Joseph Garruba
28 Winchester Dr.
Hollis, NH 03049
Oct 7, 2019

To: Members of the Hollis Planning board
Hollis Planning Department

Re: Net tract area of Hollis tax map 10 Lot 33-1

In the September 23 submittal of plans and during the May planning board meeting the applicant of the subdivision of lot 10-33-1 had made several claims regarding the calculation on the net tract area of the site. I want to call attention to the process as it is defined in our zoning ordinance. This matter is important and our ordinance should be followed carefully. Equitable enforcement of this ordinance is critical for the protection of the interests of town residents.

Net Tract Area

Net tract area is defined in our Zoning Ordinance Sec VIII definitions section as below.

> ***NET TRACT AREA:*** The net tract area of the parcel is determined by subtracting the total area calculated for wetlands, surface waters, hydric soils, flood plain, road rights-of-way, and altered/ unaltered slopes greater than 25% from the total (gross) tract area.

This implies that in order to correctly calculate the net tract area for this property one must first know the area of the wetlands, the area of the surface waters and the area of the hydric soils present on the site. This calculation is to be performed based on the present conditions at the site since doing otherwise would subvert the purpose of the zoning ordinance entirely. I will cover each of the excluded areas individually below.

Wetlands

Wetlands are defined in our Zoning Ordinance Sec VIII definitions section as below.

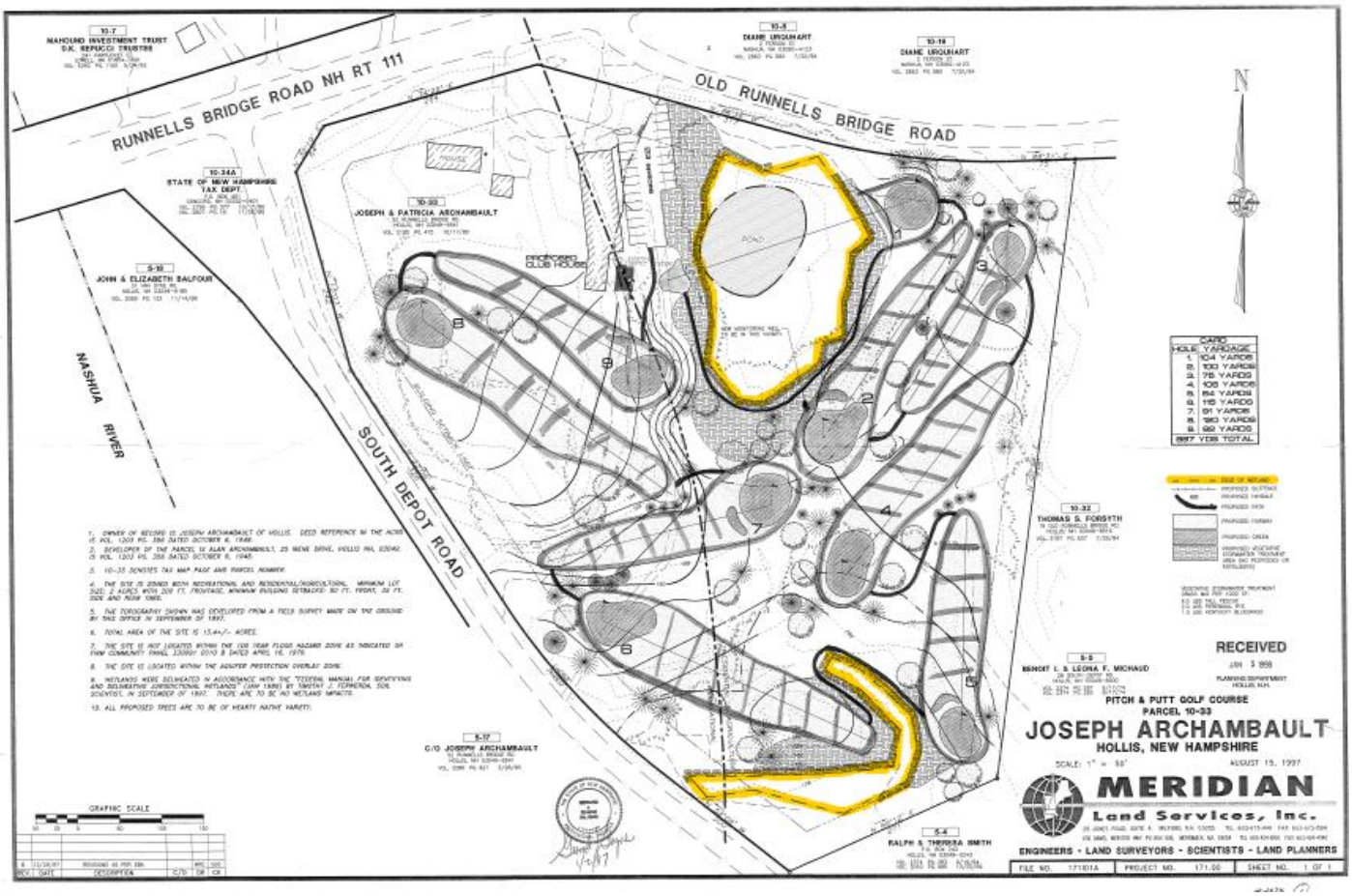
> ***WETLAND:*** A wetland is an area that is inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal conditions, does support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include, but are not limited to, swamps, marshes, bogs, and similar areas. For the purpose of determining buffer zones for site plan and subdivision review, wetland boundaries shall be delineated by either a certified soil scientist or a professional wetland scientist according to the Corps of Engineers Wetlands Delineation Manual, 1987, and the Regional Field Indicators for Identifying Hydric Soils in New England, 1998.

In order to establish the area or existence of wetland on a property, the services of a certified wetland or soil scientist must be engaged. Per Hollis zoning ordinance sec VIII, The certified scientist must follow the Army Corps of Engineers Wetland Delineation Manual of 1987 which requires the presence of all three of the following conditions, prevalence of hydrophilic vegetation, hydric Soil, and wetland hydrology. The manual provides a flow chart and worksheets to serve as a guide to the wetland scientist. In addition, the manual has specific processes for addressing atypical wetlands such as those on the golf course property. Conducting an onsite evaluation, carefully following the flow chart and completing the worksheets is the required way to perform a delineation for a complicated situation such as the one presently before the board at map 10-33-1 which includes manmade and natural wetland features.

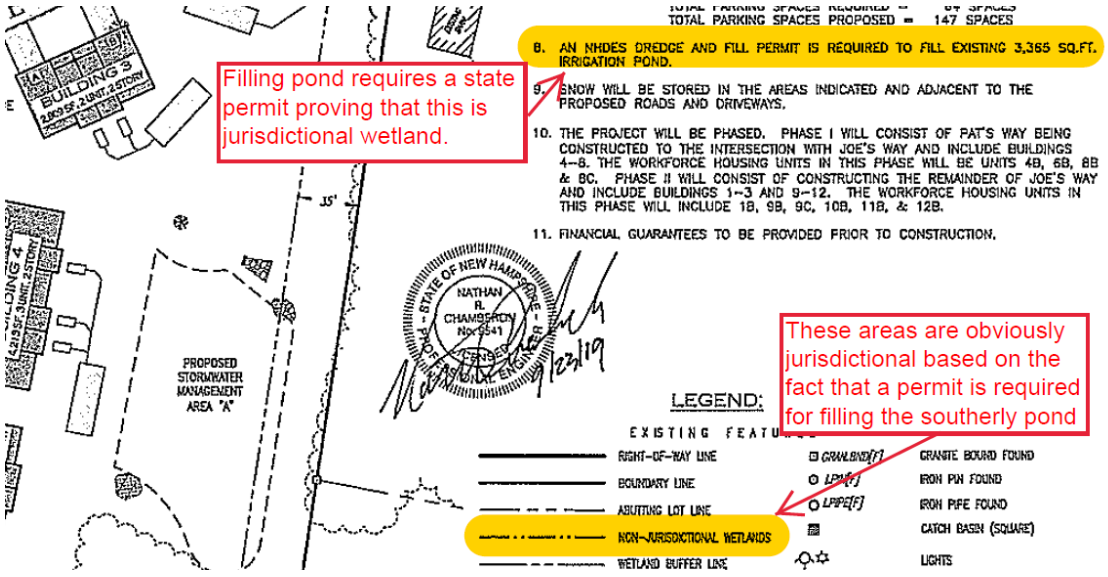
The applicant has submitted an existing conditions map indicating that there are no wetlands on the property. The town independently hired a second wetland scientist, Mr. James Gove to review the applicant's findings. In his report Mr. Gove specifically states "two areas of jurisdiction were found" He is referring to the two ponds located on the site. In addition, he states "Areas that were identified as wetlands on the 1997 plans were tested and did not have hydric soils" More recent information included in the Site Specific Soil Survey that was conducted on Sept 9 did identify hydric soil in the same southerly location as was identified in 1997.

It is likely that Mr. Gove would have included the area previously identified as wetland around the northerly pond as well, if his review was conducted per the 1987Corps of Engineers delineation manual as is required by our ordinance. Mr. Gove conducted the review in accordance with the 2012 regional supplement for the northcentral and northeast region (Doc# ERDC/EL TR-12-1) to the 1987 manual. The supplement has different procedures for delineating "difficult wetland situations" and does not rely as heavily or prior delineations. The 1987 manual has a process that reverts back to any historical delineations. This would delineate areas around the northerly pond as wetland. Regardless of the method of delineation, in all cases at a minimum, the area of both ponds are considered jurisdictional wetlands.

Wetland Areas delineated in 1997 highlighted in the site plan of 8/15/1997 below



Based on this evidence and the reports submitted by Mr. Guida and Mr. Gove. It is clear that both ponds are jurisdictional wetland. The applicant's actions support this claim since they intend to apply for an NHDES Dredge and Fill permit to fill the southerly pond per note 5 of the submitted existing conditions plan. Why would the state require this if the pond was not jurisdictional? The approximate area of the northerly pond is 11,052 sq. feet, the area of the southerly pond is 3365 sq. feet.



8/28 site plan highlight and call outs added

Page 2 of Mr. Gove's letter from 6-25-19

I, James Gove, President, GES, Inc., performed the site inspection on 6-18-2019. During the site inspection, two areas of jurisdiction were identified on the site. The jurisdictional areas were identified on the plans as man-made ponds. I agree with this determination. No other areas of wetlands were observed. Areas that had been identified as wetlands on the 1997 plans were tested and did not have hydric soils.

I conclude that the existing conditions plan by Fieldstone Land Consultants, PPLC is an accurate representation of the wetland resources on the Bella Meadows site, 1 A&B Runnells Bridge Road, Hollis, NH.

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

Sincerely,

James P. Gove
President, GES, Inc.

I have contacted Craig Rennie who serves our state at the Wetlands Bureau as the Inland Wetland Supervisor regarding the claim that the applicant could fill the northerly pond without a permit since they claim it is man-made. Mr. Rennie is familiar with the details of this project since he met with Mr Guida for a pre application meeting on July 23rd of this year. Mr. Rennie confirmed that both ponds are jurisdictional wetlands and filling either pond would require a state wetland permit. In addition, he confirmed that the concept of a non-jurisdictional wetland does not exist in NH state law or NH Wetland regulations. Images of emails from Mr. Rennie are included on the following page.

Text in yellow highlighted for emphasis

Mon 10/7/2019 1:45 PM

Rennie, Craig <Craig.Rennie@des.nh.gov>

RE: Assistance with wetlands regulations

To Garruba, Joseph

Cc Bouchard, Jessica; Blecharczyk, Jeffrey

You replied to this message on 10/7/2019 1:51 PM.

[EXTERNAL EMAIL] Verify sender before clicking on links or attachments

Joseph,
Thanks for your call. As discussed, if the developer wants to eliminate the ponds (i.e. fill them in) they would need to apply for a wetland permit, and they would be required to show how they avoided and minimized wetland impacts to the greatest extent practicable. If they chose to maintain, modify, repair or replace the ponds in order to preserve their usefulness, then they could proceed without a permit per RSA 482-A:3 IV(b). I hope this helps to clarify the project.
Thanks,
Craig

Craig Rennie, CWS, CWB, Inland Wetland Supervisor
Wetlands Bureau, Land Resources Management
Water Division, NH Department of Environmental Services
P.O. Box 95
Concord, NH 03302-0095
Phone: (603) 271-0676
Email: craig.rennie@des.nh.gov

Mon 10/7/2019 2:05 PM

Rennie, Craig <Craig.Rennie@des.nh.gov>

RE: Assistance with wetlands regulations

To Garruba, Joseph

You replied to this message on 10/7/2019 2:06 PM.

[EXTERNAL EMAIL] Verify sender before clicking on links or attachments

There is no such term (non-jurisdictional wetland) in our rules or law. All wetlands are jurisdictional; however, some do not require a permit to maintain them.
Thanks,
Craig

Craig Rennie, CWS, CWB, Inland Wetland Supervisor
Wetlands Bureau, Land Resources Management
Water Division, NH Department of Environmental Services
P.O. Box 95
Concord, NH 03302-0095
Phone: (603) 271-0676
Email: craig.rennie@des.nh.gov

Considering the determination above, it is clear that the applicant cannot fill the northerly pond at will as they have claimed. Both the northerly and southerly ponds are clearly **jurisdictional** wetland in the state of NH. The site plans submitted by the applicant incorrectly call out these areas as non-jurisdictional in several locations. The board should require corrected site plans accurately depicting the jurisdictional wetlands on the property before allowing this project to proceed. In addition, any claims by the applicant that the northerly pond can be filled in without a permit should are clearly unjustified.

Surface Waters

Surface waters is defined by Hollis Zoning ordinance in Sec XI C 2 q as included below.

q. ***SURFACE WATERS:*** Those waters which have standing or flowing water at or on the surface of the ground. This includes but is not limited to rivers, streams, lakes, ponds and tidal waters.

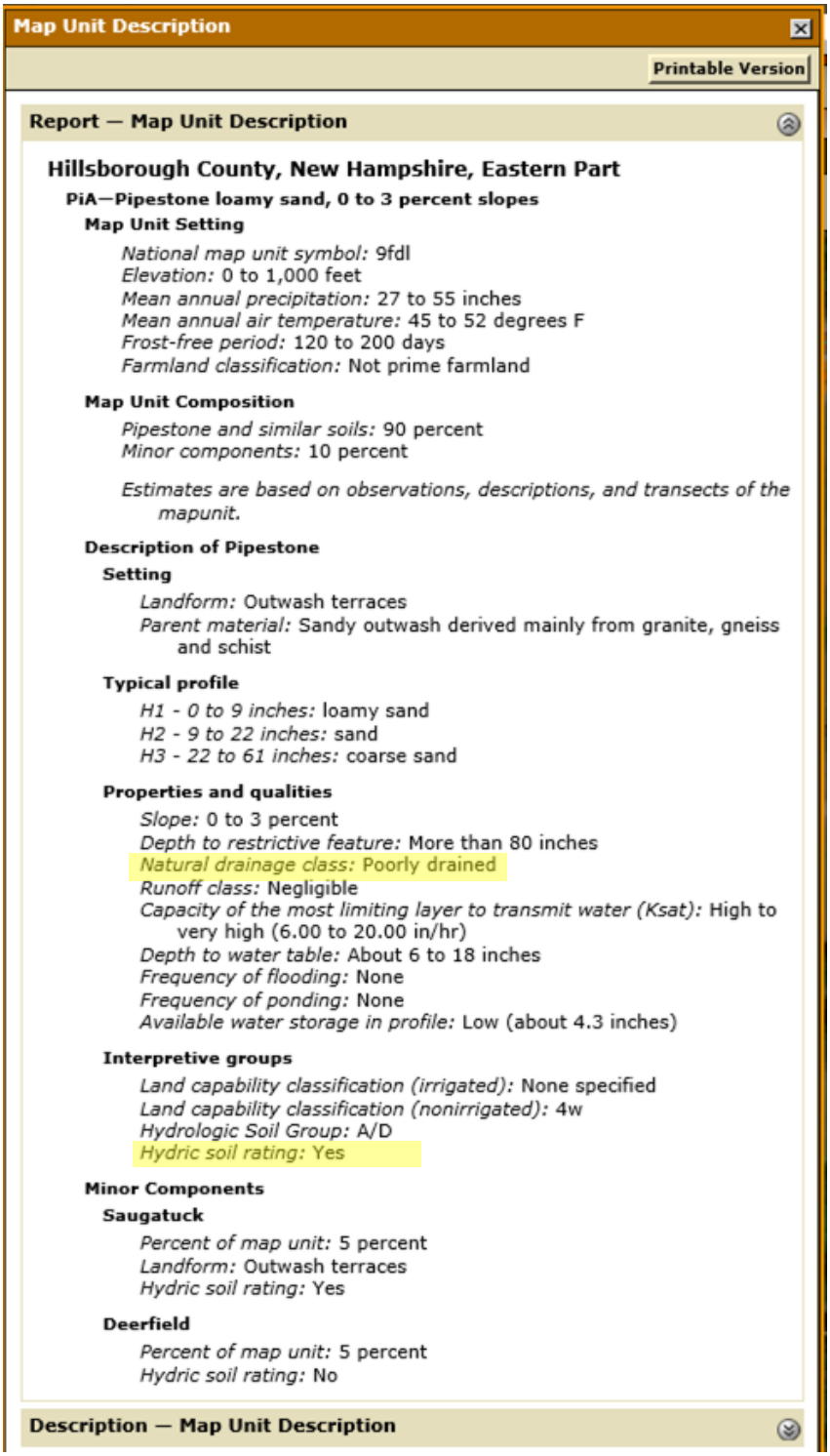
Determining the area of a surface water is straighter forward. A square footage calculation of the limits of the water on the ground is sufficient. The definition of surface waters does not provide an exemption for manmade ponds. As identified earlier, the southerly pond is 3365 sq. ft. and the northerly pond is approx. 11,052 sq. ft. Since these ponds have already been accounted for as wetland, we need not deduct the areas a second time however the definition of surface water is broader than that of wetland since the specific tests of the Army Core of Engineers Manual are not imposed. This means that the area of surface waters must be deducted from the net tract area total weather they are classified as wetlands or not.

Hydric Soil

Hydric Soil is defined in by Hollis Zoning ordinance Sec XI C 2 h as included below

h. ***HYDRIC SOILS:*** Soils that are saturated or flooded during a sufficient portion of the growing season to develop anaerobic conditions in the upper soil layers. Hydric soils consist of very poorly drained and poorly drained soil drainage classes as defined in "Field Indicators for Identifying Hydric Soils in New England", Version 2, July 1998.

Most recently, the applicant has submitted a site specific soil survey which identifies hydric soil in generaly the same area at the southern end of the property that Mr Tim Ferwerda identified it in his 1997 wetland delineation. A Site Specidic Soil Survey is the most accurate method of determining the soil types at a high resoloution on a property. The soil type is identified as pipestone and it is classified as hydric per the Natraul Resources Conservation Service's (NRCS) official database. The NRCS Web soil survey tool identifies pipestone as a "poorly drained" hydric soil. https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm



Map Unit Description

Printable Version

Report — Map Unit Description

Hillsborough County, New Hampshire, Eastern Part

PiA—Pipestone loamy sand, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 9fdl
Elevation: 0 to 1,000 feet
Mean annual precipitation: 27 to 55 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 120 to 200 days
Farmland classification: Not prime farmland

Map Unit Composition

Pipestone and similar soils: 90 percent
Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pipestone

Setting

Landform: Outwash terraces
Parent material: Sandy outwash derived mainly from granite, gneiss and schist

Typical profile

H1 - 0 to 9 inches: loamy sand
H2 - 9 to 22 inches: sand
H3 - 22 to 61 inches: coarse sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Hydric soil rating: Yes

Minor Components

Saugatuck

Percent of map unit: 5 percent
Landform: Outwash terraces
Hydric soil rating: Yes

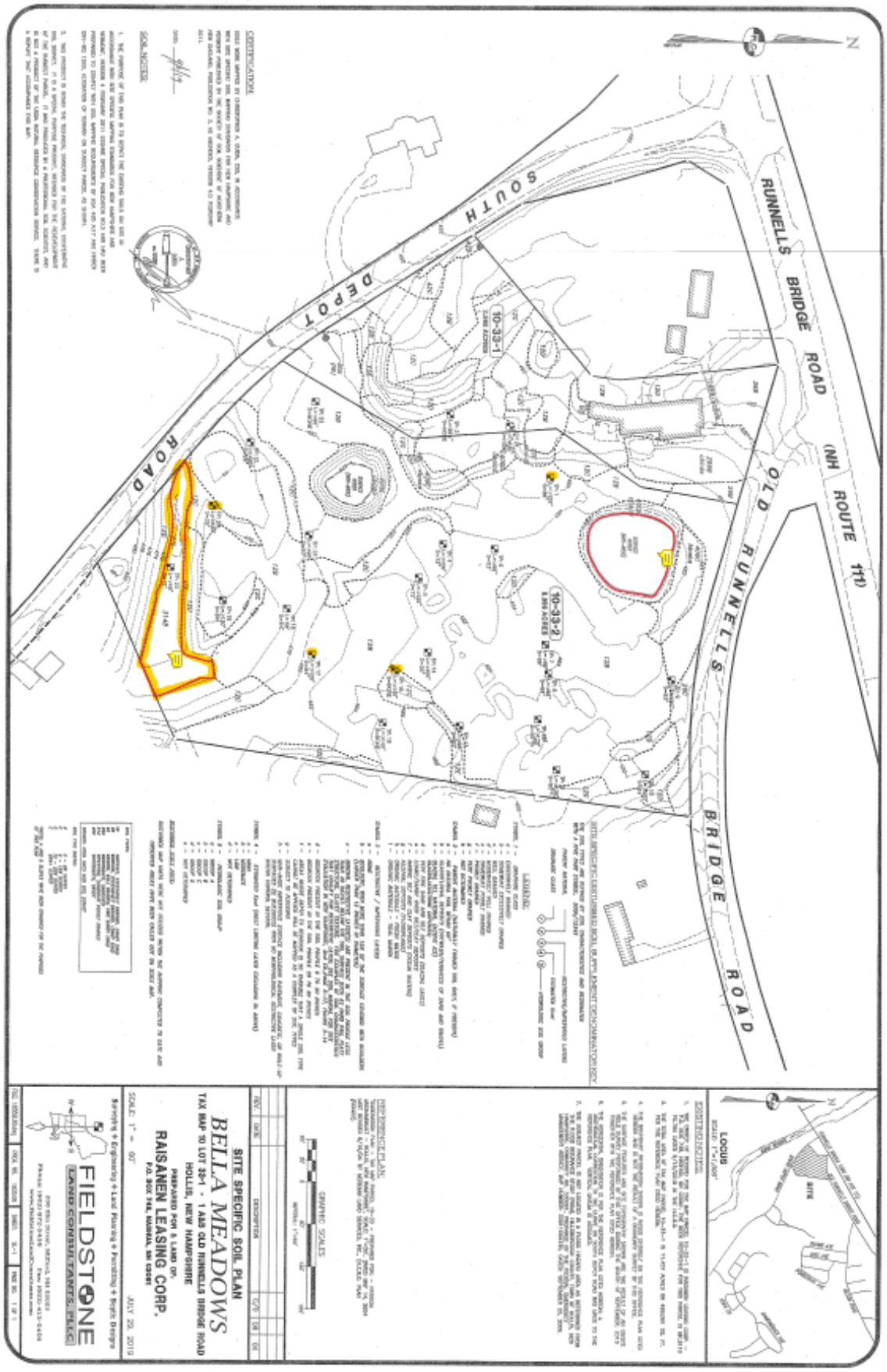
Deerfield

Percent of map unit: 5 percent
Hydric soil rating: No

Description — Map Unit Description

Web Soil Survey data for pipestone soil. Yellow highlight added for emphasis

9/6 Site Specific Soil Survey map showing pipestone hydric soil area highlighted below.



Enlargement of southern section of Site Specific Soil Survey map. Pipestone soil area highlighted.

Area estimation based on measurement of submitted map. 12,312 square feet or .283 acres

It is important to keep in mind that hydric soil is soil which has formed in an oxygen depleted environment. Since we know that this area was delineated as a wetland in 1997, we know that it not only supported hydrophilic vegetation, but it also had the hydrology required to be classified as a wetland. This means that even if the water table has lowered since the 1997 delineation, the soil is still classified as hydric soil regardless of whether or not it presently has the vegetation or hydrology to be delineated as wetland. The takeaway is that even if the soil was drained, it remains hydric soil.

Per Hollis Zoning Ordinance Sec X,D,2,A the calculation of density requires the use of the net tract area as established below.

> In order to provide for a variety of workforce housing units in the community, which includes both owner and renter occupied units, the following criteria shall be required for developments proposed in the Multi-family Zone:
>
> a. Dwelling unit density shall be no greater than four (4) units per acre, based upon the Net Tract Area of the property.

A proper density calculation for this project would begin with the area in the R&A zone. Next subtract from this the area of the wetlands as delineated per the 1987 Army Corps of Engineers (ACE) manual not including surface waters. Next the area of the surface waters must be subtracted. (Northern pond and southern pond). Finally, subtract out the area of Hydric soils which are not already defined as wetland.

8.077 Area in R&A Zone in acres
\- ? Area of wetlands delineated per 1987 ACE manual (not including surface waters)
\- .254 Area of surface waters of northerly pond in acres
\- .077 Area of surface water of southerly pond in acres
\- .283 Area of Hydric Soils not delineated as wetlands in acres

---

< 7.463 acres is the Net Tract Area

The applicant's claim that a pond is man-made has no bearing on the calculation of net tract area as can be seen from the citations provided. In addition, the density calculation provided by the applicant does not properly account for the areas of wetlands, surface waters or hydric soils. By omitting these areas, the applicant has computed a density number that is much higher than the ordinance allows.

PROPOSED NOTES (CONT.):

5. THE PROJECT DENSITY HAS BEEN CALCULATED TO BE AS FOLLOWS:
TOTAL PROPOSED LOT SIZE = 9.117 ACRES
MINUS AREA IN RECREATIONAL ZONE = 1.040 ACRES
TOTAL AREA IN RA ZONE (MULT-FAMILY OVERLAY ZONE) = 8.077 ACRES
TOTAL NET TRACT AREA = 8.077 AC (THE PONDS ON SITE ARE MANMADE AND COULD BE REMOVED).
PROJECT DENSITY = 8.077 ACRES x 4 UNITS/ACRE = 32.31 UNITS
PROPOSED IS 32, TWO BEDROOM UNITS OF WHICH 30% SHALL BE MEET THE REQUIREMENTS FOR WORKFORCE HOUSING (WFH): (32)(0.30)=9.6 – 10 WFH UNITS

Note from Aug 28 site plan showing incorrect calculation provided above for reference.

Before allowing this project to progress further, it is important to correctly compute the Net Tract area since this value determines allowable density which will have impacts on many other aspects of this project. As I have demonstrated, based on the wetland delineation of the town's expert soil scientist and the data supplied in the applicant's Site Specific Soil Survey, the areas of surface water and hydric soils must be removed from the total area in the RA zone in order to correctly calculate the Net tract area.

After accounting for these omissions in the applicant's calculation it can be seen that the maximum project density per our ordinance is less than 7.463 x 4 units per acre or less than 29.8 units. It is incumbent upon board members to ensure that the proposed project is compliant with the town's zoning ordinance. I am requesting that the board withhold its approval of this project until the density is correctly calculated.

It is important for members to challenge any unsupported claims made by the experts. The town's residents are relying on the planning board to act in their best interest to the limits of state law. The applicant's desire for an approval is not a legitimate reason to make rushed decisions. Please make sure that all the experts' claims receive critical scrutiny. Request legal guidance if necessary but before approval is granted, make sure all of your questions have been answered.

Regards,

Joseph Garruba