Bill as Introduced

HB 1129-FN – AS INTRODUCED

2000 SESSION

00-2206
10/09

HOUSE BILL ***1129-FN***

AN ACT relative to wetlands scientists.

SPONSORS: Rep. Kibbey, Sull 4

COMMITTEE: Executive Departments and Administration

ANALYSIS

This bill remove wetlands scientists from regulation, certification, and licensing as natural scientists.

Explanation: Matter added to current law appears in ***bold italics.***
Matter removed from current law appears [~~in brackets and struckthrough.~~]
Matter which is either (a) all new or (b) repealed and reenacted appears in regular type.

00-2206
10/09

STATE OF NEW HAMPSHIRE

In the Year of Our Lord Two Thousand

AN ACT relative to wetlands scientists.

Be it Enacted by the Senate and House of Representatives in General Court convened:

1 Natural Scientists; Purpose Amended. Amend RSA 310-A:75 to read as follows:

310-A:75 Purpose. The general court finds it in the best interests of the citizens of the state of New Hampshire to establish the board of natural scientists to certify and regulate the professions of soil scientists [~~and wetland scientists~~]. This certification is to guard the citizens of New Hampshire and the professions from unqualified practitioners of soil science [~~and wetland science~~] and to foster intelligent application of the knowledge of soil properties [~~and wetland characteristics~~] in planning and implementing land use decisions consistent with New Hampshire department of environmental services rules or standards adopted by the board.

2 Definition; Reference Removed. Amend RSA 310-A:76, I to read as follows:

I. "Board" means the state board of natural scientists authorized to certify soil scientists [~~and wetland scientists~~] pursuant to this subdivision

3 Application; Reference Removed. Amend RSA 310-A:77 to read as follows:

310-A:77 Application. Any person, except as specifically exempted in this subdivision, who practices or offers to practice soil science [~~or wetland science~~] for the general public in this state shall be subject to the provisions of this subdivision.

4 Governmental Employees Exemption; Reference Removed. Amend RSA 310-A:79, III to read as follows:

III. The practice of officers and employees of the government of the United States or of the state of New Hampshire while engaged within this state in the practice of the profession of soil science [~~or wetland science~~] for the government.

5 Reciprocity; Reference Removed. Amend RSA 310-A:80 to read as follows:

310-A:80 Reciprocity. A nonresident of this state who is certified as a soil scientist [~~or wetland scientist~~] in another state may be certified under this subdivision by filing an application with the board accompanied by a copy of such certification in another state, and by paying a fee to the board, provided the applicant's qualifications meet the requirements of this subdivision and the rules adopted by the board. The board may certify applicants under this section, provided that the other state's licensing requirements are substantially equivalent to, or higher than, those of this state, and provided that the other state certifies New Hampshire soil scientists [~~or wetland scientists~~] under a similar provision.

6 Composition of Board of Natural Scientists. Amend RSA 310-A:81, I to read as follows:

I. A board of natural scientists is established to administer the provisions of this subdivision. The board shall consist of 7 persons appointed by the governor and council, [~~2~~] *4* of whom shall be soil scientists[~~, 2 of whom shall be wetland scientists who are not also soil scientists,~~] and 3 of whom shall be public members. The initial professional board members shall meet the educational requirements of RSA 310-A:84, I(a) or II-a, respectively. The public members of the board shall be persons who are not, and never were, members of the soil science profession[~~, members of the wetland science profession,~~] or the spouse of any such person, and who do not have and never have had, a material financial interest in either the provision of soil science [~~or wetland science~~] services or an activity directly related to soil science [~~or wetland science~~], including the representation of the board or profession for a fee at any time during the 5 years preceding appointment.

7 Secretary of Board of Natural Scientists; Reference Removed. Amend RSA 310-A:81, VII to read as follows:

VII. The secretary of the board shall provide, upon request, a roster listing the names and places of business of all soil scientists [~~and wetland scientists~~] certified under this subdivision by the board. Copies of this roster shall be placed on file with the secretary of state and furnished to the public upon request at a fee to be established by the board. The board may include in such roster any other information it deems appropriate.

8 Applications; Certified Wetlands Scientists Removed. Amend RSA 310-A:86, II to read as follows:

II. Any person who has successfully passed the examination or has otherwise qualified as a certified soil scientist[~~,~~] ***or*** apprentice soil scientist[~~, certified wetland scientist, or apprentice wetland scientist,~~] shall, upon payment of a fee, be issued a certificate attesting that the applicant is a certified soil scientist[~~,~~] ***or*** apprentice soil scientist[~~, certified wetland scientist, or apprentice wetland scientist~~].

9 Certificates; Reference Removed. Amend RSA 310-A:87 to read as follows:

310-A:87 Certificates. Certificates shall show the full name of the certified soil scientist[~~,~~] ***or*** apprentice soil scientist[~~, certified wetland scientist, or apprentice wetland scientist,~~] have a serial number, and be signed by the chairperson and the secretary of the board under seal of the board. Each certified soil scientist [~~or certified wetland scientist~~] shall obtain a seal of the design authorized by the board bearing the name of the certified individual, the legend "Certified Soil Scientist" [~~or "Certified Wetland Scientist," as appropriate,~~] and a place for the certified individual's signature. Plans and reports prepared by a certified individual shall be stamped with the seal and signed by the certified individual during the life of the certificate.

10 Rulemaking; Reference Removed. Amend RSA 310-A:92, I(e) to read as follows:

(e) Application for certification as an apprentice soil scientist [~~or apprentice wetland scientist~~].

11 Misconduct; References Removed. Amend RSA 310-A:93, II(c) and (d) to read as follows:

(c) Any unprofessional conduct, or dishonorable conduct unworthy of, and affecting the practice of soil science [~~or wetland science~~].

(d) Unfitness or incompetency by reason of negligence or willful misconduct by a certified soil scientist [~~or certified wetland scientist~~] in the performance of professional duties.

12 Violations; Reference Removed. Amend RSA 310-A:95 to read as follows:

310-A:95 Violations; Penalties. Any person who practices or offers to practice soil science [~~or wetland science~~] in this state for others without a certificate in accordance with this subdivision, or any person presenting or attempting to use the certificate or seal of another, or any person who gives any false or forged evidence of any kind to the board or to any board member in obtaining or attempting to obtain a certificate, or any person who falsely impersonates any other certified soil scientist [~~or certified wetland scientist~~], or any person who attempts to use an expired or nonexistent or revoked certificate or authorization, or any person who violates any of the provisions of this subdivision, shall be guilty of a class B misdemeanor if a natural person, or guilty of a felony if any other person.

13 Restraint of Violations; Reference Removed. Amend RSA 310-A:96 to read as follows:

310-A:96 Restraint of Violations. The superior court shall have jurisdiction in equity to restrain violations of RSA 310-A:95 on proceedings brought by the attorney general, the board, or any society of certified soil scientists [~~or certified wetland scientists~~] duly incorporated under the laws of this state.

14 Repeal. The following are repealed:

I. RSA 310-A:76, II-a, relative to the definition of certified wetlands scientist.

II. RSA 310-A:78, II, relative to business organizations practicing wetlands science.

III. RSA 310-A:81, II (c), relative to wetland scientist board members.

IV. RSA 310-A:84, II-a and II-b, relative to qualifications for wetlands scientist certification.

V. RSA 310-A:85, II, relative to apprentice wetlands scientists.

15 Effective Date. This act shall take effect July 1, 2000.

LBAO
99-2206
10/28/99

HB 1129-FN - FISCAL NOTE

AN ACT relative to wetlands scientists.

FISCAL IMPACT:

The Joint Board is unable to determine the fiscal impact on state revenue and expenditures in FY 2001 and each year thereafter. There is no fiscal impact on county and local revenue or expenditures.

METHODOLOGY:

The Board stated that wetlands scientists certification law has only been in existence since July 1, 1997. Administrative rules were finalized on November 12, 1998 at which time the certification process began, therefor, the Board has not completed its' first year of certifying individuals. There is a grandfather clause that became effective as soon as the rules were completed and individuals are still in the process of being certified under the grandfather clause. It is expected that after November 12, 1999 the number of candidates seeking certification should stabilize. At this time, there are 44 certified wetlands scientists and 44 applications to be considered for certification. The Board expects to receive a large number of applications between now and November 12, 1999, as individuals submit their applications before the deadline. The Board stated there is no way to estimate the fiscal impact until the numbers of certified individuals stabilizes and the one year deadline under the grandfather clause is completed.

Speakers

SIGN UP SHEET

To Register Opinion If Not Speaking

Bill # HB 1129 Date 2-15-2000

Committee EDAA

** Please Print All Information **

Name	Address	Phone	Representing	(check one) Pro	Con
Bruce A. Gilday	43 Rockingham St. Concord, NH		NHANRS		✓
Peter J. Schelver	75 W.H. Road	226-2544	NHANRS		✓
Daniel Berger	7370 Oak Hill Rd Loudon, NH		NHANRS		✓
Jim McClammer	391 River Road Charlestown NH		CVEC		✓
Kurt Frazier	98 Sullivan Street Charlestown NH		LVEC		✓
John Faber	41 Main St. Merrimack, NH		03054		✓
Richard Bond	12 Woodbine Lane, Merrimack NH		03054		✓
~~Francesca Hatewicz~~	~~OSP 2 1/2 Beacon St~~				✓
Belknap Co. Cons. District	Laconia NH Concord				✓
Alden Beauchemin,	Concord, Keyland				✓ W/AMEND.
Peter Stoddard,	Stoddard Septic Design				✓
Gerard A. Miller,	31 Ashbrook Drive, Hampton, NH				✓

Hearing Minutes

HOUSE COMMITTEE ON EXECUTIVE DEPARTMENTS AND ADMINISTRATION

PUBLIC HEARING ON HB 1129-FN

BILL TITLE: **relative to wetlands scientists**

DATE: **February 15, 2000**

LOB ROOM: **202** **Time Public Hearing Called to Order:** 2:02 PM

Time Adjourned: 2:35 PM

(please circle if present)

Committee Members: Reps. Mercer, Goulet, Dyer, Langer, Holley, B. Moore, Dickinson, Stickney, Sapareto, Hamel, Millham, O'Neil, Poulin, Zolla, Murphy, Reidy, Virtue, Batchelder, Burkush, Courchesne, Landers and Lent.

Bill Sponsors: Rep. Kibbey, Sull 4

TESTIMONY

* Use asterisk if written testimony and/or amendments are submitted.

Rep. Kibbey, sponsor. Supports bill. HB 1425 was submitted in 1998 – welcomes a study committee. No identification as a wetland scientist.
*Richard Clough, representing Granite State Designers & Inst., 76 So State St., Concord, 228-1231. Supports bill only with amendments. See written testimony on 3rd or 4th page, 10 reason why an amendment should be adopted. Doesn't seem to make sense to have only 167 wetland scientists in the state.
Randall Shuet, representing HN Assoc of Natural Resources Scientists. So. Spring St., Epsom, 736-4619. Opposes bill. Recounts number who has registered. Seems to revolve around the numbers of individuals who have registered. Some say too many, some say enough, some say not enough to keep requirements as they are.
*Francesca Latawiec, representing Office of State Planning. 2 ½ Beacon St., Concord, 271-2155. Opposes bill. See written testimony.
*Richard Bond, Chairman, NH Board of Natural Scientists. 12 Woodbine Ln., Merrimack, 424-1437. Opposes bill. See Written testimony.
James McClammer, 391 River Rd., Charlestown, 826-5214. Opposes bill. His organization has always been in favor of registration of wetland scientists who are certified. Question is "who identifies a wetland scientist" if this bill is passed?" Nobody at this time.

Respectfully submitted,

Ray F. Langer

Rep. Ray Langer, Clerk

Testimony

JOINT BOARD OF LICENSURE AND CERTIFICATION
STATE OF NEW HAMPSHIRE

LOUISE LAVERTU
BOARD ADMINISTRATOR

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PROFESSIONAL ENGINEERS
ARCHITECTS
LAND SURVEYORS
FORESTERS
NATURAL SCIENTISTS

February 15, 2000

State of New Hampshire
Executive Departments and
Administration Committee
25 Capitol Street
Concord, New Hampshire 03301

RE: House Bill 1129-FN

Dear Committee Members:

A bill has been introduced to remove Wetland Scientists from regulation, certification, and licensing as natural scientists. (House Bill 1129-FN)

Two hundred and thirteen (213) applications for certification as Wetland Scientist have been received as of January 2000. The Board has been reviewing these applications and to date, one hundred sixty eight (168) Wetland Scientists have been certified, thirteen (13) applicants have been deferred pending arrival of additional information, twenty-nine (29) applications have yet to be reviewed by the Board and three (3) applicants have been denied certification.

The Wetland Scientists certified have all met the certification requirements established by RSA 310-A:84 as modified by 1997 Session Law 240:26 and 240:27. In addition Certified Wetland Scientists seeking renewal of their Wetland Scientist Certification are required to meet continuing education requirements. The New Hampshire Code of Administrative Rules Section 402.01 requires proof of having earned 5 continuing education units per biennium.

The Wetland Scientists presently certified represent many scientific fields including: wetland scientists, septic designers, soil scientists, educators, state regulators, botanists, wildlife biologists, geologists, engineers, hydrologists, foresters, ecologists, plant scientists, land surveyors and agronomists.

More applications are expected in the near future. Based upon the recent adoption of Administrative Rules, the written examination has been scheduled for March and August 2000 and the the field examination has been scheduled for June and October 2000.

It is the view of the Board of Natural Scientists that the current Wetland Scientist certification statute clearly protects the interests of the people of New Hampshire by insuring that persons certified to practice wetland science are well qualified.

If you have any questions please do not hesitate to contact me.

Respectfully submitted,

Richard W. Bond

Richard W. Bond, CWS, CSS, Chairman
Board of Certification for Natural Scientists.

OFFICE OF STATE PLANNING
STATE OF NEW HAMPSHIRE
2½ BEACON STREET– CONCORD 03301-4497
TELEPHONE: 603-271-2155
FAX: 603-271-1728

MEMORANDUM

TO: NH Planning Boards

FROM: Francesca Latawiec, CPSS, PWS, Principal Planner,
Water Protection Assistance Program

DATE: November 10, 1999

RE: Requirements for Soils and Wetlands Data in Subdivision [Site Plan Review] Regulations, 1999

This will transmit recommended language that can be included in subdivision [site plan] review regulations to specify on-site data requirements for local reviews. This proposal was designed to implement the findings of the Ad Hoc Committee on Site Review Requirements, an interagency, multi-disciplinary committee whose charge it has been to develop guidance for planning boards to use in reviewing local subdivision plans [site plans]. The intent is to provide the planning board with guidance as to the type of data needed for making informed land use decisions about developments of different magnitudes and levels of intensity. For each level, the data recommended to be required is specified in this document, as well as the standards to be used in preparing the data and the type of professionals qualified to do the work.

Questions and/or comments regarding the content or usefulness of the enclosed information are welcome.

FL:cjw

model7.fl

Enclosure

Requirements for Soils and Wetlands Data in Subdivision and Site Plan Review Regulations

State of New Hampshire,
Jeanne Shaheen, Governor

New Hampshire Office of State Planning,
Jeffrey H. Taylor, Director

New Hampshire Department of Environmental Services
Robert W. Varney, Commissioner

September, 1999

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Requirements for Soils and Wetland Data in Subdivision [Site Plan Review] Regulations

Background

Municipal subdivision and site plan review regulations require applicants to submit site specific technical information needed by the planning board to make informed decisions about proposed land use changes.

This document provides guidance to planning boards in determining the level of physical site characteristics that should be required for proposals with different levels of development intensity. It describes three levels of planning board review and specifies appropriate technical information that should be required for each. It also details the type of professionals qualified to prepare this information. A flow chart depicting the review process can be found in Figure 1 on page 7 with specific requirements in Figure 2 on page 8.

This document complements the review process outlined in the report entitled DATA REQUIREMENTS FOR SITE REVIEW: GUIDANCE FOR PLANNING BOARDS, DES and OSP, 1999. That report should be reviewed carefully by municipalities before adopting the recommendations herein. Furthermore, planning boards should keep a copy of the document on file for public review along with their subdivision [site plan review] regulations. Copies of the document are available for $3.50 from the Office of State Planning (OSP) at 2 ½ Beacon Street, Concord, NH 03301, (603) 271-2155.

It is important for the planning board to carefully review the requirements presented in this document prior to adoption. There may be conflicts or inconsistencies between them and the requirements of the existing subdivision and site plan review regulations.

Model Ordinance

Note: The language presented here can be incorporated into either the subdivision or site plan review regulations. [Bracketed] text is intended to apply to site plan review regulations.

EXPLANATORY NOTES

Italicized text in this column is for explanatory purposes and should not be incorporated into the subdivision [site plan review] regulations.

SECTION 1: Authority and Purpose

Pursuant to the authority vested in the planning board by the voters of the Town of _____on _____ , and in accordance with the provisions of RSA 674:35 & 36 [RSA 674:43 & 44] as amended, the Planning Board hereby adopts the following regulations governing the subdivision of land [development or change or expansion of use of tracts for nonresidential uses or multi-family dwelling units, whether or not such development includes a subdivision or resubdivision of the site.] These regulations are designed to accomplish the purposes set forth in RSA 674:36, as amended [RSA 674:44, as amended] and for the purpose of protecting the health, safety, and general welfare and to provide for the harmonious development of the Town of _____ and its environs.

The language in the left hand column should be the standard Authority and Purpose section of the subdivision and site plan review regulations already adopted by the municipality. The planning board should review this section of their regulations to determine if they are consistent with the language presented here.

SECTION 2: Definitions

The terms defined in this section should be added to the main definitions portion in the subdivision [site plan review] regulations. It may be necessary to amend some existing definitions for consistency with this recommended review process

"Average area" means the total acreage of the property, exclusive of very poorly drained soils, divided by the total number of proposed lots. (Use of average area here assumes that all lots are roughly the same size.)

This definition applies to subsection 3B of this proposal.

"Bedrock within 18 inches of the soil surface" meets the definition of either lithic or paralithic material. At least 75 percent of delineated areas must meet this definition with no more than 15 percent of the area having soil properties more limiting (i.e., hydric conditions). (Site-Specific Soil Mapping Standards for New Hampshire and Vermont, SSSNNE Special Publication No.3, June 1999, pp 6-7)

This defines one of the limiting physical features identified in subsection 3C, Level 2, Step C.

"Indurated" means a rock or soil hardened or consolidated by pressure, cementation, or heat. (Dictionary of Geological Terms, Bates and Jackson, 1984.)

This further defines one of the taxonomic terms used to define lithic materials.

"Limiting physical features" means rock outcrops, steep slopes > 35%, soils with bedrock within 18 inches of the soil surface, and very poorly drained areas.

These are to be identified under subsection 3C, Level 2, Step C. ***Presence of any of these limiting physical features on-site triggers the requirement for a subsection 3D, Level 3 review.***

"Lithic material" means unaltered material that is continuous, coherent, and indurated. The material qualifies for an "R" designation as a master layer (USDA Soil Survey Manual, 1993, pg. 121). Plant and tree roots cannot enter except in cracks. Hand digging with a spade is impractical. Some lithic material can be ripped with heavy power equipment. The material must be in a strongly cemented or more cemented rupture-resistance class. Granite, quartzite, and indurated limestone or sandstone are examples. (Keys to Soil Taxonomy, Eighth Edition, 1998, pg.32)

This further defines one of the taxonomic terms used to define bedrock.

"Non-limiting" means the area, exclusive of very poorly drained soils, rock outcrops, bedrock within 18 inches of the soil surface, and soils with steep slopes greater than 35 percent

This term is defined here, as it is to be used to determine the development intensity criteria under subsection 3B.

"Paralithic material" means a relatively unaltered material that has an extremely weakly cemented to moderately cemented rupture-resistance class. The material qualifies for a "Cr" designation as a subordinate distinction within a master soil layer (USDA Soil Survey Manual, 1993, pg. 124). Cementation or bulk density are such that plant and tree roots cannot enter except in cracks. The material can be hand dug with a spade with much difficulty. Commonly these materials consist of weathered or weakly consolidated bedrock. (Keys to Soil Taxonomy, Eighth Edition, 1998, pg.32) This further defines one of the taxonomic terms used to define bedrock.

This further defines one of the taxonomic terms used to define bedrock.

"Soil surface" refers to the top of the first mineral layer.

This term is defined to clarify the position from which soil depth measurements are to be taken in order to meet the prescribed standards.

SECTION 3: Requirements for Soils and Wetlands Data in Subdivision [Site Plan Review] Regulations

(In all cases, subsection A, Level 1 information is required.)

This section provides the planning board with a framework for determining the type of data needed for different magnitudes and levels of development intensity. Three levels of planning board review are established; for each level, the data to be required is specified, as well as the standards to be used in preparing the data and the type of professionals qualified to do the work. A schematic diagram of the review process is shown in Figure 1. Further details about specific requirements are shown in Figure 2.

A: Level 1 Delineation of Wetlands and Surface Waters: for All Subdivision [Site Plan Review] Applications

Information on wetlands and surface waters shall be provided on the plan with identification and delineation of the resources in accordance with the definitions and standards specified in Steps A and B of this section. **The written documentation specified in Step C shall be included on the plan and be certified by the stamp of a qualified professional.**

This first level of information is required of all proposed subdivision [site plan review] applications. It involves the on-site delineation of wetlands and surface waters existing on the subject property. All subdivision [site plan review] applications are required to show the location and extent of wetlands and surface waters on the parcel or parcels under consideration, directly on the plan. Wetland and water body information is intended to demarcate the upland portions of a property on the site. This allows the board to know the location of the more sensitive natural resources and to determine if the development structures are proposed to be sited in or near them.

* **Step A:** Wetlands are to be identified and delineated according to the following standards and/or methodologies:

  - Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, Environmental Laboratory, Department of the Army, 1987.
  - Field Indicators for Identifying Hydric Soils in New England, Version 2, New England Interstate Water Pollution Control Commission, 1998.
  - Chapters Wt 100-800 of the NH Code Of Administrative Rules, April 21, 1997.

These standards and/or methodologies are consistent with applicable state and federal regulatory requirements. They are recommended for use where existing mapped information is not adequate for site specific land use decision making.

* **Step B:** Surface Waters are to be identified and delineated in accordance with RSA 485 - A:2, XIV, NH Water Pollution and Waste Disposal and NH code of administrative rules pursuant to 485 - A.

These standards and/or methodologies are consistent with applicable state regulatory requirements.

* **Step C:** Written Documentation

  - A written statement shall be included on the subdivision plan [site plan], **certified by the stamp of the Certified Wetland Scientist (CWS) or Permitted Septic Designer (PSD), that all wetlands and surface waters on-site have been delineated in accordance with the standards specified in Steps A and B above.**

This statement assures the planning board that the certified or permitted professional preparing the Step C information has adhered to the required standards.

Figure 1. Section 3 Submission Process

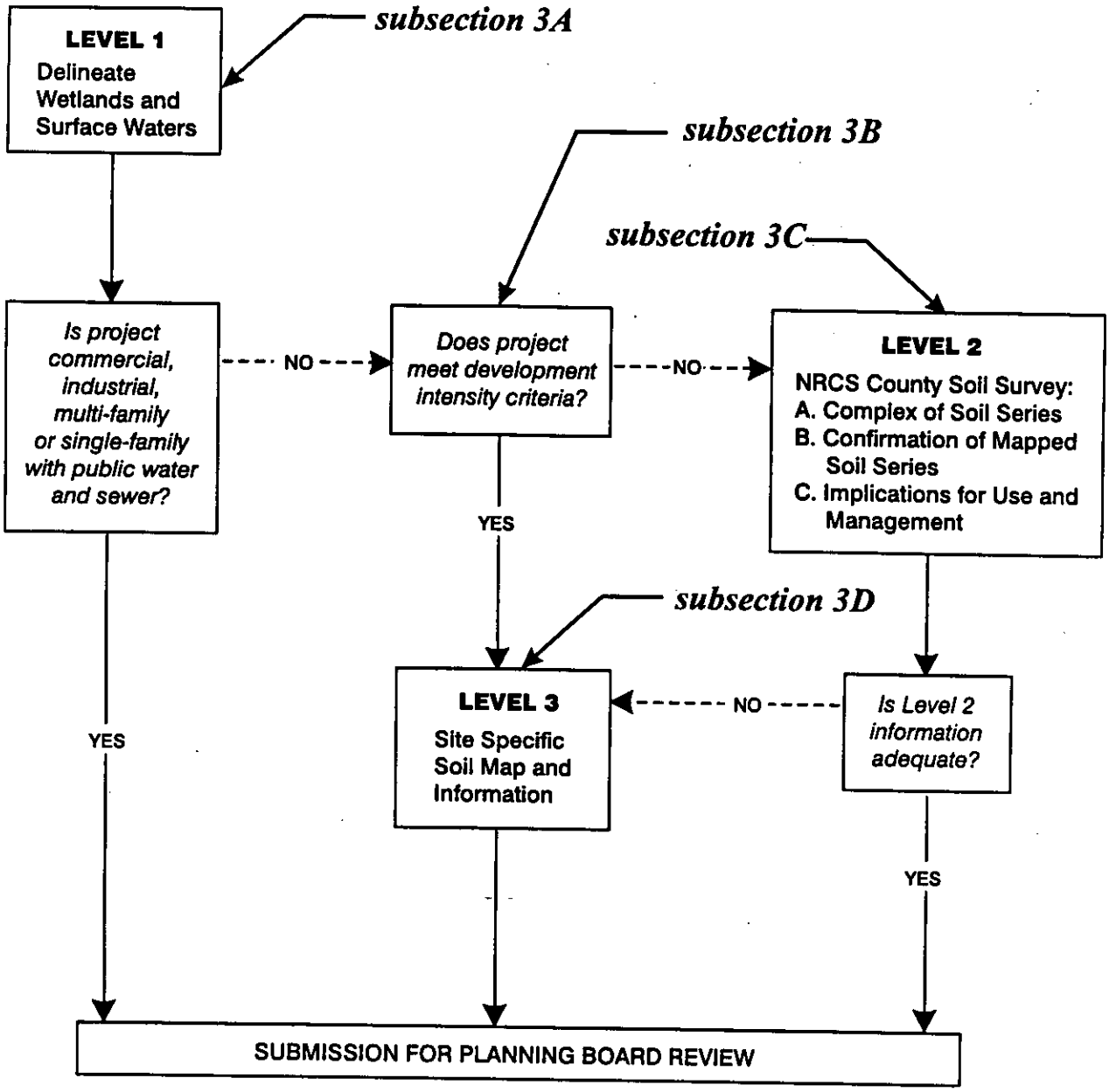


Figure 2. Levels of Information for Subdivision and Site Plan Applications

LEVEL	TASKS	STANDARDS	QUALIFICATIONS
1	**Step A.** Wetlands Delineation	• 1987 US Army Corps of Engineers Wetlands Delineation Manual • 1998 Field Indicators for Identifying Hydric Soils for New England	Certified Wetland Scientist, or Permitted Septic Designer*
	Step B. Surface Waters Delineation	• Defined by RSA 485-A:2, XIV	
2	**Step A.** Identification of Dramatically Different Soil Complexes	• Appendix 1 of this document. • NRCS Official Series Description Sheets and/or NRCS published map unit descriptions (Steps A-C).	Certified Soil Scientist or Permitted Septic Designer*
	Step B. Confirmation of NRCS Soil County Soil Survey Map	• Field Book for Describing and Sampling Soils: Vers. 1.1, 1998 • Site Specific Soil Mapping Standards for NH & VT, 1999 • Keys to Soil Taxonomy, Eighth Edition, 1998	
	Step C. Identification of Limiting Physical Features	• Same as Step B	
3	Site Specific Soil Map, when: a. Average lot size <2 acres, without municipal water and sewer, or b. Average lot size <1 acre, with municipal water, but without municipal sewer, or c. Non-limiting, non-wetland contiguous area <20,000 square feet and without municipal water and sewer, or d. Areas without municipal water and sewer and with soil complexes with dramatically different characteristics.	• Site Specific Soil Mapping Standards for NH & VT, 1999	Certified Soil Scientist
	*Per RSA 310-A:79, IV and NH Code of Administrative Rules Chapters Env-Ws 1000 adopted under RSA 485-A for the purpose of septic system design or subdivision applications.		

3B: Additional Information Required Based on the Type of Proposal

1. [If a project proposed for site plan review is served by public water and sewer, **no additional soils data needs to be submitted for the purpose of determining suitability of the site for subsurface wastewater disposal systems.]**

   In these cases, on-site wastewater disposal is not an issue and other limiting features should be addressed as part of the plan. ***However, the planning board may, at its discretion, require submission of on-site soils data for other purposes.***

   Additionally, if the site development calls for structures and/or impervious cover or alteration of an area greater than 100,000 square feet, or 50,000 square feet within the protected shoreland, then the applicant should file a site specific application under **NH Code of Administrative Rules Env-Ws 415 and RSA 485-A:17, significant alteration of terrain. Approval of the permit specified in these rules and statute is required by DES.**

   The planning board can be assured that the appropriate level of technical information and design criteria are applied to the project through this state permitting program. ***Proof of a state approved permit under this program can be required as a condition of final local approval of the subdivision plan [site plan].***

2. If a project involves a subdivision which is served by public water and sewer, no additional soils data needs to be submitted for the purpose of determining suitability of the site for subsurface wastewater disposal systems.

   In these cases, on-site wastewater disposal is not an issue and other limiting features should be addressed as part of the plan. ***However, the planning board may, at its discretion, require submission of on-site soils data for other purposes.***

3. If the project meets at least one of the following three development intensity criteria, **then the applicant should submit Site Specific Soil Map (SSS Map) information as specified in subsection 3D:**

   See the definitions of "average area" and "non-limiting" in Section 2.

   a. The average area is less than two (2) acres in area and is not served by either municipal water or sewer,

b. The average area is less than one (1) acre in area and is served by municipal water, but not sewer; or

c. The non-limiting, upland, contiguous area on any proposed lot is less than 20,000 square feet. (Can only be determined after completion of the requirements in subsection 3C, Level 2.)

4. **For all other projects, the applicant should comply with the data requirements of Section 6, Level 2.**

This provides for the planning board to require more detailed information for projects with a higher development intensity.

If the proposal does not meet any of the tests in subsection 3B then subsection 3C, Level 2 information is potentially adequate for local review, provided that the NRCS soil survey information is determined to be sufficient for the proposed use and management of the property. ***However, the planning board may, at its discretion, require submission of a site specific soil map for other purposes.***

3C: Level 2 Confirmation of County Soil Survey Maps and Identification of Limiting Physical Features

The applicant is required to submit existing data, such as soil maps representing the NRCS county soil survey, and evaluate detailed soil profile descriptions to corroborate the soil series and map unit determination from the county soil survey.

✱ **Step A:** Identification of Soil Complexes With Dramatically Different Characteristics

- If any of the soil map units on the property, as mapped by the NRCS county soil survey, is a complex of soils with dramatically different characteristics that would have an impact on use and management of the property, then the applicant must provide SSSMS information as required in subsection 3D, Level 3.

Appendix 1 of the document entitled DATA REQUIREMENTS FOR SITE REVIEW: GUIDANCE FOR PLANNING BOARDS, DES and OSP, 1999, prepared by the NRCS State Soil Scientist, lists these complex soil map units.

- If the soils mapped by the NRCS county soil survey do not include one of these complexes, **continue to Step B.**

✱ **Step B:** Confirmation of NRCS County Soil Survey Map

The following information is required to be submitted for confirmation of the NRCS county soil survey:

- A copy of the NRCS county soil survey with the subdivision [site plan] location and approximate boundaries superimposed on the soil map. **The copy of the county soil survey must be provided at the same scale as the original county soil survey.** This is important, so that the limitations of the information provided at the scale of the survey are not misunderstood by the users.

This is required to show the planning board the location of the proposal relative to the soils identified in the county soil survey .

- A representative number of detailed soil profile descriptions to characterize variations in the landscape for each mapped unit, based on NRCS standards as described in the Field Book for Describing and Sampling Soils: Version 1.1 National Soil Survey Center, NRCS, 1998. These profile descriptions are to be included in a narrative report for the project.

The applicant is required to evaluate and submit detailed soil profile descriptions to document that the conditions on site **are adequate to support the proposed use and management of the property. The standards and/or methodologies for doing this are listed below. These sources should be cited directly on the subdivision plan [site plan].**

This is required to give the planning board a general idea as to whether the soil conditions on the site are consistent with those of the soil series mapped in the County Soil Survey.

It is expected that there will be variations in soil conditions within any mapped unit. This evaluation is required to give the planning board an indication as to whether these variations would have an impact or present limitations for the proposed use and management of the property.

The planning board may, at its discretion, require submission of on-site soils data for other purposes.

If the proposal meets the requirements of Step B, then subsection 3C, Level 2 information is potentially adequate for local review, provided that the NRCS soil survey information is determined to be sufficient for the proposed use and management of the property.

Standards

These are the most current, technically accurate sources for use in describing soils.

Field Book for Describing and Sampling Soils: Version 1.1 National Soil Survey Center, NRCS, 1998. (To replace the dated, 1991 Soil Manual for Site Evaluation in New Hampshire, 2nd Edition)

NRCS Official Series Description Sheets and/or published map unit descriptions USDA/NRCS

Keys to Soil Taxonomy, Eighth Edition, USDA/NRCS 1998.

(or the most current revision of these sources)

Methodologies

A minimum of one soil profile description shall be completed per soil map unit within the subdivision plan [site plan] area, as depicted on the NRCS county soil survey. The soil will be described in sufficient detail, so as to support or refute that identified properties are within, or similar to those of the soil series used to name the map unit.

Three examples of suggested documentation for NRCS soil map confirmation for Step B are presented in Appendix 3 of the document entitled DATA REQUIREMENTS FOR SITE REVIEW: GUIDANCE FOR PLANNING BOARDS, DES and OSP, 1999.

Soils descriptions should be carried out in areas suspected of having the greatest likelihood of contrasting soil features. Some map units will require more than one soil description to document soil variability. The map unit purity standards from Site Specific Soil Mapping Standards for New Hampshire and Vermont Version 2.0, Society of Soil Scientists of Northern New England Publication No. 3, 1999, will apply.

- The location(s) of the soil profile description(s) used to corroborate the NRCS soil series shall be shown on the plan, with a reference to the description(s) in the narrative report for the project.
- A detailed comparison between each soil profile description and the representative pedon (a description of a small three-dimensional area of soil that is typical of the soil series in the county) for that soil from the county soil survey shall be included in the detailed narrative for the project. The NRCS Official Series Description Sheets and/or NRCS published map unit descriptions for each mapped unit are to be used as references.
- A written statement that the soil profile description(s) from the site adequately reflect the range of characteristics for the series, as described in the county soil survey. The statement shall indicate that the county soil survey adequately represents soil and landscape characteristics, such that site specific land use decisions can be made without further soil investigations. **This statement is to be certified by the stamp of the CSS or PSD. If this statement cannot be made, proceed to subsection 3D, Level 3.**

This statement assures the planning board that the certified or permitted professional preparing this information has adhered to the required standards.

- A narrative report for the project which summarizes the information compiled in Step B. This shall include a determination of whether limiting physical features are present on the parcel and indicate the specific mapped soil units where these occur. **If any limiting physical features are identified on-site, then Step C is required.**

This statement and narrative report assure the planning board that the certified or permitted professional preparing the Step B information has adhered to the required standards.

- If the on-site investigations confirm the nature and properties of the soils as reflected by the soil map, consistent with the intended use and intensity of development, **a subsection 3C, Level 2 review is potentially adequate for the planning board's purposes. However, the planning board may, at its discretion, require submission of on-site soils data.**

✱ **Step C:** Identification of Limiting Physical Features

In addition to the information required in Steps A and B, the information specified below is required for identification and documentation of limiting physical features. This can either be done as a stand-alone document or as an amendment or addendum to the narrative prepared under Step B.

If the on-site soil investigations indicate that limiting physical features, as defined in Section 2, which have the potential to affect the usability of certain areas for structures, on-site wastewater disposal systems, or roads, they must be identified and documented by the applicant. This information should be shown on the subdivision plan [site plan] and included in the narrative report for the project.

- Delineation of the limiting features, specifically rock outcrops, steep slopes > 35%, soils with bedrock within 18 inches of the soil surface, and very poorly drained areas on-site. These features are to be shown on the subdivision plan [site plan].

If the on-site soil investigations indicate that limiting physical features which have the potential to affect the usability of certain areas for structures, on-site wastewater disposal systems, or roads, they must be identified and documented by the applicant. The terms used to describe the limiting physical features are defined in Section 2.

- A detailed description of each limiting physical feature, based on NRCS standards, in a narrative report for the project, with reference to its location on the subdivision plan [site plan]. This can either be done as a stand-alone document or as an amendment or addendum to the narrative prepared under Step B.
- A written statement that the limiting physical features identified above would not have a significant impact on use and management of the property. **This statement is to be certified by the stamp of the Certified Soil Scientist (CSS) or Permitted Septic Designer (PSD). If this statement cannot be made, then proceed to subsection 3D, Level 3.**

These statements and the detailed description in the narrative report for the project assure the planning board that the certified or permitted professional preparing the information required for subsection 3C, Level 2, Step C has adhered to the required standards.

- A written statement to indicate that the county soil survey adequately represents soil and landscape characteristics such that site specific land use decisions can be made without further soil investigations. **This statement is to be certified by the stamp of the CSS or PSD. If this statement cannot be made, then proceed to subsection 3D, Level 3.**
- A written statement that limiting physical features are present on the parcel(s) and that **either (1) a SSS Map (Section 7) is required or (2) not required, with supporting documentation for this position. This determination is to be certified by the stamp of the CSS or PSD. If a SSS Map is required, then proceed to Section 7, Level 3.**

These statements assure the planning board that the certified or permitted professional preparing this documentation has evaluated the information in accordance with the required standards.

3D: Level 3, Site Specific Soil (SSS) Map for Intense Development and for Sites With Limiting Features

If required, an applicant shall submit a site specific soil map prepared in accordance with Site Specific Soil Mapping Standards for New Hampshire and Vermont Version 2.0, Society of Soil Scientists of Northern New England Publication No. 3, 1999. **This is to be certified by the stamp of the Certified Soil Scientist (CSS).**

This assures the planning board that the certified professional has adhered to the required standards.

OFFICE OF STATE PLANNING
STATE OF NEW HAMPSHIRE
2 ½ BEACON STREET – CONCORD 03301-4497
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Francesca L.

February 14, 2000

The Honorable Chairman H. Charles Royce
House Resource, Recreation and Development Committee
Room 305 LOB
North State Street
Concord, NH 03301

Dear Honorable Chairman Royce:

I would like to take this opportunity to comment on the proposed HB 1129, relative to removing wetlands scientists from regulation, certification and licensing of natural scientists. The legislative hearing on this bill will be held by your Committee on February 15, 2000. OSP would like to go on record as being in opposition to the proposed bill, for the following reasons.

1. HB 1129 would eliminate a certification program for wetlands scientists that was enacted by the legislature in 1997. The intent of the program is to protect the general welfare of the public by requiring that certified wetlands scientists demonstrate that they are of ethical character and posses the technical proficiency and qualifications required to practice wetlands science.

According to OSP's records,, 145 or 61% of New Hampshire municipalities have enacted some form of local regulations for wetlands protection. Most of these ordinances and regulations have some type of wetlands delineation requirement for completed subdivisions and site plans. The new certification program for wetlands scientists has improved the quality of informed land use decisions made by local planning boards based upon wetlands information.

2. The recent guidance documents entitled Data Requirements for Site Review: Guidance for Planning Boards DES and OSP, 1999 and Model Requirements for Soils and Wetlands Data in Subdivision [Site Plan Review] Regulations OSP, 1999 require that wetlands be delineated in accordance with the following sources:

- Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, Environmental Laboratory, Department of the Army, 1987.

- Field Indicators for Identifying Hydric Soils in New England, Version 2, New England Interstate Water Pollution Control Commission, 1998.

- Chapters Wt 100-800 of the NH Code Of Administrative Rules, April 21, 1997.

These wetlands delineations are specified to be done by either a certified wetland scientist under RSA 310-A or a permitted septic designer under RSA 310-A:79, IV, Env-Ws 1000 and RSA 485-A.

This guidance and model regulation have been presented and are being adopted by municipalities on a statewide basis.

Removal of the wetland scientist certification program would impede a great deal of progress that has been made in recent years through the coordination of OSP, DES, GSDI and a special Ad Hoc Committee on Site Review Requirements, chaired by DES.

Thank you for the opportunity to comment on HB 1129. If you have any questions regarding this testimony, please feel free to contact either me or Francesca Latawiec of my staff at 271-2155. We would also be happy to provide technical assistance to the RR&D Committee in any further discussions on this bill.

Sincerely,

Jeffrey H. Taylor
Director

JHT:pjd
cc: Robert W. Varney, Commissioner, DES

GRANITE STATE DESIGNERS AND INSTALLERS ASSOCIATION
76 South State Street, Concord, NH 03301-3520
Tel. (603) 228-1231 ♦ FAX (603) 228-2118

February 15, 2000

TO: Honorable Members
House Executive Departments and Administration Committee

RE: House Bill 1129-FN relative to wetland scientist certification

Granite State Designers and Installers Association is a trade association of approximately 500 septic system designers and installers, land use consultants and persons allied to the field. You may recall this association has been very involved in legislation and related rules affecting the passage and implementation of the wetland certification process.

As an Association whose members are involved in an industry working with wetlands, we do not support the repeal of the wetland scientist statute. Many people and groups have spent numerous hours in developing this program. Without question, this program has served to certify previously unlicensed wetland consultants, and raise the awareness for accurate wetland delineations.

However, this trade association is very concerned about the small number of consultants actually certified as wetland scientists to date, and recommend the bill be amended to address this specific issue without repealing the whole statute. The following recommended amendment giving credit for workshops and experience would help greatly to increase the number of possible of applicants, and ultimately certified wetland scientists:

> "Field experience gained in an acceptable apprenticeship or state permit program, or through attendance at workshops approved by the N. H. Board of Natural Scientists in any of the referenced environmental sciences will be counted towards the combined semester hours. Twelve and one-half hours of study in a workshop, credit, or non-credit course relates to one semester hour. The board may waive six combined credit or non-credit semester hours for each one-year of experience. A total of 18 combined credit or non-credit semester hours may be exchanged for a total of three years' experience."

A portion of the amendment above was in the original bill (HB197 of the 1997 legislature) and was deemed to be a great benefit to many consultants who qualified during the one year grandfathering period. Unfortunately, in the final statute that became enacted, this provision has disappeared as part

of the grandfathering provision. It had been understood by the volunteer leadership of our Association, and that of most persons, that provision was to continue, and was not to be attached to the grandfathering provision only. Regardless, we believe this provision needs to be put back into the statute, and thus our recommended amendment.

The recommended provision giving credit for experience would greatly help qualify many well qualified consultants as wetland scientists, thus strengthening and insuring the long term success of the wetland scientist program. Again, this Association maintains there are still a considerable number of well qualified consultants that should be, and could be, certified if the recommended amendment is adopted.

Sincerely,

Richard H. Clough

Richard H. Clough, CAE
Executive Director
(With approval of board of directors)

TEN REASONS WHY THE FOLLOWING RECOMMENDED AMENDMENT SHOULD BE ADOPTED

"Field experience gained in an acceptable apprenticeship or state permit program, or through attendance at workshops approved by the N. H. Board of Natural Scientists in any of the referenced environmental sciences will be counted towards the combined semester hours. Twelve and one-half hours of study in a workshop, credit, or non-credit course relates to one semester hour. The board may waive six combined credit or non-credit semester hours for each one-year of experience. A total of 18 combined credit or non-credit semester hours may be exchanged for a total of three years' experience."

1) Under RSA 310-A:84, VI, II-a, referring to non-credit semester hours, there is no definition in the statute defining what constitutes a credit, or non-credit semester hour, other than in the above clause. By adding back in this amendment, the issue will be clarified.

2) The statute when originally considered anticipated 1,120 wetland scientists being licensed in the state in order to meet the original fiscal impact statement. During deliberations on the measure various publics involved with the bill, including the N. H. Board of Natural Scientists agreed we could expect about 400 persons becoming wetland scientists within the state. As of February 1, 2000, there are only 167 currently certified wetland scientists with about a third of them claiming out of state residences. This is far from being adequate to serve the public when you consider there are 234 towns in New Hampshire, and approximately 2,600 wetland applications per year are being processed by the Wetlands Bureau at the current time. In the future the number of wetland applications is expected to increase to 6,000 to 10,000 per year due to the anticipated increase of enforcement on culverts for seasonal streams, water courses, and many drainage ditches.

3. There remain approximately 800 septic system designers who may delineate wetlands for septic system designs and subdivisions per an exemption clause in the wetland scientists statute (RSA 310) and as provided in RSA485-A. They should be encouraged to become certified as wetland scientists as well. These septic system designers are currently required to use the same exact wetland delineation standards as certified wetland scientists, and are subjected to field inspections by state inspectors on each job. As such, they would receive credit for experience towards <u>full</u> wetland scientists status.

4. During the 1997 debate on the wetland scientists certification bill, legislators were lead to believe that most septic designers would be certified if they wanted to. As has just been described this has not been the case.

5. Our suggested amendment change was a part of the grandfather provision to the wetlands scientist statute, and proved to be of great benefit in qualifying candidates during the grandfathering period. To put this provision back in to the law would not only clarify original legislative intent, it would also allow for even more capable and experienced septic designers and land use consultants to become certified to meet original expectations. In our opinion many of the best wetland

consultants are those with years of actual field experience. They should not be left out or have their experience discounted.

6. Now that the grandfathering period has passed, consultants now must take a written and field examination to get certified. Passage of these examinations helps provide assurance that a consultant is truly qualified, regardless of their formal education.

7. Without this recommended experience and workshop credit provision being added back in to the statute, many consultants will have to go back to college for years to earn the required 24 hours of semester credits. Yet, under the exemption provision contained within RSA 310 and existing law RSA 485-A, a septic designer can do wetland delineation for the purpose of septic design and subdivision applications, and need not meet the stiff provisions of RSA 310. Inclusion of the recommended amendment would eliminate experienced persons having to go back to college to earn the 24 hours of semester credits.

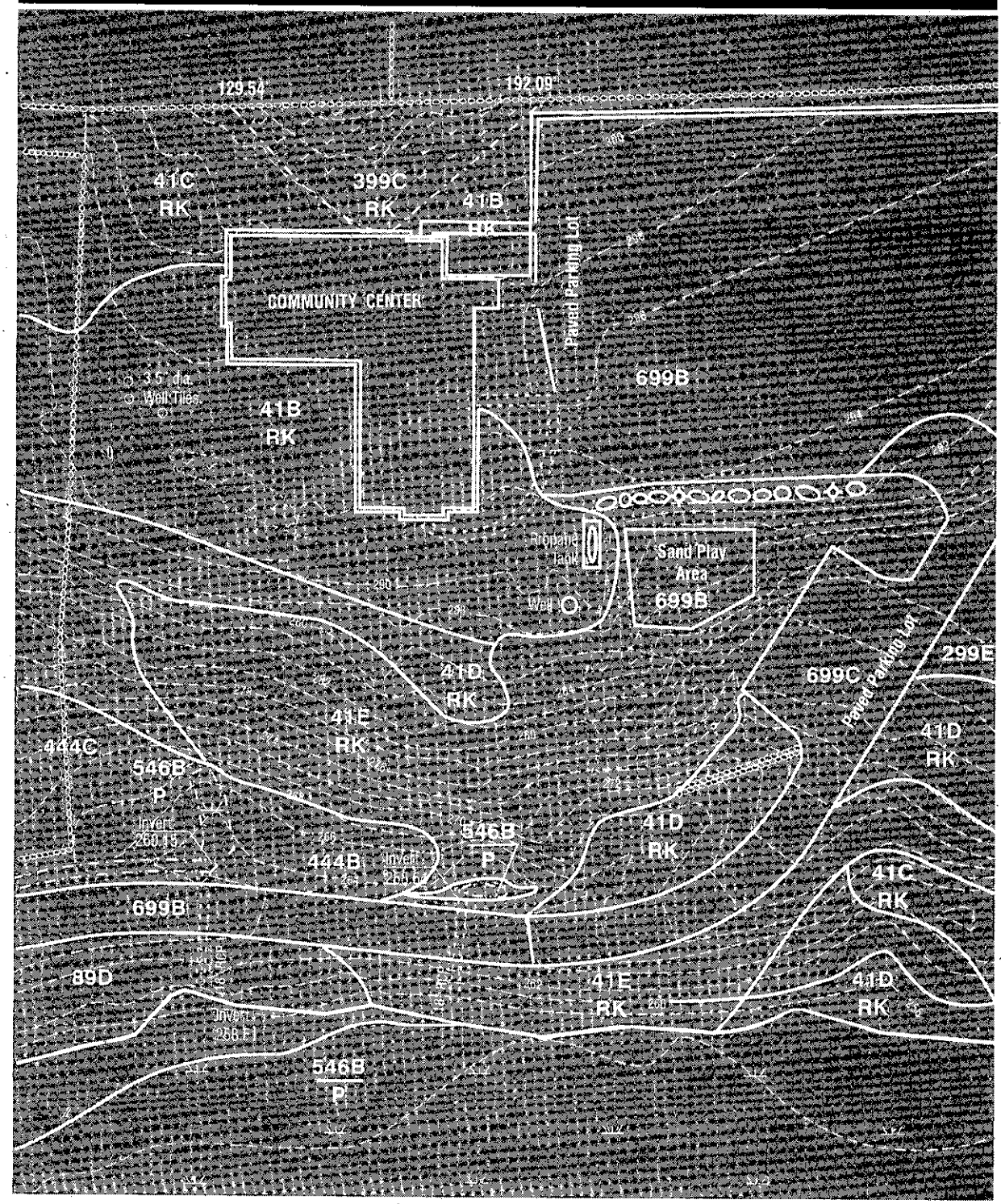
8. Without this experience credit provision, we believe a number of consultants who may be otherwise qualified will be forced slowly out of business.

9. The public and market is better serve by expanding on the number of consultants qualified as wetland scientists. As we have seen from the companion discipline soil scientists, also regulated by the N. H. Board of Natural Scientists over the years the number of certified individuals has decreased from approximately 75 to the current number of 38. We believe the public is not be served as fairly by having fewer qualified persons certified to do the work. There needs to be a sufficient number of both soil and wetland scientists to properly serve the public and market. We need to expand the base, not provide for eventual shrinkage.

10. It appears workshops via existing statute it appears to us workshops and seminars are no longer acceptable toward certification, only college credit and non-credit courses. This seems to us to be extremely unreasonable, since many consultants currently have numerous hours invested in meaningful workshops. In addition, there are several professional associations in this state including Granite State Designers and Installers Association and the N. H. Association of Natural Scientists that frequently provide extremely educational and current programs dealing with wetlands.

Data Requirements for Site Review: Guidance for Planning Boards

New Hampshire Office of State Planning • May, 1999



Data Requirements for Site Review: Guidance for Planning Boards

State of New Hampshire,
Jeanne Shaheen, Governor

New Hampshire Office of State Planning,
Jeffrey H. Taylor, Director

New Hampshire Department of Environmental Services,
Robert W. Varney, Commissioner

May, 1999

Price: $3.50

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- Steve Hundley, State Soil Scientist, NRCS, Technical Support
- Ken Gallager, Principal Planner, Technical Support
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DATA REQUIREMENTS FOR SITE REVIEW: GUIDANCE FOR PLANNING BOARDS

I. Introduction

This report presents a set of guidelines for State and local government in New Hampshire concerning the subdivision and use of land. The impetus for this report came from the release by the Soil Scientist Society of Northern New England (SSSNNE) of new site specific soil mapping standards (SSSMS) in June, 1997. Questions were raised about these standards, the accuracy of field methods, when the standards should be required, and their relation to the previous high intensity soil mapping which has been required by many New Hampshire communities. In response to these questions, the Office of State Planning (OSP) and the Department of Environmental Services (DES) invited representatives from a number of professional organizations and governmental agencies to come together to develop uniform land use planning and regulatory guidelines for municipalities which would have a broad base of support.

Members of the following organizations and interests served on the Committee:

NH Department of Environmental Services: *William E. Evans, P.E. and Karla McManus*
NH Office of State Planning: *Jeff Taylor, Jim McLaughlin and Francesca Latawiec*
Granite State Designers and Installers Association: *Alden Beauchemin, Charles Pearson, Richard Clough, Ken Bradley and Carl Sherblom*
NH Water Council: *Rep. David Kibbey*
Natural Resources Conservation Service: *Steve Hundley*
NH Municipal Association: *Susan Slack*
Rockingham Planning Commission: *Glenn Greenwood*
Rockingham County Conservation District: *Mary Currier*
NH Association of Conservation Districts: *John Hodsdon and Robert Ward*
NH Association of Conservation Commissions: *Marge Swope*
NH Board of Natural Scientists: *Tim Ferwerda*
NH Association of Consulting Soil Scientists: *Larry Morse*
NH Association of Wetland Scientists: *James Gove*
Private soil and wetland consultants: *Peter Schauer and Dave Allain*
Homebuilders Association of NH: *Steve Lewis*

The Committee met every two weeks during the spring and summer of 1998 with the objective of preparing this document and presenting its findings at the OSP Planning Conference on November 14, 1998.

Among the observations and concerns that surfaced during the deliberations of this Committee were the following:

- **Lack of consistency between local and State requirements.** Certain towns require High Intensity Soil (HIS) maps as the basis for soil-based lot sizing. The NHDES under RSA 485-A requires soils maps based on the National Cooperative Soil Survey (NCSS) standards as part of the permitting process for subdivision and subsurface wastewater treatment systems. HIS maps do not conform to NCSS standards and are therefore not acceptable for NHDES' permit requirements.

  Another example of inconsistency between levels of government is the definition and delineation of wetlands. Many towns use poorly and/or very poorly drained soils to define wetlands for local zoning purposes. The State Wetlands Bureau uses the 1987 Army Corps of Engineers Manual, which calls for delineation of wetlands according to three parameters: hydric soils, hydrophytic vegetation and wetland hydrology. Hydric soils are further determined in accordance with the 1998 Field Indicators for Identifying Hydric Soils in New England prepared by the New England Interstate Water Pollution Control Commission (NEIWPCC).

- **Consistency in permitting requirements within the Department of Environmental Services.** NHDES should strive to make the definitions and standards used by its various bureaus consistent across the entire department.

- **Improvements in our understanding of natural processes and methods.** As new scientific data, standards and methods are developed, it is important that this information be transmitted to municipalities for use in making land use decisions. For example, the Site Specific Soil Mapping Standards (SSSMS) are consistent with National Cooperative Soil Survey standards. Thus, a site specific map prepared in accordance with SSSMS for local approval processes would also be acceptable for NHDES Subsurface approval. A SSS map would also be consistent with the regional field indicators for identifying hydric soils and the soils identification portion of the delineation of federal jurisdictional wetlands.

- **Different requirements from one town to another in land use regulation.** Town ordinances and regulations affecting land use - zoning, site plan, subdivision, health ordinances - vary widely in terms of the requirements placed on developers and land owners. While this diversity is to be expected, given the unique history, natural setting, and cultural values of each of the 234 communities in New Hampshire, a consistent approach to soils mapping and wetland delineation requirements is desirable.

- **Inconsistent requirements within a town's ordinances and regulations.** This observation concerns the inconsistency that sometimes occurs where different and, at times, conflicting definitions, standards or requirements are present within a set of municipal land use regulations and ordinances.

II. Committee Findings

The Committee developed a goal which guided its deliberations and can be summed up in the following Statement: ***"In order to streamline the process and avoid confusion, put together a reasonable, comprehensive guideline that addresses soil and wetland related natural resource issues with regard to subdivisions, wastewater disposal systems, lot size criteria, general development and other uses."***

A number of findings were adopted by the Committee as the basis for its recommendations:

- There is increasing development pressure on less suitable land, especially in the southeast portion of State. As development has progressed, the better, more easily developed lands have tended to undergo conversion to residential and commercial uses. During subsequent rounds, less suitable lands have become candidates for development. Often these parcels contain wetlands, steep slopes, rock outcrops, soils with bedrock within 18 inches of the soil surface, and other features that present difficulties for building, road and other construction activities.
- State and local authorities should regulate development so that natural resources are protected, including surface water and groundwater resources. As growth pressures begin to turn toward the more difficult parcels, these same tracts of land often contain natural resources that ought to be protected. At a minimum, State and local regulations should require these resource areas to be shown on any development proposal.
- State and local authorities should allow available resource information to be employed in the permit application/review process, if the data is at an appropriate scale and level of detail to make land use decisions for the proposed intensity of development. The generalized data should be verified by on-site investigations to corroborate that the existing information is valid for the site and that it meets US Department of Agriculture/NRCS/NCSS or other established standards.
- State and local authorities should strive for consistency in terms of resource definitions, sources of information, and standards for field measurement/verification of required data.
- The Committee recommends the following as the best available guides for on-site resource characterization and mapping, consistent with State statutes and administrative rules:

  Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, Environmental Laboratory, Department of the Army, 1987;

  Field Book for Describing and Sampling Soils: Version 1.1 National Soil Survey Center, NRCS, 1998;

  Field Indicators for Identifying Hydric Soils in New England, Version 2, New England Interstate Water Pollution Control Commission, 1998; and

  Site Specific Soil Mapping Standards for New Hampshire and Vermont, Version 2.0, Society of Soil Scientists of Northern New England Publication No. 3, 1999;

- State and local authorities should require the certification or permitting of qualified professionals capable of preparing on-site information for development proposals as essential steps to protect the public and the environment.

- Professional organizations and State and regional planning agencies should cooperate to provide consistent, defensible, science based advice to municipalities on regulatory standards.
- Land use regulations often require that all applicants adhere to the same requirements, regardless of the size, extent or nature of the proposal. There appears to be a need for flexibility in the level of information required, depending on the circumstances of the land in question and the proposed use. This document provides guidance to communities in deciding on the appropriate level of information to require of an applicant.
- The NH Department of Environmental Services should revise its rules to incorporate standards for confirmation of an NRCS soils map and for the identification of limiting physical features on a site.

III. Summary Guidelines for Required Information

This document recommends the type of information about a site's physical characteristics that should be required of applicants for subdivision or site plan review approval. Every proposal has unique site characteristics, including both amenities and limitations for development. Therefore, it is appropriate to tailor the information required about a site to match the physical attributes and proposed intensity of development for that parcel.

- In all cases the planning board should require that wetlands and surface waters be delineated for the proposed site. An emphasis should be placed on avoiding or minimizing the impacts of disturbance on these resources.
- Where intense development is proposed it is appropriate to require the detail of a site specific soil (SSS) map. Such a map will help both the applicant and the planning board to identify areas with limitations for site development as well as areas that are suitable for locating structural improvements. Three criteria are offered to measure development intensity sufficient to warrant a site specific soil map:
  - Areas with average lot sizes less than two acres, without municipal water and sewer;
  - Areas with average lot sizes less than one acre, with municipal water but without municipal sewer;
  - Areas with less than 20,000 contiguous square feet of land that is not wetland and does not have any limiting physical features and without municipal water and sewer; and
- Furthermore, areas without water and sewer with soil complexes with dramatically different characteristics should require a SSS map.

If any of these criteria applies to a development proposal, the applicant should submit a site specific soil map and the planning board is justified in requiring it.

Where larger lots or low intensity of development is proposed, the level of detail provided by a site specific soil map may not be necessary. The planning board may be able to make an informed decision on such applications based on the NRCS county soil survey maps. In these instances, the planning board should require the applicant to provide evidence that the site conditions reflected in the NRCS mapping are corroborated by on-site soils investigations. If the evidence is consistent with the

NRCS data, then this level of information may be adequate for planning board review. If the evidence is not consistent, or if limiting physical features are identified on the site which would affect its use, then the planning board must decide if a site specific soil map is required. Limiting physical features include rock outcrops, soils with bedrock within 18 inches of the soil surface, steep slopes greater than 35 percent and very poorly drained areas. It should be noted that NRCS county soil maps do not show areas of contrasting soil which are less than 3 to 5 acres in size.

If complicated site conditions are known to be present, an applicant may shorten planning board review time by providing a SSS map at the outset. Similarly, the planning board may require submission of a SSS map if an application meets the development intensity criteria, significant limiting physical features are known to exist on the site, or there are areas without water and sewer with soil complexes with dramatically different characteristics. ***All applicants should take advantage of the opportunity to have preliminary discussions with the planning board, either conceptual consultation or design review, prior to submitting a completed application. This can help the board and the applicant to determine the appropriate level of site specific data to be submitted with the application.***

IV. Information Required for Subdivision and Site Plan Review

This section describes three levels of technical information to be submitted to the planning board by applicants for subdivision or site plan review approval. The intent is to provide the board with guidance as to the type of data needed for making informed land use decisions about developments of different magnitudes and levels of intensity. For each level, the data to be required is specified, as well as the standards to be used in preparing the data and the type of professional qualified to do the work. The following statutes and administrative rules adopted pursuant to them specify which professionals are certified or permitted and qualified to prepare on-site technical information:

- RSA 310-A:76, II states that a certified soil scientist is qualified to identify, classify and prepare soil maps according to NCSS or DES standards.
- RSA 310-A:76, II-a states that a certified wetland scientist is qualified to delineate wetland boundaries and prepare wetland maps in accordance with DES or USACE standards.
- RSA 310-A:79, IV allows a permitted septic designer to determine a hydric soil boundary or test pit evaluation under RSA 485-A:35.
- RSA 485-A:34 requires soil data, consisting of maps and charts prepared by NRCS or equivalent as part of an application for subsurface disposal systems.
- RSA 485-A:35 requires plans and specifications for subsurface disposal systems to be prepared by a septic designer permitted by DES.

Figure 1. is a schematic diagram showing implementation of the review process.

Figure 2. identifies the methods and standards which apply to the information required for each of the three levels of review. It also indicates the type of professionals who may be qualified to provide the information. A list of the full citations of the methods and standards to be used, by review level, is presented on page 25 in the Sources and References section of this document.

Figure 1. Submission Process

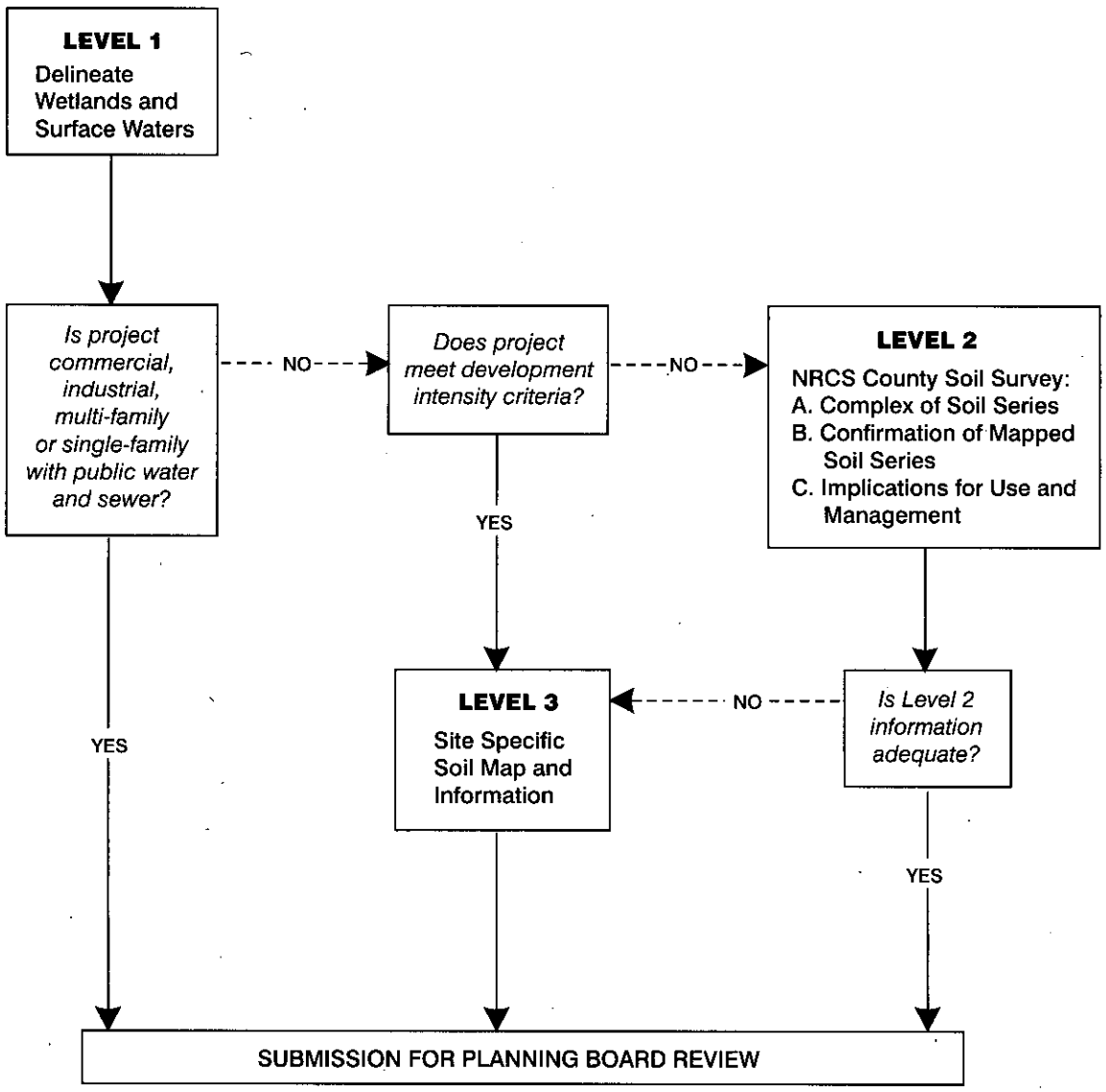


Figure 2. Levels of Information for Subdivision and Site Plan Applications

LEVEL	TASKS	STANDARDS	QUALIFICATIONS
1	**Step A.** Wetlands Delineation	• 1987 US Army Corps of Engineers Wetlands Delineation Manual • 1998 Field Indicators for Identifying Hydric Soils for New England	Certified Wetland Scientist, or Permitted Septic Designer*
	Step B. Surface Waters Delineation	• Defined by RSA 485-A:2, XIV	
2	**Step A.** Identification of Dramatically Different Soil Complexes	• Appendix 1 of this document. • NRCS Official Series Description Sheets and/or NRCS published map unit descriptions (Steps A-C).	Certified Soil Scientist or Permitted Septic Designer*
	Step B. Confirmation of NRCS Soil County Soil Survey Map	• Field Book for Describing and Sampling Soils: Vers. 1.1, 1998 • Site Specific Soil Mapping Standards for NH & VT, 1999 • Keys to Soil Taxonomy, Eighth Edition, 1998	
	Step C. Identification of Limiting Physical Features	• Same as Step B	
3	Site-Specific Soil Map, when: a. Average lot size <2 acres, without municipal water and sewer, or b. Average lot size <1 acre, with municipal water, but without municipal sewer, or c. Non-limiting, non-wetland contiguous area <20,000 square feet and without municipal water and sewer, or d. Areas without municipal water and sewer and with soil complexes with dramatically different characteristics.	• Site Specific Soil Mapping Standards for NH & VT, 1999	Certified Soil Scientist
	* Per RSA 310-A:79, IV and NH Code of Administrative Rules Chapters Env-Ws 1000 adopted under RSA 485-A for the purpose of septic system design or subdivision applications.		

LEVEL 1.
Delineation of Wetlands and Surface Waters For ALL Subdivision and Site Plan Applications

The first level of information, Level 1, is required of all proposed site plan and subdivision applications. It involves the on-site delineation of wetlands and surface waters existing on the subject property. All plan applications should show the location and extent of wetlands and surface waters on the parcel or parcels under consideration, directly on the plan. Wetland and water body information is intended to demarcate the upland portions of a property on the site. This allows the board to know the location of the more sensitive natural resources and to determine if the development structures are proposed to be sited in or near them.

Level 1 information on wetlands and surface waters shall be provided on a site plan with identification and delineation of the resources in accordance with the definitions and standards specified in Steps A and B, below. The written documentation specified in Step C shall be included on the site plan and be certified by the stamp of a qualified professional.

Step A: Wetlands Delineation

- Chapters Wt 100-800 of the NH Code Of Administrative Rules, April 21, 1997.
- Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, Environmental Laboratory, Department of the Army, 1987.
- Field Indicators for Identifying Hydric Soils in New England, Version 2, New England Interstate Water Pollution Control Commission, 1998.

Step B. Surface Waters Delineation

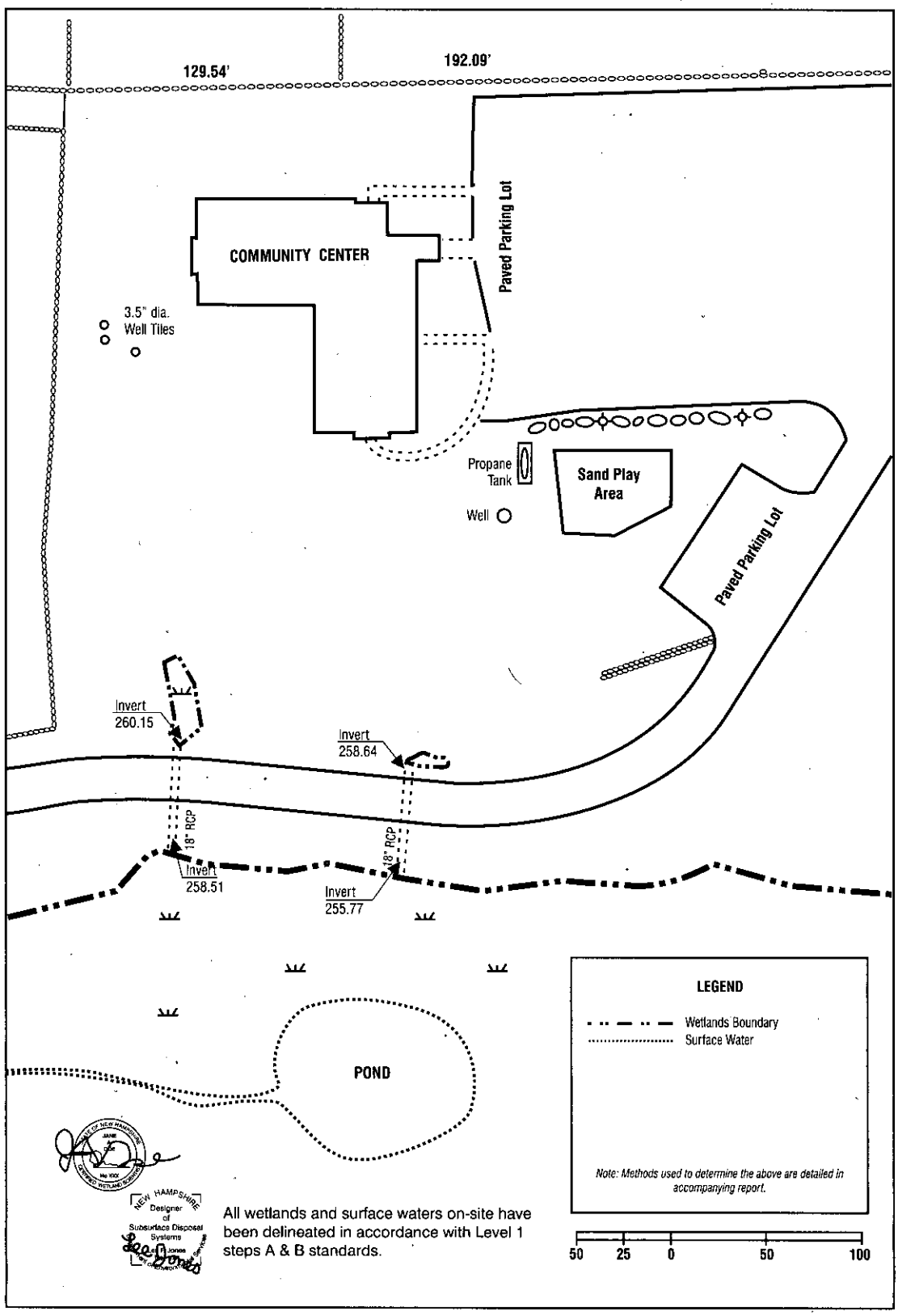
- RSA 485 - A:2, XIV, NH Safe Drinking Water Act.

Step C. Written Documentation

- A written statement on the site plan, ***certified by the stamp of the Certified Wetland Scientist (CWS)*** *in accordance with RSA 310:76,II-a* ***or Permitted Septic Designer (PSD)***, in accordance with RSA 310-A:79,IV and NH Code of Administrative Rules Chapters Env-Ws 1000, adopted under RSA 485-A, for the purpose of septic system design or subdivision applications, that all wetlands and surface waters on-site have been delineated in accordance with the standards specified in Steps A and B above.

Figure 3. shows a schematic diagram of a site plan illustrating Level 1 wetlands and surface waters. Note that the sources required by steps A and B above should be cited directly on the site plan.

Figure 3. Schematic Diagram of Level 1 Wetlands and Surface Waters Delineation



Determining the Next Level Based on the Type of Proposal

1. If a project involves commercial or industrial development or residential use which is served by public water and sewer, ***the applicant may proceed to file an application with the planning board***. In these cases, since on-site wastewater disposal is not an issue and other limiting features should be mitigated as part of the plan, submission of soils data is at the discretion of the planning board.

   Additionally, if the site development calls for structures and/or impervious cover of an area greater than 100,000 square feet, or 50,000 square feet within the protected shoreland, ***then the applicant should file a site specific application under RSA 485-A:17, significant alteration of terrain.***

2. If the project meets at least one of the following three development intensity criteria, ***then the applicant should proceed directly to Level 3:***

   - lots in a proposed subdivision average less than two (2) acres in area, and are not served by either municipal water or sewer;
   - lots in a proposed subdivision average less than one (1) acre in area, and are served by municipal water, but not sewer; or
   - the non-limiting, upland, contiguous area on any proposed lot without municipal water and sewer is less than 20,000 square feet.

   Note: For the purpose of interpreting these criteria, the following definitions apply:

   "Average area" means the total acreage of the property, exclusive of very poorly drained soils, divided by the total number of proposed lots. (Use of average area here assumes that all lots are roughly the same size.)

   "Non-limiting" means the area, exclusive of very poorly drained soils, rock outcrops, bedrock within 18 inches of the soil surface and soils with steep slopes greater than 35 percent.

3. ***For all other projects, proceed to Level 2.***

If the proposal meets none of the above tests, then Level 2 information is potentially adequate for local review, provided that the NRCS soil survey information is determined to be sufficient for the proposed use and management of the property.

LEVEL 2.
Confirmation of County Soil Survey Maps and Identification of Limiting Physical Features For Plans with Larger Lot Sizes or Lower Development Intensity.

A Level 2 review includes submission of existing data, such as soil maps representing the NRCS county soil survey. For this level, an applicant is required to submit and evaluate detailed soil profile descriptions to corroborate the soil series and map unit determination based on the county soil survey. The procedure for doing this is outlined below.

Step A: Identification of Soil Complexes With Dramatically Different Characteristics

- If any of the soil map units on the property, as mapped by the NRCS county soil survey, is a complex of soils with dramatically different characteristics that would have an impact on use and management of the property, ***then the applicant must provide Level 3 information.*** (Appendix 1, prepared by the NRCS State Soil Scientist, lists these complex soil map units.)
- If the soils mapped by the NRCS county soil survey is ***not*** one of these complexes, ***continue to Step B.***

Step B: Confirmation of NRCS County Soil Survey Map

The following information is required to be submitted for confirmation of the NRCS county soil survey:

- A copy of the NRCS county soil survey with the subdivision location and approximate boundaries superimposed on the soil map. (Appendix 3, page 34.)
- A representative number of detailed soil profile descriptions to characterize variations in the landscape for each mapped unit, based on NRCS standards. These are to be included in a narrative report for the project. The standards and methodologies for doing this description are listed here. Note that the sources required by step B should be cited directly on the site plan. (Appendix 3, page 34 and Figure 4, page 14.)

Standards

The required tasks specified under Level 2 are to be carried out according to the standards found in the following documents:

- Field Book for Describing and Sampling Soils: Version 1.1 National Soil Survey Center, NRCS, 1998.
- Keys to Soil Taxonomy, Eighth Edition, USDA/NRCS 1998.
- NRCS Official Series Description Sheets and/or published map unit descriptions USDA/NRCS.

Methods

A minimum of one soil profile description shall be completed per soil map unit within the subdivision or site plan area, as depicted on the NRCS county soil survey. The soil will be described in sufficient detail, so as to support or refute that identified properties are within, or similar to those of the soil series used to name the map unit.

Soils descriptions should be carried out in areas suspected of having the greatest likelihood of contrasting soil features. Some map units will require more than one soil description to document soil variability.

The map unit purity standards from Site Specific Soil Mapping Standards for New Hampshire and Vermont Version 2.0, Society of Soil Scientists of Northern New England Publication No. 3, 1999, will apply.

- The location(s) of the soil profile description(s) used to corroborate the NRCS soil series shall be shown on the site plan, with a reference to the description(s) in the narrative report for the project.
- A detailed comparison between each soil profile description and the representative pedon (a description of a small three-dimensional area of soil, that is typical of the soil series in the county) for that soil from the county soil survey. The NRCS Official Series Description Sheets and/or NRCS published map unit descriptions for each mapped unit are to be used as references.
- A written statement that the soil profile description(s) from the site adequately reflect the range of characteristics for the series, as described in the county soil survey. The statement shall indicate that the county soil survey adequately represents soil and landscape characteristics, such that site specific land use decisions can be made without further soil investigations. ***This statement is to be certified by the stamp of the CSS or PSD. If this statement cannot be made, proceed to Level 3.***
- A narrative report for the project which summarizes the information compiled in Step B. This shall include a determination of whether limiting physical features are present on the parcel and indicate the specific mapped soil units where these occur. ***If any limiting physical features are identified on-site, then Step C is required.***

Three examples of suggested documentation for NRCS soil map confirmation for Step B are presented in Appendix 3. Note that this information is to be accompanied by a detailed narrative report which explains the documentation.

- If the on-site investigations confirm the nature and properties of the soils as reflected by the soil map, consistent with the intended use and intensity of development, ***a Level 2 review will be adequate for the planning board's purposes.***

Step C. Identification of Limiting Physical Features

If the on-site soil investigations indicate that limiting physical features which have the potential to affect the usability of certain areas for structures, on-site wastewater disposal systems or roads, they must be identified and documented by the applicant.

In addition to the information required in Steps A and B, the following information is required for identification of limiting physical features:

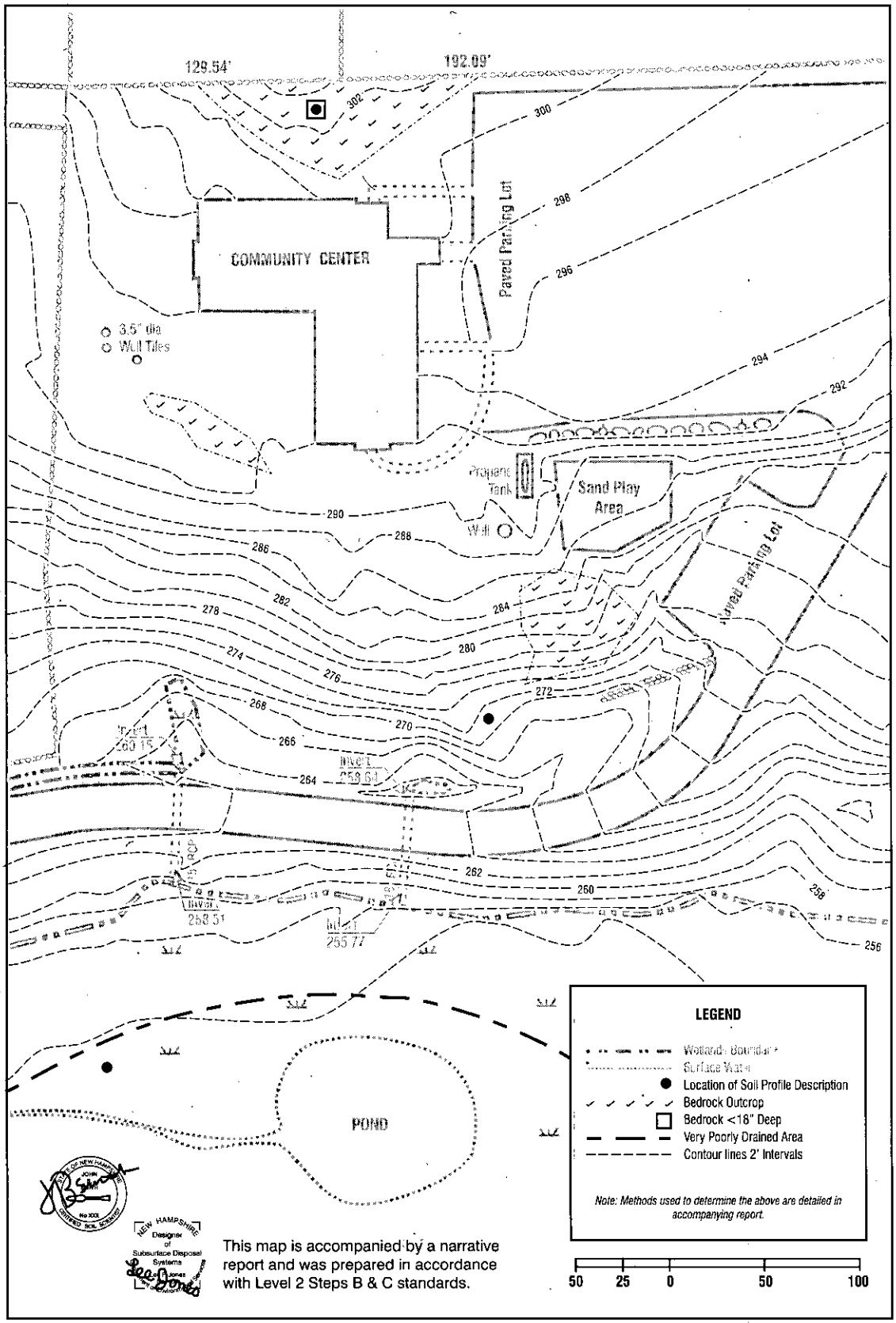
- Delineation of the limiting features, specifically rock outcrops, steep slopes > 35%, soils with bedrock within 18 inches of the soil surface and very poorly drained areas on-site. These features are to be shown on the site plan. (The terms used to describe the limiting physical features are defined in Appendix 2)
- A detailed description of each limiting physical feature, based on NRCS standards, in a narrative report for the project, with reference to its location on the site plan. This can either be done as a stand alone document or as an amendment or addendum to the narrative prepared under Step B.
- A written statement that the limiting physical features identified above would not have a significant impact on use and management of the property. ***This statement is to be certified by the stamp of the CSS or PSD. If this statement cannot be made, then proceed to Level 3.***
- A written statement to indicate that the county soil survey adequately represents soil and landscape characteristics such that site specific land use decisions can be made without further soil investigations. ***This statement is to be certified by the stamp of the CSS or PSD. If this statement cannot be made, then proceed to Level 3.***
- A written statement that limiting physical features are present on the parcel(s) and that ***either (1) a SSS Map (Level 3) is required or (2) not required, with supporting documentation for this position. This determination is to be certified by the stamp of the CSS or PSD. If a SSS Map is required, then proceed to Level 3.***

A schematic diagram of a site plan illustrating Level 2 limiting features, identified as part of Step C, is shown in Figure 4. Observe that there are no steep slopes greater than 35% shown in Figure 4, due to the lack of such a limiting feature in this example. Also note that the information shown in Figure 4 is to be accompanied by a detailed narrative report which explains the documentation. The report shall include the three written statements, certified by the stamp of the CSS or PSD, as required by Step C above. Three examples of suggested documentation for NRCS map confirmation are shown in Appendix 3, page 34. Note that the sources required by Step B of Level 2 should be cited directly on the site plan.

- If the on-site investigations confirm the nature and properties of the soils as reflected by the soil map, consistent with the intended use and intensity of development, ***a Level 2 review will be adequate for the planning board's purposes.***

The ultimate decision as to whether or not Level 3 information is required is up to the planning board.

Figure 4. Schematic Diagram of Level 2 Limiting Features



LEVEL 3.
Site Specific Soil (SSS) Map for Intense Development or Sites With Limiting Features

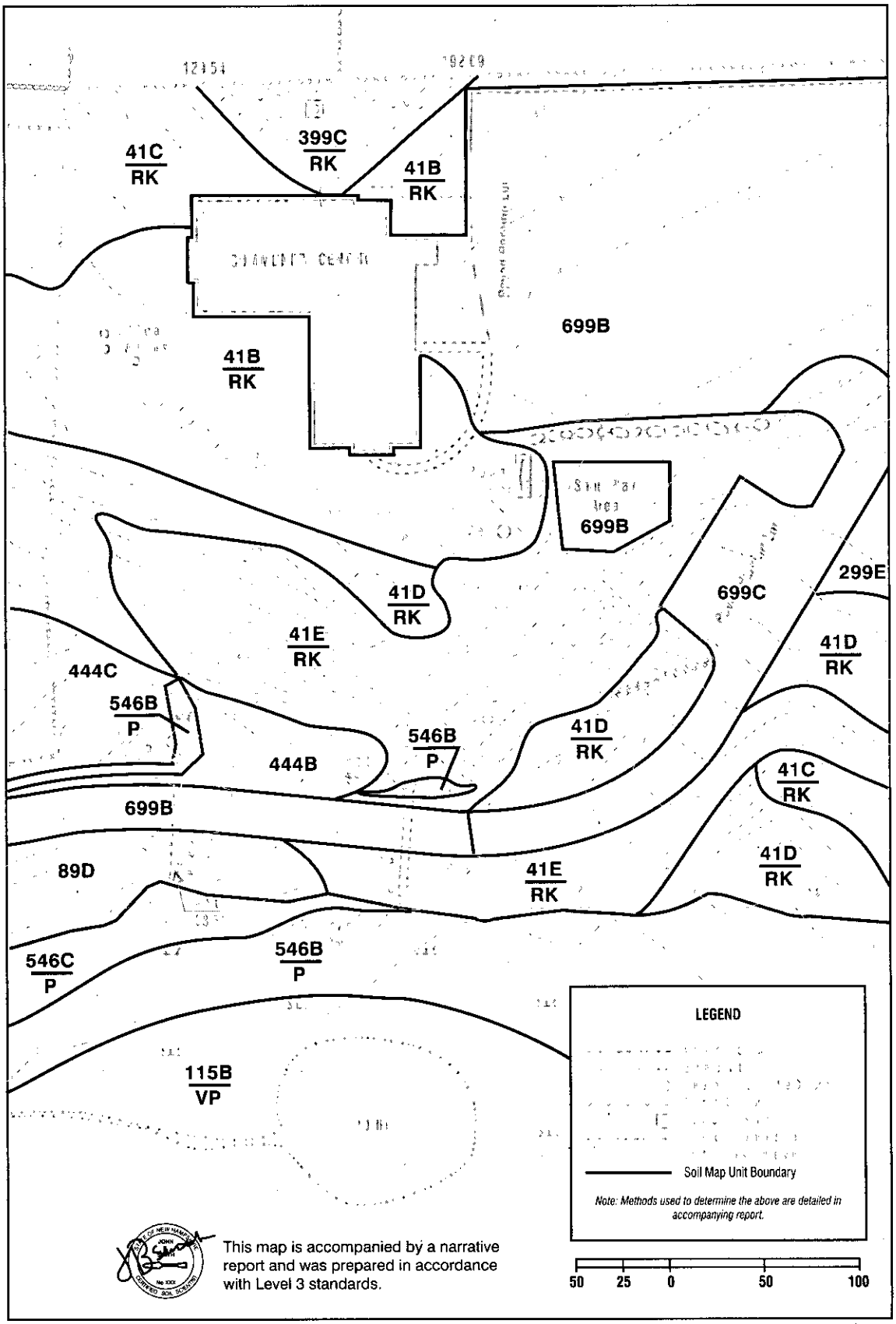
Level 3 requires a site specific soil map prepared in accordance with Site Specific Soil Mapping Standards for New Hampshire and Vermont Version 2.0, Society of Soil Scientists of Northern New England Publication No. 3, 1999. ***This is to be certified by the stamp of the CSS.***

A schematic diagram of a Level 3 SSS map is shown in Figure 5. A typical soil map unit key is shown on page 17, along with a map notation that is required to be placed on all site specific soil surveys. Pages 18-21 contain sample pages from a site-specific soil survey report which describe each soil map unit found on the property.

Final Plan

A schematic diagram of a final plan that incorporates all three levels of technical information is shown in Figure 6, page 23.

Figure 5. Schematic Diagram of a Level 3 SSS Map



SITE SPECIFIC SOIL MAP UNIT KEY

Symbol	Map Unit	Slope Class	Drainage Class	HIS Symbol
115B/VP	Scarboro mucky loamy sand	0-8%	Very Poorly Drained	611BH
546B/P	Walpole sandy loam	0-8%	Poorly Drained	511BH
699B	Urban Land pavement	0-8%	Impervious Surface	363BH
699C	Urban Land pavement	8-15%	Impervious Surface	363CH
444B	Newfields fine sandy loam	0-8%	Moderately Well Drained	321BH
444C	Newfields fine sandy loam	8-15%	Moderately Well Drained	321CH
41B/Rk	Chatfield-Hollis Rock Outcrop	0-8%	Well Drained	22XBH
41C/Rk	Chatfield-Hollis Rock Outcrop	8-15%	Well Drained	22XCH
41D/Rk	Chatfield-Hollis Rock Outcrop	15-25%	Well Drained	22XDH
41E/Rk	Chatfield-Hollis Rock Outcrop	25-50%	Well Drained	22XEH

Map Notation: To be Placed On All Site-Specific Surveys

"This map product is within the technical standards of the National Cooperative Soil Survey. It is a special purpose product, produced by a certified soil scientist, and is not a product of the USDA Natural Resources Conservation Service. A narrative report accompanies this map and map key.

SITE SPECIFIC SOIL MAP UNIT DESCRIPTIONS

Map Unit Symbol: 115B / VP

Map Unit Name: Scarboro mucky loamy sand, 0-8% slopes

Landscape Settings: This soil type is found in the concave or nearly level areas of the property.

Surface Features: The areas with this map unit are associated with the wetland that is delineated in the northern section of the property.

Drainage Class: Very Poorly Drained

Parent Material: Organic material overlying sandy glacial outwash.

Complex: Yes ( ) No (√)

Nature of Dissimilar Inclusions, Locations and Estimated Percent:

Areas of dissimilar inclusions consist of small areas where the soils are poorly drained mineral soils. This area encompasses no more than 5% of this map unit.

Additional Notes:

The organic layer of this soil ranged from 8 to 16 inches in thickness.

SITE SPECIFIC SOIL MAP UNIT DESCRIPTIONS

Map Unit Symbol: 546B / P

Map Unit Name: Walpole sandy loam, 0-8% slopes

Landscape Settings: This soil type is found in the concave and nearly level areas of the property.

Surface Features: The areas with this soil type comprise ____ of the wetland areas found on this property.

Drainage Class: Poorly Drained

Parent Material: Very deep, sandy soils formed in water-sorted glacial outwash and stratified drift.

Complex: Yes ( ) No (√)

Nature of Dissimilar Inclusions, Locations and Estimated Percent:

Areas of dissimilar inclusions consist of small areas where the depth to the seasonal high water is 12 to 15 inches in depth. This area encompasses no more than 5% of this map unit.

Additional Notes:

This poorly drained soil map unit borders the very poorly drained Scarboro series of the wetland drainage that runs through the site. Other areas with this soil type include the drainage ways that run along side of the paved road.

SITE SPECIFIC SOIL MAP UNIT DESCRIPTIONS

Map Unit Symbol: **699C**

Map Unit Name: Urban Land, pavement, 8-15% slopes

Landscape Settings: This unit is basically the sloping section of the road.

Surface Features: Hot Top Pavement.

Drainage Class: Impervious Surface

Parent Material: Anthropogenic/Hot Top

Complex: Yes ( ) No (√)

Nature of Dissimilar Inclusions, Locations and Estimated Percent:

N/A

Additional Notes:

N/A

SITE SPECIFIC SOIL MAP UNIT DESCRIPTIONS

Map Unit Symbol: 41B / Rk

Map Unit Name: Chatfield-Hollis-Rock Outcrop Complex, 0-8% slopes

Landscape Settings: This soil type is found dominantly at the highest points of the property.

Surface Features: The areas with this map unit exhibit moderately deep soils interspersed with shallow soils and areas of exposed bedrock.

Drainage Class: Well Drained

Parent Material: The Chatfield portion of this map unit has developed in 20 to 40 inches of glacial till overlying bedrock. The Hollis portion of this map unit has developed in a thin mantle of glacial till. The exposed bedrock areas are found scattered irregularly.

Complex: Yes (√) No ( )

This complex consists of approximately 40% Chatfield Series, 30% Hollis Series and 30% Exposed Bedrock.

Nature of Dissimilar Inclusions, Locations and Estimated Percent:

Areas of dissimilar inclusions consist of small areas where slopes are greater than 8%. This area encompasses no more than 5% of this map unit.

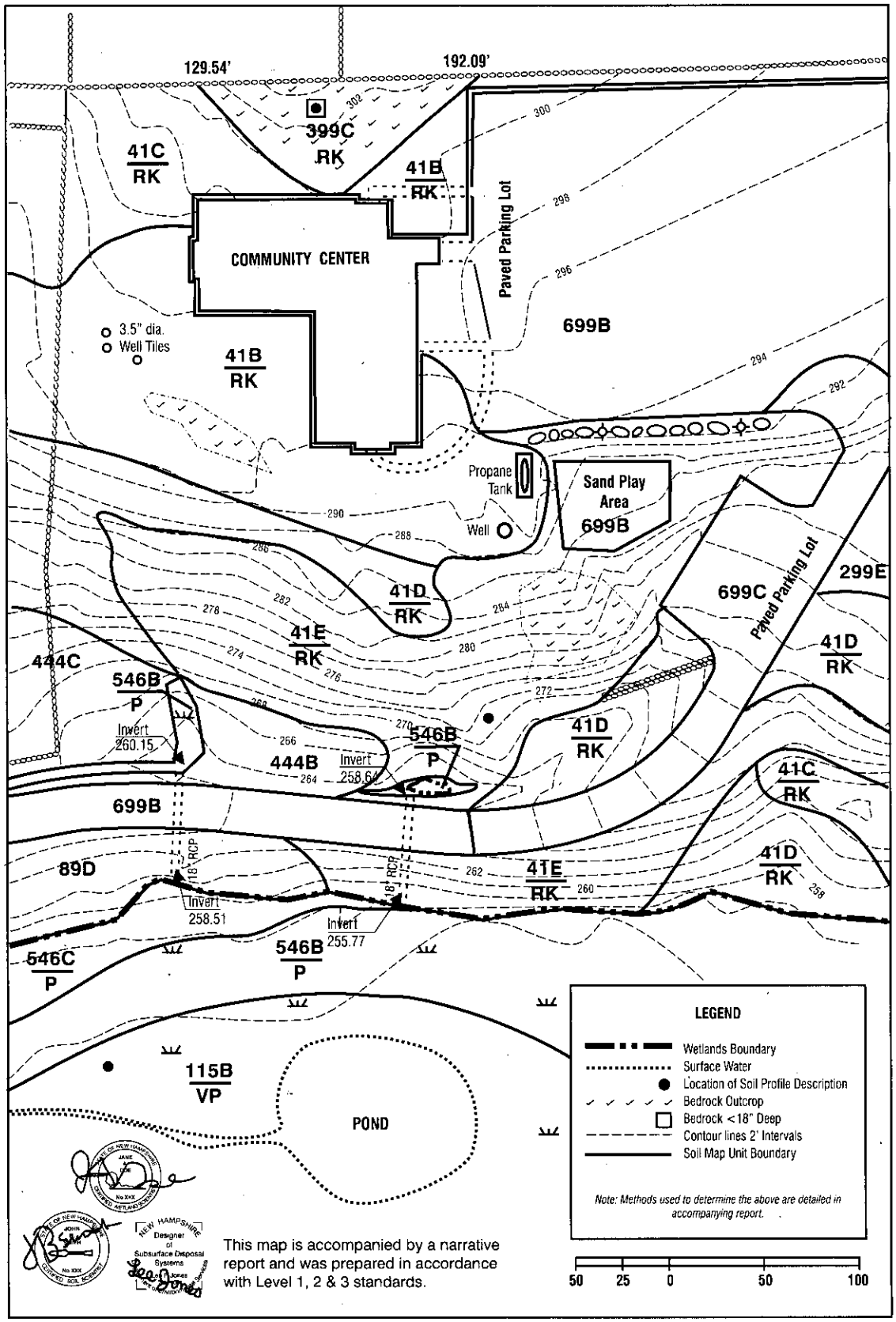
Additional Notes:

This soil complex is very variable due to the unpredictability of the undulating bedrock present in the area. Therefore some areas within this complex are bedrock controlled while other portions of this complex consist of moderately deep soils. The exposed areas of bedrock are irregularly scattered throughout this map unit.

SOIL GROUPINGS

Map Symbol	Map Unit	Soil Grouping
115	Scarboro	Group 6
546	Walpole	Group 5
699	Urban Land	Group 4
444	Newfields	Group 3
41	Chatfield/Hollis/Rock Outcrop	Group 4

Figure 6. Schematic Diagram of a Final Plan



V. Related Issues

In addition to the recommended information requirements outlined in the previous sections, three related issues deserve attention by municipalities. The first involves local regulations which determine lot sizes by soil types and the second addresses the variability of soil map units.

Application of Lot Size Calculations

In some cases, a municipality may be requiring large lots with the mistaken idea that a larger minimum lot size preserves open space. However ,a large minimum lot size uses more acreage for a given number of housing units than does a smaller minimum or zoning that allows cluster development. The effect of large lot requirements is more rapid conversion of open space to residential uses as population growth increases housing demand.

In order to ensure that subsurface wastewater treatment systems function properly, many municipalities require that lot sizes are based on soil type. In these cases, a minimum lot size is typically required in the zoning ordinance with a reference to the subdivision regulations where additional area requirements are specified depending on soil characteristics.

The committee recommends that municipalities revise their local soil based lot size regulations to be consistent with NHDES' requirements according to RSA 485-A and Env-Ws 1000. NHDES will be revising their lot size tables to reflect the use of USDA/NRCS and site specific soil mapping standards. This will help to avoid confusion and provide for consistency of the regulatory requirements at the State and local levels. The tables used to determine the lot sizes by soil type often differ from one municipality to another, as well as from those required by NHDES for subdivision approval.

Variability of Soil Map Units

All maps and plots of areas on the earth's surface represent, at best, only an approximation of what is actually there. This is true regardless of what mapping scale or mapping standard is used. This truism applies to soil maps, as well. All soil map units contain inclusions of soils other than those used to name the map unit. These inclusions are expected and are described in the map unit description.

The exact extent of inclusions and their location within a map unit are nearly impossible to determine without spending an inordinate amount of time and expense on extremely small parcels of land. This characteristic of soils, however, does not detract from the usefulness of soils information for making informed land use decisions.

In order to adequately handle the natural variability of soil map units, soil mapping standards have been developed that require specific levels of purity based on the nature of the unmappable inclusions. These inclusions are identified in the map unit description, along with statements explaining their potential impact on use and management. Local regulatory board members should be familiar with reading soil maps and understand the nature of included soils and how their properties may affect a proposed land use.

It is also important to understand the placement of soil lines on a base map. Soil boundaries represent a transition in soil behavioral characteristics and do not necessarily represent the exact point on the landscape where a particular soil type suddenly changes to another. The variable width of this transitional area is particularly important to remember when determining the exact number of lots that will be allowed in a proposed subdivision, using soil-based lot size computations. For this reason, it may be desirable for a planning board to request the assistance of a soil scientist to review applications where significant questions about the soils have been raised.

VI. Sources and References

Chapter Env-Ws 415 of the NH Code of Administrative Rules - Permits for RSA 485-A:17 Activities, February, 1996

These are the State's administrative rules for significant alteration of terrain, involving earth disturbances greater than 100,000 square feet. The requirements are for stormwater management and erosion and sediment control. This threshold drops to 50,000 square feet within 250' of the shoreline of protected waters.

Department of Environmental Services (DES)
Public Information and Permitting
PO Box 95
Concord, NH 03301-0095
(603) 271-2975

Chapter Env-Ws 1000 of the NH Code Of Administrative Rules - Subdivision and Individual Sewage Disposal System Design Rules, February, 1997 (Currently Undergoing Revision)

These are the State's administrative rules for septic system design and permitting. By adopting these standards local consistency can be assured between State and local permitting processes. NHDES will continue to update these regulations as new developments in science and technology occur.

Department of Environmental Services (DES)
Public Information and Permitting
PO Box 95
Concord, NH 03301-0095
(603)271-2975

Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, 1987.

In combination with the regional field indicators of hydric soil, this manual is consistent with the NHDES Wetlands Bureau's administrative rules, Wt 100-800. The Corps Manual can be cited as one of the on-site wetland mapping standards in local subdivision and site plan review regulations.

US Department of the Army
Waterways Experiment Station, Corps of Engineers
PO Box 631
Vicksburg, MI 39180-0631

The Corps Manual can be downloaded over the Internet from the following address:
www.wes.army.mil/el/wetlands/pdfs/wlman87.pdf

Field Book for Describing and Sampling Soils: Version 1.1 National Soil Survey Center, NRCS, 1998.

This document summarizes the current National Cooperative Soil Survey's convention for describing soils. It describes instructions, concepts and codes in a field guide for making or reading soil profile descriptions as currently practiced in the United States.

The Field Book can be downloaded over the Internet from the following address:
www.statlab.iastate.edu/soils/nssc/field_gd/field_gd.htm

Field Indicators for Identifying Hydric Soils in New England, Version 2, New England Interstate Water Pollution Control Commission, 1998.

These field indicators of hydric soils were developed by an Interstate group of professionals, specifically to address New England soil conditions and landscapes. In combination with the 1987 Army Corps of Engineers Wetlands delineation manual, they are consistent with the Wetlands Bureau's administrative rules, Wt 100-800. They can be cited as one of the on-site wetland mapping standards in the local subdivision and site plan review regulations.

New England Interstate Water Pollution Control Commission (NEIWPCC)
Boott Mills South
Foot of John Street
Lowell, MA 01852-1102

Keys to Soil Taxonomy, Eighth Edition, USDA/NRCS,1998.

This document summarizes the current National Cooperative Soil Survey's convention for classifying soils as currently practiced in the United States.

The Keys to Soil Taxonomy can be downloaded over the Internet from the following address:
www.statlab.iastate.edu/soils/keytax/keystosoiltaxonomy1998.pdf

Site Specific Soil Mapping Standards for New Hampshire and Vermont, Version 2.0, Society of Soil Scientists of Northern New England Publication No. 3, 1999, or most recent revision.

This recent publication was prepared by the Society of Soil Scientists of Northern New England (SSSNNE) to supersede SSSNNE Publications No. 1 and 2, the HIS and Order 1 mapping standards, respectively. These standards result in multi-purpose map products that can be used for a number of land use purposes, including lot sizes. They can be adopted as site specific soil mapping standards as part of the local subdivision and site plan review regulations. They are consistent with the standards of the National Cooperative Soil Survey, which many local zoning ordinances are based upon.

Soil Science Society of Northern New England (SSSNNE)
PO Box 98
Durham, NH 03824-0098

Soil Manual for Site Evaluation in New Hampshire, 2nd Edition DES, 1991.

This publication was prepared by DES in cooperation with the NRCS to provide permitted designers and installers with guidance for use in doing site evaluations for the permitting of subsurface wastewater treatment systems. It is an easy to understand basic primer on soils and site evaluation.

Department of Environmental Services (DES)
Public Information and Permitting
PO Box 95
Concord, NH 03301-0095
(603)271-2975

Stormwater Management and Erosion and Sediment Control for Urban and Developing Areas in New Hampshire, DES , RCCD, 1992.

This document contains technical standards for stormwater management in developing urbanized areas. They are consistent with the site specific standards required by DES for significant alteration of terrain in accordance with RSA 485-A:17.

Department of Environmental Services (DES)
Public Information and Permitting
PO Box 95
Concord, NH 03301-0095
(603)271-2975

VII. List of Methods and Standards to be Used, by Review Level

LEVEL 1: DELINEATION OF WETLANDS AND SURFACE WATERS

- Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, Environmental Laboratory, Department of the Army, 1987.
- Field Indicators for Identifying Hydric Soils in New England, Version 2, New England Interstate Water Pollution Control Commission, 1998.
- Chapters Wt 100-800 of the NH Code Of Administrative Rules, April 21, 1997.
- RSA 485 - A:2, XIV, NH Safe Drinking Water Act

LEVEL 2: CONFIRMATION OF COUNTY SOIL SURVEY MAPS AND IDENTIFICATION OF LIMITING SOIL FEATURES

Step A

- Data Requirements for Site Review: Guidance for Planning Boards, Appendix 1, OSP, 1999.

Step B

- Field Book for Describing and Sampling Soils: Version 1.1 National Soil Survey Center, NRCS, 1998. (To replace the dated, 1991 Soil Manual for Site Evaluation in New Hampshire, 2nd Edition).
- NRCS Official Series Description Sheets and/or published map unit descriptions USDA/NRCS
- Keys to Soil Taxonomy, Eighth Edition, USDA/NRCS, 1998.
- Site Specific Soil Mapping Standards for New Hampshire and Vermont Version 2.0, Society of Soil Scientists of Northern New England Publication No. 3, 1999.

Step C

- Data Requirements for Site Review: Guidance for Planning Boards, Appendix 2, OSP, 1999.
- Keys to Soil Taxonomy, Eighth Edition, USDA/NRCS 1998.
- Site Specific Soil Mapping Standards for New Hampshire and Vermont Version 2.0, Society of Soil Scientists of Northern New England Publication No. 3.

LEVEL 3: SITE SPECIFIC SOIL MAPPING STANDARDS (SSSMS) MAP

- Site Specific Soil Mapping Standards for New Hampshire and Vermont Version 2.0, Society of Soil Scientists of Northern New England Publication No. 3, 1999.

APPENDIX 1.

SOIL COMPLEXES WITH DRAMATICALLY DIFFERENT CHARACTERISTICS

The following map units represent soil complexes currently recognized in the USDA, Natural Resources Conservation Service, Numerical State-Wide Soils Legend for New Hampshire. These are Order 2 soil map units commonly used in county soil surveys because the scale of mapping and the intricate pattern of the soil components do not allow for these soils to be recognized and mapped separately. The individual components of these map units are significantly different in their behavioral characteristics such that they warrant different land use interpretations. Except in unusual situations, the soil components can be separated and delineated using site-specific soil mapping standards and the applicant must provide Level 3 information whenever one of these map units occur on the property in question. Map units are listed in alphabetical order according to the predominant component.

Soil associations are not listed in this table. Soil associations are complexes of different soils recognized at the Order 3 level of mapping detail. The minimum size delineation in Order 3 mapping is fifty to several hundred acres in size. The subsequent level of mapping detail is not suitable for making the land-use decisions upon which this guidance document is based.

Map Symbol	Map Unit Name
149	Acton and Acton firm substratum, very stony
148	Acton and Acton firm substratum
290	Acton Variant-Lyman Variant complex
771	Berkshire and Mondnock soils, extremely bouldery
365	Berkshire and Mondnock soils, extremely stony
364	Berkshire and Mondnock soils, very stony
273	Berkshire-Monadnock, and Hermon soils, extremely bouldery
890	Bice-Millsite complex, very stony
162	Canaan-Berkshire complex, very stony
51	Canaan-Hermon complex, extremely rocky
50	Canaan-Hermon complex, very rocky
842	Canaan-Rock outcrop-Redstone complex
360	Cardigan-Kearsarge complex
361	Cardigan-Kearsarge-Rock outcrop complex
178	Charlton-Chatfield complex
256	Chatfield-Canton complex
257	Chatfield-Canton complex, extremely rocky
258	Chatfield-Canton complex, very rocky
40	Chatfield-Hollis complex
140	Chatfield-Hollis-Canton complex, very stony
250	Chatfield-Hollis-Montauk complex, very stony
41	Chatfield-Hollis-Rock outcrop complex
135	Chatfield Variant-Newfields complex
870	Elliotsville-Monson complex, very stony
833	Glebe-Saddleback-Sisk complex, very stony

660	Hollis-Bernardston complex
661	Hollis-Bernardston-Rock outcrop complex
82	Hollis-Canton complex
186	Hollis-Canton complex, extremely rocky
185	Hollis-Canton complex, very rocky
83	Hollis-Canton-Rock outcrop complex
174	Hollis-Charlton complex
179	Hollis-Charlton complex, extremely rocky
175	Hollis-Charlton complex, very rocky
176	Hollis-Charlton-Rock outcrop complex
693	Hollis-Charlton-Urban land complex
184	Hollis-Chatfield complex
120	Hollis-Gloucester complex
122	Hollis-Gloucester complex, extremely rocky
121	Hollis-Gloucester complex, very rocky
141	Hollis-Rock outcrop-Chatfield complex
362	Kearsarge-Cardigan Rock outcrop complex
891	Lanesboro-Macomber complex, very stony
548	Leicester-Ridgebury complex, very stony
544	Leicester-Walpole complex
545	Leicester-Walpole complex, very stony
260	Lombard-Tunbridge complex
461	Lyman Variant-Tunbridge Variant-Rock outcrop complex
70	Lyman-Berkshire complex
270	Lyman-Berkshire complex, extremely rocky
170	Lyman-Berkshire complex, very rocky
71	Lyman-Berkshire-Rock outcrop complex
52	Lyman-Hermon complex
152	Lyman-Hermon complex, extremely rocky
151	Lyman-Hermon complex, very rocky
53	Lyman-Hermon-Rock outcrop complex
920	Lyman-Marlow-Rock outcrop complex
187	Lyman-Mondanock complex, extremely rocky
188	Lyman-Monadnock-complex, very rocky
171	Lyman-Monadnock-Rock outcrop complex
271	Lyman-Rock outcrop-Berkshire complex
153	Lyman-Rock outcrop-Hermon complex
161	Lyman-Tunbridge-Rock outcrop complex
346	Lyme and Moosilauke soils
347	Lyme and Moosilauke soils, very stony
267	Lyme-Moosilauke complex
248	Lyme-Moosilauke complex, very stony
249	Lyme-Pillsbury complex, very stony

254	Monadnock and Hermon soils
255	Monadnock and Hermon soils, very stony
80	Monadnock-Lyman complex, very stony
81	Monadnock-Lyman-Rock outcrop complex
25	Ninigret-Windsor complex
181	Paxton-Chatfield complex
312	Quonset-Warwick complex
837	Ricker-Rock outcrop complex
826	Ricker-Rock outcrop-Saddleback complex
836	Saddleback-Glebe-Ricker complex, very stony
805	Saddleback-Houghtonville-Rock outcrop complex
650	Saddleback-Ricker complex, very stony
807	Saddleback-Rock outcrop-Houghtonville complex
446	Scituate-Newsfields complex
447	Scituate-Newfields complex, very stony
138	Shapleigh-Gloucester complex, extremely rocky
137	Shapleigh-Gloucester complex, very rocky
136	Shapleigh-Gloucester complex
480	Tunbridge Variant-Lyman Variant-Henniker complex, very stony
370	Tunbridge-Berkshire complex
60	Tunbridge-Berkshire complex, very stony
670	Tunbridge-Berkshire-Lyman complex
90	Tunbridge-Lyman complex
380	Tunbridge-Lyman-Becket complex, very stony
160	Tunbridge-Lyman-Monadnock complex, very stony
471	Tunbridge-Lyman-Ricker complex
61	Tunbridge-Lyman-Rock outcrop complex
472	Tunbridge-Marlow complex
470	Tunbridge-Peru complex
560	Tunbridge-Plaisted-Lyman complex
561	Tunbridge-Plaisted-Lyman complex, very stony
114	Walpole-Binghamville complex
311	Warwick-Quonset complex
420	Waumbek and Skerry soils
421	Waumbek and Skerry soils, very stony
562	Winnecook-Thorndike-Rock outcrop complex

Human Influenced Soils

Human influenced soils recognized in county soil surveys typically are characterized as having extremely variable and altered soil material such that interpretations cannot be adequately applied without on-site investigations. The applicant must provide Level 3 information whenever one of these map units occurs on the property in question.

Map Symbol	Map Unit Name
698	Dumps
600	Endoaquents, loamy
900	Endoaquents, sandy
302	Made land
298	Pits, gravel and borrow
398	Quarries
300	Udipsamments, nearly level
350	Udipsamments, wet substratum
550	Udorthents, bedrock substratum
500	Udorthents, loamy
200	Udorthents, refuse substratum
400	Udorthents, sandy
299	Udorthents, smoothed
100	Udorthents, wet substratum

Source: NRCS, 1999

APPENDIX 2.

DEFINITIONS OF LIMITING FEATURES

Bedrock within 18" of the soil surface: "Soil surface" refers to the top of the first mineral layer. The bedrock meets the definition of either lithic or paralithic material. At least 75 percent of delineated areas must meet this definition with no more than 15 percent of the area having soil properties more limiting (i.e., hydric conditions). (Site-Specific Soil Mapping Standards for New Hampshire and Vermont, SSSNNE Special Publication No.3, June 1999, pp 6-7)

Lithic material: Unaltered material that is continuous, coherent and indurated.* The material qualifies for an "R" designation as a master layer (USDA Soil Survey Manual, 1993, pg. 121). Plant and tree roots cannot enter except in cracks. Hand digging with a spade is impractical. Some lithic material can be ripped with heavy power equipment. The material must be in a strongly cemented or more cemented rupture-resistance class. Granite, quartzite and indurated * limestone or sandstone are examples. (Keys to Soil Taxonomy, Eighth Edition, 1998, pg.32)

* Indurated: said of a rock or soil hardened or consolidated by pressure, cementation or heat. (Dictionary of Geological Terms, Bates and Jackson, 1984.)

Paralithic material: Relatively unaltered material that have an extremely weakly cemented to moderately cemented rupture-resistance class. The material qualifies for a "Cr" designation as a subordinate distinction within a master soil layer (USDA Soil Survey Manual, 1993, pg. 124). Cementation or bulk density are such that plant and tree roots cannot enter except in cracks. The material can be hand dug with a spade with much difficulty. Commonly these materials consist of weathered or weakly consolidated bedrock. (Keys to Soil Taxonomy, Eighth Edition, 1998, pg.32)

Bedrock outcrop: Lithic or paralithic material exposed at the surface.

Steep slopes greater than 35 percent: At least 75 percent of delineated areas must meet this definition. (Site-Specific Soil Mapping Standards for New Hampshire and Vermont, SSSNNE Special Publication No.3, June 1997, pp 6-7)

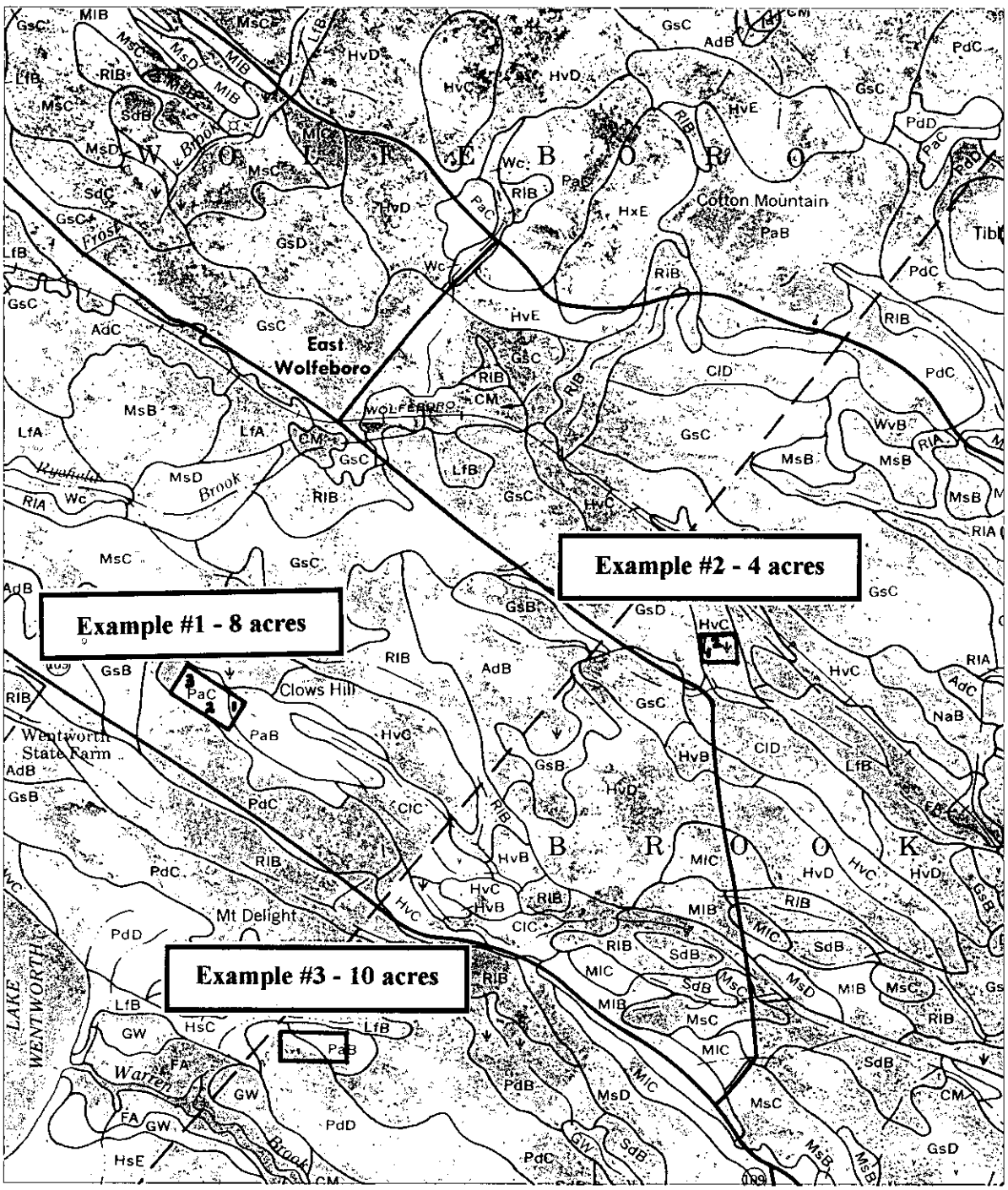
Very poorly drained soil:

Soils that are flooded daily by tides
Soils that have aquic conditions within the upper part **and**
have an organic surface layer greater than 16 " thick, **or**
Have an organic surface layer 8" to 16" thick **and**
are directly underlain by a depleted or gleyed matrix.
Have an organic surface layer 4" to 8" thick, **or**
a mucky A or Ap horizon **and**
are directly underlain by a depleted or gleyed matrix
Do not have a spodic horizon; dominant texture in upper 20" is loamy fine sand or coarser **and**
have an organic surface layer 4" to 8" thick, or mucky A or Ap directly underlain with
5 percent or more redox features.

Sources: Keys to Soil Taxonomy, Eighth Edition, 1998; Site Specific Soil Mapping Standards for New Hampshire and Vermont, Version 2.0, Society of Soil Scientists of Northern New England Publication No. 3, 1999, or most recent revision.

Appendix 3.

THREE EXAMPLES OF SUGGESTED DOCUMENTATION FOR NRCS MAP CONFIRMATION



Example #1. Proposed Subdivision of 8 Acres

Soil map units on the NRCS soil survey:

PaB – Paxton fine sandy loam, 3 to 8 percent slopes

PaC – Paxton fine sandy loam, 8 to 15 percent slopes

Summary Report:

The NRCS published soil survey and supporting soil series description describes this 8 acre parcel as being comprised of very deep, well drained loamy glacial till with a hardpan occurring about 40 inches. A perched watertable occurs above the hardpan for brief periods of time. Slopes range from 3 to 15 percent.

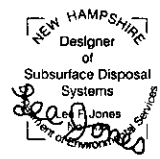
Three soil descriptions were completed on the parcel. One in the PaB map unit and two in the PaC map unit. Based on three soil descriptions, the NRCS published soil survey adequately reflects the nature and properties of the soils on the site. Indications of a perched watertable were not observed in locations #1 and #3, and the observations indicate the depth to hardpan, in some areas, is slightly below the range allowed for the Paxton Series. These features, however, do not impact on the intended use and management of the parcel.

The soils were not described below a reasonable depth after reaching the hard pan. There is no bedrock mapped, observed or expected in the immediate area and deeper investigations were deemed to be unnecessary to adequately describe the nature and properties of the soils within the parcel.

Based on the soil observations made, the NRCS soil survey adequately represents the area for the intended use and a site-specific soil survey is not warranted.

Date
Signature and Seal





(Total estimated time, on-site, to conduct soil investigations and write narrative report: 2 hours)

SOIL DESCRIPTION #1

Horizon	Depth	Matrix Color	Percent Redox	Texture	Consistence	Permeability	Comments
Ap	0-7"	10yr3/3		fsl	friable	moderate l	
Bw1	7-24"	2.5y4/4		fsl	very firm	moderate	
Cd	24-30"	5Y5/3		grfsl	friable	slow	

Comparison of Soil Characteristics:

	Slope	Drainage	SHWT & Type	Textures	Depth to Restrictive Feature	Comments
As described in soils report and/or OSD:	3-8%	Well Drained	18-40 inches; perched	Loamy	Hardpan at 18 to 40 inches	
As observed in test pit log:	3%	Well Drained	None observed	Loamy	Hardpan observed at 24 inches	Test pit supports soil as mapped; no evidence of a SHWT

SOIL DESCRIPTION #2:

Horizon	Depth	Matrix Color	Percent Redox	Texture	Consistence	Permeability	Comments
Ap	0-5"	10yr3/1		fsl	friable	moderate l	
Bw1	5-15"	10YR5/4		fsl	friable	moderate	
Bw2	15-42"	2.5y4/4		Grfsl	friable	moderate	
Bw3	42-44"	2.5y4/4	5% 7.5yr5/6	grfsl	friable	moderate	
Cd	44-50"	5Y5/3	5% 7.5				Depth to hard pan outside range by 4"

Comparison of Soil Characteristics:

	Slope	Drainage	SHWT & Type	Textures	Depth to Restrictive Feature	Comments
As described in soils report and/or OSD:	15-25%	Well Drained	18-40 inches; perched	Loamy	Hardpan at 18 to 40 inches	
As observed in test pit log:	9%	Well Drained	42" perched	Loamy	Hardpan observed at 44 inches	Depth to hardpan and depth to shwt outside range.

SOIL DESCRIPTION #3

Horizon	**Depth**	**Matrix Color**	**Percent Redox**	**Texture**	**Consistence**	**Permeability**	**Comments**
A	0-2"	10yr3/3		fsl	friable	moderate l	
Bw1	2-20"	2.5y4/4		fsl	friable	moderate	
BW2	20-45"	5Y5/3		grfsl	friable	slow	
Cd	45-47"	5Y5/3		grfsl	very firm	very slow	Hardpan outside range by 5"

Comparison of Soil Characteristics:

	Slope	**Drainage**	**SHWT & Type**	**Textures**	**Depth to Restrictive Feature**	**Comments**
As described in soils report and/or OSD:	15-25%	Well Drained	18-40 inches; perched	Loamy	Hardpan at 18 to 40 inches	
As observed in test pit log:	18%	Well Drained	None observed	Loamy	Hardpan observed at 45 inches	Hardpan outside range by 5", no evidence of a SHWT

Example #2: Proposed Subdivision of 4 Acres

Soil map units on the NRCS soil survey:

HvC – Hollis-Charlton very rocky fine sandy loams, 8 to 15 percent slopes

Summary Report:

The NRCS soil survey report describes this map unit as being a complex of shallow and deep soils overlying bedrock. Bedrock outcrops comprise as much as 25 percent of the area and deep soils can make up as much as 40 percent of the area. There is a wet spot int he northeast corner of the parcel that is represented by a special features symbol on the soil map.

Observations of bedrock outcropping were observed while traversing this parcel. Two soil descriptions were completed. One in an area of deep soils; the other in an area of poorly drained soils associated with the wet spot symbol. An area in the northeast corner of the parcel, indicated with the wet spot symbol, has already been delineated on the site plan as wetland. The wetland boundary, as shown on the site plan, may not necessarily represent the boundary of hydric soil.

Due to the observed nature and complexity of the soils within this 4 acre parcel, it is recommended that a site-specific soil survey be conducted.

Date
Signature and Seal





(Total estimated time, on-site, to conduct soil investigations and write narrative report: 1 hour)

SOIL DESCRIPTION #1

Horizon	Depth	Matrix Color	Percent Redox	Texture	Consistence	Permeability	Comments
A	0-2"	10yr3/3		fsl	friable	moderate l	
Bw1	2-20"	10yr5/4		fsl	friable	moderate	
Bw2	20-45"	2.5y4/4		grfsl	friable	moderate	
C1	45-47"	5Y5/3		l	friable	moderate	
C2	47-55"	5y5/3		l with ls lenses	friable to loose	moderately rapid	Stopped by large stone at 55"

Comparison of Soil Characteristics:

	Slope	Drainage	SHWT & Type	Textures	Depth to Restrictive Feature	Comments
As described in soils report and/or OSD: Hollis Component:	8-15%	Somewhat excessive	none	Loamy	Bedrock at 10 to 20 inches	
Charlton Component	8-15%	Well Drained	none	Loamy	None above 65"	Test pit supports soil as mapped; no evidence of a SHWT
As observed in test pit log:	12%	Well Drained	none observed	Loamy	None observed	Fits concept of the Charlton Series

SOIL DESCRIPTION #2:

Horizon	Depth	Matrix Color	Percent Redox	Texture	Consistence	Permeability	Comments
A	0-6"	10yr3/2		fsl	friable	moderate l	
Bw1	6-12"	10yr5/4	10yr5/2 7.5yr5/6	fsl	friable	moderate	
Bw2	12-22"	2.5y4/4	10yr5/2 10yr6/1 7.5yr5/6	grfsl	friable	moderate	Watertable observed at 20"
Cg1	22-35+	2.5y6/2	7.5yr5/6	l	friable		

Comparison of Soil Characteristics: None

Soil Description taken in vicinity of special features symbol.

Example #3. Proposed Subdivision of 10 Acres

Soil map units on the NRCS soil survey:

PaB – Paxton fine sandy loam, 3 to 8 percent slopes

PdD – Paxton very stony fine sandy loam, 15 to 25 percent slopes

Summary Report:

The NRCS published soil survey and supporting soil series descriptions, describes this 10 acre parcel as being comprised of very deep, well drained loamy glacial till with a hardpan occurring above 40 inches. A perched water table occurs above the hardpan for brief periods of time. Slopes range from 3 to 25 percent.

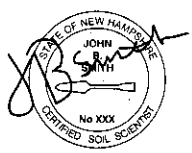
During the site visit an area was observed within the open field, located in the western half of the parcel, that can be characterized as having slopes of 8 to 15 percent. This is a mappable area at the scale of the subdivision plan and represents a new soil delineation, this area should be identified for proper soil based lot size calculation.

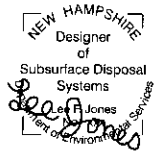
Because a new soil map unit must be recognized, subsequently altering existing soil lines on the county soil survey, a site-specific soil survey is warranted.

No soil descriptions were taken during this on-site review.

Date

Signature and Seal





(Total estimated time, on-site, to conduct soil investigations and write narrative report: ½ hour)

Voting Sheets

HOUSE COMMITTEE ON EXECUTIVE DEPARTMENTS AND ADMINISTRATION

EXECUTIVE SESSION on HB 1129-FN

BILL TITLE: **relative to wetlands scientists.**

DATE: March 22, 2000

LOB ROOM: 202

Amendments:

Sponsor: Rep. OLS Document #:

Sponsor: Rep. OLS Document #:

Sponsor: Rep. OLS Document #:

Motions: OTP, OTP/A, ITL, Re-Refer, Interim Study (Please circle one.)

Moved by Rep. Landers

Seconded by Rep. Goulet

Vote: 19-0 (Please attach record of roll call vote.)

Motions: OTP, OTP/A, ITL, Re-Refer, Interim Study (Please circle one.)

Moved by Rep.

Seconded by Rep.

Vote: (Please attach record of roll call vote.)

CONSENT CALENDAR VOTE: 19-0

(Vote to place on Consent Calendar must be unanimous.)

Statement of Intent: Refer to Committee Report

Respectfully submitted,

Rep. Ray F. Langer, Clerk

OFFICE OF THE HOUSE CLERK 2000 SESSION

EXECUTIVE DEPARTMENTS AND ADMINISTRATION

Bill #: HB1129 Title: _____

PH Date: ___/___/___ Exec Session Date: 3 / 22 / 2000

Motion: ITL Amendment #: _____

MEMBER	YEAS	NAYS
Mercer, Robert S, Chairman		
Goulet, Maurice E, V Chairman	1	
Dyer, Merton S	2	
Langer, Ray F, Clerk	3	
Holley, Sylvia A	4	
Moore, Benjamin E	5	
Dickinson, Howard C	6	
Stickney, Nancy C	7	
Sapareto, Frank V		
Hamel, Albert W	8	
Millham, Alida I	9	
O'Neil, Michael	10	
Poulin, Dave G	11	
Zolla, William R	12	
Murphy, Robert E	13	
Reidy, Frank J	14	
Virtue, Carolyn A	15	
Batchelder, Robert C	16	
Burkush, James A	17	
Courchesne, Judy A		
Landers, Dana L	18	
Lent, Donald R	19	
	19	0
TOTAL VOTE:		

Printed: 12/30/1999

Committee Report

COMMITTEE REPORT

COMMITTEE: **Executive Departments and Administration**

BILL NUMBER: **HB 1129-FN**

TITLE: relative to wetlands scientists.

DATE: March 22, 2000 CONSENT CALENDAR YES ☒ NO ☐

☐ OUGHT TO PASS

☐ OUGHT TO PASS WITH AMENDMENT

☒ INEXPEDIENT TO LEGISLATE

☐ RE-REFER

☐ REFER TO COMMITTEE FOR INTERIM STUDY
(Available only in second year of biennium.)

STATEMENT OF INTENT
(Include Committee Vote)

This bill is an attempt to de-certify the wetland scientists, which is not needed at this time. HB 197, which was passed in 1998 certifying these scientists, ought to be given the chance to work. There are now over 169 certified scientists with more than 40 more applications pending.

Vote 19-0.

Rep. Dana L. Landers
FOR THE COMMITTEE

Original: House Clerk
cc: Committee Bill file

USE ANOTHER REPORT FOR MINORITY REPORT

CONSENT CALENDAR

Executive Departments and Administration

HB 1129-FN, relative to wetlands scientists. INEXPEDIENT TO LEGISLATE

Rep. Dana R. Landers for Executive Departments and Administration: This bill is an attempt to de-certify the wetland scientists, which is not needed at this time. HB 197, which was passed in 1998 certifying these scientists, ought to be given the chance to work. There are now over 169 certified scientists with more than 40 more applications pending. Vote 19-0.

COMMITTEE REPORT

COMMITTEE: _____

BILL NUMBER: 1129

TITLE: _____

_____

DATE: _____ CONSENT CALENDAR YES ___ NO ___

___ OUGHT TO PASS

___ OUGHT TO PASS WITH AMENDMENT

___ INEXPEDIENT TO LEGISLATE

___ RE-REFER

___ REFER TO COMMITTEE FOR INTERIM STUDY
(Available only in second year of biennium.)

STATEMENT OF INTENT
(Include Committee Vote)

This bill is an attempt to de-certify the wetland scientists which is not needed at this time. HB197 which was passed in 1998 certifying these scientists, ought to be given the chance to work. There are now over 169 certified scientists with more than 40 more applications pending.

Vote._____

Rep. _____
FOR THE COMMITTEE

Original: House Clerk
cc: Committee Bill file

USE ANOTHER REPORT FOR MINORITY REPORT