

What is B-100a?

SUMMARY OF WHAT B-100a IS AND HOW IT IMPACTS A PROPERTY

"B100A" – BUILDING CONVERSIONS AND ADDITIONS

On August 3, 1998, Section 19-13-B100a of the Public Health Code became effective. This code pertains to Building Conversions/Changes in Use, Building Additions, Garages/Accessory Structures, Swimming Pools, Sewage Disposal Area Preservation on lots which are served by on-site subsurface sewage disposal systems. It replaced Section 19-13-B100 which was somewhat narrower in scope but similar in intent.

PURPOSE OF "B100A"

The purpose of this code is to require that a site assessment be made on those properties served by on-site sewage disposal facilities in order to ascertain whether further development of the property would jeopardize the ability of that property to properly treat sewage waste due to the fact that a code complying septic system could not be placed on the site. The intent is not to determine the present status of the existing leaching system, but to determine that if or, when the existing system fails a septic system can be installed on the property which will meet the needs of the proposed future use.

The previous "B100", which was in effective since October 25, 1976, also stipulated that no change of use or building addition shall be approved unless it was determined that the property could support a fully code complying septic system, except for the requirement to maintain a separate 100 percent reserve area. It has always been the position of the State Department of Public Health that a determination must be made based on soil conditions and the available area present on the property. If such information was not available, soil testing would be required to determine suitability. Unfortunately, enforcement of B100 across the state was not consistent and many health departments were not applying the code (especially when it came to soil testing) properly. The revised "B100a" now makes it very clear that testing information is required prior to approval for building conversions, additions and construction of accessory structures on the property.

It must be understood that test information and the subsequent determination of a code complying area is required even if the proposed construction is for a none water use structure (request of a non-bedroom addition, detached garage or shed, deck, in-ground swimming pool, etc.). The key is that whenever a portion of the property will be lost (by virtue of the fact that a structure is being built which will reduce the area available for future septic system needs), a code complying area must be found, exclusive of the proposed construction area, prior to an approval being granted. If a code complying area cannot be found the proposed construction shall not be granted since approving such a structure would only make the property less conforming relative to the proper disposal of sewage wastes.



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PUBLIC HEALTH CODE REGULATION SECTION 1

SEC. 19-13-B100A. BUILDING CONVERSIONS/CHANGES IN USE, BUILDING ADDITIONS, GARAGES/ACCESSORY STRUCTURES, SWIMMING POOLS, SEWAGE DISPOSAL AREA PRESERVATION.

(a) Definitions. As used in this section:

- (1) "Accessory structure" means a permanent non-habitable structure which is not served by a water supply and is used incidental to residential or non-residential buildings. Accessory structures include, but are not limited to, detached garages, open decks, tool and lawn equipment storage sheds, gazebos, and barns.
- (2) "Building conversion" means the act of winterizing a seasonal use building into year round use by providing one or more of the following: (A) a positive heating supply to the converted area; or, (B) a potable water supply which is protected from freezing; or, (C) energy conservation in the form of insulation to protect from heat loss.
- (3) "Change in use" means any structural, mechanical or physical change to a building which allows the occupancy to increase; or the activities within the building to expand or alter such that, when the building is fully utilized, the design flow or required effective leaching area will increase.
- (4) "Code-complying area" means an area on a property where a subsurface sewage disposal system can be installed which meets all requirements of Section 19-13-B103 of the Regulations of Connecticut State Agencies, and the Technical Standards except for the one hundred percent reserve leaching area referred to in Section VIII A of the Technical Standards.
- (5) "Design flow" means the anticipated daily discharge from a building as determined in accordance with Sections IV and VIII F of the Technical Standards.
- (6) "Potential repair area" means an area on a property which could be utilized to repair or replace an existing or failed septic system and includes areas on the property where exceptions to Section 19-13-B103 of the Regulations of Connecticut State Agencies could be granted by the local director of health or the Commissioner of Public Health but does not include areas beyond those necessary for a system repair and areas of exposed ledgerrock.
- (7) "Technical Standards" means those standards established by the Commissioner of Public Health in the most recent revision of the publication entitled "Technical Standards for Subsurface Sewage Disposal Systems" prepared pursuant to Section 19-13-B103d(d) of the Regulations of Connecticut State Agencies. These standards can be obtained from the Department of Public Health, 410 Capitol Avenue, MS #51SEW, P.O. Box 340308, Hartford, CT. 06134-0308, or by calling (860) 509-7296.

(b) Building conversion, change in use. If public sewers are not available, no building or part thereof shall be altered so as to enable its continuous occupancy by performing any building conversion, nor



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shall there be a change in use unless the local director of health has determined that after the conversion or change in use, a code-complying area exists on the lot for installation of a subsurface sewage disposal system. The determination by the local director of health of whether a code-complying area exists on the property shall be based upon analysis of existing soil data. If soil data is not available, the property owner shall perform soil testing. The property owner or the owner's authorized agent shall submit design plans or a sketch to demonstrate how the property contains a code-complying area that can accommodate a sewage disposal system. The local director of health may require expansion of the existing sewage disposal system or installation of a new sewage disposal system at the time of the change in use for those properties whenever the proposed change in use results in a more than 50% increase in the design flow.

(c) Building additions. If public sewers are not available, no addition to any building shall be permitted unless the local director of health has determined that after the building addition a code-complying area exists on the lot for the installation of a subsurface sewage disposal system. Once a code-complying area is identified, portions of the property outside this designated area may be utilized for further development of the property. This determination by the local director of health shall be based upon analysis of existing soil data to determine if a code-complying area exists. If soil data is not available, the property owner shall perform soil testing. The property owner or the owner's authorized agent shall submit design plans or a sketch to demonstrate how the property contains a code-complying area that can accommodate a sewage disposal system. If the applicant submits soil test data, design plans or a sketch and is unable to demonstrate a code-complying area, the building addition shall be permitted, provided:

- (1) The size of the replacement system shown on design plans or sketch provides a minimum of 50% of the required effective leaching area per the Technical Standards,
- (2) The replacement system shown on the plans or sketch provides a minimum of 50% of the required Minimum Leaching System Spread (MLSS) per the Technical Standards,
- (3) The proposed design does not require an exception to Section 19-13-B103d(a)(3) of the Regulations of Connecticut State Agencies, regarding separation distances to wells,
- (4) The addition does not reduce the potential repair area, and
- (5) The building addition does not increase the design flow of the building.

The local director of health may require expansion of the existing sewage disposal system or installation of a new sewage disposal system at the time of building addition whenever the proposed addition results in a more than 50% increase in the design flow. The separation distance from an addition to any part of the existing sewage disposal system shall comply with Table 1 in Section II of the Technical Standards.

(d) Attached or detached garages, accessory structures, below or above ground pools. If public sewers are not available, no attached garage, detached garage, accessory structure, below or above ground pool shall be permitted unless the local director of health has determined that after construction of the attached garage, detached garage, accessory structure, below or above ground pool, a code-complying



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area exists on the lot for installation of a subsurface sewage disposal system. This determination by the local director of health shall be based upon analysis of existing soil data. If soil data is not available, the property owner shall perform soil testing. The property owner or the owner's authorized agent shall submit design plans or a sketch to demonstrate how the property contains a code-complying area that can accommodate a sewage disposal system. If the applicant submits soil test data, design plans or a sketch and is unable to demonstrate a code-complying area, the attached or detached garage, below or above ground pool, or accessory structure shall be permitted, provided the structure does not reduce the potential repair area. The separation distance from the attached or detached garage, below or above ground pool, or accessory structure to any part of the existing sewage disposal system shall comply with Table 1 in Section II of the Technical Standards.

(e) Sewage disposal area preservation. If public sewers are not available, no lot line shall be relocated or any other activity performed that affects soil characteristics or hydraulic conditions so as to reduce the potential repair area, unless the local director of health has determined that after the lot line relocation or disturbance of soils on the lot a code-complying area exists for the installation of a subsurface sewage disposal system. This determination by the local director of health shall be based upon analysis of existing soil data. If soil data is not available, the property owner shall perform soil testing. The property owner or the owner's authorized agent shall submit design plans or a sketch to demonstrate how the property contains a code-complying area that can accommodate a sewage disposal system. In no case shall a relocated lot line violate Subsection (d) of Section 19-13-B103(d) of the Regulations of Connecticut State Agencies that requires that each subsurface sewage disposal system shall be located on the same lot as the building served.

(f) Decision by Director of Health. Any final decision of the local director of health made in regard to this section shall be made in writing and sent to the applicant. Any decision adverse to the applicant or which limits the application shall set forth the facts and conclusions upon which the decision is based. Such written decision shall be deemed equivalent to an order, and may be appealed pursuant to Section 19a-229 of the Connecticut General Statutes.

If you have any questions related to the B100a process or just general questions pertaining to your existing or proposed septic system, please contact Arthur H. Howland & Associates, P.C. at (860) 354-9346 and ask for Paul Szymanski. You can also visit us on the web at <http://ahhowland.com>.



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How To Hire An Engineer To Get An Extra Bedroom

TIPS AND TRICKS TO FIND THE RIGHT ENGINEER WHO WILL FIGHT TO INCREASE PROPERTY VALUE

All Engineers are not created equal and this document is intended to help you find the “cream of the crop” as it relates to hiring the right Engineer for your job.

INFORMATION NEEDED PRIOR TO CALLING ENGINEER

Make sure that prior to calling the Engineer you are fully prepared and have done as much due diligence as possible. Remember by being informed you will have the best chance of keeping costs low because you will decrease the amount of work that the Engineer will have to perform as part of getting approval. You should have the following information prior to making the call:

1. Property survey

The Engineer, when creating their design, will have to take into consideration the proposed reserve septic system location in relation to property lines in order to meet the requirements of the Connecticut Public Health code. This information can be found by contacting the property owner or performing a search of the Town Clerk's land use records or the various land use departments which may have maps on file for the property. Surveys that have topography are an added bonus as the Engineer will have to approximate/determine the topography as part of their design process.

2. Well location of subject property and neighboring properties if they are serviced by private well.

Septic tanks, pump chambers and the actual leaching fields themselves must be a minimum of 75 feet away from any potable water source. The separation distance may be greater dependent on the withdrawal rate and if the well is utilized for a community water system. Nonetheless, by performing this research the Engineer will be ready to proceed with the design that much quicker.

3. Any previous septic plans or soils testing on subject property and neighboring properties.

This information is extremely useful because if soils testing were performed on the subject property within the past 10 years or so many times we will not have to perform additional soils testing in the field. This will lead to a direct savings that many times can be up to 50% of the cost of the total design. If soils testing was not performed on the subject property but was performed on the neighboring properties and the soils profile was consistent, an Engineer should try their hardest to use that information and not perform additional soils testing in the field.

4. Any plans that may show delineated wetlands and watercourses on subject property and into neighboring properties 50 feet.

This will assist the Engineer as they have to keep the proposed reserve area a minimum of 50 feet from any wetlands or watercourses. Specific Towns may have more stringent requirements via a Sanitary Ordinance adopted by the local municipality.

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QUESTIONS TO ASK THE POTENTIAL ENGINEER

1. Are you a licensed Professional Engineer in the State of Connecticut?

If they are not licensed then chances are they will not have the technical knowhow to have the best potential of increasing the value of your property by getting that extra bedroom approved.

2. Are you familiar with the Section B100A of the Connecticut Public Health Code?

If they are hesitant to answer or say no, run do not walk to the next potential Engineer.

3. What is the most challenging design they have worked on and were they successful in getting it approved.

This will help you to learn how hard the Engineer is willing to work for you. Unfortunately, some Engineers are too willing to put in a half-hearted effort and still take your money.

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5. Do they have “Errors and Omissions” insurance?

Every Engineer makes mistakes even though some won't admit it. If an Engineer has the proper insurance to protect them from liability and are willing to pay this extra premium it is typically a sign of a conscientious and responsible Engineer who is looking to protect both their and their clients interest.

6. Have they ever performed permeability testing as part of getting a septic design approved?

A permeability test is a detailed hydraulic analysis of the soils on a property. The Connecticut Public Health Code offers general design criteria based on conservative assumptions. As an Engineer you have the right to perform a more detailed examination and as such many times get a septic approved in locations the general code would not allow it. An Engineer who has performed permeability testing versus one who is not is better versed in their knowledge of the process and has a higher likelihood of getting your project approved.

7. What will be the cost?

The saying, “You get what you pay for,” is typically consistent when it comes to retaining an Engineer. No I am not saying that just because they are expensive they will get it approved, but I would hire a competent Engineer who is more expensive than one who cannot answer the hardball questions you have thrown at them.

By utilizing this document you will be better prepared to hire an Engineer who can get the job done and get it done in a cost effective and time efficient manner.

If you have any questions related to the B100a process or just general questions pertaining to your existing or proposed septic system, please contact Arthur H. Howland & Associates, P.C. at (860) 354-9346 and ask for Paul Szymanski. You can also visit us on the web at <http://ahhowland.com>.

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