



F. Tavani and Associates, Inc.
Traffic Engineering and Planning

PO Box 459 • Saint Peters • PA • 19470 • (484) 212-3025 Phone • (484) 792-9495 Fax
www.FTAVANIASOCIATES.com

26 April 2010

Mr. David Kraynik
Township Manager
Cheltenham Township Administration Building
8230 Old York Road
Elkins Park, Pennsylvania 19027-1589

VIA ELECTRONIC MAIL ONLY

**RE: Ashbourne Country Club Redevelopment,
Traffic Impact Study Review**

FTA Job #209-023

Dear Mr. Kraynik:

Per your request, F. Tavani and Associates, Inc. (FTA) has conducted a review of a traffic impact study of the proposed redevelopment of the Ashbourne Country Club site (ACC, or the site). The site is located on the north side of Ashbourne Road (S.R. 2025) and is bounded by New 2nd Street (S.R. 2060), Tacony Creek Parkway, and Jenkintown Road. The existing main access to the ACC is opposite Oak Lane Road (S.R. 2062).

This review is based on a traffic impact study that was prepared by McMahon Transportation Engineers and Planners on behalf of the applicant. The report is dated March 2010. The study is based on a site plan which is dated 19 February 2010 by Taylor Wiseman and Taylor, a reduced version of which is included in the study as Figure 1. The plan is explained on page three of the study and is said to include “a 240 unit age-restricted community”. The site takes access to surrounding roadways via an existing signalized access opposite Oak Lane Road as well as a proposed new unsignalized access opposite Boyer Road. An earlier traffic study for the site was dated 11 June 2009 at which time the proposed site was said to include “309 age-qualified units and 176 apartment units”. Note the difference in language: previously “age-qualified” whereas now it is “age-restricted”.

In general, the study has been conducted in accordance with accepted traffic engineering practice, although there are some aspects of the study and the proposed redevelopment are worth particular mention and additional investigation. Specific comments are offered below.

Study Area

The traffic report includes counts conducted at six off-site intersections (four along Ashbourne Road at: New 2nd Street, at Front Street / Ashmead Road / Arbor Road, at Jenkintown Road and at Boyer Road; plus two along Tookany Creek Parkway, the first being at New 2nd Street and the second being at Jenkintown Road) and finally at the existing signalized site access opposite Oak Lane Road. Seven intersections were counted in total. Traffic counts were conducted in 2009 and 2010 during typical weekday commuter peak periods (7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM) and were adjusted (increased) to reflect seasonal variability. Existing traffic volumes suggest that New 2nd Street is a significant link in the study area as traffic volumes in each direction during either peak hour are on the order of 600 to 700 vph between Ashbourne Road and Church Road (to the north, not mentioned in the report or figures) – the highest by far of any link in the study area (see pages 8 and 9, upper left corners of the study for illustrations of this). The June 2009 traffic study contained fewer intersections (only two off-site intersections [Ashbourne Road and New 2nd Street plus Ashbourne Road and Front Street] plus the existing signalized site access.

Trip Generation

Trip generation for the proposed redevelopment of ACC is presented in Table 2 on page 13 of the report. *Trip Generation*, 8th Edition, published by ITE (the Institute of Transportation Engineers) was used in the trip generation derivations. The land use code used – Senior Adult Housing – Detached (LUC 251) contain relatively substantial databases and so ITE offers two different methodologies for determining trip generation. It should be noted that the study presents and uses the higher and therefore more conservative trip generation estimates of the two different methodologies. FTA reproduced the numbers exactly as shown in the table.

Trip Distribution

Site traffic was distributed throughout the road network based on “existing traffic patterns, location of major roadways, and the location of the development’s site access” (page 14). Pages 15 and 16 include figures which graphically depict the trip distribution in terms of percentages and as actual trips. Note that the percentage of site traffic depicted along New 2nd Street heading to/from Church Road is 30%. Note also that the sum of all three percentages shown at Ashbourne and Front Street is 35% (i.e., 20% + 10% + 5%).

Notable Existing Roadway Conditions

Ashbourne Road features a posted speed limit of 40 mph and a wide cartway between Front Street and New 2nd Street. The non-site side of the roadway features many residences, numerous private driveway curbcuts, and observed on-street parking (see attached photo). Unlike Oak Lane Road, which features a posted speed limit of 35 mph, many residences and numerous private

Mr. David Kraynik

26 April 2010

Page 3 of 4

driveway curbcuts, and striped shoulders, Ashbourne Road does not feature any shoulder delineation (i.e., no striped shoulders are provided). In addition, it was observed during a field visit that the southeast corner of Ashbourne Road and Oak Lane Road is often mounted and/or struck by SEPTA buses and other long wheelbase vehicles. Reconstruction would be a challenge due to a significant utility pole on this corner of the intersection (see attached aerial image and added commentary). Even so, this condition should be addressed, especially as this intersection will be the main point of access of 240 units.

Applicant's Proposed Improvements and Mitigation

The roadway and intersection improvements offered to mitigate the proposed redevelopment of the site are depicted in a figure shown on pages 24 (Figure 13) and is described on page 29. In summary, two new exclusive right-turn lanes are offered. The first is at the proposed site access opposite Oak Lane Road, a new right turn decel lane is proposed in the WB direction (along Ashbourne Road). The second is at the intersection of Ashbourne Road and Front Street where a new right turn lane is offered on the SB approach of Ashbourne Road.

At the signalized site access, a boulevard-type roadway is proposed featuring a new median. In the concept plans included with the traffic study, the median does not appear to be perpendicular to Ashbourne Road and the path of Oak Lane NB through traffic with respect to the inbound cartway of the site access appears to have some alignment irregularities. These issues should both be investigated as the project continues through the land development process.

Alternative Trip Generation Investigations

Toward the end of the report, there is a supplemental trip generation analysis which is provided. It explains that at the request of the Township Engineer, an alternative trip generation analysis was conducted assuming the site was not age-restricted. Different ITE trip generation rates were utilized and the resultant increase in traffic was on order of 60 vph during each of the peak hours investigated. FTA reproduced the trip generation estimates exactly as described in this section of the report. FTA also concurs with the conclusion of this section of the report that the increase in trip generation has no impact on the intersections included in the study.

SUGGESTED NEXT STEPS

- 1) The existing volumes along New 2nd Street heading toward or from Church Road are significant and the trip distribution model used in the report sends or receives approximately as much site traffic from the intersection of New 2nd Street and Church Road as at the intersection of Ashbourne Road and Front Street. While the latter was counted and subsequently analyzed with road improvements offered, the former was not. FTA suggests the study be expanded to include New 2nd Street and Church Road.

Mr. David Kraynik

26 April 2010

Page 4 of 4

- 2) Ashbourne Road between Front Street to New 2nd Street features a cartway which is approximately 35 feet wide and many residences and numerous private driveway curbcuts with observed on street parking on the 'non-site' side of the roadway. It is suggested that the center double yellow line of the roadway be shifted toward the site for the entire length of Ashbourne Road (from Front Street to New 2nd Street). This could allow a wide shoulder to be striped on the residential side of the street, thereby providing better identification of on-street parking for residents, a place for delivery vehicles to dwell, etc.
- 3) The intersection of Ashbourne Road and New 2nd Street may benefit from the addition of a new exclusive right-turn lane on the westbound approach. Total right turning volumes here are comparable to those heading SB at the intersection of Ashbourne Road and Front Street and include more site traffic than either of the site driveways. The feasibility and benefit of providing this lane improvement should be investigated.
- 4) The southeast corner of the intersection of Ashbourne Road and Oak Lane Road should be examined with the goal of developing a plan which addresses long-wheelbase vehicle difficulties. In absence of corner reconstruction, the previously-mentioned center line shift along Ashbourne Road should be investigated as it may – if continued through this intersection – permit a longer effective radius for NB right-turning vehicles to navigate this turn. A potential design concept which reflects this proposed center line shift – and any associated site-side curb work / widening – should be prepared in an engineered sketch and turning templates which demonstrate long-wheelbase vehicle turning ability should be prepared and presented to the township.
- 5) The proposed boulevard-type roadway of the signalized site access features a proposed median. In the concept plans included with the traffic study, the median does not appear to be perpendicular to Ashbourne Road and the path of Oak Lane NB through traffic with respect to the inbound cartway of the site access appears to have some alignment irregularities. These issues should both be further investigated as the project continues through the land development process.

Please call if you have any questions or if I could provide anything further. Thank you.

Very truly yours,

F. TAVANI AND ASSOCIATES, INC.



FRANK TAVANI, P.E., PTOE
Principal

attachments

cc: Bryan Havir, AICP
David Lynch, P.E., PLS



SITE

Photo taken on Ashbourne Road looking toward New 2nd Street
Note parked car on non-site side of roadway and delivery vehicle temporarily stopped on site side of roadway. Note also no shoulder markings and moving vehicle (heading away from camera) straddling double yellow line.

Detail of potential changes to Ashbourne Rd & Oak Lane Rd / Site Access

209-023

January 2010

