



12/13/2022

Michael Wrinn  
Director of Planning and Land Use Management  
Planning & Zoning Department  
Town Annex  
238 Danbury Road  
Wilton, Connecticut 06897

RECEIVED  
JAN 05 2023  
PLANNING & ZONING

Re: Pervious Driveway, 94 Silver Spring Road

Dear Mr. Wrinn,

I have been retained by the owners of 94 Silver Spring Road, Gifford & Marie Broderick, to represent and aid them in their pursuit for the town to reassess and consider their newly constructed pervious concrete driveway to not count towards "site coverage" as defined in the town's zoning regulations. It is my understanding that the town does not qualify their recently constructed pervious concrete driveway to not count towards site coverage in accordance with Appendix A, Figure A-2 of the Wilton Zoning Regulations. We respectfully request to be added to the next available agenda of the Planning & Zoning Commission to discuss this policy and any options that are available to the Broderick's and their newly constructed pervious driveway.

As you are aware, the town's zoning regulations state that "site coverage," as defined in the regulations, are not counted on "surfaces determined to be pervious such as gravel, stone and pavers set in stone dust/sand for walks, patios, terraces, parking areas, and driveways..."<sup>1</sup> It appears the intent is to encourage pervious structures to be built, and in doing so, the town does not count them towards the maximum site coverage determination.

The Broderick's took it upon themselves to seek out and find a "pervious" driveway solution and found the product "Raincrete".<sup>2</sup> This product is essentially very similar to typical concrete although the finer aggregate materials are removed from the mix, thereby allowed more air to be introduced to the constructed product. This air allows passages of storm water through the driveway section during rain events. It is imperative that an underground reservoir be constructed under a pervious product such as this to allow the storm water an outlet and storage area. This will allow the storm water to freely flow through the concrete and accumulate in the reservoir where it can infiltrate to the natural subsoils below over time.

In the case of the Broderick's driveway, a four (4) inch section of pervious concrete was installed on a five (5) inch bed of crushed stone. Crushed stone has a typical void ratio of 40% and pervious concrete has approximately 20%. The system that was installed allows for approximately 665 cubic feet of storm water to be stored within the driveway system before overflowing to the property's drainage system. This equates to approximately 2.75 inches of rain falling during a storm event within the pervious

<sup>1</sup> Zoning Regulations of the Town of Wilton, Connecticut, last revised 11/4/2022, Appendix A-Figure 2, page 223

<sup>2</sup> See [www.raincrete.com](http://www.raincrete.com)

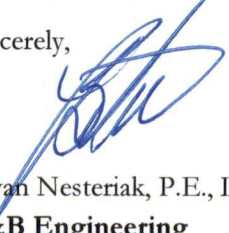
concrete area. In addition, the system allows the water to be introduced directly into the subsoils below without impingement or obstruction.

Let's compare the functionality of the pervious concrete driveway system to a typical paver installation, which is allowed by the zoning code to not be counted towards site coverage and is considered pervious. A paver driveway would be installed on a crushed aggregate base and stone dust, both of which typically have maximum void ratios of 15%. Since the pavers have an essential 0% void ratio, the volume available for storm water for a driveway of the same size would be 178 cubic feet, a reduction of 487 cubic feet or 73%. More importantly, the ability of the storm water to flow through the system is not as available in the paver system than the pervious concrete. Standard pavers are filled with mason sand, which would slow the infiltration rate of water and most likely inhibit it to the point where it would flow off to the surrounding areas. In many cases, polymeric sand is used, which would essentially remove any infiltration available to the storm water through the pavers, and would create essentially an impervious surface.

Pervious concrete driveways do require maintenance to be able to provide and maintain their full infiltration ability. Regular sweeping and vacuuming is recommended; however, even with occasional maintenance, the systems would provide more infiltration than a standard paver or even gravel surface. I would recommend that if the town considers and adopts a policy that interpret pervious concrete as non-coverage, then a robust maintenance plan and possibly even a recorded declaration be required for each system. The Broderick's are committed to providing these items for their pervious driveway.

Thank you for considering this information and request. If you have any questions or would like to discuss further, please do not hesitate to contact me.

Sincerely,

  
Bryan Nesteriak, P.E., L.S.

**B&B Engineering**

cc: Gifford & Marie Broderick

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