



ALBERT FEDERICO CONSULTING, LLC

Traffic Engineering and Mobility Solutions

133 Rutgers Avenue
Swarthmore, PA 19081

March 13, 2020

via email only

Russell Hatton, Chair
Westtown Township Planning Commission
1039 Wilmington Pike
West Chester, PA 19382

Re: Conditional Use - Traffic Review
Robinson Tract (aka Crebilly Farms) Development
Westtown Township, Chester County

Mr. Hatton:

Subsequent to the previous Traffic Review (January 29, 2020) there has been additional coordination with the Applicant, including:

- Correspondence to Mr. Russell Hatton (prepared by McMahon Associates, dated February 4, 2020) providing responses to the January 29 Traffic Engineering Review
- Meeting with PennDOT and Thornbury Township on February 11, 2020, and the distribution of Draft Meeting Minutes (prepared by McMahon Associates, distributed February 25, 2020)
- Correspondence (prepared by McMahon Associates, dated February 21, 2020 and supplemental emails) providing additional information regarding the traffic diversions assumed for the traffic analyses

Please note that this review should be considered preliminary and subject to change based on the submission of revised materials to address the comments presented herein.

In recognition of these activities the following update to the January 29 review is offered for the Township's consideration:

1. *In consideration of conditional use approval, the Township may require the applicant to submit a development impact study which considers the impact of the proposed flexible development on traffic volume and safety. {§170-906.D(2)}*
 - a. To allow for consideration of the impact of the proposed development the Transportation Impact Study (TIS) should be revised to address the following:
 - i. As previously noted, Table 1 should be updated to identify West Pleasant Grove Road as a Township Collector Roadway. *{Westtown Township Comprehensive Plan Update, page 9-7}*.

Status: In consideration of the ongoing coordination the Applicant has yet to submit a revised TIS. The submitted correspondence does not commit to this revision.



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- ii. The sections of the TIS discussing improvements should note that the internal Collector Road provides access to the property.

Status: In consideration of the ongoing coordination the Applicant has yet to submit a revised TIS. The submitted correspondence does not commit to this revision.

- iii. As previously noted, the Crash Summary only includes data for State "Reportable" collisions. In order to provide a more complete assessment of transportation safety within the study area "Non-reportable" collisions should be included. Note that the Traffic Safety Office is unaware of an outstanding request for "more detailed information". The applicant should resubmit the request to the Traffic Safety Office and Township Traffic Engineer, including the specific details being requested.

Status: Supplemental information has been provided to the Applicant. Based on coordination with the Applicant it is anticipated that this information will be considered in the revised TIS.

- iv. As previously noted, the scope of physical improvements required to provide acceptable sight distance to public roads should be clearly indicated on the plans.

Status: The submitted correspondences requests deferring this item until "detailed engineering" is completed.

- v. As previously noted, confirm that the sight distance measurements consider the widening (approximately seven feet) of West Pleasant Grove Road required to meet Code. $\{\S 149-903.A(2)\}$

Status: The submitted correspondences indicates that the measurements are based on the existing roadway.

- vi. Provide calculations supporting the assumed diversions associated with Orvis Way and the proposed Collector Road. Additionally, cross-reference the Collector Road diversions within the body of the study with the figures in Appendix K.

Status: Supplemental materials have been submitted in response to this comment. Coordination is on-going.

- vii. The Travel Time Comparisons presented in Appendix K should be revised to address the following:
 - (1) Verify the assumed route lengths. The Diversion Routes generally appear to be shorter than the Base conditions.
 - (2) Ensure that the impacts of the regular queuing along US Route 202 North during the morning peak, extending from the interchange into the study area, is included.
 - (3) The evaluation of diversions should include an alternative that considers operations following the completion of the PennDOT improvements planned for US Route 202 and PA Route 926.



(4) The traffic calming anticipated to be installed along Bridlewood Boulevard should be considered.

Status: Supplemental materials have been submitted which address these comments.

viii. As previously noted, the anticipated increase in larger vehicles traveling along West Pleasant Grove Road and turning to/from New Street increases the possibility of potential vehicular conflicts. It is noted that:

(1) The Applicant has indicated a willingness to widen the roadway along the property frontage, but additional clarification regarding the specific scope of work is warranted.

(2) West Pleasant Grove Road is designated as a Collector Road and the total Right-of-way shall be 60 feet and cartway width shall be 28 feet. {§149-903.A(2)}

Status: The submitted correspondences indicates that the Applicant will widen West Pleasant Grove Road along the frontage to Collector Road standards.

ix. As previously noted, the future operations presented for PA Route 926 and New Street rely primarily on "optimized" traffic signal timings that appear unlikely to be approved by PennDOT. Written confirmation from PennDOT should be provided that the assumed "optimized" timings can be implemented. If confirmation cannot be provided an alternative analysis utilizing a timing approved by the Township should be provided.

Status: Based on direction from PennDOT it is anticipated that this analysis will be modified in the revised TIS.

x. As previously noted, the Cross Section Assumptions Exhibit for PA Route 926 and New Street in Appendix I is based on a traditional widening. Alternative alignments that minimize the number of properties from which right-of-way would be needed should be considered. Additionally, the Applicant is not precluded from coordinating with property owners to determine if the right-of-way could be reasonably obtained.

Status: The Applicant committed to PennDOT (and represented to the Planning Commission) that revised improvement concept(s) would be prepared for PennDOT and Township review and would be used to coordinate with the potentially affected property owners.

xi. As previously noted, Cost Estimates for necessary improvements to accommodate future traffic should be provided. {§149-804.A(10)}

Status: The submitted correspondences indicates that the Applicant will provide this information once there is "concurrence" regarding the scope of improvements.



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- xii. As previously noted, an Implementation Strategy for necessary improvements to accommodate future traffic should be provided. {§149-804.A(11)}

Status: The submitted correspondences indicates that the Applicant will provide this information once there is "concurrence" regarding the scope of improvements.

2. *The burden of proof shall be upon the applicant to prove to the satisfaction of the Board of Supervisors, by credible evidence, that the use will not result in or substantially add to a significant traffic hazard or significant traffic congestion. The peak traffic generated by the development shall be accommodated in a safe and efficient manner. Such analysis shall consider any improvements to streets that the applicant is committed to complete or fund. {§170-2009.D(1)(h)}*

- a. The conclusion that the project does not adversely impact the intersection of US Route 202 and PA Route 926 continues to be based in large part on assumed diversions. As noted above, additional supporting information and analyses should be provided.

Status: Supplemental materials have been submitted and coordination is on-going. The Applicant has yet to submit a revised TIS.

- b. The Applicant has indicated that turn lanes will be provided to accommodate post development volumes at the following intersections, but these improvements are not reflected on the plans:

- i. US Route 202 at Pleasant Grove Road – Southbound Right Turn

Status: The submitted correspondences indicates that the Applicant will make this improvement and that plans will be provided there is "concurrence" regarding the scope of improvements.

- ii. PA Route 926 at New Street – Eastbound Left Turn

Status: The submitted correspondence offers an opinion that this improvement is unwarranted. Based on direction from PennDOT it is anticipated that the analysis will be modified in the revised TIS.

- c. As previously noted:

- i. Additional grading and/or traffic management measures appear warranted to enhance safety at the three accesses proposed to have insufficient sight distance or the exact minimum distance (with no margin for error):

(1) Collector Road at PA Route 926 (grading)

(2) Road M at West Pleasant Grove Road (grading and/or roundabout)

(3) Collector Road at West Pleasant Grove Road (grading and/or roundabout)

Status: The submitted correspondences requests deferring addressing these items until "detailed engineering" is completed.



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- ii. In order to minimize external conflict points, promote internal connectivity, reduce the number of cul-de-sacs and enhance overall safety along West Pleasant Grove Road:
 - (1) Road M should be removed
 - (2) Roads L and N should be extended to form a single road

Status: The submitted "Alternate" plan removed the external access without connecting the internal roadways. It has been conveyed to the Applicant on several occasions that these items are intended to be addressed together: connect the internal roads (to remove the cul-de-sacs) and remove the external access.

- iii. The design of the internal Collector Road should incorporate suitable traffic calming measures to maintain a 35 mile per hour average travel speed.

Status: The submitted correspondences requests deferring this item until Land Development.

- iv. The submitted plans should be revised to ensure they accurately reflect existing driveways in the immediate vicinity of the site, in particular the exit-only driveway from the Westminster Presbyterian Church.

Status: The driveway is reflected on the plan but is difficult to discern due to drafting. It appears the proposed site access to West Pleasant Grove Road (via the Collector Road) will impact the Church Driveway. Provisions should be made for future access from the Westminster Presbyterian Church to the internal Collector Road at a mutually agreed upon location.

- v. The plans should identify the anticipated limits of required right-of-way and/or easements to accommodate the physical improvements associated with the PennDOT project at US Route 202 and PA Route 926.

Status: The submitted correspondences indicates that right-of-way is being offered. The Applicant does correctly note that the PennDOT project is not fully engineered. The plans should include a note indicating that other reasonable right-of-way and/or easement required for the improvements will be provided to PennDOT as needed.

- vi. The following internal roadways should be reconfigured to remove geometric irregularities:
 - (1) Road E and Road F (provide a curve)
 - (2) Road F and Road G (provide a curve)
 - (3) Road I and Road J (remove the jog within the intersection)

Status: The submitted materials do not adequately address these comments. The Applicant has represented to the Planning Commission that Stop signs will be used to compensate for these irregular designs. To date no information has been provided documenting that the signs would meet accepted warrants.



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- vii. Additional facilities should be provided to address non-vehicular connectivity, including:
- (1) A perimeter trail around the portion of the site west of the internal Collector Road. *{Westtown Township Comprehensive Plan Update, page 9-15}*
 - (2) Connections to existing and planned facilities along Dunvegan Road and within the Arborview neighborhood. *{Westtown Township Comprehensive Plan Update, page 9-15}*
 - (3) Sidewalks along proposed roads, including accessible crossings. *{§149-916}*
 - (4) Connectivity to pedestrian attractors, including Stetson Middle School, Westminster Presbyterian Church, and the existing retail uses at US Route 202 and PA Route 926. *{§149-916}*

Status: The submitted materials do not adequately address these comments. It is noted that a supplemental plan was presented to the Planning Commission which included a partial connection to Arborview and a trail from an internal roadway to the intersection of US Route 202 and PA Route 926.

- viii. Provisions should be made for future access from the Westminster Presbyterian Church to the internal Collector Road.

Status: The Alternate Plan does indicate a location for potential access. To date there is no information indicating that this location has been reviewed with the Church. Based on initial coordination with the Church a location further south along the Collector Road may be preferred.

- ix. Provisions should be made for School Bus Stops, including short-term parking for drop-off and pick-up.

Status: The submitted correspondences requests deferring this item until Land Development.

Please do not hesitate to contact me at 610.608.4336 or albert@federico-consulting.com should you have any questions or require additional information.

Sincerely,

A handwritten signature in black ink, appearing to read 'A. Federico', written over the typed name.

Albert Federico, P.E., PTOE