

July 2, 2015

Mr. John Nagel
Township Manager
East Whiteland Township
209 Conestoga Road
Frazer, PA 19355-1699

RE: Celia Tract – Townhouse Development
East Whiteland Township, Chester County
McMahon Project No. 815280.11

PRINCIPALS
Joseph W. McMahon, P.E.
Joseph J. DeSantis, P.E., PTOE
John S. DePalma
William T. Steffens
Casey A. Moore, P.E.
Gary R. McNaughton, P.E., PTOE

ASSOCIATES
John J. Mitchell, P.E.
Christopher J. Williams, P.E.
R. Trent Ebersole, P.E.
Matthew M. Kozsuch, P.E.
Maureen Chlebek, P.E., PTOE

Dear Mr. Nagel:

McMahon Associates, Inc. has conducted a traffic review of the proposed development of the Celia Tract for 64 townhouses. This review is based on the traffic study prepared by Heinrich & Klein Associates, Inc. dated May 12, 2015. The property is located on the north side of Lancaster Avenue (U.S. Route 30) between Planebrook Road and Frame Avenue. Access to the site is proposed via an unsignalized access road intersection with Frame Avenue, as well as an access connection with the planned Cockerham Tract residential development internal roadway system, which ultimately provides access to Planebrook Road.

According to the traffic study, and based on trip generation projections from the Institute of Transportation Engineers publication, *Trip Generation, Ninth Edition*, the proposed 64 townhomes will generate 440 daily trips, 36 total trips during the weekday morning commuter peak hour and 42 total trips during the weekday afternoon peak hour.

Based on our review, we offer the following comments for the Township's consideration.

1. The access intersects Frame Avenue immediately south of an existing culvert, and the northeastern radius appears to tie in to the southern terminus of the culvert. Based on a brief field view, this culvert appears to be over 100 years old, and there are multiple issues that should be addressed. A more detailed evaluation is necessary, but preliminarily it may be possible to make short-term repairs to the culvert. However, due to the age of the culvert, it is our opinion it will ultimately need to be replaced. The Township should plan for the replacement of the culvert, and determine if any repairs can be conducted at this time. Also, the proposed Frame Avenue access radius ties in to the south edge of the culvert. Given its condition, the applicant should ensure no further damage to the culvert during construction of the access.

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2. According to the traffic study, the Frame Avenue and Planebrook Road site access intersections will operate at acceptable level-of-service C or better during the peak hours. Furthermore, a gap study completed at the Planebrook Road site access intersection reveals there are more than adequate gaps within the Planebrook Road traffic stream to accommodate the anticipated site traffic.
3. According to the traffic study, the results of a speed study reveal the 85th percentile speed of traffic along Planebrook Road is 42 and 43 miles per hour. The posted speed limit is 35 miles per hour. According to the traffic study, the available sight distances at the Cockerham Tract Planebrook Road site access intersection exceed PennDOT's sight distance requirements.
4. According to the traffic study, a separate left-turn lane northbound and a separate right-turn deceleration lane southbound are not warranted along Planebrook Road for access into the Cockerham Tract site access. No turn lane evaluation is provided for the proposed Frame Avenue site access; however, due to the low traffic volumes along Frame Avenue, and since little to no traffic will enter the site via the southbound Frame Avenue left turn movement, separate left- and right-turn lanes area not necessary at the proposed Frame Avenue site access.
5. The traffic study does not include a sight distance evaluation for the Frame Avenue site access intersection. However, based on a brief field view conducted by our office, it appears that adequate sight distance can be provided, assuming the existing trees and vegetation located to the north of the access are cleared. The site plans should show the extent of the vegetation clearing, and a sight distance note should be provided on the plan which indicates the sight distance requirements based on PennDOT's sight distance criteria.
6. All pedestrian facilities must be ADA compliant, including the use of curb ramps and/or detectable warning surfaces where the trail/sidewalks intersect with the streets.
7. The proposed Frame Avenue access is located in very close proximity to an existing commercial driveway immediately to the south on the same property. We question whether the possibility of a shared access had been considered.
8. Construction of the proposed Frame Avenue access and associated signage should not impact sight distance of the existing commercial driveway.
9. The width of Frame Avenue along the site side should be consistent between the adjacent commercial driveway and the Frame Avenue site access.

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If there are any questions regarding any of the above comments, please do not hesitate to contact our office.

Sincerely,

A handwritten signature in black ink that reads "Christopher J. Williams". The signature is written in a cursive, flowing style.

Christopher J. Williams, P.E.
Vice President & General Manager – Exton

CJW/JDG/ab

cc: Terry H. Woodman, East Whiteland Township
Eric Reed, East Whiteland Township
Andreas Heinrich, P.E., PTOE, Heinrich & Klein Associates, Inc.
John A. Jaros, Esq., Riley Riper Hollin & Colegreco
Victor Kelly, Jr., P.E., Commonwealth Engineers, Inc.