Report covers from 06/08/17 – 06/21/17
Items requiring Board vote are noted with an asterisk (\*)

## A. Inspection Report Reviews

## (1) 89 Choate Street, Renzi, Map 116, Lot 12\*

I have reviewed the Title 5 report for the inspection conducted at this property on May 17, 2017 by George Norris. I am in agreement with the inspector's determination that the system is functioning as intended and passes the official Title 5 inspection. However, the inspection report has noted that the system is designed for 4 bedrooms; the design plan dated December 2, 2004 and approved by the Board of Health on December 7, 2004, specifically states in the notes that the excess capacity (from 330 gpd to 440 gpd) is strictly a safety factor, and not permission to add an additional bedroom. This is due to the prohibitive setback requirements that would be in place under the new construction standards.

Review of information available in the Assessor's files indicates that dwelling had 3 bedrooms in 2003; existing conditions on an architect's drawing from 2005 show the dwelling had 3 bedrooms, with a 4<sup>th</sup> room labelled "sitting room." The sitting room would be classified as a bedroom under the Title 5 definition. While the addition of a "master bedroom suite," permitted in 2006 could potentially have been considered an increase in flow in certain situations, in this case, the Assessor's records indicate the same total number of rooms (11) on both field cards, from 2003 and 2006.

Recommendation: Discussion. I recommend a letter be sent to the property owner stating the Board of Health is in agreement with the determination of the inspector, George Norris, that the system <u>passes</u> the Title 5 inspection conducted on May 17, 2017. In addition, although the notes for the review of the septic design indicate the system shall be classified as having a 3-bedroom designation, the system was in fact designed for the 4 bedrooms that were in existence in the dwelling at that time.

### B. Soil Evaluations / Waiver Explorations – information only

# (1) 38 Pond Street, Comet, Map 146, Lot 6

I witnessed soil testing as the first step in replacing a (likely) failed septic system. The owner has signed a voluntary upgrade form acknowledging the system fails and that upgrade/replacement is due no later than 5/17/19.

#### (2) 233 John Wise Ave, Ginn, Map 103, Lot 4

I witness soil testing as the first step in replacing a failed septic system at this property.

## C. Septic System Design Plan Reviews

#### (1) 95 Apple Street, Corcoran, Map 148, Lot 6\*

I have reviewed the plan for the septic tank relocation at this property, designed by John Judd of Gateway Consultants and dated June 13, 2017. I have noted that proposed septic tank will not impact any of the state or local setback requirements for septic system components, and the septic tank is properly sized for the dwelling.

Recommendation: I recommend the Board of Health approve the plan showing a septic tank relocation at this property.

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# (2) 38 Pond Street, Comet, Map 146, Lot 6\*

I have reviewed the septic plan for this property, designed by Dan Johnson and dated June 15, 2017. During my review, I have noted the following technical deficiencies:

- 1. There is only 1 test pit in the area of the proposed SAS; Title 5 requires that the SAS have 2 valid test pits in this area which demonstrate sufficient pervious material.
- 2. The proposed leaching area is shown to be 7' from the property line; however, the designer failed to include a stamped plan from a land surveyor licensed in Massachusetts showing where the property lines are located.
- 3. A certification statement acknowledging the existence of the alternative system references a property located in Topsfield.
- 4. The designer has requested a 2' reduction in pervious material and a 2' reduction in the separation to groundwater without demonstrating that both of these reductions are necessary to achieve maximum feasible compliance.

Recommendation: I recommend the Board of Health send a letter to the property owner disapproving the plan for the above-mentioned reasons.

#### (3) 38 Pond Street, Comet, Map 146, Lot 6\*

I have reviewed the revised septic plan for this property, designed by Dan Johnson and dated June 15, 2017, with a revision date of June 20, 2017. I have noted that the required revisions have been made, including ensuring the SAS is sited over both test pits, that a greater degree of protection of public health and the environment will be achieved by raising the SAS a minimum of 3' above the estimated seasonal high water table, and that all appropriate documentation and abutter notifications have been revised to reflect the correct, revised information. However, either a stamped plan from a licensed surveyor, or documentation from a licensed surveyor stating the subdivision plan referenced on the septic design (dated 3/25/86) must be submitted prior to issuance of a Disposal Works Construction Permit.

Recommendation: Discussion. I recommend a letter be sent to the property owner stating the Board of Health approves the septic design for this property including the following variances or local upgrade approvals: siting a leachfield less than 10' from a property line; reducing the required separation to groundwater from 4' to 3'; and reducing the required depth of pervious material from 4' to 2' with the use of a Presby system. Issuance of the Disposal Works Construction Permit is on hold pending submittal of the appropriate documentation regarding the property line survey.

#### (4) 24 Cogswell, McInnes, Map 110, Lot 21\*

I have reviewed the tight tank plan for this property, designed by John Judd of Gateway Consultants and dated June 13, 2017. During my review, I have noted the following technical deficiencies:

- 1. The buoyancy calculations do not take into consideration EDS 100.1.1 which requires groundwater elevation to be assumed to be at the existing ground surface unless a soil evaluation has been performed in the location of the proposed tank demonstrating groundwater to be at a lower elevation.
- 2. General note #11 states the tank shall be pumped every 2 years at a minimum. Tight tanks require more frequent pumping, based on use.
- 3. The calculations show the required minimum capacity of the tight tank to be 550 gallons (500% x 110 gallons per day). The minimum capacity of the tight tank shall be 500% x 220 gallons per day, or 1100 gallons, since the dwelling unit has 2 bedrooms.
- 4. There should be a note referencing the tight tank notification/bedroom count deed restriction.

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Recommendation: I recommend the Board of Health send a letter to the property owner disapproving the plan for the above-mentioned reasons.

### (5) 95 Apple Street, Corcoran, Map 148, Lot 6\*

I have reviewed the plan for the septic tank relocation at this property, designed by John Judd of Gateway Consultants and dated June 13, 2017. I have noted that proposed septic tank will not impact any of the state or local setback requirements for septic system components, and the septic tank is properly sized for the dwelling.

Recommendation: I recommend the Board of Health approve the plan showing a septic tank relocation at this property.

# **D. Septic System Installations/Abandonments** (informational only)

#### (1) 44 Robbins Island Road, Winfrey, Map 108, Lot 12

I inspected the installation of the tight tank at this property.

## (2) 42 Robbins Island Road, Riggs, Map 108, Lot 11

I inspected the installation of the tight tank at this property.

# (3) 35 Rocky Hill Road, Glass, Map 153, Lot 6

I inspected the installation of the building sewer connecting an accessory building to the main septic system serving this property.

#### (4) 17 Apple Street, Comer, Map 142, Lot 19

I inspected the installation of the septic tank and pump chamber at this property.

### (5) 54 Eastern Avenue, Corrao, Map 136, Lot 35

I inspected the abandonment of the septic tank at this property in anticipation of connection to municipal sewer.

#### E. Well Water Supply

None.

## **F. Building Permit Requests**

#### (1) 59 Choate Street, Harb, Map 105, Lot 9

I signed the building permit application to finish the basement at this property. Work includes installation of sheetrock to enclose the mechanical room, as well as completion of the basement bathroom. There will be no increase in the number of bedrooms.

#### (2) 111 Conomo Point, Smith, Map 108, Lot 76

I signed the building permit application for an interior renovation at this property. There will be no change in the footprint of the dwelling and no increase in the number of bedrooms.

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## (3) 35 Conomo Point, Perkins, Map 123, Lot 5

I signed the building permit application to reside the house at this property, as well as construction of a car port. The work will not impact the septic system flow or minimum setback requirements.

#### (4) 62 Choate Street, Bourgette, Map 115, Lot 19

I signed the building permit application to renovate the existing mudroom, bathroom, and kitchen. The changes will not impact the septic system flow or component setback requirements.

### G. Complaints/Concerns

# (1) 139 Gregory Island Road, Wendell, Map 155, Lot 43

I have received a complaint from the owner of 10 Gregory Island Road (Griffin, Map 155, Lot 45) who expressed concerns that the proposed septic system at the subject property will affect the septic system on her property due to the presence of ledge as well as standard drainage issues.