
RADNOR TOWNSHIP

ENGINEERING DEPARTMENT



Memorandum

To: Community Development Committee of the Radnor Township Board of Commissioners

cc: Robert A. Zienkowski, Township Manager
William M. White, Assistant Township Manager/Finance Director

From: Stephen F. Norcini, PE, Township Engineer

Date: June 16, 2018

Proposed WAWA at the Corner of Lancaster and Aberdeen Avenues, 302-306 East Lancaster Avenue, Traffic Impact Scoping Application

For the Committee's and our residents' use, please find attached the following:

1. Traffic Impact Study Scoping Application, prepared by Traffic Planning and Design, Incorporated for the proposed project
2. A review letter prepared by Gilmore & Associates, with staff input, regarding the Scoping Application
3. A Zoning Opinion from the Township's Zoning Officer, Kevin Kochanski, to Nicholas Caniglia
4. Concept Plan for the WAWA

Please note that to date, the Township has not received a Land Development application for the proposed project.



TRAFFIC PLANNING AND DESIGN, INC.

WWW.TRAFFICPD.COM

June 13, 2018

Mr. Francis J. Hanney
Traffic Services Manager
PennDOT District 6-0
7000 Geerdes Boulevard
King of Prussia, PA 19406

RE: TRANSPORTATION IMPACT STUDY (TIS) SCOPING APPLICATION

WAWA – Lancaster Avenue (S.R. 0030) & Aberdeen Avenue

Radnor Township, Delaware County

TPD No. KARA.00010

Dear Mr. Hanney:

On behalf of Wayne Property Acquisition, Inc., Traffic Planning and Design, Inc. (TPD) has prepared the following TIA Scoping Meeting Application for the above referenced project. This scoping application has been prepared in accordance with the application procedures outlined in PennDOT's Publication 282, Appendix A, dated July, 2017.

Scoping Meeting Date: TBD

Applicant: Wayne Property Acquisition, Inc.

Applicant's Consultant: Traffic Planning and Design, Inc. (TPD) – Matthew Hammond

Applicant's Primary Contact: Peter Karakelian

1. LOCATION OF PROPOSED DEVELOPMENT:

PennDOT Engineering Dist: 6-0 County: Delaware

Municipality: Radnor Township

State Route(s) (SR): Lancaster Avenue (S.R. 0030)

Segment(s): 0040 Offset(s): 0000 to 0300

Are 102" wide combinations (w/trailer lengths greater than 28') allowed access to SR in accordance with 75 PA. C.S. (4908): Yes

Please refer to the attached **Figure 1** which shows the project location. The proposed site plan is **attached**.

2. DESCRIPTION OF PROPOSED DEVELOPMENT:

- Existing Land Use: The existing site contains the following:
 - Sunoco – Convenience Store, Ten (10) Fueling Positions, Four (4) Service Bays
 - BP – Convenience Store, Eight (8) Fueling Positions, One (1) Carwash Tunnel.

- Existing Site Access: The existing site is served by four (4) driveway locations to Lancaster Avenue (S.R. 0030) and two (2) driveway locations to Aberdeen Avenue
- Proposed Land Use: A 4.736 ksf WAWA Convenience Market with twelve (12) fueling positions
- Proposed Site Access: The site will be served by two (2) driveway locations to Lancaster Avenue (S.R. 0030) and one (1) driveway location to Aberdeen Avenue
- Community Linkages (access to neighboring properties, cross easements, pedestrian and transit accommodations): N/A

3. **DEVELOPMENT SCHEDULE AND STAGING:**

- Anticipated Opening Date: 2020
- Design Year: 2025
- Describe Proposed Development/Staging: N/A

4. **TRIP GENERATION:**

Trip generation for the proposed development will be based on:

- ITE Trip Generation Manual (10th Edition).
 - Super Convenience Market/Gas Station (ITE #960)
- Other independent surveys.

TABLE 1
TRIP GENERATION DATA – PROPOSED SITE

Land Use (ITE #)	Time Period	Size (X)	Rate	Enter %	Pass-By %
Super Convenience Market/ Gas Station (#960)	Average Weekday	4.736 ksf	<i>T = 837.58*(X)</i>	50%	N/A
	Weekday AM Peak Hour		<i>T = 83.14*(X)</i>	50%	76%
	Weekday PM Peak Hour		T = 137.38*(X) – 264.53	50%	76%
	Saturday Midday Peak Hour		<i>T = 69.28*(X)</i>	50%	76%
	Average Weekday	12 fp	T = 230.52*(X)	50%	N/A
	Weekday AM Peak Hour		T = 28.08*(X)	50%	76%
	Weekday PM Peak Hour		T = 22.96*(X)	50%	76%
	Saturday Midday Peak Hour		T = 23.26*(X)	50%	66% ¹

T = Total Trips; X = Independent Variable, ksf = 1000 sf, fp = fueling position

¹No data available, used 10% less than P.M. peak hour.

Bold/Italics = Higher Generation Utilized

The results of the trip generation calculations are summarized in **Table 2**.

TABLE 2
TRIP GENERATION – PROPOSED DEVELOPMENT

Peak Hour	Land use Code	Size	Total	Pass-By Trips			New Trips		
				Total	Enter	Exit	Total	Enter	Exit
Average Weekday	#960	4.736 ksf	3968	N/A	N/A	N/A	3968	1984	1984
Weekday A.M.			394	300	150	150	94	47	47
Weekday P.M.			328	250	125	125	78	39	39
SAT Midday			302	200	100	100	102	51	51

As noted above, the Proposed WAWA will replace two (2) existing convenience market/gas station uses. Therefore, a large portion of the trip generation shown above already exists in the Study Area. Counts will be performed at the existing driveways to quantify the increase in traffic due to the Proposed Site. Also, the trip generation shown above represents a conservative estimate.

5. **ESTIMATED DAILY TRIP GENERATION/DRIVEWAY CLASSIFICATION:**
- a. Estimated Daily Trip Generation of Proposed Development: 3968 trips/day or 1984 vehicles/day (not including a credit for the existing uses)
 - b. Driveway Classification Based on Trip Generation: Three (3) Low Volume Driveways = 25-750 vehicles/day

6. **TRANSPORTATION IMPACT STUDY REQUIRED?**

- No
- Yes, based on:
- 3,000 or more vehicle trips/day generated (before accounting for existing site uses)
 - 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?** **No** **Yes**

8. **TIS STUDY AREA:**

- Roadway and Study Intersections
 - Lancaster Avenue (S.R. 0030) & Aberdeen Avenue (Signalized)
 - Lancaster Avenue (S.R. 0030) & Existing Driveways (4)
 - Aberdeen Avenue & Existing Driveways (2)
- Land use context (Refer to Smart Transportation Handbook)
 - Suburban center
- Known Congestion Areas
 - TBD
- Known Safety Concerns
 - TBD
- Known Environmental Constraints
 - TBD
- Pedestrian/Bike Review (Community Centers, Parks, Schools, etc.)
 - Will be addressed in the TIA
- Transit Review (Current routes/stops)
 - Will be addressed in the TIA

9. **STUDY AREA TYPE:**

Urban Rural

Per PennDOT's Functional Classification Map, Lancaster Avenue (S.R. 0030) is defined as an Urban Principal Arterial.

10. **TIS ANALYSIS PERIOD AND TIMES:**

- Weekday A.M. peak hour (peak hour within the 7:00-9:00 A.M. peak period);
- Weekday P.M. peak hour (peak hour within the 4:00-6:00 P.M. peak period);
- SAT Midday peak hour (peak hour within the 11:00 A.M.-1:00 P.M. peak period).

Study Years to be evaluated:

- 2018 Existing Conditions

- 2020 Opening/Buildout Year
- 2025 Design Year

11. **TRAFFIC ADJUSTMENT FACTORS:**

- Seasonal Adjustment: (Identify counts requiring adjustment and methodology): None
- Annual Base Traffic Growth: 0.00%/year based on PennDOT Bureau of Planning and Research (BPR) data pertaining to urban non-interstate roadways in Delaware County. Will assume 0.38%/year growth to be consistent with previous version of PennDOT BPR Data.
- Pass-By Trips: See Tables 1-2 Above
- Captured Trips for Multi-Use Sites: None
- Modal Split Reductions: None
- Other Reduction: Trip Generation Credit for Existing Site(s) based on driveway counts

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

- To be determined through the scoping process.

13. **TRIP DISTRIBUTION AND ASSIGNMENT:**

TPD recommends distributing and assigning trips to the surrounding roadways based upon an evaluation of the following: (1) existing traffic patterns, (2) roadways surrounding the site, and (3) the proposed site driveway location and configuration.

14. **APPROVAL OF DATA COLLECTION ELEMENTS AND METHODOLOGIES:**

Location	Time Period	Count Type
All Existing "Roadway and Study Intersections" noted in #8 above	Weekday A.M. Peak Hour	Manual Turning Movement Count
	Weekday P.M. Peak Hour	
	SAT Midday Peak Hour	
Proposed Driveways	Weekday A.M. Peak Hour	Gap Study
	Weekday P.M. Peak Hour	
	SAT Midday Peak Hour	

15. **CAPACITY/LOS ANALYSIS:**

Capacity analyses to be conducted at the study area intersections for the peak hours and study years to be evaluated according to the methodologies contained in the 2010 HCM (where applicable), utilizing SYNCHRO 10 software. In addition, capacity analyses will be conducted at the proposed site driveway intersection under opening year conditions.

16. **ROADWAY IMPROVEMENTS/MODIFICATIONS BY OTHERS TO BE INCLUDED:**

None Found

17. **OTHER NEEDED ANALYSES:**

- Sight Distance Analysis: Yes
- Signal Warrant Analysis: No
- Required Signal Phasing/Timing Modifications: As Needed
- Traffic Signal Corridor/Network Analysis: N/A
- Analysis of the Need for Turning Lanes: Yes
- Turning Lane Lengths: Utilizing Pub. 46, Chapter 11
- Left Turn Signal Phasing Analysis: As Needed

- h. Queuing Analysis: Utilizing SYNCHRO 95th percentile queues
- i. Gap Studies: Yes
- j. Crash Analysis: Yes
- k. Weaving Analysis: N/A
- l. Other Required Studies: As Needed

18. *ADDITIONAL COMMENTS OR RECOMMENDATIONS RELATIVE TO THE SCOPE OF THE TIS:*

TBD

TRAFFIC PLANNING AND DESIGN, INC.



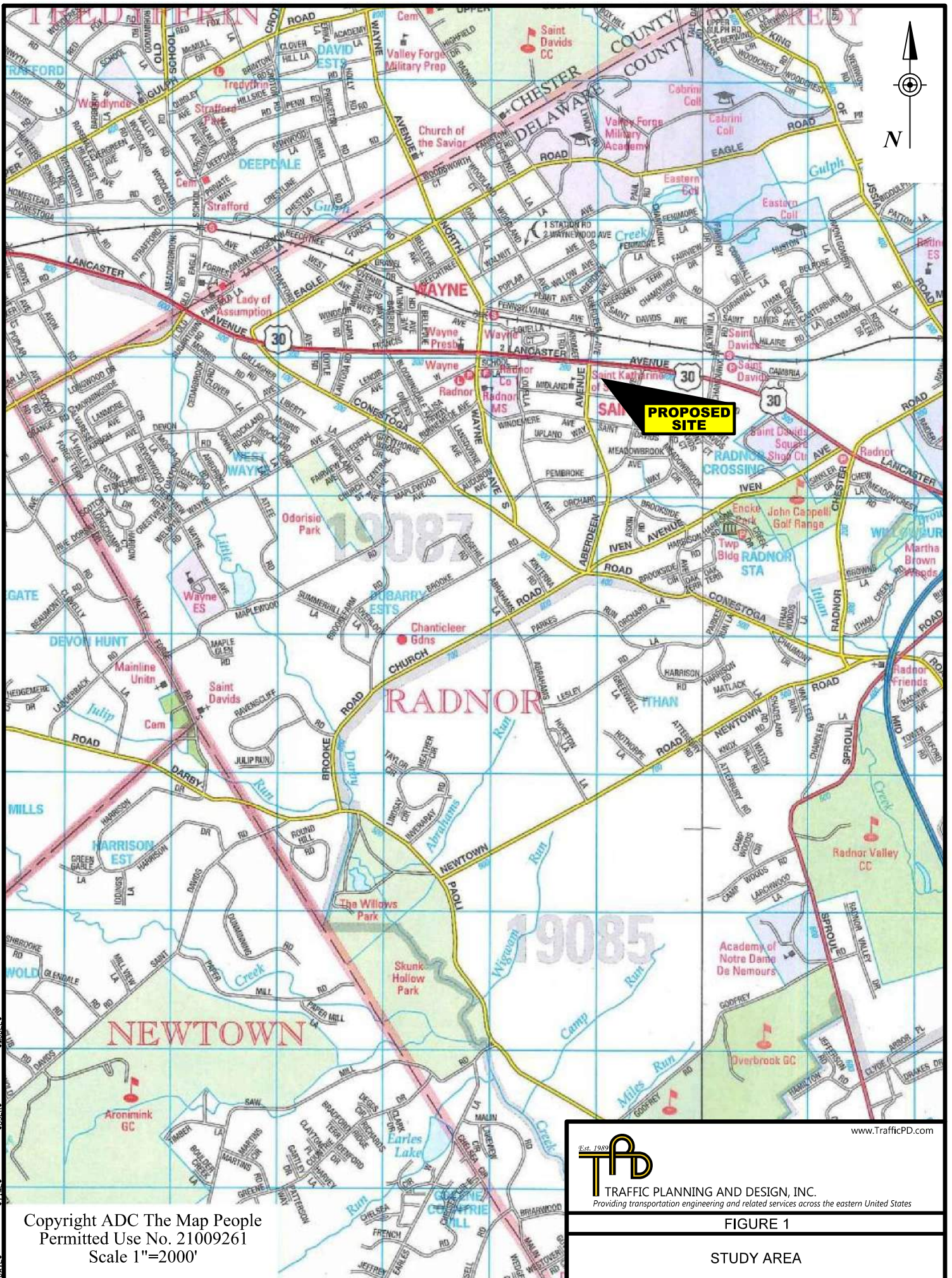
Matthew I. Hammond, P.E.

Executive Vice President

mhammond@TrafficPD.com

Attachments: Figure 1 – Study Area
Proposed Site Plan
PennDOT iTMS Data

cc: Radnor Township
Peter Karakelian, Wayne Property Acquisition, Inc.
Project Team
TPD File



PROPOSED SITE



TRAFFIC PLANNING AND DESIGN, INC.
 Providing transportation engineering and related services across the eastern United States

www.TrafficPD.com

Copyright ADC The Map People
 Permitted Use No. 21009261
 Scale 1"=2000'

FIGURE 1

STUDY AREA

FILE: 010101.DWG
 DATE: 11/11/11
 TIME: 10:11:11 AM
 USER: JAMES
 MODEL: 1



TMS Site 24557: Traffic Monitoring Report

Traffic Report Summary

Location Description: Btwn Pembroke Ave & Saint Davids Rd.

Details		Location		Map
Type of Count	MACHINE CLASS	County	DELAWARE (23)	
Type of Site	Portable	Route	0030	
Schedule	1 TIME/YR	Segment	0040	
Duration	24 HRS	Offset	1500	
Frequency Cycle	03	Latitude	40.04318	
Cycle Year	01	Longitude	-75.37598	

Traffic Data				
Date	Volume	Truck Volume	Truck %	Volume Graph
Aug 19, 1993	24,248			
Aug 03, 1999	29,953			
Oct 22, 2002	28,331			
Jan 04, 2006	26,750			
Oct 15, 2008	28,779			
Oct 18, 2011	13,465	558	4.1	
Oct 28, 2014	28,086			



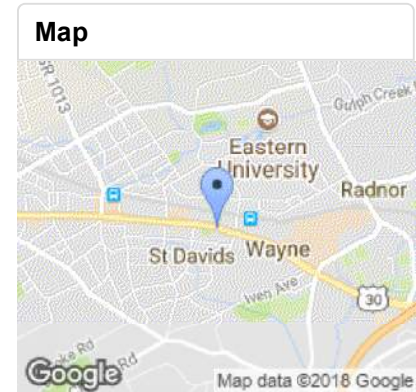
TMS Site 24557: Traffic Monitoring Report

Traffic Report Summary

Location Description: Btwn Pembroke Ave & Saint Davids Rd.

Details	
Type of Count	MACHINE CLASS
Type of Site	Portable
Schedule	1 TIME/YR
Duration	24 HRS
Frequency Cycle	03
Cycle Year	01

Location	
County	DELAWARE (23)
Route	0030
Segment	0040
Offset	1500
Latitude	40.04318
Longitude	-75.37598



Traffic Data				
Date	Volume	Truck Volume	Truck %	Volume Graph
Aug 19, 1993	24,248			
Aug 03, 1999	29,953			
Oct 22, 2002	28,331			
Jan 04, 2006	26,750			
Oct 15, 2008	28,779			
Oct 18, 2011	13,465	558	4.1	
Oct 28, 2014	28,086			



MEMORANDUM

Date: July 10, 2018

To: Steve F. Norcini, P.E.
Radnor Township Engineer

From: Amy Kaminski, P.E., PTOE
Gilmore & Associates, Inc.

cc: Roger Phillips, P.E., Senior Associate, Gannett Fleming, Inc.
Damon Drummond, P.E., PTOE, Gilmore & Associates, Inc.
Leslie A. Salsbury, E.I.T., Gilmore & Associates, Inc.

Reference: Wawa – 302-306 E. Lancaster Avenue (S.R. 0030) & Aberdeen Avenue
TIS Scoping Application Review
Radnor Township, Delaware County, PA
G&A 18-06057

We have reviewed the TIS Scoping Application prepared for Wayne Property Acquisitions, Inc., (Wawa near West Lancaster Avenue and Aberdeen Avenue) and offer the following comments for your consideration:

A. BACKGROUND

The subject properties are situated in the C-2 Commercial Zoning District operating under the permitted By-Right retail use. The parcels are located along the south side of Lancaster Avenue, east of Aberdeen Avenue at 302 E. Lancaster Avenue and 306 E. Lancaster Avenue. The parcel located at 302 E. Lancaster Avenue currently operates as a full-service motor vehicle repair shop along with the retail sale of gasoline and the parcel located at 306 E. Lancaster Avenue operates as a car wash and includes the retail sale of gasoline. The Applicant proposes consolidating the two parcels, demolishing the existing structures and constructing a new retail convenience store of 5,112 SF, with 55 parking spaces and offer the retail sale of gasoline at 12 retail gas pumps.

B. DOCUMENTS REVIEWED

1. Zoning Opinion letter issued by Kevin Kochanski, RLA, CZO, Radnor Township Director of Community Development; addressed to Nick Caniglia, Esq., of Pierce, Caniglia & Taylor, dated April 27, 2018.
2. Transportation Impact Study (TIS) Scoping Application, prepared for Wawa – Lancaster Avenue & Aberdeen Avenue, prepared by Traffic Planning and Design, dated June 13, 2018.

BUILDING ON A FOUNDATION OF EXCELLENCE

65 E. Butler Avenue | Suite 100 | New Britain, PA 18901
Phone: 215-345-4330 | Fax: 215-345-8606

www.gilmore-assoc.com

3. Concept Plan, prepared for Wayne Property Acquisition, Inc., prepared by Bohler Engineering, dated April 9, 2018.

C. TRANSPORTATION COMMENTS

We recommend the Applicant address the following comments in the impending Transportation Impact Study. If the Applicant is agreeable to the following modifications, we find it unnecessary to schedule a Scoping Application meeting to discuss the project with PennDOT:

1. §255-26 – In addition to the reviewed information proposed by the Applicant in the Transportation Impact Study Scoping Application and based on the requirements of this section of the Township Ordinance, the Applicant shall also address the following items in the Transportation Impact Study:
 - i) Include manual turning movement counts as offered in the TIS Scoping Application and include the following additional intersections:
 - Lancaster Avenue & Wayne Avenue
 - Lancaster Avenue & Louella Avenue
 - Lancaster Avenue & St. Davids Road/Chamounix Road
 - ii) Include the 24 hour ADT volumes and speed information for the following roadway segments:
 - Lancaster Avenue
 - Aberdeen Avenue
 - iii) Verify the size of the proposed building. The scoping application notes the retail building as 4,736 SF in size while the provided concept plan notes the retail building as 5,112 SF in size.
 - iv) The Scoping Application indicates the distribution and assignment will be based on the existing traffic patterns, roadways surrounding the site and the proposed site driveway location and configuration. We would prefer the Distribution and Assignment more heavily favor the existing site distribution because we anticipate the traffic associated with future retail use will behave similar to the current retail use.
 - v) Section 17 *Other Needed Analyses*; left turn signal phasing analysis shall be prepared for all signalized intersections.

D. REVIEW OF PROVIDED CONCEPT PLAN

The following comments are based on a sketch plan review of the provided concept plan; any comments identified as a Subdivision and Land Development Ordinance comment (identified by the “§”) shall be addressed during the eventual Land Development process or the Applicant will be required to seek a waiver.

1. §255-27.B(3)(b) (Lancaster Avenue) and (d) (Aberdeen Avenue); and §255-27.C(1) – The Township legal Right-of-Way on Lancaster Avenue (S.R. 0030) is 80’; and on Aberdeen Avenue the Township legal Right-of-Way is 60’.

2. §255-27.1(2) – Access to parking areas on commercial sites shall be controlled and shall be so located as to provide a minimum of 200 feet between points of access. We recommend eliminating the most western Lancaster Avenue access.
3. §255-30.E – We recommend relocating the loading area to a more optimal onsite location; the current location is too close to both proposed driveways to Lancaster Avenue.
4. 255-37.B. – The Township requires a minimum 4' sidewalk width; in addition, the Township has been requiring a 2' grass verge between the face of curb and the closest edge of the sidewalk.
5. We recommend the Applicant relocate the Air Machine (tire filling station) further away from the proposed driveway access on Aberdeen Avenue to minimize potential conflicts with vehicles utilizing this driveway.
6. The Township is intending on installing a Traffic Adaptive System along Lancaster Avenue that will extend from the Radnor Township municipal line beginning at County Line Road and continuing west and including all signalized intersections to the Radnor Financial Center/St. David's Square Shopping Center intersection on Lancaster Avenue. St. Davids Road/Chamounix Road, Louella Avenue and Wayne Avenue are the next three logical intersections to be included in the corridor Traffic Adaptive System.

LISA BOROWSKI
President

LUCAS A. CLARK, ESQ.
Vice President

JAKE ABEL

RICHARD F. BOOKER, ESQ.

SEAN FARHY

MATTHEW MARSHALL

JOHN NAGLE



RADNOR TOWNSHIP
301 IVEN AVENUE
WAYNE, PENNSYLVANIA 19087-5297

Phone (610) 688-5600
Fax (610) 971-0450
www.radnor.com

ROBERT A. ZIENKOWSKI
Township Manager
Township Secretary

JOHN B. RICE, ESQ.
Solicitor

KATHRYN GARTLAND
Treasurer

April 27, 2018

Nick Caniglia
PO Box 312
Wayne, PA 19087

SUBJECT: 302-306 EAST LANCASTER AVENUE

Mr. Caniglia,

I have received and reviewed your letter dated April 17, 2018 requesting a Zoning Opinion for the above subject property. Currently, the site consists of 2 properties. The use of these properties includes the retail sale of gasoline, a full-service motor vehicle repair station, and a car wash. The owner is proposing to consolidate the two (2) parcels; demolish the existing structures and construct a new retail store and new retail sales of gasoline. I offer the following for your consideration:

1. The subject site is located in the C-2 General Commercial Zoning District.
2. Retail uses are permitted By-Right in the C-2 district.
3. The Use provisions of ZO Section 280-49.A requiring all uses to be completely enclosed within a building is an existing non-conformity; which is proposed to be reduced. Currently, the two (2) sites maintain 20 retail gas pumps. The proposed condition would contain 12 retail gas pumps.
4. The Use provision of ZO Section 280-49.D requiring no goods shall be displayed or offered for sale beyond the front lines of a building is an existing non-conformity; which is proposed to be reduced.

A thorough zoning review has not been completed. This opinion applies only to the issue noted above. The property owner is responsible for securing all other necessary permits and approvals; as well as compliance with all applicable Municipal Codes/Regulations. If you have any questions regarding this determination, please contact me.

Sincerely,

Kevin W. Kochanski, RLA, CZO
Director of Community Development

cc: Property File

PIERCE, CANIGLIA & TAYLOR

ATTORNEYS AT LAW

125 STRAFFORD AVENUE - SUITE 110

P. O. Box 312

WAYNE, PENNSYLVANIA 19087

JAMES M. PIERCE
NICHOLAS J. CANIGLIA
KENNETH C. TAYLOR

TELEPHONE
(610) 688-2626
FAX
(610) 688-5761

April 16, 2018

Kevin W. Kochanski
Director of Community Development
Radnor Township
301 Iven Avenue
Wayne, PA 19087

**Re: Zoning Determination Opinion
302-306 E. Lancaster Avenue, Wayne**

Dear Kevin:

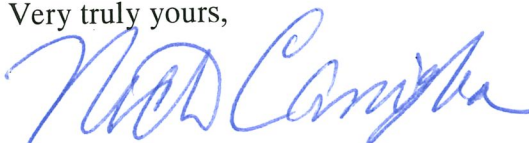
Kindly issue a determination letter indicating the compliance of the attached Plan with the provisions of the Radnor Township Zoning Code. In your opinion please provide what relief, if any, including the type of relief, is required from the provisions of the Zoning Code. Enclosed is the fee of \$100.00.

302 E. Lancaster Avenue and 306 E. Lancaster Avenue are adjacent parcels located on the south side of Lancaster Avenue. 302 E. Lancaster currently houses a full-service motor vehicle repair shop and the retail sale of gasoline. 306 E. Lancaster Avenue is operated as a car wash and also includes the retail sale of gasoline. The owner of the lots intends to combine the lots into one lot and maintain a retail convenience store together with the retail sale of gasoline. The motor vehicle repair use and the car wash use will be discontinued.

The Plan attached indicates the existing zoning conditions and the proposed development of the site. The proposed parking and loading calculations are also provided.

Thank you for your time and consideration. If you have any questions or need any further information please do not hesitate to contact me.

Very truly yours,



NICHOLAS J. CANIGLIA
Enc.

