Appendix A

(Part 3)

Misc.

- ☒ Correspondence

(per PennDOT publication ‘Policies and Procedures for Transportation Impact Studies’ dated January 28, 2009.)

Correspondence

Dynamic Traffic, LLC
www.dynamictraffic.com
826 Newtown Yardley Road | Suite 201
Newtown, PA 18940
T. 732.681.0760

November 8, 2019
Via Email (RA-pdDist80signals@pa.gov)

PennDOT Engineering District 8-0
2140 Herr Street
Harrisburg, PA 17103-1699

Attn: Mazhar Malik, Permits Manager

RE: Scoping Meeting Request
Proposed 7-Eleven with Fueling Station
and Fast Food Restaurant
147 Gettysburg Pike & South Market St (SR 0114)
Parcel No. 42-28-2419-018 & 42-2419-131
Township of Upper Allen, Cumberland County, PA
DT # 3283-99-000T

Dear Mr. Malik:

This office is in the planning stages of the construction of a 7-Eleven convenience store with fueling station and a fast food restaurant with drive-thru (The Project) located within the northeast quadrant of the intersection of South Market Street (SR 0114) and Gettysburg Pike in the Township of Upper Allen, Cumberland County, Pennsylvania. Prior to moving ahead with fully engineering the plans, our office would like to request a scoping meeting with the Department. Our intention, subsequent to the scoping meeting, would be to submit a Highway Occupancy Permit application to the Department.

The site is designated as Parcel Numbers 42-28-2419-018 & 42-2419-131 and is currently developed with "Maggie's Italian Ice & Frozen Custard" and a residential dwelling. It is proposed to demolish the existing buildings and construct a 5,000 SF 7-Eleven convenience store with 16 fueling positions and a 2,072 SF fast food restaurant with drive-thru. Access to The Project will be provided via a right turn in/right turn out driveway along South Market Street (SR 0114), a right turn in/right turn out driveway along Gettysburg Pike and a full movement driveway along Gettysburg Pike.

In compliance with the Transportation Impact Study Scoping Meeting Application requirements, we offer the following:

- Scoping Meeting Date: TBD
- Applicant: Highview Commercial
- Applicant's Consultant: Dynamic Traffic, LLC
- Applicant's Primary Contact: Corey Chase, PE & Kevin Savage

1. **Location of Proposed Development**
   - PennDOT Engineering District: 8-0
   - County: Cumberland
   - Municipality: Upper Allen Township
   - State Route: South Market Street (SR 0114), Segment 0235/Offset 0000-0400

2. **Description of Proposed Development**
   - Proposed Site Access:
     i. Right turn in/right turn out driveway along South Market Street (SR 0114)
     ii. Right turn in/right turn out driveway along Gettysburg Pike
     iii. Full movement driveway along Gettysburg Pike
   - Proposed Land Use:
     i. 5,000 SF Super Convenience Market/Gas Station with 16 Fueling Positions
     ii. 2,072 SF Fast Food Restaurant with Drive-Thru
   - Community Linkages: None

3. **Development Schedule and Staging**
   - Anticipated Opening Date: 2021
   - Full Buildout Date: 2021
   - Describe Proposed Development Schedule/Staging: N/A

4. **Trip Generation**
   - Trip generation for the existing and proposed developments is/will be based on the ITE publication *Trip Generation Manual, 10th Edition* utilizing the following Land Use Codes (LUC).
     i. Proposed Use: LUC 934 – Fast-Food Restaurant with Drive-Thru Window
     ii. Proposed Use: LUC 960 – Super Convenience Market/Gas Station

     Table I below details the daily trip generation for The Project while Table II details the peak hour trip generation.

Table I
Daily Trip Generation

Land Use	Weekday			Weekend		
	In	Out	Total	In	Out	Total
2,072 SF Fast Food Restaurant with Drive-Thru Window	488	488	976	639	638	1,277
5,000 SF Super Convenience Market/Gas Station	2,094	2,094	4,188	1,750	1,750	3,500
Total Proposed	**2,582**	**2,582**	**5,164**	**2,389**	**2,388**	**4,777**

Table II
Peak Hour Trip Generation

Land Use	AM PSH			PM PSH			Weekend PSH		
	In	Out	Total	In	Out	Total	In	Out	Total
2,072 SF Fast Food Restaurant with Drive-Thru Window	42	41	83	35	33	68	58	56	114
5,000 SF Super Convenience Market/Gas Station	211	211	422	173	173	346	160	159	319
Total Proposed	**253**	**252**	**505**	**208**	**206**	**414**	**218**	**215**	**433**

5. Estimated Daily Trip Generation/Driveway Classification

a. Estimated Daily Trip Generation of Proposed Development: 5,164 trips/day
b. Driveway Classification Based on Trip Generation and One Access Point: High Volume Driveway

6. Transportation Impact Study Required?

- Yes. Site is expected to generate 100 or more additional trips entering or exiting the development during any one-hour time period.

7. Transportation Impact Assessment Required?

- N/A

8. TIS Study Area

- Intersections:
  i. South Market Street (SR 0114) & Gettysburg Pike
  ii. South Market Street (SR 0114) & US 15 Southbound Ramps
  iii. South Market Street (SR 0114) & Site Driveway
  iv. Gettysburg Pike & Northern Site Driveway
  v. Gettysburg Pike & Southern Site Driveway

9. Study Area Type

- Urban
- South Market Street (SR 0114) is classified as a Minor Arterial Highway in the vicinity of the site.

10. TIS Analysis Periods and Times

- Peak Hours:
  i. Weekday AM Peak Hour (7:00 AM to 9:00 AM)
  ii. Weekday PM Peak Hour (4:00 PM to 6:00 PM)
  iii. Saturday Midday Peak Hour (11:00 AM to 1:00 PM)
- Study Periods:
  i. Existing Conditions (2019)
  ii. Build/No-Build Conditions (2021)
  iii. Design Horizon Year Build/No-Build Conditions (2026)

11. Traffic Adjustment Factors

a. Seasonal Adjustment: N/A
b. Annual Base Traffic Growth: 0.74% (PennDOT BPR Growth Factors for August 2019 to July 2020 – Cumberland County Urban Non-Interstate)
c. Pass-By Trips:
    a. LUC 934 – 49% for weekday morning peak hour and 50% for weekday evening peak hour (ITE Trip Generation Handbook, 3rd Edition); 50% for weekend peak hour
    b. LUC 960 – 76% for weekday morning peak hour, 76% for weekday evening peak hour and 50% for weekend peak hour (ITE Trip Generation Handbook, 3rd Edition)
d. Captured Trips for Multi-Use Sites:
    a. Weekday AM and PM peak hours in accordance with ITE Trip Generation Handbook, 3rd Edition
    b. Saturday Midday peak hour in accordance with ITE Trip Generation Handbook, 2nd Edition
    c. Internal Capture spreadsheets are appended. Table III below details the peak hour trip generation associated with The Project including internal capture rates.

Table III
Peak Hour Trip Generation Considering Internal Capture

Land Use	Trip Type	AM PSH			PM PSH			Weekend PSH		
		In	Out	Total	In	Out	Total	In	Out	Total
2,072 SF Fast Food Restaurant with Drive-Thru	Total	42	41	83	35	33	68	58	56	114
	Internal	21	6	27	10	14	24	18	16	34
	External	21	35	56	25	19	44	40	40	80
5,000 SF Super Convenience Market/Gas Station	Total	211	211	422	173	173	346	160	159	319
	Internal	6	21	27	14	10	24	16	18	34
	External	205	190	395	159	163	322	144	141	285
Total Proposed	Total	253	252	505	208	206	414	218	215	433
	Internal	27	27	54	24	24	48	34	34	68
	External	**226**	**225**	**451**	**184**	**182**	**366**	**184**	**181**	**365**

e. Modal Split Reductions: N/A
f. Other Reductions: N/A

12. Other Projects Within Study Area to be Added to Base Traffic

- To be determined at the scoping meeting

13. Trip Distribution and Assignment

- To be determined using existing traffic patterns

14. Approval of Data Collection Elements and Methodologies

- Manual Turning Movement (MTM) counts to be conducted during the analysis peak hours at the proposed study area intersections.

15. Capacity/LOS Analysis

- Capacity/LOS Analysis will be conducted using Synchro 10 software in accordance with Highway Capacity Manual (HCM) 6th Edition methodologies. Synchro files will be provided with the submission of the TIS.

16. Roadway Improvements/Modifications By Others to be Included

- To be determined at the scoping meeting

17. Other Analyses Required

a. Sight Distance Analysis: A sight distance analysis will be conducted at the proposed site driveway along South Market Street (SR 0114); however, it is anticipated that sight distance requirements can be met.
b. Signal Warrant Analysis: N/A
c. Required Signal Phasing/Timing Modifications: To be determined
d. Traffic Signal Corridor/Network Analysis: N/A
e. Analysis of the Need for Turning Lanes: Turn lane warrant analyses will be conducted for the South Market Street (SR 0114) driveway per Publication 46, Chapter 11.
f. Turning Lane Lengths: If required, turn lane lengths will be based on the 95th percentile queues and Publication 46 requirements.
g. Left Turn Signal Phasing Analysis: To be determined
h. Queueing Analysis: 50th & 95th percentile queue analysis will be conducted using Synchro 10 software in accordance with HCM 6th Edition methodologies.
i. Gap Studies: To be determined
j. Crash Analysis: To be determined
k. Weaving Analysis: N/A
l. Other Required Studies: N/A

18. Additional Comments or Recommendations Relative to the Scope of the TIS

- N/A

To assist you in this request, the following information is enclosed for your review:

1. A copy of a *Conceptual Site Plan 'A'*, prepared by Dynamic Engineering, dated October 31, 2019.
2. A copy of the *5 Mile Site Radius Map* for The Project.
3. A copy of the *1 Mile Site Radius Map* for The Project.
4. A copy of the Internal Capture Calculations for The Project

We trust that the enclosed information will be adequate to schedule a scoping meeting on the proposed project. Please review this information at your earliest convenience and contact our office so that we may schedule the meeting. Should you have any questions or require any additional information to assist you in this request, please do not hesitate to contact me.

Sincerely,

Dynamic Traffic, LLC

Corey M. Chase, PE
Principal

Kevin Savage
Project Engineer

KMS
Enclosures

c: Jim Henry (via email w/ enclosures)

File: T:\TRAFFIC PROJECTS\3283 Highview Commercial\99-000T General Job\Design\2019-11-08 PennDOT Scoping Request (147 Gettysburg Pike - Upper Allen)\2019-11-08 PennDOT Scoping Meeting Request.docx

Dynamic Traffic, LLC
www.dynamictraffic.com
826 Newtown Yardley Road | Suite 201
Newtown, PA 18940
T. 732.681.0760

November 8, 2019
Via Email (RA-pdDist80signals@pa.gov)

PennDOT Engineering District 8-0
2140 Herr Street
Harrisburg, PA 17103-1699

Attn: Mazhar Malik, Permits Manager

RE: Scoping Meeting Request
Proposed 7-Eleven with Fueling Station
and Fast Food Restaurant
225 Gettysburg Pike & South Market St (SR 0114)
Parcel No. 42-28-2419-057, 42-28-2419-043
& 42-28-2419-137
Township of Upper Allen, Cumberland County, PA
DT # 3283-99-000T

Dear Mr. Malik:

This office is in the planning stages of the construction of a 7-Eleven convenience store with fueling station (The Project) located within the southeast quadrant of the intersection of South Market Street (SR 0114) and Gettysburg Pike in the Township of Upper Allen, Cumberland County, Pennsylvania. Prior to moving ahead with fully engineering the plans, our office would like to request a scoping meeting with the Department. Our intention, subsequent to the scoping meeting, would be to submit a Highway Occupancy Permit application to the Department.

The site is designated as Parcel Numbers 42-28-2419-057, 42-28-2419-043 & 42-28-2419-137 and is currently developed with two residential dwellings. It is proposed to construct a 5,000 SF 7-Eleven convenience store with 16 fueling positions. Access to The Project will be provided via a right turn in/right turn out driveway along South Market Street (SR 0114), a right turn in/right turn out driveway along Gettysburg Pike and a full movement driveway along Gettysburg Pike.

In compliance with the Transportation Impact Study Scoping Meeting Application requirements, we offer the following:

- Scoping Meeting Date: TBD
- Applicant: Highview Commercial
- Applicant's Consultant: Dynamic Traffic, LLC
- Applicant's Primary Contact: Corey Chase, PE & Kevin Savage

1. **Location of Proposed Development**
   - PennDOT Engineering District: 8-0
   - County: Cumberland
   - Municipality: Upper Allen Township
   - State Route: South Market Street (SR 0114), Segment 0235/Offset 0000-0400

2. **Description of Proposed Development**
   - Proposed Site Access:
     i. Right turn in/right turn out driveway along South Market Street (SR 0114)
     ii. Right turn in/right turn out driveway along Gettysburg Pike
     iii. Full movement driveway along Gettysburg Pike
   - Proposed Land Use:
     i. 5,000 SF Super Convenience Market/Gas Station with 16 Fueling Positions
   - Community Linkages: None

3. **Development Schedule and Staging**
   - Anticipated Opening Date: 2021
   - Full Buildout Date: 2021
   - Describe Proposed Development Schedule/Staging: N/A

4. **Trip Generation**
   - Trip generation for the existing and proposed developments is/will be based on the ITE publication *Trip Generation Manual, 10th Edition* utilizing the following Land Use Codes (LUC).
     i. Proposed Use: LUC 960 – Super Convenience Market/Gas Station

     Table I below details the daily trip generation for The Project while Table II details the peak hour trip generation.

Table I
Daily Trip Generation

Land Use	Weekday			Weekend		
	In	Out	Total	In	Out	Total
5,000 SF Super Convenience Market/Gas Station	2,094	2,094	4,188	1,750	1,750	3,500

Table II
Peak Hour Trip Generation

Land Use	AM PSH			PM PSH			Weekend PSH		
	In	Out	Total	In	Out	Total	In	Out	Total
5,000 SF Super Convenience Market/Gas Station	211	211	422	173	173	346	160	159	319

5. **Estimated Daily Trip Generation/Driveway Classification**
   a. Estimated Daily Trip Generation of Proposed Development: 4,188 trips/day
   b. Driveway Classification Based on Trip Generation and One Access Point: High Volume Driveway

6. Transportation Impact Study Required?

- Yes. Site is expected to generate 100 or more additional trips entering or exiting the development during any one-hour time period.

7. Transportation Impact Assessment Required?

- N/A

8. TIS Study Area

- Intersections:
  i. South Market Street (SR 0114) & Gettysburg Pike
  ii. South Market Street (SR 0114) & US 15 Southbound Ramps
  iii. South Market Street (SR 0114) & Site Driveway
  iv. Gettysburg Pike & Northern Site Driveway
  v. Gettysburg Pike & Southern Site Driveway

9. Study Area Type

- Urban
- South Market Street (SR 0114) is classified as a Minor Arterial Highway in the vicinity of the site.

10. TIS Analysis Periods and Times

- Peak Hours:
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  ii. Weekday PM Peak Hour (4:00 PM to 6:00 PM)
  iii. Saturday Midday Peak Hour (11:00 AM to 1:00 PM)
- Study Periods:
  i. Existing Conditions (2019)
  ii. Build/No-Build Conditions (2021)
  iii. Design Horizon Year Build/No-Build Conditions (2026)

11. Traffic Adjustment Factors

a. Seasonal Adjustment: N/A
b. Annual Base Traffic Growth: 0.74% (PennDOT BPR Growth Factors for August 2019 to July 2020 – Cumberland County Urban Non-Interstate)
c. Pass-By Trips:
   a. LUC 960 – 76% for weekday morning peak hour, 76% for weekday evening peak hour and 50% for weekend peak hour (ITE Trip Generation Handbook, 3rd Edition)
d. Captured Trips for Multi-Use Sites: N/A
e. Modal Split Reductions: N/A
f. Other Reductions: N/A

12. Other Projects Within Study Area to be Added to Base Traffic

- To be determined at the scoping meeting

13. Trip Distribution and Assignment

- To be determined using existing traffic patterns

14. Approval of Data Collection Elements and Methodologies

- Manual Turning Movement (MTM) counts to be conducted during the analysis peak hours at the proposed study area intersections.

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- Capacity/LOS Analysis will be conducted using Synchro 10 software in accordance with Highway Capacity Manual (HCM) 6th Edition methodologies. Synchro files will be provided with the submission of the TIS.

16. Roadway Improvements/Modifications By Others to be Included

- To be determined at the scoping meeting

17. Other Analyses Required

a. Sight Distance Analysis: A sight distance analysis will be conducted at the proposed site driveway along South Market Street (SR 0114); however, it is anticipated that sight distance requirements can be met.
b. Signal Warrant Analysis: N/A
c. Required Signal Phasing/Timing Modifications: To be determined
d. Traffic Signal Corridor/Network Analysis: N/A
e. Analysis of the Need for Turning Lanes: Turn lane warrant analyses will be conducted for the South Market Street (SR 0114) driveway per Publication 46, Chapter 11.
f. Turning Lane Lengths: If required, turn lane lengths will be based on the 95th percentile queues and Publication 46 requirements.
g. Left Turn Signal Phasing Analysis: To be determined
h. Queueing Analysis: 50th & 95th percentile queue analysis will be conducted using Synchro 10 software in accordance with HCM 6th Edition methodologies.
i. Gap Studies: To be determined
j. Crash Analysis: To be determined
k. Weaving Analysis: N/A
l. Other Required Studies: N/A

18. Additional Comments or Recommendations Relative to the Scope of the TIS

- N/A

To assist you in this request, the following information is enclosed for your review:

1. A copy of a *Conceptual Site Plan 'A'*, prepared by Dynamic Engineering, dated October 29, 2019.
2. A copy of the *5 Mile Site Radius Map* for The Project.
3. A copy of the *1 Mile Site Radius Map* for The Project.

We trust that the enclosed information will be adequate to schedule a scoping meeting on the proposed project. Please review this information at your earliest convenience and contact our office so that we may schedule the meeting. Should you have any questions or require any additional information to assist you in this request, please do not hesitate to contact me.

Sincerely,

Dynamic Traffic, LLC

Corey M. Chase, PE
Principal

Kevin Savage
Project Engineer

KMS
Enclosures

c: Jim Henry (via email w/ enclosures)

File: T:\TRAFFIC PROJECTS\3283 Highview Commercial\99-000T General Job\Design\2019-11-08 PennDOT Scoping Request (225 Gettysburg Pike - Upper Allen)\2019-11-08 PennDOT Scoping Meeting Request.docx

ALPHA CONSULTING ENGINEERS, INC.

HOP APPLICATION MEETING MINUTES

RE: South Market and Gettysburg Pike
Upper Allen Township
Cumberland County, PA

Pursuant to PennDOT requirements we have prepared minutes for the meeting held at PennDOT's District 8-0 office on January 16, 2020 regarding the above referenced project.

Attendees:

Rich Alandar	PennDOT District 8-0 Permits
Bill Warden	PennDOT District 8-0 Permits
Eric Kinard	PennDOT District 8-0 Traffic
Dean Noles	PennDOT District 8-0 Traffic
Jen Boyer	Upper Allen Township
John Toner	Upper Allen Township
David Gunia	Highview Commercial – Applicant's Representative
Tim Johnson	KCI – Applicant's Access/ Traffic Consultant
John Murphy	ALPHA – Applicant's Site Engineer
Mark Allen	ALPHA – Applicant's Traffic Engineer

Please see attached sign-in sheet for email and telephone information.

Presentation:

The meeting started at approximately 10:15 AM with introductions, followed by a brief overview by John Murphy outlining proposed site development of two separate parcels located on the east side of Gettysburg Pike at the intersection with South Market Street (SR0114). A separate scoping application was submitted for each parcel. The proposed 7-11 Convenience Store and fast food restaurant will be located on the northern parcel. The southern parcel is proposed to be developed with a hotel, a restaurant, and a small retail center. John stated that the applicant team would be submitting one study for both parcels. PennDOT and the Township agreed that was appropriate.

North Side Discussion Summary:

Eric Kinard noted the challenges involved with obtaining access in the limited access portion of South Market Street. A right out would not be allowed. If a right in was allowed it would have to be designed to prohibit left turning movements. John Murphy provided an updated sketch plan which addressed PennDOT's concern over the location of the full movement driveway

being located as far as possible from the signalized intersection. Eric agreed and noted that comments (2)(3) go away based on the revised sketch. John Murphy confirmed that the driveway proposed along South Market Street was within the limited access right-of-way. KCI will be handling the limited access application and will coordinate with PennDOT.

Eric went over the additional information that PennDOT would require in the traffic study including; (1) Peak hour trip generation for convenience market should be evaluated for all applicable variables in the ITE Trip Generation Manual and the more conservative trip generation applied; (2) Weekday turn movement data would require three consecutive hours of data collection; (3) the intersection of S Market Street (SR 0114) and US 15 Northbound Ramps will need to be included in the study area; (4) include the future 'with development' scenarios in the analysis. The applicant's team agreed to include the items.

For internal capture percentages for Saturday peak hours Eric indicated that the average of the AM and PM peak hours can be used.

Eric asked if there were any other projects within study area to be added to the study. Jen Boyer said that the office project located on the northeast quadrant of the signalized intersection was getting underway. The applicant's team will include the information from that study in the background traffic. Jen also stated that the Louden Center traffic may need to be included and would check on the time frame of that project to see if it was moving forward.

Mark Allen said that the revised trip generation and trip distribution would be included with the revised scope application for approval prior to submitting the TIS. For queue analysis Mark pointed out that synchro displays the HCM6 queue lengths as decimal vehicle equivalents (i.e. 1.0 veh) as opposed to 25 feet of lane storage length. This typically generates a comment from PennDOT that the values on the worksheets don't match the values in the queue tables. Eric said that an average vehicle length calculation would be needed. Mark said the lengths would be computed from the average values in the HCM6 being 25 feet per passenger vehicle and 45 feet for heavy vehicles. The remainder of items discussed briefly were standard PennDOT technical requirements as listed under comment 17 which were agreed to by all parties.

South Side Discussion Summary:

Eric Kinard stated that an access to South Market Street from this side would not be allowed. Eric also questioned the development of the additional area shown on the concept plan. John Murphy explained that the concept plan will be updated to include the previously mentioned hotel, restaurant, and retail. Since the technical comments for the south side parcel were similar to those generated for the north side, it was agreed that one scope application for both parcels would be revised and resubmitted for review based on the comments and discussion.

The meeting concluded at approximately 11:15 AM. These meeting minutes were recorded and revised based on meeting notes from the subject meeting.

pennsylvania
DEPARTMENT OF TRANSPORTATION

Highway Occupancy Permits Meeting

Date: 1/16/2020 Time: 9:00 am

Meeting Location: Franklin Room

114/8-2

~~422/85~~

SR: ~~22/8-5~~ Segment: _____ Nearest Intersection: _____

Township/Borough: _____ County: Cumberland 8-2/ ~~Dauphin 8-5~~

Meeting Reason: TIS Scoping Meetings

Development Name: 7-Eleven

Meeting Requested By: Kevin Savage Phone: (732) 681-0760 ext. 3124

Township/Borough Invited: ☒ Yes ☐ No Attorney Invited? ☐ Yes ☒ No

Name/ Phone#/ Email Address:	Organization:	Job Title:
Mazhar Malik/ 717-787-8789/mmalik@pa.gov	PennDOT Dist. 8-0 Permits	District Permit Manager
Rich Alandar/ 717-787-5179/ralandar@pa.gov	PennDOT Dist. 8-0 Permits	Assistant Permit Manager
Eric Kinard/ 717-787-9237/ekinard@pa.gov	PennDOT Dist. 8-0 Traffic	Signal & Congestion Mgt. Supervisor
Dean Noles 717-772-0976/dnoles@pa.gov	PennDOT Dist. 8-0 Traffic	Traffic Control Specialist
Mark Allen mallen@alphaci.com	ALPHA CEI	Traffic Consultant
John Murphy jmurphy@alphaci.	Alpha	
David Gunia dgunia@highviewCommercial.com	Highview Commercial - Associate	
Tim Johnson tim.johnson@kci.com	KCI	
Jen Boyer jboyer@uatwp.org	Upper Allen Township	Comm. Dev. Director
John Toner jtoner@uatwp.org	Upper Allen Township	Planning Tech.
Bill Warden/ 717-705-0925/ Wilwarde@pa.gov/ PENNDOT/ Permit Supervisor		

- **Minutes of meeting will be prepared by the person requesting the meeting.**
- **A copy of this sign-in sheet will be distributed after the meeting.**
- **Department cannot accept any changes to the forms already approved by the Department.**
- **Department will not issue HOP until signal permit is issued and Right-of-way (ROW) plan is recorded in the County Courthouse.**
- **Engineer shall consider designing a roundabout which will reduce the maintenance cost for signal and will help lower taxes.**
- **Please submit a cross section of existing roadway where main driveway will be constructed.**
- **Please ensure that the width of existing shoulder is not reduced and bicyclists are accommodated.**
- **For E-Permitting and billing of inspection costs, please ensure that the Permittee is registered as a Business Partner in ECMS.**
- **All applications shall be submitted through the E-Permitting system website. Contact the County HOP where the work is being done with any questions.**
- **All future HOP correspondence shall be submitted to the HOP resource account at RA-PDDistrict80HOP@pa.gov.**

Draft Scope Application Comment Sheet

COUNTY:	Cumberland	MUNICIPALITY:	Upper Allen Township
JOB NAME:	7-11 Convenience Store with Gasoline and Restaurant	PREPARED BY:	Dynamic Traffic, LLC
APPLICANT:	Highview Commercial	REVIEW BY:	PennDOT / PAI

Please incorporate these comments into the revised Scoping Application and resubmit:

Scope Application Comments:

(1) LOCATION OF PROPOSED DEVELOPMENT: No comments.

(2) DESCRIPTION OF PROPOSED DEVELOPMENT:

1. The applicant shall identify and confirm that the proposed driveways/intersections are the best access plan. Plans should be evaluated based on operations of each driveway, impact on adjacent roadways, safety, and acceptability to the community. The applicant shall identify the different access options available to the subject property. Consider locating the full access driveway along Gettysburg Pike as far as possible from the signalized intersection of Gettysburg Pike and S. Market Street (SR 0114).
2. Both right-in/right-out driveways appear to be located within the functional area of the intersection of S Market Street (SR 0114) and Gettysburg Pike. Also, show and label the right-of-way lines on the Site Plan as it appears that the driveway along S Market Street (SR 0114) may be located within or very close to limited access right-of-way. Therefore, the right-in/right-out driveway along S Market Street (SR 0114) must be eliminated and consider eliminating the right-in/right-out driveway along Gettysburg Pike.
3. Consider providing a minimum throat length of 50 feet for the full access driveway to Gettysburg Pike.
4. The study should address community linkages (i.e. pedestrian, bicycle, and/or transit accommodations on the site and access to the neighboring properties).

(3) DEVELOPMENT SCHEDULE AND STAGING: No comments.

(4) TRIP GENERATION:

1. Per Pub. 282, for convenience stores the peak hour trip generation should be evaluated for all applicable variables in the ITE Trip Generation Manual and the more conservative trip generation applied.

(5) ESTIMATED DAILY TRIP GENERATION / DRIVEWAY CLASSIFICATION:

(a) Estimated Daily Trip Generation of Proposed Development: No comments.
(b) Driveway Classification Based on Trip Generation and One Access Point: No comments.

(6) TRANSPORTATION IMPACT STUDY REQUIRED? No comments.

(7) TRAFFIC IMPACT ASSESSMENT REQUIRED? No comments.

(8) TIS STUDY AREA:

1. The following information was not provided: Land use context (Refer to PennDOT Design Manual, Part 1X, Appendix B), Known Congestion Areas, Known Safety Concerns, Known

Environmental Constraints, Pedestrian/Bike Review (Community Centers, Parks, Schools, etc.), and Transit Review (Current routes/stops).

2. Include the intersection of S Market Street (SR 0114) and US 15 Northbound Ramps in the study area. Update all applicable sections of the scope application accordingly.
3. Provide documentation from Upper Allen Township and the Tri-County Regional Planning Commission indicating their review/acceptance of the scope and TIS. Address all comments to their satisfaction. Include documentation of correspondence within the TIS.

(9) STUDY AREA TYPE: No comments.

(10) TIS ANALYSIS PERIODS AND TIMES:

1. Weekday turning movement counts should be conducted from 6:00 AM to 9:00 AM and from 3:00 PM to 6:00 PM.
2. The study must include With Development Future Year analyses for the Opening and Design Horizon Years for two scenarios (no improvements and with improvements) in accordance with Step 9 of PennDOT's *Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits*.

(11) TRAFFIC ADJUSTMENT FACTORS:

(a) Seasonal Adjustment: No comments.
(b) Annual Base Traffic Growth: No comments.
(c) Pass-By Trips:

1. Provide justification for the Saturday peak hour pass-by trip rates since rates are not provided in the ITE Trip Generation Handbook, 3rd Edition.

(d) Captured Trips for Multi-Use Sites:

1. Utilize the Internal Trip Capture Estimation Tool from NCHRP Report 684 for the internal capture calculations.
2. The ITE Trip Generation Handbook, 3rd Edition does not provide internal capture percentages for the Saturday peak hour. Typically, the average of the AM and PM peak hours is used.

(e) Modal Split Reductions: No comments.
(f) Other Reductions: No comments.

(12) OTHER PROJECTS WITHIN STUDY AREA TO BE ADDED TO BASE TRAFFIC:

1. Confirm with Upper Allen Township if there are any adjacent developments within the study area that should be added to the base traffic. Include documentation of correspondence within the TIS.

(13) TRIP DISTRIBUTION AND ASSIGNMENT:

1. Provide trip distribution and assignment information including calculations and backup data to support the trip distribution percentages. A review of the backup data and methodologies will be required prior to the Department accepting the trip distribution. Consider submitting this for approval prior to submitting the TIS.

(14) APPROVAL OF DATA COLLECTION ELEMENTS AND METHODOLOGIES:

1. Weekday turning movement counts should be conducted from 6:00 AM to 9:00 AM and from 3:00 PM to 6:00 PM.

(15) CAPACITY / LOS ANALYSIS: No comments.

(16) ROADWAY IMPROVEMENTS / MODIFICATIONS BY OTHERS TO BE INCLUDED: No comments.

(17) OTHER NEEDED ANALYSES:

(a) Sight Distance Analysis:

1. Sight distance analyses should be completed for all existing and proposed access driveways and all local road intersections which provide access to the site and intersect a state route.

(b) Signal Warrant Analysis: No comments.

(c) Required Signal Phasing/Timing Modifications:

1. Signal phasing/timing modifications should be completed as deemed necessary.

(d) Traffic Signal Corridor/Network Analysis:

1. If timing modifications are being proposed at signals located within a coordinated traffic signal system, the study should address the need to retime the entire system if deemed necessary.

(e) Analysis of the Need for Turning Lanes:

1. Provide turn lane warrant analyses at all existing and proposed access driveways and at all local road intersections which provide access to the site and intersect a state route in accordance with Section 11.16 of PennDOT Publication 46.

(f) Turning Lane Lengths: No comments.

(g) Left Turn Signal Phasing Analysis:

1. Left-turn phasing analysis should be completed as deemed necessary.

(h) Queuing Analysis:

1. Queue analyses should be completed for all movements at all study intersections. 50th and 95th percentile queues from Synchro and 95th percentile queues from HCM, 6th Edition should be provided in the signalized intersection analyses and 95th percentile queues from HCM, 6th Edition should be provided in the unsignalized intersection analyses

(i) Gap Studies: No comments.

(j) Crash Analysis:

1. The most recent five years of crash data for each approach route should be obtained. The applicant shall analyze the crash data to determine if there are any crash patterns within the study area. The applicant should also contact the municipality for input regarding non-reportable crashes. Analysis of the crash data should include review of causation factors and patterns. Include the analysis of the crash data in an Appendix that is to be submitted under separate cover and sealed. Crash data is not for public consumption and is exempt from the Right to Know Law requests. Additional

information on the analysis of crash rates can be found in the Appendix of Publication 212, Item 2(1) and Publication 46, Chapters 11.1 and 11.3.

(k) Weaving Analysis: No comments.

(l) Other Required Studies: No comments.

(18) ADDITIONAL COMMENTS OR RECOMMENDATIONS RELATIVE TO THE SCOPE OF THE TIS:

1. The study should identify the driveway classification for each driveway serving the proposed development. If the design standards for the driveway classification cannot be met, provide an engineering justification explaining why and verify that driveway configurations won't unreasonably impact the state roads. For medium volume driveways, a median of sufficient length to accommodate the 95th percentile queue length must be provided, desirably 120'. For high volume driveways, a 150' median must be provided. Internal site driveways should not be located within these areas.

Draft Scope Application Comment Sheet

COUNTY:	Cumberland	MUNICIPALITY:	Upper Allen Township
JOB NAME:	7-11 Convenience Store with Gasoline	PREPARED BY:	Dynamic Traffic, LLC
APPLICANT:	Highview Commercial	REVIEW BY:	PennDOT / PAI

Please incorporate these comments into the revised Scoping Application and resubmit:

Scope Application Comments:

(1) LOCATION OF PROPOSED DEVELOPMENT:

1. The segment information for SR 0114 does not appear to be consistent with the straight-line diagram (SLD) data. The site is located along Segment 0234.

(2) DESCRIPTION OF PROPOSED DEVELOPMENT:

1. The site plan shows a proposed access to future development. Development of the remainder of the property should be accounted for in the trip generation.
2. The applicant shall identify and confirm that the proposed driveways/intersections are the best access plan. Plans should be evaluated based on operations of each driveway, impact on adjacent roadways, safety, and acceptability to the community. The applicant shall identify the different access options available to the subject property. Consider locating the full access driveway along Gettysburg Pike as far as possible from the signalized intersection of Gettysburg Pike and S. Market Street (SR 0114). Future development on the site as well as alignment of the proposed access with driveways on the opposite side of Gettysburg Pike should also be considered.
3. Both right-in/right-out driveways appear to be located within the functional area of the intersection of S Market Street (SR 0114) and Gettysburg Pike. Also, show and label the right-of-way lines on the Site Plan as it appears that the driveway along S Market Street (SR 0114) may be located within or very close to limited access right-of-way. Therefore, the right-in/right-out driveway along S Market Street (SR 0114) must be eliminated and consider eliminating the right-in/right-out driveway along Gettysburg Pike.
4. The study should address community linkages (i.e. pedestrian, bicycle, and/or transit accommodations on the site and access to the neighboring properties).

(3) DEVELOPMENT SCHEDULE AND STAGING: No comments.

(4) TRIP GENERATION:

1. Per Pub. 282, for convenience stores the peak hour trip generation should be evaluated for all applicable variables in the ITE Trip Generation Manual and the more conservative trip generation applied.
2. Remove the trip generation information for the weekend peak hour since Saturday peak hour analysis will not be required.

(5) ESTIMATED DAILY TRIP GENERATION / DRIVEWAY CLASSIFICATION:

(a) Estimated Daily Trip Generation of Proposed Development: No comments.
(b) Driveway Classification Based on Trip Generation and One Access Point: No comments.

(6) TRANSPORTATION IMPACT STUDY REQUIRED? No comments.

(7) TRAFFIC IMPACT ASSESSMENT REQUIRED? No comments.

(8) TIS STUDY AREA:

1. The following information was not provided: Land use context (Refer to PennDOT Design Manual, Part 1X, Appendix B), Known Congestion Areas, Known Safety Concerns, Known Environmental Constraints, Pedestrian/Bike Review (Community Centers, Parks, Schools, etc.), and Transit Review (Current routes/stops).
2. Include the intersection of S Market Street (SR 0114) and US 15 Northbound Ramps in the study area. Update all applicable sections of the scope application accordingly.
3. Provide documentation from Upper Allen Township and the Tri-County Regional Planning Commission indicating their review/acceptance of the scope and TIS. Address all comments to their satisfaction. Include documentation of correspondence within the TIS.

(9) STUDY AREA TYPE: No comments.

(10) TIS ANALYSIS PERIODS AND TIMES:

1. Weekday turning movement counts should be conducted from 6:00 AM to 9:00 AM and from 3:00 PM to 6:00 PM.
2. Saturday peak hour analysis will not be required.
3. The study must include With Development Future Year analyses for the Opening and Design Horizon Years for two scenarios (no improvements and with improvements) in accordance with Step 9 of PennDOT's *Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits*.

(11) TRAFFIC ADJUSTMENT FACTORS:

(a) Seasonal Adjustment: No comments.
(b) Annual Base Traffic Growth: No comments.
(c) Pass-By Trips:

1. Remove the pass-by information for the weekend peak hour since Saturday peak hour analysis will not be required.

(d) Captured Trips for Multi-Use Sites: No comments.
(e) Modal Split Reductions: No comments.
(f) Other Reductions: No comments.

(12) OTHER PROJECTS WITHIN STUDY AREA TO BE ADDED TO BASE TRAFFIC:

1. Confirm with Upper Allen Township if there are any adjacent developments within the study area that should be added to the base traffic. Include documentation of correspondence within the TIS.

(13) TRIP DISTRIBUTION AND ASSIGNMENT:

1. Provide trip distribution and assignment information including calculations and backup data to support the trip distribution percentages. A review of the backup data and methodologies will be required prior to the Department accepting the trip distribution. Consider submitting this for approval prior to submitting the TIS.

(14) APPROVAL OF DATA COLLECTION ELEMENTS AND METHODOLOGIES:

1. Weekday turning movement counts should be conducted from 6:00 AM to 9:00 AM and from 3:00 PM to 6:00 PM.

(15) CAPACITY / LOS ANALYSIS: No comments.

(16) ROADWAY IMPROVEMENTS / MODIFICATIONS BY OTHERS TO BE INCLUDED: No comments.

(17) OTHER NEEDED ANALYSES:

(a) Sight Distance Analysis:

1. Sight distance analyses should be completed for all existing and proposed access driveways and all local road intersections which provide access to the site and intersect a state route.

(b) Signal Warrant Analysis: No comments.

(c) Required Signal Phasing/Timing Modifications:

1. Signal phasing/timing modifications should be completed as deemed necessary.

(d) Traffic Signal Corridor/Network Analysis:

1. If timing modifications are being proposed at signals located within a coordinated traffic signal system, the study should address the need to retime the entire system if deemed necessary.

(e) Analysis of the Need for Turning Lanes:

1. Provide turn lane warrant analyses at all existing and proposed access driveways and at all local road intersections which provide access to the site and intersect a state route in accordance with Section 11.16 of PennDOT Publication 46.

(f) Turning Lane Lengths: No comments.

(g) Left Turn Signal Phasing Analysis:

1. Left-turn phasing analysis should be completed as deemed necessary.

(h) Queuing Analysis:

1. Queue analyses should be completed for all movements at all study intersections. 50th and 95th percentile queues from Synchro and 95th percentile queues from HCM, 6th Edition should be provided in the signalized intersection analyses and 95th percentile queues from HCM, 6th Edition should be provided in the unsignalized intersection analyses

(i) Gap Studies: No comments.

(j) Crash Analysis:

1. The most recent five years of crash data for each approach route should be obtained. The applicant shall analyze the crash data to determine if there are any crash patterns within the study area. The applicant should also contact the municipality for input regarding non-reportable crashes. Analysis of the crash data should include review of causation factors and patterns. Include the analysis of the crash data in an Appendix that is to be submitted under separate cover and sealed. Crash data is not for public consumption and is exempt from the Right to Know Law requests. Additional

information on the analysis of crash rates can be found in the Appendix of Publication 212, Item 2(1) and Publication 46, Chapters 11.1 and 11.3.

(k) Weaving Analysis: No comments.

(l) Other Required Studies: No comments.

(18) ADDITIONAL COMMENTS OR RECOMMENDATIONS RELATIVE TO THE SCOPE OF THE TIS:

1. The study should identify the driveway classification for each driveway serving the proposed development. If the design standards for the driveway classification cannot be met, provide an engineering justification explaining why and verify that driveway configurations won't unreasonably impact the state roads. For medium volume driveways, a median of sufficient length to accommodate the 95th percentile queue length must be provided, desirably 120'. For high volume driveways, a 150' median must be provided. Internal site driveways should not be located within these areas.

7-11 Upper Allen Twp Meeting Minutes

Mark Allen <mallen@alphacei.com>

Tue 3/10/2020 1:17 PM

To: Malik, Mazhar <MMALIK@pa.gov>; RA-PDDISTRICT80HOP@pa.gov <RA-PDDISTRICT80HOP@pa.gov>; RA-pdDist80Signals@pa.gov <RA-pdDist80Signals@pa.gov>
Cc: Timothy Johnson <Timothy.Johnson@kci.com>; Jennifer Boyer <jboyer@uatwp.org>; John Toner <jtoner@uatwp.org>

1 attachments (690 KB)

2020-01-16 PennDOT Scoping Meeting Minutes.pdf;

Mazhar Malik
Highway Occupancy Permit Manager
PennDOT District 8-0 Permits

Mazhar,

Please find attached meeting minutes for the meeting held January 16, 2020.
Thank you.

Mark Allen PLS, PE

ALPHA CONSULTING ENGINEERS, INC.
115 LIMEKILN ROAD P.O. BOX 'G'
NEW CUMBERLAND, PA. 17070
OFFICE 717-770-2500
FAX 717-770-2400
mallen@alphacei.com

RE: 7-11 Upper Allen Twp Meeting Minutes

Noles, Dean T <dnoles@pa.gov>

Mon 5/4/2020 1:42 PM

To: Mark Allen <mallen@alphacei.com>

Mark,

We have no comments for the meeting minutes.

Dean Noles | Traffic Control Specialist
PA Department of Transportation| PennDOT Engineering District 8-0
2140 Herr Street | Harrisburg PA 17103-1699
Phone: 717.772.0976 | Fax: 717.705.0375
www.penndot.gov

From: Mark Allen <mallen@alphacei.com>
Sent: Tuesday, March 10, 2020 1:17 PM
To: Malik, Mazhar <MMALIK@pa.gov>; PD, District 8-0 HOP <RA-PDDISTRICT80HOP@pa.gov>; PD, District 8-0 Signals <RA-pdDist80Signals@pa.gov>
Cc: Timothy Johnson <Timothy.Johnson@kci.com>; Jennifer Boyer <jboyer@uatwp.org>; John Toner <jtoner@uatwp.org>
Subject: [External] 7-11 Upper Allen Twp Meeting Minutes

Mazhar Malik
Highway Occupancy Permit Manager
PennDOT District 8-0 Permits

Mazhar,

Please find attached meeting minutes for the meeting held January 16, 2020.
Thank you.

Mark Allen PLS, PE

ALPHA CONSULTING ENGINEERS, INC.
115 LIMEKILN ROAD P.O. BOX 'G'
NEW CUMBERLAND, PA. 17070
OFFICE 717-770-2500
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mallen@alphacei.com

ALPHA CONSULTING ENGINEERS, INC.

PLANNING ♦ ENGINEERING ♦ SURVEYING

May 04, 2020

Mazhar Malik
District Permit Manager
PennDOT – District 8-0
2140 Herr Street
Harrisburg, PA 17103

RE: Scoping Meeting Application
151-237 Gettysburg Pike
Upper Allen Township
Cumberland County, PA

Dear Mr. Malik:

Per the scoping meeting held on January 16, 2020 we are resubmitting the application to the department's traffic unit, revised per Township, County, and PennDOT comments received during that meeting. The application provides a significant portion of the traffic study including: traffic count data, trip generation estimation, trip generation worksheets, proposed distribution and assignment of estimated development generated trips, future volume worksheets, and related figures.

Thank you for your consideration of this application. If you require any additional information, please contact me at 717-770-2500.

Sincerely,

Mark E. Allen, P.L.S., P.E.

ALPHA CONSULTING ENGINEERS, INC.

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May 5, 2020

Mazhar Malik
District Permit Manager
PennDOT Engineering District 8-0
2140 Herr Street
Harrisburg, PA 17103-1699

RE: Scoping Meeting Application
North Lot 151-237 Gettysburg Pike
Upper Allen Township
Cumberland County, PA

Dear Mr. Malik:

Please find the following responses in bold text to review comments (in italics) received at our meeting on January 16, 2020 for the above referenced application. The scoping application will be revised to reflect the comments and responses herein.

PennDOT Scoping Application Comments:

1) LOCATION OF PROPOSED DEVELOPMENT:
No Comments.

2) DESCRIPTION OF PROPOSED DEVELOPMENT:
1. *The applicant shall identify and confirm that the proposed driveways/intersections are the best access plan. Plans should be evaluated based on operations of each driveway, impact on adjacent roadways, safety, and acceptability to the community. The applicant shall identify the different access options available to the subject property. Consider locating the full access driveway along Gettysburg Pike as far as possible from the signalized intersection of Gettysburg Pike and S. Market Street (SR 0114).*
The full movement driveway has been moved further to the north, further away from the signalized intersection. A revised concept plan is included with the revised scoping application.

2. *Both right-in/right-out driveways appear to be located within the functional area of the intersection of S Market Street (SR 0114) and Gettysburg Pike. Also, show and*

label the right-of-way lines on the Site Plan as it appears that the driveway along S Market Street (SR 0114) may be located within or very close to limited access right-of-way. **The proposed driveway is within the limited access right-of-way. Right-of-way lines have been labeled on the concept plan.** *Therefore, the right-in/right-out driveway along S Market Street (SR 0114) must be eliminated and consider eliminating the right-in/right-out driveway along Gettysburg Pike.* **A right-in access is being proposed along South Market Street as opposed to the right-in/right-out. The right-in/right-out driveway along Gettysburg Pike has been eliminated.**

3. *Consider providing a minimum throat length of 50 feet for the full access driveway to Gettysburg Pike.* **The proposed throat length was revised and is greater than 50 feet.**

4. *The study should address community linkages (ie. pedestrian, bicycle, and/or transit accommodations on the site and access to the neighboring properties).* **The study will include the discussion on community linkages.**

3) DEVELOPMENT SCHEDULE AND STAGING:
No Comments.

4) TRIP GENERATION:
1. *Per Pub. 282, for convenience stores the peak hour trip generation should be evaluated for all applicable variables in the ITE Trip Generation Manual and the more conservative trip generation applied.* **Both fueling positions and building gross square feet were evaluated with the more conservative values provided in the revised scoping application.**

5) ESTIMATED DAILY TRIP GENERATION *I* DRIVEWAY CLASSIFICATION:
(a) Estimated Daily Trip Generation of Proposed Development:
No comments.

(b) Driveway Classification Based on Trip Generation and One Access Point:
No comments.

6) TRANSPORTATION IMPACT STUDY REQUIRED?
No comments.

7) TRAFFIC IMPACT ASSESSMENT REQUIRED?
No comments.

8) TIS STUDY AREA:

1. *The following information was not provided: Land use context (Refer to PennDOT Design Manual, Part I X, Appendix B), Known Congestion Areas, Known Safety Concerns, Known Environmental Constraints, Pedestrian/Bike Review (Community Centers, Parks, Schools, etc.), and Transit Review (Current routes/stops).* **A revised scoping application is provided with the requested information.**

2. *Include the intersection of S Market Street (SR 01 14) and US 15 Northbound Ramps in the study area. Update all applicable sections of the scope application accordingly.* **The intersection has been included in the revised scoping application.**

3. *Provide documentation from Upper Allen Township and the Tri-County Regional Planning Commission indicating their review/acceptance of the scope and TIS. Address all comments to their satisfaction. Include documentation of correspondence within the TIS.* **Documentation will be included in the correspondence section of the TIS.**

9) STUDY AREA TYPE:

No comments.

10) TIS ANALYSIS PERIODS AND TIMES:

1. *Weekday turning movement counts should be conducted from 6:00 AM to 9:00 AM and from 3:00 PM to 6:00 PM.* **Weekday turning movement counts are provided with the noted continuous three-hour periods.**

2. *The study must include With Development Future Year analyses for the Opening and Design Horizon Years for two scenarios (no improvements and with improvements) in accordance with Step 9 of PennDOT's Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits.* **The 'with development future year' analyses requirement has been added to the revised scoping application.**

11) TRAFFIC ADJUSTMENT FACTORS:

(a) Seasonal Adjustment:

No comments.

(b) Annual Base Traffic Growth:

No comments.

(c) Pass-By Trips:

1. *Provide justification for the Saturday peak hour pass-by trip rates since rates are not provided in the ITE Trip Generation Handbook, 3rd Edition.* **The pass-by trip rate for the Saturday peak hour has been removed where not supported by the ITE publication.**

(d) Captured Trips for Multi-Use Sites:

1. *Utilize the Internal Trip Capture Estimation Tool from NCHRP Report 684 for the internal capture calculations.* **Internal Trip Capture is not supported under NCHRP Report 684 as the proposed development does not exceed the minimum required 100,000 square feet of building space nor have more than two separate land used on one lot to be classified as a mixed used development. Per NCHRP Report 684, the uses on the south lot shall be classified as a Shopping Center.**

2. *The ITE Trip Generation Handbook, 3rd Edition does not provide internal capture percentages for the Saturday peak hour. Typically, the average of the AM and PM peak hours is used.* **Noted.**

(e) Modal Split Reductions:

No comments.

(f) Other Reductions:

No comments.

12) OTHER PROJECTS WITHIN STUDY AREA TO BE ADDED TO BASE TRAFFIC:

1. *Confirm with Upper Allen Township if there are any adjacent developments within the study area that should be added to the base traffic. Include documentation of correspondence within the TIS.* **A written request for this information has been made to Upper Allen Township. This request will be included within the correspondence section of the study.**

13) TRIP DISTRIBUTION AND ASSIGNMENT:

1. *Provide trip distribution and assignment information including calculations and backup data to support the trip distribution percentages. The proximity to US 15 should be considered in the evaluation. A review of the backup data and methodologies will be required prior to the Department accepting the trip distribution. Consider submitting this for approval prior to submitting the TIS.* **Trip distribution and assignment information is included with the revised scoping application.**

14) APPROVAL OF DATA COLLECTION ELEMENTS AND METHODOLOGIES:

1. *Weekday turning movement counts should be conducted from 6:00 AM to 9:00 am and from 3:00 PM to 6:00 PM.* **Weekday turning movement counts will be provided with the noted continuous three-hour periods.**

15) CAPACITY / LOS ANALYSIS:

No comments.

16) ROADWAY IMPROVEMENTS / MODIFICATIONS BY OTHERS TO BE INCLUDED:

No comments.

17) OTHER NEEDED ANALYSES:

(a) Sight Distance Analysis:

1. *Sight distance analyses should be completed for all existing and proposed access driveways and all local road intersections which provide access to the site and intersect a state route.* **The scoping application has been revised to note this requirement.**

(b) Signal Warrant Analysis:

No comments.

(c) Required Signal Phasing/Timing Modifications:

1. *Signal phasing/timing modifications should be completed as deemed necessary.* **Noted.**

(d) Traffic Signal Corridor Network Analysis:

1. *If timing modifications are being proposed at signals located within a coordinated traffic signal system, the study should address the need to retime the entire system if deemed necessary.* **The scoping application has been revised to note this requirement.**

(e) Analysis of the Need for Turning Lanes:

1. *Provide turn lane warrant analyses at all existing and proposed access driveways and at all local road intersections which provide access to the site and intersect a state route in accordance with Section 11.16 of PennDOT Publication 46.* **The scoping application has been revised to note the requirement for the proposed driveways.**

(f) Turning Lane Lengths:

No comments.

(g) Left Turn Signal Phasing Analysis:

1. *Left-turn phasing analysis should be completed as deemed necessary.* **Noted**

(h) Queuing Analysis:

1. *Queue analyses should be completed for all movements at all study intersections. 50th and 95 th percentile queues from Synchro and 95 th percentile queues from HCM 6th Edition should be provided in the signalized intersection analyses and 95 th percentile queues from HCM 6th Edition should be provided in the unsignalized intersection analyses.* **The scoping application has been revised to note this requirement.**

(i) Gap Studies:

No comments.

(j) Crash Analysis:

1. *The most recent five years of crash data for each approach route should be obtained. The applicant shall analyze the crash data to determine if there are any crash patterns within the study area. The applicant should also contact the municipality for input regarding non-reportable crashes. Analysis of the crash data should include review of causation factors and patterns. Include the analysis of the crash data in an Appendix that is to be submitted under separate cover and sealed. Crash data is not for public consumption and is exempt from the Right to Know Law requests. Additional information on the analysis of crash rates can be found in the Appendix of Publication 212, Item 2(1) and Publication 46, Chapters 11.1 and 11.3.* **A crash study will be provided as a separate appendix.**

(k) Weaving Analysis:

No comments.

(I) Other Required Studies:

No comments.

(18) ADDITIONAL COMMENTS OR RECOMMENDATIONS RELATIVE TO THE SCOPE OF THE TIS:

1. *The study should identify the driveway classification for each driveway serving the proposed development. If the design standards for the driveway classification cannot be met, provide an engineering justification explaining why and verify that driveway configurations won 't unreasonably impact the state roads. For medium volume driveways, a median of sufficient length to accommodate the 95 th percentile queue length must be provided, desirably 120'. For high volume driveways, a 150' median must be provided. Internal site driveways should not be located within these areas.* **The driveways access state roads have been revised and are shown on the included concept plan within the revised scoping application.**

If you have any further questions or comments, please contact our office.

Sincerely,

Mark E. Allen, P.L.S., P.E.

ALPHA CONSULTING ENGINEERS, INC.

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May 5, 2020

Mazhar Malik
District Permit Manager
PennDOT Engineering District 8-0
2140 Herr Street
Harrisburg, PA 17103-1699

RE: Scoping Meeting Application
South Lot 151-237 Gettysburg Pike
Upper Allen Township
Cumberland County, PA

Dear Mr. Malik:

Please find the following responses in bold text to review comments (in italics) received at our meeting on January 16, 2020 for the above reference application. The scoping application has been revised to reflect the comments and responses herein.

PennDOT Scoping Application Comments:

1) LOCATION OF PROPOSED DEVELOPMENT:
   1. *The segment information for SR 0114 does not appear to be consistent with the straight-line diagram (SLD) data. The site is located along Segment 0234.* **Access to this lot is via Gettysburg Pike, a Township road. Segments and Offsets are not applicable.**

2) DESCRIPTION OF PROPOSED DEVELOPMENT:
   1. *The site plan shows a proposed access to future development. Development of the remainder of the property should be accounted for in the trip generation.* **The information has been included in the trip generation.**

   2. *The applicant shall identify and confirm that the proposed driveways/intersections are the best access plan. Plans should be evaluated based on operations of each driveway, impact on adjacent roadways, safety, and acceptability to the community. The applicant shall identify the different access options available to the subject property. Consider locating the full access driveway along Gettysburg Pike as far as*

possible from the signalized intersection of Gettysburg Pike and S. Market Street (SR 0114). Future development on the site as well as alignment of the proposed access with driveways on the opposite side of Gettysburg Pike should also be considered. **A revised concept plan is included within the revised scoping application.**

3. *Both right-in/right-out driveways appear to be located within the functional area of the intersection of S Market Street (SR 0114) and Gettysburg Pike. Also, show and label the right-of-way lines on the Site Plan as it appears that the driveway along S Market Street (SR 0114) may be located within or very close to limited access right-of-way. Therefore, the right-in/right-out driveway along S Market Street (SR 0114) must be eliminated and consider eliminating the right-in/right-out driveway along Gettysburg Pike.* **Noted. The access to South Market Street has been eliminated.**

4. *The study should address community linkages (i.e. pedestrian, bicycle, and/or transit accommodations on the site and access to the neighboring properties).* **The study will include the discussion on community linkages.**

3) DEVELOPMENT SCHEDULE AND STAGING:
No Comments.

4) TRIP GENERATION:
1. *Per Pub. 282, for convenience stores the peak hour trip generation should be evaluated for all applicable variables in the ITE Trip Generation Manual and the more conservative trip generation applied.* **Peak hour trip generation has been evaluated where necessary.**

2. *Remove the trip generation information for the weekend peak hour since Saturday peak hour analysis will not be required.* **Per the scoping meeting, a Saturday peak hour analysis is included for the Retail component.**

5) ESTIMATED DAILY TRIP GENERATION *I* DRIVEWAY CLASSIFICATION:
(a) Estimated Daily Trip Generation of Proposed Development:
No comment.

(b) Driveway Classification Based on Trip Generation and One Access Point:
No comment.

6) TRANSPORTATION IMPACT STUDY REQUIRED?
No comment.

7) TRAFFIC IMPACT ASSESSMENT REQUIRED?
No comment.

8) TIS STUDY AREA:

1. *The following information was not provided: Land use context (Refer to PennDOT Design Manual, Part IX, Appendix B), Known Congestion Areas, Known Safety Concerns, Known Environmental Constraints, Pedestrian/Bike Review (Community Centers, Parks, Schools, etc.), and Transit Review (Current routes/stops).* **A revised scoping application is provided with the requested information.**

2. *Include the intersection of S Market Street (SR 0114) and US 15 Northbound Ramps in the study area. Update all applicable sections of the scope application accordingly.* **The intersection has been included in the revised scoping application.**

3. *Provide documentation from Upper Allen Township and the Tri-County Regional Planning Commission indicating their review/acceptance of the scope and TIS. Address all comments to their satisfaction. Include documentation of correspondence within the TIS.* **Documentation will be included in the correspondence section of the TIS.**

9) STUDY AREA TYPE:

No comments.

10) TIS ANALYSIS PERIODS AND TIMES:

1. *Weekday turning movement counts should be conducted from 6:00 AM to 9:00 AM and from 3:00 PM to 6:00 PM.* **Weekday turning movement counts are provided with the noted continuous three-hour periods.**

2. *Saturday peak hour analysis will not be required.* **See comment 4-2 above.**

3. *The study must include With Development Future Year analyses for the Opening and Design Horizon Years for two scenarios (no improvements and with improvements) in accordance with Step 9 of PennDOT's Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits.* **The 'with development future year' analyses requirement has been added to the revised scoping application.**

11) TRAFFIC ADJUSTMENT FACTORS:

(a) Seasonal Adjustment:

No comments.

(b) Annual Base Traffic Growth:

No comments.

(c) Pass-By Trips:

1. *Remove the pass-by information for the weekend peak hour since Saturday peak hour analysis will not be required.* **The pass-by trip rate for the Saturday peak hour has been removed where not supported by the ITE publication**

(d) Captured Trips for Multi-Use Sites:
No comments.

(e) Modal Split Reductions:
No comments.

(f) Other Reductions:
No comments.

12) OTHER PROJECTS WITHIN STUDY AREA TO BE ADDED TO BASE TRAFFIC:

1. *Confirm with Upper Allen Township if there are any adjacent developments within the study area that should be added to the base traffic. Include documentation of correspondence within the TIS.* **A written request for this information has been made to Upper Allen and Monroe Township. This request will be included within the correspondence section of the study.**

13) TRIP DISTRIBUTION AND ASSIGNMENT:

1. *Provide trip distribution and assignment information including calculations and backup data to support the trip distribution percentages. The proximity to US 15 should be considered in the evaluation. A review of the backup data and methodologies will be required prior to the Department accepting the trip distribution. Consider submitting this for approval prior to submitting the TIS.* **Trip distribution and assignment information is included with the revised scoping application.**

14) APPROVAL OF DATA COLLECTION ELEMENTS AND METHODOLOGIES:

1. *Weekday turning movement counts should be conducted from 6:00 AM to 9:00 AM and from 3:00 PM to 6:00 PM.* **Weekday turning movement counts will be provided with the noted continuous three-hour periods**

15) CAPACITY / LOS ANALYSIS:
No comments.

16) ROADWAY IMPROVEMENTS / MODIFICATIONS BY OTHERS TO BE INCLUDED:
No comments.

17) OTHER NEEDED ANALYSES:

(a) Sight Distance Analysis:

1. *Sight distance analyses should be completed for all existing and proposed access driveways and all local road intersections which provide access to the site and*

intersect a state route. **The scoping application has been revised to note this requirement.**

(b) Signal Warrant Analysis:

No comments.

(c) Required Signal Phasing/Timing Modifications:

1. *Signal phasing/timing modifications should be completed as deemed necessary.* **Noted.**

(d) Traffic Signal Corridor Network Analysis:

1. *If timing modifications are being proposed at signals located within a coordinated traffic signal system, the study should address the need to retime the entire system if deemed necessary.* **The scoping application has been revised to note this requirement.**

(e) Analysis of the Need for Turning Lanes:

1. *Provide turn lane warrant analyses at all existing and proposed access driveways and at all local road intersections which provide access to the site and intersect a state route in accordance with Section 11.16 of PennDOT Publication 46.* **The scoping application has been revised to note the requirement for the proposed driveways.**

(f) Turning Lane Lengths:

No comments.

(g) Left Turn Signal Phasing Analysis:

1. *Left-turn phasing analysis should be completed as deemed necessary.* **Noted.**

(h) Queuing Analysis:

1. *Queue analyses should be completed for all movements at all study intersections. 50th and 95th percentile queues from Synchro and 95th percentile queues from HCM, 6th Edition should be provided in the signalized intersection analyses and 95th percentile queues from HCM, 6th Edition should be provided in the unsignalized intersection analyses.* **The scoping application has been revised to note this requirement.**

(i) Gap Studies:

No comments.

(j) Crash Analysis:

1. *The most recent five years of crash data for each approach route should be obtained. The applicant shall analyze the crash data to determine if there are any crash patterns within the study area. The applicant should also contact the municipality for input regarding non-reportable crashes. Analysis of the crash data should include*

review of causation factors and patterns. Include the analysis of the crash data in an Appendix that is to be submitted under separate cover and sealed. Crash data is not for public consumption and is exempt from the Right to Know Law requests. Additional information on the analysis of crash rates can be found in the Appendix of Publication 212, Item 2(1) and Publication 46, Chapters 11.1 and 11.3. **A crash study will be provided as a separate appendix.**

(k) Weaving Analysis:
No comments.

(I) Other Required Studies:
No comments.

(18) ADDITIONAL COMMENTS OR RECOMMENDATIONS RELATIVE TO THE SCOPE OF THE TIS:

1. *The study should identify the driveway classification for each driveway serving the proposed development. If the design standards for the driveway classification cannot be met, provide an engineering justification explaining why and verify that driveway configurations won't unreasonably impact the state roads. For medium volume driveways, a median of sufficient length to accommodate the 95th percentile queue length must be provided, desirably 120'. For high volume driveways, a 150' median must be provided. Internal site driveways should not be located within these areas.* **The driveways accessing state roads have been revised and are shown on the included concept plan within the revised scoping application.**

If you have any further questions or comments, please contact our office.

Sincerely,

Mark E. Allen, P.L.S., P.E.

Draft Scope Application Comment Sheet

COUNTY:	Cumberland	MUNICIPALITY:	Upper Allen Township
JOB NAME:	151-237 Gettysburg Pike (7-11)	PREPARED BY:	Alpha Consulting Engineers, Inc.
APPLICANT:	Highway Commercial	REVIEW BY:	PennDOT / PAI

Please incorporate these comments into the revised Scoping Application and resubmit:

Scope Application Comments:

(1) LOCATION OF PROPOSED DEVELOPMENT: No comments.

(2) DESCRIPTION OF PROPOSED DEVELOPMENT:

1. The proposed break in limited access right-of-way along SR 0114 will require coordination and approval from the District Excess Land Committee. Central Office approval will also be required.

(3) DEVELOPMENT SCHEDULE AND STAGING: No comments.

(4) TRIP GENERATION:

1. The trip generation estimates for the Shopping Center land use appear to be unrealistic based on the size of the shopping center. For shopping centers less than 50,000 SF, consider using the average rate instead of the equation.

(5) ESTIMATED DAILY TRIP GENERATION / DRIVEWAY CLASSIFICATION:

(a) Estimated Daily Trip Generation of Proposed Development: No comments.
(b) Driveway Classification Based on Trip Generation and One Access Point: No comments.

(6) TRANSPORTATION IMPACT STUDY REQUIRED? No comments.

(7) TRAFFIC IMPACT ASSESSMENT REQUIRED? No comments.

(8) TIS STUDY AREA:

1. Include the intersection of SR 0114 and Bumble Bee Hollow Road / Kim Acres Drive in the study area. Update all applicable sections of the scope application accordingly. The need to include this intersection is based on the revised trip generation information provided and may not be necessary upon revising the scope application to address the comments on the trip generation and trip distribution & assignment.
2. The study must document the land use context of the subject property, and along key area roadways. The applicant should identify the land use context that seems most representative of a roadway segment as a whole. Land use contexts should not be defined in too fine a manner; avoid segments of less than 600-feet in length. There are seven different land use contexts, in order of intensity: rural, suburban neighborhood, suburban corridor, suburban center, town/village neighborhood, town center, and urban core. For more information on land use context, see PennDOT Design Manual, Part 1X, Appendix B.

(9) STUDY AREA TYPE: No comments.

(10) TIS ANALYSIS PERIODS AND TIMES: No comments.

(11) TRAFFIC ADJUSTMENT FACTORS:

(a) Seasonal Adjustment: No comments.
(b) Annual Base Traffic Growth: No comments.
(c) Pass-By Trips: No comments.
(d) Captured Trips for Multi-Use Sites: No comments.
(e) Modal Split Reductions: No comments.
(f) Other Reductions: No comments.

(12) OTHER PROJECTS WITHIN STUDY AREA TO BE ADDED TO BASE TRAFFIC:

1. The trips from other developments should be assigned through the SR 0114 and US 15 Ramps intersections.

(13) TRIP DISTRIBUTION AND ASSIGNMENT:

1. Provide calculations and backup data to support the trip distribution and assignment percentages.
2. For new trips, the entering and exiting percentages for each node should be the same (i.e., calculate the distribution percentages using the total volume on each node instead of calculating separate percentages for entering and exiting trips).
3. Since the distribution percentages for new trips and pass-by trips are different, the methodology used does not appear to reflect the correct number of trips. The trips shown in Figure 4 should be for new trips only, based on the new trip distribution percentages. The new trips should then be combined with the pass-by trips, which are calculated separately, to obtain the total trips.
4. It is understood that some of the trips may include route diversion due to the driveway locations. However, the pass-by trip distribution percentages appear to be incorrect. For example, for the North Lot, the percentages on the eastbound approach of SR 0114 should be calculated based on the eastbound through traffic and eastbound right-turning traffic at the intersection of SR 0114 & Gettysburg Pike. The eastbound left-turning traffic is accounted for in the northbound Gettysburg Pike traffic passing the site. Revise the pass-by percentages, as necessary.
5. Verify the pass-by trip distribution percentages for northbound Gettysburg Pike for the North Lot. The volume on this approach includes the right-turning traffic from SR 0114 which would enter via the driveway along SR 0114 and exit via the driveway along Gettysburg Pike. Revise the pass-by percentages, as necessary.
6. Include distribution and assignment information at both proposed site driveways for the South Lot.
7. Revise the traffic volume worksheets and figures as necessary.

(14) APPROVAL OF DATA COLLECTION ELEMENTS AND METHODOLOGIES:

1. The Saturday peak hour turning movement count data printout for the SR 0114 and US 15 Southbound Ramps is not consistent with the traffic volume worksheet and figures.
2. There appear to be differences in traffic volumes between the adjacent intersections along SR 0114. Verify that all traffic volumes balance between intersections, conservatively adjusting the volumes up, if it is found that balancing is appropriate and necessary.

(15) CAPACITY / LOS ANALYSIS: No comments.

(16) ROADWAY IMPROVEMENTS / MODIFICATIONS BY OTHERS TO BE INCLUDED: No comments.

(17) OTHER NEEDED ANALYSES:

(a) Sight Distance Analysis: No comments.

(b) Signal Warrant Analysis: No comments.
(c) Required Signal Phasing/Timing Modifications: No comments.
(d) Traffic Signal Corridor/Network Analysis: No comments.
(e) Analysis of the Need for Turning Lanes: No comments.
(f) Turning Lane Lengths:

1. 95^{th} percentile queue lengths should also be evaluated when determining turning lane lengths.

(g) Left Turn Signal Phasing Analysis: No comments.
(h) Queuing Analysis: No comments.
(i) Gap Studies: No comments.
(j) Crash Analysis: No comments.
(k) Weaving Analysis: No comments.
(l) Other Required Studies: No comments.

(18) ADDITIONAL COMMENTS OR RECOMMENDATIONS RELATIVE TO THE SCOPE OF THE TIS: No comments.

Memo

DATE: June 29, 2020

TO: Upper Allen Township Planning Commission
Wayne Willey, Chair

FROM: Jennifer M. Boyer, AICP
Community Development Director/Planner

John Toner
Planning Technician

RE: Revised Report and Comments for 151 Gettysburg Pike
Plan Type: Preliminary/Final Subdivision/Land Development
UAT File No.: 20-06-01
Property Parcel ID: 42-28-2419-131 & 42-28-2419-018
Property Address: 147 & 151 Gettysburg Pike
Zoning District: Highway Commercial (C-2)

The proposed project is the for consolidation and redevelopment of two properties addressed at 147 & 151 Gettysburg Pike. The project will consolidate both parcels into a single parcel, demolish the existing buildings on site and construct a one story, 5,000 square foot convenience store (7-11) with 16 gas dispensing stations, and a one story, 3,000 square foot restaurant with a drive thru.

The proposed development will be served by both public water and sewer. There is a small area of wetlands on the property, but no steep slopes or other environmentally sensitive areas. The proposed use of the subject properties is consistent with the Upper Allen Township Zoning Ordinance and Comprehensive Plan.

The Applicant has requested the following waiver, modification & deferrals:

1. Modify the requirements of Section 220-16.A(1) to install curbs along all proposed access drives, parking compounds, and along building fronts.

    a. *Staff Comment: Staff sees no issues with this request, as the lack of curbing will occur within private areas. Curbing is proposed through most of the site but is not proposed where runoff from pavement will directly enter a rain garden/storm basin. This modification was also approved for previous plan designs to this site.*

8. The dumpster pad location is sitting within the proposed drainage easement. In accordance with Section 220-23.A(2) of the Codified Ordinance of Upper Allen Township, nothing shall be placed, planted or set within an easement area.

STORMWATER

9. The site plan proposes to direct stormwater runoff through the proposed dumpster enclosure. The detail included on Sheet 12 of 15 must be updated to specify provisions to provide unimpeded flow through the back wall of the structure.

10. The Underground Detention Basin No. 2 basin rating curve assumes there is not a tailwater condition at the proposed pipe outlet to the Lower Storm Facility No. 2. The Lower Storm Facility No. 2 will cause the outfall culvert for the underground detention basin to become fully submerged. The Report must be updated to account for the tailwater condition accordingly. The Designer may consider raising the emergency spillway of the Lower Storm Facility No. 2 to match the underground facility emergency spillway at elevation 564.10 feet. This adjustment would force the entire system to work contiguously and further optimize the available storage capacity of the Lower Storm Facility No. 2.

SANITARY SEWER

11. Sheet 5 of 15 – Grading and Utility Plan
    a) Existing sanitary sewer manhole no. LS10-14 at the intersection of S. Market St. and Gettysburg Pike should be labeled.

12. Sheet 9 of 15 – Utility Profiles
    Sanitary Sewer Lateral
    a) At point of connection into existing sewer main a note should be added stating “INVERT ELEVATION TO BE VERIFIED IN THE FIELD AND PIPE SLOPES TO BE ADJUSTED ACCORDINGLY”.

13. Sheet 13 of 15 – Sanitary Sewer Details
    a) Add sanitary sewer manhole frame and cover details.

TRAFFIC

14. The current land development plans for the North Lot show a wide right in only entrance from South Market Street of about 26 feet wide. We have concerns that a driveway this wide will be utilized to make illegal turning maneavers to avoid the traffic signal. We recommend this driveway be reduced in size.

15. Exhibit 5 of the Scoping Application indicates that the South Lot is proposing a 30,000 square foot shopping center and a 2,800 square foot fast food restaurant with a drive-thru. The trip generation calculations on Page B1–B5 indicate a shopping center of 33,000 square feet and it does not include calculations for the fast food restaurant with the drive-thru on this Lot.

16. Item No. 13 on Page B7 indicates that the trip distribution and assignment is to match the existing distribution measured at the existing site. It is unclear how this is to be done with the South Lot which is undeveloped. The designer should consider distributing and assigning trips to the surrounding roadways based upon an evaluation of existing traffic patterns at the study area intersections for both lots. A Trip distribution table should be included in the application.

17. On July 24, 2019, the Township acknowledged and supported a phased approach to improve the intersection of South Market Street and Gettysburg Pike. Both PennDOT and the Township recognized a phased, cohesive approach to address deficiencies at this intersection was the best strategy. Additional rights-of-way were acquired to accommodate future traffic improvements. Accordingly, the Applicant shall demonstrate compliance with Phase 3 of the approach plan, along with any additional improvements, unless a new approach is deemed acceptable by PennDOT and the Township. All required traffic improvements shall be shown on the final plan.

18. The Traffic Impact Study should include the latest revised signal permit and proposed modifications for the South Market Street and Gettysburg Pike intersection. The analysis should include all updates that haven't yet been constructed.

19. The Applicant shall submit a full traffic study and demonstrate compliance with any and all conditions, as reviewed and approved by the Township's Traffic Engineer, in accordance with Section 220-11.F of the Codified Ordinances of Upper Allen Township.

GENERAL

20. Note #8 states that all surrounding properties are within the C-2 District. This is not correct. Abutting properties to the west are within the C-1 District. The districts shall be labeled accordingly on the final plan, per Section 220-9.C(2)(k) of the Codified Ordinances of Upper Allen Township.

21. Note #10 states all signage shall conform to Article XXIII of the Township Zoning Ordinance. The correct article is Article XVIII. The final plan shall be corrected.

ADMINISTRATIVE

22. The Applicant must obtain approval of the Erosion and Sediment Control Plan from the Cumberland County Conservation District and furnish to the Township a copy of the required NPDES permit in accordance with the requirements of Section 220-9.C(4)(h), Section 220-27, and Section 214-15.C of the Codified Ordinances of Upper Allen Township.

23. The Applicant must submit a copy of the Erosion and Sediment Pollution Control Plan to the Township in accordance with the requirements of Section 220-27.A(1) of the Codified Ordinances of Upper Allen Township.

ALPHA CONSULTING ENGINEERS, INC.

PLANNING ♦ ENGINEERING ♦ SURVEYING

July 10, 2020

Mazhar Malik
District Permit Manager
PennDOT Engineering District 8-0
2140 Herr Street
Harrisburg, PA 17103-1699

RE: Scoping Meeting Application
151-237 Gettysburg Pike
Upper Allen Township
Cumberland County, PA

Dear Mr. Malik:

Please find the following responses (in **bold** text) to review comments (in *italics*) received on June 12, 2020 for the above reference application. The scoping application has been revised to reflect the comments and responses herein.

PennDOT Scoping Application Comments:

1) LOCATION OF PROPOSED DEVELOPMENT:
No Comments

2) DESCRIPTION OF PROPOSED DEVELOPMENT:
1. *The proposed break in limited access right-of-way along SR 0114 will require coordination and approval from the District Excess Land Committee. Central Office approval will also be required.* **A note has been added to this section of the scoping meeting application to include / reference the required approvals.**

3) DEVELOPMENT SCHEDULE AND STAGING:
No Comments.

4) TRIP GENERATION:
1. *The trip generation estimates for the Shopping Center land use appear to be unrealistic based on the size of the shopping center. For shopping centers less than 50,000 SF, consider using the average rate instead of the equation.* **The trip**

generation for the shopping center land use has been revised to use the average rate as recommended by PennDOT.

5) ESTIMATED DAILY TRIP GENERATION *I* DRIVEWAY CLASSIFICATION:
(a) Estimated Daily Trip Generation of Proposed Development:
No comment.

(b) Driveway Classification Based on Trip Generation and One Access Point:
No comment.

6) TRANSPORTATION IMPACT STUDY REQUIRED?
No comment.

7) TRAFFIC IMPACT ASSESSMENT REQUIRED?
No comment.

8) TIS STUDY AREA:

1. *Include the intersection of SR 0114 and Bumble Bee Hollow Road / Kim Acres Drive in the study area. Update all applicable sections of the scope application accordingly. The need to include this intersection is based on the revised trip generation information provided and may not be necessary upon revising the scope application to address the comments on the trip generation and trip distribution & assignment.* **We agree that inclusion of the intersection is not necessary as the majority of traffic, approximately 60 percent, from/to that intersection will be made up of pass-by trips during the PM peak hour. The PM peak hour is the time period wherein heaviest traffic volumes occur. Please see table 3c in exhibit 9 for estimated PM peak hour pass-by trip volumes. Preliminary capacity analysis indicates that improvements will not be required at the US 15 ramps as a result of this development. As the Bumble Bee Hollow Road / Kim Acres Drive intersection lies further away from the development, similar results, i.e. no impact, are anticipated.**

2. *The study must document the land use context of the subject property and along key area roadways. The applicant should identify the land use context that seems most representative of a roadway segment as a whole. Land use contexts should not be defined in too fine of a manner; avoid segments of less than 600 feet in length. There are seven different land use contexts in order of intensity: rural, suburban neighborhood, suburban corridor, suburban center, town/village neighborhood, town center, and urban core. For more information on land use context, see PennDOT Design Manual, Part 1X, Appendix B.* **The previous revision to the application included the site context with consideration that the study area falls within PennDOT's urban boundary. However, the application has been revised to one of the seven land uses that PennDOT defines in the glossary (DM-1X).**

Note that the glossary states 'In reality, land uses do not always fit neatly into these seven areas and boundaries between areas may be fluid.'

9) STUDY AREA TYPE:
No comments.

10) TIS ANALYSIS PERIODS AND TIMES:
No Comments

11) TRAFFIC ADJUSTMENT FACTORS:
(a) Seasonal Adjustment:
No comments.

(b) Annual Base Traffic Growth:
No comments.

(c) Pass-By Trips:
No comments.

(d) Captured Trips for Multi-Use Sites:
No comments.

(e) Modal Split Reductions:
No comments.

(f) Other Reductions:
No comments.

12) OTHER PROJECTS WITHIN STUDY AREA TO BE ADDED TO BASE TRAFFIC:
1. *The trips from other developments should be assigned through the SR 0114 and US 15 Ramps intersections.* **The studies provided by others did not provide the requested information. To create the requested assignment, we have applied the percentages developed via this analysis proportionally to the other development trips. Please see figure 4 sheet 16 of 16 and the volume worksheets.**

13) TRIP DISTRIBUTION AND ASSIGNMENT:
1. *Provide calculations and backup data to support the trip distribution and assignment percentages.* **Please see figure 4, the distribution worksheets, and the volume worksheets within exhibit 9 for the requested calculations.**

2. *For new trips, the entering and exiting percentages for each node should be the same (i.e., calculate the distribution percentages using the total volume on each node instead of calculating separate percentages for entering and exiting trips).* **Please see**

figure 4, the distribution worksheets, and the volume worksheets within exhibit 9. The calculations provided, based on entering and exiting percentages, consider the close proximity of the development to US 15. This is the most accurate model as it considers traffic from US 15 and will emulate the traffic distribution that currently exists to /from the restaurant and convenience market located to the east of US 15.

3. *Since the distribution percentages for new trips and pass-by trips are different, the methodology used does not appear to reflect the correct number of trips. The trips shown in Figure 4 should be for new trips only, based on the new trip distribution percentages.* **General formatting is based on Pennsylvania Department of Transportation's (PennDOT) publication 'Policies and Procedures for Transportation Impact Studies' dated January 28, 2009 and last revised July 2017 as included as Appendix A of PennDOT Publication 282. Figure 4 is listed for 'Trip Distribution Percentage and Volumes' within the publication. Figure 4 is therefore provided to illustrate aspects of trip distribution.** *The new trips should then be combined with the pass-by trips, which are calculated separately, to obtain the total trips.* **Per the ITE Trip Generation Handbook, tables E.1 through 39 present the values for percentage of site generated trips that is accounted for as pass-by and non-pass-by. Estimated total site generation is provided in tables 3a, 3b, and 3c. Figure 4 provides all trips, broken down on separate sheets into primary and pass-by trips. The combined trips equal the total trips estimated to be generated by this development and is therefore correctly shown.**

4. *It is understood that some of the trips may include route diversion due to the driveway locations. However, the pass-by trip distribution percentages appear to be incorrect. For example, for the North Lot, the percentages on the eastbound approach of SR 0114 should be calculated based on the eastbound through traffic and eastbound right-turning traffic at the intersection of SR 0114 & Gettysburg Pike. The eastbound left-turning traffic is accounted for in the northbound Gettysburg Pike traffic passing the site. Revise the pass-by percentages, as necessary.* **The pass-by percentages and resulting pass-by trips have been revised to reflect the existing traffic volume percentages on the immediately adjacent streets for each lot. This revision will account for the eastbound left-turning traffic within the northbound Gettysburg Pike traffic. Please see Figure 4, sheets 2 and 3 of 16.**

5. *Verify the pass-by trip distribution percentages for northbound Gettysburg Pike for the North Lot. The volume on this approach includes the right-turning traffic from SR 0114 which would enter via the driveway along SR 0114 and exit via the driveway along Gettysburg Pike. Revise the pass-by percentages, as necessary.* **The documents have been compared and verified.**

6. *Include distribution and assignment information at both proposed site driveways for the South Lot.* **Since the number of vehicles using the southern driveway would be less than the northern driveway, the original assignment of all estimated trips to one driveway would be conservative. However, we have assigned the northbound entering trips to the southern driveway along with 50 percent of the exiting northbound trips.**

7. *Revise the traffic volume worksheets and figures as necessary.* **Additional sheets have been added to figure 4 to assist the review.**

14) APPROVAL OF DATA COLLECTION ELEMENTS AND METHODOLOGIES:

1. *The Saturday peak hour turning movement count data printout for the SR 0114 and US 15 Southbound Ramps is not consistent with the traffic volume worksheet and figures.* **The documents have been compared and verified.**

2. *There appear to be differences in traffic volumes between the adjacent intersections along SR 0114. Verify that all traffic volumes balance between intersections, conservatively adjusting the volumes up, if it is found that balancing is appropriate and necessary.* **The volume difference is approximately 10 vehicles for similar time periods. Therefore, balancing is not necessary. Note that the analysis conservatively uses the peak hour of the intersections. While the peak hours of the intersections with US 15 occur at the same time, the intersection with Gettysburg Pike peak hours occur 15 minutes off the peak hours of the US 15 intersections.**

15) CAPACITY / LOS ANALYSIS:

No comments.

16)ROADWAY IMPROVEMENTS / MODIFICATIONS BY OTHERS TO BE INCLUDED:

No comments.

17)OTHER NEEDED ANALYSES:

(a) Sight Distance Analysis:

No comments.

(b) Signal Warrant Analysis:

No comments.

(c) Required Signal Phasing/Timing Modifications:

No comments.

(d) Traffic Signal Corridor Network Analysis:

No comments.

(e) Analysis of the Need for Turning Lanes:
No comments.

(f) Turning Lane Lengths:
No comments.

(g) Left Turn Signal Phasing Analysis:
No comments.

(h) Queuing Analysis:
No comments.

(i) Gap Studies:
No comments.

(j) Crash Analysis:
No comments.

(k) Weaving Analysis:
No comments.

(I) Other Required Studies:
No comments.

(18) ADDITIONAL COMMENTS OR RECOMMENDATIONS RELATIVE TO THE SCOPE OF THE TIS:

1. *The study should identify the driveway classification for each driveway serving the proposed development. If the design standards for the driveway classification cannot be met, provide an engineering justification explaining why and verify that driveway configurations won't unreasonably impact the state roads. For medium volume driveways, a median of sufficient length to accommodate the 95th percentile queue length must be provided, desirably 120'. For high volume driveways, a 150' median must be provided. Internal site driveways should not be located within these areas.* **The driveways accessing state roads have been revised and are shown on the included concept plan within the revised scoping application.**

If you have any further questions or comments, please contact our office.

Sincerely,

Mark E. Allen, P.L.S., P.E.

ALPHA CONSULTING ENGINEERS, INC.

PLANNING ♦ ENGINEERING ♦ SURVEYING

July 12, 2020

Jennifer M. Boyer
Community Development Director/Planner
Upper Allen Township
100 Gettysburg Pike
Mechanicsburg, PA 17055

RE: Scoping Meeting Application
151 – 237 Gettysburg Pike
Upper Allen Township
Cumberland County, PA

Dear Ms. Boyer:

Please find the following responses **(in bold text)** to Township review comments *(in italics)* received June 29, 2020 for the above referenced project:

Traffic

14. *The current land development plans for the North Lot show a wide right in only entrance from South Market Street of about 26 feet wide. We have concerns that a driveway this wide will be utilized to make illegal turning maneuvers to avoid the traffic signal. We recommend this driveway be reduced in size.* **The driveway is sized to account for safe access of delivery vehicles. Based on information within the previously submitted Scoping Meeting Application and the Internal Traffic Patterns analysis, travel time through the development will be longer than travel time through the intersection making the use of the intersection more appealing to drivers as opposed to using the site as a cut-through.**

15. *Exhibit 5 of the Scoping Application indicates that the South Lot is proposing a 30,000 square foot shopping center and a 2,800 square foot fast food restaurant with a drive-thru. The trip generation calculations on Page B1–B5 indicate a shopping center of 33,000 square feet and it does not include calculations for the fast food restaurant with the drive-thru on this Lot.* **This is addressed within the scoping meeting application, specifically under our response dated May 5, 2020 to PennDOT's comment 11(d)1, that the trip generation follows the guidance in NCHRP Report 684 and shall be classified as a Shopping Center.**

16. *Item No. 13 on Page B7 indicates that the trip distribution and assignment is to match the existing distribution measured at the existing site. It is unclear how this is to be done with the South Lot which is undeveloped. The designer should consider distributing and assigning trips to the surrounding roadways based upon an evaluation of existing traffic patterns at the study area intersections for both lots. A Trip distribution table should be included in the application.* **The distribution was provided based on the adjacent intersections. Please see exhibit 9 within the scoping application for detailed exhibits and the tables with distribution and assignment volumes.**

17. *On July 24, 2019, the Township acknowledged and supported a phased approach to improve the intersection of South Market Street and Gettysburg Pike. Both PennDOT and the Township recognized a phased, cohesive approach to address deficiencies at this intersection was the best strategy. Additional rights-of-way were acquired to accommodate future traffic improvements. Accordingly, the Applicant shall demonstrate compliance with Phase 3 of the approach plan, along with any additional improvements, unless a new approach is deemed acceptable by PennDOT and the Township. All required traffic improvements shall be shown on the final plan.* **Acknowledged**

18. *The Traffic Impact Study should include the latest revised signal permit and proposed modifications for the South Market Street and Gettysburg Pike intersection. The analysis should include all updates that haven't yet been constructed.* **The traffic study will include information to address the modifications to the intersection.**

19. *The Applicant shall submit a full traffic study and demonstrate compliance with any and all conditions, as reviewed and approved by the Township's Traffic Engineer, in accordance with Section 220-11.F of the Codified Ordinances of Upper Allen Township.* **A study will be provided as required by the ordinance. Since a Highway Occupancy Permit is required for this development, PennDOT's procedures are being followed. That process includes, in the following order; submitting an application, attending a scoping meeting, collecting traffic data, revising the application to include the first part of a traffic study (counts, distribution and assignment), and finally submitting a full study. PennDOT is currently reviewing the first part of the study (Traffic counts, distribution, assignment).**

If you have any further questions or comments, please contact our office.

Sincerely,

Mark E. Allen PLS, PE

Memo

DATE: July 20, 2020

TO: Upper Allen Township Planning Commission
Wayne Willey, Chair

FROM: Jennifer M. Boyer, AICP
Community Development Director/Planner

John Toner
Planning Technician

RE: Report and Comments for 151 Gettysburg Pike
Plan Type: Preliminary/Final Subdivision/Land Development
UAT File No.: 20-06-01
Property Parcel ID: 42-28-2419-131 & 42-28-2419-018
Property Address: 147 & 151 Gettysburg Pike
Zoning District: Highway Commercial (C-2)

The proposed project is the for consolidation and redevelopment of two properties addressed at 147 & 151 Gettysburg Pike. The project will consolidate both parcels into a single parcel, demolish the existing buildings on site and construct a one story, 5,000 square foot convenience store (7-11) with 16 gas dispensing stations, and a one story, 3,000 square foot restaurant with a drive thru.

The proposed development will be served by both public water and sewer. There is a small area of wetlands on the property, but no steep slopes or other environmentally sensitive areas. The proposed use of the subject properties is consistent with the Upper Allen Township Zoning Ordinance and Comprehensive Plan.

The Applicant has requested the following waiver, modification & deferrals:

1. Modify the requirements of Section 220-16.A(1) to install curbs along all proposed access drives, parking compounds, and along building fronts.

    a. *Staff Comment: Staff sees no issues with this request, as the lack of curbing will occur within private areas. Curbing is proposed through most of the site but is not proposed where runoff from pavement will directly enter a rain garden/storm basin. This modification was also approved for previous plan designs to this site.*

2. Modify the requirements of Section 220-16.B(5) to require sidewalks be located within the street right-of-way.

    a. *Staff Comment: Staff has no issue with this request since a five-foot wide sidewalk with a ten-foot-wide pedestrian easement is proposed along the front of the site facing Gettysburg Pike. The modification allows for a pedestrian path along the front of the property while considering topographical changes. This modification was also approved for previous plan designs to this site.*

3. Defer the requirements of Section 220-16.A(2) to require curbing along all existing Township and/or state roads.

    a. *Staff Comment: Staff sees no issue with this request due to the pending traffic improvements that may be warranted at the intersection of Gettysburg Pike and South Market Street as the remaining lots become developed. Additionally, there is only a 36-foot area where curbs will not be installed, close to the corner of Gettysburg Pike and South Market Street. Stormwater runoff currently enters this area of the site and the lack of curbing will allow the street runoff to continue flowing through this area of grass. This deferral was also approved for previous plan designs to this site.*

4. Waive the requirements of Section 220-23.D(2) to require a 15-foot conservation easements around delineated wetland areas.

    a. *Staff Comment: Staff has no issue with this request. The entire wetlands area falls within the proposed stormwater easement area.*

TIMELINE

The following table presents the review period timeline for the above referenced application.

PLAN REVIEW PERIOD	CURRENT DATES
Application Date	06/01/2020
Review Period Beginning Date	06/29/2020
Last Available Planning Commission Meeting	08/31/2020
Last Available Board of Commissioners Meeting	09/16/2020
Review Period End Date	09/27/2020

RECREATION FEE/LAND DEDICATION

The applicant shall, upon plan approval and prior to plan recording, contribute to the Township's Recreation Land Acquisition and Improvement Fund, in accordance with Section 220-28.D(5) of the Codified Ordinances of Upper Allen Township. The contribution amount shall be $3,200.00.

OTHER AGENCY REVIEWS

The following agencies were notified on June 2, 2020 that this plan is available for review. An amended plan was provided to staff/agencies on July 13, 2020. Their comments have been included in this report.

AGENCY	SUBMISSION OF COMMENTS
Community Development Department	06/15/20; 07/15/20
Township Engineer (C.S. Davidson, Inc.)	06/25/20; 07/20/20
Traffic Engineer (C.S. Davidson, Inc.)	06/26/20; 07/20/20
Sewer Department	06/15/20
Police Department	06/03/20; No Comment
Fire Department	No Comment to date
Public Works/MS4 Coordinator	06/15/20; No Comment
Cumberland County Planning Commission	06/12/20

PLANNING COMMISSION - SUGGESTED MOTIONS

The Planning Commission should consider recommending approval or denial of the following waivers, modifications, and deferrals.

WAIVERS

1. Move to recommend approval of the waiver request for Section 220-23.D(2) to require a 15-foot conservation easements around delineated wetland areas. The wetland area does fall within a stormwater easement area, as shown on the final plan, which limits disturbance to the area.

DEFERRALS

2. Move to recommend approval of deferral request for Section 220-16.A(2) to require curbing along all existing Township and/or state roads. A 36-foot area towards the intersection of South Market Street and Gettysburg Pike is deferred until such time as the Township deems the improvement necessary, to allow stormwater runoff from the pavement to directly enter a rain garden/stormwater basin area.

MODIFICATIONS

3. Move to recommend approval of the modification request for Section 220-16.A(1) to install curbs along all proposed private access drives, parking compounds, and along building fronts. Curbed areas will exist throughout most of the internal site, with a few

exceptions to allow stormwater runoff to enter directly into rain gardens/stormwater basins. The modified areas are within private property, as noted on the final plan.

4. Move to recommend approval of the modification request for Section220-16.B(5) to require sidewalks be located within the street right-of-way. The Applicant is instead installing a five-foot wide sidewalk with a ten-foot pedestrian easement along the front of the property facing Gettysburg Pike.

PLAN ACTION

The Planning Commission should consider recommending approval or denial of the subdivision plan. If recommending approval, the conditions listed below should be applied. If recommending denial, the reasons for denial should be given.

It is the recommendation of staff that the Planning Commission consider the plan. Staff also recommends that the Applicant address conditions 1 – 18 and revise their plans prior to going before the Board of Commissioners.

SUBDIVISION, LAND DEVELOPMENT & ZONING

1. The Applicant shall provide a final lighting plan demonstrating compliance with Sections 220-32.A, 245-16.10.G., and 245-17.8 of the Codified Ordinance of Upper Allen Township.

SANITARY SEWER

2. Sheet 9 of 15 – Utility Profiles
   A. The left hand side of the following note is cut off: "INVERT ELEVATION TO BE VERIFIED IN THE FIELD AND PIPE SLOPES TO BE ADJUSTED ACCORDINGLY".

3. Sheet 13 of 15 – Sanitary Sewer Details
   A. Replace standard detail drawing MH-3 – Heavy Duty Manhole Watertight Frame and cover with MH-1 – Heavy Duty Manhole Self-Sealing Cover.

TRAFFIC

4. The plan proposed a right-turn only entrance from South Market Street. Consideration should be given to provide a barricade that prevents left-turn movements into the site from opposing lanes of traffic.

5. Table 7 on Page 22 of the Traffic Impact Study (TIS) shows all of the same sight distances data for Driveways 1, 2, and 3. All the data should be reviewed and revised as necessary. Driveway

2 and 3 will have different speeds of 40 MPH and 25 MPH respectively. Data needs added to the table for Driveway 4.

6. The TIS should provide information on the crash data. The executive summary should briefly provide an overview of any known safety concerns.

7. The Manual Turn Movement Data should include the AM data for the Gettysburg Pike and SR 114 intersection. It currently shows Saturday data twice.

8. The sight distance information should show the intersection sight distance in addition to the stopping sight distance.

9. Figure 4 on Sheet 4 of 16 indicates the total primary trips exiting the South Lot as 12 on the summary table but the figure shows 7 exiting site driveway 3 and 7 existing site driveway 4 for a total of 14.

10. The total pass by trips and primary trips for the shopping center and fast food restaurant shown in Table 3c should equal the total enter and exit trips and should correlate with all Figure 4 information.

11. The Summary Table on Figure 4 on Sheet 13 of 16 for the South Lot shows data that doesn't correlate with Table 3c.

12. The percentage of heavy vehicles in the Synchro Analysis for the baseline, no build, and build scenarios do not correlate with the existing traffic count data.

13. The proposed no build and build scenarios for 2021 and 2026 for Gettysburg Pike and South Market Street should include a west bound exclusive right turn lane, as well as updated timing to the intersection that is currently proposed and will begin construction shortly.

14. The TIS is recommending the installation of a roundabout at the intersection of South Market Street (SR 0114) and Gettysburg Pike to mitigate the LOS drop. While we do not disagree with this recommendation, we note that considerable effort has been completed already and agreements are in place for planned improvements to the intersection, specifically the addition of a right turn lane on the eastbound lane of Market Street which is close to construction as well as future planned improvements including a northbound right turn lane onto Market Street from Gettysburg Pike.

15. As mentioned in Comment 10 above, a northbound right turn lane onto Market Street from Gettysburg Pike had been planned as part of the development of Lot 2 in previous analysis done by the Developers of Lot #4, Gettysburg Pike. The TIS should provide an analysis for the

build scenarios which includes an exclusive right turn lane to determine what effect this will have on the LOS of the intersection.

16. The lane and timing input worksheets for the synchro analysis should be included in the traffic impact study.

17. A conceptual plan for a roundabout should be included in the TIS. It should be determined if it is physically feasible to propose a roundabout at this location.

18. The Traffic Impact Study should include the latest revised signal permit dated April 17, 2020 in addition to the existing signal permit.

ADMINISTRATIVE

19. The Applicant shall submit a full traffic study and demonstrate compliance with any and all conditions, as reviewed and approved by the Township's Traffic Engineer, in accordance with Section 220-11.F of the Codified Ordinances of Upper Allen Township.

20. The Applicant must obtain approval of the Erosion and Sediment Control Plan from the Cumberland County Conservation District and furnish to the Township a copy of the required NPDES permit in accordance with the requirements of Section 220-9.C(4)(h), Section 220-27, and Section 214-15.C of the Codified Ordinances of Upper Allen Township.

21. The Applicant must submit a copy of the Erosion and Sediment Pollution Control Plan to the Township in accordance with the requirements of Section 220-27.A(1) of the Codified Ordinances of Upper Allen Township.

22. Final plans shall be submitted to the Township for any necessary review and approval of changes to the intersection of Gettysburg Pike and South Market Street, as required by PennDOT.

23. The Applicant must obtain a Highway Occupancy Permit (HOP) from PennDOT for access onto a state road, and supply the Township with a copy of the HOP prior to the plan being recorded, in accordance with Section 220-17.B(3)(a) of the Codified Ordinances of Upper Allen Township. Any changes to the road conditions as a result of the HOP shall be identified on the plan before recording. The Applicant must add a note to the plan, per Section 220-10.A(10), that a HOP is required before the driveway access to the state road is permitted, pursuant to Section 420 of the act of June 1, 1945 (P.L. 1242, no. 428) known as the "State Highway Law".

24. The Applicant shall obtain approval of the planning module for new land development or approval of an exemption from the planning requirements from the Township and PA DEP in

accordance with the requirements of Section 220-20.A of the Codified Ordinances of Upper Allen Township and pay all applicable application and tapping fees in accordance with the requirements of Section 200-15.D(8) of the Codified Ordinances of Upper Allen Township.

25. This project is situated in a Special Sewer District within the Township (Ordinance 741, Chapter 200, Article XI) having a cost per EDU in the amount of $1,641.80. This amount is in addition to the current tapping fee of $2,805.00 per EDU. The applicant shall pay a total tapping fee amount of $4,446.80 per EDU before recording the plan.

26. Any modifications, waivers, and/or deferrals granted by the Board of Commissioners shall be listed on the final plan, including the date in which such action was granted, in accordance with Section 220-10.B(3) of the Codified Ordinances of Upper Allen Township. All deferred improvements shall be shown on final plans as future improvements. A note shall be placed on the plan indicating that all deferrals are granted "……until such time as the Board of Commissioners deem the improvement necessary."

27. The Applicant must enter into a Reservation of Capacity (ROC) Agreement with the Township and pay the appropriate ROC fees, or, pay tapping fees for the number of approved EDUs.

28. The Applicant must enter into a Sewer Extension Agreement with the Township and furnish the required $1,000.00 escrow for plan and legal review costs, provide plats and legal descriptions for sanitary sewers to be located outside of the public rights-of-way, furnish the required escrow amount for inspection and related costs, and provide appropriate installation financial security for the sanitary sewers.

29. The Applicant must provide a copy of agreements with other utilities, highways, or railways when crossing and occupying their easements. Any restrictions / conditions shall be noted on the plan.

30. The Applicant must contribute to the Township Recreation Land Acquisition and Improvement Fund in the amount of $3,200.00 in accordance with the requirements of Section 220-28.D(5) of the Codified Ordinances of Upper Allen Township.

31. The Applicant must submit a signed and sealed construction cost estimate for all public improvements, including sanitary sewer work, in accordance with Section 220-13 of the Codified Ordinances of Upper Allen Township.

32. The Applicant must provide financial security in a form acceptable to the Township and in an amount to be estimated by the applicant and approved by the Township Engineer to insure construction of the improvements and/or concrete monuments shown on the plan, and the applicant must enter into an agreement with the Township providing for construction and installation of all improvements shown on the plan according to Section 220-13 of the

Codified Ordinances of Upper Allen Township. The financial security shall contain the provision that the Township shall be informed in writing thirty (30) days before the expiration date of any letter of credit or bond provided as a condition of approval.

33. The Applicant must also furnish financial security to the Township in an amount equal to 10% of the total financial security provided to cover the cost of construction inspection, administrative, and other related costs according to Section 220-52.B of the Codified Ordinances of Upper Allen Township.

34. The Applicant must provide evidence that the sanitary sewer system design has been reviewed and approved by the Township Engineer, in accordance with Section 220-20.D(3)(b) of the Codified Ordinances of Upper Allen Township.

35. The Applicant shall enter into a Stormwater Best Management Practices Maintenance Operation and Maintenance Agreement with the Township and pay all applicable fees, in accordance with Section 214-20.E of the Codified Ordinances of Upper Allen Township.

36. The Applicant must have the plan signed and sealed by a licensed surveyor and licensed engineer certifying to the accuracy of the survey and plan in accordance with Section 220-9.C(2)(e) and 220-10.B(1)(b) of the Codified Ordinances of Upper Allen Township.

37. All plans, profiles or drawings required under the provisions of this chapter shall include a certification by a Pennsylvania-registered professional engineer attesting that all elements of the plan are inconformity with the Township Code and applicable state regulations, as required by Section 220-15.N(3) of the Codified Ordinances of Upper Allen Township.

38. The landscape architect licensed by the commonwealth of Pennsylvania shall sign and seal the landscaping plans, as designed in accordance with Section 245-6.8. of the Codified Ordinances of Upper Allen Township.

39. The Applicant must sign the plan and have the signatures notarized according to Section 220-9.C(2)(dd) and 220-10.B(1)(a) of the Codified Ordinances of Upper Allen Township.

40. The Applicant shall provide evidence of appropriate permits that have been issued or are not required prior to recording the plan, for any activity within streams, wetlands, or another state or federally regulated body of water, in accordance with Section 220-10.B(3) of the Codified Ordinances of Upper Allen Township.

41. The Applicant shall also comply with all fees, taxes, utility rentals, building, police or fire codes, ordinances, resolutions and regulations as may be in effect from time to time concerning the proposed development.

42. The Applicant shall pay such fees as are charged from time to time by Upper Allen Township for other further reviews or permits as may be required concerning the proposed development.

43. The Applicant must satisfy all conditions on the approval of the plan and the plan must be recorded within 275 days from the date of written conditional approval by the Board of Commissioners or the plan will be considered disapproved. Since the final land development plan is approved with outstanding conditions, the signature block for the Upper Allen Township Board of Commissioners shall state the date in which the conditional approval is granted. A second line shall be added to state, "The conditions of approval were satisfied this ____ day of _____, 20__."

44. Prior to obtaining the county signature for final plan recording, the Applicant shall provide a CD that includes a .dwg AutoCAD file that shows all parcel boundaries, lot lines, building footprints, road rights-of-way (to include curbs and sidewalks), edge of pavement, hydrants, and any utility or easements (public and private).

Thank you.

cc: Commissioner Ginnie M. Anderson
Commissioner Kenneth Martin
File

Draft Scope Application Comment Sheet

COUNTY:	Cumberland	MUNICIPALITY:	Upper Allen Township
JOB NAME:	151-237 Gettysburg Pike (7-11)	PREPARED BY:	Alpha Consulting Engineers, Inc.
APPLICANT:	Highview Commercial	REVIEW BY:	PennDOT / PAI

Please incorporate these comments into the revised Scoping Application and resubmit:

Scope Application Comments:

1. There appears to be a fast-food restaurant with drive-through window on the south lot. The shopping center land use appears to underestimate the trip generation for this land use. Verify and revise.
2. The intersection of SR 0114 and Bumble Bee Hollow Road / Kim Acres Drive may need to be included in the study area depending on the results of the revised trip generation and trip distribution & assignment.
3. According to ITE's Transportation Impact Analyses for Site Development, pass-by trips diverted from a through-fare should be rechecked if they represent more than 15 percent of the traffic volume on that street. Verify and revise the pass-by trip percentages and volumes accordingly.
4. The Super Convenience Market / Gas Station should include pass-by trips in the Saturday Midday Peak Period. Typically, ten percent less than the Weekday P.M. Peak Period average pass-by trip percentage is used as long as it doesn't represent more than 15 percent of the traffic volume on that street.
5. There appear to be differences in traffic volumes between the adjacent intersections along SR 0114. Verify that all traffic volumes balance between intersections, conservatively adjusting the volumes up, if it is found that balancing is appropriate and necessary. The volumes between the US Route 15 ramp intersections should balance.
6. Include the adjacent development traffic volumes in the future volume figures.
7. Some of the movement arrows are missing from the sheets in Figure 4.

ALPHA CONSULTING ENGINEERS, INC.

PLANNING ♦ ENGINEERING ♦ SURVEYING

September 12, 2020

Mazhar Malik
District Permit Manager
PennDOT – District 8-0
2140 Herr Street
Harrisburg, PA 17103

RE: Scoping Meeting Application
151-237 Gettysburg Pike
Upper Allen Township
Cumberland County, PA

Dear Mr. Malik:

Per the scoping meeting held on January 16, 2020 we are resubmitting the application to the department's traffic unit, revised per PennDOT comments received August 20, 2020. The application provides a significant portion of the traffic study including: traffic count data, trip generation estimation, trip generation worksheets, proposed distribution and assignment of estimated development generated trips, future volume worksheets, and related figures.

Thank you for your consideration of this application. If you require any additional information, please contact me at 717-770-2500.

Sincerely,

Mark E. Allen, P.L.S., P.E.

115 LIMEKILN ROAD, P.O. BOX 'G' ♦ NEW CUMBERLAND, PA 17070 ♦ (717) 770-2500 ♦ FAX (717) 770-2400

ALPHA CONSULTING ENGINEERS, INC.

PLANNING ♦ ENGINEERING ♦ SURVEYING

September 16, 2020

Mazhar Malik
District Permit Manager
PennDOT Engineering District 8-0
2140 Herr Street
Harrisburg, PA 17103-1699

RE: Scoping Meeting Application
South Lot 151-237 Gettysburg Pike
Upper Allen Township
Cumberland County, PA

Dear Mr. Malik:

Please find the following responses in bold text to review comments (in *italics*) received on August 20, 2020 for the above reference application. The scoping application has been revised to reflect the comments and responses herein.

PennDOT Scoping Application Comments:

1. *There appears to be a fast-food restaurant with drive-through window on the south lot. The shopping center land use appears to underestimate the trip generation for this land use. Verify and revise.* **Correct, the fast-food restaurant was noted in the previous submissions and correspondence. Per discussions with PennDOT on August 20, 2020, the trip generation for the south lot has been revised to use the more conservative methodology of the following.**
   - **Shopping center using the regression equation.**
   - **Fast-food restaurant with drive through window + shopping center using the average rate.**

   For the AM and PM peak hours, the shopping center using the regression equation is the more conservative methodology which returns the trip generation values to those provided in the May 4, 2020 revision of the application. For the Saturday peak hour, the fast-food restaurant with drive through window + shopping center using the average rate is the more conservative methodology. This revision resulted in approximately 42 additional trips during the Saturday peak hour. The subsequent analysis throughout the application and study has been revised accordingly.

2. *The intersection of SR 0114 and Bumble Bee Hollow Road / Kim Acres Drive may need to be included in the study area depending on the results of the revised trip generation and trip distribution & assignment.* **During the scoping meeting, PennDOT required the inclusion of the US Route 15 northbound ramps as the limit of the study. Per discussions with PennDOT on September 16, 2020, Dean Noles clarified that the additional intersection would be required if the revised trip generation and distribution resulted in peak hour trips at the Bumble Bee Hollow Road / Kim Acres Drive intersection that were above PennDOT's standard thresholds. The trip generation volumes estimated to enter and exit the Bumble Bee Hollow Road / Kim Acres Drive intersection during the AM, PM, and Saturday peak hours are less than PennDOT's threshold of either 100 or more new vehicle trips entering or 100 or more new vehicle exiting. Per these discussions, the additional intersection is not warranted. Please see figure 4, sheets 15-17, for estimated total development trips.**

3. *According to ITE's Transportation Impact Analyses for Site Development, pass-by trips diverted from a through-fare should be rechecked if they represent more than 15 percent of the traffic volume on that street. Verify and revise the pass-by trip percentages and volumes accordingly.* **The pass-by volumes are less than 15% of the existing street volumes. An additional page (sheet 14) has been added to figure 4 with the corridor breakdown of pass-by volumes related to street volumes.**

4. *The Super Convenience Market / Gas Station should include pass-by trips in the Saturday Midday Peak Period. Typically, ten percent less than the Weekday P.M. Peak Period average pass-by trip percentage is used as long as it doesn't represent more than 15 percent of the traffic volume on that street.* **A pass-by trip rate of 66% for the Saturday peak hour, which is 10% less the PM peak hour, has been applied to the analysis. The subsequent analysis throughout the application and study has been revised accordingly. Please see figure 4 sheet 13 for the illustration of the land use pass-by trips, and sheet 14 for the verification that the pass-by trips are less than 15 percent.**

5. *There appear to be differences in traffic volumes between the adjacent intersections along SR 0114. Verify that all traffic volumes balance between intersections, conservatively adjusting the volumes up, if it is found that balancing is appropriate and necessary. The volumes between the US Route 15 ramp intersections should balance.* **The volumes measured between the Route 15 ramps during the peak hours are as follows:**
   - **AM exiting the northbound ramp, 606vph; entering the southbound ramp, 634vph; difference, 28vph, 4.6%.**
   - **AM exiting the southbound ramp, 612vph; entering the northbound ramp, 615vph; difference, 3vph, 0.5%.**
   - **PM exiting the northbound ramp, 507vph; entering the southbound ramp, 499vph; difference, 8vph, 1.6%.**
   - **PM exiting the southbound ramp, 955vph; entering the northbound ramp, 961vph; difference, 6vph, 0.6%.**

- **Saturday exiting the northbound ramp, 544vph; entering the southbound ramp, 546vph; difference, 2vph, 0.4%.**
- **Saturday exiting the southbound ramp, 628vph; entering the northbound ramp, 630vph; difference 2vph, 0.3%.**

The differences in volumes accurately reflects the traffic between the two locations, or queuing between the two locations. It also reflects vehicles that have exited one intersection just prior to the beginning of the peak hour but arrived at the second intersection just after the beginning of the peak hour, and vehicles that have exited one intersection just prior to the end of the peak hour but arrived at the second intersection just after the end of the peak hour. Therefore, balancing is not appropriate nor necessary.

6. *Include the adjacent development traffic volumes in the future volume figures.* **Additional figures 5B, 5D, 6B, and 6D have been added to illustrate the inclusion of the adjacent development.**

7. *Some of the movement arrows are missing from the sheets in Figure 4.* **The two arrows missing from the total development sheets in Figure 4 have been added.**

If you have any further questions or comments, please contact our office.

Sincerely,

Mark E. Allen, P.L.S., P.E.

ALPHA CONSULTING ENGINEERS, INC.

PLANNING ♦ ENGINEERING ♦ SURVEYING

September 23, 2020

Jennifer M. Boyer
Community Development Director/Planner
Upper Allen Township
100 Gettysburg Pike
Mechanicsburg, PA 17055

RE: 151 Gettysburg Pike
Preliminary Subdivision Plan
Upper Allen Township

Dear Ms. Boyer:

Please find the following responses **(in bold text)** to Township review comments *(in italics)* received July 20, 2020 for the above referenced project. The responses reflect PennDOT comments received August 20, 2020 and discussions with the Township Engineer on September 18 and 22, 2020.

Traffic (start at number 4)

4. *The plan proposed a right-turn only entrance from South Market Street. Consideration should be given to provide a barricade that prevents left-turn movements into the site from opposing lanes of traffic.* **Per the Scoping Application Meeting Minutes, the South Market Street entrance shall be designed to prohibit left turning movements. This requirement has been added to the executive summary.**

5. *Table 7 on Page 22 of the Traffic Impact Study (TIS) shows all of the same sight distances data for Driveways 1,2 and 3. All the data should be reviewed and revised as necessary. Driveways 2 and 3 will have different speeds of 40 MPH and 25 MPH respectively. Data needs added to the table for Driveway 4.* **Table 7 has been updated and revised. For site driveway 1 the speed limit changes from 25 MPH to 35 MPH at the northern boundary of the property. Site driveway 2 has no site distance requirement (entering right turns only). Site driveways 3 and 4 are analyzed for the posted 25 MPH.**

6. *The TIS should provide information on the crash data. The executive summary should briefly provide an overview of any known safety concerns.* **A statement regarding crash data has been added to the executive summary.**

7. *The Manual Turn Movement Data should include the AM data for the Gettysburg Pike and SR 114 intersection. It currently shows Saturday data twice.* **The turn movement data printout has been added to the report.**

8. *The sight distance information should show the intersection sight distance in addition to the stopping sight distance.* **Per discussions with Christopher Metz, (CS Davidson), the distance to the signalized intersection has been added to table 7.**

9. *Figure 4 on Sheet 4 of 16 indicates the total primary trips exiting the South Lot as 12 on the summary table but the figure shows 7 exiting site driveway 3 and 7 existing site driveway 4 for a total of 14.* **Figure 4 has been revised to illustrate the primary and pass-by trips for all study intersections. Please see Figure 4 sheets 4-6 for primary trips and sheets 7-14 for pass-by trips.**

10. *The total pass by trips and primary trips for the shopping center and fast food restaurant shown in Table 3c should equal the total enter and exit trips and should correlate with all Figure 4 information.* **The information correlates between the tables and figures. Please see the attached correspondence with PennDOT dated September 12, 2020 regarding the changes to trip generation and distribution.**

11. *The Summary Table on Figure 4 on Sheet 13 of 16 for the South Lot shows data that doesn't correlate with Table 3c.* **Nine sheets have been added to figure 4 to illustrate the primary and pass-by trips for all study intersections. The information correlates to tables 3b, and 3c.**

12. *The percentage of heavy vehicles in the Synchro Analysis for the baseline, no build, and build scenarios do not correlate with the existing traffic count data.* **The heavy vehicle percentages have been verified and revised. Per discussions with Christopher Metz, the heavy vehicle percentage includes busses.**

13. *The proposed no build and build scenarios for 2021 and 2026 for Gettysburg Pike and South Market Street should include a west bound exclusive right turn lane, as well as updated timing to the intersection that is currently proposed and will begin construction shortly.* **The separate scenario for the proposed improvements by others has been added to the report. Per the July correspondence with PennDOT, the most current signal plan is the August 2016 plan. Per discussions with Christopher Metz, the April 2020 system plan shall be used to analyze proposed AM and PM peak hour build scenarios that includes the adjacent development currently under construction. The April 2020 system plan has not been implemented. Therefore both system plan scenarios are included in the analysis.**

14. *The TIS is recommending the installation of a roundabout at the intersection of South Market Street (SR 0114) and Gettysburg Pike to mitigate the LOS drop. While we do not disagree with this recommendation, we note that considerable effort has been completed already and agreements are in place for planned improvements to the intersection,*

specifically the addition of a right turn lane on the eastbound lane of Market Street which is close to construction as well as future planned improvements including a northbound right turn lane onto Market Street from Gettysburg Pike. **The previously planned improvements were based on an office center estimated to generate approximately 55 peak hour trips at the intersection of South Market Street and Gettysburg Pike. These planned improvements did not consider the 837 trips estimated to be generated for this proposed development. The roundabout will provide for higher capacity, create less delay, require less pavement, require less additional right of way, remove the maintenance cost of signals, and most of all, provide a safer intersection.**

15. *As mentioned in Comment 10 above, a northbound right turn lane onto Market Street from Gettysburg Pike had been planned as part of the development of Lot 2 in previous analysis done by the Developers of Lot #4, Gettysburg Pike. The TIS should provide an analysis for the build scenarios which includes an exclusive right turn lane to determine what effect this will have on the LOS of the intersection.* **Per discussions with Christopher Metz, the final traffic study for the 'S Market Street Office Building' did not include the northbound right scenario nor match the April 2020 system plan. The analysis herein will include the scenario for the April 2020 system plan as noted in our response to Township comment 13.**

16. *The lane and timing input worksheets for the synchro analysis should be included in the traffic impact study.* **The requested worksheets have been added to the report.**

17. *A conceptual plan for a roundabout should be included in the TIS. It should be determined if it is physically feasible to propose a roundabout at this location.* **A concept plan has been added to the report.**

18. *The Traffic Impact Study should include the latest revised signal permit dated April 17, 2020 in addition to the existing signal permit.* **Please see our response to Township comments 13 and 15.**

If you have any further questions or comments, please contact our office.

Sincerely,

Mark E. Allen PLS, PE

RE: Revised Scope App - 7-11 Gettysburg Pike, Upper Allen Twp, Cumberland Co

PD, District 8-0 Signals <RA-pdDist80Signals@pa.gov>

Thu 10/1/2020 9:05 AM

To: Mark Allen <mallen@alphacei.com>
Cc: Malik, Mazhar <MMALIK@pa.gov>; PD, District 8-0 HOP <RA-PDDISTRICT80HOP@pa.gov>; Kinard, Eric W <ekinard@pa.gov>; Flad, Christopher <cflad@pa.gov>; PD, District 8-0 Signals <RA-pdDist80Signals@pa.gov>

Mark,

The District Traffic Unit has reviewed the submitted TIS scope application and has found it to be acceptable. Please proceed with the TIS submission.

Thank you,
Dean Noles | Traffic Control Specialist
PA Department of Transportation| PennDOT Engineering District 8-0
2140 Herr Street | Harrisburg PA 17103-1699
Phone: 717.772.0976 | Fax: 717.705.0375
www.penndot.gov

From: Mark Allen <mallen@alphacei.com>
Sent: Monday, September 21, 2020 11:33 AM
To: PD, District 8-0 Signals <RA-pdDist80Signals@pa.gov>; PD, District 8-0 HOP <RA-PDDISTRICT80HOP@pa.gov>
Subject: [External] Revised Scoping Application 114 Upper Allen Township

PennDOT District 8-0

The scoping meeting application for 151-237 Gettysburg Pike (7-11) has been revised for your review and approval.

Our response to PennDOT comments is included at the end of the application.

Thank you.

Mark Allen PLS, PE

ALPHA CONSULTING ENGINEERS, INC.

115 LIMEKILN ROAD P.O. BOX 'G'

NEW CUMBERLAND, PA. 17070

OFFICE 717-770-2500

FAX 717-770-2400

mallen@alphacei.com

COMMISSIONERS of UPPER ALLEN TOWNSHIP
CUMBERLAND COUNTY
100 GETTYSBURG PIKE
MECHANICSBURG, PA 17055-5698

BOARD OF COMMISSIONERS:
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TOWNSHIP MANAGER:
LOUIS FAZEKAS

TELEPHONE: (717) 766-0756
FAX: (717) 796-9833
WEB PAGE: www.uatwp.org

October 8, 2020

Mark Allen PLS, PE
Alpha Consulting Engineers, Inc.
115 Limekiln Road, PO Box G
New Cumberland, PA 17070

Re: TIS/TIS Scoping Application for 151-237 Gettysburg Pike

Dear Mark,

We are in receipt of your latest TIS Scoping Application for the above-referenced properties, which was last revised on September 16, 2020. We have reviewed the submitted TIS Scoping Application and found it to be acceptable.

We are also in receipt of your TIS, last revised on September 23, 2020, which is currently under review. Once Traffic Engineer has completed his review and provided comments to me, I will forward them to you.

Finally, the Board of Commissioners, at their meeting on October 7, 2020 discussed the proposed improvements to the intersection of Gettysburg Pike and South Market Street. The Commissioners asked that consideration be given to the following issues:

1. Incorporate sidewalks along South Market Street to provide a connection between the sidewalks that will be along Gettysburg Pike south towards the Route 15 ramps and the intersection of South Market Street/Bumble Bee Hollow Road/Kim Acres Road.

2. There is an insufficient stacking lane area on South Market Street for the Route 15 northbound ramp. This area has a high volume of tractor trailer traffic, mostly from the Allen Distribution site, as well as general vehicular traffic. A longer stacking lane or other measures should be considered during the design process to address the existing issue as well as account for additional traffic generated by the development of these sites.

Should you have any further questions, please contact me at jboyer@uatwp.org or 717-766-0756. Township staff and officials are available to further discuss the concerns mentioned above.

Sincerely,

Jennifer M. Boyer, AICP
Community Development Director

cc: Project File: Z:\Community Development\Planning\PLANS\151 Gettysburg Pike 20-06-01 (7-Eleven Plan)\Traffic\Letter-Traffic Study Status 100820.Docx

Final Scoping Meeting Application 151 Gettysburg Pike

Mark Allen <mallen@alphacei.com>

Fri 10/9/2020 1:13 PM

To: Noles, Dean T <dnoles@pa.gov>; Jennifer Boyer <jboyer@uatwp.org>

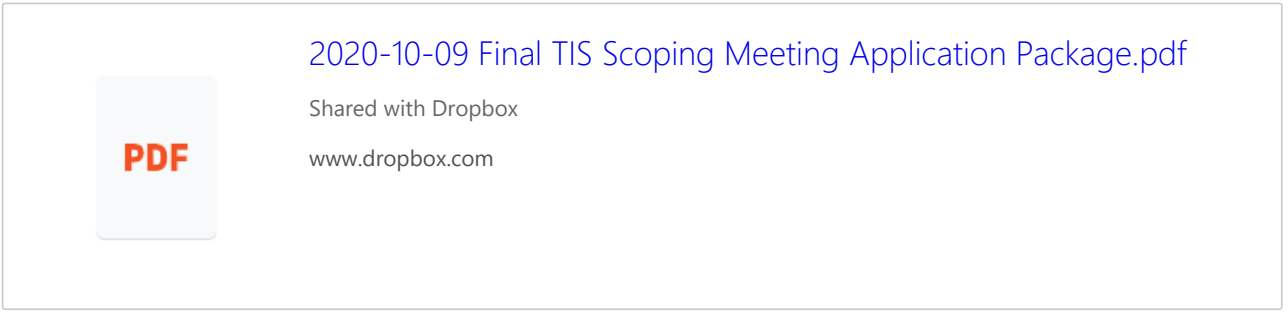
Dean/ Jen,

A copy of the final scope is attached via dropbox for your records. The final document includes the recently received acceptance letters/emails.
A copy will be included in the EPS with the TIA when submitted.
Thank you.

Mark Allen PLS, PE

ALPHA CONSULTING ENGINEERS, INC.
115 LIMEKILN ROAD P.O. BOX 'G'
NEW CUMBERLAND, PA. 17070
OFFICE 717-770-2500
FAX 717-770-2400
mallen@alphacei.com

https://www.dropbox.com/s/s0yuhwhnmlur5ea/2020-10-09%20Final%20TIS%20Scoping%20Meeting%20Application%20Package.pdf?dl=0



SCOPING MEETING APPLICATION
FOR
151-237 Gettysburg Pike

Applicant:
Highview Commercial
280 Highway 35 South, Suite 150
Red Bank, NJ 07701
REP: David Gunia

Site Location:
151-237 Gettysburg Pike
Upper Allen Township
Cumberland County
Pennsylvania

November 8, 2019
Revised September 16, 2020
Final October 9, 2020

Prepared by:

ALPHA CONSULTING ENGINEERS, INC.
PLANNING ♦ ENGINEERING ♦ SURVEYING
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New Cumberland, PA 17070
(717) 770-2500 Fax (717) 770-2400
www.alphacei.com

TRANSPORTATION IMPACT STUDY (TIS)
SCOPING MEETING APPLICATION

Scoping Meeting Date: **January 16, 2020**

Applicant: **Highview Commercial**

Applicant's Consultant: **ALPHA Consulting Engineers Inc.**

Applicant's Primary Contact: **David Gunia**

(Attach a list of meeting attendees along with phone numbers and email address)

(1) LOCATION OF PROPOSED DEVELOPMENT: (Attach location map if available) **Exhibit 3 & 4**

PennDOT Engineering Dist.: **08** - **2** County: **Cumberland**

Municipality: **Upper Allen Township**

State Route(s) (SR): **0114**

Segment(s): **0235** Offset(s): **0300 to 0400**

State Route(s) (SR):

Segment(s): Offset(s):

(2) DESCRIPTION OF PROPOSED DEVELOPMENT: (Attach site plan if available) **Exhibit 5**

Existing site access: **Existing driveways on Gettysburg Pike, Township Road**

Existing Land Use: **Agriculture, Office and Retail ,**

Proposed site access: **North Lot: Approx. 340 feet north of signal and 0114/0235/0370 rt-in**

South Lot: Approx. 400 to 770 south of signal

Proposed land uses: **North Lot: 7-11 Convenience Market, Fast Food Restaurant w/DTW**

South Lot: Retail, Fast Food Restaurant w/DTW

Community linkages (*access to neighboring properties, cross easements, pedestrian and transit accommodations):*

A section will be included within the study addressing the community linkages. The proposed break in limited access right-of-way along SR 0114 will require coordination and approval from the District Excess Land Committee. Central Office approval will also be required. The study shall note these requirements.

(3) DEVELOPMENT SCHEDULE AND STAGING:

Anticipated Opening Date: **2021** Full Build Out Date: **2021**

Describe Proposed Development Schedule/Staging: **Single stage to complete facilities.**

(4) TRIP GENERATION: (Use the most recent edition of "Institute of Transportation Engineers (ITE) Trip Generation," unless the Department approves another source. Non-ITE methods must be fully justified based on surveys of multiple sites of the same land use type and size.)

Trip generation for the proposed development will be based on:

__**X**__ ITE Trip Generation Manual.
(List proposed development land uses and associated ITE Land Use Codes)

____ Other independent surveys.
(Attach justification for non-ITE methods)

List land development and trip generation information, as appropriate. If necessary, attach additional sheets to indicate additional land uses or development phases.

TRIP GENERATION EQUATIONS

Land Use Description	ITE #	Time Period	Equations	Independent Variable (X)	Entering %	Exiting %
Shopping Center	820	Weekday	AR: T = 37.75(X) Ln(T) = 0.68 Ln(X) + 5.57	(33) (For Regression Equation Scenario) (30) (For Average Rate Scenario) 1,000 SF	50%	50%
		AM Peak Hour of Adj Street	AR: T = 0.94(X) T = 0.50(X) + 151.78		62%	38%
		PM Peak Hour of Adj Street	AR: T = 3.81(X) Ln(T) = 0.74 Ln(X) + 2.89		48%	52%
		AM Peak Hour of Generator	AR: T = 3.00(X) T = 2.76(X) + 77.28		54%	46%
		PM Peak Hour of Generator	AR: T = 4.21(X) Ln(T) = 0.72 Ln(X) + 3.02		50%	50%
		Saturday	AR: T = 46.12(X) Ln(T) = 0.62 Ln(X) + 6.24		50%	50%
		Saturday Peak Hour	AR: T = 4.50(X) Ln(T) = 0.79 Ln(X) + 2.79		52%	48%

T = number of site-generated vehicular trips AR = Trip Generation Rate, No equation provided. SNA = Split Not Available
M= Measured Trip Rate

TRIP GENERATION EQUATIONS CONTINUED

Land Use Description	ITE #	Time Period	Equations	Independent Variable (X)	Entering %	Exiting %
Fast-Food Restaurant with Drive-Through Window	934	Weekday	T = 470.95(X)	(3) 1,000 SF	50%	50%
		AM Peak Hour of Adj Street	T = 40.19(X)		51%	49%
		PM Peak Hour of Adj Street	T = 32.67(X)		52%	48%
		AM Peak Hour of Generator	T = 50.97(X)		52%	48%
		PM Peak Hour of Generator	T = 51.36(X)		51%	49%
		Saturday	T = 616.12(X)		50%	50%
		Saturday Peak	T = 54.86(X)		51%	49%

Land Use Description	ITE #	Time Period	Equations	Independent Variable (X)	Entering %	Exiting %
Super Convenience Market/Gas Station	960	Weekday	T = 837.58(X)	(5.0) 1,000 SF	50%	50%
		AM Peak Hour of Adj Street	AR: T = 83.14(X) T = 137.38(X) – 264.53		50%	50%
		PM Peak Hour of Adj Street	T = 69.28(X)		50%	50%
		AM Peak Hour of Generator	AR: T = 70.01(X) T = 99.90(X) – 130.36		50%	50%
		PM Peak Hour of Generator	AR: T = 67.53(X) T = 77.96(X) – 46.12		50%	50%
		Saturday	T = 700.00(X)		50%	50%
		Saturday Peak	AR: T = 63.80(X) T = 104.71(X) – 204.23		50%	50%

T = number of site-generated vehicular trips AR = Trip Generation Rate, No equation provided. SNA = Split Not Available
M= Measured Trip Rate

TRIP GENERATION EQUATIONS CONTINUED

Land Use Description	ITE #	Time Period	Equations	Independent Variable (X)	Entering %	Exiting %
Super Convenience Market/Gas Station	960	Weekday	T = 230.52(X)	(16) Fueling Positions	50%	50%
		AM Peak Hour of Adj Street	T = 28.08(X)		50%	50%
		PM Peak Hour of Adj Street	T = 22.96(X)		50%	50%
		AM Peak Hour of Generator	T = 21.30(X)		50%	50%
		PM Peak Hour of Generator	T = 20.25(X)		50%	50%
		Saturday	T = 291.67(X)		50%	50%
		Saturday Peak	T = 23.26(X)		50%	50%

T = number of site-generated vehicular trips AR = Trip Generation Rate, No equation provided. SNA = Split Not Available
M= Measured Trip Rate

TRIP GENERATION PROPOSED DEVELOPMENT – BUILD OUT

	Trips											
	Total				Enter				Exit			
	South Lot		North Lot		South Lot		North Lot		South Lot		North Lot	
Land Use	Shopping Center	Fast-Food Restaurant with Drive-Through Window 3.0 TSF		Super Convenience Market/Gas Station	Shopping Center	Fast-Food Restaurant with Drive-Through Window 3.0 TSF		Super Convenience Market/Gas Station	Shopping Center	Fast-Food Restaurant with Drive-Through Window 3.0 TSF		Super Convenience Market/Gas Station
ITE#	**820**	**934**	**934**	**960**	**820**	**934**	**934**	**960**	**820**	**934**	**934**	**960**
Time Period												
Weekday	1133	1413	1413	4188	566	706	707	2094	567	707	706	2094
	2829		*	*	1414		*	*	1415		*	*
	*	*	*	3688	*	*	*	1844	*	*	*	1844
	8430				**4215**				**4215**			
Weekday AM Adj.	28	121	121	416	17	61	61	208	11	60	60	208
	168		*	422	104		*	211	64		*	211
	*	*	*	449	*	*	*	224	*	*	*	225
	738				**389**				**349**			
Weekday PM Adj.	114	98	98	346	55	51	51	173	59	47	47	173
	239		*	*	115		*	*	124		*	*
	*	*	*	367	*	*	*	183	*	*	*	184
	704				**349**				**355**			
Weekday AM Gen.	90	153	153	350	49	80	80	175	41	73	73	175
	168		*	369	91		*	184	77		*	185
	*	*	*	341	*	*	*	170	*	*	*	171
	765				**393**				**372**			
Weekday PM Gen.	126	154	154	338	63	79	79	169	63	75	75	169
	254		*	344	127		*	172	127		*	172
	*	*	*	324	*	*	*	162	*	*	*	162
	778				**393**				**385**			
Saturday	1384	1848	1848	3500	692	924	924	1750	692	924	924	1750
	4482		*	*	2241		*	*	2241		*	*
	*	*	*	4667	*	*	*	2333	*	*	*	2334
	10997				**5498**				**5499**			
Saturday Peak	135	165	165	319	70	84	84	159	65	81	81	160
	258		*	319	134		*	159	124		*	160
	*	*	*	372	*	*	*	186	*	*	*	186
	837				**424**				**413**			

(5) ESTIMATED DAILY TRIP GENERATION/DRIVEWAY CLASSIFICATION:

(a) Estimated Daily Trip Generation of Proposed Development -- Assuming One Access Point and Full Build out/Occupancy of Entire Tract: trips/day **8,430 Trips/Day or 4,215 VPD**

(b) Driveway Classification Based on Trip Generation and One Access Point: **High Volume**

(6) TRANSPORTATION IMPACT STUDY REQUIRED?

_____ No

__**X**__ Yes, based on:

__**X**__ 3,000 or more vehicle trips/day generated

_____ During any one-hour time period, 100 or more new (added) vehicle trips generated entering or 100 or more new (added) vehicle trips generated exiting development

_____ Other considerations as described below:

(7) TRAFFIC IMPACT ASSESSMENT REQUIRED? __**X**__ No __ Yes

(If a TIS is required, the following sections of this checklist will be discussed at the TIS Scoping Meeting. The applicant may provide preliminary information.)

(8) TIS STUDY AREA: (Describe; attach map and/or diagram) **Exhibit 6**

(a) Roadway and Study intersections:
South Market Street intersections with Gettysburg Pike and US 15 (NB and SB Ramps)
Site driveways connecting to Gettysburg Pike and South Market Street SR 0114.

(b) Land Use Context: **Suburban Corridor.**

(c) Known Congestion Areas: **None Known.**
.

(d) Known Safety Concerns: **To be requested from the Township as part of any TIS.**

(e) Known Environmental Constraints: **None Known.**

(f) Pedestrian/Bike Review (Community Centers, Parks, Schools, etc.) **No major contributors known.**

(g) Transit Review (Current routes/stops). **Nearest route information to be included in any TIS**.

(9) STUDY AREA TYPE: Urban _____**X**____ Rural _____ _____

(10) TIS ANALYSIS PERIODS AND TIMES:

(List periods and times. Normal analysis periods are existing conditions, 5 years in the future without development, and 5 years in the future with development. Normal analysis times for each period are the AM peak hour, the PM peak hour, and the peak hour of site-generated traffic.)

Weekday Peak Periods for the, 2020 Current Year, 2021 Opening Year with/without development and 2026 Horizon Year with/without development:

1. **AM Peak Hour of the adjacent street between 6:00am to 9:00am**
2. **PM Peak Hour of the adjacent street between 3:00pm to 6:00pm**
3. **Saturday Peak Hour of the adjacent street between 10:00am to 2:00pm**

(11) TRAFFIC ADJUSTMENT FACTORS:

(a) Seasonal Adjustment: (Identify counts requiring adjustment and methodology) **None**

(b) Annual Base Traffic Growth: _____**0.74** %/yr. Source: __**PennDOT August 2019- July 2020**__

(c) Pass-By Trips: (Attach justification where required) **Per ITE Trip Generation Handbook**

Land Use	%	Source
820	**34% PM**	**Table E9**
	26% SAT	**E10**
934	**49% AM**	**E31**
	50% PM	**E32**
960	**76% AM**	**E39**
	76% PM	**E40**
	66% SAT	**10% less than E40**

(d) Captured Trips for Multi-Use Sites: **N/A**

(List % and manner of application. Attach justification where required.)

(e) Modal Split Reductions **N/A**

(f) Other Reductions **N/A**

(12) OTHER PROJECTS WITHIN STUDY AREA TO BE ADDED TO BASE TRAFFIC:
(Identify proposed developments with issued permits that need to be included.)

Adjacent development office center.

(13) TRIP DISTRIBUTION AND ASSIGNMENT:
(Describe; explain/justify; attach diagram and related information.)

Match existing distribution measured at existing site.

(14) Approval of Data Collection Elements and Methodologies:

Location	Period	Type
SR 0114 & Gettysburg Pike	**WD 6:00-9:00AM, 3:00-6:00PM, 10:00AM-2:00PM SAT**	**TM**
SR 0114 & US 15SB Ramp	**WD 6:00-9:00AM, 3:00-6:00PM, 10:00AM-2:00PM SAT**	**TM**
SR 0114 & US 15NB Ramp	**WD 6:00-9:00AM, 3:00-6:00PM, 10:00AM-2:00PM SAT**	**TM**

WD = Weekday
TM = Turn Movement
ATR = Automatic Traffic Recorder

(15) CAPACITY/LOS ANALYSIS:

Location	Period	Type
Listed Below	**AM PM WD and Saturday Peak Opening and Horizon Year**	**HCM 6 Synchro 10 Software**

Proposed Site Driveway Intersections
Adjacent intersections:

1. **South Market Street SR 0114 & Gettysburg Pike**
2. **South Market Street SR 0114 & US 15 Southbound Ramp**
3. **South Market Street SR 0114 & US 15 Northbound Ramp**

(16) ROADWAY IMPROVEMENTS/MODIFICATIONS BY OTHERS TO BE INCLUDED:
(Projects programmed for construction or other developments with issued permits.)

None known.

(17) OTHER NEEDED ANALYSES:

(a) Sight Distance Analysis:
(Required for all site access driveways; identify other locations)

Per CH 441 for all existing and proposed site driveway Intersections for passenger vehicles.

(b) Signal Warrant Analysis:
(Identify locations)

None proposed.

(c) Required Signal Phasing/Timing Modifications:
(Determine for all signalized intersections; specify methodology.)

As deemed necessary by the analysis within the TIS.

(d) Traffic Signal Corridor/Network Analysis:
(Identify locations/methodology)

If timing modifications are being proposed at signals located within a coordinated traffic signal system, the study will address the need to retime the entire system if deemed necessary.

(e) Analysis of the Need for Turning Lanes:
(Identify locations/methodology)

The proposed Site Driveway intersections per Pub 46.

(f) Turning Lane Lengths:
(Identify methodology to be used)

The proposed site driveway intersections per Pub 46.

(g) Left Turn Signal Phasing Analysis:
(Identify locations/methodology)

As deemed necessary by the analysis within the TIS.

(h) Queuing Analysis:
(Identify locations/methodology)

Per PennDOT, queue analysis will include all signalized movements and all unsignalized minor movements. Include both 50th percentile (signalized only) and 95th percentile queues from Synchro (HCM6 methodology). Also provide 95th percentile queues using Synchro methodology for the signalized intersection. For through movements, consider the distance to the next major intersection as the available stacking distance. Note that mitigation will be required if queues that are shorter than the available stacking distance in the "baseline" grow to lengths that are longer than the available stacking distance in the "with development" scenario. Mitigation will also be required for queues that are longer than the available stacking distance in the "baseline" and are increased between the baseline and "with development" scenario.

(i) Gap Studies:
(Identify locations/methodology)

None proposed.

(j) Crash Analysis:
(Identify locations)

For the area along Gettysburg Pike and South Market Street through the site frontage.

(k) Weaving Analysis:
(Identify locations)

None proposed.

(l) Other Required Studies:
(Specify locations/methodology)

None proposed.

(18)ADDITIONAL COMMENTS OR RECOMMENDATIONS RELATIVE TO THE SCOPE OF THE TIS:

Per PennDOT, 'the study should identify the driveway classification for each driveway serving the proposed development. If the design standards for the driveway classification cannot be met, provide an engineering justification explaining why and verify that driveway configurations won't unreasonably impact the state roads. For medium volume driveways, a median of sufficient length to accommodate the 95th percentile queue length must be provided, desirably 120'. For high volume driveways, a 150' median must be provided. Internal site driveways should not be located within these areas.'

_____ Date: _____
Signature of Applicant's Engineer

_____ Date: _____
Signature of District Traffic PennDOT Representative

_____ Date: _____
Signature of District Permit PennDOT Representative (if present)

_____ Date: _____
Signature of Municipal Traffic Representative

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WWW.ALPHACEI.COM

SCOPING MEETING APPLICATION - EXHIBIT 3

LOCATION MAP - USGS

151 - 237 GETTYSBURG PIKE

UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

PROJECT NO.	319590
DATE :	04-30-2020
DRAWN :	MEA
SCALE :	1" = 1000'
SHEET	3

SITE

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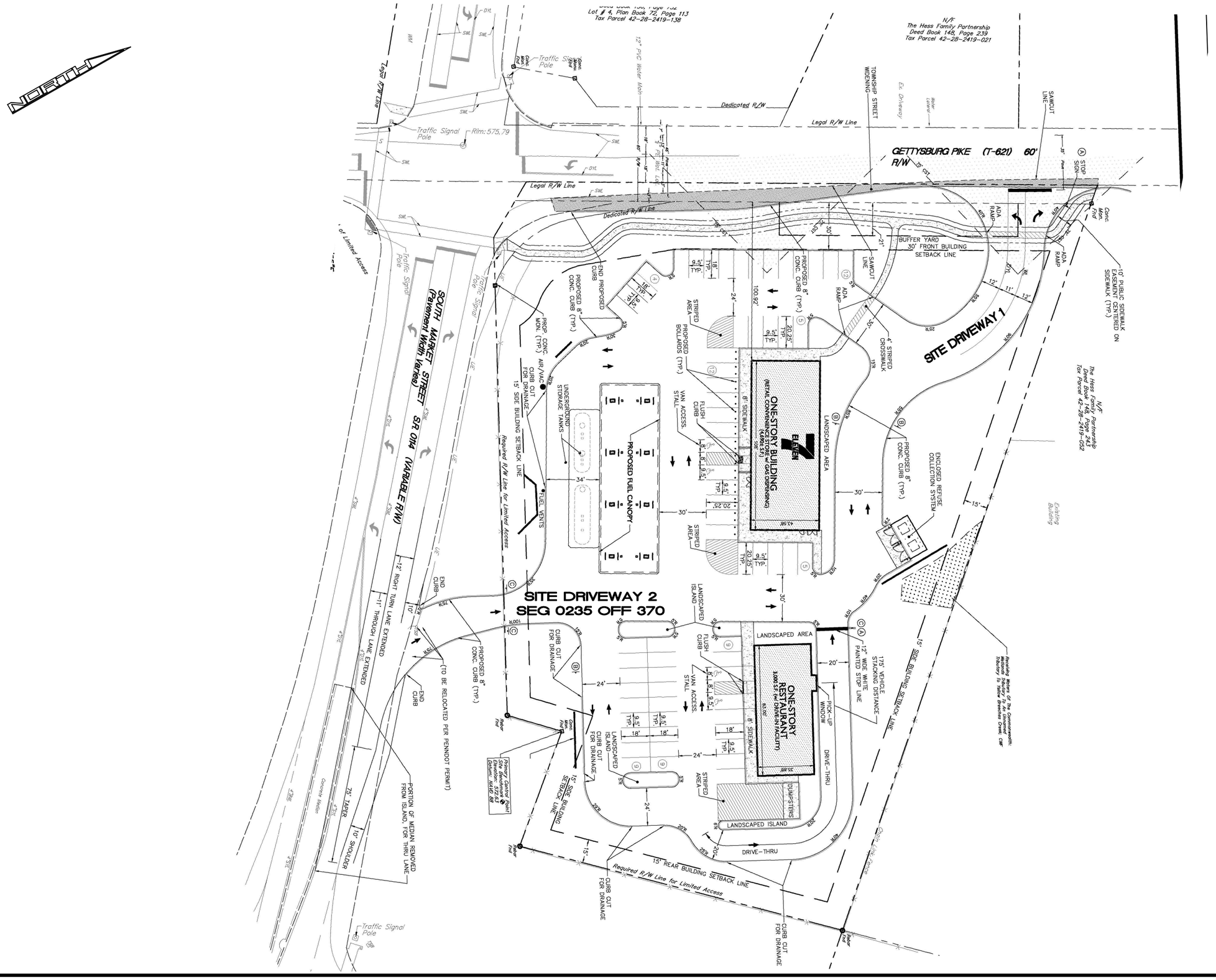
SCOPING MEETING APPLICATION - EXHIBIT 4

AERIAL

151 - 237 GETTYSBURG PIKE

UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

PROJECT NO.	319590
DATE :	04-30-2020
DRAWN :	MEA
SCALE :	1" = 200'
SHEET	4



DESIGN :	MEA
DRAWN :	MEA
CHECKED :	X.X.
DATE :	04-30-2020

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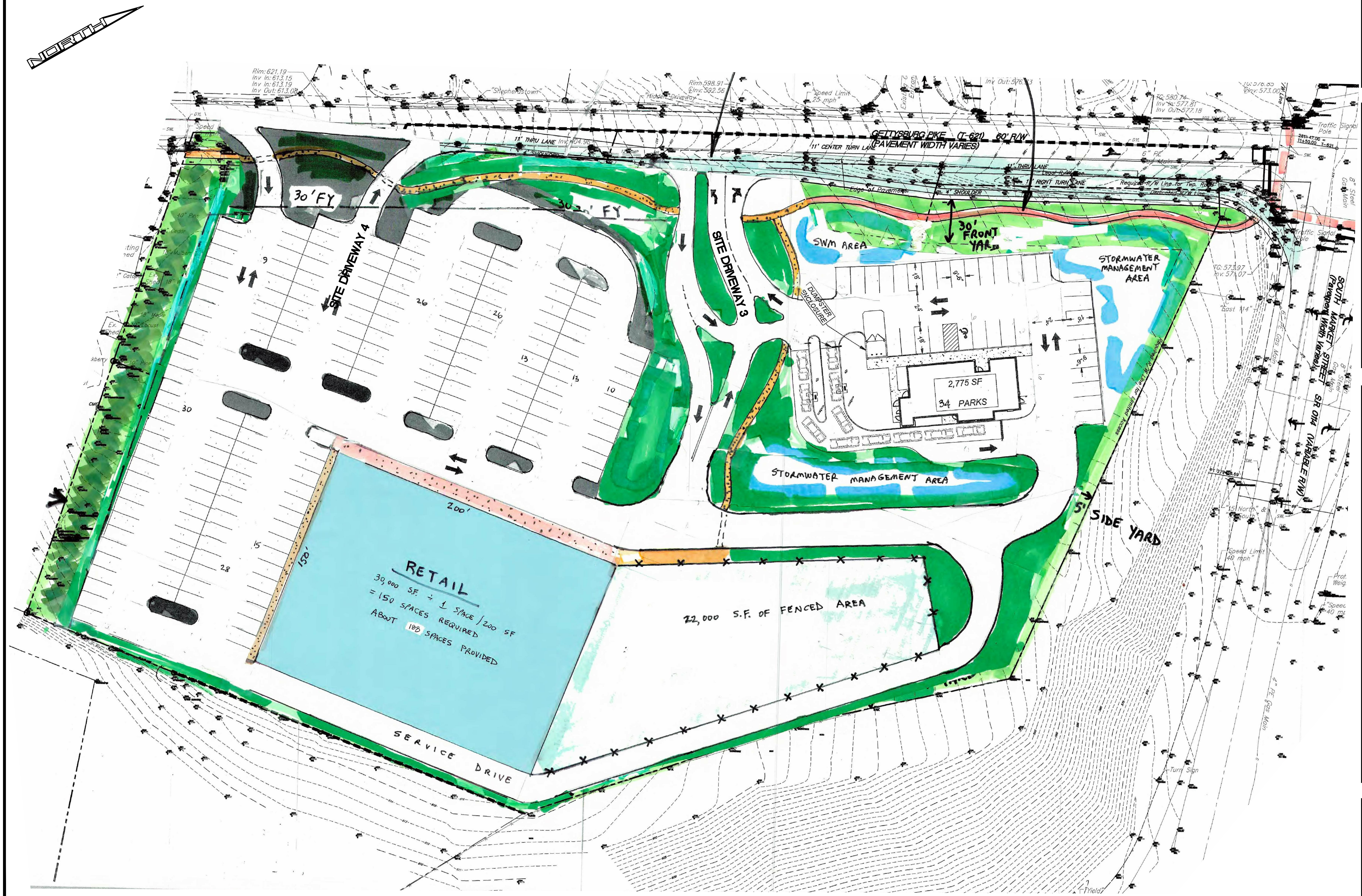
SCOPING MEETING APPLICATION - EXHIBIT 5

CONCEPT PLAN – NORTH LOT

151 - 237 GETTYSBURG PIKE

UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

PROJECT NO.	319590
SURVEY BOOK :	Z:\Surveyor\Year\Project.txt
SCALE :	1" = 60'
SHEET	5A



DESIGN : MEA
DRAWN : MEA
CHECKED : X.X.
DATE : 04-30-2020

ALPHA
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SCOPING MEETING APPLICATION - EXHIBIT 5

CONCEPT PLAN - NORTH LOT

151 - 237 GETTYSBURG PIKE

UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

PROJECT NO. 319590
SURVEY BOOK : Z:\Surveyor\Year\Project.txt
SCALE : 1" = 60'
SHEET 5B

PROPOSED STUDY INTERSECTIONS:

1. SOUTH MARKET STREET SR 0114 - GETTYSBURG PIKE
2. SOUTH MARKET STREET SR 0114 - US 15 SOUTHBOUND RAMP
3. SOUTH MARKET STREET SR 0114 - US 15 NORTHBOUND RAMP

SITE DRIVEWAYS

SITE

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SCOPING MEETING APPLICATION - EXHIBIT 6

PROPOSED STUDY ROADWAYS AND INTERSECTIONS

151 - 237 GETTYSBURG PIKE

UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

PROJECT NO.	319590
DATE :	04-30-2020
DRAWN :	MEA
SCALE :	1" = 200'
SHEET	6

pennsylvania
DEPARTMENT OF TRANSPORTATION

Date: 12/18/2020

Subject: Highway Occupancy Permit Application No. 228878, Cycle No.1 - Returned For Revisions

To: Linlo Properties LLX
150 Corporate Center Drive, Suite 100
Camp Hill, PA 17011

From: PennDOT Engineering District 8-0
2140 Herr Street
Harrisburg, PA 17103-1699

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 Mazhar Malik, District Permit Manager, at (717) 787-8789.

pennsylvania
DEPARTMENT OF TRANSPORTATION

Response Comments
Date: 12/18/2020
Application Number: 228878, Cycle No.1

Form Letter Notes

(1) * Upon resubmission, the applicants engineer should put together a response letter that includes each comment, describes how each comment has been addressed, and where each can be found in the report. A copy of these comments and any previously submitted reports should also be provided. This will help expedite the review.

* Additional comments may follow upon subsequent review of the revised Transportation Impact Study (TIS). If you have any questions pertaining to the technical aspects of this review, please contact Mr. Eric Kinard of the District 8-0 Traffic Unit at (717) 787-9237.

Application

(1) It appears that the application has been submitted by an "agent" on behalf of the applicant. Provide an Applicants Authorization for Agent to Apply for Highway Occupancy Permit form (M-950AA) authorizing the "agent" to act on behalf of the applicant.

Transportation Impact Study/Transportation Impact Assessment

(1) Provide Upper Allen Township and local Municipal Planning Organization (MPO) acceptance with your resubmission. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits)

(2) The proposed break in limited access right-of-way along SR 0114 will require coordination and approval from the District Excess Land Committee. Central Office approval will also be required.

(3) For mitigation scenarios, applicants are expected to mitigate the overall intersection LOS to the original Without Development LOS; the 10-second delay variance is not applied to mitigation scenarios. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 10). The LOS at the intersection of SR 0114 and Gettysburg Pike drops from LOS C in the 2026 Without Development conditions to LOS D in the 2026 With Development with Improvements conditions in the PM peak hour.

(4) Analysis of traffic signals should assume optimized signal timing for the without development and with development conditions. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 9)

(5) Provide lane widths, shoulder widths and approach grades for all unsignalized intersections,

including the approaches to proposed driveways. This information should be included in the TIS in the form of field sketches, existing signal permit plans, or tabular format. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 2)

(6) Provide a description in the narrative of each nearby development included in the background traffic. Include trip generation and trip distribution information for each development in the appendix, as well as excerpts from the respective transportation impact studies, if available. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 4)

(7) Provide right turn lane warrant and length analyses at the proposed site driveway intersections in accordance with PennDOT Publication 46. Include all backup data in the appendix. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 9). Also, verify the speeds used in the left turn lane warrant and length analyses at the intersections along Gettysburg Pike.

(8) Provide LOS tables that include the LOS and delay for all applicable movements, approaches, and the overall intersection. This is necessary to identify and address capacity concerns for critical lanes/movements. Also, the delay values should not be rounded.

(9) Ensure that the calibration parameters outlined in Publication 46, Chapter 10 were incorporated into the unsignalized intersection capacity analyses. Include all backup information.

(10) Within the study there are recommendations to retime certain signals. Some of these signals are located within a coordinated system and thus modifying the timings at one intersection within the system will likely result in the need to retime all the signals within the system whether or not mitigation is necessary. Please address the need to retime the entire system within the studys recommendations.

(11) The questionnaire found in Chapter 3, Appendix A of Publication 13M and Appendix AC of Publication 10X should be used as guidance when evaluating the feasibility of installing a roundabout. Also, provide a roundabout versus signal evaluation. The evaluation should include a concept plan of the roundabout with sufficient detail to show the feasibility and HCM, 6th Edition analyses for the roundabout for a 20-year horizon. Truck turning templates should also be provided since they will impact the intersection footprint. Provide an explanation on the advantages and disadvantages for the roundabout and signalization for the particular location, include the municipalities comments and preference. In addition, several of the roundabout approaches are projected to operate with v/c ratios greater than 0.85 and at LOS E/F under both 2021 and 2026 scenarios and queuing on SR 0114 may extend back to the roundabout at times. Therefore, a roundabout may not be the preferred alternative due to the operations and location within a

signalized corridor. Additional analyses will be required and input from Central Office will be required if the roundabout option is determined to be feasible. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 11)

(12) Concept plans of full mitigation shall be prepared with sufficient detail to describe their feasibility. Development of construction cost estimates is required along with noting any proposed design exception(s). The plans must also show right-of-way lines. The plan scale should be 50-scale unless otherwise agreed to at the scoping meeting. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 9). The sketches provided within the report are not consistent with the analyses and do not provide sufficient detail for review.

(13) Based on the 95th percentile queue length results, there is at least one movement that exceeds the length available for storage (e.g., EB Left at SR 0114 and US 15 Northbound Ramps). Where With Development queues are greater than Without Development queues and exceed existing/proposed storage lengths, provide mitigating measures. If mitigation is impractical / infeasible, the applicant must document the reasons that construction of the improvements is impractical or infeasible in the report. Also, there were several movements in the Synchro analyses where the volume exceeds the capacity and the queue is theoretically infinite. The report should address these movements accordingly.

(14) Ensure that the 95th percentile queue lengths provided in Tables 6a, 6b, and 6c are consistent with the Synchro/HCM results. Several inconsistencies were noticed. Typically, the HCM queue lengths are calculated by multiplying the number of vehicles from the HCM results by 25 feet. Also, provide the distance to the nearest intersection for the westbound through lane at the intersection of SR 0114 and Gettysburg Pike in the queue analysis tables.

(15) Address the following in the capacity analyses:

a) Verify that the detector inputs used for the mainline phases match the traffic signal permit plans.
b) Verify the recall mode used in the analyses for the minor street phases at the Route 15 Ramps. Actuated side street phases should be set to None.
c) Verify that the walk and flashing dont walk times match the traffic signal permit plans.
d) Verify that the coordination offsets match the traffic signal permit plans.
e) Ensure that Link Origin-Destination (O-D) volumes were adjusted within the interchange area within the Volume Settings window in Synchro.
f) If unsignalized right-turn movements exist at signalized intersections, the delay for these movements should be estimated and input into the HCM, 6th Edition tab within Synchro, if applicable.

g) Code the right turn overlap phases at the intersection of SR 0114 and Gettysburg Pike in the with adjacent development scenarios.

h) Provide justification for coding the Route 15 Off Ramps with channelized right turns with stop control.

i) Ensure that the peak hour factors for the mitigation scenarios are consistent with the build conditions.

j) Ensure that maximum green times are at least 7 seconds.

k) The eastbound left turn lane at the intersection of SR 0114 and US 15 NB Ramps should be coded as one lane in the Saturday peak hour mitigation scenarios.

l) The northbound right turn bypass lane at the roundabout should be coded as Yield.

m) Provide Saturday peak hour analyses with the improvements from the adjacent development.

n) Enter the eastbound through volume at the intersection of SR 0114 and Site Driveway 2.

(16) In the study, please specify the software type, version number, build number, and revision number used to complete the capacity and queue analyses. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 3)

(17) To facilitate Department review, the Appendices should be electronically bookmarked / hyperlinked within the PDF.

(18) Utilizing the checklist located in Publication 10X, Design Manual Part 1X, the applicant shall identify any existing or proposed pedestrian or bicycle facility that would be affected by the proposed development. Pedestrian facilities include sidewalks, intersection treatments, and off-road paths or trails. Bicycle facilities include on-street bike lanes, paved shoulders, and off-road paths or trails. The study shall note any impact on pedestrian and bicycle facilities, and shall also note any impact on the ability of pedestrians to cross roadways within the study area, both at intersections and at identified common mid-block crossings. The study shall describe how the proposed development was designed to accommodate pedestrians, bicycles and transit operations. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 2)

(19) Crash data for the study area shall be obtained as agreed upon at the scoping meeting. The most recent five years of crash data for each approach route should be obtained. The applicant shall analyze the crash data to determine if there are any crash patterns within the study area. The applicant should also contact the municipality for input regarding non-reportable crashes. Analysis of the crash data should include review of causation factors and patterns. Include the analysis of the crash data in an Appendix that is to be submitted under separate cover. Crash data is not for public consumption and is exempt from the Right to Know Law requests. Additional information on the analysis of crash rates can be found in the Appendix of Publication 212, Item 2(1) and Publication

46, Chapters 11.1 and 11.3. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 2)

(20) At intersections, pedestrian activity as well as pedestrian accommodations should be recorded and reflected in the study. The report should identify if pedestrian activity at any of the study intersections is significant enough to impact the results of the analyses. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 2)

(21) Provide updated site plans that reflect all of the latest findings of the study and developer commitments.

(22) The recommended improvements in the Executive Summary and in the Recommended Improvements section of the report should be consistent and match the analyses. Also, the report indicates that the roundabout size is preliminarily estimated as 80 feet (radius) and the roundabout shall include an exclusive by-pass northbound right turn lane that extends to the eastbound left turn lane of the Route 15 southbound ramp. Typically, the inscribed circle diameter is specified for roundabout size and there is not an eastbound left turn lane at the Route 15 southbound ramp. Verify and revise.

ALPHA CONSULTING ENGINEERS, INC.
PLANNING ♦ ENGINEERING ♦ SURVEYING

June 15, 2021

Mr. Mazhar Malik
District Permits Manager
PennDOT District 8-0
2140 Herr Street
Harrisburg, PA 17103

RE: Highway Occupancy Permit
EPS Application #228878
Upper Allen Township, PA

Dear Mr. Malik:

Please find the following responses (in **bold** text) to review comments (in *italics*) received December 18, 2020 for the above referenced application. This letter has been attached to PennDOT's Electronic Permitting System as cycle 3 document 'A' (Exhibit **C3A**). Items previously submitted under cycle 1 and 2 include:

- Exhibit C1A – Approved Final Scoping Application Package dated 2020-10-09,
- Exhibit C1B – Traffic Impact Study dated 2020-10-13,
- Exhibit C1C – Traffic Impact Study Appendix.
- Exhibit C2A – Request for new 180-day cycle.

Form Letter Notes:

1. ** Upon resubmission, the applicants engineer should put together a response letter that includes each comment, describes how each comment has been addressed, and where each can be found in the report. A copy of these comments and any previously submitted reports should also be provided. This will help expedite the review.* **This letter is being provided to address this comment.**

   ** Additional comments may follow upon subsequent review of the revised Transportation Impact Study (TIS). If you have any questions pertaining to the technical aspects of this review, please contact Mr. Eric Kinard of the District 8-0 Traffic Unit at (717) 787-9237.* **Acknowledged.**

Application:

1. *It appears that the application has been submitted by an "agent" on behalf of the applicant. Provide an Applicants Authorization for Agent to Apply for Highway Occupancy Permit form (M-950AA) authorizing the "agent" to act on behalf of the applicant.* **Form M-950AA is attached as exhibit C3B.**

Transportation Impact Study/Transportation Impact Assessment:

1. *Provide Upper Allen Township and local Municipal Planning Organization (MPO) acceptance with your resubmission. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits).* **Municipal correspondence is included in the traffic study appendix as exhibit C3D.**

2. *The proposed break in limited access right-of-way along SR 0114 will require coordination and approval from the District Excess Land Committee. Central Office approval will also be required.* **This is noted in the executive summary section of the attached traffic study.**

3. *For mitigation scenarios, applicants are expected to mitigate the overall intersection LOS to the original Without Development LOS; the 10-second delay variance is not applied to mitigation scenarios. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 10). The LOS at the intersection of SR 0114 and Gettysburg Pike drops from LOS C in the 2026 Without Development conditions to LOS D in the 2026 With Development with Improvements conditions in the PM peak hour.* **The mitigation scenario has been revised to eliminate the different LOS criteria between the signalized and non-signalized intersections, thereby resolving the appearance of a 10-second variance.**

4. *Analysis of traffic signals should assume optimized signal timing for the without development and with development conditions. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 9).* **The signal timings have been adjusted.**

5. *Provide lane widths, shoulder widths and approach grades for all unsignalized intersections, including the approaches to proposed driveways. This information should be included in the TIS in the form of field sketches, existing signal permit plans, or tabular format. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 2)* **There are no existing driveways being analyzed and therefore, no sketch is provided. Signal plans are provided as figure 3a within the traffic study.**

6. *Provide a description in the narrative of each nearby development included in the background traffic. Include trip generation and trip distribution information for each development in the appendix, as well as excerpts from the respective transportation impact studies, if available. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 4)* **Information from the adjacent study has been added to the study prior to the correspondence section.**

7. *Provide right turn lane warrant and length analyses at the proposed site driveway intersections in accordance with PennDOT Publication 46. Include all backup data in the appendix. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 9). Also, verify the speeds used in the left turn lane warrant and length analyses at the intersections along Gettysburg Pike.* **Right turn lane warrant analysis has been included within the study.**

8. *Provide LOS tables that include the LOS and delay for all applicable movements, approaches, and the overall intersection. This is necessary to identify and address capacity concerns for critical lanes/movements. Also, the delay values should not be rounded.* **Table 1a has been added to provide the movement and approach information. The accuracy and precision of the intersection delay is correct per the HCM and as shown in step 10 of PennDOT Publication 282.**

9. *Ensure that the calibration parameters outlined in Publication 46, Chapter 10 were incorporated into the unsignalized intersection capacity analyses. Include all backup information.* **Headway calibration calculations are included in the study.**

10. *Within the study there are recommendations to retime certain signals. Some of these signals are located within a coordinated system and thus modifying the timings at one intersection within the system will likely result in the need to retime all the signals within the system whether or not mitigation is necessary. Please address the need to retime the entire system within the study's recommendations.* **Signal retiming of the system is included in the executive summary section of the attached traffic study.**

11. *The questionnaire found in Chapter 3, Appendix A of Publication 13M and Appendix AC of Publication 10X should be used as guidance when evaluating the feasibility of installing a roundabout. Also, provide a roundabout versus signal evaluation. The evaluation should include a concept plan of the roundabout with sufficient detail to show the feasibility and HCM, 6th Edition analyses for the roundabout for a 20-year horizon. Truck turning templates should also be provided since they will impact the intersection footprint. Provide an explanation on the advantages and disadvantages for the roundabout and signalization for the particular location, include the municipalities comments and preference. In addition, several of the roundabout approaches are projected to operate with v/c ratios greater than 0.85 and at LOS E/F under both 2021 and 2026 scenarios and queuing on SR 0114 may extend back to the roundabout at times. Therefore, a roundabout may not be the preferred alternative due to the operations and location within a*

signalized corridor. Additional analyses will be required and input from Central Office will be required if the roundabout option is determined to be feasible. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 11) **The mitigation scenario has been revised and these requirements are no longer applicable.**

12. *Concept plans of full mitigation shall be prepared with sufficient detail to describe their feasibility. Development of construction cost estimates is required along with noting any proposed design exception(s). The plans must also show right-of-way lines. The plan scale should be 50-scale unless otherwise agreed to at the scoping meeting. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 9). The sketches provided within the report are not consistent with the analyses and do not provide sufficient detail for review.* **Concept plans have been updated and are included within the study.**

13. *Based on the 95th percentile queue length results, there is at least one movement that exceeds the length available for storage (e.g., EB Left at SR 0114 and US 15 Northbound Ramps). Where With Development queues are greater than Without Development queues and exceed existing/proposed storage lengths, provide mitigating measures. If mitigation is impractical / infeasible, the applicant must document the reasons that construction of the improvements is impractical or infeasible in the report. Also, there were several movements in the Synchro analyses where the volume exceeds the capacity and the queue is theoretically infinite. The report should address these movements accordingly.* **The eastbound mitigation scenario has been revised to address the queue lengths.**

14. *Ensure that the 95th percentile queue lengths provided in Tables 6a, 6b, and 6c are consistent with the Synchro/HCM results. Several inconsistencies were noticed. Typically, the HCM queue lengths are calculated by multiplying the number of vehicles from the HCM results by 25 feet. Also, provide the distance to the nearest intersection for the westbound through lane at the intersection of SR 0114 and Gettysburg Pike in the queue analysis tables.* **Queue lengths have been revised to reflect 25 feet per vehicle.**

15. *Address the following in the capacity analyses:*

    a. *Verify that the detector inputs used for the mainline phases match the traffic signal permit plans.* **The detector inputs have been verified and are correct for the HCM 6 methodology.**
    b. *Verify the recall mode used in the analyses for the minor street phases at the Route 15 Ramps. Actuated side street phases should be set to None.* **The recall mode has been set to 'none' as requested.**
    c. *Verify that the walk and flashing don't walk times match the traffic signal permit plans.* **The walk and flashing time have been verified and revised accordingly.**

d. *Verify that the coordination offsets match the traffic signal permit plans.* **The coordination offsets are correct and as modified by the optimization for the future scenarios.**
e. *Ensure that Link Origin-Destination (O-D) volumes were adjusted within the interchange area within the Volume Settings window in Synchro.* **The volumes were not to be adjusted per scoping meeting correspondence dated July 10, 2020.**
f. *If unsignalized right-turn movements exist at signalized intersections, the delay for these movements should be estimated and input into the HCM, 6th Edition tab within Synchro, if applicable.* **This is not applicable.**
g. *Code the right turn overlap phases at the intersection of SR 0114 and Gettysburg Pike in the with adjacent development scenarios.* **The right turn overlap has been added to the with adjacent development scenarios.**
h. *Provide justification for coding the Route 15 Off Ramps with channelized right turns with stop control.* **The coding is based on field observations.**
i. *Ensure that the peak hour factors for the mitigation scenarios are consistent with the build conditions.* **The PHF have been verified as 0.90 for proposed driveway movements.**
j. *Ensure that maximum green times are at least 7 seconds.* **Green times are based upon the signal timing and the optimization required for the future scenarios.**
k. *The eastbound left turn lane at the intersection of SR 0114 and US 15 NB Ramps should be coded as one lane in the Saturday peak hour mitigation scenarios.* **Mitigation scenarios have been revised.**
l. *The northbound right turn bypass lane at the roundabout should be coded as Yield.* **This comment is not applicable.**
m. *Provide Saturday peak hour analyses with the improvements from the adjacent development.* **The scenario has been added as requested.**
n. *Enter the eastbound through volume at the intersection of SR 0114 and Site Driveway 2.* **The values have been entered as requested.**

16. *In the study, please specify the software type, version number, build number, and revision number used to complete the capacity and queue analyses. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 3)* **The software has been listed as Synchro 10, current build.**

17. *To facilitate Department review, the Appendices should be electronically bookmarked / hyperlinked within the PDF.* **The study has been booked marked.**

18. *Utilizing the checklist located in Publication 10X, Design Manual Part 1X, the applicant shall identify any existing or proposed pedestrian or bicycle facility that would be affected by the proposed development. Pedestrian facilities include sidewalks, intersection treatments, and off-road paths or trails. Bicycle facilities include on-street bike lanes, paved shoulders, and off-road paths or trails. The study shall note any impact on pedestrian and bicycle facilities, and shall also note any impact on the ability of pedestrians to cross roadways within the study area, both at intersections and at identified common mid-block crossings. The study shall describe how the proposed development was designed to accommodate pedestrians, bicycles and transit operations. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 2)* **Please see the multimodal section of the traffic study.**

19. *Crash data for the study area shall be obtained as agreed upon at the scoping meeting. The most recent five years of crash data for each approach route should be obtained. The applicant shall analyze the crash data to determine if there are any crash patterns within the study area. The applicant should also contact the municipality for input regarding non-reportable crashes. Analysis of the crash data should include review of causation factors and patterns. Include the analysis of the crash data in an Appendix that is to be submitted under separate cover. Crash data is not for public consumption and is exempt from the Right to Know Law requests. Additional information on the analysis of crash rates can be found in the Appendix of Publication 212, Item 2(1) and Publication46, Chapters 11.1 and 11.3. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 2)* **The crash study has been submitted as a separate attachment.**

20. *At intersections, pedestrian activity as well as pedestrian accommodations should be recorded and reflected in the study. The report should identify if pedestrian activity at any of the study intersections is significant enough to impact the results of the analyses. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 2)* **No pedestrians were observed during the data collection.**

21. *Provide updated site plans that reflect all of the latest findings of the study and developer commitments.* **Updated site plans are attached as exhibit C3D.**

22. *The recommended improvements in the Executive Summary and in the Recommended Improvements section of the report should be consistent and match the analyses. Also, the report indicates that the roundabout size is preliminarily estimated as 80 feet (radius) and the roundabout shall include an exclusive by-pass northbound right turn lane that extends to the eastbound left turn lane of the Route 15 southbound ramp. Typically, the inscribed circle diameter is specified for roundabout size and there is not an eastbound left turn lane at the Route 15 southbound ramp. Verify and revise.* **Improvement recommendations have been revised.**

If you have any further questions or comments, please contact our office.

Sincerely,

Mark E. Allen, P.L.S., P.E.

Memo

DATE: July 14, 2021

TO: Upper Allen Township Board of Commissioners, Planning and Zoning Committee
Commissioner Ginnie M. Anderson
Commissioner Kenneth Martin

FROM: Jennifer M. Boyer, AICP
Community Development Director/Planner

RE: Plan Name: Mills at Shepherdstown Crossing
Plan Type: Prelim/Final Subdivision/Land Development
UAT File No.: 21-04-01
Property Parcel ID: 42-28-2419-137; 057; 043; 044; 049; 042; and 041AEX
Property Address: Gettysburg Pike and South Market Street
Zoning District: Neighborhood Commercial (C-1) and Highway Commercial (C-2)

The proposed project is for the consolidation of seven lots into two lots. The 14.36 acre tract of land (Lot A) will be developed with a mix of commercial and residential units. Approximately 44,000 square feet of commercial space is proposed, along with 54 multi-family dwelling units. The development will be served with public water and sewer.

The various residential and non-residential uses require a total of 341 off-street parking spaces. The Applicant is providing 285 parking spaces, including 13 garage spaces. The two restaurant buildings will have drive-thru lanes to accommodate their businesses. While the Applicant is providing less parking spaces overall, the various uses lend themselves to utilizing joint parking facilities. Traditionally, residential parking is needed more for evening and weekend hours, while the retail and restaurant businesses' peak times will be during the day. Joint parking is permitted for various non-residential uses on the same lot, provided that the total number of spaces is based on the one use of the facility which requires the most spaces.

The Applicant submitted a zoning text amendment petition to allow for the proposed uses, as designed. The text amendment was approved on June 2nd and adopted through Ordinance 810.

As part of the revised plan, the Applicant is now requesting the following modifications:

1. Modification to Section 220-5.3.B to allow for the public walkway around the site instead of a sidewalk within the public right-of-way.

a. Correct overlapping text at MH LS10-16- "*Inv. CL 592.56*".
b. At LS10-16 show hidden text stating *"Core Drill and Connect to Existing Manhole-Finish Channel as Directed by Engineer/Owner."*

TRAFFIC

7. The site plan shows Building 3 as a 19,200 sf 3-story, Office/Retail/Restaurant use. The plan in the TIS assumes a 12,800 sf Medical Office. The trip generation calculations assumed in the TIS must be updated based on the current plan. If the changes in trip generation are significant, the following comments in this review may be modified.

8. The capacity analysis for the 2026 traffic volumes at the proposed driveways incorrectly show 2021 traffic volumes and must be updated.

9. The turn lane analysis for the proposed driveways assumed a 25mph speed limit on Gettysburg Pike instead of the posted 35 mph speed limit. The turn lane analysis must be updated to reflect the posted speed limit.

10. The Saturday analysis (Synchro. turn lane, figures, etc.) at the proposed driveways show incorrect through volumes and must be updated.

11. We concur with the proposed southbound left turn lane on Gettysburg Pike at proposed site driveway 1. The length of the proposed left turn lane should be confirmed based on the posted 35 mph speed limit and revised Saturday traffic volumes.

12. We concur with the construction of the proposed median to prohibit left turns from South Market Street into proposed driveway 2. The need for a right turn lane into this driveway should be completed for this driveway.

13. We concur with the proposed southbound left turn lane on Gettysburg Pike at proposed site driveway 3. The length of the proposed left turn lane should be confirmed based on the posted 35 mph speed limit and revised Saturday traffic volumes.

14. The need for a right turn lane should be verified for site driveway 4 based on the posted 35 mph speed limit and revised Saturday traffic volumes.

15. We concur with the construction of an additional eastbound through lane on South Market Street between Gettysburg Pike and the US 15 NB Ramp.

16. The study proposes to provide coordinated signal retimings. Because the cycle lengths are proposed to change, the entire corridor should be retimed. Additionally, some of the left

turn phases have green times of 4-5 seconds, typically the minimum for signal phases is 7 seconds. The minimum green times should be adjusted for these phases and updated in the TIS.

17. The concept plans should be updated to show the proposed driveways and the roadway improvements at each driveway. The plans should include dimensions of the proposed improvements.

18. PennDOT review comments should be forwarded to the Township for review. All PennDOT comments must be addressed.

GENERAL

19. The site plans include proposed retaining walls. Detailed design plans need to be included with the set for approval.

20. The plans currently propose conceptual PennDOT improvements outside the limits of the existing public right of way. We realize the plan is in a developmental phase and that additional public right of way will need to encompass the proposed roadway improvements. Additional clarification needs to be provided regarding the status of the intersection improvements and the entity responsible for completing those improvements.

21. The site plan proposes an interconnection with the neighboring Church property. Additional information regarding the joint access and any supporting cross-access agreements needs to be provided to the Township.

22. On the Cover Page, the Applicant shall correct the following:

    a. Provide updated figures for parking spaces required/provided.

    b. General Note #12 only mentions as-built plans for sanitary sewer work. As-builts shall include all new and modified facilities as required in Section 220-4.2.C(3) of the Codified Ordinances. The note shall be updated.

    c. General Note #25 should identify an easement area around the walking trail. The easement may also be noted on another page.

23. On the Landscaping Page (Sheet 6), the following section reference incorrect ordinance sections:

    a. Landscaping islands. Change section 220-26.D(7)(a) to Section 220-5.13.B(2).

    b. Dumpsters. Change Section 220-26.B(2) to Section 220-5.13.B(3).

pennsylvania
DEPARTMENT OF TRANSPORTATION

Date: 07/16/2021

Subject: Highway Occupancy Permit Application No. 228878, Cycle No.3 - Returned For Revisions

To: Linlo Properties LLX
150 Corporate Center Drive, Suite 100
Camp Hill, PA 17011

From: PennDOT Engineering District 8-0
2140 Herr Street
Harrisburg, PA 17103-1699

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 Mazhar Malik, District Permit Manager, at (717) 787-8789.

pennsylvania
DEPARTMENT OF TRANSPORTATION

Response Comments
Date: 07/16/2021
Application Number: 228878, Cycle No.3

Form Letter Notes

(1) * Upon resubmission, the applicants engineer should put together a response letter that includes each comment, describes how each comment has been addressed, and where each can be found in the report. A copy of these comments and any previously submitted reports should also be provided. This will help expedite the review.

* Additional comments may follow upon subsequent review of the revised Transportation Impact Study (TIS). If you have any questions pertaining to the technical aspects of this review, please contact Mr. Eric Kinard of the District 8-0 Traffic Unit at (717) 787-9237.

Application

(1) The applicant name on the M-950AA form does not match the applicant name in the ePermitting System (EPS). Also, the email address entered in EPS must be the applicant's if they have elected to receive updates on the M-950AA form and the email address listed must match between the two locations.

Transportation Impact Study/Transportation Impact Assessment

(1) Provide Upper Allen Township and local Municipal Planning Organization (MPO) acceptance with your resubmission. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits)
(2) The proposed break in limited access right-of-way along SR 0114 will require coordination and approval from the District Excess Land Committee. Central Office approval will also be required.
(3) The Appendices should be clearly marked and tabbed appropriately. Each major section should be a separate Appendix (e.g., photos, volume development, capacity analysis, etc.). The information should be in accordance with pages C-6 to C-8 of PennDOTs Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits. Additionally, to facilitate Department review, the Appendices should be electronically bookmarked / hyperlinked within the PDF.
(4) Provide lane widths, shoulder widths and approach grades for all unsignalized intersections, including the existing approaches to proposed driveways. This information should be included in the TIS in the form of field sketches, existing signal permit plans, or tabular format. (Policies and

Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 2)

(5) Provide right turn lane warrant and length analyses at the proposed site driveway intersections in accordance with PennDOT Publication 46, including the driveway along SR 0114. Include all backup data in the appendix. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 9). Also, verify the speeds and type of terrain used in the turn lane warrant and length analyses at the intersections along Gettysburg Pike.

(6) Within the study there are recommendations to retime certain signals. Some of these signals are located within a coordinated system and thus modifying the timings at one intersection within the system will likely result in the need to retime all the signals within the system whether or not mitigation is necessary. The study recommendations should clearly identify that the timings will be updated for the entire signal system along SR 0114.

(7) Revise the Un-signalized and HCM2010 references in Table 1a.

(8) In the Synchro analyses, the volume exceeds the capacity and the queue is theoretically infinite for the southbound approach at the intersection of SR 0114 and US 15 SB Ramp.

(9) Clarify the * symbols used in the queue analysis tables.

(10) In the study, please specify the software type, version number, build number, and revision number used to complete the capacity and queue analyses. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 3)

(11) Utilizing the checklist located in Publication 10X, Design Manual Part 1X, the applicant shall identify any existing or proposed pedestrian or bicycle facility that would be affected by the proposed development.

(12) Provide updated site plans that reflect all of the latest findings of the study and developer commitments. The Land Development Plans provided do not match the plans shown in the study and a roundabout is still shown at the intersection of SR 0114 and Gettysburg Pike on the Land Development plan for the south lot.

(13) Engineering justification for use of the trip distribution model should be provided in the study. In addition, all supporting assumptions and calculations shall be included in the TIS to ensure that the trip distribution calculations can be verified by the Department. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 7)

(14) Include trip generation for the proposed Dunkin Donuts utilizing ITE Land Use Code 937 Coffee/Donut Shop w/Drive-Through Window. Revise the proposed trip generation accordingly.

(15) Crash data for the study area shall be obtained as agreed upon at the scoping meeting. The most recent five years of crash data for each approach route should be obtained. The applicant shall analyze the crash data to determine if there are any crash patterns within the study area. The

applicant should also contact the municipality for input regarding non-reportable crashes. Analysis of the crash data should include review of causation factors and patterns. Include the analysis of the crash data in an Appendix that is to be submitted under separate cover. Crash data is not for public consumption and is exempt from the Right to Know Law requests. Additional information on the analysis of crash rates can be found in the Appendix of Publication 212, Item 2(1) and Publication 46, Chapters 11.1 and 11.3. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 2)

(16) Verify the sizes of the proposed land uses. The trip generation is not consistent with the latest land development plans for the southern lot. Additionally, provide clarification as to the land use for Building 3. The plan indicates retail/office/restaurant. Include the size of the proposed land uses in the executive summary of the TIS report.

(17) The additional eastbound thru lane on SR 0114 is shown as an add lane from the channelized northbound right turn lane on Gettysburg Pike on the concept plan and coded as Free in the analyses. This could create potential weaving issues on SR 0114 as currently shown. Other design options should be considered at this location. Also, the eastbound right turn lane length at the US 15 Southbound Ramps should be maintained. In addition, verify that there is adequate width under the US 15 overpass to construct the recommended thru lane on SR 0114. Appropriate overhead signing and pavement markings will also be required for the proposed lane drop on SR 0114 at the US 15 Northbound Ramps. Please note that the concept plan was 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. Approval of the TIS does not imply that the plans included with the study are acceptable. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 9)

(18) Address the following in the capacity analyses:

a) Verify that the detector inputs used for the mainline phases match the traffic signal permit plans.
b) Verify the recall mode used in the analyses for the minor street phases at the Route 15 Ramps. Actuated side street phases should be set to None. Check the 2021 Build AM peak hour.
c) Verify that the coordination timings and offsets match the traffic signal permit plans for the existing conditions.
d) Ensure that Link Origin-Destination (O-D) volumes were adjusted within the interchange area within the Volume Settings window in Synchro.
e) If unsignalized right-turn movements exist at signalized intersections, the delay for these movements should be estimated and input into the HCM, 6th Edition tab within Synchro, if

applicable.
f) Code the right turn overlap phases at the intersection of SR 0114 and Gettysburg Pike in the 2026 Saturday peak hour with mitigation.
g) Ensure that the peak hour factors for the mitigation scenarios are consistent with the build conditions. Check the intersection of SR 0114 and Gettysburg Pike.
h) Ensure that maximum green times are at least 7 seconds.
i) Uncheck the Allow Lead/Lag Optimize and Fixed Force Off settings in the Phasing settings of Synchro.
j) Calculate and code lane utilization factors, where applicable, to account for the downstream lane drop at the US 15 Northbound Ramp.
k) Ensure that the additional eastbound thru lane on SR 0114 and the channelized northbound right turn lane on Gettysburg Pike are consistent between the analyses and concept plan.

ALPHA CONSULTING ENGINEERS, INC.
PLANNING ♦ ENGINEERING ♦ SURVEYING

September 7, 2021

Jennifer M. Boyer
Community Development Director/Planner
Upper Allen Township
100 Gettysburg Pike
Mechanicsburg, PA 17055

RE: 151 Gettysburg Pike
Preliminary Subdivision Plan
Upper Allen Township

Dear Ms. Boyer:

Please find the following responses **(in bold text)** to Township review comments *(in italics)* received July 14, 2021 for the above referenced project.

Traffic (start at number 7)

7. *The site plan shows Building 3 as a 19,200 sf 3-story, Office/Retail/Restaurant use. The plan in the TIS assumes a 12,800 sf Medical Office. The trip generation calculations assumed in the TIS must be updated based on the current plan. If the changes in trip generation are significant, the following comments in this review may be modified.* **The TIS has been updated to reflect the revised trip generation. The resulting changes in delay are minimal averaging approximately 1 second.**

8. *The capacity analysis for the 2026 traffic volumes at the proposed driveways incorrectly show 2021 traffic volumes and must be updated.* **Traffic volumes throughout the study have been updated to reflect comments from both the Township and PennDOT.**

9. *The turn lane analysis for the proposed driveways assumed a 25mph speed limit on Gettysburg Pike instead of the posted 35 mph speed limit. The turn lane analysis must be updated to reflect the posted speed limit.* **The posted speed limit changes from 25mph to 35mph north of proposed driveway 1. Therefore, the warrant analysis for the southbound approach to site driveway 1 is the only approach analyzed at 35mph. All other approaches to proposed driveways 1, 3, and 4 are within the 25mph zone.**

10. *The Saturday analysis (Synchro. turn lane, figures, etc.) at the proposed driveways show*

incorrect through volumes and must be updated. **The traffic volumes for the capacity analysis have been updated.**

11. *We concur with the proposed southbound left turn lane on Gettysburg Pike at proposed site driveway 1. The length of the proposed left turn lane should be confirmed based on the posted 35 mph speed limit and revised Saturday traffic volumes.* **A minimum length of 100 feet is being provided. Note that the warrant analysis calculation for speeds of either 25 or 35mph is the same. All turn lane warrants have been updated to be consistent with other revisions within the study.**

12. *We concur with the construction of the proposed median to prohibit left turns from South Market Street into proposed driveway 2. The need for a right turn lane into this driveway should be completed for this driveway.* **A right-turn-lane warrant analysis has been added to the study for site driveway 2.**

13. *We concur with the proposed southbound left turn lane on Gettysburg Pike at proposed site driveway 3. The length of the proposed left turn lane should be confirmed based on the posted 35 mph speed limit and revised Saturday traffic volumes.* **The posted speed limit at site driveway 3 is 25mph. All turn lane warrants have been updated to be consistent with other revisions within the study.**

14. *The need for a right turn lane should be verified for site driveway 4 based on the posted 35 mph speed limit and revised Saturday traffic volumes.* **A right-turn-lane warrant analysis has been added to the study for site driveway 4. The posted speed limit at site driveway 4 is 25mph. All turn lane warrants have been updated to be consistent with other revisions within the study.**

15. *We concur with the construction of an additional eastbound through lane on South Market Street between Gettysburg Pike and the US 15 NB Ramp.* **Acknowledged.**

16. *The study proposes to provide coordinated signal retiming. Because the cycle lengths are proposed to change, the entire corridor should be retimed.* **This recommendation is included within the executive summary.** *Additionally, some of the left turn phases have green times of 4-5 seconds, typically the minimum for signal phases is 7 seconds. The minimum green times should be adjusted for these phases and updated in the TIS.* **Timings have been revised to meet the 7 second criteria for maximum green times.**

17. *The concept plans should be updated to show the proposed driveways and the roadway improvements at each driveway. The plans should include dimensions of the proposed improvements.* **Concept plans have been updated based on the revised study. General dimensions have been provided as dimensions should be the result of the HOP plan portion of the application.**

18. *PennDOT review comments should be forwarded to the Township for review. All PennDOT*

comments must be addressed. **All comments are included within the correspondence section of the study for review.**

If you have any further questions or comments, please contact our office.

Sincerely,

Mark E. Allen PLS, PE

ALPHA CONSULTING ENGINEERS, INC.
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September 7, 2021

Mr. Mazhar Malik
District Permits Manager
PennDOT District 8-0
2140 Herr Street
Harrisburg, PA 17103

RE: Highway Occupancy Permit
EPS Application #228878
Upper Allen Township, PA

Dear Mr. Malik:

Please find the following responses (in **bold** text) to review comments (in *italics*) received July 16, 2021 for the above referenced application. This letter has been attached to PennDOT's Electronic Permitting System as cycle 4 document 'A' (Exhibit **C4A**). Items previously submitted under cycles 1 through 3 include:

- Exhibit C1A – Approved Final Scoping Application Package dated 2020-10-09,
- Exhibit C1B – Traffic Impact Study dated 2020-10-13,
- Exhibit C1C – Traffic Impact Study Appendix.

- Exhibit C2A – Request for Return of Application dated 2021-06-14,

- Exhibit C3A – Response to PennDOT Comments,
- Exhibit C3B – PennDOT Form M950-AA,
- Exhibit C3C – TIS dated 2021-06-15,
- Exhibit C3D1 – TIS Appendix Part 1 dated 2021-06-15,
- Exhibit C3D2 – TIS Appendix Part 2 dated 2021-06-15,
- Exhibit C3E1 – North Lot Land Development Plan dated 2020-09-25,
- Exhibit C3E2 – South Lot Land Development Plan dated 2021-05-03.

Form Letter Notes:

1. ** Upon resubmission, the applicants engineer should put together a response letter that includes each comment, describes how each comment has been addressed, and where each can be found in the report. A copy of these comments and any previously submitted reports*

should also be provided. This will help expedite the review. **This letter is being provided to address this comment.**

** Additional comments may follow upon subsequent review of the revised Transportation Impact Study (TIS). If you have any questions pertaining to the technical aspects of this review, please contact Mr. Eric Kinard of the District 8-0 Traffic Unit at (717) 787-9237.* **Acknowledged.**

Application:

1. *The applicant name on the M-950AA form does not match the applicant name in the ePermitting System (EPS). Also, the email address entered in EPS must be the applicant's if they have elected to receive updates on the M-950AA form and the email address listed must match between the two locations.* **The EPS was updated and does match the form.**

Transportation Impact Study/Transportation Impact Assessment:

1. *Provide Upper Allen Township and local Municipal Planning Organization (MPO) acceptance with your resubmission. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits)* **This will be provided upon approval / acceptance by the Township and the MPO.**

2. *The proposed break in limited access right-of-way along SR 0114 will require coordination and approval from the District Excess Land Committee. Central Office approval will also be required.* **The requirement of coordination is mentioned in the study. Please see page 1 under the Executive Summary section, and page 14 under the Proposed Site Access section of the study included as exhibit C4B.**

3. *The Appendices should be clearly marked and tabbed appropriately. Each major section should be a separate Appendix (e.g., photos, volume development, capacity analysis, etc.). The information should be in accordance with pages C-6 to C-8 of PennDOTs Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits. Additionally, to facilitate Department review, the Appendices should be electronically bookmarked / hyperlinked within the PDF.* **The appendices are marked and tabbed according to PennDOT's Policies and Procedures. Per publication 282, 'all figures, concept plans, calculations, etc. are to be contained in the Appendix of the report'. Each section is clearly marked by a cover/header page. Each section is discussed within the report and referenced. Hyperlinks are provided within each of the TIS documents.**

4. *Provide lane widths, shoulder widths and approach grades for all unsignalized intersections, including the existing approaches to proposed driveways. This information*

should be included in the TIS in the form of field sketches, existing signal permit plans, or tabular format. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 2) **Field sketches for the existing approaches to the proposed driveways have been added to the study.**

5. *Provide right turn lane warrant and length analyses at the proposed site driveway intersections in accordance with PennDOT Publication 46, including the driveway along SR 0114.* **Analysis has been added for the driveway along SR 0114. Note that this driveway is to be constructed as a one-way right turn only entrance per the scoping application.** *Include all backup data in the appendix. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 9).* **Worksheets are included within the appendix.** *Also, verify the speeds and type of terrain used in the turn lane warrant and length analyses at the intersections along Gettysburg Pike.* **The speeds and terrain have been verified and are correct.**

6. *Within the study there are recommendations to retime certain signals. Some of these signals are located within a coordinated system and thus modifying the timings at one intersection within the system will likely result in the need to retime all the signals within the system whether or not mitigation is necessary. The study recommendations should clearly identify that the timings will be updated for the entire signal system along SR 0114.* **This recommendation is included within the executive summary.**

7. *Revise the Un-signalized and HCM2010 references in Table 1a.* **The references have been updated to reflect publication HCM 6.**

8. *In the Synchro analyses, the volume exceeds the capacity and the queue is theoretically infinite for the southbound approach at the intersection of SR 0114 and US 15 SB Ramp.* **The queue lengths are summarized in tables 6a, 6b, and 6c. For all scenarios, the estimated queue lengths for the southbound approach are shorter than the available storage length.**

9. *Clarify the * symbols used in the queue analysis tables.* **The tables have been updated to clarify the * symbol. The * symbols are used to denote the mitigation scenario storage lengths.**

10. *In the study, please specify the software type, version number, build number, and revision number used to complete the capacity and queue analyses. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 3)* **The build number and revision number have been added to the software information previously provided. Please see page 22 of the TIS.**

11. *Utilizing the checklist located in Publication 10X, Design Manual Part 1X, the applicant shall identify any existing or proposed pedestrian or bicycle facility that would be affected*

by the proposed development. **A pedestrian bicycle facility discussion developed from the checklist is included on pages 12-13.**

12. *Provide updated site plans that reflect all of the latest findings of the study and developer commitments. The Land Development Plans provided do not match the plans shown in the study and a roundabout is still shown at the intersection of SR 0114 and Gettysburg Pike on the Land Development plan for the south lot.* **The site plans have been updated. The current land development plan for the south lot is included as exhibit C4C.**

13. *Engineering justification for use of the trip distribution model should be provided in the study. In addition, all supporting assumptions and calculations shall be included in the TIS to ensure that the trip distribution calculations can be verified by the Department. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 7)* **The distribution model is per the approved scoping application revised per PennDOT and Township comments related to updating land uses.**

14. *Include trip generation for the proposed Dunkin Donuts utilizing ITE Land Use Code 937 Coffee/Donut Shop w/Drive-Through Window. Revise the proposed trip generation accordingly.* **Per comment 12 above, the study and site plans have been revised to be consistent. This particular building use was previously revised in the June 28, 2021 plan revision, and LUC 937 is not applicable.**

15. *Crash data for the study area shall be obtained as agreed upon at the scoping meeting. The most recent five years of crash data for each approach route should be obtained. The applicant shall analyze the crash data to determine if there are any crash patterns within the study area. The applicant should also contact the municipality for input regarding non-reportable crashes. Analysis of the crash data should include review of causation factors and patterns. Include the analysis of the crash data in an Appendix that is to be submitted under separate cover. Crash data is not for public consumption and is exempt from the Right to Know Law requests. Additional information on the analysis of crash rates can be found in the Appendix of Publication 212, Item 2(1) and Publication 46, Chapters 11.1 and 11.3. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 2)* **The crash study is attached as exhibit C4D.**

16. *Verify the sizes of the proposed land uses. The trip generation is not consistent with the latest land development plans for the southern lot.* **The current land development plans for the south lot are attached as exhibit C4C. The study has been revised to reflect the current plan.** *Additionally, provide clarification as to the land use for Building 3. The plan indicates retail/office/restaurant. Include the size of the proposed land uses in the executive summary of the TIS report.* **Actual tenants for this building are unknown. Consistent with the other uses on the south lot where the tenant is**

unknown, this building is being analyzed under land use 820 (Shopping Center). The size of the proposed land uses has been added to the executive summary.

17. *The additional eastbound thru lane on SR 0114 is shown as an add lane from the channelized northbound right turn lane on Gettysburg Pike on the concept plan and coded as Free in the analyses. This could create potential weaving issues on SR 0114 as currently shown. Other design options should be considered at this location.* **The study has been revised to remove the northbound right-turn channelization.** *Also, the eastbound right turn lane length at the US 15 Southbound Ramps should be maintained.* **The eastbound right-turn lane has been maintained in the mitigation scenarios.** *In addition, verify that there is adequate width under the US 15 overpass to construct the recommended thru lane on SR 0114.* **There is approximately 100 feet between the overpass piers to construct the 4 lanes.** *Appropriate overhead signing and pavement markings will also be required for the proposed lane drop on SR 0114 at the US 15 Northbound Ramps. Please note that the concept plan was 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. Approval of the TIS does not imply that the plans included with the study are acceptable. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 9)* **Acknowledged.**

18. *Address the following in the capacity analyses:*
    a) *Verify that the detector inputs used for the mainline phases match the traffic signal permit plans.* **The loop detector sizes are based on information provided on the signal permit plans. For radar detection, stop bar detection sizes are not provided within the signal permit plans, therefore a scaled dimension of 6'x50' is used for this model. HCM only supports stop bar detection. Therefore, all inputs reflect stop bar detection.**

    b) *Verify the recall mode used in the analyses for the minor street phases at the Route 15 Ramps. Actuated side street phases should be set to None. Check the 2021 Build AM peak hour.* **The recall mode for the minor street phases has been verified and is set to 'none'.**

    c) *Verify that the coordination timings and offsets match the traffic signal permit plans for the existing conditions.* **The coordination timings and offsets for the existing condition 2020 scenario match the existing condition coordination plan.**

    d) *Ensure that Link Origin-Destination (O-D) volumes were adjusted within the interchange area within the Volume Settings window in Synchro.* **The volumes were not to be adjusted per scoping meeting correspondence dated July 10, 2020.**

e) *If unsignalized right-turn movements exist at signalized intersections, the delay for these movements should be estimated and input into the HCM, 6th Edition tab within Synchro, if applicable.* **Based on field observations, the synchro model is conservatively estimating the delay for the unsignalized movements. However, the measure average delay, approximately 6 seconds, for the right turn movements from the two off ramps have been input as requested.**

f) *Code the right turn overlap phases at the intersection of SR 0114 and Gettysburg Pike in the 2026 Saturday peak hour with mitigation.* **The right turn overlap phase has been added to the 2026 Saturday peak hour with mitigation scenario.**

g) *Ensure that the peak hour factors for the mitigation scenarios are consistent with the build conditions. Check the intersection of SR 0114 and Gettysburg Pike.* **The peak hour factor for the build condition is consistent with the mitigation scenarios.**

h) *Ensure that maximum green times are at least 7 seconds.* **Timings have been revised to meet the 7 second criteria.**

i) *Uncheck the Allow Lead/Lag Optimize and Fixed Force Off settings in the Phasing settings of Synchro.* **The fixed force off and the L/L optimization has been unchecked. By removing the fixed force off option all extra time will be given to the main street.**

j) *Calculate and code lane utilization factors, where applicable, to account for the downstream lane drop at the US 15 Northbound Ramp.* **The lane utilization factor has been entered for the eastbound approach lanes to the southbound ramp.**

k) *Ensure that the additional eastbound thru lane on SR 0114 and the channelized northbound right turn lane on Gettysburg Pike are consistent between the analyses and concept plan.* **The concept plans have been revised in conjunction with the revised study.**

If you have any further questions or comments, please contact our office.

Sincerely,

Mark E. Allen, P.L.S., P.E.

pennsylvania
DEPARTMENT OF TRANSPORTATION

Date: 10/06/2021

Subject: Highway Occupancy Permit Application No. 228878, Cycle No.4 - Returned For Revisions

To: Linlo Properties XVI LLC
150 Corporate Center Drive, Suite 100
Camp Hill, PA 17011

From: PennDOT Engineering District 8-0
2140 Herr Street
Harrisburg, PA 17103-1699

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 Mazhar Malik, District Permit Manager, at (717) 787-8789.

pennsylvania
DEPARTMENT OF TRANSPORTATION

Response Comments
Date: 10/06/2021
Application Number: 228878, Cycle No.4

Form Letter Notes

(1) * Upon resubmission, the applicant's engineer should put together a response letter that includes each comment, describes how each comment has been addressed, and where each can be found in the report. A copy of these comments and any previously submitted reports should also be provided. This will help expedite the review.

* Additional comments may follow upon subsequent review of the revised Transportation Impact Study (TIS). If you have any questions pertaining to the technical aspects of this review, please contact Mr. Eric Kinard of the District 8-0 Traffic Unit at (717) 787-9237.

Transportation Impact Study/Transportation Impact Assessment

(1) Provide Upper Allen Township and local Municipal Planning Organization (MPO) acceptance with your resubmission. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits)

(2) The Appendices should be clearly marked and tabbed appropriately. Each major section should be a separate Appendix (e.g., photos, volume development, capacity analysis, etc.). The information should be in accordance with pages C-6 to C-8 of PennDOT's Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits. Additionally, to facilitate Department review, the Appendices should be electronically bookmarked / hyperlinked within the PDF.

(3) A 175' right turn lane is warranted at the driveway along SR 0114 but cannot be provided due to the proximity of the US 15 Southbound Off-Ramp. Therefore, eliminate the driveway since the appropriate turn lane length and distance from the US 15 Southbound Off-Ramp cannot be provided. With removal of the driveway, the proposed break in limited access right-of-way along SR 0114 will not be required and coordination and approval from the District Excess Land Committee will not be necessary.

(4) Update the Project Description on page 14 of the TIS to be consistent with the latest site layout. Also, clarify the use of the Office land use and verify the retail size and trips in the internal trip calculations.

(5) The delay values in Table 1 should be revised to match the analyses (i.e., with no rounding). Also, revise the un-signalized references in the footers of Table 1a as applicable. The (V/C Ratio) in the

header also does not appear to be applicable.

(6) Utilizing the checklist located in Publication 10X, Design Manual Part 1X, the applicant shall identify any existing or proposed pedestrian or bicycle facility that would be affected by the proposed development. Include a copy of the checklist in the Appendix.

(7) Verify the trip generation for the Shopping Center land use. Some minor discrepancies were noticed.

(8) Verify the type of terrain used in the turn lane warrant and length analyses as level terrain does not appear to apply based on the terrain of the surrounding area.

(9) Address the following in the capacity analyses:

a) Ensure that the Link Origin-Destination (O-D) volumes were adjusted within the interchange area within the Volume Settings window in Synchro. See example attached in EPS for clarification.
b) Verify the peak hour factors used for the build conditions. Check the intersection of SR 0114 and Gettysburg Pike.
c) Ensure that maximum green times are at least 7 seconds (or match the signal permits if less than 7 seconds) for all phases under all analyses conditions.

(10) The most recent five years of crash data (2016-2020) for each approach route should be obtained and analyzed. Also, provide collision diagrams to identify if and where any clusters exist. If crash trends exist, discuss how traffic generated from the development may impact these locations, and if any improvements would be beneficial in mitigating these trends.

(11) Verify the effectiveness of converting the eastbound right turn lane on SR 0114 at Gettysburg Pike to a shared through-right turn lane since there are two through lanes provided departing the intersection. Also, remove the specific signing improvements from the recommendations for the proposed lane drop on SR 0114 at the US 15 Northbound Ramps. Instead, indicate that appropriate overhead signing and pavement markings will be provided as applicable and will be determined during the design phase. In addition, the proposed left turn lanes on Gettysburg Pike will impact access to several adjacent properties. Solicit input from the municipality regarding the design of these turn lanes since Gettysburg Pike is a Township road. Please note that the concept plan was 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. Approval of the TIS does not imply that the plans included with the study are acceptable. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 9)

COMMISSIONERS of UPPER ALLEN TOWNSHIP
CUMBERLAND COUNTY
100 GETTYSBURG PIKE
MECHANICSBURG, PA 17055-5698

BOARD OF COMMISSIONERS:
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TOWNSHIP MANAGER:
Scott W. Fraser

TELEPHONE: (717) 766-0756
FAX: (717) 796-9833
WEB PAGE: www.uatwp.org

October 8, 2021

Mark Allen, PLS, PE
Alpha Consulting Engineers, Inc.
115 Limekiln Road
PO Box G
New Cumberland, PA 17070

Re: Traffic Impact Study for 151-237 Gettysburg Pike

Dear Mr. Allen:

The Township has received the Traffic Impact Study for 151-237 Gettysburg Pike dated July 10, 2020 and revised September 7, 2021. Our traffic engineer has reviewed this study and offered the following comments on September 29, 2021.

1. We concur with the construction of the proposed median to prohibit left turns from South Market Street into proposed driveway 2. The TIS shows that a 175' right turn lane into this driveway is warranted however based on the distance to the US 15 off ramp, a full 175' right turn lane cannot be constructed. The plan shows a 75' taper and an extended driveway throat to serve as the right turn lane to maximize the area for right turning vehicles. The applicant should confirm with PennDOT that this design is acceptable.

2. PennDOT review comments should be forwarded to the Township for review. All PennDOT comments must be addressed.

We have no other technical comments for this TIS and concur with the study recommendations. Should you require additional information from us, please contact me at jboyer@uatwp.org or 717-766-0756.

Sincerely,

Jennifer M. Boyer, AICP
Community Development Director

ALPHA CONSULTING ENGINEERS, INC.
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November 19, 2021

Mr. Mazhar Malik
District Permits Manager
PennDOT District 8-0
2140 Herr Street
Harrisburg, PA 17103

RE: Highway Occupancy Permit
EPS Application #228878
Upper Allen Township, PA

Dear Mr. Malik:

Please find the following responses (in **bold** text) to review comments (in *italics*) received October 6, 2021 for the above referenced application. This letter has been attached to PennDOT's Electronic Permitting System as cycle 5 document 'A' (Exhibit **C5A**). Items previously submitted under cycles 1 through 4 include:

- Exhibit C1A – Approved Final Scoping Application Package dated 2020-10-09,
- Exhibit C1B – Traffic Impact Study dated 2020-10-13,
- Exhibit C1C – Traffic Impact Study Appendix.

- Exhibit C2A – Request for Return of Application dated 2021-06-14,

- Exhibit C3A – Response to PennDOT Comments,
- Exhibit C3B – PennDOT Form M950-AA,
- Exhibit C3C – TIS dated 2021-06-15,
- Exhibit C3D1 – TIS Appendix Part 1 dated 2021-06-15,
- Exhibit C3D2 – TIS Appendix Part 2 dated 2021-06-15,
- Exhibit C3E1 – North Lot Land Development Plan dated 2020-09-25,
- Exhibit C3E2 – South Lot Land Development Plan dated 2021-05-03.

- Exhibit C4A – Response to PennDOT Comments,
- Exhibit C4B – TIS dated 202109-07,
- Exhibit C4B1 – TIS Appendix Part 1 dated 2021-09-07,
- Exhibit C4B2 – TIS Appendix Part 2 dated 2021-09-07,

- Exhibit C4C – Land Development Plan dated 2021-04-01,
- Exhibit C4D – TIS Appendix B dated 2021-10-10.

Form Letter Notes:

1. ** Upon resubmission, the applicants engineer should put together a response letter that includes each comment, describes how each comment has been addressed, and where each can be found in the report.* **This letter is being provided to address this comment.** *A copy of these comments and any previously submitted reports should also be provided. This will help expedite the review.* **Correspondence is included within exhibit C5C2. A list of previously submitted items and their location is also included within this letter.**

   ** Additional comments may follow upon subsequent review of the revised Transportation Impact Study (TIS). If you have any questions pertaining to the technical aspects of this review, please contact Mr. Eric Kinard of the District 8-0 Traffic Unit at (717) 787-9237.* **Acknowledged.**

Transportation Impact Study/Transportation Impact Assessment:

1. *Provide Upper Allen Township and local Municipal Planning Organization (MPO) acceptance with your resubmission. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits)* **The Township Letter of Concurrence is included as exhibit C5B. Per discussions with Tri-County, they only provide reviews of the scoping and no review of the TIS will be provided.**

2. *The Appendices should be clearly marked and tabbed appropriately. Each major section should be a separate Appendix (e.g., photos, volume development, capacity analysis, etc.). The information should be in accordance with pages C-6 to C-8 of PennDOT's Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits. Additionally, to facilitate Department review, the Appendices should be electronically bookmarked / hyperlinked within the PDF.* **The appendices are marked and tabbed according to PennDOT's Policies and Procedures. Each section is discussed within the report and referenced. Each section is clearly marked by a cover/header page. Hyperlinks are provided within each of the TIS documents. All required exhibits are provided within the study. We therefore believe that this comment has been addressed. However, while the exhibits and concept plans are provided in the body of the study, these figures are now included within the appendix to provide 'all figures, concept plans, calculations, etc.' within the appendix.**

3. *A 175' right turn lane is warranted at the driveway along SR 0114 but cannot be provided due to the proximity of the US 15 Southbound Off-Ramp. Therefore, eliminate the driveway since the appropriate turn lane length and distance from the US 15 Southbound Off-Ramp*

cannot be provided. With removal of the driveway, the proposed break in limited access right-of-way along SR 0114 will not be required and coordination and approval from the District Excess Land Committee will not be necessary. **Per discussions, we are submitting a configuration for approval based upon PennDOT's preference of options provided.**

4. *Update the Project Description on page 14 of the TIS to be consistent with the latest site layout.* **Page 14 of the TIS has been updated to be consistent with the latest site layout**. *Also, clarify the use of the Office land use and verify the retail size and trips in the internal trip calculations.* **Per PennDOT policy, the trip generation for unknown uses is to be estimated using the 'Shopping Center' use, which has been done. To evaluate the internal capture within the shopping center uses and other uses on the site, we assigned 5 generated trips (AM) and 23 generated trips (PM) based on an estimated 6,400 sf to provide a better evaluation of the internal capture. The rest of the shopping center generated trips were assigned to retail. The office space inclusion equated to approximately 1 internal trip during the AM peak hour and 5 internal trips during the PM peak hour.**

5. *The delay values in Table 1 should be revised to match the analyses (i.e., with no rounding).* **The intersection LOS tables are shown per pub 282 and provide the precision noted in the Highway Capacity Manual (HCM). Per the approved scoping meeting application, the capacity analysis shall be performed per the HCM. The HCM precision / accuracy for vehicle mode delay is seconds per vehicle and the LOS definition within chapters 19 and 20 specifically list whole numbers, no decimals. Chapter 8 also requires rounding in the presentation of results. The HCM is very specific about not applying any accuracy and precision beyond the limits of the model. Pub 282 Appendix A illustrates the intersection LOS to the (whole) second. Table 1 is provided correctly.** *Also, revise the un-signalized references in the footers of Table 1a as applicable. The (V/C Ratio) in the header also does not appear to be applicable.* **Table 1a has been revised as noted.**

6. *Utilizing the checklist located in Publication 10X, Design Manual Part 1X, the applicant shall identify any existing or proposed pedestrian or bicycle facility that would be affected by the proposed development. Include a copy of the checklist in the Appendix.* **A copy of the checklist has been added to the appendix.**

7. *Verify the trip generation for the Shopping Center land use. Some minor discrepancies were noticed.* **The trip generation has been verified. The information shown on the ITE printouts matches the information within Table 3.**

8. *Verify the type of terrain used in the turn lane warrant and length analyses as level terrain does not appear to apply based on the terrain of the surrounding area.* **Per AASHTO "A Policy on Geometric Design of Highways and Streets" section 3.4.1, "In level terrain, highway sight distances, as governed by both horizontal and vertical**

restrictions, are generally long or can be made to be so without construction difficulty or major expense. In rolling terrain, natural slopes consistently rise above and fall below the road or street grade, and occasional steep slopes offer some restriction to normal horizontal and vertical roadway alignment… In general, rolling terrain generates steeper grades than level terrain, causing trucks tor reduce speeds below those of passenger cars." The roadway corridors predominately have long sight distances and do not rise and fall above the adjacent grades as evident by the existing driveway connections in the area. Level terrain is therefore the correct classification for the corridors.

9. *Address the following in the capacity analyses:*
   a) *Ensure that the Link Origin-Destination (O-D) volumes were adjusted within the interchange area within the Volume Settings window in Synchro. See example attached in EPS for clarification.* **The volumes have been adjusted per the example.**
   b) *Verify the peak hour factors used for the build conditions. Check the intersection of SR 0114 and Gettysburg Pike.* **The peak hour factor has been verified for the build conditions, specifically, 0.90 is used based on the newer configuration of the intersection and has been field verified.**
   c) *Ensure that maximum green times are at least 7 seconds (or match the signal permits if less than 7 seconds) for all phases under all analysis's conditions.* **Timings have been revised to meet the 7 second criteria.**

10. *The most recent five years of crash data (2016-2020) for each approach route should be obtained and analyzed. Also, provide collision diagrams to identify if and where any clusters exist. If crash trends exist, discuss how traffic generated from the development may impact these locations, and if any improvements would be beneficial in mitigating these trends.* **The updated crash study is attached as exhibit C5D.**

11. *Verify the effectiveness of converting the eastbound right turn lane on SR 0114 at Gettysburg Pike to a shared through-right turn lane since there are two through lanes provided departing the intersection.* **The shared through-right turn lane has been added to the with improvements scenario.** *Also, remove the specific signing improvements from the recommendations for the proposed lane drop on SR 0114 at the US 15 Northbound Ramps. Instead, indicate that appropriate overhead signing and pavement markings will be provided as applicable and will be determined during the design phase.* **The improvement recommendation has been revised as noted.** *In addition, the proposed left turn lanes on Gettysburg Pike will impact access to several adjacent properties. Solicit input from the municipality regarding the design of these turn lanes since Gettysburg Pike is a Township Road.* **The Township has indicated their concurrence with the recommended improvements. Township correspondence is included as exhibit C5B and is included within the correspondence section of the study.** *Please note that the concept plan was 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. Approval of the TIS does not imply that the plans included with the study are acceptable. (Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits, Step 9)
Acknowledged.

If you have any further questions or comments, please contact our office.

Sincerely,

Mark E. Allen, P.L.S., P.E.

pennsylvania
DEPARTMENT OF TRANSPORTATION

Date: 12/23/2021

Subject: Highway Occupancy Permit Application No. 228878, Cycle No.5 - Returned For Revisions

To: Linlo Properties XVI LLC
150 Corporate Center Drive, Suite 100
Camp Hill, PA 17011

From: PennDOT Engineering District 8-0
2140 Herr Street
Harrisburg, PA 17103-1699

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 Mazhar Malik, District Permit Manager, at (717) 787-8789.

pennsylvania
DEPARTMENT OF TRANSPORTATION

Response Comments
Date: 12/23/2021
Application Number: 228878, Cycle No.5

Form Letter Notes

(1) * Upon resubmission, the applicant's engineer should put together a response letter that includes each comment, describes how each comment has been addressed, and where each can be found in the report. A copy of these comments and any previously submitted reports should also be provided. This will help expedite the review.

* Additional comments may follow upon subsequent review of the revised Transportation Impact Study (TIS). If you have any questions pertaining to the technical aspects of this review, please contact Mr. Eric Kinard of the District 8-0 Traffic Unit at (717) 787-9237.

Transportation Impact Study/Transportation Impact Assessment

(1) The proposed break in limited access right-of-way along SR 0114 will require coordination and approval from the District Excess Land Committee. Central Office approval will also be required.
(2) The delay values in Table 1 should be revised to match the analyses (i.e., with no rounding). It is understood that the computations result in the "estimation" of control delay and LOS. However, the results presented in the report should be consistent with the analysis, which shows the delay to the tenth of a decimal. This is consistent with Table 1 in PennDOTs Policies And Procedures for Transportation Impact Studies Related to Highway Occupancy Permits.
(3) Clarify the use of the Office land use and verify the retail size and trips in the internal trip calculations. If there was no office land use in the trip generation, then it shouldnt be used in the internal capture.
(4) Verify the trip generation results in Table 3b as some of the results do not appear correct when using the equations in Table 3a. For example, it appears that the total trips should be 1465 for the weekday for the 38.8 TSF shopping center and 3408 for the weekday for the 43.4 TSF shopping center.
(5) Verify the type of terrain used in the turn lane warrant and length analyses as level terrain does not appear to apply based on the terrain of the surrounding area. The truck adjustment factors in Exhibit 11-5 of Publication 46 were taken from the HCM which indicates that level terrain typically contains short grades of no more than 2%. This is referring to the roadway grades.
(6) The proposed left turn lanes on Gettysburg Pike will impact access to several adjacent properties. Solicit input from the municipality regarding the design of these turn lanes since Gettysburg Pike is a Township road.

(7) Address the following in the capacity analyses:

a) Verify the peak hour factors used for the build conditions. Check the intersection of SR 0114 and Gettysburg Pike. The same factor should be used for all analyses for each time period.
b) Verify the cycle lengths used in the analysis. Coordinated traffic signals should have the same cycle length.
c) Verify that the proposed mainline timings are realistic. The maximum time for volume-density operation should be set no lower than the TBR plus TTR. If the maximum time is set less than this sum, the controller will not have the ability to properly perform the gap reduction function.

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January 13, 2022

Upper Allen Township
Attn: Jennifer Boyer, AICP
Community Development Director/Planner
100 Gettysburg Pike
Mechanicsburg, PA 17055

Re: The Mills at Shepherdstown Crossing
151-237 Gettysburg Pike – TIS Review
Upper Allen Township, Cumberland County, PA
UAT File No. 21-04-01
TRG Project No. 517.003.21

Dear Ms. Boyer:

Transportation Resource Group, Inc., has completed the review of the Transportation Impact Study for the proposed Development located at 151-237 Gettysburg Pike. The study dated November 19, 2021, was completed by Alpha Consulting Engineers, Inc. Based on the review, we offer the following comments:

1. As requested by PennDOT in their latest review letter dated December 23, 2021, we have reviewed the concept plans for the proposed left turn lanes on Gettysburg Pike at proposed Site Driveway 1 and Site Driveway 3. The left turn lanes shown on the plans are in accordance with PennDOT criteria on turn lanes. We recognize that the turn lanes will have an impact to adjacent property owners. The Township will work with the engineer and adjacent property owners to come up with a design that is acceptable to all impacted parties.

2. We have no other technical comments regarding the TIS.

If you have any questions regarding the above review comments, please feel free to give me a call.

Very truly yours,
Transportation Resource Group, Inc.

Christopher E. Schwab

Christopher E. Schwab, P.E.
Senior Associate

ALPHA CONSULTING ENGINEERS, INC.
PLANNING ♦ ENGINEERING ♦ SURVEYING

January 25, 2022

Mr. Mazhar Malik
District Permits Manager
PennDOT District 8-0
2140 Herr Street
Harrisburg, PA 17103

RE: Highway Occupancy Permit
EPS Application #228878
Upper Allen Township, PA

Dear Mr. Malik:

Please find the following responses (in **bold** text) to review comments (in *italics*) received December 23, 2021 for the above referenced application. This letter has been attached to PennDOT's Electronic Permitting System as cycle 6 document 'A' (Exhibit **C6A**). Items previously submitted under cycles 1 through 5 include:

- Cycle 1: Initial submission for a restaurant, convenience market/gas station on the north lot and a 33,000 square foot shopping center on the south lot,
- Exhibit C1A – Approved Final Scoping Application Package dated 2020-10-09,
- Exhibit C1B – Traffic Impact Study dated 2020-10-13,
- Exhibit C1C – Traffic Impact Study Appendix.

- Cycle 2: Time extension
- Exhibit C2A – Request for Return of Application dated 2021-06-14,

- Cycle 3: Initial submission to revise the uses and configuration on the south lot to a mixed-use development consisting of restaurants, residential units, and commercial uses,
- Exhibit C3A – Response to PennDOT Comments,
- Exhibit C3B – PennDOT Form M950-AA,
- Exhibit C3C – TIS dated 2021-06-15,
- Exhibit C3D1 – TIS Appendix Part 1 dated 2021-06-15,
- Exhibit C3D2 – TIS Appendix Part 2 dated 2021-06-15,
- Exhibit C3E1 – North Lot Land Development Plan dated 2020-09-25,

- Exhibit C3E2 – South Lot Land Development Plan dated 2021-05-03.
- Cycle 4: Initial submission of revised mixed-use development on the south lot,
- Exhibit C4A – Response to PennDOT Comments,
- Exhibit C4B – TIS dated 2021-09-07,
- Exhibit C4B1 – TIS Appendix Part 1 dated 2021-09-07,
- Exhibit C4B2 – TIS Appendix Part 2 dated 2021-09-07,
- Exhibit C4C – South Lot Land Development Plan dated 2021-06-28,
- Exhibit C4D – TIS Appendix B dated 2021-10-10.

- Cycle 5: Revisions per PennDOT review comments,
- Exhibit C5A – Response to PennDOT Comments,
- Exhibit C5B – TIS Letter of Concurrence from the Township,
- Exhibit C5C – TIS dated 2021-11-19,
- Exhibit C5C1 – TIS Appendix Part 1 dated 2021-11-19,
- Exhibit C5C2 – TIS Appendix Part 2 dated 2021-11-19,
- Exhibit C5C3 – TIS Appendix Part 3 dated 2021-11-19,
- Exhibit C5D – TIS Appendix B dated 2021-10-22.

Form Letter Notes:

1. ** Upon resubmission, the applicants engineer should put together a response letter that includes each comment, describes how each comment has been addressed, and where each can be found in the report.* **This letter is being provided to address this comment.** *A copy of these comments and any previously submitted reports should also be provided. This will help expedite the review.* **Correspondence is included within exhibit C6C3. A list of previously submitted items and their location is also included within this letter.**

   ** Additional comments may follow upon subsequent review of the revised Transportation Impact Study (TIS). If you have any questions pertaining to the technical aspects of this review, please contact Mr. Eric Kinard of the District 8-0 Traffic Unit at (717) 787-9237.* **Acknowledged.**

Transportation Impact Study/Transportation Impact Assessment:

1. *The proposed break in limited access right-of-way along SR 0114 will require coordination and approval from the District Excess Land Committee. Central Office approval will also be required.* **This comment was responded to and addressed in the cycle 3 submission and reaffirmed in the cycle 4 submission. Please see page 1 under the Executive Summary section of the TIS, and page 14 under the Proposed Site Access section of the TIS for notification of the requirement of coordination and approval of the break in limited access. Per discussion with Eric Kinard, PennDOT may keep this comment with all reviews throughout the**

application process until approval of the break in limited access has been granted.

2. *The delay values in Table 1 should be revised to match the analyses (i.e., with no rounding). It is understood that the computations result in the "estimation" of control delay and LOS. However, the results presented in the report should be consistent with the analysis, which shows the delay to the tenth of a decimal. This is consistent with Table 1 in PennDOTs Policies And Procedures for Transportation Impact Studies Related to Highway Occupancy Permits.* **Table 1 has been revised as requested.**

3. *Clarify the use of the Office land use and verify the retail size and trips in the internal trip calculations. If there was no office land use in the trip generation, then it shouldn't be used in the internal capture.* **Per discussions with PennDOT, the office land use has been removed from the internal capture calculation. Note that this removes any estimation of internal capture between possible office and other uses within the shopping center component. This revision resulted in the removal of 2 internally captured vehicles during the AM peak hour, 4 internally captured vehicles during the PM peak hour, and 3 internally captured vehicles during the Saturday mid-day peak hour, or less than 0.5% of estimated peak hour vehicles. There were no changes to the results of the study from this revision.**

4. *Verify the trip generation results in Table 3b as some of the results do not appear correct when using the equations in Table 3a. For example, it appears that the total trips should be 1465 for the weekday for the 38.8 TSF shopping center and 3408 for the weekday for the 43.4 TSF shopping center.* **The trip generation calculations have been checked by hand to the ITE software that was used in the analysis. A revised trip generation table has been created based on the hand calculations. The AM peak hour total trips did not change, the PM peak hour total trips increased by 1 vehicle trip, and the Saturday mid-day peak hour total trips increase by 2 vehicle trips. These revisions had no impact to the analysis but were carried through all the printouts. For the daily total trips, which are not included in any analysis, the weekday total trips increase by 11 vehicle trips and the Saturday total daily trips increase by 13 vehicle trips. Values are approximately a 0.1% increase from those estimated by the software and were within the range of the accuracy and precision of the ITE trip generation method.**

5. *Verify the type of terrain used in the turn lane warrant and length analyses as level terrain does not appear to apply based on the terrain of the surrounding area. The truck adjustment factors in Exhibit 11-5 of Publication 46 were taken from the HCM which indicates that level terrain typically contains short grades of no more than 2%. This is referring to the roadway grades.* **The full definition of 'level terrain' from the 2000 HCM is: 'A combination of horizontal and vertical alignments that permits heavy vehicles to maintain approximately the same speed as passenger cars; this generally includes short grades of no more than 1 to 2 percent.' As a result of**

viewing the traffic operations along Gettysburg Pike during the data collection periods (approximately 20 hours), heavy vehicles (which include buses) were observed to maintain speed with passenger vehicles and were observed to accelerate when leaving the intersection with South Market Street. Therefore, the definition of the combination of horizontal and vertical alignments that permits heavy vehicles to maintain approximately the same speed as passenger cars has been met. In applying a different type of terrain 'rolling terrain' is defined in the 2000 HCM as: 'A combination of horizontal and vertical alignments causing heavy vehicles to reduce their speed substantially below that of passenger cars but not to operate at crawl speeds for a significant amount of time.' As heavy vehicles were not observed to reduce their speed substantially below that of passenger cars, the rolling terrain classification does not apply and level terrain is the correct classification for the corridors. In the interest of moving beyond this comment, site driveway 3 and site driveway 4 have corridor (Gettysburg Pike) grades greater than 2 percent, and an additional analysis with the rolling terrain classification is provided as exhibit C6D. The additional analysis does not change any of the warrant analysis results or recommended turn lane lengths for the two driveways from the Township Road. The Township Traffic Engineer has previously concurred with the recommendations of the study using the level terrain classification.

6. *The proposed left turn lanes on Gettysburg Pike will impact access to several adjacent properties. Solicit input from the municipality regarding the design of these turn lanes since Gettysburg Pike is a Township Road.* **Correspondence with the Township is included as exhibit C6B and indicates the Township recognizes the turn lane impacts and that the Township will work with the engineer and adjacent property owners to come up with a design that is acceptable to all impacted parties.**

7. *Address the following in the capacity analyses:*
   a) *Verify the peak hour factors used for the build conditions. Check the intersection of SR 0114 and Gettysburg Pike. The same factor should be used for all analyses for each time period.* **For the intersection of SR 0114 and Gettysburg Pike a peak hour factor of 0.84 is used for the AM peak hour, 0.94 for the PM peak hour, and 0.94 for the Saturday mid-day peak hour, for all time scenarios.**

   b) *Verify the cycle lengths used in the analysis. Coordinated traffic signals should have the same cycle length.* **Traffic signal timings have been revised to provide the corridor prioritization (same cycle length), per Publication 282.**

   c) *Verify that the proposed mainline timings are realistic. The maximum time for volume-density operation should be set no lower than the TBR plus TTR. If the maximum time is set less than this sum, the controller will not have the ability to properly perform the gap reduction function.* **The timings within the analysis are realistic as the**

timings presented represent corridor coordinated timings as requested by PennDOT (comment 7b) and are consistent with the previous system plans for the corridor. When the signal operates in free mode, the volume density timings will then be utilized. Please see the signal permit plans, figure 3a within exhibit C6C1 which indicate that maximum time for volume density operations is greater than the TBR plus TTR. Any revisions as part of the updated signal coordination recommended in the executive summary will be part of the design phase.

If you have any further questions or comments, please contact our office.

Sincerely,

Mark E. Allen, P.L.S., P.E.