



**TOWNSHIP
OF
LOWER MERION**
MONTGOMERY COUNTY

TOWNSHIP ENGINEER

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LOWM 254.89

January 3, 2020

Christopher Leswing, Director of Building and Planning
Township of Lower Merion
75 East Lancaster Avenue
Ardmore, PA 19003

**Re: 396 W. Lancaster Ave
Preliminary Plan Review**

Dear Mr. Leswing:

In accordance with your request for the above referenced submission, we have reviewed a set of thirty (30) plans dated 07-15-19 latest revision dated 11-21-19, and associated stormwater management calculations dated 08-08-19, latest revision dated 12-19-19 prepared by Core States Group. We have also reviewed a Traffic Impact Study dated 08-06-19, latest revision dated 12-13-19 prepared by Shropshire Assoc., Inc. We offer the following comments for your consideration:

A. MAJOR ENGINEERING ISSUES

- ❖ **Stormwater** – The present submission does not provide the code required recharge for the increase in runoff volume from the proposed development for the twenty five (25) year storm considering the predevelopment ground cover condition as meadow. The developer has requested a waiver from this requirement due to poor percolation conditions. We support this waiver request since the development reduces the amount of impervious on the property by more than twenty (20%) percent.
- ❖ **Traffic** - We have requested that additional right of way be offered on Lancaster Avenue and Haverford Station Road sufficient to enable future construction of left-turn lanes at the intersection. This is requested due to the poor level of service at the northbound Haverford Station approach that may be made slightly worse by this development.

With the resolution of the above major engineering issues and the remaining comments in this letter incorporated, we recommend that the Preliminary Plan be approved.

B. ORDINANCE REQUIREMENTS

1. Section 121-4A(4)—The responsibility for the continued maintenance and operation of the detention basin and other facilities shall be the obligation of the property owner.

2. Section 121-4B(2a)1—At a minimum, the increased volume of stormwater generated by the proposed development for the twenty five (25) year storm shall be recharged. Pre-development conditions of meadow ground cover in agreement with township code must be used for the determination. The applicant has requested a waiver from this code requirement due to the slow infiltration rates obtained in the testing. We support this request for a waiver since the proposed design results in a reduction of impervious surface of more than twenty (20%) percent.
3. Section 121-4E(2j)—In addition to the number of perforations shown on the detail, the size of perforations per linear foot of pipe shall be clearly included in the seepage bed detail for each and all pipe diameters used. Perforations shall not be less than five-sixteenths (5/16") inch in diameter and the size/number of holes must provide an opening area not less than three and thirty-one hundredth (3.31) square inches per square foot of pipe surface.
4. Section 121-4E(2L)—Seepage beds shall not receive runoff until the entire contributory area to the BMP has been stabilized. The notes on the plan shall also indicate approval must be obtained from the Township Engineer prior to introduction of runoff into the permanent system.
5. Section 121-5A(2)—The maximum time of exposure for bare soil areas shall be twenty (20) days before stabilization measures are implemented. This shall be a condition of permit issuance.
6. Section 121-15—The runoff crossing to the adjacent properties during the construction phase of the project shall be managed so that the water quality/quantity impact is minimized to the adjacent properties. Diversion berms, stoned construction staging areas, and inlets/piping shall be provided as required or as directed by the township so as to ensure acceptable conditions during the construction phase. This shall be a condition of permit issuance.
7. Section 135-17B(1)—The existing sanitary sewer main shall be shown within two hundred (200') feet of the development or to the first manhole structure. The rim and invert elevations shall be provided on the plan for the sanitary manholes shown.
8. Section 135-17B(2)—The location of the existing sanitary lateral(s) shall be shown on the demolition plan. Separate permits will be required for the sanitary sewer work associated with this application.
9. Section 135-19B(8)—The applicant shall provide with the Traffic Study HCM 6th Edition detail reports for all intersection analyses and the electronic synchro files for review. The analysis must incorporate actual heavy vehicle percentages. Also, the eastbound Lancaster Avenue "No Turn on Red" restriction has not been properly considered in the analysis.
10. Section 135-19B(8)—The Traffic Study included a table outlining available vehicle storage length and 95th percentile queue information at all intersections and driveway access locations for the existing, no-build and build conditions. Turn restrictions during peak

traffic hours shall be implemented if/as requested by PaDOT or the Township Traffic Safety Unit.

11. Section 135-19B(8)—A handicap refuge area shall be shown to be provided on the south side of Old Railroad Avenue at the new crosswalk location. A detail shall be provided on the plan.
12. Section 135-19B(8)-- A post-development traffic count and signal timing optimization analysis shall be performed for the adjacent signalized intersection of Lancaster Ave and Haverford Station Road. The signal timing shall be adjusted if/as directed by the Township and approved by PaDOT.

C. ENGINEERING COMMENTS

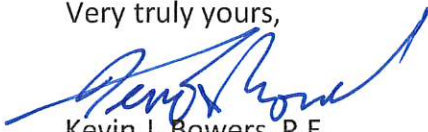
1. The Lighting Plan must be approved by the Director of Building and Planning prior to recording the Final Plan.
2. The Planting Plan must be approved by the Planning Department and the Township Arborist prior to issuance of the permit/recording the Final Plan.
3. Depressed curb shall be clearly labeled at the new driveway access locations on Sheet C5.
4. The length of existing depressed curb to be raised to full reveal shall be clearly indicated and dimensioned on Sheet C5.
5. The detail of the concrete apron which is to be used shall be clarified on the plans. Details that are not used shall be removed from the plan to avoid confusion.
6. The location of the replacement handicap ramps and crosswalks shall be coordinated with the Township and also PaDOT if/as required.
7. The crosswalks at Lancaster Ave and Haverford Station Road shall be noted to be refurbished with high visibility, durable pavement markings if/as directed by the Township. Work must be in accordance with PaDOT standards.
8. The applicant must obtain a Pennsylvania Department of Transportation (PaDOT) Highway Occupancy Permit for the proposed revisions to the access point along Lancaster Avenue (Route 30). All plans, calculations and correspondence submitted to PaDOT for the Highway Occupancy Permit must be provided to Lower Merion Township. Lower Merion Township must be notified of any meetings scheduled with PaDOT regarding the site and the HOP application.
9. The applicant shall provide additional right-of-way along Lancaster Avenue and Haverford Station Road in order to facilitate left-turn lanes at the intersection. This improvement would have a positive impact on the Level of Service F and E conditions that currently

exist on the northbound Haverford Station approach and which may be made slightly worse with this development.

10. The mean grade of the structure shall be calculated and shown on the plan. The architectural plans must be coordinated with and must comply with the grading proposed with this application.
11. A copy of the revised plan shall be submitted with any changes highlighted. A letter shall also be provided with the revised plan indicating how each requested revision has been addressed in the re-submission.

Please advise if we may be of further assistance in this matter.

Very truly yours,

A handwritten signature in blue ink, appearing to read "Kevin J. Bowers", is written over the typed name.

Kevin J. Bowers, P.E.

PENNONI ASSOCIATES

Township Engineer

Cc: Robert E. Duncan, Assistant Township Manager
Core States Group
Shropshire Assoc., Inc.
Chase Bank