



1001 E. Baltimore Pike
Kennett Square, PA 19348

Emergency Number: 9-1-1
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MEMORANDUM

To: Bruce Mitchell, Kennett Township Fire Marshal
From: A.J. McCarthy, Fire Chief
Date: October 30, 2018
Re: Novak Subdivision – Norway Road

I have reviewed the Novak Subdivision plans that you supplied in October 2018.

I have the following recommendations:

1. In accordance with the 2015 International Fire Code (IFC), Appendix D: Section D102.1: Access and Loading - the shared roadway shall maintain a minimum clear width of 20 feet exclusive of shoulders and a driving surface capable of supporting the imposed load of fire apparatus weighing at least 75, 000lbs.
 - a. This is only permitted if the construction access roadway is kept a permanent means of emergency access as described later in the memo.
2. In accordance with the 2015 IFC, Appendix D: Section D103.1 – the shared access roadway shall have a minimum clearance of 26ft around the fire hydrant. Figure D103.1 provides the necessary example.
3. The plans show the shared roadway to be approximately 1,100 feet from Norway Road to the start of the construction access road. The 2015 IFC, Appendix D: Section D103.4 requires dead-end fire apparatus roads in excess of 150 feet to be provided with width and turnaround provisions in accordance with Table D103.4.
 - a. If the construction access is built to be a permanent means of emergency vehicle access, the subdivision will now be considered to have two separate means of access/egress.
 - i. The construction access shall be constructed in the same manner as described in #1 of this memorandum.
 - ii. If the construction access roadway is equipped with a gate after the completion of the subdivision, it shall comply with the 2015 IFC

Appendix D, Section D103.5 – Fire apparatus access road gates.
Section D103.5.6 – Method of locking for the construction gate shall be chain and “Knox Padlock” exterior version from Knoxbox. Com. The padlock shall be keyed to the district key for Longwood Fire Company.

- b. The construction access roadway must contain the appropriate easement for emergency vehicle access from the edge of the cul-de-sac at Sunstone Lane and be continuous until it meets the shared access roadway in the submitted plans. The continuous roadway shall meet the design and build requirements as per the 2015 International Fire Code.
4. 2015 IFC, Appendix B: Table B105.1(1): Fire-flow requirements for buildings: The largest house on the subdivision plan is approximately 4,400 square feet. The plans do not list the type of construction, but it is assumed that it will be Type V without any listed fire ratings. The required flow will be 1,750 gallons per minute for a 2-hour duration, requiring 210,000 gallons be available onsite.
- a. To my knowledge, the closest water main that is available is approximately 4,368 ft from the entrance to the subdivision to the Chester Water Authority Booster station on Norway Road. Given the size of this subdivision, it may not be feasible to extend the water line from the booster station, however, a water supply for fire protection is still required.
 - b. 2015 IFC Appendix B, Section B103.1 – Decreases – allows the Fire Chief to decrease the fire flow requirement in a rural setting where the recommended flow may not be feasible.
 - c. The 2015 International Wildland-Urban Interface Code, as adopted by the Commonwealth of Pa, provides the following:
 - i. 2015 IWUIC, Chapter 4, Section 404 Water Supply, Subsection 404.5.1: Adequate Water Supply – The required water supply for One- and Two-family dwellings exceeding 3,601 square feet shall be 1,500 gallons per minute for 30 minutes.
 - ii. This subdivision would require underground storage tanks as approved by the fire department with a usable capacity of 45,000 gallons.
 1. Tank placement and design should be a follow up conversation with the civil engineer.
 - iii. 2015 IWUIC, Ch.4, Section 404.6: This area of Kennett Township has an ISO rating Class 9 or better.
5. Any plantings that could be installed in the future shall not hang over the shared access roadway.

If there are any questions, please contact me at amccarthy@longwoodfireco.com.

Respectfully submitted,

*A.J. McCarthy**

A.J. McCarthy, Fire Chief