



Board of Health

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MEMORANDUM

TO: Sherborn Zoning Board of Appeals (ZBA)
FROM: Sherborn Board of Health (BoH)
DATE: January 31, 2025
RE: Recommendations on Waivers for Brush Hill Homes 40B

In an updated submission on January 3rd, 2025, Fenix Partners Brush Hill Homes LLC requested waivers to broad sections of Sherborn Board of Health (BoH) regulations rather than identifying needed waivers to specific BoH regulations.

The following tables contain BoH approved recommendations regarding waivers that would be necessary for the project per the January 24th, 2025 plan reviewed by the Health Agent. These recommendations were discussed at BoH meetings of January 22nd and 31st, 2025. These tables identify waivers recommended by the Board and, for certain regulatory sections, clarify why waivers are not recommended.

Per the developer's statements at the January 22nd, 2025 BoH meeting, the proposed location of the buildings and the driveway are anticipated to change from the January 24th, 2025 plans that were the subject of the BoH septic review. As with all projects, changes to approved plans must be brought to the BoH for review and confirmation that any alterations do not affect approval status. This includes but is not limited to: any changes to the septic system and associated infrastructure; discovery of unexpected subsurface conditions during system installation; relocation and/or reconfiguration of dwellings; site contouring changes; well relocations; etc.

Regulation I: Sewage Disposal

The applicant requests a waiver of all requirements except for:

- 3.4.1 Plan Requirements
- 3.4.2 Design Requirements
- 3.4.3 As Built Plans
- 18.3 Temporary Facilities

The Board does NOT recommend a waiver to the entirety of Regulation I: Sewage Disposal, excluding the sections itemized above, where no waiver is requested.

Per 310 CMR 11.02, local septic regulations were developed to address Sherborn's specific circumstances.¹ Most notably, the minimum standards provided by Title 5 are not sufficiently protective for a town that relies on drinking water resources co-located with septic systems' discharges.²

There are trade-offs between the need for affordable housing and the goal of equitably fostering good quality and quantity of water for residents. If a septic system contaminates a water supply(s), the result is additional financial demands and responsibilities for all affected residents, including residents of affordable units.

The sections within this regulation outline design standards important to health and safety, detail to be included on a plan critical for installers to build to the engineer's criteria, along with best practices for pre-installation conferencing, oversight and verification during installation, as well as verification and documentation after a septic system is installed.

Based on plans submitted to the BoH on January 24, 2025, the following sections within Regulation I were identified by the Board's Agent as requiring a waiver from the ZBA:

¹ Title 1 of the State Environmental Code, 310 CMR 11.02, states: *"Unless otherwise expressly provided in any other title, the legally designated health authority of any city, town, county or other legally constituted governmental unit within the Commonwealth having the usual powers and duties of the board of health may, as it considers necessary to promote and protect the health and wellbeing of the particular locality under its jurisdiction, adopt under its own legal power as exists in the General Laws any rules or regulations containing requirements stricter than those contained in this code. Nor should the existence of this code limit or otherwise affect the power of any health authority with respect to any matter for which this code makes no provision."*

² From Title 5, 310 CMR 15.003(3): *Local approving authorities may enact more stringent regulations to protect public health, safety, welfare and the environment only in accordance with M.G.L. c. 111, section 31. [Note that Section 31 states: "Boards of health may make reasonable health regulations. ..."]*

Regulation I: Sewage Disposal		
Waiver Requested	Summary	BoH Recommendations
8.0(1) Vertical Grades and Clearances	The bottom of any leaching area shall be a minimum of five (5) feet above the maximum high ground water table.	Recommend waiving the requirement for 5-feet of separation to maximum high groundwater based on the current septic system design meeting Title 5 with the added protection afforded by having adjusted the system's separation to mounded groundwater to achieve at least 4 feet of separation during high groundwater conditions. (See Recommended Conditions)
8.0(2) Vertical Grades and Clearances	A depth of at least five (5) feet of pervious material in natural soil shall be maintained below the bottom of the leaching area.	As this requirement is closely related to 8.0(1) for this site, a waiver to this requirement is similarly recommended. (See Recommended Conditions)
Background to BoH Recommendations		
<p><i>These regulatory sections are among the most important local protections for the shared drinking water resources in Sherborn. Recommending waivers to these sections is <u>not</u> preferred by the Board.</i> Yet, the Board recognizes that housing mandates under Chapter 40B put pressure on municipalities to compromise on local best practices.</p> <p>The Board maintains that having at least 5 feet of separation between the bottom of a soil absorption system (SAS, a.k.a. leaching area) and maximum high groundwater, comprised of naturally occurring/deposited soils, is important to the health standards applied to all non-40B new construction in Sherborn. Having 5 feet of separation in native soils ensures a greater degree of septic effluent filtration and pathogen attenuation.</p> <p>Groundwater mounding calculations were provided by the Health Agent, to review a groundwater mounding analysis submitted by an outside expert. Both assessments, which used standard analytical methodology, indicated that site conditions (from plan data), in combination with the volume of effluent, will cause groundwater to mound beneath the SAS by 0.7 feet, and perhaps as high as 1.4 feet.</p> <p>The Health Agent assisting with review of the mounding situation recommended raising the SAS by 1-foot above the elevation indicated on the January 15th, 2025 plan. The Board agreed based on a goal of providing at least 4 feet of separation from the bottom of the SAS to estimated maximum high groundwater.</p>		

Regulation II: Water Supply		
<p>The applicant requests a waiver of all requirements except for:</p> <p>15.0.B Well Abandonment Procedures 17.6 Other Use Prohibitions</p>		
<p>The Board does NOT recommend a waiver to the entirety of Regulation II: Water Supply.</p> <p>The health and safety standards outlined within Regulation II ensure the sanitary performance, location, quantity and quality measures of the proposed wells. 105 CMR 410.180 requires property owners to provide a safe supply of drinking water to occupants from a public water supply or a private source approved by the local Board of Health. There are no other regulations for private wells, only guidelines.</p> <p>Based on the latest plans submitted to the BoH on January 24, 2025, the following sections within Regulation II would require a waiver from the ZBA:</p>		
Waiver Requested	Summary	BoH Recommendation
6.0(G)	(1) Defines a protective area around a semi-public wellhead (2) Any such protective area shall be entirely contained within the project's property.	Recommend waiver as long as all other setbacks are met, some of which are more protective for these particular wells (serving only 6 bedrooms each) than the protective area calculation under this section. (See Recommended Conditions)
7.0 Number of Wells	Only one well per property, business, or residence shall be allowed. No well shall be used to supply more than one dwelling unless permitted as a Public Water Supply or as a Semi-Public Water Supply.	Recommend waiver to allow 2 wells for the property due to its condominium structure and shared wells being protective, offering resilience, and being sufficient for the multiple dwellings on the property. The wells shall be permitted as semi-public water supplies per Regulation II. An irrigation well(s) shall not be permitted on this site for reasons of maintaining groundwater quantity.

Regulation III: Public and Environmental Health Review Regulations and Standards for Selected Site Development Activities or Other Special Conditions, or for Other Than a Single-Family Dwelling on a Single Lot		
The applicant requests a waiver to the “extent that it would apply additional local requirements to the project site or any portion thereof in excess of the Title V requirements.”		
The Board does not recommend a waiver to any part of this regulation, with the exception of that noted below.		
Waiver Requested	Summary	BoH Recommendation
3.1 Environmental Health Impact Report (EHIR) (and associated 14.0 EHIR – Scope and General Submittal Requirements)	Requires submittal of a complete EHIR for an application for approval of a Comprehensive Permit under M.G.L. c.40B, s. 20-23	Recommend waiver, for reasons stated in the footnote. ³
10.0 Bedrock Disruption	Requires a permit prior to any bedrock disruption activities in excess of 10 cubic yards	Recommend that NO waiver be granted, if applicable. ⁴
13.0 Earth Removal Standards	These standards apply to any proposed earth removal operation exceeding 350 cubic yards of material per lot or 1000 cubic yards per project.	Recommend that NO waiver be granted, if applicable. To date, site development descriptions have included bringing additional fill material onto the site, not removal of existing earth to off-site.

³ When the BoH last updated its regulations, the Board at the time agreed that III.3.1(g) should be covered by the other descriptors for projects and that 40B projects should not be identified separately. That clause appears in the regulation because it was too late in the regulatory update process to remove it without cancelling the many other updates being discussed in that public hearing. Thus, while the BoH believes that an EHIR can be useful toward understanding whether larger projects potentially pose risks of environmental changes that may negatively affect future residents of the project or its neighbors, it was not deemed a requirement for this project.

⁴ Thus far, there has been no indication that bedrock disruption will be required by this project. In the event that bedrock is encountered during site development, the BoH recommends against a waiver to this requirement because:

- a) costs associated with this requirement are minimal (e.g., there is no permit fee, nearby properties shall be given advance written notice of the bedrock disruption activities);
- b) geologic characteristics of bedrock in Sherborn have the potential to contaminate groundwater when disrupted, which is an important factor for the future residents of this project and neighbors.

Appendix A: Board of Health Guidelines to Obtain a Building Permit		
The applicant requests a waiver to Room Count Definitions and will deed restrict the homes to three bedrooms.		
Waiver Requested	Summary	BoH Recommendation
V. B. What is a bedroom?	<p>Defines criteria for a “bedroom” and room count calculations as total rooms divided by $\frac{1}{2}$, rounded down to the nearest whole number.</p> <p>Note that 8 room homes may be classified as 3-bedroom homes provided that counts do not exceed 3 bedrooms when including:</p> <ul style="list-style-type: none">• any room above the first floor as a bedroom, and• any room with a $\frac{3}{4}$ or full bathroom that opens directly into that room as a bedroom.	<p>Recommend that NO waiver be granted.</p> <p>Once the house plans are finalized, with either slab or full basements, the BoH will review them as part of permitting the septic system.</p>

Recommended Conditions to Support Recommended Waivers	
Three of the following conditions are recommended to strengthen performance of the project into the future. The fourth condition is to counterbalance waivers that have been recommended ONLY due to the 40B status of this project.	
Condition	BoH Recommendation
<i>Fiscal Assurance Mechanisms for the Operation and Maintenance of the Shared Wells and Septic System</i>	The Board encourages the ZBA to practice its administrative privileges and ensure that the Condominium Association's Master Deed establishes a robust financing mechanism for on-going operation and maintenance of the shared wells and wastewater systems, prior to occupancy. The BoH requests a condition of the Comprehensive Permit be that the Health Agent for this project be allowed to review the operation and maintenance plan for the septic system for appropriate inclusion of technical issues.
<i>Simultaneous Pump Testing of the Project's Wells</i>	The goal of simultaneous pump testing of both wells for the project is to ensure that the wells are not interacting in a manner that would compromise expected yield from each well. If the wells are drawing from the same bedrock fractures, then individual pump tests will not reflect that dynamic. Upon occupancy and use of all the dwellings, unexpected low yields may require water supply enhancement, which will be more complicated and expensive for the residents at that point. Furthermore, extended pump testing may be appropriate depending upon characteristics of the site and wells.
<i>Maintaining Standard Well Setbacks from Driveways/Roadways</i>	The BoH recommends the best practice of maintaining well distance to a driveway as greater than 20 feet. This is particularly important when different households, possibly with different risk perspectives, are sharing infrastructure. Furthermore, when the Board added the option to provide well protection features, the intent was to enable protective options when constraints at existing developed properties limited options to achieve the required setback distance.
<i>Minimizing Negative Impacts to Drinking Water Quality</i>	Minimizing harmful chemical releases to the soils and groundwater will serve to protect the quality of drinking water for neighbors, methods for which may include but not be limited to: <ul style="list-style-type: none"> ○ implementation of organic pest and landscape management practices; ○ minimized or no use of fertilizers containing nitrogen and phosphorus; ○ no storage of toxic chemicals or best management practices for their safe and spill-preventing storage; and ○ careful selection and minimal use of deicing chemicals.