January 20, 2017

Mr. Chris Patriarca, AICP
Westtown Township
1039 Wilmington Pike
West Chester, PA 19382

RE: Crebilly Residential Development
Traffic Engineering Review
Westtown Township, Chester County, PA
McMahon Project No. 816451.11

Dear Mr. Patriarca:

McMahon Associates, Inc. is in receipt of Kimley-Horn and Associates, Inc.’s comment letter dated December 27, 2016 with regard to the Transportation Impact Study for the above referenced project. On behalf of the applicant, below is a summary of the TIS comments in italics, with our responses following each comment.

General

Comment #1: The materials provided to the Township do not clearly demonstrate that peak traffic will be accommodated in a safe and efficient manner, or identify improvements that the applicant is committed to complete or fund. [§170-2009 D(1)(h)]

Response: The TIS has been revised to address the Township’s comments, and demonstrates that efficient access to and from the proposed development can be provided, and furthermore, site-generated traffic is mitigated at the study area intersections with the committed improvements.

Comment #2: The proposed accesses and improvements along US 202 and PA 926 (Street Road) will require PennDOT approval as well as further action by the Township. The applicant should include the Township in all communications and correspondence with PennDOT.

Response: The applicant has and will continue to include the Township in all correspondence with PennDOT.
Transportation Impact Study

Comment #3: The intersection of New Street and West Pleasant Grove Road should be included in the study. [§149-804.A]

Response: The unsignalized intersection of New Street and West Pleasant Grove Road is included within the revised TIS.

Comment #4: The study should include a description of the internal road network, including proposed street width and non-vehicular accommodations.

Response: Please refer to the conditional use site plan for information regarding the internal road network.

Comment #5: The 2016 traffic volumes should be reviewed to verify the following:
   a. The null eastbound right turn volume from West Pleasant Grove Road to US 202 during the evening peak period.
   b. The decreased through volumes along US 202 compared to the most recent previous study of the subject site.

Response: a. At the intersection of U.S. Route 202 and West Pleasant Grove Road, the eastbound right-turn traffic movement was not summarized on the traffic count worksheets in error. The traffic count worksheets and corresponding traffic analyses have been revised in the TIS.

   b. Due to typical day-to-day traffic volume fluctuations and varying traffic signal operations, some traffic movements at U.S. Route 202 and Street Road (S.R. 0926) increased and some decreased compared to the previous study. The northbound and southbound U.S. Route 202 volumes are generally consistent between the counted intersections, and the traffic volumes were balanced upwards if needed.

Comment #6: Assess the magnitude of traffic associated with the pending Tigue Road residential development within East Bradford Township and include in the study if warranted.

Response: The 91-unit Tigue Road residential development will generate very little traffic through the study area, and is assumed to be part of the background traffic growth, as indicated in the revised TIS.

Comment #7: Revise the assumed distribution of traffic associated with the Arborview Commercial development to address the anticipated access/roadway connection from West Pleasant Grove Road to Stetson Middle School Drive.
Response: In the revised TIS, the traffic to be generated by this development has been distributed assuming the roadway connection and access, as requested.

Comment #8: Provide quantitative justification for the assumed project build-out based on experience with similar developments.

Response: With an estimated opening in 2018, a five-year build out was assumed based on the proposed development, the residential market, and past projects. This assumption equates to an average delivery of five to seven units per month. The traffic analysis was completed for a future build-out year of 2023 and a future design year of 2028, or five years beyond the anticipated build-out year.

Comment #9: The distribution of project traffic should be revised to consider:
   a. The location and density of dwellings throughout the site.
   b. Traffic accessing points north and west via New Street.

Response: The revised TIS includes the requested modifications to the site trip distributions. The location of the dwelling units and the roadway connections throughout the proposed development were also considered upon development of the site trip distributions. Previously, the distributions to/from New Street were based on previous studies that included two to three percent of the site traffic along New Street. Upon further review based on the recent 2016 traffic counts, five percent along each direction of New Street is appropriate.

Comment #10: The capacity analyses should be revised to utilize the appropriate heavy vehicle percentages from the submitted traffic counts.

Response: The heavy vehicle percentages documented within the traffic counts sheets are calculated for each movement. At signalized intersections, the traffic counts worksheets calculate the heavy vehicle percentages for right-turns versus right-turns on red separately. This information must be combined and the heavy vehicle percentages must be recalculated for input into the traffic analysis. For ease of review, the heavy vehicle percentages for the combined right-turn movements at signalized intersections are included within the traffic counts worksheets provided in the revised TIS.

Comment #11: The study should include post-development turn lane warrant analyses for the following intersections:
   a. PA 926 and New Street
   b. New Street and West Pleasant Grove Road
   c. US 202 and West Pleasant Grove Road (southbound right turn only)

Response: The revised TIS includes the requested turn lane warrant analyses.
Comment #12: Provide formal documentation of the status of the pending PennDOT project to improve the intersection of US 202 and PA 926. It is the Township’s understanding that the project is still in Preliminary Engineering, not Final Design.

Response: Based on the TIP and coordination with PennDOT’s consultant project manager, the current project schedule indicates an estimated construction start date in late 2018 or early 2019, with a construction completion date by the end of 2019. However, this schedule is dependent on moving through the project development process, with activities such as evaluation of project effect on the Westtown Inn (eligible for the historic register), Consulting Parties consultations, approval of overall environmental document, preliminary plan approvals, utility coordination, property acquisitions, and preparation of design plans and construction bid package.

Comment #13: The study should include an alternative analysis of US 202 and PA 926 without the anticipated PennDOT improvements.

Response: The revised TIS includes analysis of U.S. Route 202 and Street Road (S.R. 0926) both without and with PennDOT’s improvements, as requested.

Comment #14: Ensure that the sight distance for the West Pleasant Grove Road accesses are evaluated consistent with Township requirements. (§149-915K(5)) As presented it appears that improvements and/or alternative intersection control (e.g. roundabouts) may be warranted.

Response: The existing available sight distances at the proposed site access intersections along West Pleasant Grove Road, which is a Township roadway, meet PennDOT and Township requirements for all movements, with one exception. The available sight distance at the West Pleasant Grove Road and East Site Access does not meet PennDOT or Township sight distance criteria for the left-turn exiting movement due to the vertical curvature of the roadway. The applicant is committed to relocate this site access to the crest of the vertical curve to provide adequate sight distance.

Comment #15: The study assumes modified traffic signal timings at the intersection of PA 926 and New Street. The analyses should be revised to utilize the current signal timings and the study should note the modified timings as an improvement to be made by the applicant.

Response: The TIS has been revised, and indicates that the applicant will complete traffic signal retiming optimization.

Comment #16: The study must include a description of the necessary improvements to accommodate future traffic at the intersection of US 202 and PA 926. (§149-804.A(9))

Response: The revised TIS includes a description of the necessary improvements to accommodate the development traffic at the intersection.
If there are any questions or if additional information is needed, please feel free to contact me at nkline@mcmahonassociates.com or (610) 594-9995.

Sincerely,

Nicole R. Kline, P.E., PTOE
Senior Project Manager

NRK

cc: Albert Federico, P.E., PTOE, Kimley-Horn
    Robert Pingar, P.E., Westtown Township
    Andrew Semon, Toll Brothers
    Michael Downs, P.E., Toll Brothers
    Gregg Adelman, Esq., Kaplin Stewart