



Walpole Fire Department

Emergency Services

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To: Ashley Clark, Director of Community & Economic Development
From: Paul C. Barry, Deputy Fire Chief *PCB*
Date: June 5, 2020
RE: "Diamond Hill Estates" – Dupee Street

The following comments are provided by the Walpole Fire Department (WFD) in regards to the Dupee Street 40B Project.

1. The memorandum dated June 2, 2020, submitted by William J. Scully, P.E. and Corinne Tobias, P.E., PTOE of Green International Affiliates, Inc states the site has been modified by eliminating a circle and incorporating a hammerhead turn around. Whenever possible, WFD prefers the safer option of avoiding backing up fire apparatus and would rather see a rounded turn-around incorporated at the end of the street/development. Regardless of the final turn-around decision, the submittal must comply with 527 CMR 1, specifically but not limited to chapter 18. The submitted documents do not show a stamped turn analysis and do not show the proposed hammerhead incorporated in the turn analysis. That appropriate turning radius must be provided to avoid the dangerous situation of requiring fire apparatus to back out of Dupee Street on Route 27. The turn analysis must incorporate the overhang of the apparatus and take into consideration the proximity of the telephone pole and tree at the entrance of Dupee Street, as well as any obstacles pertaining to the turn-around.
 - a. Massachusetts State Fire Code 527 CMR 1:
 - i. 18.1.1.1 This chapter shall apply to public and privately owned fire apparatus access roads.
 - ii. 18.1.1.4 The fire road access road plan must include an analysis and evaluation of fire apparatus maneuvers throughout the access roads created by swept path analysis and turn simulation software.
 - iii. 18.1.1.5 The fire apparatus access plans shall bear the seal and signature of the responsible registered professional engineer.

- iv. 18.2.2.1.1 "Approval of access roads shall be subject to the AHJ and capable of supporting the imposed loads of fire apparatus and shall be provided with an all weather driving surface and shall be maintained as provided."
- v. 18.2.3.1.2 Fire Department access roads shall consist of roadways, fire lanes, parking lot lanes, or a combination thereof.
- vi. 18.2.3.4.8 Travel in the Opposing Lane states, the use of the opposite travel lane is prohibited in the design of all new fire apparatus access roads.
- vii. 18.2.3.4.1.1 Fire Department access roads shall have an unobstructed width of not less than 20 feet.
- viii. 18.2.3.5.1 Where required by the AHJ, approved signs, approved roadway surface markings, or other approved notices shall be provided and maintained to identify fire department access roads or to prohibit the obstruction thereof or both.

1. It is agreed the improved roadway will provide better access; however, 527 CMR 1 states the minimal unobstructed access width shall be 20 feet, the proposed roadway does not allow for curbside parking. We question if visitor parking should be included on the site plan.
2. We still have concerns with the project name Diamond Hill Estate; the Town already has a Diamond Street and a Diamond Pond Terrace.
3. We support and prefer the water main to be looped.
4. We prefer the opportunity to work with the developer on final hydrant locations.
5. Tree plantings must consider growth over the roadway. The sycamore maple has a mature growth width of 35-60 feet, and the pin oak has a mature growth width of 40-50 feet, depending on the planting placement, these have the potential to damage fire apparatus.

If there are any questions or concerns, please do hesitate to contact me.