



TRAFFIC PLANNING AND DESIGN, INC.

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September 12, 2019

Patrick Duffy, P.E.
Director of Planning and Zoning
Middletown Township
3 Municipal Way
Langhorne, PA 19047

**RE: Lennar-Woodbourne Road, S/LD 18-8: The Orchard Tract
Preliminary/Final Land Development Plan Review
TPD# MTTO.00034**

Dear Mr. Duffy,

In our role as Township Traffic Engineer, Traffic Planning and Design, Inc. (TPD) has reviewed the following items for the above referenced project:

- Preliminary/Final Land Development Plans prepared by Bohler Engineering, dated August 28, 2018, revised August 12, 2019;
- Geoblock5150 Porous Pavement System Specification Summary;

Based on our review, we offer the following comments:

Traffic Study Comments

1. Please provide the synchro analysis for review in subsequent submissions.
2. The acceptable sight distance should be updated to use the 85th percentile speed and not the posted.
3. A traffic impact fee will be necessary for the project. Based on the location of the Development within the Township (Service Area #1), the impact fee per trip is \$249.97. As indicated in the traffic study and confirmed by our office, the site will generate 59 new trips. Multiplying the 59 P.M. peak hour trips by the impact fee of \$249.97, the total impact fee will be \$14,748.23.
4. A revised study showing the new driveway configuration (one lane egress) should be submitted for review and approval.

Roadway Comments

1. Additional information should be provided for the emergency access:
 - a. A method to close off the access when not in use. We will defer to the local emergency services on how they would like this done;

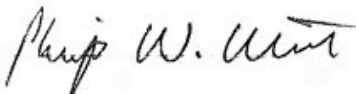
- b. Signing to indicate this is an emergency access. We will defer to the local emergency services on how they would like this done.
2. Remove the boulevard typical roadway cross section as it is no longer applicable to the project.

Note, the following comments can be deferred to the PennDOT Highway Occupancy Permit plan review due to these being associated directly with the driveway and improvements along Woodbourne Road.

1. Woodbourne Road is a State Route. A PennDOT Highway Occupancy Permit (HOP) will need to be obtained for any work performed in the state's right-of-way. Please submit plans and correspondence to the Township for review and approval.
2. The sight distance from the proposed driveway crosses over adjacent properties outside of the right of way. A sight distance easement will be necessary to obtain the necessary sight distance length.
3. Railroad warning light timings will need to be adjusted and additional equipment added for the proposed crossing of the Fairless Hills Branch.
4. A crossing should be provided for the proposed driveway.
5. A center left turn lane is being proposed on Woodbourne Road. Note, what is shown on the plans extends past the current plan sheet. Plans should be provided showing this improvement.
6. Drainage calculations should be provided to confirm the design will meet PennDOT and Middletown Township standards. This should include spread calculations at the site access points and inlets within the project area.

If you have any questions, please contact Bill Zadrovicz or me at your earliest convenience.

Sincerely,



Philip Wursta, P.E.

Township Traffic Engineer

Cc: Stephanie Teoli Kuhls, Township Manager
Joseph Baran, Bohler Engineering
Mark Roth, McMahan Associates
Scott Burton, PennDOT 6-0