



pennsylvania
DEPARTMENT OF TRANSPORTATION

Date: 10/11/2019
Subject: Highway Occupancy Permit Application No. 196830, Cycle No.1 - Returned For Revisions
To: Toll PA XVIII, L.P.
250 Gibraltar Road
Horsham, PA 19044
From: PennDOT Engineering District 6-0
7000 Geerdes Boulevard
King of Prussia, PA 19406

Dear Applicant,

PennDOT has reviewed your application for completeness, consistency and compliance with applicable Department Regulations. This review has identified issues that must be addressed in order for our review to continue.

The Department's review comments are attached.

Once the comments have been addressed, please resubmit the application and associated material for further review.

Upon resubmission, the applicant's engineer should put together a letter that describes how each comment has been addressed and where each can be found. This will help expedite the review. For guidance on HOP applications refer to 67 PA Code, Chapter 441, Chapter 459 and PennDOT Publication 282, "Highway Occupancy Permit Guidelines". Additional comments may follow upon review of the resubmitted application.

If you have any questions regarding this matter, you may contact Drew Sirianni, at (215) 254-7893.

Response Comments

Date: 10/11/2019

Application Number: 196830, Cycle No.1

Form Letter Notes

(1) * Upon resubmission, the applicant's engineer must prepare a letter that describes how each comment has been addressed and where each can be found in the plan set.

* Additional comments may follow upon review of the resubmitted application. If you have any questions pertaining to the technical aspects of this review, please contact the Department's representative, Drew E. Sirianni, PE, PTOE of Pennoni at 215.254.7893 or DSirianni@Pennoni.com.

* For guidance on Highway Occupancy Permit applications refer to PA Code Title 67, Chapter 441, Chapter 459 and PennDOT Publication 282. This will help expedite the review.

General

- (1) This project must be coordinated with the Department project for improvements to the intersection of SR 0202 and SR 0926 (MPMS No. 95430). Contact the Department's consultant project manager, Paul Valliere, for coordination.
- (2) PLEASE SUBMIT A CHECK FOR \$100.00 MADE PAYABLE TO PENNDOT-ATTN: MARY ELLEN CULHANE, PERMITS SUPERVISOR, 7000 GEERDES BLVD. KING OF PRUSSIA, PA. 19406. PLEASE INCLUDE THE APPLICATION NUMBER ON THE CHECK FOR OUR REFERENCE.
- (3) PennDOT Form M-950MPC, Land Use Questionnaire, must be completed and submitted with all Highway Occupancy Permit applications. (Sections 619.2 and 1105 of the Municipal Planning Code and PennDOT Publication 282, Chapter 3.3)

Application

- (1) The application must be submitted in the name of the person who holds fee title to the land or a person who holds an estate or other legal interest in property, such as an easement, a lease, a license, subsurface rights, or an equitable interest under a sales agreement or option to purchase. Submit the supporting documentation with the next submission. (Pa Code Title 67, Chapter 441.3(b) and 441.5(b))
- (2) The proposed access must be revised from a driveway to a local road classification on the

ePermitting application. Please contact Mary Ellen Culhane, District 6 Permits Supervisor, at (610) 205-6825 to have the application modified.

(3) Please note that consistent with current Department Policy, applicants for Highway Occupancy Permits must apply for an EPS Business Partner ID (BPID). The EPS BPID is to be used in the establishment of a billing account for the invoicing of inspection costs. After an EPS BPID is obtained and activated by the applicant's system administrator, a user ID will then need to be created in order to ensure that the EPS BPID is integrated into EPS and searchable through the "looking glass" feature. Once this has been established, please provide the following information in the applicant contact information tab under "Applicant Team":

- BPID

- Contact information (name/title/phone/email) for a general contact person (person that typically deals with the Highway Occupancy Permit application process)

- Contact information (name/title/phone/email) for a billing contact person (person that typically deals with the Highway Occupancy Permit invoicing process)

For information on obtaining an EPS BPID, you may visit:

<https://www.dot14.state.pa.us/EPS/home/manageBPRegistration.jsp> (follow the instructions that are in the pink shaded row) or contact the ECMS Help Desk. Please be aware that having an ECMS BPID does not guarantee the establishment of an EPS BPID as they are not reciprocal to one another.

Free online tutorials are also available detailing BPID registration at:

<http://www.dot14.state.pa.us/epsTraining/BPID%20Registration%20for%20Municipalities%20and%20Planning%20Commissions.html>

Please note that there are two applicable tutorials on the webpage (tabs on the left side bar), one providing info on ECMS registration and one providing info on creating an EPS user.

Transportation Impact Study/Transportation Impact Assessment

(1) MITIGATION

a. The intersection of Wilmington Pike (SR 0202) and Skiles Boulevard/Stetson School Drive is projected to have an increase in delay due to diverted traffic in conjunction with the new connector road required for this development. Provide mitigation.

b. Concept plans of full mitigation must be prepared with sufficient detail to describe their feasibility. The plans must also show right-of-way lines. The plan scale should be 50-scale unless otherwise agreed to at the scoping meeting. Ensure that the travel lane and shoulder widths are in accordance with PennDOT's Resurfacing, Restoration and Rehabilitation (3-R) Design Criteria

found in PennDOT Publication 13M, Design Manual Part 2. Please note that the concept plan will be reviewed to determine if the recommended improvements are feasible. A full review of the plans will be completed upon submission of the Highway Occupancy Permit (HOP) package.

(2) INTERSECTION CONTROL EVALUATION (ICE) POLICY

a. This HOP application is expected to include the creation of a medium volume or high volume local road, the addition of a leg to an existing intersection (SR 0926 and Bridlewood Blvd), the addition of a turning lane at an existing intersection (SR 0926 and Bridlewood Blvd), and modification of control at an existing intersection (SR 0926 and Bridlewood Blvd). As such, the applicant shall comply with PennDOT's Intersection Control Evaluation (ICE) Policy. Please refer to Appendix AI of Publication 10X (DM-1X) and the ICE portion of PennDOT's Traffic Signal Portal for additional information, guidance, and standard forms.

(3) TURN LANE WARRANTS

a. Based on the submitted turn lane warrant analysis, left turn lanes are needed on all 4 approaches at the intersection of Street Road (SR 0926) and New Street. Revise the TIS to provide this improvement and include a conceptual plan to show how it will be constructed.

b. Based on the turn lane warrant analysis, a right turn deceleration lane is needed on the southbound approach of Wilmington Pike (SR 0202) at W Pleasant Grove Rd. Please update the "Committed Improvements" section of the TIS to identify that the lane will be constructed by the applicant.

c. The report should include a traffic signal warrant analysis and turn lane warrant analysis section along with summary of results.

d. Please include the input page of the traffic signal warrant analysis in the appendices.

(4) Side-by-side eastbound and westbound left turn lanes must be provided on W Pleasant Grove Road between Collector Road and Orvis Road.

(5) A dedicated right-turn lane along westbound Street Road (SR 0926) along the Robinson Tract property frontage is proposed but not shown on the Synchro files. Please verify and revise.

(6) TRAFFIC SIGNAL WARRANTS

a. The report indicates that a signal is warranted at the site driveway access with Street Road, however all Traffic Signal Warrant analyses in Appendix G (all Alternatives) do not indicate whether volumes utilized are for the 2030 Design Year or 2025 Build-Out Year. Please clarify.

b. If signalization is the chosen alternative for the intersection of Street Road (SR 0926) and Bridlewood Boulevard/ Site Access, it is likely that signalization won't meet warrants for several years while the site is built out. As such, traffic volumes must be monitored during development to determine when a traffic signal is warranted. An intersection monitoring condition statement will

be required.

(7) MUNICIPAL COORDINATION

- a. Provide documentation from Westtown Township indicating their review/acceptance of the study.
- b. Provide documentation from Thornbury Township indicating their review/acceptance of the study showing a signalized access along Street Rd (SR 0926) opposite Bridlewood Blvd.

(8) TRIP DIVERSIONS

- a. 50 percent of southbound Wilmington Pike (SR 0202) right turns to eastbound Street Road (SR 0926) were diverted to Orvis Way. Provide justification for such a substantial amount of trips.

(9) MULTI-MODAL

- a. In the Executive Summary and study recommendations, indicate that all improvements will be constructed to accommodate non-motorized access/circulation and be ADA-compliant unless otherwise approved by the Department. Describe how these connections connect to existing non-motorized facilities (e.g., Township Trails Plan). If pedestrian accommodations are not proposed, engineering justification must be provided in accordance with PennDOT Publications 236, 46, and 149. Walking school children and school bus stops shall also be noted.
- b. The study must describe how the proposed development was designed to accommodate pedestrians, bicycles and transit operations.

(10) Provide an updated site plan and/or conceptual improvement plan that reflects all the latest findings of the study and developer commitments.

(11) Provide photographs at all study intersections, including the proposed access driveways. Photos must be in color, 4"X6" in size, and two views of each approach must be provided (approximately 200 feet from the intersection and approximately 50 feet from the intersection showing the opposite approach).

(12) CRASH DATA AND ANALYSIS

- a. Contact the municipality to obtain non-reportable crash data for the study area intersections. Include this crash data in the analysis if it is available.
- b. The traffic crash data analyses for several of the study area intersections/corridors indicate that crash trends exist, particularly at signalized intersections within the study area. Discuss how traffic generated from the development may impact these locations, and if any improvements would be beneficial in mitigating these trends.

(13) QUEUE ANALYSIS

- a. The available storage for eastbound left turns at Wilmington Pike (SR 0202) and Skiles Boulevard/Stetson School Drive is 200 feet. The future queue with development is 478 feet. This

will block the through and right turn movements. Please revise the analysis and recommendations to address this queue.

b. The available storage for southbound right turns at Wilmington Pike (SR 0202) and Skiles Boulevard/Stetson School Drive is 200 feet. The future queue with development of southbound traffic is 700 feet. This will block the right turn movements. Please revise the analysis and recommendations to address this queue.

c. The available storage for southbound left turns at Street Road (SR 0926) and Bridlewood Boulevard/Collector Road is 150 feet. The future queue with development of southbound through/right traffic is 360 feet. This will block the left turn movements. Please revise the analysis and recommendations to address this queue.

Sight Distance- Driveways/Local Roads

- (1) Please be advised that pursuant to and in accordance with Title 67, Chapter 441.8(h)(2)(iv) of the code, the Safe Stopping Sight Distance is the absolute minimum acceptable sight distance for any driveway. It is the designer's responsibility to ensure that this minimum requirement is satisfied. Furthermore, it should also be understood that any comments made (or guidance given) in this correspondence are preliminary in nature and the Department reserves the right to change, alter, withdraw, or amend them as it deems necessary in the future.

Signal Section (Publication 46, 148 And 149)

- (1) a. The Peak Hour warrant would not apply for this location.
 - b. Provide signal plans for review.
 - c. Provide a TE-160 form and resolution.
 - d. Provide a Traffic Signal Design Report.
 - e. Interconnect proposed signal at Street/Bridlewood and Street/New signal, and provide communications back to the District Office.
 - f. The intersection of SR 0202 and SR 0926 is scheduled to be adaptive under an active state project. The 165-second cycle being proposed is not realistic, even for an adaptive system. This intersection has capacity concerns.
 - g. Refer to the TIS comments regarding the left turn warrants at the intersection of Street Road (SR 0926) and New Street.

Drainage

- (1) Please be aware that the installation of drainage facilities within the Legal Right-of-Way may

necessitate additional permitting requirements, including, but not limited to, a separate Highway Occupancy Permit from the Municipality for the future maintenance of the new drainage facilities. Specific information relating to five potential drainage scenarios, as well each scenario's submission requirements, is presented in Publication 282.