

**BOARD OF COMMISSIONERS**

**REVISED AGENDA**

**Monday, May 18, 2015 - 6:30 PM**

Pledge of Allegiance

Notice of Executive Session preceding the Board of Commissioners meeting of May 18, 2015

1. Consent Agenda

- a) Disbursement Review and Approval: 2015-5B
- b) Approval of minutes for the Board of Commissioners meeting of April 27, 2015
- c) Acceptance of Department Monthly Reports
- d) Resolution #2015-59 - Award of the Contract for Project #B-15-003, Radnor Chester (SR1021) and Rader Road Traffic Signal Installation

2. Recognitions by Radnor Police Department

~~3. Update on the Willows~~

4. Radnor Historical Society to present their proposal for an ordinance protecting the dispersed historical assets in the Township

5. Public Participation

6. Committee Reports

***PUBLIC SAFETY***

- A. Ordinance #2015-06 (***Introduction***) - Amending Ordinance 2013-17 dated January 6, 2014, Chapter 270 of Radnor Township revising Section 57, parking meter zones on Lancaster Avenue, south side, from 2 hour parking to 15 minute parking

***PUBLIC WORKS & ENGINEERING***

- B. Pine Tree Road Stop Sign Evaluation presentation and discussion

- C. Resolution #2015-58 – Homeowner (SFR) Stormwater Facility Rebate Program (the SWMAC will have brief presentation for this)

- ~~D. Resolution #2015-53 (***Preliminary Approval***) – 145 King of Prussia Road (***BioMed***)~~

***COMMUNITY DEVELOPMENT***

- E. Authorization for the Township Solicitor to draft amendment to Recreation Impact Fee Ordinance

- F. Discussion of future zoning ordinance amendments (***Per Commissioner Booker***)

***FINANCE & AUDIT***

***LIBRARY***

***PARKS & RECREATION***

***PERSONNEL & ADMINISTRATION***

***PUBLIC HEALTH***

Old Business

New Business

Public Participation

Adjournment

**RADNOR TOWNSHIP**  
**DISBURSEMENTS SUMMARY**  
**May 18, 2015**

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The table below summarizes the amount of disbursements made since the last public meeting held on May 11, 2015. As approved by the Board, the Administration is now making weekly accounts payable disbursement batches and publishing those lists on the Township's web site at the following link. Please refer to those files for a detailed listing of the amounts paid by vendor by account code.

Link: <http://www.radnor.com/egov/apps/document/center.egov?path=browse&id=22>


<b>Fund (Fund Number)</b>	<b>2015-5B May 8, 2015</b>	<b>Total</b>
General Fund (01)	526,268.39	\$526,268.39
Sewer Fund (02)	10,420.70	10,420.70
Storm Sewer Management (04)	7,027.50	7,027.50
Capital Improvement Fund (05)	75,095.47	75,095.47
<b>Total Accounts Payable Disbursements</b>	<b>\$618,812.06</b>	<b>\$618,812.06</b>
<i>Electronic Disbursements</i>	n/a	1,151,845.47
<b>Grand Total</b>	<b>\$618,812.06</b>	<b>\$1,770,657.53</b>

In addition to the accounts payable checks, the Township also has various electronic payments including payroll, debt service, credit card purchases and fees as well as others from time to time. The attached table reflects all of the electronic payments made since the last public Board meeting as well as those anticipated prior to the next Board meeting.

The Administration has adopted various internal control and processing procedures to insure that amounts obligated are within the budgetary limits established by the Board of Commissioners. Those procedures are monitored on a daily basis by members of the Finance Department and responsible employees of the various departments. The amounts included in the table above have been scrutinized as part of the internal control and processing procedures and have obtained the required approvals prior to disbursement.

If you should have any questions, please contact the Finance Department.

Respectfully Submitted,

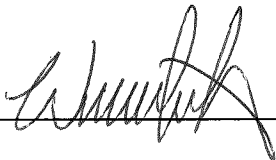
  
\_\_\_\_\_  
William M. White  
Finance Director

**ELECTRONICALLY PAID DISBURSEMENT LISTING**

Estimated Through June 15, 2015

Description	Account No.	Date	Purpose	Amount
Credit Card Revenue Fees - Estimated	Various Funds	6/1/2015	5/15 Credit Card Revenue Processing Fees	\$5,000.00 *
Credit Card Revenue Fees - Actual	01-Variou	5/1/2015	4/15 Credit Card Revenue Processing Fees	\$10,842.04
Payroll [Pension] Transaction - Estimated	07-492-4980	6/1/2015	6/15 Police Pension Payments	\$171,497.64
Payroll [Pension] Transaction - Estimated	11-495-4980	6/1/2015	6/15 Civilian Pension Payments	\$133,705.79
Payroll [Bi-Weekly] Transaction - Estimated	01-various	5/21/2015	Salaries and Payroll Taxes - General Fund	\$400,000.00
Payroll [Bi-Weekly] Transaction - Estimated	02-various	5/21/2015	Salaries and Payroll Taxes - Sewer Fund	\$15,000.00
Payroll [Bi-Weekly] Transaction - Estimated	17-various	5/21/2015	Salaries and Payroll Taxes - K-9 Fund	\$400.00
Payroll [Bi-Weekly] Transaction - Estimated	01-various	6/4/2015	Salaries and Payroll Taxes - General Fund	\$400,000.00
Payroll [Bi-Weekly] Transaction - Estimated	02-various	6/4/2015	Salaries and Payroll Taxes - Sewer Fund	\$15,000.00
Payroll [Bi-Weekly] Transaction - Estimated	17-various	6/4/2015	Salaries and Payroll Taxes - K-9 Fund	\$400.00
<b>Period Total</b>				<b>\$1,151,845.47</b>

Submitted:



\* Credit card fees are charged to the Township's accounts on the first of the month

<u>Original Estimate</u>			<u>Actual Amount</u>
\$400,000.00	5/7/2015	Salaries and Payroll Taxes - General Fund	\$414,279.68
\$15,000.00	5/7/2015	Salaries and Payroll Taxes - Sewer Fund	\$13,570.56
\$400.00	5/7/2015	Salaries and Payroll Taxes - K-9 Fund	\$135.64
<b>\$415,400.00</b>			<b>\$427,985.88</b>

**TOWNSHIP OF RADNOR**  
**Minutes of Public Meeting of April 27, 2015**

*The Radnor Township Board of Commissioners met at approximately 6:30 PM in the Radnorshire Room in the Radnor Township Municipal Building, 301 Iven Avenue, Wayne, PA 19087*

**Commissioners Present**

*William Spingler, President*

*John Fisher*

*John Nagle*

*Elaine Schaefer*

*James C. Higgins, Vice President*

*Richard F. Booker*

*Donald Curley*

**Also Present:** *Robert A. Zienkowski, Township Manager; John Osborne, Treasurer; Jonathan Reiss, Township Solicitor; William White, Finance Director; Kevin Kochanski, Director of Community Development; Steve Norcini, Director of Public Works; William Colarulo, Superintendent of Police; Tammy Cohen, Director of Recreation and Community Programming; Amy Kaminski, Traffic Engineer; Matt Scholz, Township Engineer and Amy Lacey, Radnor Township.*

*President Spingler called the meeting to order and led the assembly in the Pledge of Allegiance*

*Notice of Executive Session of the Board of Commissioners meeting of April 27, 2015*

All commissioners were in attendance, where matters of personnel, real estate and litigation were discussed. Commissioner Spingler also announced that there was a Personnel and Administration sub-committee meeting held on April 23, 2015 where matters of personnel were discussed.

Commissioner Spingler announced that item E will be removed from this evening's agenda.

*1. Consent Agenda*

- a) *Disbursement Review and Approval: 2015-04A, 2015-04B, 2015-04Z*
- b) *Acceptance of Department Monthly Reports*
- c) *Approval of minutes for the Board of Commissioners meeting of March 23, 2015 & April 13, 2015*
- d) *Acceptance of Staff Traffic Committee Meeting Minutes of March 18, 2015*
- e) *Resolution #2015-55 – Award of Superpave Resurfacing Program*

Commissioner Spingler made a motion to approve, seconded by Commissioner Higgins. Motion passed 7-0. Commissioner Booker requested a paving schedule to send to the constituents. Mr. Norcini said the contractor will be notified of the motion to approve tomorrow and the schedule will be posted to the Board.

*2. Letters of Commendation (Police) and Recognitions (Recreation)*

Chief Colarulo presented letters of commendations to officers. Director Tammy Cohen presented recognition awards to Villanova University for their participation and support of Township programs.

*3. Public Participation*

None

#### 4. Committee Reports

##### **PUBLIC SAFETY**

###### A. Ordinance #2015-04 – (Introduction) - Section 270-16, Stop Intersections, Adding New Stop Intersections for Oakford Road, Arbordale Road and Creek Drive

Commissioner Schaefer made a motion to introduce, seconded by Commissioner Fisher. Motion passed 7-0.

###### B. Ordinance #2015-05 – (Introduction) - Chapter 270, Section 270-31 - Rescinding Handicapped Parking Space on David Drive

Commissioner Schaefer made a motion to introduce, seconded by Commissioner Nagle. Motion passed 7-0.

##### **PUBLIC WORKS & ENGINEERING**

###### C. Motion to Approve the Ardrossan Subdivision Planting Berm

John Snyder from Saul Ewing, representing ES III, LP presented a plan of a proposed planting berm for the Ardrossan subdivision. In the plan, an 11-foot planting berm will be created using the additional fill at the site. The plan presented included plantings on the berm. The applicant was requesting this proposed berm and plantings plan be approved in lieu of the \$40,000 escrow required as part of the original subdivision approval. Mr. Snyder reasoned the cost to place the berm and additional plantings would be more than double the previously approved escrow amount and that the berm would look more appealing and had a better chance of survival.

Commissioner Schaefer and Commissioner Fisher did not agree with forgoing the previously approved escrow amount. Commissioner Curley inquired if the plan had gone through the Shade Tree Commission and what their thoughts on it were. Commissioner Booker agreed with the placing of the berm, but not with the forgoing of the \$40,000 escrow. Commissioner Nagle suggested placing the berm and plantings, waiting to see if it was successful, and then returning the \$40,000 escrow.

Solicitor Reiss stated the board could agree on forgoing of the escrow with just a motion but the votes were needed for it to pass.

##### Public Comment

Leslie Morgan – She spoke to her disagreement with the size of the trees and the reduction in the number of trees planted. She supported keeping the \$40,000 escrow requirement.

Commissioner Higgins made a motion to approve the planting plan with the additional of berm but they do not agree to forgo the previously approved \$40,000 escrow, seconded by Commissioner Curley. Motion passed 5-2, with Commissioners Spingler and Nagle opposed.

###### D. Resolution #2015-54 – Preliminary Approval – Preliminary Approval – Villanova University Housing Project

Commissioner Higgins introduced the resolution for preliminary approval. Commissioner Schaefer recused herself from the discussion and possible vote.

Nick Caniglia, representing Villanova University, made several comments to the resolution. Villanova University had several comments on the resolution and the review letters. There was an in depth discussion amongst the Commissioners, Staff and the Applicant in regards to the resolution; parking surface spots; stormwater management for the housing and West Lancaster parking areas; the height of the Pike Field garage; the façade of the Performing Arts Center; the church walk and bridge lighting; and various waiver requests where existing non-conformities exist. They also discussed traffic flow requirements; traffic impact requirements and waiver requirements where existing non-conformities exist; landscaping requirements and conditional use provisions; ADA parking spots and the sidewalks; Recreational Use fee required by the Township along with discussion on the interpretation of the definition of building area. There was additional discussion on the requirement for a bridge and/or a tunnel for pedestrians. Mr. Caniglia stated when Villanova University proposed a bridge in the 1990's, the Township acquiesced on that requirement.

Commissioner Curley requested a 30-day extension because of the amount of changes that are needed to move forward. Mr. Caniglia stated Villanova University would agree to an extension to May 12, 2015.

#### Public Comment

Jane Galli, Barcladen Road – She voiced her concerns of the traffic in her area.

Rick Leonardi, 30 Aldwyn Lane – He spoke to traffic and student traffic at the Ithan/Lancaster

Commissioner Curley made a motion to table until the May 11<sup>th</sup> meeting, seconded by Commissioner Fisher. Motion passed 6-0, with Commissioner Schaefer recusing.

~~*E. Resolution #2015-53 – Preliminary Approval – Preliminary Approval – 145 King of Prussia Road (BioMed)*~~

Removed from agenda

#### *F. Discussion of a draft PLO amendment as prepared by RETTEW*

Steve Gabriel of Rettew & Associates discussed the draft PLO amendment submitted to the Board of Commissioners. There was a lengthy discussion on the specifics of the draft amendment. Commissioner comments and discussion points included building heights, traffic impact, traffic neutrality, incentives, and the effect of the amendment on the constituents. Commissioner Schaefer would like more research and analysis; as well as the input of the CARFAC as to the economic difference between the two types of zoning.

#### Public Comment

Diane Edbril, Spruce Tree Rd - She commented on various aspects of the draft amendment; specifically the riparian buffer, and the parking formula used in section.

George Broseman - He spoke as a representative of Brandywine Partnership, the largest property owner in PLO zoning district. Mr. Broseman stated he will be reviewing the draft amendment and the process. Brandywine Partnership is in support of mixed use amendment.

The Board agreed to bring their notes and thoughts on the draft amendment to the next Commissioners meeting on May 11; with a vote taking place on May 18<sup>th</sup> to send it to the Planning Commission and the Delaware County Planning Commission.

***COMMUNITY DEVELOPMENT - None***

***FINANCE & AUDIT - None***

***LIBRARY - None***

***PARKS & RECREATION - None***

***PERSONNEL & ADMINISTRATION - None***

***PUBLIC HEALTH - None***

*Old Business*

None

*New Business*

Commissioner Nagle made a recommendation to direct the Township Manager to send a letter to the Radnor Township School District regarding North Wayne Field asking permission to proceed with plan E of the stormwater improvements under the current lease. Commissioner Schaefer seconded and the motion passed 5-2 with Commissioners Booker and Curley opposed.

*Public Participation*

Sara Pilling, Garrett Hill - She spoke to her fear that Villanova University will not follow through on their plan for building the bridge and asked the board to make the bridge mandatory.

Township Manager Zienkowski stated Godfrey Road is in terrible condition due to the potholes and that PennDOT has no plans to patch it because it is on the paving program.

*There being no further business, the meeting adjourned on a motion duly made and seconded.*

*Respectfully submitted,*

*Amy Lacey*

MEMORANDUM

To: Board of Commissioners  
CC: Robert A. Zienkowski, Twp. Manager  
Stephen F. Norcini, P.E.; Director of Public Works  
From: Suzan Jones, Administrative Assistant Engineering Department  
Re: March 2015 Monthly Summary Report

\*\*\*\*\*

We hereby submit for your review the March 2015 Engineering and Public Works Departments Revenue, respectively \$ 10,240.00 and \$ 4,595 as outlined below.

➤ 25	Grading Permit Applications - \$ 5,725.00	year-to-date - \$ 16,850.00
➤ 0	Clearing Permit Application - \$ 0.00	year-to-date - \$ 160.00
➤ 0	SALDO Application - \$ 0.00	year-to-date - \$ 300.00
➤ 7	Sidewalk Permit Applications - \$ 200.00	year-to-date - \$ 600.00
➤ 28	Sidewalk blocks replaced -	year-to-date - 49 blocks
➤ 0	Septic Permit Applications - \$ 0.00	year-to-date - 0.00
➤ 1	Property inspections - \$ 65.00	year-to-date - \$ 5,265.00
➤ 25	Certificate of Occupancy Applications - \$ 4,050.00	year-to-date - \$ 9,900.00
➤ 17	Highway Permit Applications - \$ 1,140.00	year-to-date - \$ 14,645.00

Engineering income for 2015 year-to-date \$ 33,075.00  
Public Works income for 2015 year-to-date \$ 14,645.00

Engineering Assistant Doug Meder, SEO, performed the following:

➤ 82	site visits	year-to-date - 166
➤ 23	mark outs for property resale (sidewalks)	year-to-date - 53
➤ 23	sewer inspections	year-to-date - 53
➤ 6	complaints investigated	year-to-date - 19
➤ 11	Grading Permit applications reviewed	year-to-date - 16
➤ 36	meetings attended	year-to-date - 104
➤ 0	Sewage Permit Review	year-to-date - 0
➤ 0	Sewage Permit Deep Holes	year-to-date - 0
➤ 0	Sewage Permit Pre-soaks	year-to-date - 0
➤ 0	Sewage Permit Percolation Tests	year-to-date - 0
➤ 0	Sewage Permit Septic Installations	year-to-date - 1
➤ 3	Storm percolation tests	year-to-date - 3
➤	Deliveries to Shade Tree and Planning Commission members	year-to-date - 47

Professional Service Fees Reimbursed for 2015 year-to-date \$ 188,741.14



MEMORANDUM

To: Board of Commissioners  
CC: Robert A. Zienkowski, Twp. Manager  
Stephen F. Norcini, P.E.; Director of Public Works  
From: Suzan Jones, Administrative Assistant Engineering Department  
Re: April 2015 Monthly Summary Report

\*\*\*\*\*

We hereby submit for your review the April 2015 Engineering and Public Works Departments Revenue, respectively \$ 18,780.00 and \$ 1,140.00 as outlined below.

➤ 28	Grading Permit Applications - \$ 8,350.00	year-to-date - \$ 25,200.00
➤ 1	Clearing Permit Application - \$ 80.00	year-to-date - \$ 240.00
➤ 2	SALDO Application - \$ 1,900.00	year-to-date - \$ 2,200.00
➤ 2	Sidewalk Permit Applications - \$ 100.00	year-to-date - \$ 700.00
➤ 5	Sidewalk blocks replaced -	year-to-date - 54 blocks
➤ 0	Septic Permit Applications - \$ 0.00	year-to-date - 0.00
➤ 20	Property inspections - \$ 1,300.00	year-to-date - \$ 6,565.00
➤ 41	Certificate of Occupancy Applications - \$ 7,050.00	year-to-date - \$ 16,950.00
➤ 6	Highway Permit Applications - \$ 1,140.00	year-to-date - \$ 15,785.00

Engineering income for 2015 year-to-date \$ 51,855.00  
Public Works income for 2015 year-to-date \$ 15,785.00

Engineering Assistant Doug Meder, SEO, performed the following:

➤ 75	site visits	year-to-date - 241
➤ 31	mark outs for property resale (sidewalks)	year-to-date - 84
➤ 31	sewer inspections	year-to-date - 84
➤ 5	complaints investigated	year-to-date - 24
➤ 7	Grading Permit applications reviewed	year-to-date - 23
➤ 27	meetings attended	year-to-date - 131
➤ 0	Sewage Permit Review	year-to-date - 0
➤ 0	Sewage Permit Deep Holes	year-to-date - 0
➤ 0	Sewage Permit Pre-soaks	year-to-date - 0
➤ 0	Sewage Permit Percolation Tests	year-to-date - 0
➤ 2	Sewage Permit Septic Installations	year-to-date - 3
➤ 0	Storm percolation tests	year-to-date - 3
➤	Deliveries to Shade Tree and Planning Commission members	year-to-date - 63

Professional Service Fees Reimbursed for 2015 year-to-date \$ 286,536.90

**Radnor Township**  
**Public Works Department**  
**Monthly Report for April 2015**

**Building Maintenance**    *1 man*

Maintains & cleans facilities including trash and recycling removal – Administration and Police Building, Public Works Buildings, and Radnor Activity Center

**Fleet**                            *3 men*

- Daily routine checkups of police vehicles  
– 42 vehicles
- Vehicle safety inspections for all departments  
– 20 vehicles
- Major Repairs  
– Unit #27 Replace air brake dryer  
Unit #77 Drive shaft universal joints  
Unit #32 Replace bolts on springs and bushings  
Unit #53 Replace broken brake slack adjusters  
Unit #31 Replace water pump and coolant  
Unit #34 Radiator replace and clutch fan  
Unit #105 Repair driver seat  
Unit #L-3 Fuel pump and diff. sensor, oil change  
Unit #27 Towed to Hunter International for repairs  
Unit #11 Replace both front struts and alignment  
Unit #30 Replace fuel tank  
Unit #TG-1 Replace hammer tips on grinder  
Unit #47 Replace hydraulic brake booster
- Unit #PT-1 Install cycle stands and restraints  
Unit #58 Replace oil pan and fuel tank
- Scheduled Vehicle Maintenance  
Unit #9  
Unit #P-1  
Unit #105  
Unit #27  
Unit #T-3  
Unit #H-1  
Unit #2  
Unit #25  
Unit #11  
Unit #44  
Unit #47  
Unit #8
- Repair, Service and Maintenance of 137 pieces of equipment and vehicles

**Highway**                            *12 men*

- Attended All Staff meetings
- Installed new traffic signs
- Installed kiosk signs for parking authority (36 signs)
- Replaced bulbs as needed on traffic signals
- Ran the Tub Grinder at Skunk Hollow
- Installed speed boards for police dept.
- Cleaned inlets throughout the Township
- Delivered Barricades for various events
- Assisted Sewer Department
- 150 storm drains cleaned
- 125 pot holes filled
- Filled pot holes on State Roads
- Repaired meters for parking authority
- Began painting street markings
- Turned compost piles at Skunk Hollow
- Delivered mulch & grindings to EAC locations
- Replaced and repaired signs as needed
- Called Higgins Electric for Traffic Signal Concerns
- Cleaned Storm Sewer Lines with the Sewer Department
- Moved Speed Boxes for Police Department
- Cleaned business district
- Installed new delineators at the trail entrance
- Called in water main breaks
- Curb job on Oak Lane
- Assisted with trash and recycling
- Assisted with Rain Garden installation at Twp. Bldg.
- Assisted with Wheels of Wayne Event
- Responded to electrical emergency on N. Wayne Ave

**Parks**                                *13 men*

- Attended all staff meetings
- Cleaned all Park Restrooms, 3 times per week
- Aerated all Fields
- Cleared 1 tree from waterway

- Picked up trash at parks and bike trail, 3 times per week
- Checked the Radnor Bike Trail after all storms
- Groomed all ballfields 3 times per week
- Installed clay at all ballfields
- Cut all playing fields 2 times per week
- Seed and fertilized all fields
- Cut and trimmed all parks and Twp. buildings
- Washed all Vehicles
- Repaired all fences in the parks
- Checked all park playground equipment
- Cleaned garages
- Cleaned Public Works Buildings & bathrooms
- Assist trash department – Monday and Tuesday

- Removed 5 trees in township right of way
- Pruned 26 trees in right of way
- Removed 2 trees in parks
- Performed Spring Clean-up at all Parks and Buildings
- Mulched all Township beds
- Weeded all Township beds
- Repaired small equipment
- Serviced all mowers and tractors
- Removed 2 fallen trees from roads at night
- Repaired swings at tot-lots
- Responded to electrical emergency on N. Wayne Ave
- Set up and cleaned up after all Recreation Dept. events
- Assisted with Tree Give Away at Twp. Bldg
- .

**Sewer** *3 men*

- Pumping Stations (5) check and maintain 5 times per week – 100 times per month
- PA One Call markouts – 297 for the month of April
- Repaired 3 manholes
- Fueled generators at pumping stations
- 17 stoppages for the month of April
- Cleaned 10 manholes
- Camared sewer lines

- Generators (4) - check and maintain 5 times per week – 80 times per month
- Jet Truck – cleaned 3,560 feet of sewer and storm lines
- Located 2 buried manholes
- Repaired 1 pumping stations
- Assist trash department Monday and Tuesday
- Cleaned garages
- Washed all vehicles

**Solid Waste** *20 full time and 1 part time men*

- Solid Waste and Recycling collections -7,500 collections 2 times per week
- 66 Open truck collections

- Curbside Yard Waste Collection – Every Wednesday
- Cleaned road side on State Roads
- Picked up paint at 32 residences as requested

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INTEROFFICE MEMORANDUM

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**TO:** BOARD OF COMMISSIONERS  
**FROM:** KEVIN KOCHANSKI, DIRECTOR  
DEPARTMENT OF COMMUNITY DEVELOPMENT  
**SUBJECT:** APRIL MONTHLY REPORT  
**DATE:** MAY 5, 2015  
**CC:** ROBERT A. ZIENKOWSKI, TOWNSHIP MANAGER



Community  
Development

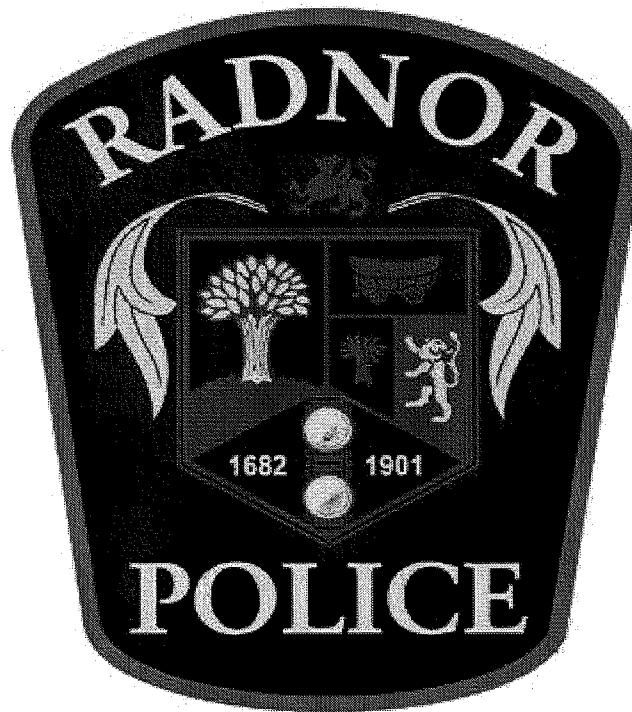
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Attached for your review is the Community Development Monthly Report for the month of April 2015. Please note the following highlights:

- Building Permit Fee Revenue totaled \$55,609.00 with 74 permits issued
  - Electric Permit Fee Revenue totaled \$6,734.00 with 46 permits issued
  - Mechanical Permit Fee Revenue totaled \$2,990.00 with 20 permits issued
  - Plumbing Permit Fee Revenue totaled \$6,872.00 with 37 permits issued
  - Zoning Permit Fee Revenue totaled \$975.00 with 13 permits issued
  - Design Review Board Revenue totaled \$1,000.00 with 7 applications received
  - Zoning Hearing Board Fee Revenue totaled \$5,600.00 with 7 application received
- 
- Permit and application revenue for April 2015:           \$ 79,780.00
  - Permit and application revenue year to date:           \$ 346,278.00
- 
- Permits and applications for April 2015:           204
  - Permits and applications year to date:           714
- 
- Inspections conducted for April 2015:           556
  - Inspections conducted year to date:           2,581

# **RADNOR TOWNSHIP POLICE DEPARTMENT**

## **MONTHLY REPORT**



**APRIL 2015**

**William A. Colarulo  
Police Superintendent**



# **RADNOR TOWNSHIP POLICE DEPARTMENT**

**301 IVEN AVENUE  
WAYNE, PENNSYLVANIA 19087-5297  
OFFICE: (610) 688-0503  
FAX: (610) 688-1238**

**WILLIAM A. COLARULO  
POLICE SUPERINTENDENT**

## **Executive Summary**

**April 2015**

The Radnor Police Department responded to 1,867 calls for service for the month of April 2015. Radnor Officers issued 440 traffic citations for motor vehicle violations. 77 non-traffic citations were issued for various summary offenses such as Disorderly Conduct, Underage Drinking and Public Drunkenness. A total of 754 parking tickets were issued for expired meter violations. Radnor Police Officers made 15 misdemeanor/felony arrests during April 2015.

**Radnor Township Police Department**  
**April 2015 Accidents / Violations / Investigations / Juvenile Report**

<b>Accidents</b>	<b>Apr-15</b>	<b>YTD 2015</b>	<b>Apr-14</b>	<b>YTD 2014</b>	<b>YTD from 15 to 14</b>
Accidents - Fatal	0	1	0	0	1
Accidents - Reportable- With Injuries	3	20	5	24	-4
Accidents - Reportable - No Injuries	12	53	13	53	0
Accidents - Non Reportable	54	205	61	243	-38
Accidents - Hit & Run	9	28	13	50	-22
Accidents - No Report	7	33	10	32	1
Pedestrian Accidents - With Injuries	0	0	0	0	0
Pedestrian Accidents - Fatal	0	0	0	0	0
<b>Total Accidents</b>	<b>85</b>	<b>340</b>	<b>102</b>	<b>402</b>	<b>-62</b>
<b>Violations</b>					
Arrests - Felony & Misdemeanor	15	64	10	63	1
Traffic Violations	440	1759	634	1624	135
Non-Traffic Violations	77	207	73	269	-62
Parking Meter Violations	754	5736	2077	8927	-3191
Abandoned Vehicles	2	6	2	5	1
<b>Total Violations</b>	<b>1288</b>	<b>7772</b>	<b>2796</b>	<b>10888</b>	<b>-3116</b>
<b>Complaints</b>					
Complaints	1350	5081	1271	5293	-212
Unlocked Businesses	14	33	6	29	4
Alarms	125	494	134	628	-134
Animal Complaints	11	48	27	84	-36
					0
<b>Total Complaints</b>	<b>1500</b>	<b>5656</b>	<b>1438</b>	<b>6034</b>	<b>-378</b>

May 11, 2015

# Calls for Service - by UCR Code



Incidents Reported Between 04/01/2015 and 04/30/2015

RADNOR TOWNSHIP

Code	Description	Primary Count	Secondary UCR Count		
			Code 2	Code 3	Code 4
0411	ASSAULT-KNIFE OR CUTTING INSTRUMENT	1			
0440	ASSAULT - ATROCIOUS- HANDS,FISTS,FEET	1			
0512	BURGLARY-FORCED ENTRY-RESIDENCE-DAY	2			
0613	THEFT-\$200 & OVER-RETAIL THEFT	1			
0617	THEFT-\$200 & OVER-FROM BUILDINGS	4			
0619	THEFT-\$200 & OVER-ALL OTHER	4			
0623	THEFT-\$50 TO \$200-RETAIL THEFT	2			
0629	THEFT-\$50 TO \$200-ALL OTHER	2			
0636	THEFT - UNDER \$50 - BICYCLES	1			
0637	THEFT - UNDER \$50 - FROM BUILDINGS	1			
0713	M.V. THEFT - AUTOS - DRIVEWAY	1			
0810	SIMPLE PHYSICAL ASSAULTS	1			
1100	FRAUD	8			
1130	FRAUD - ALL OTHERS (FLIM-FLAM, ETC.)	4			
1150	FRAUD - CREDIT CARDS	5			
1190	FRAUD-ALL OTHER(FLIM FLAM,CONFIDENCE	2			
1191	FRAUD - REPORTS	8			
1410	CRIMINAL MISCHIEF TO AUTOMOBILES	3			
1440	CRIMINAL MISCHIEF - ALL OTHER	4			
1810	DRUG VIOLATIONS	0		1	
1832	NARCOTICS-POSSESSION-MARIJUANA,ETC.	4			
1890	NARCOTICS - REPORTS	1			
2111	DRIVING UNDER THE INFLUENCE - ALCOHOL	5			
2112	DRIVE UNDER INFLUENCE-ALCOHOL-IMPAIRED	1			
2122	DRIVE UNDER INFLUENCE - DRUGS-IMPAIRED	1			
2211	LIQUOR LAW-UNDERAGE-PURCH,CONSMP,POSSES	3			
2300	PUBLIC DRUNKENESS	4			
2400	DISORDERLY CONDUCT	1			
2410	HARASSMENT BY COMMUNICATION	1			
2440	DISORDERLY CONDUCT-DISTURBING THE PEACE	1			
2450	HARASSMENT	4			
2480	DISORDERLY CONDUCT-ALL OTHERS	1			
2640	ALL OTHER ORDINANCE VIOLATIONS	9			
2660	TRESPASSING OF REAL PROPERTY	1			
2900	JUVENILE RUNAWAYS	9			
2910	LOST/MISSING PROPERTY	1			
3000	LOST/RECOVERED PROPERTY	6			
3200	CHECK ON WELFARE	7			
3300	CIVIL DISPUTES	12			
3320	DOA	1			
3500	DISTURBANCE - DISORDERLY PERSONS	7			
3501	DISTURBANCE-COMPLAINT OF NOISE,MUSIC,ETC	17	1		
3520	DOMESTIC PROBLEM (NO ARREST)	19			
3610	DISTURBANCES-JUVENILE	1			
3620	DISTURBANCES-OTHER (FIGHTS,DISPUTES,ETC)	1			
3650	ELECTRIC COMPANY-POWER OUTAGES,ETC	3			
3700	FIRE - RESIDENTIAL	4			
3701	FIRE-COMMERCIAL	2			



May 11, 2015

# Calls for Service - by UCR Code



Incidents Reported Between 04/01/2015 and 04/30/2015

RADNOR TOWNSHIP

Code	Description	Primary Count	Secondary UCR Count		
			Code 2	Code 3	Code 4
3702	FIRE-VEHICLE	1			
3703	FIRE-ALL OTHERS	7			
3704	FIRE-BURNING ORDINANCE VIOLATION	3			
3706	FIRE - LEAVES, BRUSH, ETC.	3			
3850	HAZARDOUS CONDITIONS	4			
3880	OPEN DOORS/WINDOWS - DISCOVERED	3			
3900	GAS LEAKS (NATURAL GAS)	4			
4000	JUVENILE PROBLEMS (NO ARREST)	5			
4018	NON-CRIMINAL-ST. LIGHT OUT, ST. REPAIRS.	4			
4200	MISSING PERSONS(EXCEPT JUVENILES)	2			
4300	MENTAL HEALTH-EMERG.302/SUICIDE ATTEMPTS	2			
4301	MENTAL HEALTH-ALL OTHERS	4			
4500	OPEN DOORS/WINDOWS	14			
4600	ORDINANCE VIOL.-EXCEPT BURNING/SOLICIT	7	1		
4650	POLICE INFORMATION	54			
4655	CID/DTF INVESTIGATION	2			
4660	911 HANG UP CALL	30			
4700	ADDED PATROL-REQUEST FOR	14			
4701	ADDED PATROL - BUSINESS CHECKS	100	1		
4702	ADDED PATROL - SCHOOL CHECKS	45	1		
4800	SOLICITING-WITHOUT PERMIT	1			
4801	SOLICITING-COMPLAINTS	1			
4900	SUSPICIOUS PERSON	15			
4901	SUSPICIOUS CIRCUMSTANCE	33			
4902	SUSPICIOUS VEHICLES	24			
5000	TELEPHONE CALLS-HARASSING/SUSPICIOUS	16			
5004	LOST & FOUND - FOUND ARTICLES	3			
5006	LOST & FOUND - LOST ANIMAL	1			
5008	LOST & FOUND - LOST ARTICLES	2			
5100	TRAFFIC SIGNALS-DAMAGED/NEED REPAIR	2			
5200	TRAFFIC HAZARD-POTHoles/OBSTRUCTIONS/ICE	8			
5300	TREES DOWN AND/OR BLOCKING ROADWAY,ETC	4			
5400	VEHICLES-ABANDONED	2			
5401	VEHICLES-ASSIST MOTORIST(INCL LOCKOUTS)	15			
5402	VEHICLES-DISABLED	17			
5403	VEHICLES-MV VIOLATIONS & MVV COMPLAINTS	23	1		
5404	VEHICLES-PARKING COMPLAINTS	16			
5405	VEHICLES-TOWED	9			
5406	VEHICLES-REGISTRATION/LOST OR STOLEN	1			
5500	WATER MAIN BREAK/WATER CO. PROBLEMS	2			
5501	WIRES DOWN - NO HAZARD	8			
5502	ANIMAL COMPLAINTS - BARKING DOGS	4			
5504	ANIMAL COMPLAINTS - DOG BITES	3			
5506	ANIMAL COMPLAINTS - STRAY ANIMALS	4			
5510	ANIMAL COMPLAINTS - OTHER	12			
5600	WARRANT-ARREST (ISSUED OUTSIDE RADNOR)	2			
6001	ACCIDENT - WITH INJURIES	3			
6002	ACCIDENT - NO INJURIES (REPORTABLE)	12			

May 11, 2015

# Calls for Service - by UCR Code

Incidents Reported Between 04/01/2015 and 04/30/2015



## RADNOR TOWNSHIP

Code	Description	Primary Count	Secondary UCR Count		
			Code 2	Code 3	Code 4
6003	ACCIDENT - NON REPORTABLE	54			
6004	ACCIDENT - HIT & RUN	9			
6005	ACCIDENT - NO REPORT DONE	7	1		
6010	TRAFFIC ACCIDENT - OTHER ACC. INVEST.	1			
6612	TRAFFIC RELATED - SIGNALS-SIGNS OUT	1			
6614	TRAFFIC RELATED - OTHER TRAFFIC	1			
7002	NOTIFICATION - COMMUNITY DEVELOPMENT	1			
7008	NOTIFICATION - SEWER DEPT.	3			
7014	PUBLIC SERVICE - OTHERS (OFFICER ASSIST)	1			
7090	PUBLIC SERVICES - REPORTS	2			
7502	ASSIST OTHER AGENCIES - FIRE DEPT.	1			
7504	ASSIST OTHER AGENCIES - OTHER POLICE	2			
7506	ASSISTING OTHER AGENCIES - ALL OTHERS	2			
7590	ASSISTING OTHER AGENCIES - REPORTS	1			
8001	BURG/HOLDUP/PANIC ALARM - NO CITATION	98			
8003	FIRE/MEDICAL ALARM - NO CITATION	23			
8004	ANY ALARM- SEVERE WEATHER- NO CITATION	4			
9000	ANIMALS - DOG COMPLAINTS	4	1		
9002	ANIMALS - ALL OTHER	4			
9005	ANIMALS - ALL INVOLVING DEER	3			
9038	K-9 ASSIST	4	9		
9039	K-9 ASSIST OTHER LAW ENFORCEMENT	1			
9040	ASSIST LOWER MERION PD	5			
9042	ASSIST MARPLE PD	1			
9043	ASSIST NEWTOWN PD	1			
9045	ASSIST TREDYFFRIN PD	1			
9046	ASSIST UPPER MERION PD	1			
9047	ASSIST PSP	1			
9050	ASSIST SICK/INJURED	94			
9051	ASSIST AMBULANCE	30	1		
9052	ASSIST OTHER POLICE DEPARTMENT	3			
9055	ASSIST SICK/INJURED ALCOHOL/DRUG RELATED	4	1		
9966	SELECTIVE ENFORCEMENT-CITATION ISSUED	148			
9968	SELECTIVE ENFORCEMENT-WARNING ISSUED	22			
9970	SELECTIVE ENFORCEMENT-NO ISSUANCE	78			
9972	MOTOR OFFICER ACTIVITY	0	2	1	
9999	MISCELLANEOUS	1			
CITN	NON-TRAFFIC CITATION	77			
CITT	TRAFFIC CITATION	440			
<b>Total Calls</b>		<b>1,867</b>			

**Radnor Township Police Department**  
**April 2015 Burglary Report**

<i>Time of Day</i>	Res-Forced	Res-No Force	Res-Attempt	Non Res-Forced	Non Res-No Force	Non Res-Attempt
Day (6 AM to 6 PM)	2	0	0	0	0	0
Night (6 PM to 6 AM)	0	0	0	0	0	0
Time Unknown	0	0	0	0	0	0
<b>Total Burgs - 4/15</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Burgs - YTD</b>	<b>8</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Burglaries by Area</b>						
Patrol Area	District	Burgs 4/15	Burgs YTD 15			
Northeast Beat	1	0	0			
Northwest Beat	2	1	4			
Southwest Beat	3	0	3			
Southeast Beat	4	1	2			
Villanova University	7	0	0			
<b>Total Burglaries</b>		<b>2</b>	<b>9</b>			

**Radnor Township Police Department**  
**April 2015 Property Stolen Recovered Report**

Type of Property	Apr-15 Stolen	2015 YTD Stolen	Apr-15 Recovered	2015 Y-T-D Recovered
Currency, Notes, Stocks Etc.	\$808.00	\$5,743.00	\$0.00	\$0.00
Clothing & Furs	\$0.00	\$10,195.00	\$0.00	\$60.00
Locally Stolen Motor Vehicles	\$15,565.00	\$26,065.00	\$15,565.00	\$23,565.00
Office Equipment	\$1,940.00	\$15,985.00	\$0.00	\$1,300.00
Televisions, Radios, Cameras	\$750.00	\$2,075.00	\$0.00	\$0.00
Firearms	\$0.00	\$0.00	\$0.00	\$160.00
Household Goods	\$2,217.00	\$10,245.00	\$90.00	\$985.00
Consumable Goods	\$0.00	\$376.00	\$0.00	\$0.00
Jewelery & Precious Metals	\$0.00	\$29,237.00	\$0.00	\$0.00
Livestock	\$0.00	\$0.00	\$0.00	\$0.00
Miscellaneous	\$5,300.00	\$10,626.00	\$50.00	\$350.00
<b>Total Property Value</b>	<b>\$26,580.00</b>	<b>\$110,547.00</b>	<b>\$15,705.00</b>	<b>\$26,420.00</b>

**Radnor Township Police Department**  
**April 2015 Crime Report**

<b>CLASS 1 Offenses</b>							
<b>Offense</b>	<b>Inc 4/15</b>	<b>Inc YTD 15</b>	<b>Clr'd 4/15</b>	<b>Clr'd YTD 15</b>	<b>Inc YTD 14</b>	<b>Clr'd YTD 14</b>	<b>Inc YTD 15 to 14</b>
Criminal Homicide	0	0	0	0	1	0	-1
Forcible Rape	0	0	0	0	0	0	0
Robbery	0	0	0	0	0	0	0
Assault	3	8	0	2	8	9	0
Burglary	2	9	0	0	16	1	-7
Larceny	15	70	1	4	82	4	-12
Auto Theft	1	3	1	1	4	0	-1
Arson	0	0	0	0	0	0	0
<b>Total Class 1 Off.</b>	<b>21</b>	<b>90</b>	<b>2</b>	<b>7</b>	<b>111</b>	<b>14</b>	<b>-21</b>
<b>CLASS 2 Offenses</b>							
Vandalism	7	29	0	0	25	3	4
Illegal Drugs	4	31	9	25	12	12	19
DUI	7	21	7	16	29	19	-8
Disorderly Conduct	8	31	0	3	35	6	-4
Fraud Related	27	85	0	0	39	0	46
Underage Drinking	3	12	3	7	25	15	-13
All Other Class 2	10	32	4	13	43	11	-11
<b>Total Class 2 Off.</b>	<b>66</b>	<b>241</b>	<b>23</b>	<b>64</b>	<b>208</b>	<b>66</b>	<b>33</b>
<b>Grand Total</b>	<b>87</b>	<b>331</b>	<b>25</b>	<b>71</b>	<b>319</b>	<b>80</b>	<b>12</b>

# Radnor Township Police Department

## 2015 Deer Summary

		2015 Total Deer Incidents							
Date	Time	Location	M / F	Killed Auto	Inj Auto	Killed Other	Inj Other	Others	Incident Narrative
		<b>Sub-Totals</b>		5	4	4	3	1	
1/2/2015	12:42	609 Portledge Drive	U			1			Private Removal
1/4/2015	13:12	Bryn Mawr & Mill	U		1				Injured - Gone Upon Arrival
1/13/2015	11:15	92 Woodstone Lane	U				1		Injured - Gone Upon Arrival
1/13/2015	22:30	King of Prussia & Woodcrest	U	1					PennDot Notified
1/26/2015	15:04	110 Quaker Lane	U				1		Injured - Gone Upon Arrival
2/5/2015	18:08	473 S. Ithan Avenue	U		1				Game Commission Notified
2/5/2015	22:51	363 W. Lancaster Avenue	U					1	Gone Upon Arrival
2/12/2015	2:52	3 Lynch Road	U			1			Public Safety Notified
2/12/2015	20:13	Sproul Rd. & Chandler La.	U		1				Gone Upon Arrival
2/14/2015	12:37	Conestoga Rd. & S. Ithan Av.	U		1				Gone Upon Arrival
2/14/2015	15:25	713 Sturbridge Drive	U			1			Private Removal
2/27/2015	12:31	Bryn Mawr Av. & Stone Creek La.	M	1					Game Commission Notified
3/29/2015	10:57	13 Courtney Circle	M				1		Gone Upon Arrival
3/30/2015	11:21	949 Wootton Road	U	1					Game Commission Notified
4/2/2015	8:40	1000 Conestoga Road	F	1					PennDot Notified
4/13/2015	17:00	527 Conestoga Road	U			1			Private Removal
4/18/2015	23:04	East Lancaster & RT 476	U	1					PennDot Notified

RESOLUTION NO. 2015-59

A RESOLUTION OF RADNOR TOWNSHIP, DELAWARE  
COUNTY, PENNSYLVANIA, AWARDED CONTRACT #B –  
15-003, TRAFFIC SIGNAL INSTALLATION AT RADNOR  
CHESTER (SR1021) AND RAIDER ROADS

*WHEREAS*, the Township wishes to proceed with the installation of a traffic signal at the  
aforementioned streets

*WHEREAS*, the project was bid in accordance with Township requirements

*WHEREAS*, Armour & Sons Electric, Incorporated is the lowest qualified bidder at \$188,276

*NOW, THEREFORE*, be it *RESOLVED* by the Board of Commissioners of Radnor Township  
does hereby award Contract #B-15-003, Traffic Signal Installation at Radnor Chester Road (SR1021) and  
Raider Road to Armour & Sons Incorporated, in the amount of \$188,276.

*SO RESOLVED* this 18th day of May, A.D., 2015

**RADNOR TOWNSHIP**

By: \_\_\_\_\_

Name: William Spingler  
Title: President

ATTEST:

\_\_\_\_\_  
Robert A. Zienkowski  
Manager/Secretary

**Radnor Township**  
**PROPOSED LEGISLATION**

**DATE:** May 12, 2015  
**TO:** Radnor Township Board of Commissioners  
**CC:** Robert A. Zienkowski, Township Manager  
**FROM:** Stephen F. Norcini, P.E., Director of Public Works *SFN*

**Resolution #2015-59: Award of Contract #B-15-003, Traffic Signal Installation at Radnor Chester Road (SR1021) and Raider Road**

**LEGISLATIVE HISTORY:** The Board of Commissioners authorized the design and permitting of the above intersection (Gilmore & Associates), and subsequently authorized the receipt of sealed bids.

**PURPOSE AND EXPLANATION:** It has long been noted that a signal is required at this intersection, not just for vehicular traffic but for pedestrian safety. Gilmore designed the traffic signal, the School District is beginning construction on the ramps and drive alignment, and the owner of 240 Radnor Chester Road is funding and preparing the HOP for the ramps and drive alignment for his property (240 Radnor Chester Road will be submitting for Land Development in the future). Brandywine Realty Trust provided \$100,000 for this intersection during Land Development of 200 Radnor Chester Road. Sealed bids were received on May 5<sup>th</sup>, 2015, via Penn BID, opened and read aloud publicly. The bid tabulation is as follows:

<i>Armour &amp; Sons Electric, Incorporated</i>	<i>\$188,276.00</i>
Charles A Higgins Sons, Incorporated	\$193,917.25
Carr Duff, Incorporated	\$197,551.25

Armour & Sons Electric, Incorporated is the lowest qualified bidder.

**IMPLEMENTATION SCHEDULE:** Work is to begin as soon as possible, to coincide with the School District's work. The poles and mast arms are on a 12-16 week back log, which could push the completion date beyond that date.

**FISCAL IMPACT:** The project is funded from account 05-433-7760. The Township has received \$100,000 from Brandywine Realty Trust towards this project.

**RECOMMENDED ACTION:** *I respectfully request the Board of Commissioners award Contract #B-15-003, Traffic Signal Installation at Radnor Chester Road (SR1021) and Raider Road to Armour & Sons Incorporated, in the amount of \$188,276.*

**MOVEMENT OF LEGISLATION:** It is being requested that the Board of Commissioners approve the legislation for this project.



Recognitions by  
Radnor Police Department

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# Update on the Willows

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Radnor Historical Society  
to present their proposal  
for an ordinance protecting  
the dispersed historical  
assets in the Township

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# Public Participation

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**ORDINANCE NO. 2015-06**

**AN ORDINANCE OF RADNOR TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA,  
AMENDING CHAPTER 270 OF THE CODE OF RADNOR TOWNSHIP VEHICLES AND  
TRAFFIC, REVISING SECTION 57, PARKING METER ZONES ESTABLISHED.**

The Board of Commissioners of the Township of Radnor does hereby ENACT and ORDAIN the following amendments to Section 270-57 as follows:

**Section 1.** Chapter 270, Vehicles and Traffic, §270, parking meter zones established is hereby amended by revising the location for the meter zones as follows:

Name of Street	Side	Rate	Time Limit	Meters	Location
[Lancaster Avenue	South	1 US Quarter per 15 minutes	15 minutes	5	From the south side of Lancaster Avenue being EL44 to #550, from EL45 to #551, from EL46 to #552, from EL7 to #588, from EL 8 to #589]

Name of Street	Side	Rate	Time Limit	Meters	Location
<u>Lancaster Avenue</u>	<u>South</u>	<u>1 US Quarter per 15 minutes</u>	<u>15 minutes</u>	<u>7</u>	<u>From the south side of Lancaster being meters from #571, #572</u>

**Section 2:** Repealer. All ordinances or parts of Ordinances which are inconsistent herewith are hereby repealed.

**Section 3:** Severability. If any section, paragraph, subsection, clause or provision of this Ordinance shall be declared invalid or unconstitutional by a court of competent jurisdiction, such decision shall not affect the validity of this Ordinance as a whole or any part thereof other than that portion specifically declared invalid.

**Section 4.** Effective date. This ordinance shall become effective in accordance with the Home Rule Charter of Radnor Township.

*ENACTED* and *ORDAINED* this        day of        , 2015.

RADNOR TOWNSHIP

By: \_\_\_\_\_  
Name: William A. Spingler  
Title: President

ATTEST: \_\_\_\_\_  
Robert A. Zienkowski, Secretary

**Radnor Township**  
**PROPOSED LEGISLATION**

**DATE:** 05/11/15

**TO:** Robert A. Zienkowski, Township Manager

**FROM:** William A. Colarulo, Police Superintendent

**LEGISLATION:** Ordinance No. 2015-06 request time change of two (2), 2-hour parking spaces, and lowering them to 15-minute parking spaces. This ordinance will lower the time limit on the 100 block of Lancaster Avenue.

**LEGISLATIVE HISTORY:** None.

**PURPOSE AND EXPLANATION:** This will assist the business community in moving people and goods more efficiently while supporting the vitality and the needs of the Wayne Business District.

**FISCAL IMPACT:** None.

**RECOMMENDED ACTION:** The Police Department respectfully requests the Board to consider the amendment at the regular Board of Commissioners Meeting on May 18, 2015.



May 6, 2015

File No. 15-05007

Mr. Stephen F. Norcini, P.E.  
Director of Public Works  
Radnor Township  
301 Iven Avenue  
Wayne, PA 19087-5297

Reference: Intersection Sight Distance Evaluation  
Pine Tree Road  
Radnor Township, Delaware County, Pennsylvania

Dear Mr. Norcini:

Pursuant to Radnor Township's request, Gilmore & Associates, Inc. (G&A) has completed a sight distance evaluation for several Pine Tree Road intersections from King of Prussia Road (S.R. 1021) to Upper Gulph Road, including the intersections of Cricket Lane, Rock Rose Lane, Spruce Tree Road and Woods Lane. Previously, G&A prepared a traffic calming analysis for the identified section of roadway and offered recommendations regarding traffic calming improvements; however, during a recent Township meeting, residents' identified perceived sight distance deficiencies and G&A was asked to review the existing sight lines to determine if mitigation was required.

### **DATA COLLECTION**

On September 10, 2014, a field investigation was completed to document the existing conditions on Pine Tree Road with a follow up stopping sight distance evaluation performed on May 1, 2015 at all intersections on Pine Tree Road. Intersection sketches and photographs were obtained for the intersections of Pine Tree Road and; Cricket Lane, Rock Rose Lane, Spruce Tree Road, Woods Lane and Upper Gulph Road. An Automated Data Recorder was deployed by the Radnor Township Police Department on Pine Tree Road for a period of one week to obtain volume and speed data (11/12 – 11/19/2013).

The speed study on Pine Tree Road (posted speed limit of 25 miles per hour) revealed an 85<sup>th</sup> percentile speed, the speed at or below which 85 percent of vehicles travel, of 37 miles per hour for both directions of travel; 38 mph for westbound vehicles and 35 mph for eastbound vehicles. The 85<sup>th</sup> percentile speed of a roadway is considered to characterize the reasonable and prudent speed for a roadway segment.

Cricket Lane, Rock Rose Lane, Spruce Tree Road and Woods Lane are all stop-controlled at Pine Tree Road and Pine Tree Road is uncontrolled with free flow movements. Data provided by the Police Department indicated there were five (5) crashes in the study area within the past three years; three (3) of those crashes occurred at the intersection of Pine Tree Road and Cricket Lane.

PennDOT Publication 212 *Official Traffic Control Devices* and Publication 70M *Guidelines for the Design of Local Roads and Streets* both provide guidance on conducting a sight distance

evaluation. By definition, sight distance is the distance along a roadway throughout which a 2 foot high object is continuously visible to the driver’s eye located 3.5 feet above the roadway surface. The available sight distance on a roadway must be equal to or greater than the calculated stopping distance necessary for an approaching motorist traveling at or near the design speed, to react and come to a stop prior to reaching a stationary object in its path.

Under Pennsylvania Code Title 67 *Transportation* Chapter 212 *Official Traffic-Control Devices*: §212.6. *Removal of traffic hazards* subsection (b) *Trees, plants, shrubs or other obstructions* indicates the following:

*The Department on State-designated highways, and local authorities on any highway within their boundaries, may require a property owner to remove or trim a tree, plant, shrub or other obstruction or part thereof which constitutes a traffic hazard. The following are examples of traffic hazards:*

- (1) *The obstruction restricts the stopping sight distance for drivers of through vehicles or the available corner sight distance for drivers entering from side roads or driveways to distances less than the appropriate minimum stopping sight distance or minimum corner sight distance values.*
- (2) *The obstruction critically restricts the sight distance to a traffic-control device.*
- (3) *Vehicle crash records indicate that a crash has involved the obstruction or that the obstruction contributed to one or more of the vehicle crashes.*

**ANALYSIS**

A summary of the results and findings during the recent field analysis indicate the following information:

Table 1: *Pine Tree Road Intersection Sight Distance Evaluation*

Approach to Pine Tree Road	LEFT SIGHT DISTANCE		RIGHT SIGHT DISTANCE		REMARKS
	<i>Calculated<sup>1</sup></i>	<i>Available/Existing</i>	<i>Calculated<sup>1</sup></i>	<i>Available/Existing</i>	
Cricket Lane	233'	59'	309'	334'	Left sight is deficient/Trim shrubs
Rock Rose Lane	235'	425'	309'	800'+	No deficiency
Spruce Tree Road	312'	80'	235'	380'+	Left sight is deficient
Woods Lane	244'	210'	292'	290'+	Left sight is deficient/Trim shrubs

<sup>1</sup>Based on PennDOT and AASHTO Minimum Stopping Sight Distance

Based on the collected field data and sight distance calculations; motorists stopped on Cricket Lane, Spruce Tree Road and Woods Lane do not have sufficient left sight distance available to turn onto Pine Tree Road. Trimming or eliminating the existing shrubs/vegetation obstructing the left field of view at Cricket Lane and Spruce Tree Road may improve the sight distance deficiency; if the Township should decide to trim or eliminate the obstructions, we recommend re-evaluating the available stopping sight distance at both locations.

The nationally accepted standard for analyzing stop warranting conditions included in the Manual of Uniform Traffic Control Devices (MUTCD), section 2B.07 *Multi-Way Stop Applications*, indicates under option C that a multi-way stop control is warranted at “Locations where a road user, after



*stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop.*" Therefore, the intersections of Pine Tree Road and: Cricket Lane, Spruce Tree Road and Woods Lane; all meet the required warrant for multi-way stop control. However, we would first recommend trimming the existing shrubs at Cricket Lane and Woods Lane and re-evaluating the new stopping sight distance.

## **CONCLUSIONS**

If the Township decides to install all-way stop control on Pine Tree Road at the three identified intersections, we recommend the following:

- Provide red flashing beacons on all six (6) new R1-1 STOP signs (size 30"x30") posted on Pine Tree Road.
- Install nine (9) R1-3P ALL WAY plaques (size 18"x6") for all nine (9) approaches, mounted under the existing and new stop signs.
- Install two (2) W23-2 NEW TRAFFIC PATTERN AHEAD warning signs (size 36"x36") in advance of the northbound approach of Pine Tree Road at Cricket Lane and the southbound approach of Pine Tree Road at Woods Lane.
- After an adjustment period of six months, the NEW TRAFFIC PATTERN AHEAD warning signs and red flashing beacons should be removed from roadway.

If you have any questions regarding the above, please contact this office.

Sincerely,



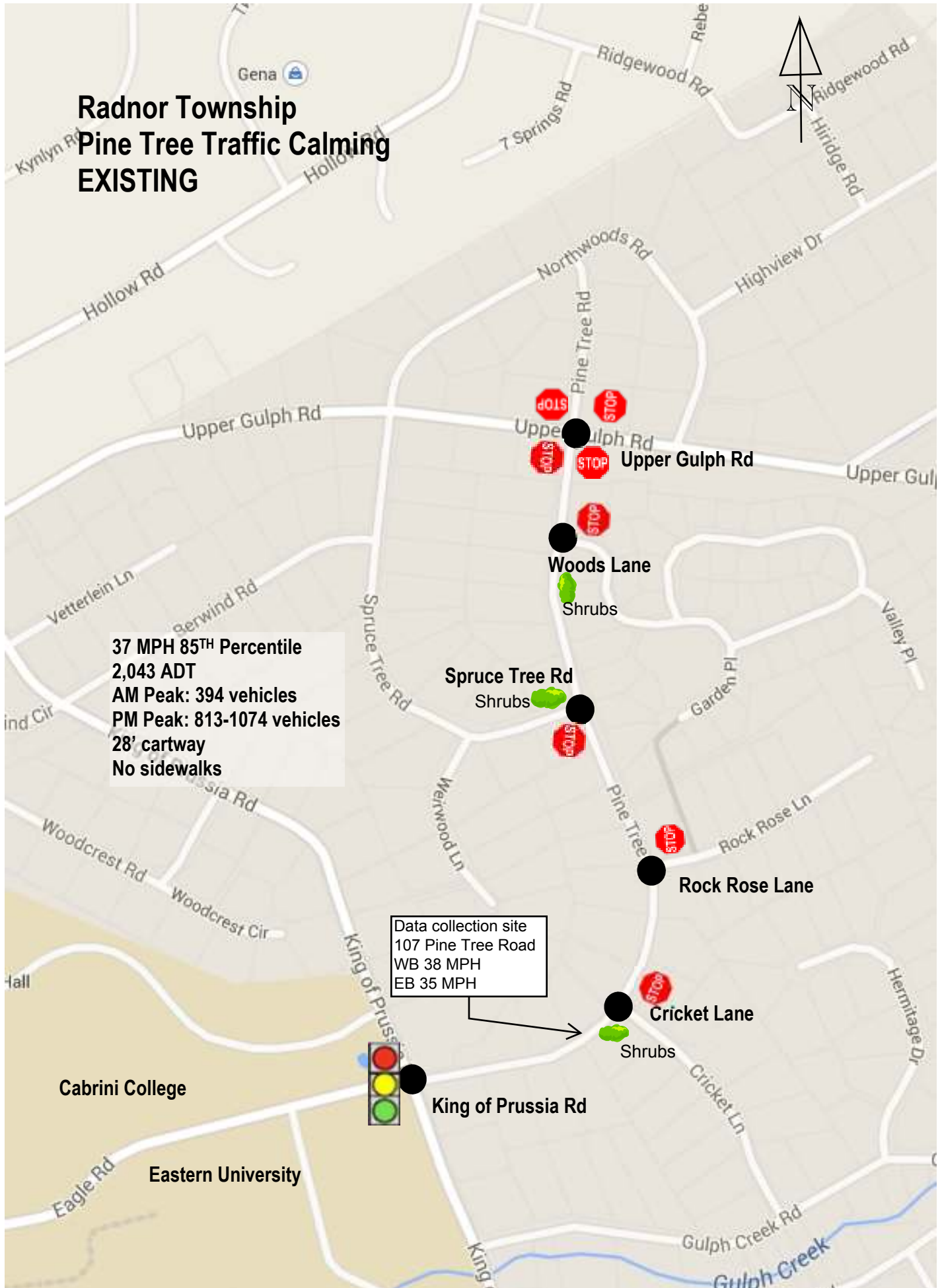
Amy B. Kaminski, P.E., PTOE  
Transportation Services Manager  
Gilmore & Associates, Inc.

CC: Damon Drummond, P.E., PTOE, Gilmore & Associates, Inc.

# Radnor Township Pine Tree Traffic Calming EXISTING

37 MPH 85<sup>TH</sup> Percentile  
2,043 ADT  
AM Peak: 394 vehicles  
PM Peak: 813-1074 vehicles  
28' cartway  
No sidewalks

Data collection site  
107 Pine Tree Road  
WB 38 MPH  
EB 35 MPH



## Minimum Stopping Sight Distance

Job No. 15-05007  
 County: Delaware County  
 Municipality: Radnor Township  
 Location: Pine Tree Road & Cricket Lane  
 STA +800

PA Code Title 67; § 441  
 $SSD = 1.47VT + (V^2)/30(f \pm g)$

SSD = Stopping Sight Distance  
 V = 85th Percentile Speed (miles per hour)  
 T = Perception Time of Driver (2.5 seconds)  
 f = Coefficient of Friction for Wet Pavements  
 g = Percent of Grade of Roadway Divided by 100

LEFT-SSD		Exiting Motorist	RIGHT-SSD	
Minimum Calc.	Existing in Field		Minimum Calc.	Existing in Field
SSD = 233	59 (415 with corner shrub removed)		SSD = 309	334
V = 35			V = 38	
T = 2.5			T = 2.5	
f = 0.34			f = 0.33	
g = 5			g = -4.5	

PennDOT Form M-950 "A"

Motorist SSD to Rear of Left INTO Driveway		Left INTO Driveway:	
Minimum Calc.	Existing in Field	Minimum Calc.	Existing in Field
SSD = 309	230	SSD = 233	295
V = 38		V = 35	
T = 2.5		T = 2.5	
f = 0.33		f = 0.34	
g = -4.5		g = 5	

PennDOT Form M-950 "B"

PennDOT Form M-950 "C"

### Minimum Stopping Sight Distance (feet)

85th Percentile Speed	Coefficient of Friction	Grade =				
		-10%	-5%	0%	5%	10%
25	0.38	166	155	147	140	135
30	0.35	230	210	196	185	177
35	0.34	299	269	249	233	221
40	0.32	389	345	314	291	274
45	0.31	487	425	383	353	330
50	0.3	600	517	462	422	392
55	0.3	706	605	538	490	454
60	0.29	852	721	634	573	528

### Conclusion:

Sight distance deficiencies are noted. Consider shrub removal to improve the left exit movement sight distance. Alternative Traffic calming measures should be considered.

Date: 4/30/2015      Compiled by: ABK      Checked by: DAD      5/4/2015

## Project Photo Sheet

**County:** Delaware County  
**Municipality:** Radnor Township  
**Intersection:** Pine Tree Road & Cricket Lane

**Job Number:** 15-05007



**Photo 1:**

**Photo 2:**

**Photo 3:**

**Photo 4:**

**Photo 5:**

**Photo 6:**

## Minimum Stopping Sight Distance

Job No. 15-05007  
 County: Delaware County  
 Municipality: Radnor Township  
 Location: Pine Tree Road & Rock Rose Lane  
 STA +1400

PA Code Title 67; § 441  
 SSD= 1.47VT + (V<sup>2</sup>)/30(f ± g)

SSD = Stopping Sight Distance  
 V = 85th Percentile Speed (miles per hour)  
 T = Perception Time of Driver (2.5 seconds)  
 f = Coefficient of Friction for Wet Pavements  
 g = Percent of Grade of Roadway Divided by 100

LEFT- SSD		Exiting Motorist	RIGHT-SSD	
Minimum Calc.	Existing in Field		Minimum Calc.	Existing in Field
SSD =	235		SSD =	309
V =	35		V =	38
T =	2.5		T =	2.5
f =	0.34		f =	0.33
g =	4.5		g =	-4.5
				800+

PennDOT Form M-950 "A"

Motorist SSD to Rear of Left INTO Driveway		Left INTO Driveway:	
Minimum Calc.	Existing in Field	Minimum Calc.	Existing in Field
SSD =	309	SSD =	235
V =	38	V =	35
T =	2.5	T =	2.5
f =	0.33	f =	0.34
g =	-4.5	g =	4.5
	800+		296

PennDOT Form M-950 "B"

PennDOT Form M-950 "C"

### Minimum Stopping Sight Distance (feet)

85th Percentile Speed	Coefficient of Friction	Grade =				
		-10%	-5%	0%	5%	10%
25	0.38	166	155	147	140	135
30	0.35	230	210	196	185	177
35	0.34	299	269	249	233	221
40	0.32	389	345	314	291	274
45	0.31	487	425	383	353	330
50	0.3	600	517	462	422	392
55	0.3	706	605	538	490	454
60	0.29	852	721	634	573	528

### Conclusion:

No sight distance concerns.

Date: 4/30/2015 Compiled by: ABK Checked by: DAD 5/4/2015

## Project Photo Sheet

**County:** Delaware County  
**Municipality:** Radnor Township  
**Intersection:** Pine Tree Road & Rock Rose Lane

**Job Number:** 15-05007



**Photo 1:**

**Photo 2:**

**Photo 3:**

**Photo 4:**

**Photo 5:**

**Photo 6:**

## Minimum Stopping Sight Distance

Job No. 15-05007  
 County: Delaware County  
 Municipality: Radnor Township  
 Location: Pine Tree Road & Spruce Tree Rd  
 STA +2000

PA Code Title 67; § 441  
 $SSD = 1.47VT + (V^2)/30(f \pm g)$

SSD = Stopping Sight Distance  
 V = 85th Percentile Speed (miles per hour)  
 T = Perception Time of Driver (2.5 seconds)  
 f = Coefficient of Friction for Wet Pavements  
 g = Percent of Grade of Roadway Divided by 100

LEFT- SSD		Exiting Motorist	RIGHT-SSD	
Minimum Calc.	Existing in Field		Minimum Calc.	Existing in Field
SSD =	312	80'(295' with corner shrub removed)	SSD =	235
V =	38		V =	35
T =	2.5		T =	2.5
f =	0.33		f =	0.34
g =	-5		g =	4.5

PennDOT Form M-950 "A"

Motorist SSD to Rear of Left INTO Driveway		Left INTO Driveway:			
Minimum Calc.	Existing in Field	Minimum Calc.	Existing in Field		
SSD =	235	765	SSD =	312	370'
V =	35		V =	38	
T =	2.5		T =	2.5	
f =	0.34		f =	0.33	
g =	4.5		g =	-5	

PennDOT Form M-950 "B"

PennDOT Form M-950 "C"

### Minimum Stopping Sight Distance (feet)

85th Percentile Speed	Coefficient of Friction	Grade =				
		-10%	-5%	0%	5%	10%
25	0.38	166	155	147	140	135
30	0.35	230	210	196	185	177
35	0.34	299	269	249	233	221
40	0.32	389	345	314	291	274
45	0.31	487	425	383	353	330
50	0.3	600	517	462	422	392
55	0.3	706	605	538	490	454
60	0.29	852	721	634	573	528

### Conclusion:

Consider shrub removal to improve the left exit movement sight distance.

Date: 4/30/2015    Compiled by: ABK    Checked by: DAD    5/4/2015

## Project Photo Sheet

**County:** Delaware County  
**Municipality:** Radnor Township  
**Intersection:** Pine Tree Road & Spruce Tree Road

**Job Number:** 15-05007



**Photo 1:**

**Photo 2:**

**Photo 3:**

**Photo 4:**

**Photo 5:**

**Photo 6:**



## Minimum Stopping Sight Distance

Job No. 15-05007  
 County: Delaware County  
 Municipality: Radnor Township  
 Location: Pine Tree Road & Woods Lane  
 STA +2400

PA Code Title 67; § 441  
 $SSD = 1.47VT + (V^2)/30(f \pm g)$

SSD = Stopping Sight Distance  
 V = 85th Percentile Speed (miles per hour)  
 T = Perception Time of Driver (2.5 seconds)  
 f = Coefficient of Friction for Wet Pavements  
 g = Percent of Grade of Roadway Divided by 100

LEFT-SSD		Exiting Motorist	RIGHT-SSD	
Minimum Calc.	Existing in Field		Minimum Calc.	Existing in Field
SSD =	244		292	290
V =	35		V =	38
T =	2.5		T =	2.5
f =	0.34		f =	0.33
g =	1.5		g =	-1.5

PennDOT Form M-950 "A"

Motorist SSD to Rear of Left INTO Driveway		Left INTO Driveway:	Left INTO Driveway:	
Minimum Calc.	Existing in Field		Minimum Calc.	Existing in Field
SSD =	258	340+	279	340
V =	35	Extends beyond all way stop intersection.	V =	38
T =	2.5		T =	2.5
f =	0.33		f =	0.33
g =	-1.5		g =	1.5

PennDOT Form M-950 "B"

PennDOT Form M-950 "C"

### Minimum Stopping Sight Distance (feet)

85th Percentile Speed	Coefficient of Friction	Grade =				
		-10%	-5%	0%	5%	10%
25	0.38	166	155	147	140	135
30	0.35	230	210	196	185	177
35	0.34	299	269	249	233	221
40	0.32	389	345	314	291	274
45	0.31	487	425	383	353	330
50	0.3	600	517	462	422	392
55	0.3	706	605	538	490	454
60	0.29	852	721	634	573	528

### Conclusion:

Combination of trees, horizontal curve and grade limit the sight distance.

Date: 4/30/2015 Compiled by: ABK Checked by: DAD 5/4/2015

## Project Photo Sheet

**County:** Delaware County  
**Municipality:** Radnor Township  
**Intersection:** Pine Tree Road & Woods Lane

**Job Number:** 15-05007



**Photo 1:**

**Photo 2:**

**Photo 3:**

**Photo 4:**

**Photo 5:**

**Photo 6:**

# DRIVEWAY SIGHT DISTANCE MEASUREMENTS

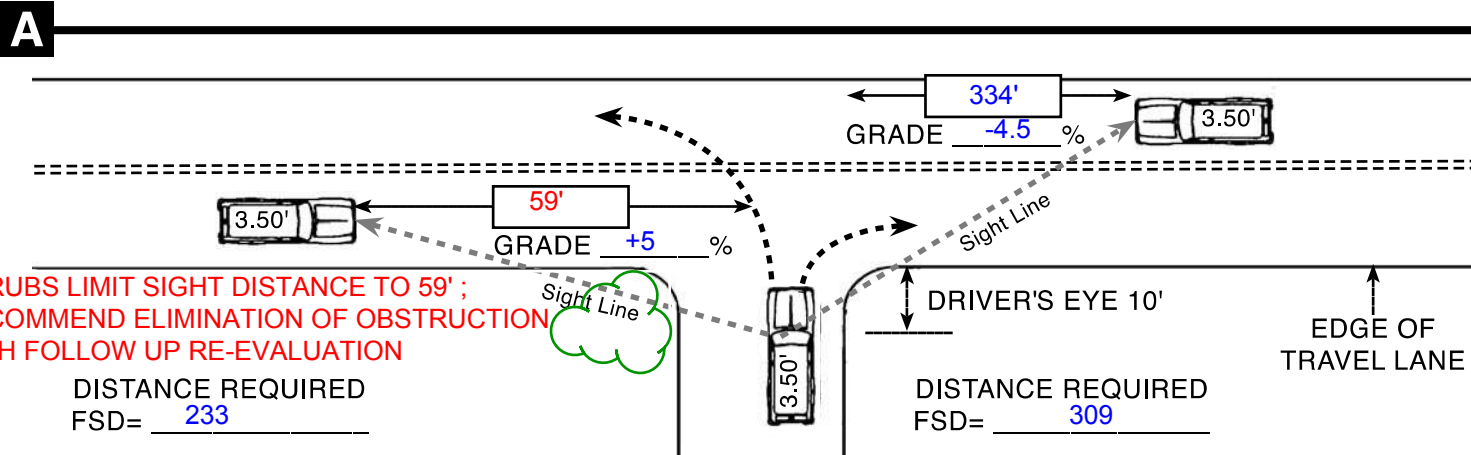
(FOR LOCAL ROADS, USE PENNDOT PUB 70)

APPLICANT Pine Tree Rd /Cricket Lane APPLICATION NO. \_\_\_\_\_

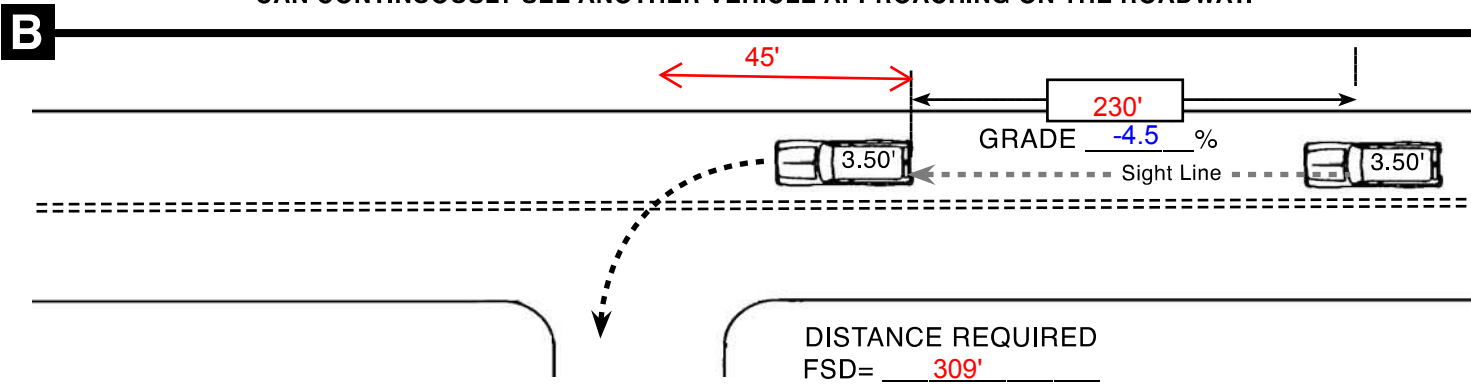
S.R. \_\_\_\_\_ SEG. \_\_\_\_\_ OFFSET \_\_\_\_\_ LEGAL SPEED LIMIT 25 MPH

MEASURED BY MFP/DAD DATE 5/2/15

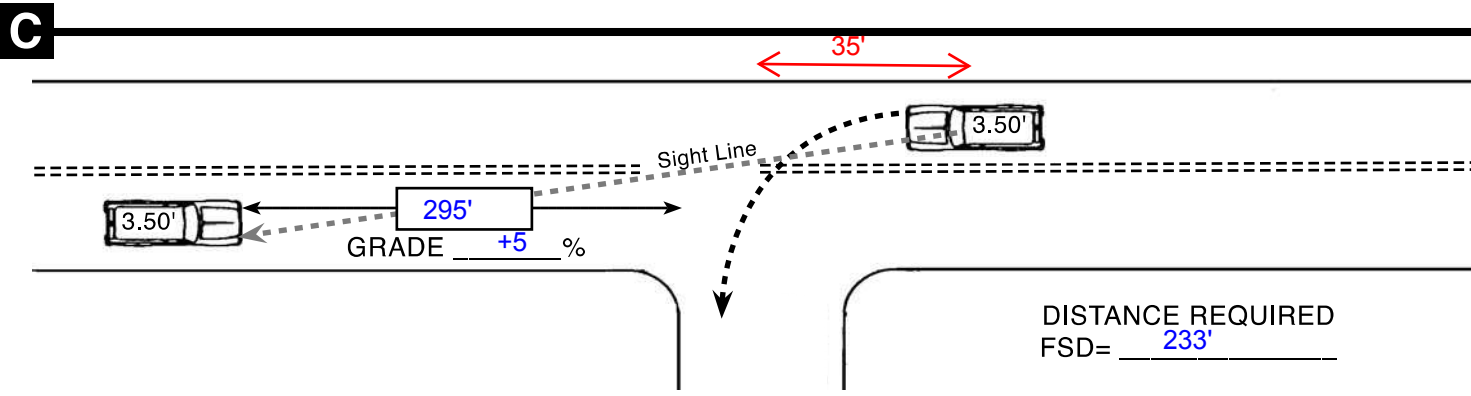
FOR DEPARTMENT USE ONLY: Safe-Running Speed \_\_\_\_\_ 85th Percentile Speed 35 MPH EB/38 MPH WB



THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER AT A DRIVEWAY LOCATION  
CAN CONTINUOUSLY SEE ANOTHER VEHICLE APPROACHING ON THE ROADWAY.



THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER ON THE ROADWAY CAN  
CONTINUOUSLY SEE THE REAR OF A VEHICLE WHICH IS LOCATED IN THE DRIVER'S TRAVEL LANE  
AND WHICH IS POSITIONED TO MAKE A LEFT TURN INTO A DRIVEWAY.



THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER OF A VEHICLE INTENDING TO MAKE A LEFT TURN  
INTO A DRIVEWAY CAN CONTINUOUSLY SEE A VEHICLE APPROACHING FROM THE OPPOSITE DIRECTION.

## FORMULA SIGHT DISTANCE TABLE

Speed (V) (Miles Per Hour)	Average Grade (G) (Percent)										
	<b>Use plus grades when approaching vehicle is travelling upgrade.</b>										
	0.0	+1.0	+2.0	+3.0	+4.0	+5.0	+6.0	+7.0	+8.0	+9.0	+10.0
25	147	145	144	143	142	140	139	138	137	136	135
30	196	194	191	189	187	185	183	182	180	178	177
35	249	245	242	239	236	233	231	228	226	224	221
40	314	309	304	299	295	291	287	284	280	277	274
45	383	376	370	364	358	353	348	343	339	334	330
50	462	453	444	436	429	422	415	409	403	397	392
55	538	527	517	508	499	490	482	475	468	461	454
	<b>Use negative grades when approaching vehicle is travelling downgrade.</b>										
	0.0	-1.0	-2.0	-3.0	-4.0	-5.0	-6.0	-7.0	-8.0	-9.0	-10.0
25	147	148	150	151	153	155	157	159	161	164	166
30	196	199	201	204	207	210	214	217	221	226	230
35	249	252	256	260	265	269	275	280	286	292	299
40	314	319	325	331	338	345	352	360	369	379	389
45	383	390	398	406	415	425	435	447	459	472	487
50	462	471	481	492	504	517	531	546	563	581	600
55	538	550	562	576	590	606	622	641	661	682	706

# DRIVEWAY SIGHT DISTANCE MEASUREMENTS

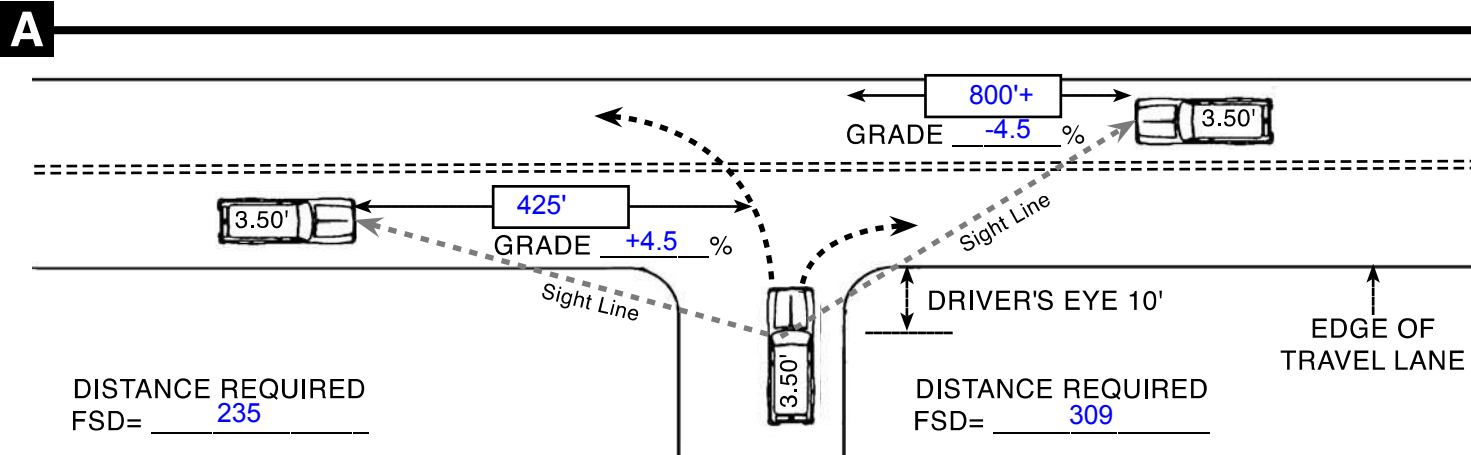
(FOR LOCAL ROADS, USE PENNDOT PUB 70)

APPLICANT Pine Tree Rd /Rock Rose Lane APPLICATION NO. \_\_\_\_\_

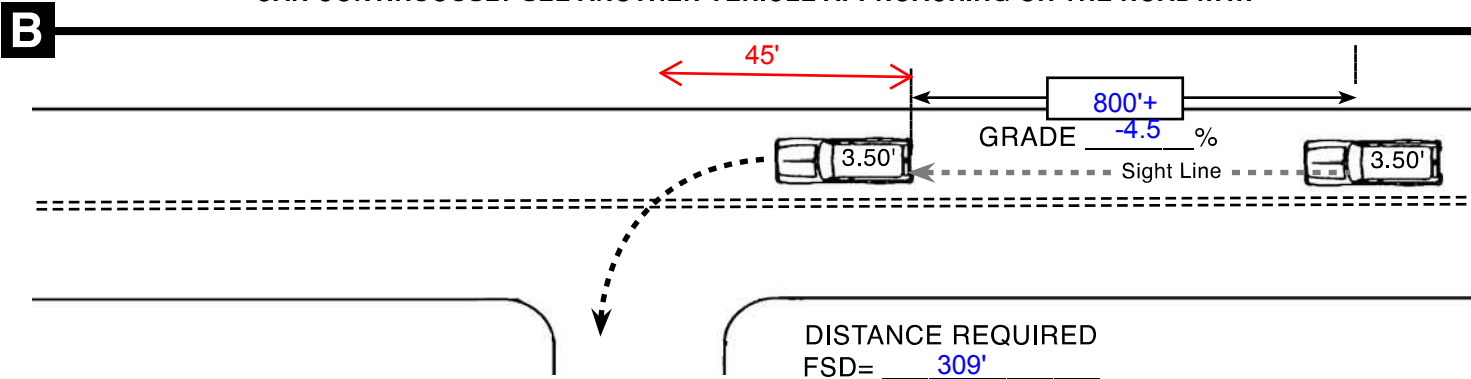
S.R. \_\_\_\_\_ SEG. \_\_\_\_\_ OFFSET \_\_\_\_\_ LEGAL SPEED LIMIT 25 MPH

MEASURED BY MFP/DAD DATE 5/2/15

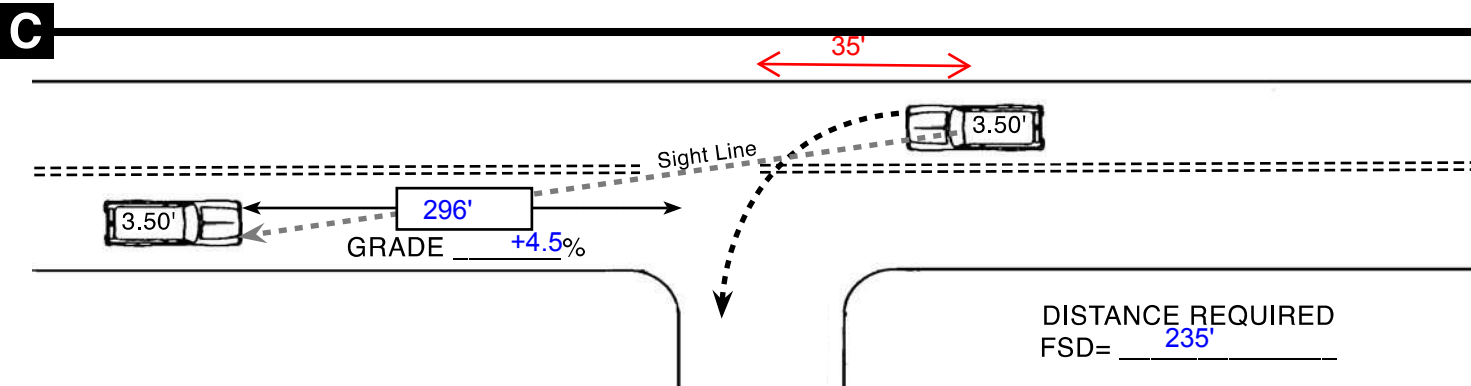
FOR DEPARTMENT USE ONLY: Safe-Running Speed \_\_\_\_\_ 85th Percentile Speed 35 MPH EB/38 MPH WB



THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER AT A DRIVEWAY LOCATION CAN CONTINUOUSLY SEE ANOTHER VEHICLE APPROACHING ON THE ROADWAY.



THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER ON THE ROADWAY CAN CONTINUOUSLY SEE THE REAR OF A VEHICLE WHICH IS LOCATED IN THE DRIVER'S TRAVEL LANE AND WHICH IS POSITIONED TO MAKE A LEFT TURN INTO A DRIVEWAY.



THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER OF A VEHICLE INTENDING TO MAKE A LEFT TURN INTO A DRIVEWAY CAN CONTINUOUSLY SEE A VEHICLE APPROACHING FROM THE OPPOSITE DIRECTION.

## FORMULA SIGHT DISTANCE TABLE

Speed (V) (Miles Per Hour)	Average Grade (G) (Percent)										
	<b>Use plus grades when approaching vehicle is travelling upgrade.</b>										
	0.0	+1.0	+2.0	+3.0	+4.0	+5.0	+6.0	+7.0	+8.0	+9.0	+10.0
25	147	145	144	143	142	140	139	138	137	136	135
30	196	194	191	189	187	185	183	182	180	178	177
35	249	245	242	239	236	233	231	228	226	224	221
40	314	309	304	299	295	291	287	284	280	277	274
45	383	376	370	364	358	353	348	343	339	334	330
50	462	453	444	436	429	422	415	409	403	397	392
55	538	527	517	508	499	490	482	475	468	461	454
	<b>Use negative grades when approaching vehicle is travelling downgrade.</b>										
	0.0	-1.0	-2.0	-3.0	-4.0	-5.0	-6.0	-7.0	-8.0	-9.0	-10.0
25	147	148	150	151	153	155	157	159	161	164	166
30	196	199	201	204	207	210	214	217	221	226	230
35	249	252	256	260	265	269	275	280	286	292	299
40	314	319	325	331	338	345	352	360	369	379	389
45	383	390	398	406	415	425	435	447	459	472	487
50	462	471	481	492	504	517	531	546	563	581	600
55	538	550	562	576	590	606	622	641	661	682	706

# DRIVEWAY SIGHT DISTANCE MEASUREMENTS

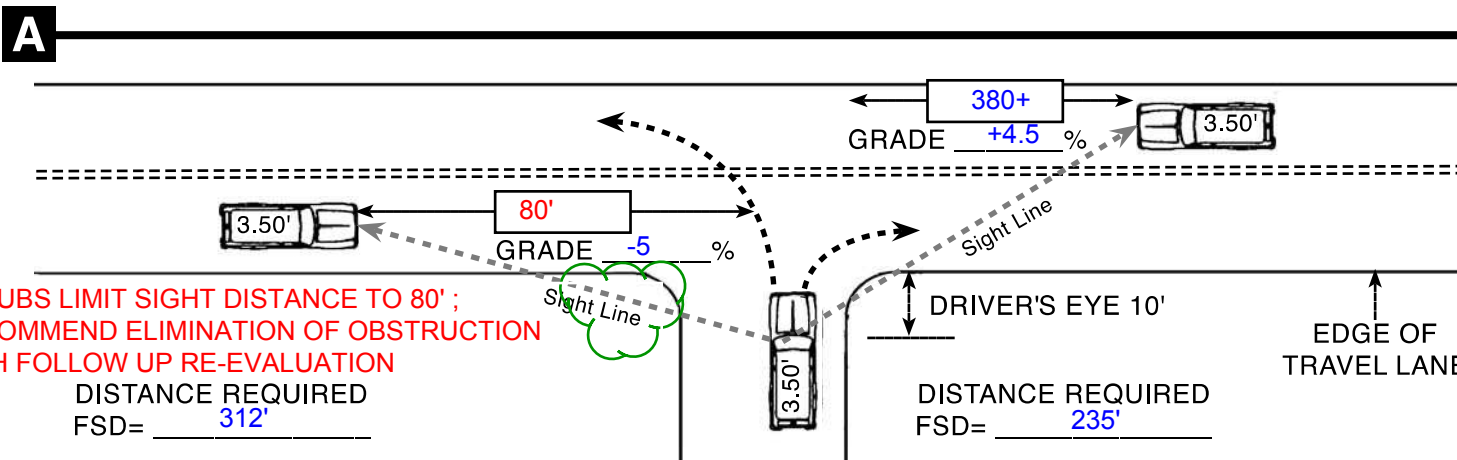
(FOR LOCAL ROADS, USE PENNDOT PUB 70)

APPLICANT Pine Tree Rd /Spruce Tree Lane APPLICATION NO. \_\_\_\_\_

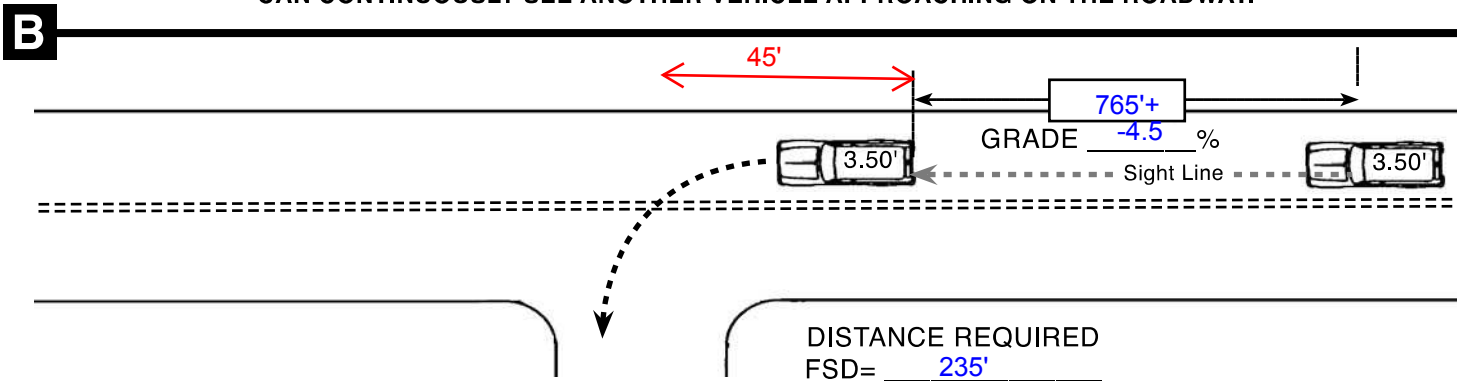
S.R. \_\_\_\_\_ SEG. \_\_\_\_\_ OFFSET \_\_\_\_\_ LEGAL SPEED LIMIT 25 MPH

MEASURED BY MFP/DAD DATE 5/2/15

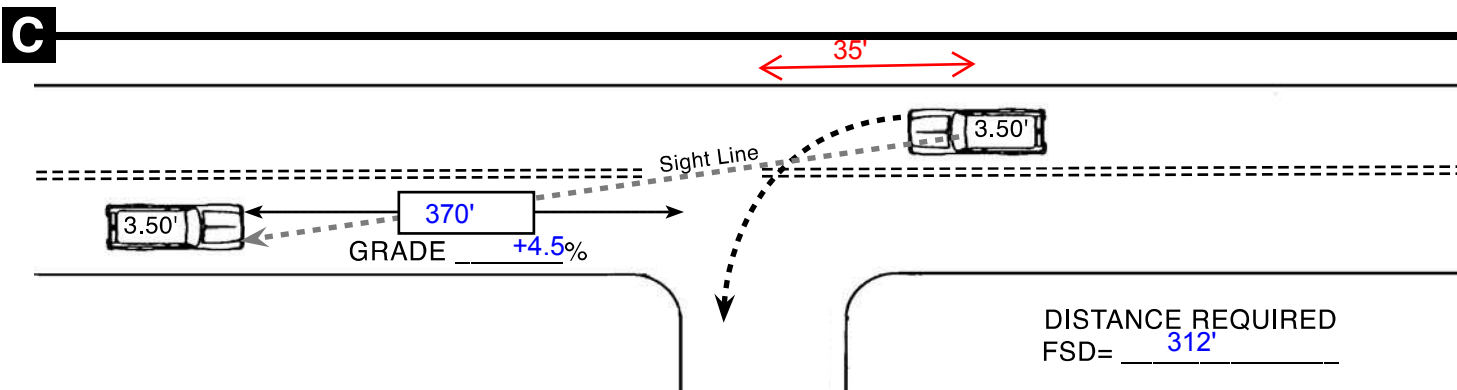
FOR DEPARTMENT USE ONLY: Safe-Running Speed \_\_\_\_\_ 85th Percentile Speed 35 MPH EB/38 MPH WB



THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER AT A DRIVEWAY LOCATION CAN CONTINUOUSLY SEE ANOTHER VEHICLE APPROACHING ON THE ROADWAY.



THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER ON THE ROADWAY CAN CONTINUOUSLY SEE THE REAR OF A VEHICLE WHICH IS LOCATED IN THE DRIVER'S TRAVEL LANE AND WHICH IS POSITIONED TO MAKE A LEFT TURN INTO A DRIVEWAY.



THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER OF A VEHICLE INTENDING TO MAKE A LEFT TURN INTO A DRIVEWAY CAN CONTINUOUSLY SEE A VEHICLE APPROACHING FROM THE OPPOSITE DIRECTION.

## FORMULA SIGHT DISTANCE TABLE

Speed (V) (Miles Per Hour)	Average Grade (G) (Percent)										
	<b>Use plus grades when approaching vehicle is travelling upgrade.</b>										
	0.0	+1.0	+2.0	+3.0	+4.0	+5.0	+6.0	+7.0	+8.0	+9.0	+10.0
25	147	145	144	143	142	140	139	138	137	136	135
30	196	194	191	189	187	185	183	182	180	178	177
35	249	245	242	239	236	233	231	228	226	224	221
40	314	309	304	299	295	291	287	284	280	277	274
45	383	376	370	364	358	353	348	343	339	334	330
50	462	453	444	436	429	422	415	409	403	397	392
55	538	527	517	508	499	490	482	475	468	461	454
	<b>Use negative grades when approaching vehicle is travelling downgrade.</b>										
	0.0	-1.0	-2.0	-3.0	-4.0	-5.0	-6.0	-7.0	-8.0	-9.0	-10.0
25	147	148	150	151	153	155	157	159	161	164	166
30	196	199	201	204	207	210	214	217	221	226	230
35	249	252	256	260	265	269	275	280	286	292	299
40	314	319	325	331	338	345	352	360	369	379	389
45	383	390	398	406	415	425	435	447	459	472	487
50	462	471	481	492	504	517	531	546	563	581	600
55	538	550	562	576	590	606	622	641	661	682	706



# DRIVEWAY SIGHT DISTANCE MEASUREMENTS

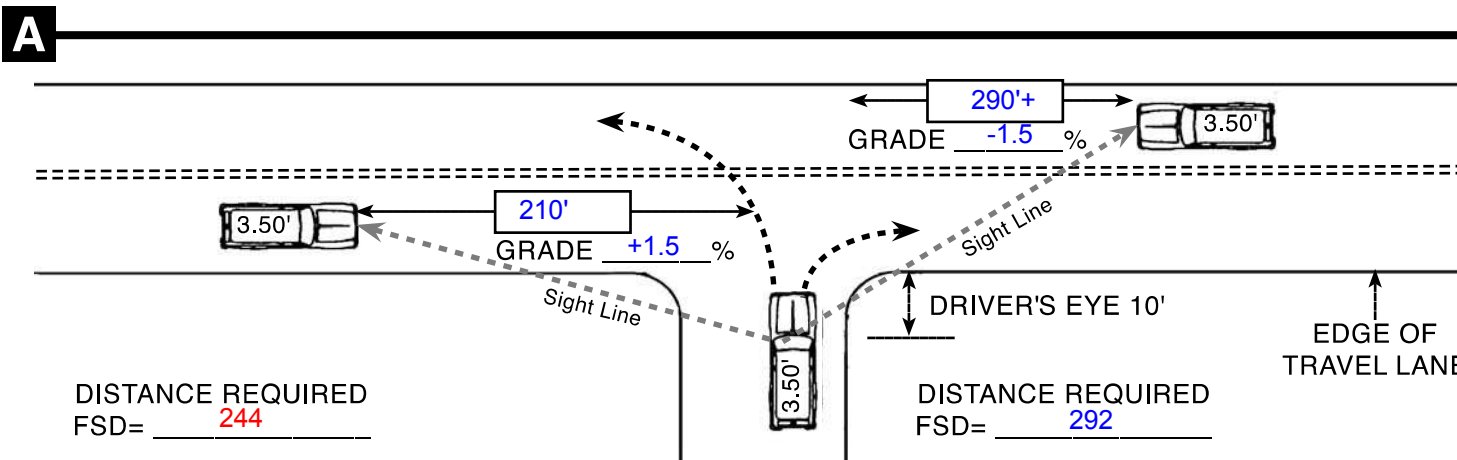
(FOR LOCAL ROADS, USE PENNDOT PUB 70)

APPLICANT Pine Tree Rd /Woods Lane APPLICATION NO. \_\_\_\_\_

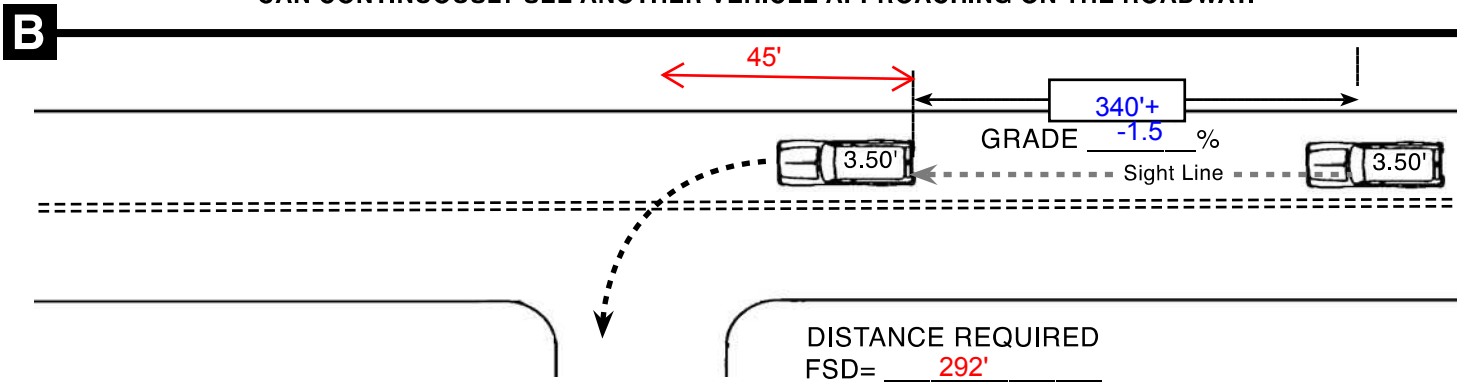
S.R. \_\_\_\_\_ SEG. \_\_\_\_\_ OFFSET \_\_\_\_\_ LEGAL SPEED LIMIT 25 MPH

MEASURED BY MFP/DAD DATE 5/2/15

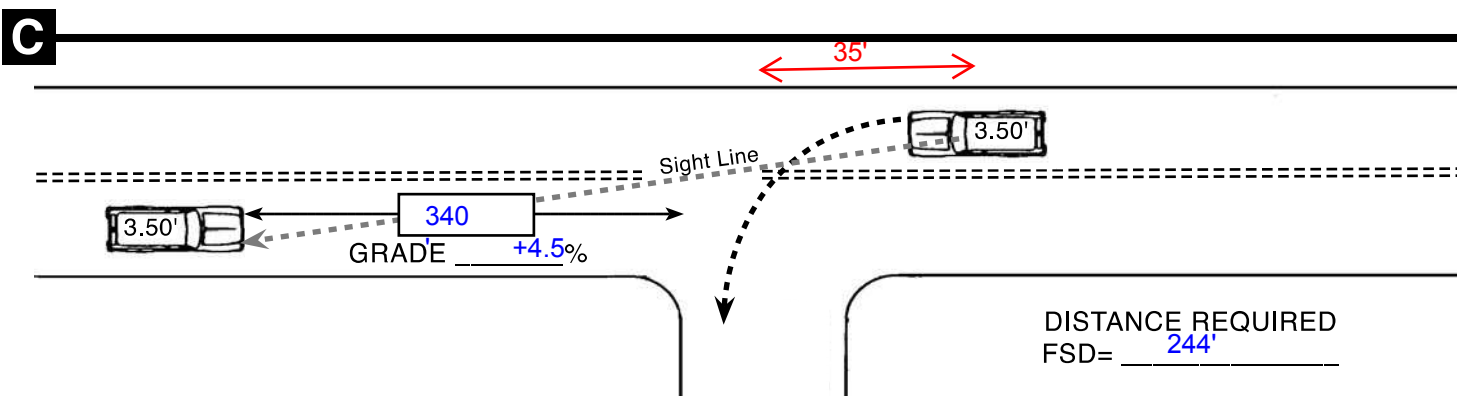
FOR DEPARTMENT USE ONLY: Safe-Running Speed \_\_\_\_\_ 85th Percentile Speed 35 MPH EB/38 MPH WB



**THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER AT A DRIVEWAY LOCATION CAN CONTINUOUSLY SEE ANOTHER VEHICLE APPROACHING ON THE ROADWAY.**



**THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER ON THE ROADWAY CAN CONTINUOUSLY SEE THE REAR OF A VEHICLE WHICH IS LOCATED IN THE DRIVER'S TRAVEL LANE AND WHICH IS POSITIONED TO MAKE A LEFT TURN INTO A DRIVEWAY.**



**THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER OF A VEHICLE INTENDING TO MAKE A LEFT TURN INTO A DRIVEWAY CAN CONTINUOUSLY SEE A VEHICLE APPROACHING FROM THE OPPOSITE DIRECTION.**

## FORMULA SIGHT DISTANCE TABLE

Speed (V) (Miles Per Hour)	Average Grade (G) (Percent)										
	<b>Use plus grades when approaching vehicle is travelling upgrade.</b>										
	0.0	+1.0	+2.0	+3.0	+4.0	+5.0	+6.0	+7.0	+8.0	+9.0	+10.0
25	147	145	144	143	142	140	139	138	137	136	135
30	196	194	191	189	187	185	183	182	180	178	177
35	249	245	242	239	236	233	231	228	226	224	221
40	314	309	304	299	295	291	287	284	280	277	274
45	383	376	370	364	358	353	348	343	339	334	330
50	462	453	444	436	429	422	415	409	403	397	392
55	538	527	517	508	499	490	482	475	468	461	454
	<b>Use negative grades when approaching vehicle is travelling downgrade.</b>										
	0.0	-1.0	-2.0	-3.0	-4.0	-5.0	-6.0	-7.0	-8.0	-9.0	-10.0
25	147	148	150	151	153	155	157	159	161	164	166
30	196	199	201	204	207	210	214	217	221	226	230
35	249	252	256	260	265	269	275	280	286	292	299
40	314	319	325	331	338	345	352	360	369	379	389
45	383	390	398	406	415	425	435	447	459	472	487
50	462	471	481	492	504	517	531	546	563	581	600
55	538	550	562	576	590	606	622	641	661	682	706

**RESOLUTION 2015-58**

**RADNOR TOWNSHIP**

**A RESOLUTION OF RADNOR TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA, ESTABLISHING A STORMWATER FACILITY REBATE PROGRAM IN ACCORDANCE WITH ORDINANCE NO. 2013-15, THE RADNOR TOWNSHIP STORMWATER MANAGEMENT FEE ORDINANCE.**

*WHEREAS*, Radnor Township enacted Ordinance No. 2013-15, the Radnor Township Stormwater Management Fee on October 14, 2013; and

*WHEREAS*, the Stormwater Management Fee Ordinance permits the Board of Commissioners to establish rules and regulations necessary to implement the polices and procedures set forth in the Ordinance; and

*WHEREAS*, the Board of Commissioners desires to establish a Homeowner Stormwater Facility Rebate program.

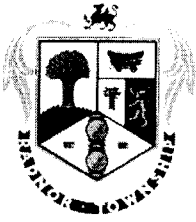
*NOW, THEREFORE*, it is hereby *RESOLVED* that the Radnor Township Board of Commissioners does hereby approve a Homeowner Stormwater Facility Rebate application form and procedure as set forth on the attached Exhibit "A". The Township Administration is further authorized to establish such policies and procedures necessary to implement the rebate program as set forth on the attached Exhibit "A".

*SO RESOLVED*, at a duly convened meeting of the Board of Commissioners conducted on this \_\_\_\_\_ day of May, 2015.

RADNOR TOWNSHIP

By: \_\_\_\_\_  
Name: William Spingler  
Title: President

ATTEST: \_\_\_\_\_  
Robert A. Zienkowski, Secretary



## Homeowner Stormwater Facility Rebate Application Form

Stormwater Utility users may be eligible for a rebate for the purchase and construction/installation of qualifying stormwater facilities. This form and all requested information shall be submitted to either the address or email given below. Upon receipt of this information, the Radnor Township Stormwater Program Administrator will review and process the application.

**Electronic submittals are encouraged.**

### REBATE TYPE

- Rebate applied for: (check all that apply)
- Rain barrel(s) (up to 5) (\$50 each)
  - Rain garden (up to \$250)
  - Cistern (\$100)
  - Downspout diversion\* (up to \$50)

\* Diversion of roof downspout runoff from driveways, sidewalks or streets to lawn or garden areas.

### PROPERTY INFORMATION

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Property Location (if different): \_\_\_\_\_

Phone: \_\_\_\_\_ Cell: \_\_\_\_\_

Email: \_\_\_\_\_

### APPLICATION REQUIREMENTS

Please supply the requested information for the applicable rebates. Additional documentation may be requested by the Radnor Township Stormwater Program Administrator.

#### Rain Barrel

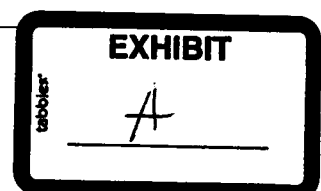
- # of rain barrels \_\_\_\_\_
- Size in gallons (min. 45 gal) \_\_\_\_\_
- Proof of payment for barrel(s)
- Photo showing connection(s) to downspout(s)
- Approximate roof area draining to downspout \_\_\_\_\_ ft<sup>2</sup>

#### Cistern

- Cistern size in gallons (min. 250 gal) \_\_\_\_\_
- Proof of payment for installation or materials
- Photo showing installation
- Impervious area draining to cistern (roof, patio, driveway) \_\_\_\_\_
- Approximate impervious area draining to cistern \_\_\_\_\_ ft<sup>2</sup>

#### Rain Garden

- Sketch of location
- Dimensions (min. 100 ft<sup>2</sup>, 6" min. depression) Area \_\_\_\_\_ Depth \_\_\_\_\_
- Photo of rain garden installed at property
- Proof of payment for installation or materials
- Impervious area draining to rain garden (roof, patio, driveway) \_\_\_\_\_



[ ] Approximate impervious area draining to rain garden \_\_\_\_\_ ft<sup>2</sup>

**Downspout Diversion**

- [ ] Pre- and post-installation photos documenting diversion
- [ ] Proof of payment for materials used
- [ ] Approximate roof area draining to downspout \_\_\_\_\_ ft<sup>2</sup>
- [ ] Briefly describe the receiving area for downspout flow:

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Signature of Property Owner \_\_\_\_\_ Date \_\_\_\_\_

*I hereby state that the above information is true to the best of my knowledge and acknowledge that any attempt to purposely supply incorrect information may result in denial of the rebate application, elimination of any rebate granted, and restitution of previous rebates. I also understand that, with my permission, Radnor Township or its agents reserve the right to inspect rebated stormwater facility installations to determine effectiveness and/or need for maintenance. Furthermore, I understand that any rebate received under this program is a one-time payment for each eligible stormwater facility installation.*

*All installation suggestions for stormwater devices are provided based upon nationally recognized best-practices. Radnor assumes no liability for installation or in the unlikely case that the device has a negative consequence*

Submit application to:

Radnor Township Stormwater Administrator  
301 Iven Avenue  
Wayne, PA 19087-5297

Or e-mail with supporting documents attached to [stormwater@radnor.org](mailto:stormwater@radnor.org)

If you have questions about this program, please contact Dan Wible at [stormwater@radnor.org](mailto:stormwater@radnor.org) or call \_\_\_\_\_

**FOR ADMINISTRATIVE USE ONLY**

Stormwater Account # \_\_\_\_\_

Payment of Annual Stormwater Fee?: \_ YES NO \_\_\_\_\_

Account in Good Standing (No Delinquencies)?: \_ YES NO \_\_\_\_\_

Authorization for the  
Township Solicitor to draft  
amendment to Recreation  
Impact Fee Ordinance

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Discussion of future  
zoning ordinance  
amendments  
*(Per Commissioner Booker)*

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