LINE
---	STONEWALL
---	SOIL BOUNDARY
---	MAJOR CONTOUR
---	MINOR CONTOUR
---	EDGE OF PAVEMENT
---	OVERHEAD ELECTRIC
---	IRON PIPE/IRON ROD
---	DRILL HOLE
---	STONE/GRANITE BOUND
---	BENCHMARK (TBM)
---	TEST PIT
---	UTILITY POLE
---	FRESHWATER WETLANDS
---	SLOPES OVER 25%

APPROVED - HUDSON, NH  
PLANNING BOARD

DATE:

APPLICANT  
TUCK REALTY CORP.  
149 EPPING ROAD, SUITE 2A  
EXETER, NH 03833

TOTAL LOT AREA  
1,447,080 SQ. FT.  
33.22 ACRES



Design: JAC	Draft: PSL	Date: 7/10/15
Checked: JAC	Scale: AS SHOWN	Project No.: 15031
Drawing Name: 15031-PLAN SET.dwg		

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REV.	DATE	REVISION	BY
4	12/18/16	REVISED PER CONSERVATION COMMISSION COMMENTS	PSL
3	12/7/15	MINOR REVISIONS	PSL
2	9/25/15	PREPARED FOR PLANNING BOARD SUBMISSION	PSL
1	8/18/15	REVISED PER TOWN COMMENTS AND NEW WETLANDS	PSL
0	7/10/15	ISSUED FOR REVIEW	PSL
REV.	DATE	REVISION	BY

Designed and Produced In NH

**J/B Jones & Beach Engineers, Inc.**

85 Portsmouth Ave.  
PO Box 218  
Stratham, NH 03885

Civil Engineering Services

603-772-4746  
FAX: 603-772-0227  
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	<b>EXISTING CONDITIONS PLAN</b>
Project:	<b>BRECKENRIDGE ESTATES SUBDIVISION SPEARE ROAD, HUDSON, NH 03051</b>
Owner of Record:	<b>DOUGLAS S. SANDERSON 11 NERSESIAN WAY, HAMPTON, NH 03842</b>

DRAWING No.  
**C2**  
SHEET # OF 19  
JBE PROJECT NO. 15031

**CERTIFICATION:**

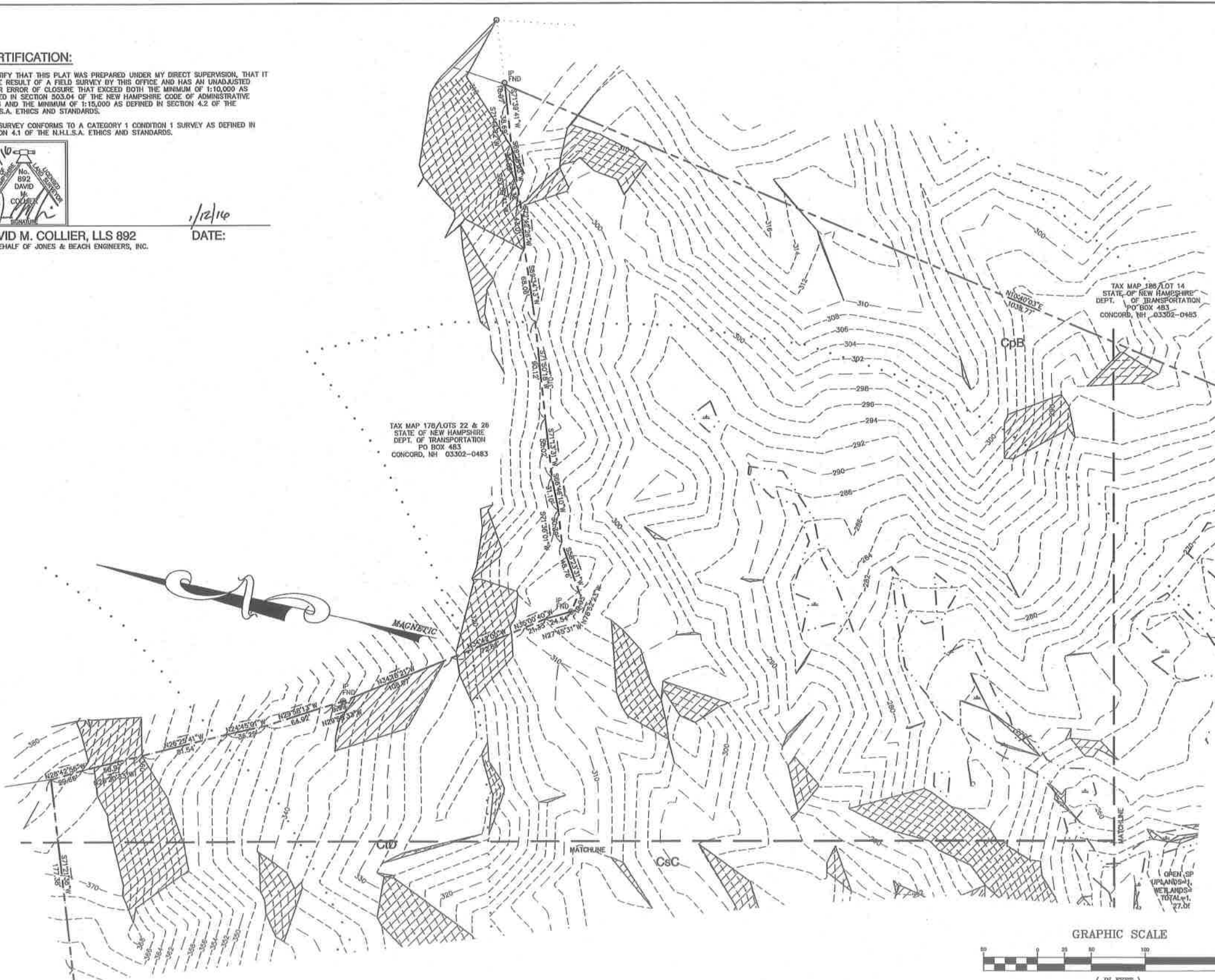
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DAVID M. COLLIER, LLS 892  
ON BEHALF OF JONES & BEACH ENGINEERS, INC.

DATE: 1/12/16



**ADDITIONAL ABUTTERS:**

- TAX MAP 177 LOT 49  
ELAINE F. & FRANK W. YEN  
61 BEAR PATH LANE  
HUDSON, NH 03051  
BK 6171/PG 0047
- TAX MAP 177 LOT 80  
ROBERT F. & JEAN M. WILKIE  
49 BEAR PATH LANE  
HUDSON, NH 03051  
BK 6180/PG 1993
- TAX MAP 177 LOT 81  
KANSTANTIN AUSIANNIKAU  
47 BEAR PATH LANE  
HUDSON, NH 03051  
BK 8009/PG 1795
- TAX MAP 177 LOT 82  
TODD J. & KATHRYN H. COPPI  
45 BEAR PATH LANE  
HUDSON, NH 03051  
BK 7008/PG 1938
- TAX MAP 177 LOT 83  
GREGORY M. & TIFFANY A. GAGNON  
46 BEAR PATH LANE  
HUDSON, NH 03051  
BK 8563/PG 1914
- TAX MAP 177 LOT 84  
MARINILLI REVOCABLE TRUST  
CARMINE MARINILLI, TRUSTEE  
PO BOX 8103  
NASHUA, NH 03080-8103  
BK 8588/PG 2000
- TAX MAP 185/LOT 66  
MATTHEW H. MEDEROS  
LAURIE SCANDRAS  
43 BEAR PATH LANE  
HUDSON, NH 03051  
BK 8573/PG 1640
- TAX MAP 185/LOT 67  
ROBERT J. FLOHR, SR.  
JEANNE A. FLOHR  
41 BEAR PATH LANE  
HUDSON, NH 03051  
BK 8377/PG 0216
- TAX MAP 185/LOT 68  
CHARLES F. & LISA D. ANDERSON  
39 BEAR PATH LANE  
HUDSON, NH 03051  
BK 6871/PG 2001
- TAX MAP 185/LOT 69  
MICHAEL PATRICK JOHNSTON  
LANI L. NILSSON-JOHNSTON  
37 BEAR PATH LANE  
HUDSON, NH 03051  
BK 8850/PG 1747
- TAX MAP 185/LOT 70  
LEE A. & JULIE A. SHAPPY  
35 BEAR PATH LANE  
HUDSON, NH 03051  
BK 6188/PG 0560
- TAX MAP 185 LOT 71  
ANDREAS DOMINGUEZ  
CLAUDIA E. GOLDA-DOMINGUEZ  
27 BEAR PATH LANE  
HUDSON, NH 03051  
BK 8591/PG 0514
- TAX MAP 185/LOT 2  
JAMIE L. WHITMAN  
145 MEADOWSWEET COURT  
WINSTON SALEM, NC 27107  
BK 6686/PG 0635
- TAX MAP 185/LOT 3  
JAMES A. & LISA L. STEJSKAL  
29 BEAR PATH LANE  
HUDSON, NH 03051  
BK 8208/PG 2322
- TAX MAP 185/LOT 4  
VINCENT J. GNATEK  
36 1/2 SPEARE ROAD  
HUDSON, NH 03051  
BK 8208/PG 0288
- TAX MAP 185/LOT 5  
JAMES D. & KRISTIN M. PAQUETTE  
2 GATES LANE  
HUDSON, NH 03051  
BK 7303/PG 0438
- TAX MAP 185/LOT 6  
JAMES E. & KIM M. NORMAND  
4 GATES LANE  
HUDSON, NH 03051  
BK 7329/PG 0942
- TAX MAP 185/LOT 15  
THOMAS P. & SUSAN L. DUVAL  
60 SPEARE ROAD  
HUDSON, NH 03051  
BK 6877/PG 0404
- TAX MAP 185/LOT 16  
RONALD A. & CARLA A. FRASER  
64 SPEARE ROAD  
HUDSON, NH 03051  
BK 5988/PG 0485
- TAX MAP 185/LOT 17  
BRIAN M. MALING  
68 SPEARE ROAD  
HUDSON, NH 03051  
BK 8511/PG 0543
- TAX MAP 185/LOT 24  
EAGLES NEST ESTATES LLC  
2 MAJESTIC AVENUE  
PELHAM, NH 03078-5005  
BK 8221/PG 0189
- TAX MAP 185/LOT 26  
JOSEPH R. & ALINE T. BOUTIN  
61 SPEARE ROAD  
HUDSON, NH 03051  
BK 8327/PG 0234
- TAX MAP 185/LOT 27  
STEVEN A. & TRISHA H. GAGNON  
51 SPEARE ROAD  
HUDSON, NH 03051  
BK 6921/PG 0788
- TAX MAP 185/LOT 28  
NORMAN & KENDALL CALLER  
47 SPEARE ROAD  
HUDSON, NH 03051  
BK 8007/PG 0333
- TAX MAP 185/LOT 29  
MATTHEW & CHARLENE BROWN  
45 SPEARE ROAD  
HUDSON, NH 03051  
BK 8608/PG 0038
- TAX MAP 185/LOT 30  
DAVID & KAREN BURNELL  
41 SPEARE ROAD  
HUDSON, NH 03051  
BK 2791/PG 0105

**GENERAL LEGEND**

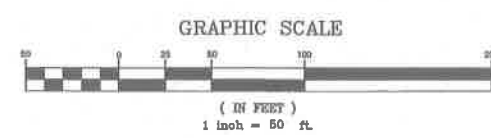
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---	TEST PIT
---	UTILITY POLE
---	FRESHWATER WETLANDS
---	SLOPES OVER 25%

APPROVED - HUDSON, NH  
PLANNING BOARD

APPLICANT  
TUCK REALTY CORP.  
149 EPPING ROAD, SUITE 2A  
EXETER, NH 03833

TOTAL LOT AREA  
1,447,060 SQ. FT.  
33.22 ACRES

DATE:



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Design: JAC	Draft: PSL	Date: 7/10/15
Checked: JAC	Scale: AS SHOWN	Project No.: 15031
Drawing Name: 15031-PLAN SET.dwg		
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REV.	DATE	REVISION	BY
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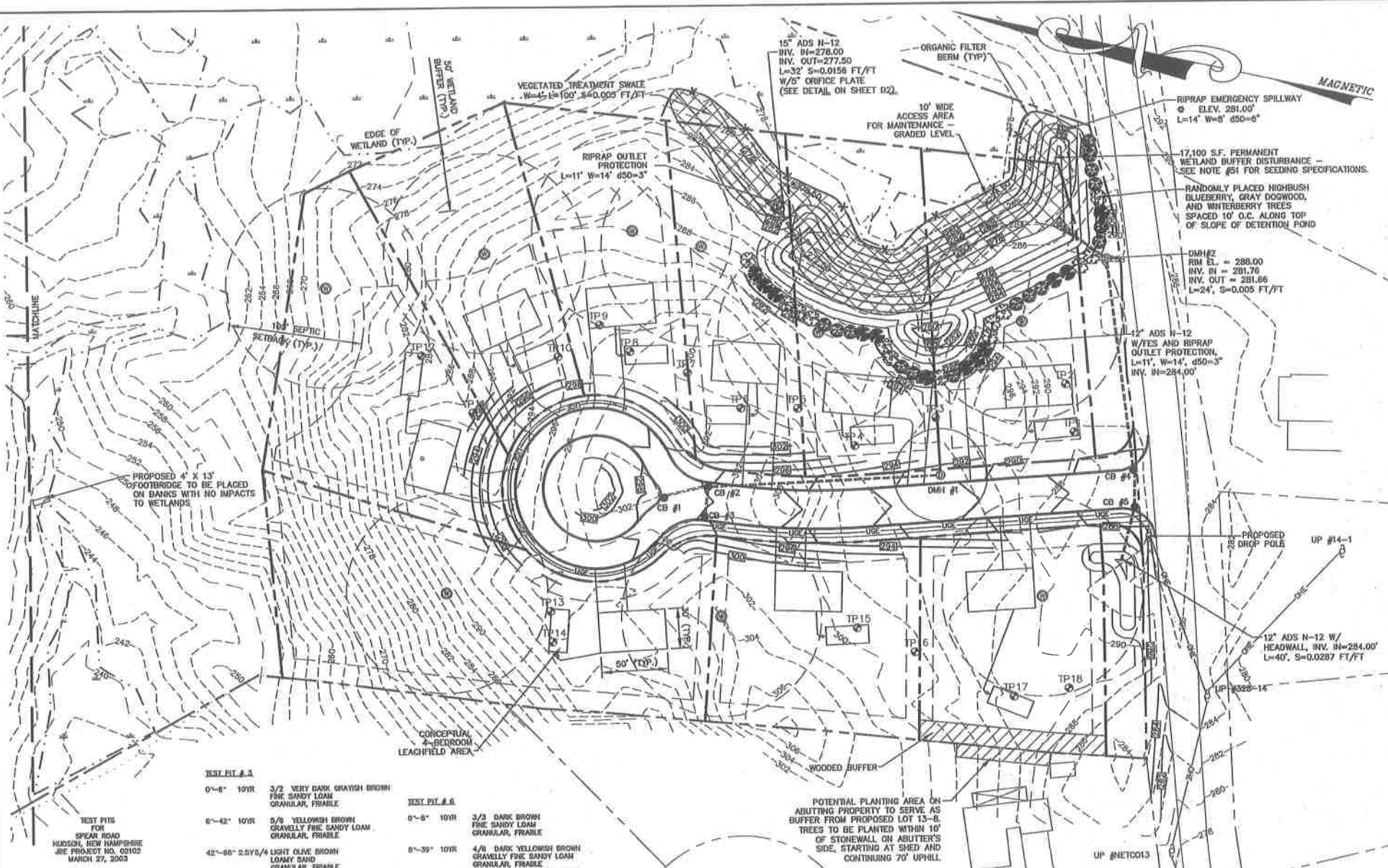
Plan Name:	<b>EXISTING CONDITIONS PLAN</b>
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Owner of Record:	<b>DOUGLAS S. SANDERSON 11 NERSESIAN WAY, HAMPTON, NH 03842</b>

DRAWING No.

**C3**

SHEET 10 OF 18  
JBE PROJECT NO. 15031

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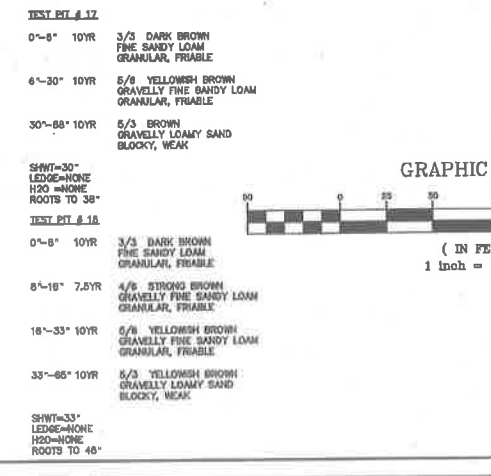


**GRADING, DRAINAGE AND UTILITY NOTES:**

- UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER JONES & BEACH ENGINEERS, INC. NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES AND/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 888-316-SAFE (888-344-7233).
- VERTICAL DATUM: XXXXX. HORIZONTAL DATUM: XXXXX.
- ALL BENCHMARKS AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR.
- SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED. SEE CONSTRUCTION SEQUENCE ON SHEET E1.
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR IS REQUIRED TO HAVE THE PROJECT'S LAND SURVEYOR STAKE OR FLAG CLEARING LIMITS. A MINIMUM OF 48 HOURS NOTICE IS REQUIRED.
- ALL ROOF DRAINS FROM BUILDING SHALL END 4' OUTSIDE THE BUILDING LIMITS AS SHOWN ON PLAN AND SHALL BE PROVIDED WITH TEMPORARY PLUG AND NUTTING AT THE END. ALL EXTERIOR ROOF DOWNSPOUTS ARE TO BE INSTALLED WITH OVERFLOW DEVICES.
- ALL SWALES AND DETENTION PONDS ARE TO BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
- PROPOSED RIM ELEVATIONS OF DRAINAGE STRUCTURES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH WITH FINISH GRADES.
- ALL SWALES AND ANY SLOPES GREATER THAN 3:1 SHALL BE STABILIZED WITH NORTH AMERICAN GREEN S75 EROSION CONTROL BLANKETS (OR AN EQUIVALENT APPROVED IN WRITING BY THE ENGINEER), UNLESS OTHERWISE SPECIFIED.
- ALL DRAINAGE AND SANITARY STRUCTURE INTERIOR DIAMETERS (4" MIN) SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS. CATCH BASINS SHALL HAVE 3" DEEP SUMPS WITH GREASE HOODS, UNLESS OTHERWISE NOTED.
- ALL DRAINAGE STRUCTURES SHALL BE PRECAST, UNLESS OTHERWISE SPECIFIED.
- ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC H20 LOADING AND SHALL BE INSTALLED ACCORDINGLY.
- IMMEDIATELY APPLY AND COMPACT STONE BASE FOR BUILDING PAD TO +/- 1/2" PRIOR TO EXCAVATING INTERIOR AND PERIMETER FOOTINGS.
- IN AREAS WHERE CONSTRUCTION IS PROPOSED ADJACENT TO ABUTTING PROPERTIES, THE CONTRACTOR SHALL INSTALL GRANGE CONSTRUCTION FENCING ALONG PROPERTY LINES IN ALL AREAS WHERE SILT FENCING IS NOT REQUIRED.
- ALL DRAINAGE PIPE SHALL BE NON-PERFORATED ADS N-12 OR APPROVED EQUAL.
- STONE INLET PROTECTION SHALL BE PLACED AT ALL CATCH BASINS. SEE DETAIL WITHIN THE DETAIL SHEETS.
- LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY ALL GOVERNING AUTHORITIES. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE EPA SWPPP DURING CONSTRUCTION OPERATIONS.
- NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
- ALL EXPOSED AREAS SHALL BE SEEDED AS SPECIFIED WITHIN 3 DAYS OF FINAL GRADING.
- SHOULD CONSTRUCTION STOP FOR LONGER THAN 3 DAYS, THE SITE SHALL BE SEEDED AS SPECIFIED.
- MAINTAIN EROSION CONTROL MEASURES AFTER EACH RAIN EVENT OF 0.6" OR GREATER IN A 24 HOUR PERIOD AND AT LEAST ONCE A WEEK.
- THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE. AS THE GENERAL CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SEDIMENT FROM LEAVING THE SITE.
- CONSTRUCTION VEHICLES SHALL UTILIZE THE STABILIZED CONSTRUCTION ENTRANCE TO THE EXTENT POSSIBLE THROUGHOUT CONSTRUCTION.
- IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
- SEDIMENT SHALL BE REMOVED FROM ALL SEDIMENT BASINS BEFORE THEY ARE 25% FULL.

- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH PROJECT SPECIFICATIONS.
- ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED, IF DEEMED NECESSARY BY ON-SITE INSPECTION BY ENGINEER AND/OR REGULATORY OFFICIALS.
- SEE ALSO EROSION AND SEDIMENT CONTROL SPECIFICATIONS ON SHEET E1.
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER, ARCHITECT AND/OR OWNER, IN ORDER TO OBTAIN AND/OR PAY ALL THE NECESSARY LOCAL PERMITS, CONNECTION FEES AND BONDS.
- THE CONTRACTOR SHALL PROVIDE A MINIMUM NOTICE OF FOURTEEN (14) DAYS TO ALL CORPORATIONS, COMPANIES AND/OR LOCAL AUTHORITIES OWNING OR HAVING A JURISDICTION OVER UTILITIES RUNNING TO, THROUGH OR ACROSS PROJECT AREAS PRIOR TO DEMOLITION AND/OR CONSTRUCTION ACTIVITIES.
- THE LOCATION, SIZE, DEPTH AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE TO THE STANDARDS AND REQUIREMENTS OF THE RESPECTIVE UTILITY COMPANY (ELECTRIC, TELEPHONE, CABLE TELEVISION, FIRE ALARM, GAS, WATER, AND SEWER).
- A PRECONSTRUCTION MEETING SHALL BE HELD WITH THE OWNER, ENGINEER, ARCHITECT, CONTRACTOR, LOCAL OFFICIALS, AND ALL PROJECT-RELATED UTILITY COMPANIES (PUBLIC AND PRIVATE) PRIOR TO START OF CONSTRUCTION.
- ALL CONSTRUCTION SHALL CONFORM TO THE TOWN STANDARDS AND REGULATIONS, AND NHDES STANDARDS AND SPECIFICATIONS, WHICHEVER ARE MORE STRINGENT, UNLESS OTHERWISE SPECIFIED.
- ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) RULES AND REGULATIONS.
- BUILDING TO BE SERVED BY UNDERGROUND UTILITIES UNLESS OTHERWISE NOTED.
- THE CONTRACTOR IS TO VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITY STUBS PRIOR TO CONSTRUCTION AND DISCONNECT ALL EXISTING SERVICE CONNECTIONS AT THEIR RESPECTIVE MAINS IN ACCORDANCE WITH THE RESPECTIVE UTILITY COMPANY'S STANDARDS AND SPECIFICATIONS. ENGINEER TO BE NOTIFIED.
- AS-BUILT PLANS SHALL BE SUBMITTED TO DEPARTMENT OF PUBLIC WORKS.
- INVERTS AND SHELVES: MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT, CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW AT CHANGES IN DIRECTION. THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE THROUGH CHANNEL UNDERLAYMENT OF INVERT, AND SHELF SHALL CONSIST OF BRICK MASONRY.
- FRAMES AND COVERS: MANHOLE FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 30 INCH DIA. CLEAR OPENING. THE WORD "SEWER" OR "DRAIN" SHALL BE CAST INTO THE CENTER OF THE UPPER FACE OF EACH COVER WITH RAISED, 3" LETTERS.
- PROPOSED RIM ELEVATIONS OF DRAINAGE AND SANITARY MANHOLES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH WITH FINISH GRADES. ADJUST ALL OTHER RIM ELEVATIONS OF MANHOLES, WATER GATES, GAS GATES AND OTHER UTILITIES TO FINISH GRADE AS SHOWN ON THE GRADING AND DRAINAGE PLAN.
- CONTRACTOR TO FURNISH SHOP DRAWINGS FOR UTILITY RELATED ITEMS TO ENSURE CONFORMANCE WITH THE PLANS AND SPECIFICATIONS. SHOP DRAWINGS SHOULD BE SENT IN TRIPlicate TO THE DESIGN ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
- EXISTING UTILITIES SHALL BE DIGGAED BEFORE CONSTRUCTION.
- ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
- TOWN OF HUDSON ASSUMES NO RESPONSIBILITY FOR WATER QUALITY FOR ON-SITE WELLS WHICH MAY BE THE RESULT OF ROUTINE MAINTENANCE OF TOWN OR STATE ROADWAYS ADJACENT TO THE PROPERTY, SUCH AS SANDING, SALTING, PAVING, ETC.
- MUNICIPAL WATER SUPPLY IS NOT AVAILABLE IN THE VICINITY OF THIS SUBDIVISION FOR FIRE FIGHTING PURPOSES. TANKER TRUCKS WILL BE USED IN THE EVENT OF AN EMERGENCY SITUATION.
- ALL PROPOSED LOTS ARE TO BE ACCESSED FROM PROPOSED ROADWAY ONLY.
- ALL HOUSE, DRIVEWAY, AND LEACHFIELD LOCATIONS ARE CONCEPTUAL ONLY. THEY HAVE BEEN ADDED TO THE PLAN IN ORDER TO SERVE AS AN AID IN THE PLANNING PROCESS ONLY.
- CONTRACTOR IS TO INSTALL 12" ADS N-12 CULVERTS WITH FLARED END SECTIONS IN THE EXISTING DITCH LINE AT ALL PROPOSED DRIVEWAY LOCATIONS (IF NECESSARY).
- ABUTTING PROPERTIES AND INFRASTRUCTURE WILL FACE MINIMAL ADVErsITY FROM STORMWATER ASSOCIATED WITH THIS PROJECT.
- WETLAND BUFFER IMPACT AREAS TO BE SEEDED WITH NEW ENGLAND CONSERVATION MIXTURE TO PROVIDE PERMANENT COVER OF GRASSES, WILDFLOWERS, AND LEGUMES. THIS SEED MIX PROVIDES FOR BOTH EROSION CONTROL AND WILDLIFE HABITAT VALUE FOR DISTURBED AREAS. THIS IS A NO MAINTENANCE SEED MIX AND SHOULD BE MOVED ONCE YEARLY IN THE FALL.  
APPLICATION RATE: 25LBS/ACRE | 1750 SQ FT/LB

TEST PIT #	DEPTH	SOIL DESCRIPTION	TEST PIT #	DEPTH	SOIL DESCRIPTION
TEST PIT # 1	0'-6" 10YR	3/2 VERY DARK GRAYISH BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 6	0'-8" 10YR	3/3 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 2	0'-8" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 7	0'-39" 10YR	4/8 DARK YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE COBBLES COMMON & DISTINCT
TEST PIT # 3	0'-28" 10YR	5/8 YELLOWISH BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 8	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE STONES COMMON & DISTINCT
TEST PIT # 4	0'-38" 10YR	5/8 YELLOWISH BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 9	0'-6" 10YR	3/3 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 5	0'-22" 10YR	5/8 YELLOWISH BROWN FINE SANDY LOAM GRANULAR, FRABLE COBBLES COMMON & DISTINCT	TEST PIT # 10	0'-31" 10YR	4/8 DARK YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 6	0'-22" 10YR	5/8 YELLOWISH BROWN FINE SANDY LOAM GRANULAR, FRABLE COBBLES COMMON & DISTINCT	TEST PIT # 11	0'-6" 10YR	3/3 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 7	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 12	0'-31" 10YR	4/8 DARK YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 8	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 13	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE STONES COMMON & DISTINCT
TEST PIT # 9	0'-18" 10YR	4/8 DARK YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 14	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 10	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 15	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 11	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 16	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 12	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 17	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 13	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 18	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 14	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 19	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 15	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 20	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 16	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 21	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 17	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 22	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 18	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 23	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 19	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 24	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 20	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 25	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 21	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 26	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 22	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 27	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 23	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 28	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 24	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 29	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 25	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 30	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 26	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 31	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 27	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 32	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 28	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 33	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 29	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 34	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 30	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 35	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 31	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 36	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 32	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 37	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 33	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 38	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 34	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 39	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 35	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 40	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 36	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 41	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 37	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 42	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 38	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 43	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 39	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 44	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE
TEST PIT # 40	0'-38" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 45	0'-6" 10YR	5/3 BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE



**APPLICANT**  
TUCK REALTY CORP.  
149 EPPING ROAD, SUITE 2A  
EXETER, NH 03833

**TOTAL LOT AREA**  
1,447,060 SQ. FT.  
33.22 ACRES

APPROVED - HUDSON, NH  
CONSERVATION COMMISSION

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

Design: JAC Draft: PSL Date: 7/10/15  
Checked: JAC Scale: AS SHOWN Project No.: 15031  
Drawing Name: 15031-PLAN SET.dwg

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REV.	DATE	REVISION	BY
4	12/18/15	REVISED PER CONSERVATION COMMISSION COMMENTS	PSL
3	12/7/15	MINOR REVISIONS	PSL
2	9/25/15	PREPARED FOR PLANNING BOARD SUBMISSION	PSL
1	8/18/15	REVISED PER TOWN COMMENTS AND NEW WETLANDS	PSL
0	7/10/15	ISSUED FOR REVIEW	PSL

Designed and Produced in NH

**J/B Jones & Beach Engineers, Inc.**

85 Portsmouth Ave. PO Box 219 Stratham, NH 03885

Civil Engineering Services

603-772-4746 FAX: 603-772-0227 E-MAIL: JBE@JONESANDBEACH.COM

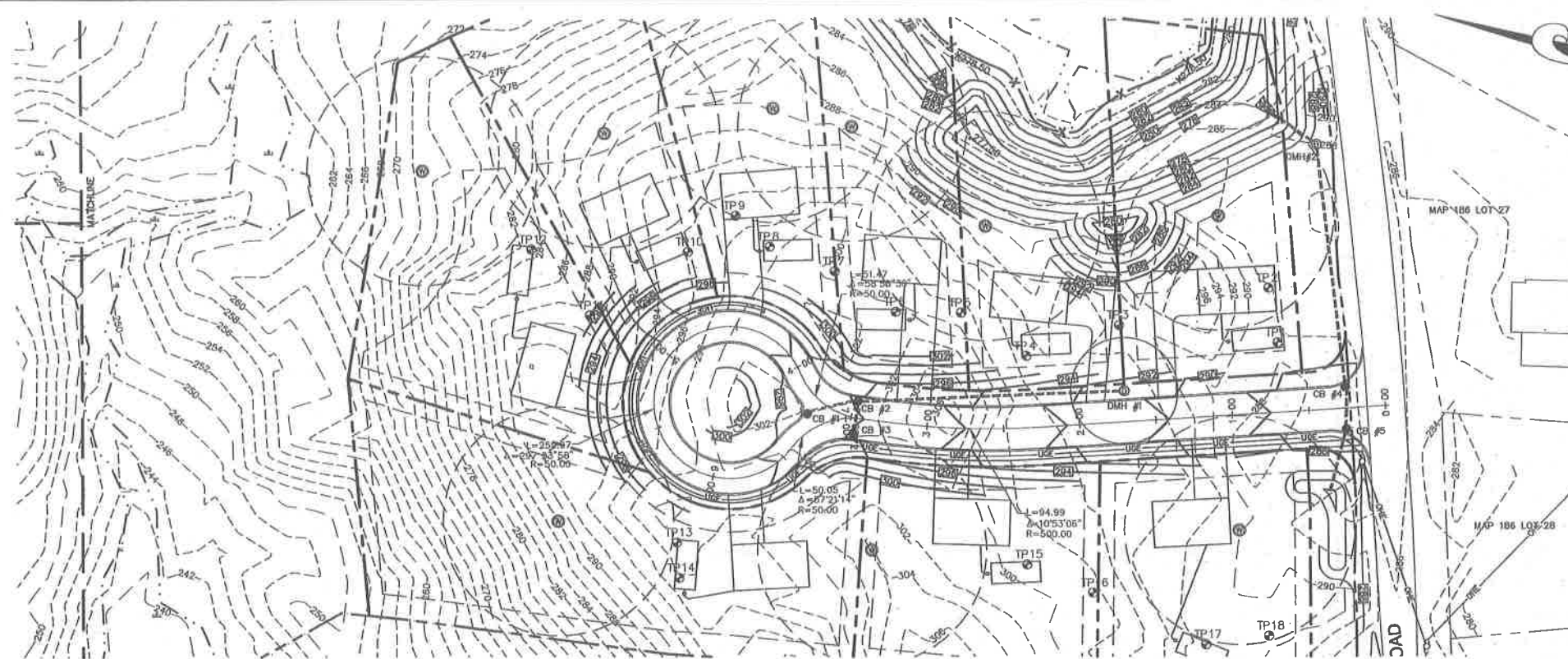
Plan Name: **GRADING, DRAINAGE AND UTILITY PLAN**

Project: **BRECKENRIDGE ESTATES SUBDIVISION  
SPEARE ROAD, HUDSON, NH 03051**

Owner of Record: **DOUGLAS S. SANDERSON  
11 NERSESIAN WAY, HAMPTON, NH 03842**

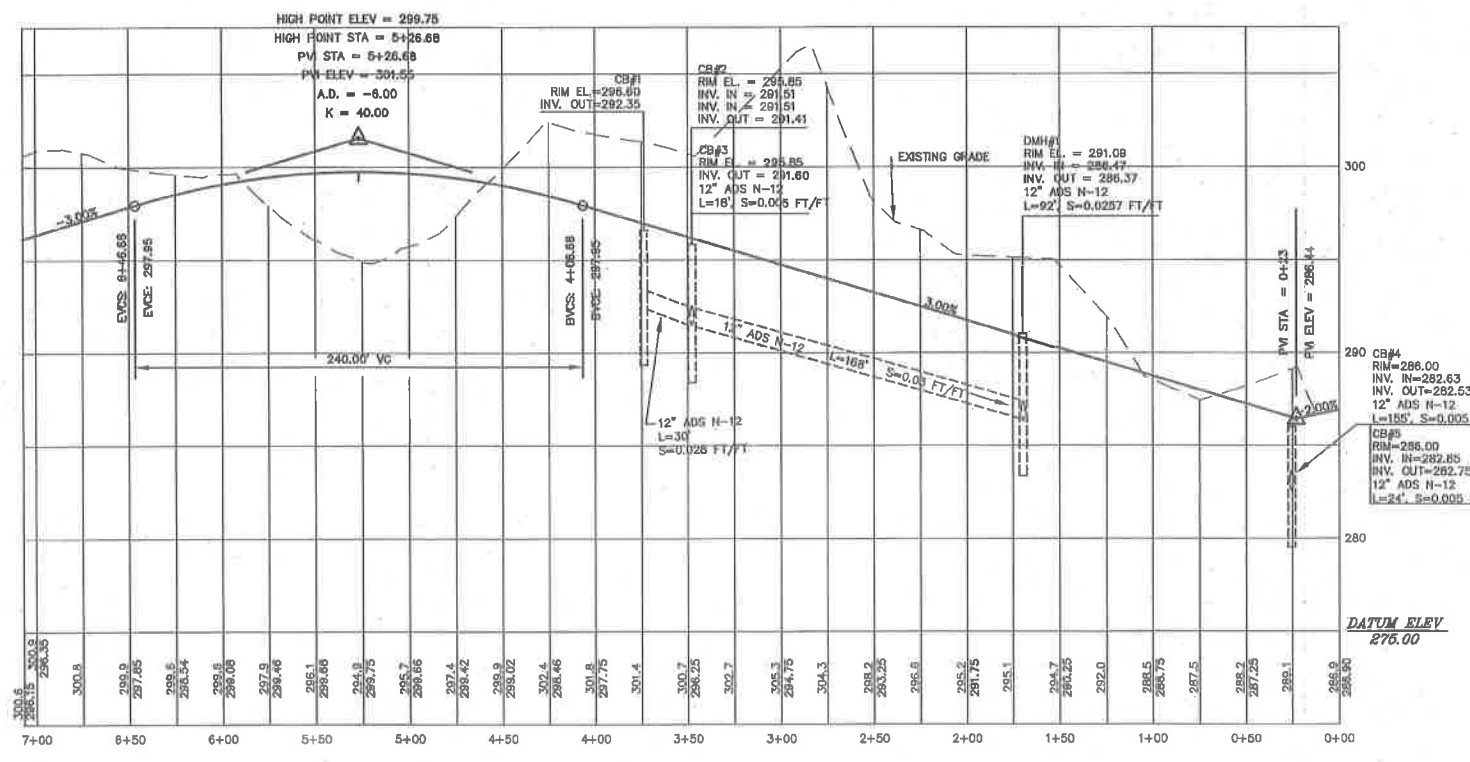
DRAWING No. **C4**

SHEET 11 OF 19  
JBE PROJECT NO. 15031



- NOTES:**
- THIS SITE WILL REQUIRE A USEPA NPDES PERMIT FOR STORMWATER DISCHARGE FOR THE CONSTRUCTION SITE. THE CONSTRUCTION SITE OPERATOR SHALL DEVELOP AND IMPLEMENT A CONSTRUCTION STORM WATER POLLUTION PREVENTION PLAN (SWPPP), WHICH SHALL REMAIN ON SITE AND BE MADE ACCESSIBLE TO THE PUBLIC. THE CONSTRUCTION SITE OPERATOR SHALL SUBMIT A NOTICE OF INTENT (NOI) TO THE EPA REGIONAL OFFICE SEVEN DAYS PRIOR TO COMMENCEMENT OF ANY WORK ON SITE. EPA WILL POST THE NOI AT [HTTP://CFR.PUBLIC.LIBRARY.GOV/NPDES/STORMWATER/NOI/NOISEARCH.CFM](http://CFR.PUBLIC.LIBRARY.GOV/NPDES/STORMWATER/NOI/NOISEARCH.CFM). AUTHORIZATION IS GRANTED UNDER THE PERMIT ONCE THE NOI IS SHOWN IN "ACTIVE" STATUS ON THIS WEBSITE. A COMPLETED NOTICE OF TERMINATION SHALL BE SUBMITTED TO THE 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 OR
    - ANOTHER OPERATOR/PERMITTEE HAS ASSUMED CONTROL OVER ALL AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED. PROVIDE DPW WITH A COPY OF THE NOTICE OF TERMINATION (NOT).
  - ALL ROAD AND DRAINAGE WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR THE TOWN, AND NHDOT SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, WHICHEVER IS MORE STRINGENT.
  - AS-BUILT PLANS TO BE SUBMITTED TO THE TOWN PRIOR TO ACCEPTANCE OF THE ROADWAY.
  - DEVELOPER IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL WETLAND REGULATIONS, INCLUDING ANY PERMITTING AND SETBACK REQUIREMENTS REQUIRED UNDER THESE REGULATIONS.
  - CONTRACTOR TO COORDINATE AND COMPLETE ALL WORK REQUIRED FOR THE RELOCATION AND/OR INSTALLATION OF ELECTRIC, CATV, TELEPHONE, AND FIRE ALARM PER UTILITY DESIGN AND STANDARDS. LOCATIONS SHOWN ARE APPROXIMATE. LOW PROFILE STRUCTURES SHALL BE USED TO THE GREATEST EXTENT POSSIBLE.
  - THIS PLAN HAS BEEN PREPARED BY JONES & BEACH ENGINEERS, INC. FOR MUNICIPAL AND STATE APPROVALS AND FOR CONSTRUCTION BASED ON DATA OBTAINED FROM ON-SITE FIELD SURVEY AND EXISTING MUNICIPAL RECORDS. THROUGHOUT THE CONSTRUCTION PROCESS, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY OF ANY FIELD DISCREPANCY FROM DATA SHOWN ON THE DESIGN PLANS. THIS INCLUDES ANY UNFORESEEN CONDITIONS, SUBSURFACE OR OTHERWISE, FOR EVALUATION AND RECOMMENDATIONS. ANY CONTRADICTION BETWEEN ITEMS OF THIS PLAN/PLAN SET, OR BETWEEN THE PLANS AND ON-SITE CONDITIONS MUST BE RESOLVED BEFORE RELATED CONSTRUCTION HAS BEEN INITIATED.
  - SILTATION AND EROSION CONTROLS SHALL BE INSTALLED PRIOR TO CONSTRUCTION, SHALL BE MAINTAINED DURING CONSTRUCTION, AND SHALL REMAIN UNTIL SITE HAS BEEN STABILIZED WITH PERMANENT VEGETATION. SEE DETAIL SHEET E1 FOR ADDITIONAL NOTES ON EROSION CONTROL.
  - ALL DISTURBED AREAS NOT STABILIZED BY NOVEMBER 1st SHALL BE COVERED WITH AN EROSION CONTROL BLANKET, PRODUCT TO BE SPECIFIED BY THE ENGINEER.
  - FINAL DRAINAGE, GRADING AND EROSION PROTECTION MEASURES SHALL CONFORM TO REGULATIONS OF THE PUBLIC WORKS DEPARTMENT.
  - CONTRACTOR TO VERIFY EXISTING UTILITIES AND TO NOTIFY ENGINEER OF ANY DISCREPANCY IMMEDIATELY.
  - ROADWAY INTERSECTIONS WITH SLOPE GRANITE CURB SHALL EXTEND AROUND RADIUS WITH 6" STRAIGHT PIECE ALONG TANGENT.
  - RETAINING WALLS SHALL BE DESIGNED AND STAMPED BY A LICENSED PROFESSIONAL ENGINEER. CONTRACTOR SHALL COORDINATE WITH MANUFACTURER PRIOR TO INSTALLATION.
  - 6" PERFORATED ADS UNDER DRAIN PLACEMENT TO BE DETERMINED BY THE ENGINEER DURING TIME OF SUBGRADE INSPECTION. CONTRACTOR TO ADJUST LOCATION IN THE FIELD ONLY WITH PRIOR APPROVAL OF PROJECT ENGINEER OR PUBLIC WORKS DEPARTMENT. CONTRACTOR TO INCLUDE 3000 LF IN BID PRICE.
  - ALL DRIVEWAYS TO BE CONSTRUCTED MAXIMUM 10% SLOPE. SEE DETAIL SHEET. ALL DRIVEWAYS TO HAVE CULVERTS UNLESS APPROVED BY THE TOWN ROAD AGENT.
  - ENGINEER TO INSTALL PERMANENT BENCHMARK (REINFORCED GRANITE MARKER) AT LOCATIONS SHOWN ON PLANS. BENCH MARKS TO BE TIED TO STATE PLANE COORDINATE SYSTEM.
  - SIDEWALK TO BE INSTALLED AT TIME OF TOP COURSE PAVING ALONG WITH DRIVEWAY APRONS.

- DRAINAGE INSPECTION AND MAINTENANCE SCHEDULE: SILT FENCING WILL BE INSPECTED DURING AND AFTER STORM EVENTS TO ENSURE THAT THE FENCE STILL HAS INTEGRITY AND IS NOT ALLOWING SEDIMENT TO PASS. SEDIMENT BUILD UP IN SWALES WILL BE REMOVED IF IT IS DEEPER THAN SIX INCHES, AND IS TO BE REMOVED FROM SLUMPS BELOW THE INLET OF CULVERTS SEMIANNUALLY, AS WELL AS FROM CATCH BASINS. FOLLOWING MAJOR STORM EVENTS, THE STAGE DISCHARGE OUTLET STRUCTURES ARE TO BE INSPECTED AND ANY DEBRIS REMOVED FROM THE ORIFICE, TRASH TRAP AND EMERGENCY SPILL WAY. INFREQUENTLY, SEDIMENT MAY ALSO HAVE TO BE REMOVED FROM THE SLUMP OF THE STRUCTURE.
- CONTRACTOR MUST HAVE A VALID PIPE INSTALLER'S LICENSE FROM THE PUBLIC WORKS DEPARTMENT BEFORE WORKING ON ANY DRAINAGE AND/OR UTILITY CONSTRUCTION.
- ALL DRAINAGE INFRASTRUCTURE SHALL BE INSTALLED AND STABILIZED PRIOR TO DIRECTING ANY RUNOFF TO IT.
- DETENTION PONDS REQUIRE TIMELY MAINTENANCE AND SHOULD BE INSPECTED AFTER EVERY MAJOR STORM EVENT, AS WELL AS FREQUENTLY DURING THE FIRST YEAR OF OPERATION, AND ANNUALLY THEREAFTER. EVERY FIVE YEARS, THE SERVICES OF A PROFESSIONAL ENGINEER SHOULD BE RETAINED TO PERFORM A THOROUGH INSPECTION OF THE DETENTION POND AND ITS INFRASTRUCTURE. ANY DEBRIS AND SEDIMENT ACCUMULATIONS SHOULD BE REMOVED FROM THE OUTLET STRUCTURE(S) AND EMERGENCY SPILLWAY(S) AND DEPOSED OF PROPERLY. DETENTION POND BERMS SHOULD BE MOWED AT LEAST ONCE ANNUALLY SO AS TO PREVENT THE ESTABLISHMENT OF WOODY VEGETATION. TREES SHOULD NEVER BE ALLOWED TO GROW ON A DETENTION POND BERM, AS THEY MAY DESTABILIZE THE STRUCTURE AND INCREASE THE POTENTIAL FOR FAILURE. AREAS SHOWING SIGNS OF EROSION OR THIN OR DYING VEGETATION SHOULD BE REPAIRED IMMEDIATELY BY WHATEVER MEANS NECESSARY, WITH THE EXCEPTION OF FERTILIZER. RODENT BORROWS SHOULD BE REPAIRED IMMEDIATELY AND THE ANIMALS SHOULD BE TRAPPED AND RELOCATED IF THE PROBLEM PERSISTS.
- THE DETENTION PONDS ARE TO BE CONSTRUCTED PRIMARILY THROUGH EXCAVATION. IN THOSE AREAS WHERE THE BERMS MUST BE CONSTRUCTED BY THE PLACEMENT OF FILL, THE ENTIRE EMBANKMENT AREA OF THE DETENTION PONDS SHALL BE EXCAVATED TO PROPOSED GRADE, STRIPPED OF ALL ORGANIC MATERIALS, COMPACTED TO AT LEAST 95% AND SCORPED PRIOR TO THE PLACEMENT OF THE EMBANKMENT MATERIAL. IN THE EVENT THE FOUNDATION MATERIAL EXPOSED DOES NOT ALLOW THE SPECIFIED COMPACTION, AN ADDITIONAL ONE FOOT (1') OF EXCAVATION AND THE PLACEMENT OF A ONE FOOT (1') THICK, TWELVE FOOT (12') WIDE PAD OF THE MATERIAL DESCRIBED IN THE NOTE BELOW, COMPACTED TO 95% OF ASTM D-1557 MAY BE NECESSARY. PLACEMENT AND COMPACTION SHOULD OCCUR AT A MOISTURE CONTENT OF OPTIMUM PLUS OR MINUS 3% AND NO FROZEN OR ORGANIC MATERIAL SHOULD BE PLACED WITHIN FOR ANY REASON.
- EMBANKMENT MATERIAL FOR THE BERMS SHALL BE CLEAN MINERAL SOIL WITH A CLAY COMPONENT FREE OF ROOTS, ORGANIC MATTER, AND OTHER DELETERIOUS SUBSTANCES, AND SHALL CONTAIN NO ROCKS OR LUMBS OVER FOUR INCHES (4") IN DIAMETER. THIS MATERIAL SHOULD BE INSTALLED IN 6" LIFTS AND COMPACTED TO 95% OS ASTM D-1557, AND SHOULD MEET THE FOLLOWING SPECIFICATIONS: 4" PASSING 100% #4 SIEVE 25-70%, #200 SIEVE 10-20% (IN TOTAL SAMPLE).
- EMBANKMENT IS TO HAVE 3:1 SIDE SLOPES (MAX.) AND IS TO BE BROUGHT TO SPECIFIED GRADES PRIOR TO THE ADDITION OF LOAM (4" MINIMUM) SO AS TO ALLOW FOR THE COMPACTION OF THE STRUCTURE OVER TIME WHILE MAINTAINING THE PROPER BERM ELEVATION.
- COMPACTION TESTING SERVICES (I.E. NUCLEAR DENSITY TESTS) ARE TO BE PERFORMED BY AN INDEPENDENT GEOTECHNICAL ENGINEER RETAINED BY THE CONTRACTOR FOR ROADWAY CONSTRUCTION, AND ON THE FOUNDATION OF THE BERM AND ON EVERY LIFT OF NEWLY PLACED MATERIAL.
- ORNAMENTAL STREET LIGHTING SHALL BE PRIVATELY OWNED AND MAINTAINED BY THE HOME OWNER'S ASSOCIATION. LIGHTING SHALL NOT TO BE OWNED OR MAINTAINED BY THE TOWN.
- SLOPED GRANITE CURB TO BE TIPPED DOWN AT ALL DRIVEWAY ENTRANCES BY THE CONTRACTOR. ALL DRIVEWAY LOCATIONS SHALL BE REVIEWED AND APPROVED BY PUBLIC WORKS PRIOR TO ISSUANCE OF BUILDING PERMIT.
- NO IRRIGATION PIPES OR SPRINKLER HEADS SHALL BE LOCATED WITHIN TOWN RIGHT OF WAY.
- FILTER STRIP AREAS SHALL HAVE ALL BOULDERS REMOVED FROM THE ENTIRE LENGTH AND WIDTH AND SHALL BE IMMEDIATELY STABILIZED WITH VEGETATION. OR THE CONTRACTOR SHALL ORIENT THE FILTER STRIP AND LEVEL SPREADER SO AS TO ALLOW DRAINAGE FLOW OVER A BOULDER FREE AREA OF EQUAL LENGTH AND WIDTH. ENGINEER SHALL BE NOTIFIED TO INSPECT ALL LEVEL SPREADERS AND FILTER STRIP LOCATIONS AFTER ROAD SUBGRADE IS ESTABLISHED. NO STORMWATER SHALL BE DIRECTED TO THE LEVEL SPREADER AND FILTER STRIP UNTIL THE AREA HAS BEEN STABILIZED WITH VEGETATION.



**DRAINAGE TABLE**

Structure	Location	Dimensions	Notes
CB#1 - 4' ID	Station 5+26.68	240.00' VC	AD. = -8.00, K = 40.00
CB#2 - 4' ID	Station 3+07.7	12" ADS N-12	L=168' S=0.03
CB#3 - 4' ID	Station 2+50.0	12" ADS N-12	L=168' S=0.03
DMH#1 - 4' ID	Station 2+50.0	12" ADS N-12	L=92' S=0.0257
DMH#2 - 4' ID	Station 2+50.0	12" ADS N-12	L=24' S=0.005

Design: JAC Draft: PSL Date: 7/10/15  
 Checked: JAC Scale: AS SHOWN Project No.: 15031  
 Drawing Name: 15031-PLAN SET.dwg

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Designed and Produced in NH

**J/B Jones & Beach Engineers, Inc.**  
 Civil Engineering Services

85 Portsmouth Ave. PO Box 219 Stratham, NH 03885  
 603-772-4746 FAX: 603-772-0227 E-MAIL: JBE@JONESANDBEACH.COM

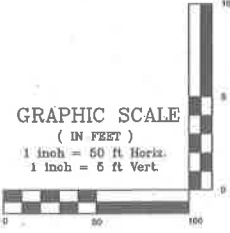
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Project: **BRECKENRIDGE ESTATES SUBDIVISION SPEARE ROAD, HUDSON, NH 03051**

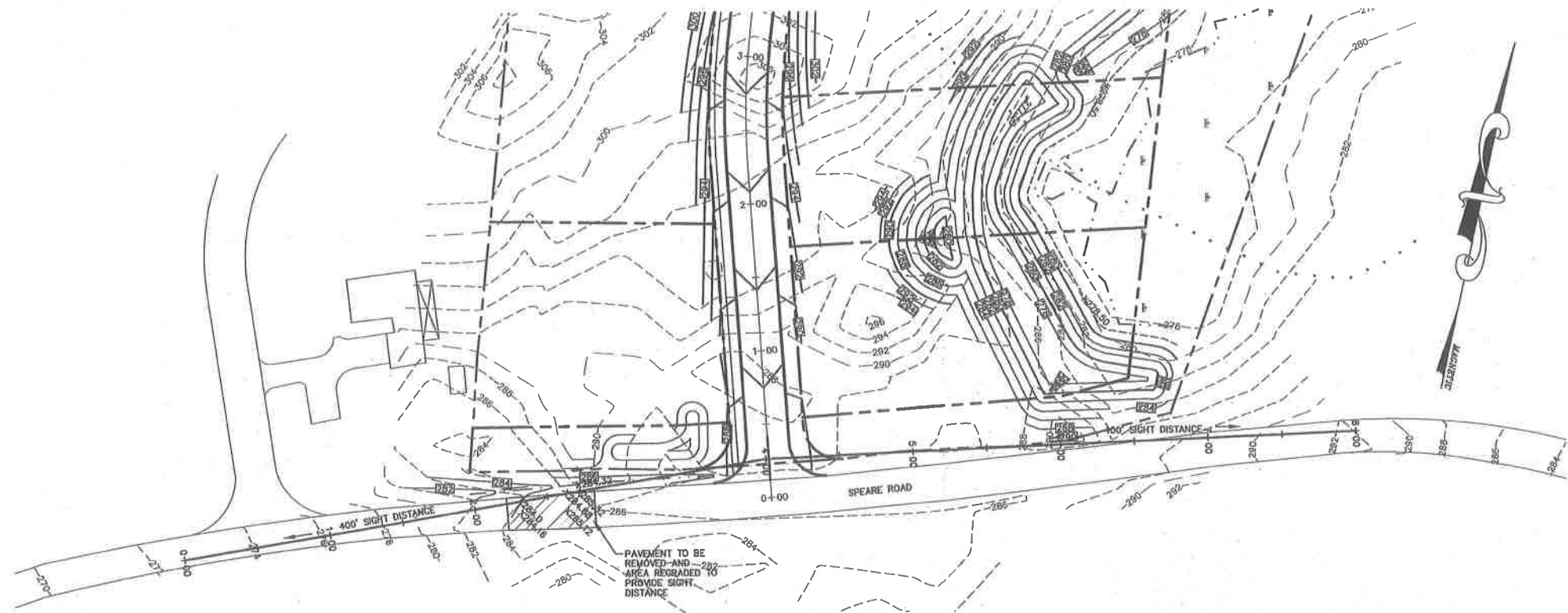
Owner of Record: **DOUGLAS S. SANDERSON 11 NERSESIAN WAY, HAMPTON, NH 03842**

DRAWING No. **P1**

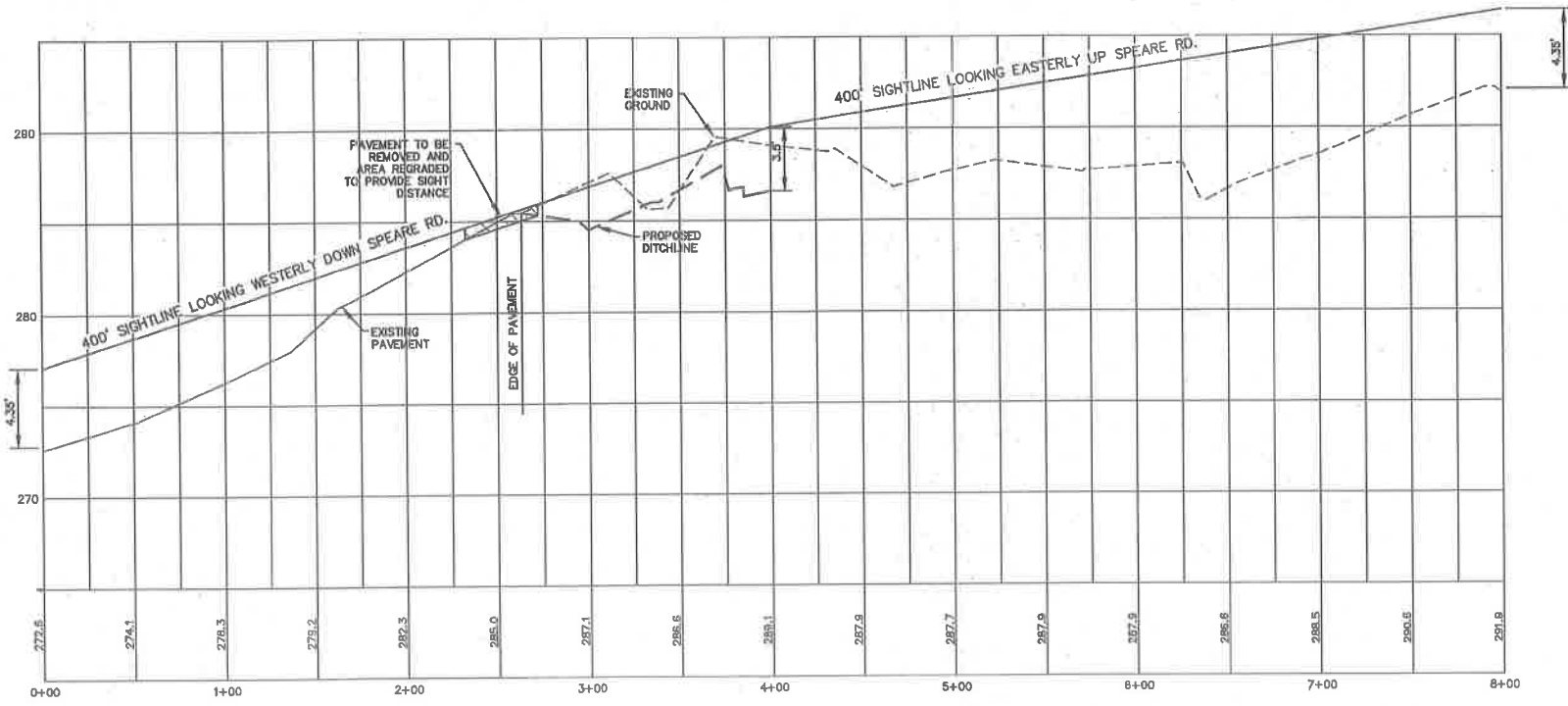
SHEET 12 OF 19  
 JBE PROJECT NO. 15031



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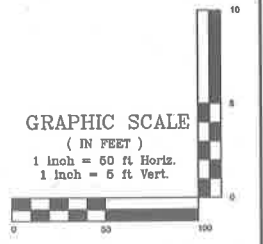
**SITE LINE PLAN**  
SCALE: 1"=50'



**SIGHT LINE PROFILE**  
SCALE: 1"=50' HORIZ.  
SCALE: 1"=5' VERT.

**NOTES:**

- SIGHT DISTANCE MEASURED FROM A HEIGHT OF 3.5' AT THE CENTERLINE OF THE PROPOSED ROAD TO AN OBJECT 4.35' IN HEIGHT 400' IN BOTH DIRECTIONS.



Design: JAC    Draft: PSL    Date: 7/10/15  
 Checked: JAC    Scale: AS SHOWN    Project No.: 15031  
 Drawing Name: 15031-PLAN SET.dwg  
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0	7/10/15	ISSUED FOR REVIEW	PSL

Designed and Produced in NH

**J/B Jones & Beach Engineers, Inc.**

65 Portsmouth Ave.    Civil Engineering Services    603-772-4746  
 PO Box 219    Stratham, NH 03885    FAX: 603-772-0227  
 E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: **HIGHWAY ACCESS PLAN**

Project: **BRECKENRIDGE ESTATES SUBDIVISION  
SPEARE ROAD, HUDSON, NH 03051**

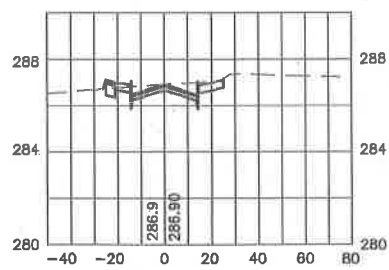
Owner of Record: **DOUGLAS S. SANDERSON  
11 NERSESIAN WAY, HAMPTON, NH 03842**

DRAWING No. **H1**

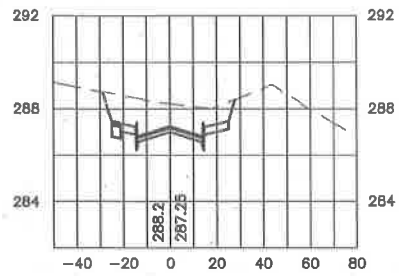
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JBE PROJECT NO. 15031

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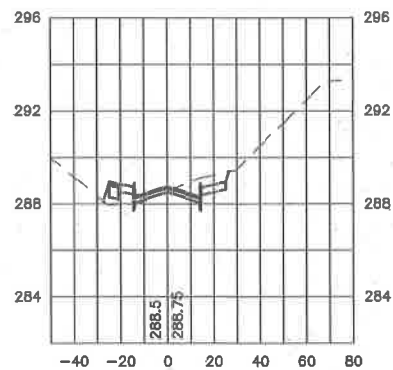
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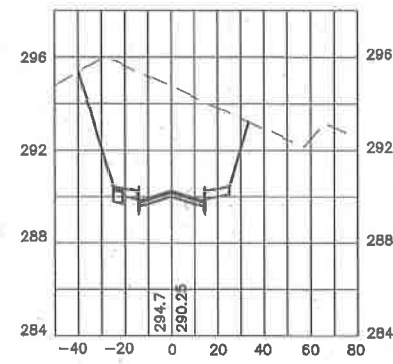
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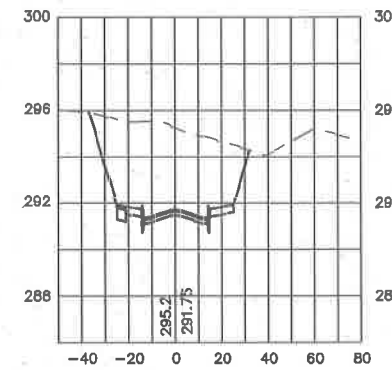
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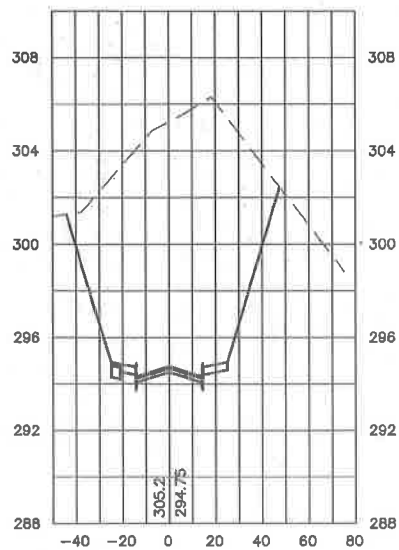
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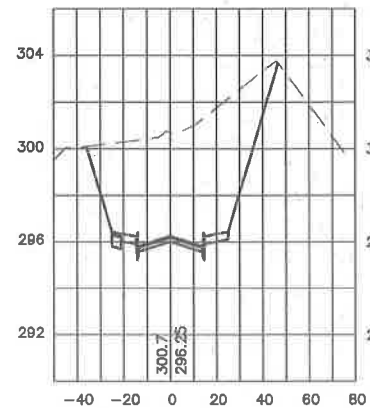
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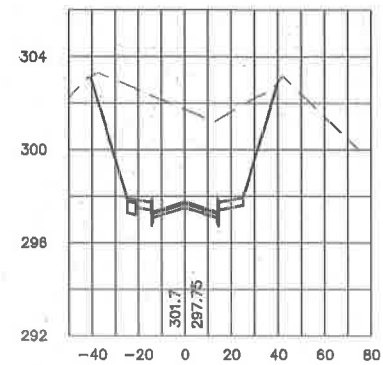
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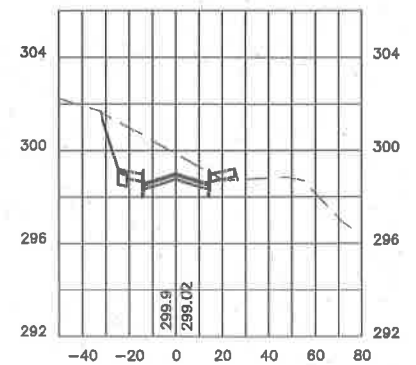
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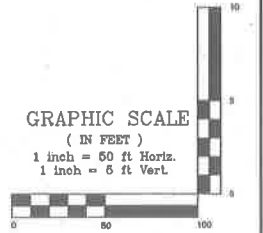
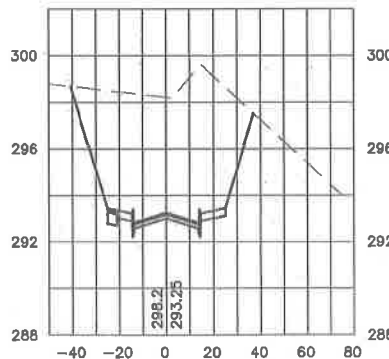
4+00



4+50



2+50



Design: JAC Draft: PSL Date: 7/10/15  
 Checked: JAC Scale: AS SHOWN Project No.: 15031  
 Drawing Name: 15031-PLAN SET.dwg  
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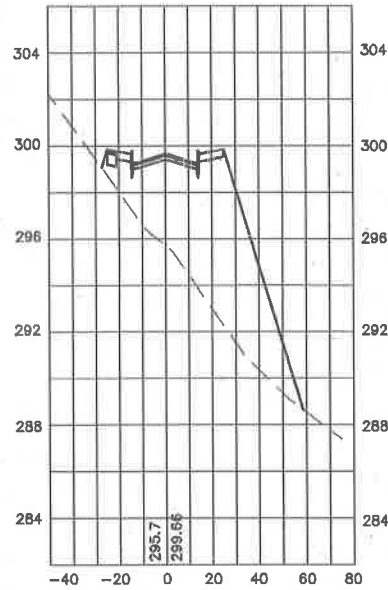
REV.	DATE	REVISION	BY
4	12/18/15	REVISED PER CONSERVATION COMMISSION COMMENTS	PSL
3	12/7/15	MINOR REVISIONS	PSL
2	9/25/15	PREPARED FOR PLANNING BOARD SUBMISSION	PSL
1	8/18/15	REVISED PER TOWN COMMENTS AND NEW WETLANDS	PSL
0	7/10/15	ISSUED FOR REVIEW	PSL

Designed and Produced in NH  
**J/B Jones & Beach Engineers, Inc.**  
 Civil Engineering Services  
 85 Portsmouth Ave. PO Box 219 Stratham, NH 03885  
 603-772-4746 FAX: 603-772-0227 E-MAIL: JBE@JONESANDBEACH.COM

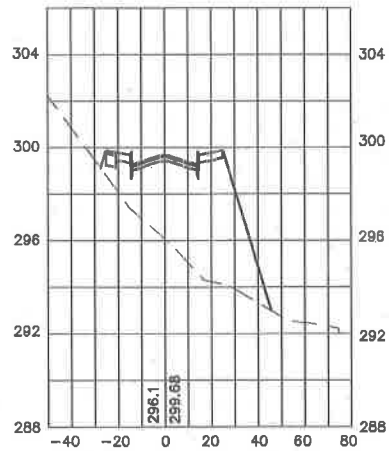
Plan Name: **CROSS SECTIONS STA 0+00 TO 4+50**  
 Project: **BRECKENRIDGE ESTATES SUBDIVISION  
 SPEARE ROAD, HUDSON, NH 03051**  
 Owner of Record: **DOUGLAS S. SANDERSON  
 11 NERSESIAN WAY, HAMPTON, NH 03842**

DRAWING No. **X1**  
 SHEET 14 OF 19  
 JBE PROJECT NO. 15031

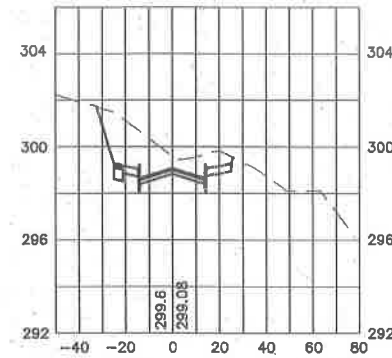
5+00



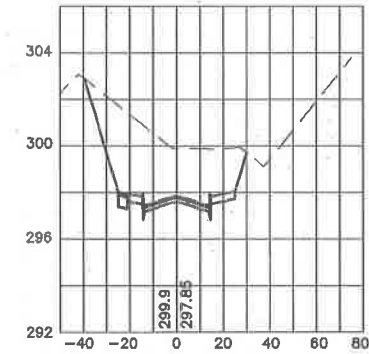
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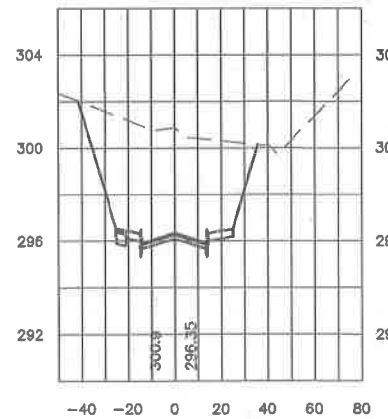
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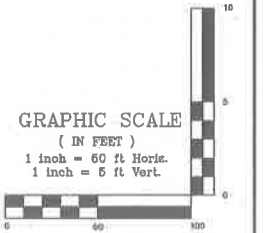
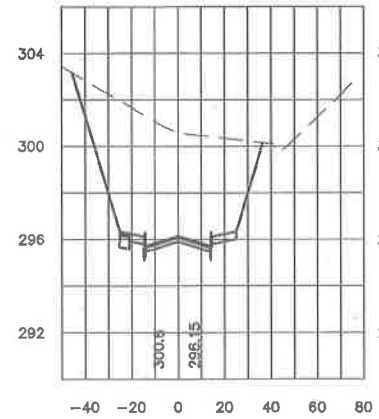
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7+00



7+06.72



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Design: JAC    Draft: PSL    Date: 7/10/15  
 Checked: JAC    Scale: AS SHOWN    Project No.: 15031  
 Drawing Name: 15031-PLAN SET.dwg  
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**J/B Jones & Beach Engineers, Inc.**

85 Portsmouth Ave.    Civil Engineering Services    603-772-4746  
 PO Box 219    Stratham, NH 03885    FAX: 603-772-0227  
 E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: **CROSS SECTIONS STA 5+00 TO 7+06.72**

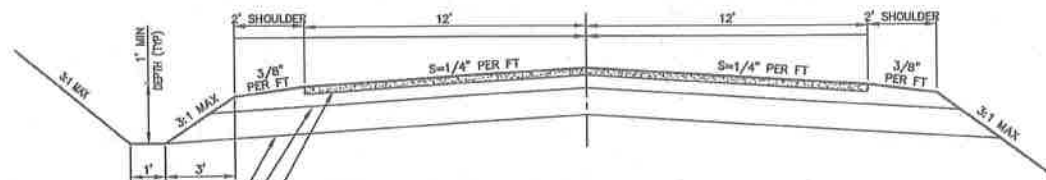
Project: **BRECKENRIDGE ESTATES SUBDIVISION  
 SPEARE ROAD, HUDSON, NH 03051**

Owner of Record: **DOUGLAS S. SANDERSON  
 11 NERSESIAN WAY, HAMPTON, NH 03842**

DRAWING No. **X2**

SHEET 16 OF 19  
 JBE PROJECT NO. 15031



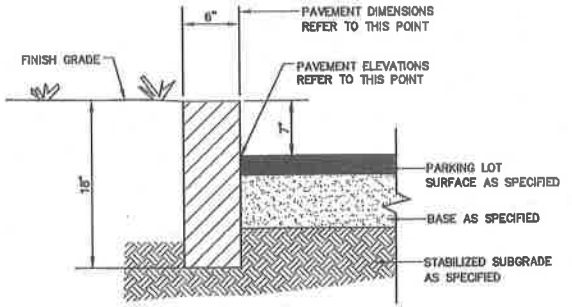


- NOTES:**
1. SAWCUT EXISTING PAVEMENT AND REGRADE TO LIMITS SHOWN ON PLAN.
  2. ALL MATERIALS TO BE AS SPECIFIED PER TOWN STANDARDS AND NHDOT, WHICHEVER IS MOST STRINGENT.
  3. GRADATION AND COMPACTION TEST RESULTS (95% MIN.) SHALL BE SUBMITTED FOR REVIEW AND APPROVAL.
  4. ALL WORKMANSHIP AND MATERIALS INCORPORATED INTO ROADWAY AND INFRASTRUCTURE CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION) AS PUBLISHED AND ADMENDED BY THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION AS WELL AS THE TOWN OF HUDSON SUBDIVISION REGULATIONS.

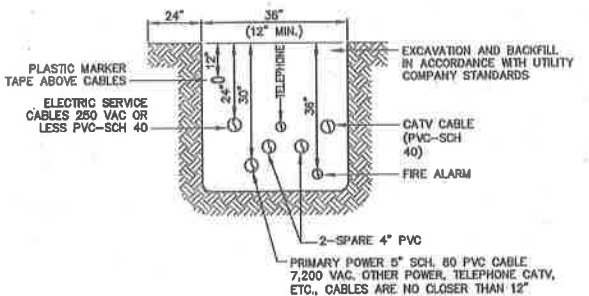
TWO COURSES BITUMINOUS CONCRETE  
 1" WEARING COURSE ROLLED (NHDOT TYPE E)  
 2" BINDER COURSE ROLLED (NHDOT TYPE B)

**TYPICAL ROADWAY SECTION SPERE ROAD**

NOT TO SCALE



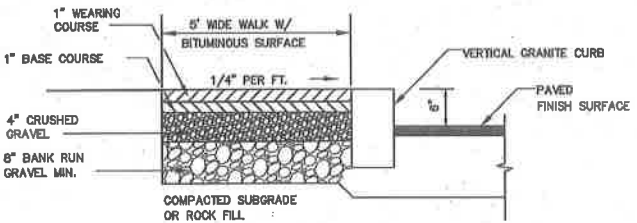
- NOTES:**
1. EDGING TO BE PLACED PRIOR TO PLACING TOP SURFACE COURSE.
  2. JOINTS BETWEEN STONES SHALL BE MORTARED.



NOTE: ALL UTILITIES SHALL BE REVIEWED AND APPROVED BY APPROPRIATE UTILITY COMPANY.

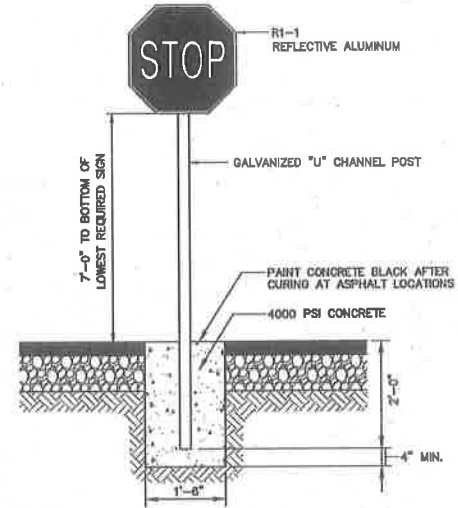
**UTILITY TRENCH**

NOT TO SCALE



**BIT. SIDEWALK W/ VERTICAL GRANITE CURB**

NOT TO SCALE

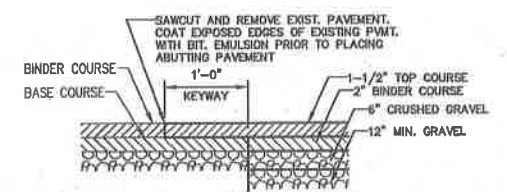


**STOP SIGN (R1-1)**

NOT TO SCALE

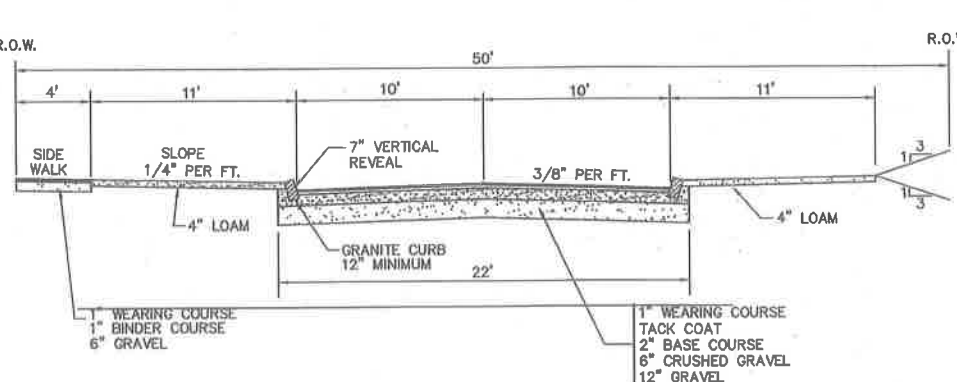
**KEYWAY DETAIL FOR CONNECTION TO EXISTING PAVEMENT**

NOT TO SCALE



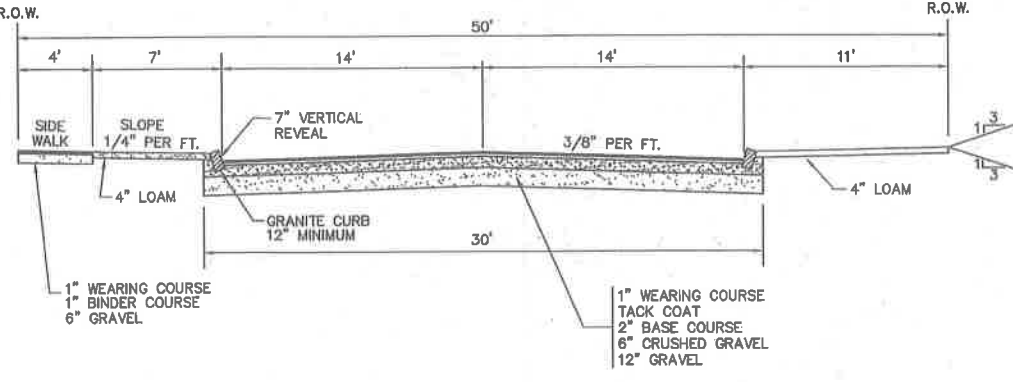
**7" VERTICAL GRANITE CURB**

NOT TO SCALE



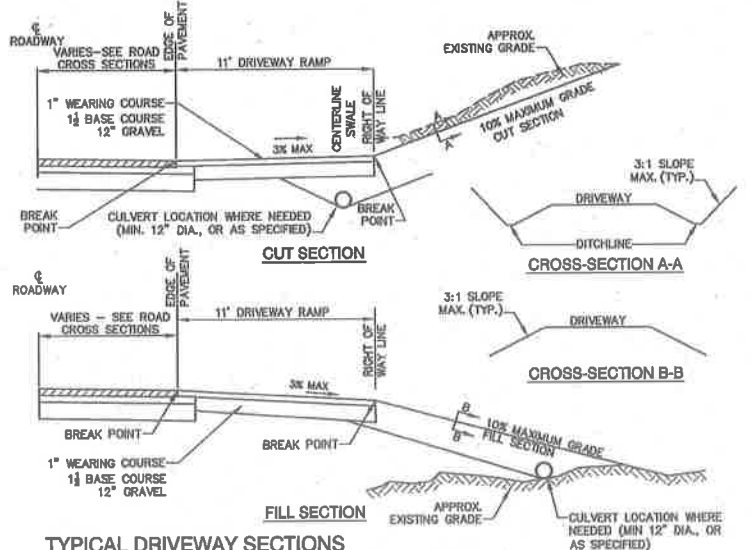
**TYPICAL ROADWAY SECTION - CUL-DE-SAC**

SCALE: 1"=10'



**TYPICAL ROADWAY SECTION**

SCALE: 1"=10'



**TYPICAL DRIVEWAY SECTIONS**

NOT TO SCALE

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Design: JAC	Draft: PSL	Date: 7/10/16
Checked: JAC	Scale: AS NOTED	Project No.: 15031
Drawing Name: 15031-PLAN SET.dwg		
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Designed and Produced in NH

**J/B Jones & Beach Engineers, Inc.**

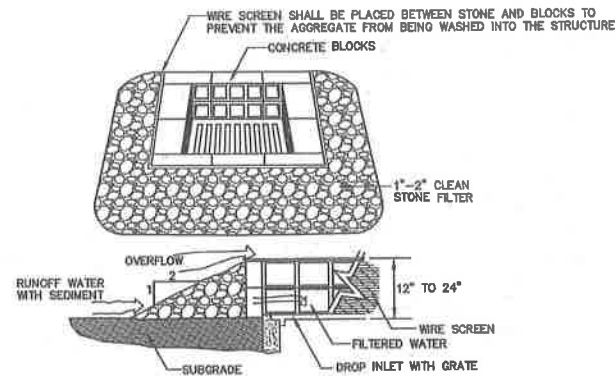
85 Portsmouth Ave. Civil Engineering Services 603-772-4746  
 PO Box 219 Stratham, NH 03885 FAX: 603-772-0227  
 E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	<b>DETAIL SHEET</b>
Project:	<b>BRECKENRIDGE ESTATES SUBDIVISION SPEARE ROAD, HUDSON, NH 03051</b>
Owner of Record:	<b>DOUGLAS S. SANDERSON 11 NERSESIAN WAY, HAMPTON, NH 03842</b>

DRAWING No.

**D1**

SHEET 16 OF 19  
 JBE PROJECT NO. 15031

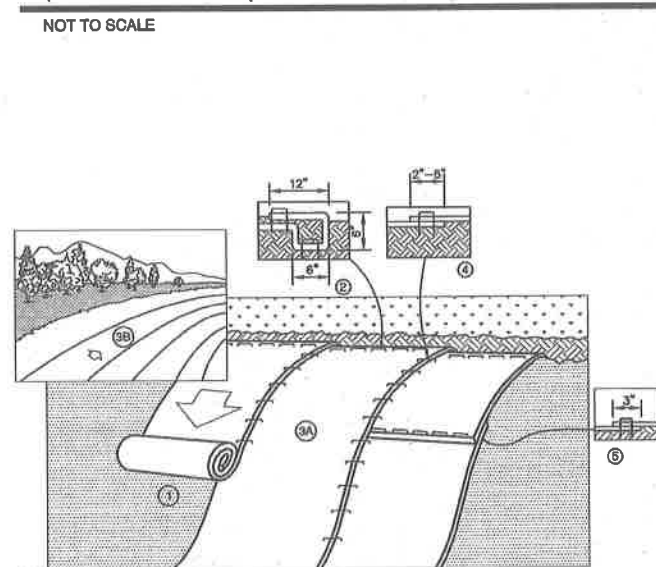


**MAINTENANCE NOTE:**

1. ALL STRUCTURES SHOULD BE INSPECTED AFTER EVERY RAINFALL AND REPAIRS MADE AS NECESSARY. SEDIMENT SHOULD BE REMOVED FROM TRAPPING DEVICES AFTER THE SEDIMENT HAS REACHED A MAXIMUM OF ONE HALF THE DEPTH OF THE TRAP. THE SEDIMENT SHOULD BE DISPOSED IN A SUITABLE UPLAND AREA AND PROTECTED FROM EROSION BY EITHER STRUCTURE OR VEGETATIVE MEANS. THE TEMPORARY TRAPS SHOULD BE REMOVED AND THE AREA REPAIRED AS SOON AS THE CONTRIBUTING DRAINAGE AREA TO THE INLET HAS BEEN COMPLETELY STABILIZED.

**TEMPORARY CATCH BASIN INLET PROTECTION**  
(Block and Gravel Drop Inlet Sediment Filter)

NOT TO SCALE



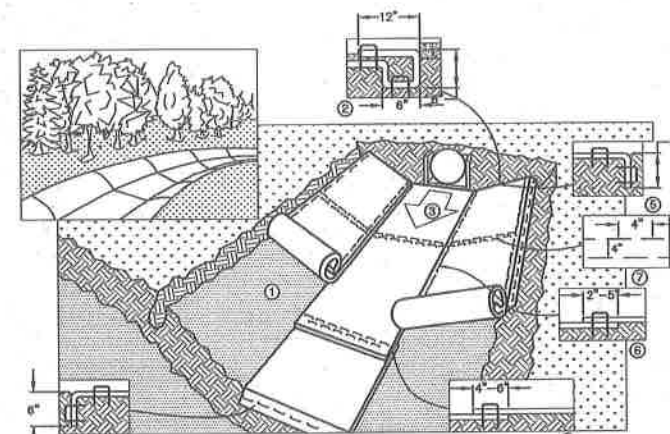
**NOTES:**

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH. NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

**NORTH AMERICAN GREEN**  
14649 HIGHWAY 41 NORTH  
EVANSVILLE, INDIANA 47725  
1-800-772-2040

**EROSION CONTROL BLANKET SLOPE INSTALLATION**  
NORTH AMERICAN GREEN (800) 772-2040

NOT TO SCALE



**NOTES:**

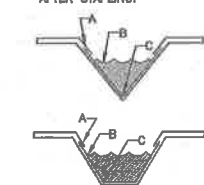
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4"-6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE BLANKETS.
5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP BY 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 2"-5" (DEPENDENT ON BLANKET TYPE) AND STAPLED, TO INSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE BLANKET BEING OVERLAPPED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP BY 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

**CRITICAL POINTS:**

- A. OVERLAPS AND SEAMS
- B. PROJECTED WATER LINE
- C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

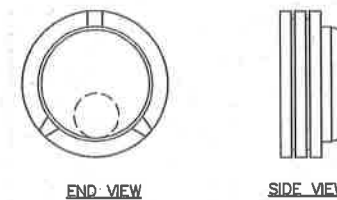
**NOTES:**

- \* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.
- \*\* IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.



**EROSION CONTROL BLANKET SWALE INSTALLATION**  
NORTH AMERICAN GREEN (800) 772-2040

NOT TO SCALE

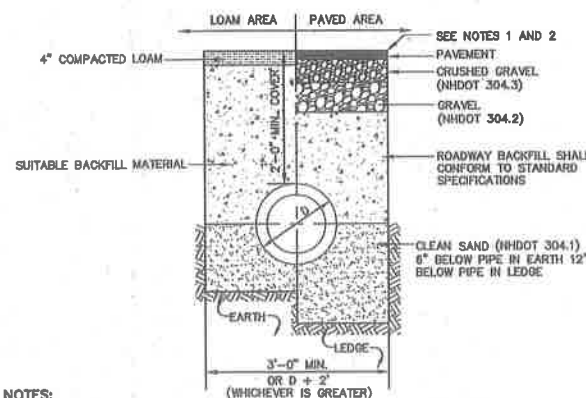


**NOTE:**

1. ADS N-12 SPLIT END CAP, ADS PRODUCT #--S7--AA. CONTRACTOR TO DRILL A CIRCULAR ORIFICE AS SPECIFIED ON CONSTRUCTION DRAWINGS IN THE END CAP TO MATCH THE INLET INVERT OF THE RECEIVING ADS N-12 CULVERT. INSTALLATION REQUIRES THAT THE END CAP BE FIELD BOLTED TO THE CULVERT WITH STAINLESS STEEL (SS306) HARDWARE.

**ADS ORIFICE END CAP**

NOT TO SCALE

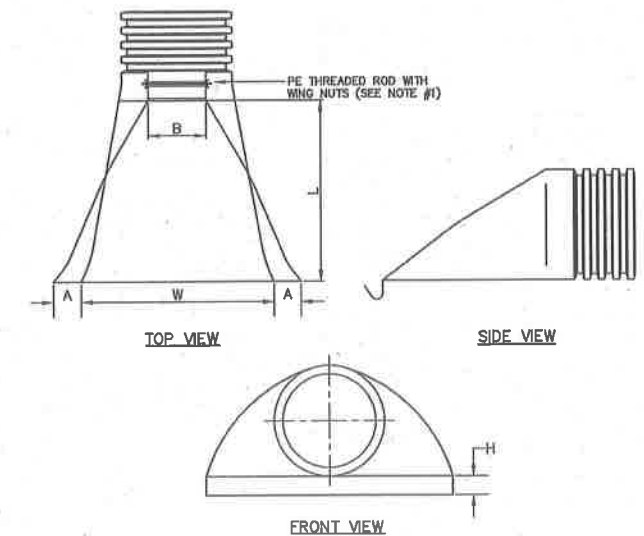


**NOTES:**

1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REGULATIONS.
2. NEW ROADWAY CONSTRUCTION SHALL CONFORM WITH PROJECT AND TOWN SPECIFICATIONS.
3. ALL MATERIALS ARE TO BE COMPACTED TO 95% OF ASTM D-1557.

**DRAINAGE TRENCH**

NOT TO SCALE



PART NO.	PIPE SIZE	A	B (MAX)	H	L	W
1210-NP	12"	6.5"	10"	6.5"	25"	29"
1510-NP	15"	6.5"	10"	6.5"	25"	29"
1810-NP	18"	7.5"	15"	6.5"	32"	35"
2410-NP	24"	7.5"	18"	6.5"	36"	45"
3010-NP	30"	10.5"	N/A	7.0"	53"	66"
3610-NP	36"	10.5"	N/A	7.0"	53"	66"

**NOTES:**

1. PE THREADED ROD WITH WING NUTS PROVIDED FOR END SECTIONS 12"-24". 30" AND 36" END SECTIONS TO BE WELDED PER MANUFACTURER'S RECOMMENDATIONS.
2. ALL DIMENSIONS ARE NOMINAL.

**ADS N-12 FLARED END SECTION**

NOT TO SCALE

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Design: JAC	Draft: PSL	Date: 7/10/16
Checked: JAC	Scale: AS NOTED	Project No.: 15031
Drawing Name: 15031-PLAN SET.dwg		
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0	7/10/15	ISSUED FOR REVIEW	PSL

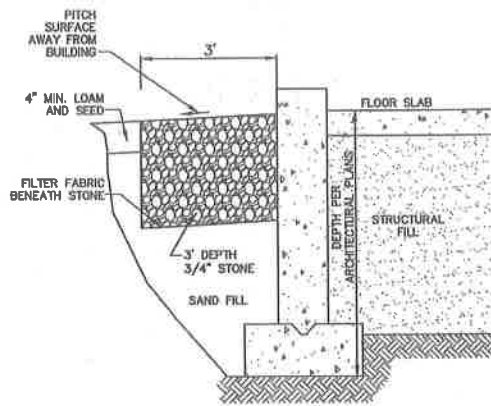
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E-MAIL: JBE@JONESANDBEACH.COM

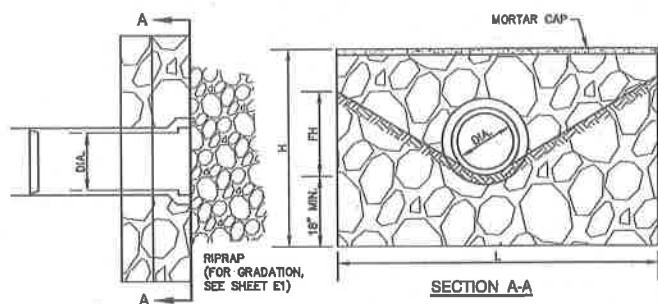
Plan Name:	<b>DETAIL SHEET</b>
Project:	<b>BRECKENRIDGE ESTATES SUBDIVISION SPEARE ROAD, HUDSON, NH 03051</b>
Owner of Record:	<b>DOUGLAS S. SANDERSON 11 NERSESIAN WAY, HAMPTON, NH 03842</b>

DRAWING No.	<b>D2</b>
SHEET 17 OF 19	JBE PROJECT NO. 15031



**DRIP EDGE DETAIL**

NOT TO SCALE



SECTION A-A

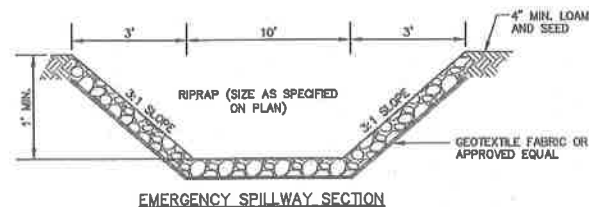
DA	HEADWALL LENGTH	HEADWALL HEIGHT	FILL HEIGHT	PIPE COVER	HEADWALL BOTTOM WIDTH
D	L	H	FH	h	W
12"	4'-3"	3'-0"	1'-1"	1'-3"	2'-0"
18"	6'-0"	4'-3"	1'-7"	1'-8"	2'-1"
18"	7'-0"	4'-8"	1'-10"	1'-6"	2'-2"
24"	8'-0"	5'-0"	2'-4"	1'-8"	2'-3"
30"	11'-0"	5'-6"	2'-10"	1'-6"	2'-5"
36"	13'-0"	6'-0"	3'-4"	1'-6"	2'-6"
42"	16'-0"	6'-9"	4'-1"	1'-9"	2'-9"
48"	17'-9"	7'-3"	4'-7"	1'-9"	2'-10"

**NOTES:**

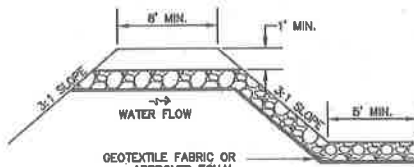
1. ALL DIMENSIONS GIVEN IN FEET AND INCHES.
2. PROVIDE BELL END AT INLET HEADWALL, AND SPIGOT END AT OUTLET END HEADWALL.
3. RIPRAP SHALL BE SIZED TO RESIST THE TRACTIVE VELOCITY FORCES.

**MORTAR RUBBLE MASONRY HEADWALL**

NOT TO SCALE



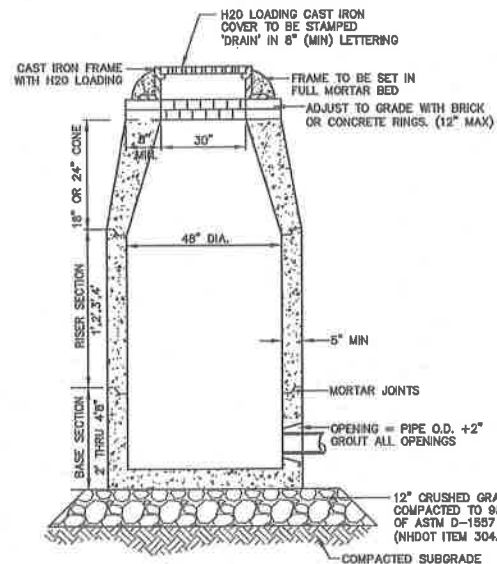
EMERGENCY SPILLWAY SECTION



EMERGENCY SPILLWAY PROFILE

**EMERGENCY SPILLWAY**

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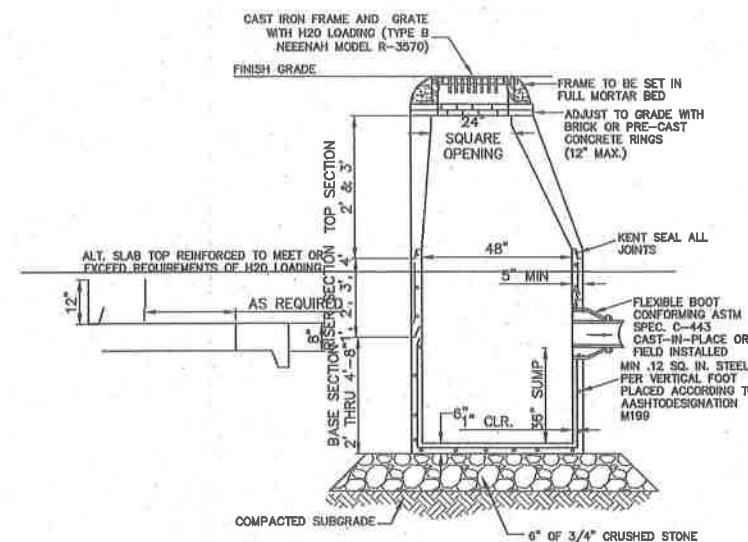


**NOTES:**

1. BASE SECTION SHALL BE MONOLITHIC WITH 48" INSIDE DIAMETER.
2. ALL SECTIONS SHALL BE DESIGNED FOR H2O LOADING.
3. CONCRETE SHALL BE COMPRESSIVE STRENGTH 4000 PSI, TYPE II CEMENT.
4. FRAMES AND GRATES SHALL BE HEAVY DUTY AND DESIGNED FOR H2O LOADING.
5. PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS SO AS TO BE WATERTIGHT.
6. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE BUTYL RUBBER.
7. ALL DRAIN MANHOLE FRAMES AND GRATES SHALL BE NHDOT TYPE MH-1, OR NEENAH R-1798 OR APPROVED EQUAL (30" DIA. TYPICAL).
8. STANDARD FRAME(S) AND GRATE(S) SHALL BE SET IN FULL MORTAR BED, ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM, BUT NO MORE THAN 12"), OR PRECAST CONCRETE "DONUTS".

**DRAIN MANHOLE**

NOT TO SCALE



**NOTES:**

1. BASE SECTION SHALL BE MONOLITHIC WITH 48" INSIDE DIAMETER.
2. ALL SECTIONS SHALL BE DESIGNED FOR H2O LOADING.
3. CONCRETE SHALL BE COMPRESSIVE STRENGTH 4000 PSI, TYPE II CEMENT.
4. FRAMES AND GRATES SHALL BE HEAVY DUTY AND DESIGNED FOR H2O LOADING.
5. PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS SO AS TO BE WATERTIGHT.
6. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE BUTYL RUBBER.
7. ALL CATCH BASIN FRAMES AND GRATES SHALL BE NHDOT CATCH BASIN TYPE ALTERNATE 1 OR NEENAH R-3570 OR APPROVED EQUAL (24"x24" TYPICAL).
8. STANDARD CATCH BASIN FRAME AND GRATE(S) SHALL BE SET IN FULL MORTAR BED, ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM, BUT NO MORE THAN 12"), OR PRECAST CONCRETE "DONUTS".

**CATCH BASIN**

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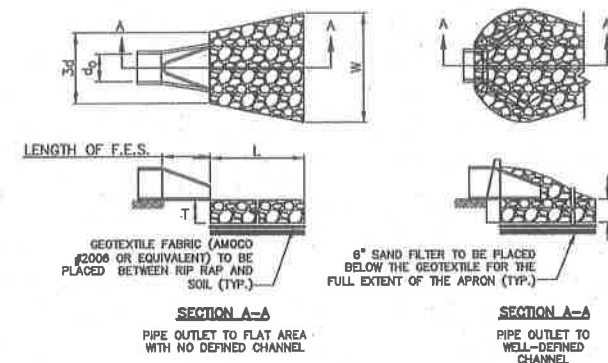


TABLE 7-24--RECOMMENDED RIP RAP GRADATION RANGES

THICKNESS OF RIP RAP = 0.75 FEET			
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	

TABLE 7-24--RECOMMENDED RIP RAP GRADATION RANGES

THICKNESS OF RIP RAP = 1.5 FEET			
d50 SIZE=	0.50	FEET	6 INCHES
% OF WEIGHT SMALLER THAN THE GIVEN d50 SIZE	SIZE OF STONE (INCHES)		
	FROM	TO	
100%	9	12	
85%	8	11	
50%	6	9	
15%	2	3	

**NOTES:**

1. THE SUBGRADE FOR THE GEOTEXTILE FABRIC AND RIP RAP SHALL BE PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.
2. THE RIP RAP SHALL CONFORM TO THE SPECIFIED GRADATION.
3. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE 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.
4. 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.
5. OUTLETS TO A DEFINED CHANNEL SHALL HAVE 2:1 OR FLATTER SIDE SLOPES AND SHOULD BEGIN AT THE TOP OF THE CULVERT AND TAPER DOWN TO THE CHANNEL BOTTOM THROUGH THE LENGTH OF THE APRON.
6. MAINTENANCE: 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.

**RIP RAP OUTLET PROTECTION APRON**

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Design: JAC Draft: PSL Date: 7/10/16  
 Checked: JAC Scale: AS NOTED Project No.: 15031  
 Drawing Name: 15031-PLAN SET.dwg  
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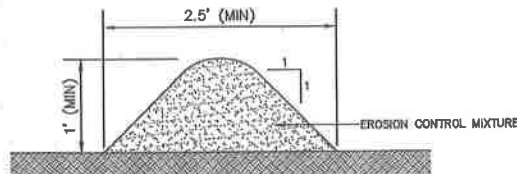
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**J/B Jones & Beach Engineers, Inc.**  
 Civil Engineering Services  
 85 Portsmouth Ave. PO Box 218 Stratford, NH 03865  
 603-772-4746 FAX: 603-772-0227 E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: **DETAIL SHEET**  
 Project: **BRECKENRIDGE ESTATES SUBDIVISION SPEARE ROAD, HUDSON, NH 03051**  
 Owner of Record: **DOUGLAS S. SANDERSON 11 NERSESIAN WAY, HAMPTON, NH 03842**

DRAWING No. **D2**  
 SHEET 18 OF 19  
 JBE PROJECT NO. 15031

**TEMPORARY EROSION CONTROL NOTES**

- THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME, AT NO TIME SHALL AN AREA IN EXCESS OF 5 ACRES BE EXPOSED AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED.
- EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND AT LOCATIONS AS REQUIRED, DIRECTED BY THE ENGINEER.
- ALL DISTURBED AREAS (INCLUDING POUD AREAS BELOW THE PROPOSED WATERLINE) SHALL BE RETURNED TO PROPOSED GRADES AND ELEVATIONS. DISTURBED AREAS SHALL BE LOAMED WITH A MINIMUM OF 6" OF SCREENED ORGANIC LOAM AND SEEDED WITH SEED MIXTURE 'C' AT A RATE NOT LESS THAN 1.10 POUNDS OF SEED PER 1,000 S.F. OF AREA (48 LBS. / ACRE).
- SILT FENCES AND OTHER BARRIERS SHALL BE INSPECTED EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 0.5" OR GREATER. ALL DAMAGED AREAS SHALL BE REPAIRED, AND SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED AND DISPOSED OF.
- AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, THE TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED AND THE AREA DISTURBED BY THE REMOVAL SMOOTHED AND RE-VEGETATED.
- AREAS MUST BE SEEDED AND MULCHED OR OTHERWISE PERMANENTLY STABILIZED WITHIN 3 DAYS OF FINAL GRADING, OR TEMPORARILY STABILIZED WITHIN 14 DAYS OF THE INITIAL DISTURBANCE OF SOIL. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
- ALL PROPOSED VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING NORTH AMERICAN GREEN 576 EROSION CONTROL BLANKETS FOR AN EQUIVALENT APPROVED IN WRITING BY THE ENGINEER ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
- ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- AFTER NOVEMBER 15th, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3" OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
  - BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
  - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
  - A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH STONE OR RIPRAP HAS BEEN INSTALLED; OR
  - EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- FUGITIVE DUST CONTROL IS REQUIRED TO BE CONTROLLED IN ACCORDANCE WITH ENV-A 1000, AND THE PROJECT IS TO MEET THE REQUIREMENTS AND INTENT OF RSA 430:53 AND AGR 3800 RELATIVE TO INVASIVE SPECIES.
- PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR'S NAME, ADDRESS, AND PHONE NUMBER SHALL BE SUBMITTED TO DES VIA EMAIL (SEE BELOW).
- PRIOR TO CONSTRUCTION, A PHASING PLAN THAT DELINEATES EACH PHASE OF THE PROJECT SHALL BE SUBMITTED. ALL TEMPORARY SEDIMENT BASINS THAT WILL BE NEEDED FOR DEWATERING WORK AREAS SHALL BE LOCATED AND IDENTIFIED ON THIS PLAN.
- IN ORDER TO ENSURE THE STABILITY OF THE SITE AND EFFECTIVE IMPLEMENTATION OF THE SEDIMENT AND EROSION CONTROL MEASURES SPECIFIED IN THE PLANS FOR THE DURATION OF CONSTRUCTION, THE CONTRACTOR SHALL BE IN STRICT COMPLIANCE WITH THE FOLLOWING INSPECTION AND MAINTENANCE REQUIREMENTS IN ADDITION TO THOSE CALLED FOR IN THE SWPPP:
  - A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL OR A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW HAMPSHIRE ("MONITOR") SHALL BE EMPLOYED TO INSPECT THE SITE FROM THE START OF ALTERATION OF TERRAIN ACTIVITIES UNTIL THE SITE IS IN FULL COMPLIANCE WITH THE SITE SPECIFIC PERMIT ("PERMIT").
  - DURING THIS PERIOD, THE MONITOR SHALL INSPECT THE SUBJECT SITE AT LEAST ONCE A WEEK, AND IF POSSIBLE, DURING ANY 1/2 INCH OR GREATER RAIN EVENT (I.E. 1/2 INCH OF PRECIPITATION OR MORE WITHIN A 24 HOUR PERIOD). IF UNABLE TO BE PRESENT DURING SUCH A STORM, THE MONITOR SHALL INSPECT THE SITE WITHIN 24 HOURS OF THIS EVENT.
  - THE MONITOR SHALL PROVIDE TECHNICAL ASSISTANCE AND RECOMMENDATIONS TO THE CONTRACTOR ON THE APPROPRIATE BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROLS REQUIRED TO MEET THE REQUIREMENTS OF RSA 485 A:17 AND ALL APPLICABLE DES PERMIT CONDITIONS.
  - WITHIN 24 HOURS OF EACH INSPECTION, THE MONITOR SHALL SUBMIT A REPORT TO DES VIA EMAIL (RIDGELY MAUCK AT: RIDGELY.MAUCK@DES.NH.GOV).
  - THE MONITOR SHALL MEET WITH DES TO DECIDE UPON A REPORT FORMAT. THE REPORT FORMAT SHALL BE REVIEWED AND APPROVED BY DES PRIOR TO THE START OF CONSTRUCTION.



**NOTES:**

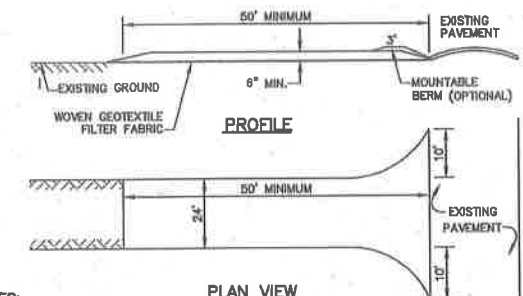
- ORGANIC FILTER BERMS MAY BE UTILIZED IN LIEU OF SILT FENCE, UNLESS OTHERWISE SPECIFIED.
- THE EROSION CONTROL MIX USED IN THE FILTER BERMS SHALL BE A WELL-GRADED MIXTURE OF PARTICLE SIZES, MAY CONTAIN ROCKS LESS THAN 4" IN DIAMETER, STUMP GRINDINGS, SHREDDED OR COMPOSTED BARK, OR ACCEPTABLE MANUFACTURED PRODUCTS, AND SHALL BE FREE OF REFUSE, PHYSICAL CONTAMINANTS, AND MATERIAL TOXIC TO PLANT GROWTH, AND SHALL MEET THE FOLLOWING STANDARDS:
  - THE ORGANIC CONTENT SHALL BE 80-100% OF DRY WEIGHT.
  - PARTICLE SIZE BY WEIGHT SHALL BE 100% PASSING A 6" SCREEN, AND 70-85% PASSING A 0.75" SCREEN.
  - THE ORGANIC PORTION SHALL BE FIBROUS AND ELONGATED.
  - LARGE PORTIONS OF SILTS, CLAYS, OR FINE SANDS SHALL NOT BE INCLUDED IN THE MIXTURE.
  - SOLUBLE SALTS CONTENT SHALL BE >4.0mmhos/cm.
  - THE pH SHALL BE BETWEEN 5.0 AND 8.0.
- ORGANIC FILTER BERMS SHALL BE INSTALLED ALONG A RELATIVELY LEVEL CONTOUR. IT MAY BE NECESSARY TO CUT TALL GRASSES OR WOODY VEGETATION TO AVOID CREATING VOIDS AND BRIDGES THAT WOULD ENABLE FINES TO WASH UNDER THE BERM.
- ON SLOPES LESS THAN 5% OR AT THE BOTTOM OF SLOPES STEEPER THAN 3:1, UP TO 20' LONG, THE BERM SHALL BE A MINIMUM OF 12" HIGH (AS MEASURED ON THE UPHILL SIDE), AND A MINIMUM OF 36" WIDE. ON LONGER OR STEEPER SLOPES, THE BERM SHALL BE WIDER TO ACCOMMODATE THE POTENTIAL ADDITIONAL RUNOFF.
- FROZEN GROUND, OUTCROPS OF BEDROCK, AND VERY ROOTED FORESTED AREAS PRESENT THE MOST PRACTICAL AND EFFECTIVE LOCATIONS FOR ORGANIC FILTER BERMS. OTHER BMP'S SHOULD BE USED AT LOW POINTS OF CONCENTRATED RUNOFF, BELOW CULVERT OUTLET APRONS, AROUND CATCH BASINS, AND AT THE BOTTOM OF STEEP PERIMETER SLOPES THAT HAVE A LARGE CONTRIBUTING AREA.
- SEDIMENT SHALL BE REMOVED FROM BEHIND THE STRUCTURES WHEN IT HAS ACCUMULATED TO ONE HALF THE ORIGINAL HEIGHT OF THE STRUCTURE.
- STRUCTURES MAY BE LEFT IN PLACE ONCE THE SITE IS STABILIZED.

**ORGANIC FILTER BERM**

NOT TO SCALE

**SEEDING SPECIFICATIONS**

- GRADING AND SHAPING**
  - SLOPES SHALL NOT BE STEEPER THAN 2:1 WITHOUT APPROPRIATE EROSION CONTROL MEASURES AS SPECIFIED ON THE PLANS (3:1 SLOPES OR FLATTER ARE PREFERRED).
  - WHERE MOWING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE RECOMMENDED.
- SEEDBED 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 FERTILIZER AND LIME MIXED INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A 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. TYPES 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 6-10-10.)
  - 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 THE "SEEDING GUIDE" AND "SEEDING RATES" TABLES ON THIS SHEET FOR APPROPRIATE SEED MIXTURES AND RATES OF SEEDING. ALL LEGUMES (CROWNVEATCH, BIRDSFOOT, TREFOL AND FLATPEA) MUST BE INOCULATED WITH THEIR SPECIFIC INOCULANT PRIOR TO THEIR INTRODUCTION TO THE SITE.
  - WHEN SEEDING AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDING AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20th OR FROM AUGUST 10th TO SEPTEMBER 1st.
- MULCH**
  - HAY, 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 S.F.
- MAINTENANCE TO ESTABLISH A STAND**
  - PLANTED AREAS 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 PERENNIALS TAKE 2 TO 3 YEARS TO BECOME FULLY ESTABLISHED.
  - IN WATERWAYS, CHANNELS, OR SWALES WHERE UNIFORM FLOW CONDITIONS ARE ANTICIPATED, ANNUAL MOWING MAY BE NECESSARY TO CONTROL GROWTH OF WOODY VEGETATION.



**NOTES:**

- STONE FOR STABILIZED CONSTRUCTION ENTRANCE SHALL BE 1 TO 2 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.
- 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, WHICHEVER IS GREATER.
- GEOTEXTILE FILTER FABRIC SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER FABRIC IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENTIAL 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 STONE 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 THE PUBLIC RIGHT-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 THE PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.

**STABILIZED CONSTRUCTION ENTRANCE**

NOT TO SCALE

USE	SEEDING MIXTURE 1/	DROUGHTY	WELL DRAINED	MODERATELY WELL DRAINED	POORLY DRAINED
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A	FAIR	GOOD	GOOD	FAIR
	B	POOR	GOOD	FAIR	FAIR
	C	POOR	GOOD	EXCELLENT	GOOD
	D	FAIR	EXCELLENT	EXCELLENT	POOR
WATERWAYS, EMERGENCY SPILLWAYS, AND OTHER CHANNELS WITH FLOWING WATER.	A	GOOD	GOOD	GOOD	FAIR
	C	GOOD	EXCELLENT	EXCELLENT	FAIR
LIGHTLY USED PARKING LOTS, OOD AREAS, UNUSED LANDS, AND LOW INTENSITY USE RECREATION SITES.	A	GOOD	GOOD	GOOD	FAIR
	B	GOOD	GOOD	FAIR	POOR
	C	GOOD	EXCELLENT	EXCELLENT	FAIR
PLAY AREAS AND ATHLETIC FIELDS. (TOPSOIL IS ESSENTIAL FOR GOOD TURF.)	E	FAIR	EXCELLENT	EXCELLENT	2/
	F	FAIR	EXCELLENT	EXCELLENT	2/

NOTE: TEMPORARY SEED MIX FOR STABILIZATION OF TURF SHALL BE WINTER RYE OR OATS AT A RATE OF 2.5 LBS. PER 1000 S.F. AND SHALL BE PLACED PRIOR TO OCTOBER 10th, IF PERMANENT SEEDING NOT YET COMPLETE.

**SEEDING GUIDE**

MIXTURE	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 OR FLAT PEA	30	0.75
TOTAL	40 OR 65	0.95 OR 1.35
C. TALL FESCUE	20	0.45
CREeping RED FESCUE	20	0.45
BIRDS FOOT TREFOL	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/	80	1.15
KENTUCKY BLUEGRASS 1/	50	1.15
TOTAL	100	2.30
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.

**SEEDING RATES**

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Designed and Produced in NH

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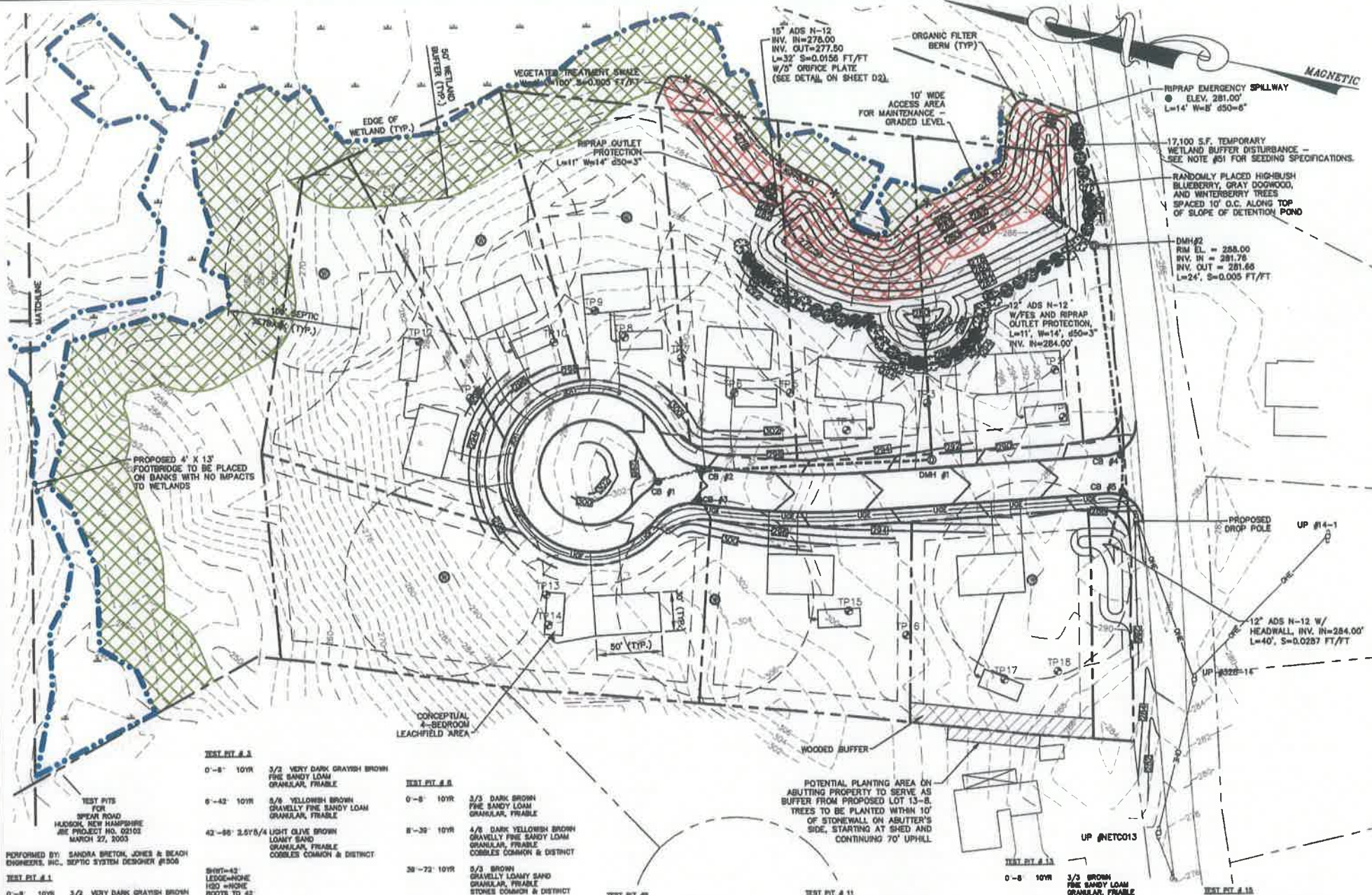
Plan Name:	<b>EROSION AND SEDIMENT CONTROL DETAILS</b>
Project:	<b>BRECKENRIDGE ESTATES SUBDIVISION SPEARE ROAD, HUDSON, NH 03051</b>
Owner of Record:	<b>DOUGLAS S. SANDERSON 11 NERSESIAN WAY, HAMPTON, NH 03842</b>

DRAWING No.

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SHEET 19 OF 19  
JBE PROJECT NO. 15031

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**GRADING, DRAINAGE AND UTILITY NOTES:**

- UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER JONES & BEACH ENGINEERS, INC. NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES AND/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 688-DIG-SAFE (688-344-7235).
- VERTICAL DATUM: XXXXX. HORIZONTAL DATUM: XXXXX.
- ALL BENCHMARKS AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR.
- SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED. SEE CONSTRUCTION SEQUENCE ON SHEET E1.
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR IS REQUIRED TO HAVE THE PROJECT'S LAND SURVEYOR STAKE OR FLAG CLEARING LIMITS. A MINIMUM OF 48 HOURS NOTICE IS REQUIRED.
- ALL ROOF DRAINS FROM BUILDING SHALL END 5' OUTSIDE THE BUILDING LIMITS AS SHOWN ON PLAN AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AND WITNESS SET THE END. ALL EXTERIOR ROOF DOWNSPOUTS ARE TO BE INSTALLED WITH OVERFLOW DEVICES.
- ALL SWALES AND DETENTION PONDS ARE TO BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
- PROPOSED RM ELEVATIONS OF DRAINAGE STRUCTURES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH WITH FINISH GRADES.
- ALL SWALES AND ANY SLOPES GREATER THAN 3:1 SHALL BE STABILIZED WITH NORTH AMERICAN GREEN 875 EROSION CONTROL BLANKETS (OR AN EQUIVALENT APPROVED IN WRITING BY THE ENGINEER), UNLESS OTHERWISE SPECIFIED.
- ALL DRAINAGE AND SANITARY STRUCTURE INTERIOR DIAMETERS (4" MIN) SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS. CATCH BASINS SHALL HAVE 3" DEEP Sumps WITH GREASE HOODS, UNLESS OTHERWISE NOTED.
- ALL DRAINAGE STRUCTURES SHALL BE PRECAST, UNLESS OTHERWISE SPECIFIED.
- ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC H2O LOADING AND SHALL BE INSTALLED ACCORDINGLY.
- IMMEDIATELY APPLY AND COMPACT STONE BASE FOR FOOTING PAD TO +/- 1/2" PRIOR TO EXCAVATING INTERIOR AND PERIMETER FOOTINGS.
- IN AREAS WHERE CONSTRUCTION IS PROPOSED ADJACENT TO ABUTTING PROPERTIES, THE CONTRACTOR SHALL INSTALL GRANGE CONSTRUCTION FENCING ALONG PROPERTY LINES IN ALL AREAS WHERE SBT FENCING IS NOT REQUIRED.
- ALL DRAINAGE PIPE SHALL BE NON-PERFORATED ADS N-12 OR APPROVED EQUAL.
- STONE INLET PROTECTION SHALL BE PLACED AT ALL CATCH BASINS. SEE DETAIL WITHIN THE DETAIL SHEETS.
- LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY ALL GOVERNING AUTHORITIES. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE EPA SWPPP DURING CONSTRUCTION OPERATIONS.
- NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
- ALL EXPOSED AREAS SHALL BE SEEDDED AS SPECIFIED WITHIN 3 DAYS OF FINAL GRADING.
- SHOULD CONSTRUCTION STOP FOR LONGER THAN 3 DAYS, THE SITE SHALL BE SEEDDED AS SPECIFIED.
- MAINTAIN EROSION CONTROL MEASURES AFTER EACH RAIN EVENT OF 0.5" OR GREATER IN A 24 HOUR PERIOD AND AT LEAST ONCE A WEEK.
- THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE, AS THE GENERAL CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SEDIMENT FROM LEAVING THE SITE.
- CONSTRUCTION VEHICLES SHALL UTILIZE THE STABILIZED CONSTRUCTION ENTRANCE TO THE EXTENT POSSIBLE THROUGHOUT CONSTRUCTION.
- IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
- SEDIMENT SHALL BE REMOVED FROM ALL SEDIMENT BASINS BEFORE THEY ARE 25% FULL.
- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH PROJECT SPECIFICATIONS.
- ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED, IF DEEMED NECESSARY BY ON-SITE INSPECTION BY ENGINEER AND/OR REGULATORY OFFICIALS.
- SEE ALSO EROSION AND SEDIMENT CONTROL SPECIFICATIONS ON SHEET E1.
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER, ARCHITECT AND/OR OWNER, IN ORDER TO OBTAIN AND/OR PAY ALL THE NECESSARY LOCAL PERMITS, CONNECTION FEES AND BONDS.
- THE CONTRACTOR SHALL PROVIDE A MINIMUM NOTICE OF FOURTEEN (14) DAYS TO ALL CORPORATIONS, COMPANIES AND/OR LOCAL AUTHORITIES OWNING OR HAVING A JURISDICTION OVER UTILITIES RUNNING TO, THROUGH OR ACROSS PROJECT AREAS PRIOR TO DEMOLITION AND/OR CONSTRUCTION ACTIVITIES.
- THE LOCATION, SIZE, DEPTH AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE TO THE STANDARDS AND REQUIREMENTS OF THE RESPECTIVE UTILITY COMPANY (ELECTRIC, TELEPHONE, CABLE TELEVISION, FIRE ALARM, GAS, WATER, AND SEWER).
- A PRECONSTRUCTION MEETING SHALL BE HELD WITH THE OWNER, ENGINEER, ARCHITECT, CONTRACTOR, LOCAL OFFICIALS, AND ALL PROJECT-RELATED UTILITY COMPANIES (PUBLIC AND PRIVATE) PRIOR TO START OF CONSTRUCTION.
- ALL CONSTRUCTION SHALL CONFORM TO THE TOWN STANDARDS AND REGULATIONS, AND HIGHER STANDARDS AND SPECIFICATIONS, WHICHEVER ARE MORE STRINGENT, UNLESS OTHERWISE SPECIFIED.
- ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) RULES AND REGULATIONS.
- BUILDING TO BE SERVED BY UNDERGROUND UTILITIES UNLESS OTHERWISE NOTED.
- THE CONTRACTOR IS TO VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITY STUBS PRIOR TO CONSTRUCTION AND DISCONNECT ALL EXISTING SERVICE CONNECTIONS AT THEIR RESPECTIVE MAINS IN ACCORDANCE WITH THE RESPECTIVE UTILITY COMPANY'S STANDARDS AND SPECIFICATIONS. ENGINEER TO BE NOTIFIED.
- AS-BUILT PLANS SHALL BE SUBMITTED TO DEPARTMENT OF PUBLIC WORKS.
- INVERTS AND SHELVES: MANHOLES SHALL HAVE A BRICK PAVED FLOOR AND INVERT CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW AT CHANGES IN DIRECTION. THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE THROUGH CHAMBER UNDERLAYMENT OF INVERT, AND SHELVE SHALL CONSIST OF BRICK MASONRY.
- FRAMES AND COVERS: MANHOLE FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 30 INCH DIA. CLEAR OPENING. THE WORD "SEWER" OR "DRAIN" SHALL BE CAST INTO THE CENTER OF THE UPPER FACE OF EACH COVER WITH RAISED, 3" LETTERS.
- PROPOSED RM ELEVATIONS OF DRAINAGE AND SANITARY MANHOLES ARE APPROXIMATE. FINAL ELEVATIONS SHALL BE SET FLUSH WITH FINISH GRADES. ADJUST ALL OTHER RM ELEVATIONS OF MANHOLES, WATER GATES, GAS GATES AND OTHER UTILITIES TO FINISH GRADE AS SHOWN ON THE GRADING AND DRAINAGE PLAN.
- CONTRACTOR TO FURNISH SHOP DRAWINGS FOR UTILITY RELATED ITEMS TO ENSURE CONFORMANCE WITH THE PLANS AND SPECIFICATIONS. SHOP DRAWINGS SHOULD BE SENT IN TRIPPLICATE TO THE DESIGN ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
- EXISTING UTILITIES SHALL BE DIESALED BEFORE CONSTRUCTION.
- ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
- TOWN OF HUDSON ASSUMES NO RESPONSIBILITY FOR WATER QUALITY FOR ON-SITE WELLS WHICH MAY BE THE RESULT OF ROUTINE MAINTENANCE OF TOWN OR STATE ROADWAYS ADJACENT TO THE PROPERTY, SUCH AS SANDING, SALTING, PAVING, ETC.
- MUNICIPAL WATER SUPPLY IS NOT AVAILABLE IN THE VICINITY OF THIS SUBDIVISION FOR FIRE FIGHTING PURPOSES. TANKER TRUCKS WILL BE USED IN THE EVENT OF AN EMERGENCY SITUATION.
- ALL PROPOSED LOTS ARE TO BE ACCESSED FROM PROPOSED ROADWAY ONLY.
- ALL HOUSE, DRIVEWAY, AND LEACHFIELD LOCATIONS ARE CONCEPTUAL ONLY. THEY HAVE BEEN ADDED TO THE PLAN IN ORDER TO SERVE AS AN AID IN THE PLANNING PROCESS ONLY.
- CONTRACTOR IS TO INSTALL 12" ADS N-12 CULVERTS WITH FLARED END SECTIONS IN THE EXISTING DITCH LINE AT ALL PROPOSED DRIVEWAY LOCATIONS (IF NECESSARY).
- ABUTTING PROPERTIES AND INFRASTRUCTURE WILL FACE MINIMAL ADVERSEITY FROM STORMWATER ASSOCIATED WITH THIS PROJECT.
- WETLAND BUFFER IMPACT AREAS TO BE SEEDDED WITH NEW ENGLAND CONSERVATION/WILDLIFE MIX TO PROVIDE PERMANENT COVER OF GRASSES, BLOOMERS, AND LEGUMES. THIS SEED MIX PROVIDES FOR BOTH EROSION CONTROL, AND WILDLIFE HABITAT VALUE FOR DISTURBED AREAS. THIS IS A NO MAINTENANCE SEED MIX AND SHOULD BE MOWED ONCE YEARLY IN THE FALL.  
APPLICATION RATE: 25LBS/ACRE | 1750 SQ FT/LB

TEST PIT #	DEPTH	SOIL DESCRIPTION	TEST PIT #	DEPTH	SOIL DESCRIPTION
TEST PIT # 1	0-8" 10YR	3/2 VERY DARK GRAYISH BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 10	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 2	6-12" 10YR	5/8 YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 11	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 3	42-48" 2.5Y/8.4	LIGHT OLIVE BROWN LOAMY SAND GRANULAR, FRABLE COBBLES COMMON & DISTINCT	TEST PIT # 12	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 4	0-8" 10YR	3/2 VERY DARK GRAYISH BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 13	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 5	6-12" 10YR	5/8 YELLOWISH BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 14	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 6	28-32" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 15	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 7	32-40" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 16	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 8	0-8" 10YR	3/2 VERY DARK GRAYISH BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 17	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 9	8-18" 7.5Y/8.5	STRONG BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 18	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 10	18-33" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE	TEST PIT # 19	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 11	33-50" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 20	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 12	0-8" 10YR	3/2 VERY DARK GRAYISH BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 21	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 13	8-18" 7.5Y/8.5	STRONG BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 22	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 14	18-33" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE	TEST PIT # 23	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 15	33-50" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 24	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 16	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 25	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 17	4-18" 10YR	4/8 DARK YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 26	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 18	18-33" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE	TEST PIT # 27	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 19	33-50" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 28	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 20	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 29	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 21	4-18" 10YR	4/8 DARK YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 30	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 22	18-33" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE	TEST PIT # 31	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 23	33-50" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 32	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 24	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 33	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 25	4-18" 10YR	4/8 DARK YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 34	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 26	18-33" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE	TEST PIT # 35	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 27	33-50" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 36	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 28	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 37	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 29	4-18" 10YR	4/8 DARK YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 38	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 30	18-33" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE	TEST PIT # 39	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 31	33-50" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 40	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 32	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 41	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 33	4-18" 10YR	4/8 DARK YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 42	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 34	18-33" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE	TEST PIT # 43	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 35	33-50" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 44	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 36	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 45	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 37	4-18" 10YR	4/8 DARK YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 46	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 38	18-33" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE	TEST PIT # 47	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 39	33-50" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 48	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 40	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 49	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 41	4-18" 10YR	4/8 DARK YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 50	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 42	18-33" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE	TEST PIT # 51	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 43	33-50" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 52	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 44	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 53	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 45	4-18" 10YR	4/8 DARK YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 54	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 46	18-33" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE	TEST PIT # 55	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 47	33-50" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 56	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 48	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 57	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 49	4-18" 10YR	4/8 DARK YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 58	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 50	18-33" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE	TEST PIT # 59	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 51	33-50" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 60	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 52	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 61	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 53	4-18" 10YR	4/8 DARK YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 62	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 54	18-33" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE	TEST PIT # 63	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 55	33-50" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 64	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 56	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 65	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 57	4-18" 10YR	4/8 DARK YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 66	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 58	18-33" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE	TEST PIT # 67	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 59	33-50" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 68	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 60	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 69	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 61	4-18" 10YR	4/8 DARK YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 70	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 62	18-33" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE	TEST PIT # 71	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 63	33-50" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 72	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 64	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 73	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 65	4-18" 10YR	4/8 DARK YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 74	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 66	18-33" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE	TEST PIT # 75	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 67	33-50" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 76	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 68	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 77	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 69	4-18" 10YR	4/8 DARK YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 78	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 70	18-33" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE	TEST PIT # 79	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 71	33-50" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 80	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 72	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 81	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 73	4-18" 10YR	4/8 DARK YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 82	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 74	18-33" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE	TEST PIT # 83	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 75	33-50" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 84	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 76	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 85	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 77	4-18" 10YR	4/8 DARK YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 86	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 78	18-33" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE	TEST PIT # 87	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 79	33-50" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 88	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 80	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 89	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 81	4-18" 10YR	4/8 DARK YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 90	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 82	18-33" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY LOAMY SAND GRANULAR, FRABLE	TEST PIT # 91	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 83	33-50" 2.5Y/8.4	LIGHT OLIVE BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 92	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 84	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 93	0-4" 10YR	3/2 DARK BROWN FINE SANDY LOAM GRANULAR, FRABLE
TEST PIT # 85	4-18" 10YR	4/8 DARK YELLOWISH BROWN GRAVELLY FINE SANDY LOAM GRANULAR, FRABLE	TEST PIT # 94	0-	

# **Review of the Zoning Amendment Warrant Articles for the 2016 March Town Meeting**

Staff Report  
27 January 2016

Attached, please find a copy of the 2016 Town Meeting Warrant, as you can see, Articles 2 through 5 pertain to the recent Zoning Amendments approved for this Warrant. The remaining Articles pertain to matters of Town governance.

## **XVI. OTHER BUSINESS**

- B. Discussion on the Zoning Ordinance Review Committee's (ZORC) Efforts-to-Date on Updating the Town's Zoning Ordinance.**
- C. Review of the Updated Planning Board Land Use Regulations.**

In regard to the above 2 agenda items, under XVI. OTHER BUSINESS, at the meeting staff will give a verbal update on each. That is, rather than a written staff Report provided herewith.

**2016 Town Meeting Warrant  
Hudson, New Hampshire**

To the inhabitants of the Town of Hudson, in the County of Hillsborough, State of New Hampshire, qualified to vote in town affairs. You are hereby notified to meet at the Hudson Community Center, 12 Lions Avenue, commencing at 9:00 a.m. on Saturday, February 6, 2016 for the transaction of all business, other than voting by official ballot. This first session of the Annual Town Meeting shall consist of explanation, discussion and debate of each warrant article. Warrant articles may be amended at the first session, subject to the restrictions set forth in NH RSA 40:13, IV.

You are hereby further notified that the second session of the Annual Meeting shall be held at Hudson Community Center, 12 Lions Avenue, between the hours of 7:00 a.m. and 8:00 p.m. on Tuesday, March 8, 2016, to elect Town officers and to vote by official ballot on all articles set forth in this Warrant, as may be amended by act of the first session meeting.

**Election of Town Officers**

**Article 1**            To choose all necessary Town Officers for the coming year.

**Article 2**            **Are you in favor of the adoption of Amendment No. 1 as proposed by the Planning Board for the Town Zoning Ordinance as follows?**

Amend the Official Zoning Map of the Town of Hudson by re-zoning from Industrial (I) to Business (B) the parcel of land located on the southerly border of Elm Avenue shown on the Town Assessor's Maps as identification number 156-063-000, together with a portion of the adjacent section of Elm Avenue, the resulting zoning line to run along the centerline of Elm Avenue, with the I District being to the north of the centerline and the B District being to the south of the centerline. (Approved by the Planning Board by a vote of 4-0-0)

**Article 3**            **Are you in favor of the adoption of Amendment No. 2 as proposed by the Planning Board for the Town Zoning Ordinance as follows?**

Amend the Official Zoning Map of the Town of Hudson by re-zoning from Business (B) to Town Residential (TR) the following parcels of land, which are located along the west border of Webster Street between Federal Street to the north and Daw Street to the south, with the following identification numbers on the Town Assessor's Maps: 165-001-000 thru 165-006-000, 165-037-000 thru 165-042-000, 173-007-000 through 173-010-000, and 173-024-000. (Approved by the Planning Board by a vote of 3-1-0)

**Article 4**            **Are you in favor of the adoption of Amendment No. 3 as proposed by the Planning Board for the Town Zoning Ordinance as follows?**

Amend Article IV, Establishment of Districts, § 334-18, subsections (F) and (G), to clarify that the General (G) and General-One (G-1) Districts do not include areas specifically zoned Town Residence (TR). (Approved by the Planning Board by a vote of 4-0-0)

**Article 5**            **Are you in favor of the adoption of Amendment No. 4 as proposed by the Planning Board for the Town Zoning Ordinance as follows?**

Amend Article III, General Regulations, §334-14, to permit a maximum allowed habitable building height of 50 feet for warehouses and distribution facilities in the Sagamore Industrial Park located in the Industrial (I) District. (Approved by the Planning Board by a vote of 5-1-0)

**Selectmen's Articles**

**Article 6**            **Construction of a New Fire Station**

Shall the Town of Hudson vote to raise and appropriate the sum of \$2,206,300 for the design and construction of a new fire station on Town-owned land located on Lowell Road, and authorize the issuance of \$2,206,300 of bonds or notes in accordance with the provisions of Municipal Finance Act (RSA Chapter 33), and authorize the Board of Selectmen to issue and negotiate such bonds or notes and to determine the rate of interest thereon, and further raise and appropriate the sum of \$75,158 for the purpose of paying 2016-2017 bond issuance cost and interest on said general obligation bonds or notes? (3/5 ballot vote required) (This appropriation is in addition to Article 7, the Operating Budget.) (Recommended by the Board of Selectmen 5 - 0) (Recommended by the Budget Committee 10 - 0)

**Article 7**            **General Fund Operating Budget**

Shall the Town of Hudson raise and appropriate as an operating budget, not including appropriations by special warrant articles and other appropriations voted separately, the amounts set forth on the budget posted with the warrant or as amended by vote of the first session, for the purposes set forth therein, totaling \$24,384,481? Should this article be defeated, the default budget shall be \$24,178,496, which is the same as last year, with certain adjustments required by previous action of the Town of Hudson or by law; or the governing body may hold one special meeting, in accordance with RSA 40:13, X and XVI, to take up the issue of a revised operating budget only. (Recommended by the Board of Selectmen 4 - 0) (Recommended by the Budget Committee 10 - 0)

**Article 8**            **Sewer Fund Operating Budget**

Shall the Town of Hudson raise and appropriate as a Sewer Fund operating budget, not including appropriations by special warrant articles and other appropriations voted separately, the amounts set forth on the budget posted with the warrant or as amended by vote of the first session, for the purposes set forth therein, totaling \$1,501,002? Should this article be defeated, the default budget shall be \$1,504,002, which is the same as last year, with certain adjustments required by previous action of the Town of Hudson or by law; or the governing body may hold one special meeting, in accordance with RSA 40:13, X and XVI, to take up the issue of a revised operating budget only. (Recommended by the Board of Selectmen 4 - 0) (Recommended by the Budget Committee 10 - 0)

**Article 9**            **Water Fund Operating Budget**

Shall the Town of Hudson raise and appropriate as a Water Fund operating budget, not including appropriations by special warrant articles and other appropriations voted separately, the amounts set forth on the budget posted with the warrant or as amended by vote of the first session, for the purposes set forth therein, totaling \$3,598,441? Should this article be defeated, the default budget shall be \$3,614,763, which is the same as last year, with certain adjustments required by previous action of the Town of Hudson or by



law; or the governing body may hold one special meeting, in accordance with RSA 40:13, X and XVI, to take up the issue of a revised operating budget only. (Recommended by the Board of Selectmen 4 - 0) (Recommended by the Budget Committee 10 - 0)

**Article 10 Hudson Firefighters, IAFF Local 3154 Wage & Benefit Increases**

Shall the Town of Hudson vote to approve the cost items included in the collective bargaining agreement reached between the Town of Hudson Board of Selectmen and the Hudson Firefighters, IAFF Local 3154 which calls for the following increase in salaries and benefits:

Year	Amount
7/1/16 - 6/30/17	\$79,829
7/1/17 - 6/30/18	\$74,451
7/1/18 - 6/30/19	\$74,361

and to raise and appropriate the sum of \$79,829 for the 2016 - 2017 Fiscal Year, said sum representing the additional costs attributable to the increase in salaries and benefits over those paid in the prior Fiscal Year? (This appropriation is in addition to Article 7, the Operating Budget.) (Recommended by the Board of Selectmen 5 - 0) (Recommended by the Budget Committee 9 - 1)

**Article 11 Hudson Support Staff, AFSCME Local 1801 Wage & Benefit Increases**

Shall the Town of Hudson vote to approve the cost items included in the collective bargaining agreement reached between the Town of Hudson Board of Selectmen and the Town of Hudson Support Staff, AFSCME Local 1801 which calls for the following increase in salaries and benefits:

Year	Amount
7/1/16 - 6/30/17	\$32,562
7/1/17 - 6/30/18	\$32,656
7/1/18 - 6/30/19	\$31,606

and to raise and appropriate the sum of \$32,562 for the 2016 - 2017 Fiscal Year, said sum representing the additional costs attributable to the increase in salaries and benefits over those paid in the prior Fiscal Year? (This appropriation is in addition to Article 7, the Operating Budget.) (Recommended by the Board of Selectmen 5 - 0) (Recommended by the Budget Committee 9 - 1)

**Article 12 Hudson Police, Fire and Town Supervisors Association Wage & Benefit Increases**

Shall the Town of Hudson vote to approve the cost items included in the collective bargaining agreement reached between the Town of Hudson Board of Selectmen and the Hudson Police, Fire and Town Supervisors Association which calls for the following increase in salaries and benefits:

Year	Amount
7/1/16 - 6/30/17	\$78,662
7/1/17 - 6/30/18	\$73,290
7/1/18 - 6/30/19	\$71,368

and to raise and appropriate the sum of \$78,662 for the 2016 - 2017 Fiscal Year, said sum representing the additional costs attributable to the increase in salaries and benefits over those paid in the prior Fiscal Year? (This appropriation is in addition to Article 7, the Operating Budget.) (Recommended by the Board of Selectmen 5 - 0) (Recommended by the Budget Committee 9 - 1)

**Article 13 Wage and Benefit Increase for Town Clerk/Tax Collector**

Shall the Town of Hudson vote to raise and appropriate the sum of \$6,035 which represents an increase in wages and benefits for the Town Clerk/Tax Collector? (This appropriation is in addition to Article 7, the Operating Budget.) (Recommended by the Board of Selectmen 4 - 0) (Recommended by the Budget Committee 8 - 2)

**Article 14 Hire One Full Time Police Officer**

Shall the Town of Hudson vote to raise and appropriate the sum of \$85,343 which represents the cost of wages and benefits necessary to hire one additional full time Police Officer? This officer will be assigned to the Patrol Division and will work directly in the neighborhoods and business community. (This appropriation is in addition to Article 7, the Operating Budget.) (Recommended by the Board of Selectmen 4 - 0) (Recommended by the Budget Committee 10 - 0)

**Article 15 Part Time to Full Time – Recreation Department Office Assistant**

Shall the Town of Hudson vote to raise and appropriate the sum of \$23,982 which represents the cost of wages and benefits necessary to convert the position of Recreation Department Office Assistant from part time to full time? The Recreation Office Assistant assists in the creation, direction and execution of recreation programs and opportunities for the residents of the Town of Hudson. The Recreation Office Assistant will also support the Senior Services Coordinator and serve as the backup when the Senior Service Coordinator is absent. (This appropriation is in addition to Article 7, the Operating Budget.) (Recommended by the Board of Selectmen 3 - 1) (Recommended by the Budget Committee 9 - 1)

**Article 16 Hiring of Part-time IT Entry-Level Technician**

Shall the Town of Hudson vote to raise and appropriate the sum of \$28,073 which represents the cost of wages and payroll taxes, to hire a part time entry level technician to work in the Information Technology Department? (This appropriation is in addition to Article 7, the Operating Budget.) (Recommended by the Board of Selectmen 4 - 1) (Recommended by the Budget Committee 9 - 1)

**Article 17 Lining of the Central Street Bridge/Culvert**

Shall the Town of Hudson vote to raise and appropriate the sum of \$160,000 for the lining and repair of the Central Street Bridge/Culvert located on Central Street over Hadley/First Brook? This bridge/culvert is currently on the New Hampshire Department of Transportation Red List. This is a Special Warrant Article, per RSA 32:3 VI, reflecting an appropriation that will not lapse until the monies are expended or June 30, 2021, whichever is the earliest. (This appropriation is in addition to Article 7, the Operating Budget.) (Recommended by the Board of Selectmen 4 - 0) (Recommended by the Budget Committee 10 - 0)

**Article 18 Benson Park Utilities**

Shall the Town of Hudson vote to raise and appropriate the sum of \$250,000 for the purpose of extending utility services into Benson Park and providing electric, water and sewer utility services to the building known as the Elephant Barn at Benson Park? This is the first phase of a proposed three phase project to provide utility services to Benson Park. This is a Special Warrant Article, per RSA 32:3 VI, reflecting an appropriation that will not lapse until the monies are expended or June 30, 2021, whichever is the earliest. (This appropriation is in addition to Article 7, the Operating Budget.) (Recommended by the Board of Selectmen 5 - 0) (Recommended by the Budget Committee 6 - 4)

**Article 19 Establish Capital Reserve Fund for Water Utility Infrastructure and Capital Equipment Replacement**

Shall the Town of Hudson vote to establish a Capital Reserve Fund under the provisions of RSA 35:1 for the purpose of replacing water utility infrastructure and capital equipment, including, but not limited to, wells, pumps, pipes, storage tanks, booster stations and other water utility infrastructure and capital equipment to be known as "Water Utility Replacement Capital Reserve Fund" and to raise and appropriate the sum of \$100,000 to be placed in this fund and to further appoint the Board of Selectmen as agents to expend from this fund? This appropriation will be funded from the 06/30/16 Water Utility Fund Balance. (This appropriation is in addition to Article 9, the Water Utility Operating Budget.) (Recommended by the Board of Selectmen 4 - 0) (Recommended by the Budget Committee 10 - 0)

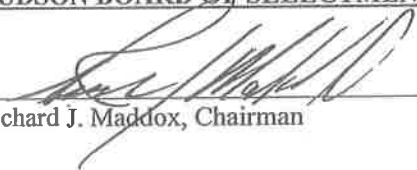
**Article 20 Funding for Capital Reserve Funds from Unassigned Fund Balance**

Shall the Town of Hudson vote to raise and appropriate the sum of \$285,000 of which \$95,000 will be added to the Communications Equipment and Infrastructure Capital Reserve Fund previously established, \$95,000 will be added to the Recreation Field Construction Capital Reserve Fund previously established, and \$95,000 will be added to Major Repairs to Town Buildings Capital Reserve Fund previously established? This sum is to come from the June 30, 2015 Unassigned Fund Balance. No amount to be raised from taxation. (This appropriation is in addition to Article 7, the Operating Budget.) (Recommended by the Board of Selectmen 4 - 0) (Recommended by the Budget Committee 8 - 2)

GIVEN UNDER OUR HANDS AND SEALS AT SAID HUDSON ON THE \_\_\_\_\_ DAY OF JANUARY, 2016.

A TRUE COPY ATTEST:

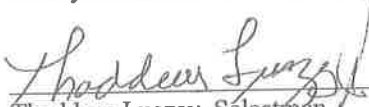
HUDSON BOARD OF SELECTMEN

  
Richard J. Maddox, Chairman

\_\_\_\_\_  
Roger E. Coutu, Vice-Chairman

  
Patricia Nichols, Selectman

\_\_\_\_\_  
Marilyn E. McGrath, Selectman

  
Thaddeus Luszey, Selectman