

BOARD OF COMMISSIONERS

AGENDA *Materials updated 10/14/2021*

Monday, October 18, 2021 - 6:30 pm

Pledge of Allegiance

Notice of Executive Session

1. Public Participation

2. Consent Agenda

- a) Disbursement Review & Approval
- b) Approval of Minutes of the Board of Commissioners Meeting of September 13, 20, 21, 2021
- c) HARB 2021-18 - 201 Walnut Avenue – New Garage
- d) HARB 2021-19 – 319 St Davids Road – Garage Door Replacement with Framed Opening also includes New Main Door
- e) Resolution 2021-112 – Adopting a Volunteer Firefighter Tax Credit Program
- f) Motion to Authorize the receipt of sealed bids for the purchase of gasoline and diesel fuel for 2022
- g) Resolution 2021-114 - Authorizing the Engineering Department to Receive Sealed Bids for the Malin Road Culvert Replacement Project
- h) Resolution 2021-115 - Authorizing the Engineering Department to Receive Sealed Bids for the Gulph Creek (at 210 Gulph Creek Road) Bank Restoration Project
- i) Resolution 2021-117 - Appointing Douglas Meder, SEO as Primary Sewage Enforcement Officer and James Bevin, SEO [Herbert E. MacCombie Jr., PE, Consulting Engineers] as Alternate Sewage Enforcement Officer

3. Committee Reports

- A. Ordinance 2021-09 – (***Adoption***) - Concordia (Eagle and Radnor Rd) – Zoning Map Amendment (*Advertised Public Hearing*)
- B. Resolution 2021-99 - Concordia (Eagle and Radnor Rd) – Request of Preliminary/Final Land Development Plan
- C. Bond Refunding Opportunity
 - Ordinance 2021-12 (Introduction) – Authorizing the advance refunding of the Series 2013B in the aggregate principal amount not to exceed \$15,500,000
 - Resolution 2021-123– Engaging PFM to provide financial consulting services for the advance refunding of the Series 2013B Bonds
 - Resolution 2021-124 – Engaging Cozen O’Connor as Bond Counsel for the advance refunding of the Series 2013B Bonds
- D. 904 Drexel Lane -Waiver of the Stormwater Management Ordinance
- E. 123 Hickory Lane - Waiver of the Stormwater Management Ordinance
- F. Ordinance 2021-07 - (***Adoption***) - Amending Chapter 280 of the Radnor Township Code, Zoning Ordinance, by permitting an increase in building height in the Garrett Hill Neighborhood (GH-N) and Garrett Hill Garrett Avenue (GH-GA) Districts. In addition, outdoor dining would be permitted in the Garrett Hill Conestoga Road (GH-CR) District.

G. Ordinance 2021-11 – (*Adoption*) - Approving the First Amendment to Land Lease Agreement Between the Township of Radnor and Cellco Partnership D/B/A Verizon Wireless

H. Resolution 2021-125 – Resolution of Admonishment and Censure of Interim Commissioner, Catherine Agnew

4. Reports of Standing Committees
5. Old Business
6. New Business
 - a. PECO contractor incident. (Commissioner Farhy)
7. Public Participation
8. Adjournment

Meeting Notice

There will be a Regular Board of Commissioners meeting held on Monday, October 18, 2021, beginning at 6:30 PM in the Radnorshire Room of the Radnor Township Building, 301 Iven Avenue Wayne, PA 19087. The Meeting will be streamed live on the Radnor Township YouTube Channel <https://www.youtube.com/channel/UCvh6jeMQTvo3ojCTh8wZkbA>

Public Meeting Notice

The Board of Commissioners will hold a public hearing on October 18, 2021, at 6:30 p.m., at the Radnor Township Municipal Building, 301 Iven Avenue, Wayne, PA 19087 to consider for possible enactment an ordinance, of which this Notice is a summary, rezoning Delaware County Tax Map Parcel No. 36-02-0097810 from PI – Planned Institutional to R-2 Residence

Public Participation

***RADNOR TOWNSHIP
DISBURSEMENTS SUMMARY
October 18, 2021***

The table below summarizes the accounts payable disbursements made since the last public meeting held on September 20, 2021. As approved by the Board, the Administration is now making bi-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. Also, please visit the [Open Finance](#) program to view the Township's [Checkbook](#), where all vendor payments are available.

Link: <http://radnor.com/728/Disbursements-List>

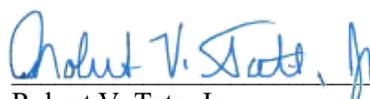
Fund (Fund Number)	2021-9C September 9, 2021	2021-10A October 8, 2021	Total
General Fund (01)	\$547,965.79	\$581,193.81	\$1,129,159.60
Sewer Fund (02)	27,779.10	4,708.88	32,487.98
Storm Sewer Management (04)	140,614.48	10,661.75	151,276.23
Capital Improvement Fund (05)	325,884.51	28,931.82	354,816.33
Police Pension Fund (07)	0.00	7,810.11	7,810.11
OPEB Fund (08)	122,412.96	1,589.90	124,002.86
Escrow Fund (10)	29,010.55	111,187.30	140,197.85
Civilian Pension Fund (11)	0.00	6,964.39	6,964.39
Investigation Fund (12)	178.64	0.00	178.64
The Willows Fund (23)	661.83	15,123.10	15,784.93
Park & Trail Improvement Fund (501)	0.00	1,107.0	1,107
GOB19 Project Fund (502)	0.00	22,331.23	22,331.23
Total Accounts Payable Disbursements	\$1,194,507.86	\$791,609.29	\$1,986,117.15
 Grand Total	 \$1,194,507.86	 \$791,609.29	 \$1,986,117.15

In addition to the accounts payable checks, the Township also makes various electronic payments including payroll, debt service, credit card purchases and fees from time to time which are not reflected in the attached table.

The Administration has adopted various internal control and processing procedures to ensure that amounts obligated are within the budgetary limits established by the Board of Commissioners. Those procedures are monitored daily 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,



 Robert V. Tate, Jr.
 Finance Director

TOWNSHIP OF RADNOR
Minutes of the Regular Board of Commissioners Meeting of September 13, 2021

The Radnor Township Board of Commissioners met via Zoom at approximately 6:36 pm
<https://www.youtube.com/watch?v=QA38j40Q-EU&t=12796s>

Commissioners Present

Jack Larkin, President	Lisa Borowski (arrived 7:05 pm)	Cathy Agnew
Sean Farhy	Richard Booker	Jake Abel

Also Present: William White, Township Manager, John Rice, Township Solicitor, Robert Tate, Director of Finance, Christopher Flanagan, Chief of Police, Tammy Cohen, Director of Parks and Community Programming, Steve Norcini, Township Engineer, Roger Phillips, Engineer, Damon Drummond, Traffic Engineer, Kevin Kochanski, Director of Community Development, Ricky Foster, Jr., Acting Public Works Director, Peggy Hagan, Executive Assistant to the Township Manager.

Not Present: Moira Mulrone, Vice President

President Larkin called the meeting to order and led the assembly in the Pledge of Allegiance.

1. Public Participation

Heather Gill - Spoke on an incident involving Commissioner Agnew at the Porch Fest event on September 11, 2021.

Avery Rome – Resident of the 6th Ward – Spoke on behalf of Resolution 2021-96.

2. Motion to Confirm Ricky Foster, Jr. as Public Works Director

Commissioner Larkin moved to Confirm Ricky Foster, Jr. as Public Works Director, seconded by Commissioner Farhy.

Bill White, Township Manger, recommend the confirmation of Ricky Foster, Jr.as Public Works Director for Radnor Township and spoke on his work as Supervisor and Interim Director.

President Larkin called the vote, the motion passed 5-0 with Commissioners Borowski and Mulrone absent.

3. Promotion of Officer Katherine Reardon to the Rank of Sergeant

Superintendent Flanagan thanked the Officers of the Radnor Township Police Department and spoke on the open Sergeant position. He then spoke on Officer Reardon’s career and introduced her family in attendance. Judge Lang administered the Oath for Promotion to Sergeant to Katherine Reardon.

Consent Agenda

- a) Disbursement Review & Approval
- b) Approval of Minutes of the Board of Commissioners Meeting of August 16, 2021

- c) HARB 2021-12 – 113 Walnut Avenue – New Construction, Single Family with 2 Car Detached Garage
- d) Resolution #2021-90 - Authorizing the Township to enter into agreement with Tyler Stroyek for Fall 2021 Seasonal Tennis Programming
- e) Resolution 2021-92 – Authorization to Replace the Fuel & Gate Management System at the Public Works Facility at a price not to exceed \$15,000.
- f) ~~Resolution 2021-93 – Authorizing the Purchase of Public Works Capital Vehicles and Equipment -Sanitation Packer \$45,000 (5 year capital lease), Dump Truck \$37,000 (5 year capital lease), Loader \$45,000 (5 year capital lease), Street Sweeper \$66,444 (5 year capital lease), Clam Bucket \$20,000 (CoStars purchase), Pick Up Truck \$42,500 (CoStars purchase), Skid Steer \$95,000 (CoStars purchase), Walk Behind Mower \$6,000 (CoStars purchase), Blower \$7,000 (CoStars purchase), all as noted in the 2021 Approved Budget.~~
- g) ~~Resolution 2021-91 – Purchase of the Knox Key Secure 6 System for Radnor Township First Responder Vehicles~~
- h) Resolution 2021-104 - Authorization for Gannett Fleming, Incorporated to Perform a Culvert Inspection and Assessment, in the Amount of \$31,500, Funded by the Stormwater (04) Fund

President Larkin asked if any Commissioner(s) wanted to pull items from the Consent Agenda. Commissioner Farhy asked for items f), and g) to be removed from the Consent Agenda

~~f) Resolution 2021-93 – Authorizing the Purchase of Public Works Capital Vehicles and Equipment -Sanitation Packer \$45,000 (5 year capital lease), Dump Truck \$37,000 (5 year capital lease), Loader \$45,000 (5 year capital lease), Street Sweeper \$66,444 (5 year capital lease), Clam Bucket \$20,000 (CoStars purchase), Pick Up Truck \$42,500 (CoStars purchase), Skid Steer \$95,000 (CoStars purchase), Walk Behind Mower \$6,000 (CoStars purchase), Blower \$7,000 (CoStars purchase), all as noted in the 2021 Approved Budget.~~

President Larkin moved to approve Resolution 2021-93, seconded by Commissioner Abel.

Ricky Foster, Public Works Director, stated the items are replacement pieces. There was discussion among the Commissioners and Staff.

President Larkin called the vote, the motion passed 5-0 with Commissioners Borowski and Mulroneo absent.

Commissioner Borowski arrived at the meeting.

~~g) Resolution 2021-91 – Purchase of the Knox Key Secure 6 System for Radnor Township First Responder Vehicles~~

President Larkin moved to approve Resolution 2021-91, seconded by Commissioner Farhy

Superintendent Flanagan spoke on the item, Sergeant Gluck gave a presentation on the system. There was discussion among the Commissioners.

President Larkin called the vote, the motion passed 4-2 with Commissioners Farhy and Booker against

President Larkin called the vote on the balance of the Consent Agenda, items 2 a), b), c), d), and e). The motion passed 6-0 with Commissioner Mulroneu absent.

5. Committee Reports

A. Appointment of William Lawlor to CARFAC for an unexpired term ending December 31, 2022

President Larkin moved to appoint William Lawlor to CARFAC, seconded by Commissioner Booker. The motion passed 6-0 with Commissioner Mulroneu absent

B. Resolution 2021-97 - 401 E. Lancaster Ave – FINAL: Minor Final Subdivision Plan

The representative from the American Legion spoke on the lot consolidation. There was discussion among Commissioners, Applicant, and Staff.

President Larkin called the vote, the Resolution passed with a vote of 5-0 with Commissioner Booker abstaining and Commissioner Mulroneu absent.

C. ~~Resolution 2021-99 – Concordia (Eagle and Radnor Rd) – Request of Preliminary/Final Land Development Plan~~ *Removed from Agenda 9/10/2021 at Applicant's Request*

D. ~~Ordinance 2021-09 – (Adoption) – Concordia (Eagle and Radnor Rd) – Zoning Map Amendment (Advertised Public Hearing)~~ *Removed from Agenda 9/10/2021 at Applicant's Request*

E. Ordinance 2021-07 - (Introduction) - Amending Chapter 280 of the Radnor Township Code, Zoning Ordinance, by permitting an increase in building height in the Garrett Hill Neighborhood (GH-N) and Garrett Hill Garrett Avenue (GH-GA) Districts. In addition, outdoor dining would be permitted in the Garrett Hill Conestoga Road (GH-CR) District.

President Larkin moved to Introduce Ordinance 2021-07, seconded by Commissioner Farhy.

Kevin Kochanski spoke on the amendments to Chapter 280 of the Radnor Township Code, Zoning Ordinance, which include the addition of outdoor dining and changes to building height. He noted the Planning Commission recommended the Ordinance as written for outdoor dining and 35 ft maximum height.

There was discussion among Commissioners and Staff.

Public Comment

Sara Pilling – She read a letter from Rick Barker.

Sumanth Joseph - He spoke on support of the amendments to the Code and felt he had no say in the previous overlay zoning amendment.

Kim Cruz – She read a letter from Roberta Winters

Andrew Tillman – He spoke on the need to change the overlay zoning.

Angie Mitchell – Owner of Flip and Bailey’s and Garrett Hill Ale House - She spoke on the need for outdoor dining in Garrett Hill.

President Larkin called the vote to introduce Ordinance 2021-07. The motion passed 6-0 with Commissioner Mulroney absent.

F. — Ordinance 2021-10 – (Introduction) – Providing for the Amendment of Article XXVIII of the Zoning Ordinance of the Township of Radnor; Providing for Definitions; Establishing Certain General and Specific Standards Relating to the Locations, Placement, Construction and Maintenance of Tower Based Wireless Communications Facilities, Non-Tower Wireless Communications Facilities, and Small Wireless Communications Facilities; Providing Further for the Regulation of Such Facilities within the Public Rights Of Way and Outside the Public Rights Of Way; Providing for the Enforcement of Said Regulations; and Providing for an Effective Date. (Removed 9/13/2021)

G. Ordinance 2021-11 – (Introduction) - Approving the First Amendment to Land Lease Agreement Between the Township of Radnor and Cellco Partnership D/B/A Verizon Wireless

President Larkin moved to approve the introduction of Ordinance 2021-11, seconded by Commissioner Farhy.

Bob Tate, Director of Finance, and John Rice, Township Solicitor spoke on the extension of the Land Lease. There was discussion among Commissioners and Staff.

President Larkin called the vote, the motion to introduce Ordinance 2021-11 passed 5-1 with Commissioner Booker opposed and Commissioner Mulroney absent.

H. Resolution 2021-101 - Authorizing the Payment of a Change Order for the Consulting, Design and Construction Services for the Valley Creek Stream Bank Stabilization (at Robinhood Road), to Gannett Fleming, Inc., in the amount of \$42,000

President Larkin moved to approve Resolution 2021-101, seconded by Commissioner Borowski.

Roger Phillips, Engineer and Steve Norcini, Township Engineer, spoke on the Resolution and the need for the change order. There was discussion among Commissioners and Staff.

President Larkin called the vote, the motion passed 6-0 with Commissioner Mulroney absent.

I. Resolution 2021-102 - Authorizing Award of the Contract for Permitting, Design, Bidding Documents, and Construction Services for Crosswalk Improvements to the Intersection of South Devon Avenue and Conestoga Road to Gilmore & Associates, Incorporated, in the Amount of \$17,000.

Commissioner Larkin moved to approve Resolution 2021-102, seconded by Commissioner Agnew.

Commissioner Abel introduced the Resolution and spoke on the crosswalk. Steve Norcini, Township Engineer, spoke on the crosswalk and the need to make the crosswalk ADA compliant

and update the crosswalk to today's standard.

There was discussion among Commissioners and Staff.

Public Comment

Patricia Denham - 121 Conestoga Road – Spoke on the safety issues of the existing crosswalk.
Amara Denham – Student at Wayne Elementary - She spoke on the difficulty to cross Conestoga Road safely.

Alice Meehan – She is concerned about how she will get out of her driveway when traffic is stopped at the crosswalk, her driveway is right where the crosswalk is located.

Mr. Denham – He spoke on questions on enforcement or the crosswalk.

Steve Norcini suggested to amend the Resolution to a cost of up to \$20,000, to include the ability to design a rectangular rapid flashing beacon, if approved by PennDOT.

President Larkin moved to amend the Resolution to change the cost to \$20,000, seconded by Commissioner Abel. The motion passed 6-0 with Commissioner Mulrone absent.

President Larkin called the vote on the amended Resolution, the motion passed 6-0 with Commissioner Mulrone absent.

J. Resolution 2021-96 – Radnor Township Sponsoring Darby Creek Valley Association Plan for Darby-Cobbs Watershed Plan

President Larkin moved to approve Resolution 2021-96, seconded by Commissioner Borowski.

Commissioner Borowski spoke on the Resolution and asked for support as a Municipal Partner for the grant. She noted she is abstaining from the vote because she is a Darby Creek Valley Association Board Member.

There was discussion among Commissioners and Staff

Public Comment

Robin Mann – Board Member of the Darby Creek Valley Association – She spoke on the Association's focus and the need to update the watershed plan. The plan will provide an educational vehicle for those who live along the stream.

President Larkin called the vote, the motion passed 4-1 with Commissioner Booker against, Commissioner Borowski abstaining, and Commissioner Mulrone absent.

K. Resolution 2021-103 - Authorizing the Payment of a Change Order for the Consulting, Design and Construction Services for the King of Prussia Road and Eagle Road Intersection Pedestrian and Stormwater Improvements Radnor Trail Extension, to Associated Engineering Consultants, Inc., in the amount of \$9,000 (language update 9/13/2021)

President Larkin moved to approve Resolution 2021-103, seconded by Commissioner Borowski.

Steve Norcini, Township Engineer, spoke on the need for the change order. There was discussion among Commissioners and Staff.

President Larkin called the vote, the motion passed 5-1 with Commissioner Booker against and Commissioner Mulroney absent.

L. Resolution 2021-95 – Authorizing the Execution of a Grant Application to the County of Delaware’s Delco Green Ways Municipal Grant Program in the amount up to \$100,000 (Planning and Design) and \$500,000 (Connect/Trail Development) to be used for the Valley Forge to Heinz Refuge Trail / Radnor Trail Extension Project (No matching Township funds are required for this Grant)

President Larkin moved to approve Resolution 2021-95, seconded by Commissioner Borowski

Steve Norcini, Township Engineer, spoke on the grant application. There was discussion among Commissioners and Staff.

President Larkin called the vote, the motion passed 5-1 with Commissioner Booker against and Commissioner Mulroney absent.

M. Resolution 2021-82 - Authorizing the Award of the Contract for Design, Engineering and Permitting for the King of Prussia Road SEPTA Bridge Warning System, to Gilmore & Associates, Inc., in the Amount of \$25,500

President Larkin moved to approve Resolution 2021-82, seconded by Commissioner Farhy.

Steve Norcini spoke on the proposal to install a passive system. Chris Flanagan, Police Chief, asked Officer Janoski to show some pictures of the recent bridge strike and spoke on the number of bridge strikes. There was discussion among Commissioners and Staff.

Commissioner Booker moved to table the Resolution, seconded by Commissioner Farhy. The motion to table passed 4-1 with Commissioner Borowski off the dais, Commissioner Larkin against, and Commissioner Mulroney absent.

6. Reports of Standing Committees

Commissioner Farhy spoke on the Parks and Recreation meeting on Fenimore Woods and thanked all who participated. He announced the next Parks and Recreation meetings will be held on October 14, 2021 and November 18, 2021.

7. Old Business

Commissioner Borowski asked for an update on the tax credit for Firefighters. Bill White, Township Manger, noted it will be on the agenda of the October 18, 2021, Board of Commissioners Meeting.

Commissioner Borowski also noted that residents are concerned about accessibility in relation to the Fenimore Woods project and would like it to remain a priority.

8. New Business

Commissioner Booker commented on Commissioner Agnew's behavior at Porch Fest. Cathy Agnew responded and spoke on the event, discussion ensued.

9. Public Participation

None

10. Adjournment of Regular Meeting

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

Respectfully submitted.

Peggy Hagan

TOWNSHIP OF RADNOR
Minutes of the Regular Board of Commissioners Meeting of September 20, 2021

The Radnor Township Board of Commissioners met via Zoom at approximately 6:45 pm
<https://www.youtube.com/watch?v=sXtMXSLSt6E&t=13823s>

Commissioners Present

Jack Larkin, President Moira Mulrone, Vice President Lisa Borowski
Cathy Agnew Sean Farhy Richard Booker Jake Abel

Also Present: William White, Township Manager, Colby Grim, Township Solicitor, Robert Tate, Director of Finance, Christopher Flanagan, Chief of Police, Tammy Cohen, Director of Parks and Community Programming, Steve Norcini, Township Engineer, Roger Phillips, Engineer, Damon Drummond, Traffic Engineer, Ricky Foster, Jr., Public Works Director, Molly Gallagher, Public Information Officer, Peggy Hagan, Executive Assistant to the Township Manager.

Not Present:

President Larkin called the meeting to order and led the assembly in the Pledge of Allegiance.

President Larkin gave Notice of Executive Session held prior to the September 20, 2021, regular Board of Commissioners Meeting to discuss personnel issues.

1. Public Participation

Leslie Morgan - She spoke on September 11, 2021 and would like the Township to hold 9/11 Remembrance Events in the future.

Baron Gemmer - He wanted to remind everyone of the upcoming Electronics Recycling Day and Paper Shredding Event to be held on October 2, 2021 at Radnor Financial Center and The Carol H. Axelrod Memorial Blood Drive to be held on October 7, 2021 at the Radnor Activity Center.

2. American Red Cross, Battle of the Badge Award, Presentation to Radnor Fire Department.

Marie Carbonara, Radnor Township Health Officer, presented to the Radnor Fire Department the American Red Cross, Battle of the Badge Award. She spoke on the partnership with the Red Cross to provide regular blood drives in the Community

3. Consent Agenda

- a) Disbursement Review & Approval
- b) Chief's Monthly Report - September 2021
- c) Conditional Employment Offer for One (1) New Radnor Township Police Officer
- d) Final Staff Traffic Committee Meeting Minutes - August 18, 2021
- e) Resolution 2021-109 - Three Radnor Township Police Vehicles for use by the Radnor Township Police Department at a cost of \$166,481.26 as included in the 2021 Capital Budget.

~~f) Resolution 2021-110 – Motion to accept the monetary donation of \$11,000 to be used for the acquisition of a replacement K9 for the Radnor Township Police Department~~

~~g) Motion to Authorize Bid of the Cowan Park and Odorisio Park Basketball Court Renovations~~

~~h) Resolution 2021-111 - Authorization to rebuild the spare pump for the King of Prussia Pump Station at a cost of \$9,580.~~

~~i) Resolution 2021-94 – Adopting the 2022 Minimum Municipal Obligation (MMO) for Township Pension Plans as required by State Law~~

President Larkin asked if any Commissioner(s) wanted to pull items from the Consent Agenda. Commissioner Booker asked for items c), f), and i), and Commissioner Abel asked for item g), to be removed from the Consent Agenda

c). Conditional Employment Offer for One (1) New Radnor Township Police Officer

President Larkin moved to approve the Conditional Employment Offer for One (1) new Radnor Township Police Officer, seconded by Commissioner Mulroney.

Bill White, Township Manager, noted the hiring of the Police Officer would bring the Force to its full compliment of 45, currently at 44. There was discussion among Commissioners and Staff.

President Larkin called the vote, the motion passed 7-0.

f) Resolution 2021-110 – Motion to accept the monetary donation of \$11,000 to be used for the acquisition of a replacement K9 for the Radnor Township Police Department

President Larkin moved to approve Resolution 2021-110, seconded by Commissioner Mulroney.

Chris Flanagan, Chief of Police, noted the acquisition would take the K9 count to 4, after the retirement of K9 Officer Bear. There was discussion among Commissioners and Staff.

President Larkin called the vote, the motion passed 6-1 with Commissioner Booker against.

g) Motion to Authorize Bid of the Cowan Park and Odorisio Park Basketball Court Renovations

President Larkin moved to authorize the bid of Cowan Park and Odorisio Park Basketball Court seconded by Commissioner Abel.

Tammy Cohen reviewed the project details.

President Larkin called the vote, the motion passed 7-0.

i) Resolution 2021-94 – Adopting the 2022 Minimum Municipal Obligation (MMO) for Township Pension Plans as required by State Law

President Larkin moved to Adopt the 2022 Minimum Municipal Obligation for Township Pension Plans as required.

Bob Tate, Director of Finance spoke on the calculations. There was discussion among Commissioners and Staff.

President Larkin called the vote, the motion passed 6-1 with Commissioner Booker against.

President Larkin called the vote for the balance of the consent agenda, items a), b), d), e), and h). The motion passed 7-0.

4. Committee Reports

A. Resolution 2021-113 – Sponsoring Willows Park Preserve’s Delaware County Green Ways Grant Application for Improvements to the Area Surrounding the Mansion. (Added 9/17/2021)

President Larkin moved to approve Resolution 2021-133, seconded by Commissioner Borowski. Clair Streibert, of the Willows Park Preserve, spoke on the grant application and their seeking approval to apply for the grant to update the Willows Mansion outdoor structure, creating a more accessible outdoor space for community events. There was discussion among Commissioners, Applicant, and Staff.

President Larkin called the vote, the motion passed 7-0.

B. Resolution 2021-98 - 250 KOP Road – Request of Preliminary/Final Land Development Plan

President Larkin moved to approve Resolution 2021-98, seconded by Commissioner Mulroney.

The Applicant, 205 KOP Road, spoke on the project, timeline, waivers requested which include permission to proceed as a preliminary/final land development plan without a separate preliminary land development application, showing existing improvements off the property within 500 feet of the property, to permit within the parking structure more than 10 continuous parking spaces in a row without being interrupted by a cubed landscape island, waive parking lot landscaping requirements within the parking structure, waive the groundwater recharge requirement and permit evapotranspiration through a rain garden to be installed on the property to meet the stormwater standard.

There was discussion among Commissioners, Staff, and Applicant. During the discussion the applicant agreed to install two additional rows of stormwater pipe.

President Larkin moved to amend the Resolution to include two additional rows of stormwater pipe, seconded by Commissioner Booker. The motion to amend passed 7-0.

There was continued discussion among Commissioners, Staff, and Applicant. During the discussion the applicant agreed to give up offsite parking spaces.

President Larkin moved to amend the Resolution to include the applicant will give up use of all offsite parking spaces and in future would not have the ability to add the number of offsite parking spots in parking calculations for the building, seconded by Commissioner Booker. Commissioner Larkin called the vote, the motion passes 6-1 with Commissioner Mulroney

opposed.

President Larkin called the vote on the amended Resolution, the motion passed 5-2 with Commissioners Booker and Abel against.

C. Ordinance 2021-10 – (Introduction) - Providing for the Amendment of Article XXVIII of the Zoning Ordinance of the Township of Radnor; Providing for Definitions; Establishing Certain General and Specific Standards Relating to the Locations, Placement, Construction and Maintenance of Tower-Based Wireless Communications Facilities, Non-Tower Wireless Communications Facilities, and Small Wireless Communications Facilities; Providing Further for the Regulation of Such Facilities within the Public Rights-Of-Way and Outside the Public Rights-Of-Way; Providing for the Enforcement of Said Regulations; and Providing for an Effective Date.

President Larkin moved to Introduce Ordinance 2021-10, seconded by Commissioner Borowski.

Mike Roberts, of Cohen Law Group, spoke on his assistance to the Township in preparing the Ordinance and gave a presentation on the background and information on the amendment to the Zoning Ordinance, which was reviewed by the Planning Commission and Citizens Communications Council. There was discussion among Commissioners, Mr. Roberts, and Staff

Commissioner Larkin moved to table the Introduction of Ordinance 2021-10, seconded by Commissioner Booker. The motion passed 7-0

D. Motion to approve the 2022 Budget Calendar and Special Meeting Dates

President Larkin moved to approve the 2022 Budget Calendar, seconded by Commissioner Borowski.

Bill White, Township Manager, suggested September 30 and October 27 for Special Budget Meetings and suggested a two-hour time limit for the special meetings.

President Larkin called the vote for the Calendar including the September 30 and October 27 meeting dates, motion passed 7-0.

Stormwater Discussion and Action Items:

E. Resolution 2021-100: Authorizing the Engineering Department to Receive Sealed Bids for the South Wayne Avenue Stormwater Management Project Funded by the Stormwater Fund, with a Presentation by Meliora Design

President Larkin moved to approve Resolution 2021-100, seconded by Commissioner Mulroney. Commissioner Agnew moved to waive a presentation from Meliora and have them just answer Commissioners questions, seconded by Commissioner Larkin.

Steve Norcini, Township Engineer, recapped the project timeline Michele Adams, Meliora

Design, gave a presentation on the project. There was discussion among Commissioners, Ms. Adams, and Staff.

Commissioner Larkin called the vote, the motion passed 6-1 with Commissioner Booker abstaining.

F. Resolution. 2021-106: Authorizing Award of the Contract for Permitting, Design and Bidding Documents for the Reconstruction of the North Wayne Avenue Parking Lot to Include Porous Paving, Stormwater Management, and Parking Lot Upgrades [North Wayne Parking Lot Stormwater Management Project] to Carroll Engineering Corporation, in the Amount of \$35,200 to be paid from the Stormwater Fund.

President Larkin moved to approve Resolution 2021-106, seconded by Commissioner Agnew. Steve Norcini, Township Engineer spoke on the project. There was discussion among Commissioners and Staff.

The motion passed 6-0 with Commissioner Booker abstaining.

G. Resolution 2021-107: Authorizing Award of the Contract for Permitting, Design and Bidding Documents for the Installation of Tree Trenches at Various Locations in North Wayne to Carroll Engineering Corporation, in the Amount of \$18,500 to be paid from the Stormwater Fund.

President Larkin moved to approve Resolution 2021-07, seconded by Commissioner Mulroney. Steve Norcini, Township Engineer, spoke on the project which will be funded through the Stormwater Fund.

President Larkin called the vote, the motion passed 6-1 with Commissioner Booker against.

H. Resolution 2021-108: Authorizing the Award of the Contract to Develop Solutions for Stormwater Management in Midland/St. Davids Area to Carroll Engineering Corporation, in the amount of \$108,000 to be paid from the Stormwater Fund.

President Larkin moved to approve Resolution 2021-108, seconded by Commissioner Agnew. Steve Norcini, Township Engineer, spoke on the project. There was discussion among Commissioners and Staff.

Commissioner Larkin called the vote, the motion passed 6-1 with Commissioner Booker against.

I. Other Stormwater Project Updates from the Township Engineer

Steve Norcini, Township Engineer gave a brief update on each of the following projects, Malin Road Culvert Replacement, South Wayne Municipal Parking Lot Stormwater Management Project, North Wayne Municipal Parking Lot Stormwater Management Project, Gulph Creek Flood Plain Creation, North Wayne Tree Trench Project, Stormwater Management

Solutions Feasibility for the Midland/St. Davids area, West Wayne Preserve & Friends of the Radnor Trail Park, Strathmore Road Storm Sewer Replacement, Spring Mill Road Culvert Replacement, Arthur Road Storm Sewer, Robinhood Road Culvert Extension, Wistar Road Storm Sewer, Rawles Run Lane Culvert Rehabilitation, Wooton Storm Sewer, Gulph Creek (#210) Bank Restoration, Highview Outfall, Cumberland Storm Sewer, Brookside Avenue Storm Sewer, North Wayne Area Infrastructure Improvements, Clover Lane, Louella Court & Lancaster Avenue Storm Sewer, Maplewood Storm Sewer, Leslie Road Storm Sewer, and Chamounix Road Culvert Replacement.

5. Reports of Standing Committees

Commissioner Borowski announced the Library has opened registration for Elves for the Shelves 5K Fun Run and Move-A-Thon, registration can be found at the Radnor Memorial Library website.

6. Old Business

None

7. New Business

Commissioner Farhy read a statement asking Commissioner Larkin to apologize to the residents for his behavior at the September 13, 2021 Board of Commissioners Meeting.

8. Public Participation

None

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

Respectfully submitted.

Peggy Hagan

TOWNSHIP OF RADNOR***Minutes of the Regular Board of Commissioners Special Meeting of September 21, 2021***

*The Radnor Township Board of Commissioners met via Zoom at approximately 6:35 pm
https://www.youtube.com/watch?v=ykBb_CqDLbY*

Commissioners Present

*Moirra Mulrone, Vice President
Sean Farhy*

*Lisa Borowski
Jake Abel*

Cathy Agnew

Also Present: *William White, Township Manager, Robert Tate, Director of Finance, Amy Lacey, Assistant Director of Finance, Christopher Flanagan, Chief of Police, Tammy Cohen, Director of Parks and Community Programming, Steve Norcini, Township Engineer, Ricky Foster, Jr., Public Works Director, Kevin Kochanski, Director of Community Development, Peggy Hagan, Executive Assistant to the Township Manager.*

Not Present: *Jack Larkin, Richard Booker*

Vice President Mulrone called the meeting to order and led the assembly in the Pledge of Allegiance.

1. Public Participation

None

2. Presentation of the 2022 Township Manager Recommended Budget

Bill White, Township Manager began by thanking the Board of Commissioners for scheduling the special meeting and noted the meeting to be capped at two hours, he also thanked the Department Heads for attending the meeting.

Bill White, Township Manager, and Bob Tate, Director of Finance, gave a budget presentation which included, 2022 General Fund Outlook, Millage History, Business Taxes with a year over year comparison and 2022 projection, General Fund Expenditures which included wages, payroll liabilities, benefits, and transfers, Annual Departmental Expense Comparison, General Fund Expenditure Comparison including OPEB Funding Plan, varying levels of departmental capital expense, pandemic expenditures, General Fund Operating Statement 2020-2021, 2022 Sanitary Sewer Outlook, Sanitary Sewer Rate History – 2012 -2021, and the 2022 Stormwater Fund Outlook.

There was discussion among Commissioners and Staff which included, use of Federal Stimulus Money received, possible RHM sanitary sewer rate change, emergency project funding, upcoming special meeting dates of September 30, 2021, and October 27, 2021, projected increase of Business Privilege Tax income, and Community Organization process for requesting funding and notification of meeting date for discussion.

3. Public Participation

Sara Pilling – 29 Garrett Avenue – She is concerned about the heat this summer and going forward in regard to seniors and keeping them cool enough. She would like a contingency plan developed for seniors and infants on very hot summer days.

Baron Gemmer – He had questions on 2020 and 2021 Business Tax projections and payments.

4. Adjournment

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

Respectfully submitted.

Peggy Hagan

BOARD OF COMMISSIONERS

AGENDA

Monday, October 18, 2021 - 6:30 pm

Pledge of Allegiance

Notice of Executive Session

1. Public Participation

2. Consent Agenda

- a) Disbursement Review & Approval
- b) Approval of Minutes of the Board of Commissioners Meeting of September 13, 20, 21, 2021
- c) HARB 2021-18 - 201 Walnut Avenue – New Garage
- d) HARB 2021-19 – 319 St Davids Road – Garage Door Replacement with Framed Opening also includes New Main Door
- e) Resolution 2021-112 – Adopting a Volunteer Firefighter Tax Credit Program
- f) Motion to Authorize the receipt of sealed bids for the purchase of gasoline and diesel fuel for 2022
- g) Resolution 2021-114 - Authorizing the Engineering Department to Receive Sealed Bids for the Malin Road Culvert Replacement Project
- h) Resolution 2021-115 - Authorizing the Engineering Department to Receive Sealed Bids for the Gulph Creek (at 210 Gulph Creek Road) Bank Restoration Project
- i) Resolution 2021-117 - Appointing Douglas Meder, SEO as Primary Sewage Enforcement Officer and James Bevin, SEO [Herbert E. MacCombie Jr., PE, Consulting Engineers] as Alternate Sewage Enforcement Officer

3. Committee Reports

- A. Ordinance 2021-09 – (***Adoption***) - Concordia (Eagle and Radnor Rd) – Zoning Map Amendment (*Advertised Public Hearing*)
- B. Resolution 2021-99 - Concordia (Eagle and Radnor Rd) – Request of Preliminary/Final Land Development Plan
- C. Bond Refunding Opportunity
 - Ordinance 2021-12 (Introduction) – Authorizing the advance refunding of the Series 2013B in the aggregate principal amount not to exceed \$15,500,000
 - Resolution 2021-123– Engaging PFM to provide financial consulting services for the advance refunding of the Series 2013B Bonds
 - Resolution 2021-124 – Engaging Cozen O’Connor as Bond Counsel for the advance refunding of the Series 2013B Bonds
- D. 904 Drexel Lane -Waiver of the Stormwater Management Ordinance
- E. 123 Hickory Lane - Waiver of the Stormwater Management Ordinance
- F. Ordinance 2021-07 - (***Adoption***) - Amending Chapter 280 of the Radnor Township Code, Zoning Ordinance, by permitting an increase in building height in the Garrett Hill Neighborhood (GH-N) and Garrett Hill Garrett Avenue (GH-GA) Districts. In addition, outdoor dining would be permitted in the Garrett Hill Conestoga Road (GH-CR) District.

G. Ordinance 2021-11 – (*Adoption*) - Approving the First Amendment to Land Lease Agreement Between the Township of Radnor and Cellco Partnership D/B/A Verizon Wireless

H. Resolution 2021-125 – Resolution of Admonishment and Censure of Interim Commissioner, Catherine Agnew

4. Reports of Standing Committees
5. Old Business
6. New Business
 - a. PECO contractor incident. (Commissioner Farhy)
7. Public Participation
8. Adjournment

Meeting Notice

There will be a Regular Board of Commissioners meeting held on Monday, October 18, 2021, beginning at 6:30 PM in the Radnorshire Room of the Radnor Township Building, 301 Iven Avenue Wayne, PA 19087. The Meeting will be streamed live on the Radnor Township YouTube Channel <https://www.youtube.com/channel/UCvh6jeMQTvo3ojCTh8wZkbA>

Public Meeting Notice

The Board of Commissioners will hold a public hearing on October 18, 2021, at 6:30 p.m., at the Radnor Township Municipal Building, 301 Iven Avenue, Wayne, PA 19087 to consider for possible enactment an ordinance, of which this Notice is a summary, rezoning Delaware County Tax Map Parcel No. 36-02-0097810 from PI – Planned Institutional to R-2 Residence

CERTIFICATE OF APPROPRIATENESS

Radnor Township Historical and Architectural Review Board



NAME OF OWNER: IAN & JULIE HARTMAN
OWNER ADDRESS: 201 WALNUT AVE
ADDRESS OF PROPERTY: 201 WALNUT AVENUE
APPLICATION NUMBER: HARB 2021-18

Subject to the conditions below the above owner, having complied with the Radnor Township Historical and Architectural Review Board (HARB) process, is hereby granted this permit for the

NEW GARAGE

at the address specified and may proceed with the building permit process. If not completed within one year of the date hereof, this permit is void and new application must be made. This Approval is subject to the Applicant applying for and receiving all necessary permits and approvals; and complying with all applicable Municipal regulations. Owner specifically gives the building inspector or designated official the right to inspect the work during progress and at completion.

NOTES AND/OR CONDITIONS OF APPROVAL:

MOTION TO APPROVE AS SUBMITTED SUBJECT TO ZONING APPROVAL

ISSUED: 10/18/2021

TOWNSHIP OFFICIAL

ACCEPTED BY APPLICANT

CERTIFICATE OF APPROPRIATENESS

Radnor Township Historical and Architectural Review Board



NAME OF OWNER: GEORGE GIBBONS & MICHELLE MARZIANO
OWNER ADDRESS: 319 ST DAVIDS RD
ADDRESS OF PROPERTY: 319 DAVIDS RD STREET
APPLICATION NUMBER: HARB 2021-19

Subject to the conditions below the above owner, having complied with the Radnor Township Historical and Architectural Review Board (HARB) process, is hereby granted this permit for the

**GARAGE DOOR REPLACEMENT WITH NEW FRAMED OPENING ALSO
INCLUDES A NEW MAIN DOOR**

at the address specified and may proceed with the building permit process. If not completed within one year of the date hereof, this permit is void and new application must be made. This Approval is subject to the Applicant applying for and receiving all necessary permits and approvals; and complying with all applicable Municipal regulations. Owner specifically gives the building inspector or designated official the right to inspect the work during progress and at completion.

NOTES AND/OR CONDITIONS OF APPROVAL:

MOTION TO APPROVE AS SUBMITTED

ISSUED: 10/18/2021

TOWNSHIP OFFICIAL

ACCEPTED BY APPLICANT

RESOLUTION 2021-112

A RESOLUTION OF RADNOR TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA, ENACTING A VOLUNTEER FIREFIGHTER STIPEND PROGRAM FOR QUALIFYING VOLUNTEERS AT THE RADNOR FIRE COMPANY, BRYN MAWR FIRE COMPANY, AND BROOMALL FIRE COMPANY EFFECTIVE JANUARY 1, 2022

WHEREAS, the three companies servicing Radnor Township have all expressed concerns over declining firefighting volunteerism; and

WHEREAS, the impact to Radnor Township is twofold: (1) The Township is having to allocate additional dollars annually to help pay for paid firefighting staff in order to (2) ensure that adequate resources are available to respond to safety calls in Radnor Township; and

WHEREAS, a stipend program is another tool being utilized to attract and retain volunteers in areas where volunteer firefighting companies provide coverage; and

WHEREAS, after discussions with the three fire companies in which a real estate tax credit program and a stipend program were compared, the stipend program was thought to provide the greatest positive impact based on the program's goal of attracting and retaining volunteers; and

WHEREAS, the Radnor Township Board of Commissioners wishes to partner with the three fire companies identified in the Resolution Title to offer a stipend to qualifying volunteers effective January 1, 2022.

NOW, THEREFORE, it is hereby *RESOLVED* by the Radnor Township Board of Commissioners authorizes a stipend of \$1,000.00 to qualifying volunteers at the Radnor Fire Company, Bryn Mawr Fire Company, and Broomall Fire Company (or their successor companies should boundaries change) based on the following criteria:

- A. Program Goal: To assist in attracting and retaining volunteer firefighters for the fire companies that provide service to Radnor Township
- B. Eligibility:
 - a. The stipend program is only available to "active service" volunteers who successfully meet their respective fire company's training and attendance criteria to be in good standing with the fire company.
 - b. In no case shall a paid staff member of a fire company be eligible.
 - c. Each Fire Company will require the volunteer firefighter to respond to a minimum of 25% of all fire calls in Radnor Township for the preceding year. For 2022, the fire call criteria will be based on calls recorded in 2021.
- C. Certification of List: In January of each year, the Fire Chief of each company will submit to the Township a certified list of eligible volunteers. That list will be approved in a public meeting by the Radnor Township Board of Commissioners prior to payment.

- D. Payment Method: Upon approval by the Radnor Township Board of Commissioners, the Township will issue a lump sum amount to each respective fire company in the aggregate amount of the total stipend owed to their volunteers. It will be the responsibility of the Fire Company to issue the individual allocations based on the Board approved certified list.

- E. Review: To ensure the program is achieving its desired goal, the Board of Commissioners may wish to review the program, including the amount and eligibility criteria. These reviews may require the Township to review volunteer firefighter participation and other types of information. Each fire company will be required to submit any requested information to assist in that evaluation in order to be eligible for future payments.

SO RESOLVED, this 18th day of October, A.D., 2021.

RADNOR TOWNSHIP

By: _____
Name: Jack Larkin
Title: President

ATTEST: _____
Name: William M. White
Title: Township Manager / Secretary

Radnor Township



PROPOSED LEGISLATION

DATE: October 13, 2021
TO: Board of Commissioners
FROM: William M. White, Township Manager

LEGISLATION: Resolution #2021-112 establishing a volunteer firefighter stipend program for the Radnor, Bryn Mawr, and Broomall Fire Company volunteer's who meet certain service criteria.

LEGISLATIVE HISTORY: This was requested by Commissioner Borowski in the spring (2021) and has been an item discussed annually during the budget season as the fire companies present their funding requests to the Township.

PURPOSE AND EXPLANATION: First, the program was initially introduced as a Real Estate Tax Credit Program as authorized by Act 172-2016. However, after discussion and consultation with the fire companies and Township Solicitor, a stipend program offers a greater opportunity for participation and success:

Program Goal: **To assist in attracting and retaining volunteer firefighters for the fire companies that provide service to Radnor Township**

	<u>RE Tax</u>	<u>Stipend</u>
Eligibility:		
• Radnor Homeowner Volunteers	YES	YES
• Radnor Renter Volunteers	NO	YES
• Non-Radnor Homeowner Volunteers	NO	YES
• Non-Radnor Renter Volunteers	NO	YES

Other considerations:

- RE Tax program Limitations:
 - Limited to a credit of only the Radnor Township portion of the tax which limits the credit to an amount that might not generate participation (for example, if the Radnor Township portion of the homeowner's RE Tax is \$500, then that's the maximum amount of the stipend we can offer that individual).
 - Does not benefit multiple volunteers within a single household
- Stipend Program allows the Board of Commissioners to establish the amount and criteria with no additional oversight / governance from the State.

FISCAL IMPACT: At current levels of volunteers and the eligibility criteria outlined in the Resolution (x33) the fiscal impact would be \$30,000 annually.

RECOMMENDED ACTION: The Administration respectfully asks the Board to adopt the program and then to monitor success by annually reviewing volunteer participation as part of the funding decision process.

Radnor Township
PROPOSED MOTION

DATE: October 18, 2021

TO: Radnor Township Board of Commissioners

CC: William M. White, Township Manager/Secretary

FROM: Ricky Foster, Jr., Director of Public Works

LEGISLATION: Motion to Authorize the receipt of sealed bids for the Gasoline and Diesel Fuel Contract

LEGISLATIVE HISTORY: The Public Works Department annually bids for the purchase of gasoline and diesel fuel.

PURPOSE AND EXPLANATION: The annual gasoline and fuel bid is to provide gasoline and diesel fuel to the Township's fleet, consisting of Public Works' vehicles and equipment, Police Department vehicles, Community Development vehicles, Administration vehicles, and the Radnor Fire Company.

The contract is bid based on estimated annual usage of 74,000 gallons of gasoline and 53,000 gallons of diesel fuel. Our annual costs will be based on actual usage. All fuel bids are to be based upon the Oil Price Information Service (OPIS) for Philadelphia weekly (5 day) average which is published by OPIS every Monday, for each fuel type, and is comprised of prices up to and including those of the previous Thursday.

IMPLEMENTATION SCHEDULE: Pending Board of Commissioner approval, a Purchase Order will be processed, and the new supplier's contract will begin January 1, 2022.

FISCAL IMPACT: Funding for this project is provided in the various department accounts for fuel.

RECOMMENDED ACTION: I respectfully request the Board of Commissioners authorize the Public Works Department to receive sealed bids for gasoline and diesel fuel.

RESOLUTION NO. 2021-114

**A RESOLUTION OF RADNOR TOWNSHIP,
DELAWARE COUNTY, PENNSYLVANIA,
AUTHORIZING THE ENGINEERING DEPARTMENT
TO RECEIVE SEALED BIDS FOR THE
CONSTRUCTION OF THE MALIN ROAD CULVERT PROJECT**

WHEREAS, the culvert under Malin Road near Bryn Mawr Avenue, has severely deteriorated during the past several years and needs to be replaced;

WHEREAS, Malin Road is heavily traveled during AM and PM rush hours; and

WHEREAS, design of the culvert replacement has been completed and permits have been approved, and the project is ready for bid.

NOW, THEREFORE, be it **RESOLVED** by the Board of Commissioners of Radnor Township does hereby Authorize the Engineering Department to Receive Sealed Bids for Construction of the Malin Road Culvert Replacement Project.

SO RESOLVED this 18th day of October, A.D., 2021.

RADNOR TOWNSHIP

By: _____
Name: Jack Larkin
Title: President

ATTEST: _____
William M. White
Manager/Secretary

Radnor Township

PROPOSED LEGISLATION

DATE: October 12, 2021
TO: Radnor Township Board of Commissioners
FROM: Dennis P. Capella, Engineering Project Manager
CC: William M. White, Township Manager
Stephen F. Norcini, P.E., Township Engineer

LEGISLATION: Resolution No. 2021-xxx: Authorizing the Engineering Department to Receive Sealed Bids for the Construction of the Malin Road Culvert Replacement Project

LEGISLATIVE HISTORY: The Board of Commissioners approved the contract to provide surveying, permitting, design and bidding services for the replacement of the Malin Road culvert in June 2018 (Resolution No. 2018-42).

PURPOSE AND EXPLANATION: The Malin Road culvert conveys Fox Run Creek under Malin Road, just east of Bryn Mawr Avenue. Malin Road is heavily traveled during AM and PM rush hours. Over the past several years:

- The road has subsided above the culvert.
- Portions of the masonry part of the culvert on the downstream side are completely missing.
- The concrete span on both sides of the culvert has lost a section.
- The riveted “chimney pipe” is severely rusted and deteriorated.

The culvert needs to be replaced. The design has been completed (site plan attached), and the project is ready for bid.

IMPLEMENTATION SCHEDULE: Pending Board of Commissioners’ approval, the project will be advertised for sealed bids. A subsequent contract award recommendation will be presented to the Board of Commissioners. The project construction will require additional time for coordination with PECO Gas for the relocation of a gas line.

FISCAL IMPACT: The project cost is estimated at \$1.6 million, including a contingency, and will be funded by the Stormwater Fund.

RECOMMENDED ACTION: *Staff respectfully requests the Board of Commissioners of Radnor Township to Authorize the Engineering Department to Receive Sealed Bids for the Construction of the Malin Road Culvert Replacement Project.*

RESOLUTION NO. 2021-115

**A RESOLUTION OF RADNOR TOWNSHIP,
DELAWARE COUNTY, PENNSYLVANIA,
AUTHORIZING THE ENGINEERING DEPARTMENT
TO RECEIVE SEALED BIDS FOR THE
CONSTRUCTION OF THE GULPH CREEK (AT 210 GULPH CREEK ROAD)
BANK STABILIZATION PROJECT**

WHEREAS, by virtue of an easement agreement, dated November 7, 1957, between Radnor Township and the owners of the property at 210 Gulph Creek Road for the purpose of installing a storm drain outfall, the Township is required to address the encroachment of Gulph Creek at that property;

WHEREAS, severe weather conditions have compromised an existing retaining wall intended to address that encroachment; and

WHEREAS, a bank stabilization project has been designed to address the current encroachment.

NOW, THEREFORE, be it *RESOLVED* by the Board of Commissioners of Radnor Township does hereby Authorize the Engineering Department to Receive Sealed Bids for the Construction of the Gulph Creek (at 210 Gulph Creek Road) Bank Restoration Project.

SO RESOLVED this 18th day of October, A.D., 2021.

RADNOR TOWNSHIP

By: _____
Name: Jack Larkin
Title: President

ATTEST: _____
William M. White
Manager/Secretary

Radnor Township

PROPOSED LEGISLATION

DATE: October 12, 2021
TO: Radnor Township Board of Commissioners
FROM: Dennis P. Capella, Engineering Project Manager
CC: William M. White, Township Manager
Stephen F. Norcini, P.E., Township Engineer

LEGISLATION: Resolution No. 2021-xxx: Authorizing the Engineering Department to Receive Sealed Bids for the Construction of the Gulph Creek (at 210 Gulph Creek Road) Bank Restoration Project

LEGISLATIVE HISTORY: The Township has an Easement Agreement, dated November 7, 1957 (attached), to install a storm drain outfall on the property at 210 Gulph Creek Road and to “to take such steps as may be necessary by the erection of a retaining wall or otherwise to prevent encroachment of Gulph Creek” on that property. The installation of the retaining wall became necessary, and, in 2012, the Board of Commissioners authorized the advertisement of sealed bids. Severe weather has since compromised the original retaining wall and required further improvements. The Board approved the contract to design the Gulph Creek bank stabilization project in August 2020 (Resolution No. 2020-82).

PURPOSE AND EXPLANATION: In order to stabilize the stream bank, an extension of the current riprap is needed and an existing redi-rock wall will be extended 12-15 feet to the common property boundary with 220 Gulph Creek Road (plans attached).

IMPLEMENTATION SCHEDULE: Pending Board of Commissioners’ approval, the project will be advertised for sealed bids. A subsequent contract award recommendation will be presented to the Board of Commissioners.

FISCAL IMPACT: The project cost is estimated at \$50,000, including a contingency, and will be funded by the Stormwater Fund.

RECOMMENDED ACTION: *Staff respectfully requests the Board of Commissioners of Radnor Township to Authorize the Engineering Department to Receive Sealed Bids for the Construction of the Gulph Creek (at 210 Gulph Creek Road) Bank Restoration Project.*



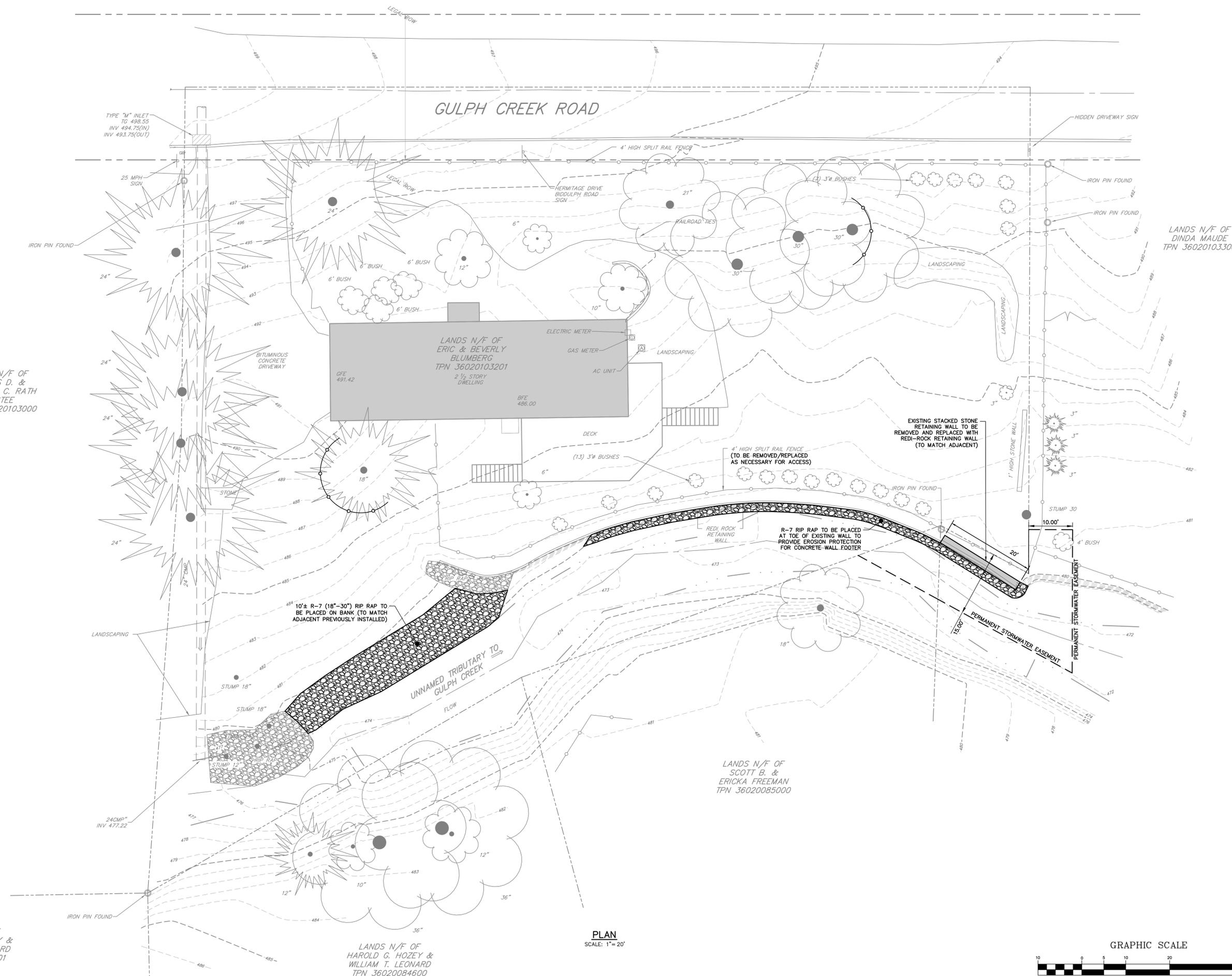
Carroll Engineering Corporation

CORPORATE OFFICE
949 EASTON ROAD
WARRINGTON, PA 18976
PHONE: 215.343.5700
FAX: 215.343.0875

630 Freedom Business Ctr., 3rd Fl. 105 Raider Boulevard, Suite 206
King of Prussia, PA 19386 Hillborough, NJ 08844
Phone: 610-489-5100 Fax: 908-874-7500
Phone: 484-875-3075 Fax: 908-874-5122

101 Lindenwood Drive, Suite 225
Malvern, PA 19355
Phone: 484-875-3075

www.carrollengineering.com



LANDS N/F OF
THOMAS D. &
CHRISTINE C. RATH
TRUSTEE
TPN 36020103000

LANDS N/F OF
ERIC & BEVERLY
BLUMBERG
TPN 36020103201
2 1/2 STORY
DRELLING

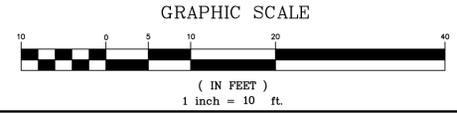
LANDS N/F OF
DINDA MAUDE
TPN 36020103300

LANDS N/F OF
SCOTT B. &
ERICKA FREEMAN
TPN 36020085000

LANDS N/F OF
HAROLD G. HOZEY &
WILLIAM T. LEONARD
TPN 36020084501

LANDS N/F OF
HAROLD G. HOZEY &
WILLIAM T. LEONARD
TPN 36020084600

PLAN
SCALE: 1" = 20'



SITE PLAN
210 GULPH CREEK ROAD
STREAM BANK REHABILITATION
SITUATED IN
RADNOR TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA
PREPARED FOR
RADNOR TOWNSHIP
301 IVEN AVENUE
WAYNE, PENNSYLVANIA 19087-5297

NO.	DATE	DESCRIPTION	INITIALS

DATE 9-17-20
 CADD FILE 201756003
 JOB NO 20-1756.00
 DSG BY CAP
 DWN BY TSB
 CKD BY WNM
 SCALE 1"=10'

SHEET 3 OF 6 SHEETS
 DRAWING NUMBER
C-101

\\carroll\file\new\formal\sub\201756_00\CADD\Drawings\201756003.dwg Jan 14, 2021 11:46am operation Erat

210 Gulph Creek

RIGHT OF WAY
1957
Nov.
7th

DEED BOOK 1924 page 165.
Miriam C. Daugherty, widow

and

the Township of Radnor

Cons. \$1.00

The said Grantor does grant, bargain and sell unto the said Grantee, its successors and assigns, the free and uninterrupted right, use, livery and privilege to install, maintain, renew and replace at its sole cost, a 24" storm drain pipe of suitable construction for the discharge of surface water from Cricket Lane into Gulph Creek, together with the right to pass over and use the surface land over and adjacent thereto for the purpose of installing, maintaining, renewing and replacing said pipe as may be necessary or appropriate to facilitate such discharge of surface water to said stream, the center line of said strip of land over and through which said privilege is granted being described as follows:-

BEGINNING at a point in the middle of Gulph Creek Road at the distance of 1211.99' Southwest from the middle of Biddulph Road to a point, the place of beginning; thence crossing the land of Miriam C. Daugherty South 30° 12' East 185' more or less, ending at Gulph Creek.

Together with the free ingress, egress and regress to and for the said Grantor, its successors and assigns, its workmen, servants, agents, employees and contractors, at all convenient times and seasons, for the purpose of constructing, cleansing, maintaining, improving, installing and renewing the above mentioned storm water sewer.

To have and To hold all and singular the premises, rights and privileges hereby granted, or mentioned or intended so to be, with the appurtenances, unto the said Grantee, its successors and assigns, to and for the only proper use and behoof of the said Grantee, its successors and assigns, forever.

And the said Grantee does hereby covenant and agree that it, the said Grantee, its successors and assigns, shall and will at its own sole cost and expense, whenever, by the exercise of the rights and privileges hereunto granted to it, the lands, structures, trees or shrubbery of the Grantors, or any of them, shall have been excavated, penetrated or disturbed, restore such lands, structures, trees or shrubbery as nearly as may be reasonably possible to the conditions thereof obtaining before such excavation, penetration or similar disturbance.

And the said Grantee does further covenant and agree that said storm water drain shall be constructed at such depth that it will not interfere with the free use of the surface of the ground.

And the said Grantee does hereby covenant and agree to indemnify and to save harmless the aforesaid Grantors from any claim for damages arising out of the diversion of the water and increasing the size and flow of Gulph Creek by discharge of storm water from the aforementioned storm water sewer.

And the said Grantee does hereby covenant and agree that it will, at its sole cost and expense, take such steps as may be necessary by the erection of a retaining wall or otherwise to prevent the encroachment of Gulph Creek upon land of the above named Grantors resulting from the discharge of the water into Gulph Creek from the aforementioned storm water sewer.

And the said Grantee does hereby covenant and agree that the covenants and agreements of the Grantee herein above contained shall run to and enure to the benefit of the heirs, executors, administrators and assigns of the Grantor.

ACK. Nov. 7, 1957
REC'D Nov. 29, 1957
DEED BOOK 1924 page 165

**RESOLUTION OF RADNOR TOWNSHIP RESOLUTION NO. 2021- 117
SELECTION OF PRIMARY AND ALTERNATE
SEWAGE ENFORCEMENT OFFICER
FOR CALENDAR YEAR 2021**

RESOLUTION OF THE Board of COMMISSIONERS OF RADNOR TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA (hereinafter “the municipality”).

WHEREAS Section 8 of the Act of January 24, 1966, P.L. 1535, No. 537, known as the “Pennsylvania Sewage Facilities Act”, as Amended, and the rules and Regulations of the Pennsylvania Department of Environmental Protection (Department) adopted thereunder, Chapter 72 of Title 25 of the Pennsylvania Code require the municipality to employ an adequate number of sewage enforcement officers or contract with individuals, firms, or corporations to adequately perform the services of sewage enforcement officers to administer the provision of Section 7 of the Pennsylvania Sewage Facilities Act, and

WHEREAS Section 8 of the Pennsylvania Sewage Facilities Act requires that the municipality have at least one alternate sewage enforcement officer as authorized by the local agency to work in the municipality or municipalities of the local agency, and

WHEREAS Section 8 of the Pennsylvania Sewage Facilities Act requires that the municipality adopt by resolution a list of individuals who are sewage enforcement officers employed by companies or corporations under contract with the local agency to perform the services of sewage enforcement officers.

NOW, THEREFORE, BE IT RESOLVED that the TOWNSHIP BOARD OF COMMISSIONERS hereby adopt and submit to the Department, the name, address, and phone number of the primary and alternate sewage enforcement officers for Radnor TOWNSHIP for the calendar year 2021:

	Primary SEO	Alternate SEO
Name	Douglas Meder	James C. Bevan
Mailing Address	301 Iven Avenue, Wayne PA 1087	1000 Palmers Mill Road, Media PA 19063
Phone Number	610-721-3291	610-356-9550
Email Address	dmeder@radnor.org	jbevan@hemenginc.com

I, Jack Larkin, President, Board of Commissioners of RADNOR TOWNSHIP
 _____ certify that the foregoing is a true copy of RADNOR
 TOWNSHIP Resolution #2021-117, adopted October 18th, 2021

Seal of
Governing Body

Radnor Township

PROPOSED LEGISLATION

DATE: October 11, 2021

TO: Radnor Township Board of Commissioners

FROM: Stephen F. Norcini, P.E., Township Engineer

CC: William M. White, Township Manager

LEGISLATION: Resolution #2021-117: Appointing Douglas Meder, SEO as Primary Sewage Enforcement Officer and James Bevin, SEO [Herbert E. MacCombie Jr., PE, Consulting Engineers] as Alternate Sewage Enforcement Officer

LEGISLATIVE HISTORY: This topic has not been before the Board of Commissioners previously.

PURPOSE AND EXPLANATION: The Department of Environmental Protection (DEP) requires the Township to officially appoint a Sewage Enforcement Officer (SEO) and Alternate Sewage Enforcement Officer. The duty of the SEO is to inspect onsite sanitary sewer systems in accordance with DEP regulations. Doug Meder has been our SEO for many years, as well as our in-house engineering inspector. James Bevin, SEO, is an employee of Herbert E. MacCombie Jr., PE, Consulting Engineers and will act as our alternate, third-party SEO, if needed in the event of Doug's absence.

IMPLEMENTATION SCHEDULE: Pending Commissioners approval, the appointment will be effective immediately.

FISCAL IMPACT: There is no fiscal impact anticipated; should Doug Meder be unavailable for SEO duties, James Bevin's rates are \$85/HR, which would be pass through costs.

RECOMMENDED ACTION: *I respectfully request the Board of Commissioners appoint Douglas Meder, SEO as Primary Sewage Enforcement Officer and James Bevin, SEO [Herbert E. MacCombie Jr., PE, Consulting Engineers] as Alternate Sewage Enforcement Officer.*

MARY C. EBERLE
JOHN B. RICE
DIANNE C. MAGEE *
DALE EDWARD CAYA
DAVID P. CARO ♦
DANIEL J. PACI ♦ †
JONATHAN J. REISS ♦
GREGORY E. GRIM †
PETER NELSON *
PATRICK M. ARMSTRONG
KELLY L. EBERLE *
JOEL STEINMAN
MATTHEW E. HOOVER
COLBY S. GRIM
MICHAEL K. MARTIN
MITCHELL H. BAYLARIAN
WILLIAM D. OETINGER
FRANK N. D'AMORE, III

* ALSO ADMITTED IN NEW JERSEY
♦ ALSO ADMITTED IN NEW YORK
† MASTERS IN TAXATION
♦ ALSO A CERTIFIED PUBLIC ACCOUNTANT

LAW OFFICES
GRIM, BIEHN & THATCHER

A PROFESSIONAL CORPORATION

SUCCESSOR TO
GRIM & GRIM AND BIEHN & THATCHER
ESTABLISHED 1895 AND 1956,
RESPECTIVELY
126TH ANNIVERSARY 1895-2021

www.grimlaw.com

John B. Rice
e-mail: jrice@grimlaw.com

J. LAWRENCE GRIM, JR., OF COUNSEL
JOHN FREDERIC GRIM, OF COUNSEL

104 S. SIXTH STREET
P.O. BOX 215
PERKASIE, PA. 18944-0215
(215) 257-6811
FAX (215) 257-5374

(215) 536-1200
FAX (215) 538-9588

(215) 348-2199
FAX (215) 348-2520

September 29, 2021

Delaware County Law Library
Delaware County Courthouse
201 W. Front Street
Media, PA 19063

Re: Radnor Township – Rezoning Ordinance

Dear Sir/Madam:

Enclosed for filing with the Delaware County Law Library, please find a true and correct copy of a proposed Ordinance which the Radnor Township Board of Commissioners will consider for possible adoption after a public hearing on October 18, 2021. Please keep the enclosed Ordinance available for public inspection and/or photocopying through the hearing date.

Sincerely,

GRIM, BIEHN & THATCHER

By: 

John B. Rice

JBR/hlp
Enclosure

cc: Bill White, Township Manager (w/encl.) – via email
Kevin Kochanski (w/encl.) – via email
Peggy Hagan (w/encl.) – via email
David Falcone, Esquire (w/encl.) – via email

ORDINANCE NO. 2021- 09

**AN ORDINANCE OF RADNOR TOWNSHIP, DELAWARE COUNTY,
PENNSYLVANIA, REZONING DELAWARE COUNTY TAX MAP
PARCEL NO. 36-02-0097810 FROM PI - PLANNED INSTITUTIONAL TO
R-2 RESIDENCE**

The Board of Commissioners of the Township of Radnor does hereby ENACT and ORDAIN the following amendment to the Zoning Map of Radnor Township as follows:

SECTION 1. Section 280-6 (entitled “Zoning Map”) and the Zoning Map of Radnor Township, which is adopted as part of the Radnor Township Zoning Ordinance, is hereby revised to rezone Delaware County Tax Parcel No. 36-02-0097810, from PI - Planned Institutional District to R-2 Residence District. This tax parcel consists of 19.530 acres as depicted on the zoning map attached hereto as **Exhibit “A”**.

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 _____, 2021.

ATTEST:

BOARD OF COMMISSIONERS,
RADNOR TOWNSHIP

William White, Secretary

BY: _____
Name: Jack Larkin
Title: President

**RESOLUTION NO. 2021-99
RADNOR TOWNSHIP**

**A RESOLUTION OF RADNOR TOWNSHIP, DELAWARE COUNTY,
PENNSYLVANIA, APPROVING THE PRELIMINARY/FINAL LAND
DEVELOPMENT PLAN FOR CG WAYNE, LLC FOR THE
PROPERTY LOCATED AT EAGLE ROAD AND RADNOR ROAD**

WHEREAS, GC Wayne, LLC (“Applicant”) submitted a Preliminary/Final Land Development plan prepared by Site Engineering Concepts, LLC consisting of eighteen (18) sheets, dated September 15, 2020, last revised September 16, 2021 (the “Plan”); and

WHEREAS, the Plan has been reviewed by both the Radnor Township Planning Commission and the Delaware County Planning Commission; and

WHEREAS, the Applicant proposes to construct 18 new single family homes on Tax Parcel 36-02-0097810, consisting of 19.530 acres (the “Property”) bounded by Eagle Road, Radnor Street Road and Walnut Avenue; and

WHEREAS, the Board of Commissioners now intends to approve the Preliminary/Final Land Development Plans for CG Wayne, LLC, subject to certain terms and conditions.

NOW, THEREFORE, it is hereby **RESOLVED** that the Radnor Township Board of Commissioners does hereby approve the Preliminary/Final Land Development Plans for CG Wayne, LLC, prepared by Site Engineering Concepts, LLC consisting of eighteen (18) sheets, dated September 15, 2020, last revised September 16, 2021, subject to the following conditions:

1. The Applicant shall comply with the October 5, 2021, Gannett Fleming review letter, a copy of which is attached hereto as *Exhibit “A”*.
2. The Applicant shall comply with the October 8, 2021, Gilmore & Associates, Inc. review letter, a copy of which is attached hereto as *Exhibit “B”*, including construction of the pedestrian walkways as noted in Paragraphs C, 1., 2., and 3. and Paragraph F. 2. of the review letter. Additionally, the Applicant shall provide a right of way easement to the Township along the Property’s Radnor Street Road and Eagle Road frontages.
3. The Applicant shall comply with all other applicable ordinances with respect to sewage, stormwater management, zoning and building, and all county, state, and federal rules, regulations, and statutes. Additionally, this approval is subject to final approval of the Zoning Map change of the Property from PI-Planned Institutional District to R-2 Residence District.
4. The Applicant shall execute Development and Financial Security Agreements in a form and manner to be approved by the Township Solicitor. Park and recreation fees shall be paid in the amount of \$3,307.00 for each of the eighteen (18) dwelling units contemporaneously with execution of Development Agreements.

In addition to the foregoing conditions of the Preliminary/Final Land Development Plan approval, the following Subdivision and Land Development Ordinance waivers are granted provided that no more than eighteen single family dwellings are constructed on the Property:

- a. Section 255-12.A – to permit the land development application to proceed and be reviewed as a preliminary/final land development plan.

 X Approved _____ Denied

- b. Section 255-21.B (1)(n) – from providing man-made features within 500 feet of the site.

 X Approved _____ Denied

SO RESOLVED, at a duly convened meeting of the Board of Commissioners of Radnor Township conducted on this _____ day of _____, 2021.

RADNOR TOWNSHIP BOARD OF COMMISSIONERS

By: _____

Name: Jack Larkin

Title: President

ATTEST: _____



Excellence Delivered As Promised

Date: October 5, 2021

To: Steve Norcini, PE Township Engineer

From: Roger Phillips, PE

cc: Kevin W. Kochanski, RLA, CZO – Director of Community Development
John Rice, Esq. – Grim, Biehn, and Thatcher
Damon Drummond, PE – Gilmore & Associates, Inc.
Patricia Sherwin – Radnor Township Engineering Department

RE: Eagle and Radnor Roads

Date Accepted: 10/06/2020
90 Day Review: 01/04/2021 extended to 10/29/2021

Gannett Fleming, Inc. has completed a review of the Preliminary Land Development Plan for the above referenced project for compliance with the Radnor Township Code. We have reviewed the plans based on a proposed zoning map revision that would convert this Parcel to R-2 from the current zoning designation of R-1 and PI. The map revision must be approved by the Board of Commissioners prior to this plan moving forward in the approval process. The applicant is proposing to construct 18 single family homes on individual lots. The Plan was reviewed for conformance with Subdivision and Land Development, Zoning and other applicable codes of the Township of Radnor.

The applicant has indicated in a January 15, 2021 letter that the following waivers are being requested:

1. §255-12.A – To permit the land development application to proceed and be reviewed as a single preliminary/final land development plan.
2. §255-21.B(1)(n) – Existing principal buildings (and their respective uses) and driveways on the adjacent peripheral strip. Sewer lines, storm drains, culverts, bridges, utility easements, quarries, railroads and other significant man-made features within 500 feet of and within the site (this includes properties across streets) must be shown on the plans. A partial waiver is being requested to not provide the items which are not visible on aerial imagery (sewer lines, storm drains, easements, etc.)

The applicant appeared before the Zoning Hearing Board April 15, 2021 and May 20, 2021. The applicant has requested a variance from the following:

Gannett Fleming, Inc.

Valley Forge Corporate Center • 1010 Adams Avenue • Audubon, PA 19403-2402
t: 610.650.8101 • f: 610.650.8190
www.gannettfleming.com

Exhibit "A"

1. §280-112 – To permit disturbance of man-made steep slopes and such other relief as deemed necessary by the board.

On June 26, 2021 the applicant received the attached Zoning Relief.

Eagle and Radnor Roads

Plans Prepared By: Site Engineering Concepts, LLC

Dated: 09/15/2020 and last revised 09/16/2021

Sewage Facilities Planning

1. Final plan approval will not be granted until Planning Approval or a Planning Exemption is received from the PA DEP. The applicant has submitted the planning module application to the Township on September 7, 2021 for review and comments were transmitted to the Engineer on September 28, 2021.

Zoning

1. §280-112 – The applicant has received zoning relief as outlined in the attached zoning order. The man-made slopes that relief was granted from must be shown on the plans as such. The applicant has provided a not with the zoning relief on sheet 4. This should be revised to be shown on the record plan that will be recorded.
2. The percentage of impervious coverage for lots 11, 12 and 17 must be verified.

Subdivision and Land Development

1. §255-20-B(1)(n) – Existing principal buildings (and their respective uses) and driveways on the adjacent peripheral strip. Sewer lines, storm drains, culverts, bridges, utility easements, quarries, railroads and other significant man-made features within 500 feet of and within the site (this includes properties across streets) must be shown on the plans. The applicant has requested a partial waiver from this requirement.
2. §255.27.C(4) – When a subdivision abuts or contains an existing street of inadequate right-of-way width, the Board of Commissioners may require the reservation or dedication of rights-of-way to conform with the required standards. Radnor Street Road is a Minor Collector, with a right-of-way requirement is 60 feet. The applicant has indicated on the plans that the existing right-of-way is 33 feet. Walnut Avenue is a local Road, with a right-of-way requirement is 60 feet. The applicant has indicated on the plans that the existing right-of-way is 50 feet. A 25-foot half right-of-way from the existing cartway centerline

is being provided along Radnor Street Road. The existing Walnut Ave right-of-way is currently sufficient for the type and usage of roadway.

3. §255-43.1.B(1) – For all residential subdivisions or land developments involving a total of four or more lots and/or dwelling units, a minimum of 1,440 square feet or suitable park and recreation land shall be provided per dwelling unit within such subdivision/land development, unless the developer agrees to a fee in lieu of \$3,307 per dwelling unit (existing or proposed).
4. §255-49 – Where appropriate, the developer shall install or cause to be installed, at the developer’s expense, metal or fiberglass pole streetlights serviced by underground conduit in accordance with a plan to be prepared by the developer’s engineer and approved by the Board of Commissioners. Three streetlights are being provided.
5. §255-54.B – The central water system should be designed with adequate capacity and appropriately spaced fire hydrants for fire-fighting purposes pursuant to the specification of the National Fire Protection Association. Review and approval by the Township Engineer and the Township Fire Marshall shall be required in order to ensure that adequate fire protection is provided. A fire hydrant is being provided at the end of the cul-de-sac per discussions with the fire department. The applicant is preparing a water extension plan for review and approval by Aqua and Township.

Stormwater

1. The drainage boundary for the Pre-Development area on Sheet 14 of the plan set appears to have been turned off for Lot 18 and some other areas. Please revise the plans to show all drainage boundaries.
2. The Post-Bypass Total hydrograph in the stormwater report indicates a drainage area of 5.036 ac but the Post-Construction drainage area plan on Sheet 15 of the plan set appears to indicate a Post-Dev Bypass area of ~5.39 ac. The post-construction drainage area map shows some areas that contain drainage boundaries but no hatch, and some areas that contain a hatch but no drainage boundaries. Please revise this inconsistency and ensure that the drainage boundaries and hatches are consistent.
3. It appears that there are several inconsistencies between the Beechtree Storm Main Profile on Sheet 9 of the plan set and the Utility Plan on Sheet 11 of the plan set. Please address the following:
 - a. The profile shows Lot 12 water service ~15’ before PO11 but the Utility Plan appears to show PO11 just before the Lot 12 water service.

- b. The profile shows utility crossings of PP-R1C in sequence as Lot 16/17 Water, Lot 12 Sanitary, and Lot 16 Sanitary, but the Utility Plan appears to show Lot 12 Sanitary, Lot 16/17 Water, Lot 16 Sanitary, and Lot 17 Sanitary.
 - c. The Utility Plan shows PP-R4 crossing an existing sanitary main but it is not shown on the profile.
4. The Mid-Lot Storm Main Profile on Sheet 9 of the plan set indicates a sewer main crossing PP9, but there appears to be less than 18" of vertical clearance between the two pipes. Please revise the profile to provide at least 18" of vertical clearance.
5. The Beechtree Storm Main and Mid-Lot Storm Main profiles show portions of pipes upstream of the outfalls as having no cover. It is not recommended to propose a pipe with no cover.
6. The plans now show infiltration bed PIB-2 with an irregular shaped footprint that is inconsistent with the dimensions shown on Sheet 8 of the plan set. Please revise this inconsistency.
7. Final approval of the stormwater management plan will be required as part of the Grading Permit process. Any revisions to the size or location of the individual structures or other features will be addressed at that time.

Sanitary Sewer

1. The lateral for Lot 10 shall be relocated to not encroach on Lot 9. The lateral appears to be located on Lot 9 prior to the existing sanitary sewer easement. This must be revised.

General

1. The applicant has indicated that all retaining walls will be less than 4 feet high. Any revisions to the size or locations of the individual structures will be addressed with the grading permits.
2. The applicant appeared before the Shade Tree Commission on June 16, 2021 and was granted approval.

The applicant appeared before the Planning Commission on August 2, 2021. The Planning Commission recommended approval of the plan and requested waivers.

If you have any questions or require any additional information, please contact me.

Very truly yours,

GANNETT FLEMING, INC.

A handwritten signature in black ink, appearing to be 'R. Phillips', enclosed within a large, loopy circular flourish.

Roger A. Phillips, P.E.
Senior Project Manager

RADNOR TOWNSHIP ZONING HEARING BOARD

APPEAL NO. 3093

CG Wayne , LLC (“Applicants”), premises located at Eagle Road and Radnor Street Road (“Premises”) and zoned Planned Institutional (“PI”).

DECISION OF THE ZONING HEARING BOARD

Relief Requested

1. The applicant seeks to improve and disturb certain steep slopes to allow for the construction of 18 new dwellings designed under the R-1(A) provisions of the Code. (“Steep Slope Disturbance”).

2. To permit the Steep Slope Disturbance the applicant requests relief from Section 280-112 that prohibits the disturbance of steep slopes.

Findings of Fact

1. This application involves the premises located at Eagle Road and Radnor Street Road and zoned PI (“Premises”).

2. Testimony and evidence on this application were presented at the properly noticed hearings held on April 15, 2021 and May 20, 2021.

3. Applicant’s Exhibits A-1 through A-12 were entered into the record at the May 20, 2021 hearing. (May 20, 2021 Hearing Transcript, 33:11 - 34:12).

4. The Premises contains several steep slopes dispersed throughout the property. (April 15, 2021 Hearing Transcript, 27:21 – 34:12; Exh. A-5, A-3, A-6, & A-7).

5. The existing slopes on the premises were manmade and predate the permitting requirements of Chapter 175 of the Township’s Code. (4/15/21 Tr., 42:13 – 43:2).

6. The existing structures and large parking lot located on the Premises do not have any stormwater controls. (4/15/21 Tr., 43:17-19).

7. The applicant’s proposed development has less impervious coverage than currently exists on the Premises. (4/15/21 Tr., 44:7-8).

8. The existing manmade slopes present an undue hardship to any future development of the Premises. (4/15/21 Tr., 53:9-21, 54:3-9).

9. The applicant’s Steep Slope Disturbance will limit erosion, sedimentation, and stormwater runoff, and protect the existing watersheds. (4/15/21 Tr., 50:19 – 52:1).

10. The Township's letter of support for this application was entered into the record at the April 15, 2021 hearing. (4/15/21 Tr., 100:11-14).

Conclusions of Law

1. The unique physical conditions of the Premises, including the age of the manmade slopes, present an unnecessary hardship to its use.
2. A variance is necessary to allow the applicant to reasonably overcome the unnecessary hardship and to enable the reasonable use of the Premises.
3. The granting of the requested relief will significantly reduce the existing impervious coverage and will improve the stormwater controls.
4. The unnecessary hardship was not created by the applicant. (4/15/21 Tr., 54:10-12).
5. The granting of the requested variance will not alter the essential character of the neighborhood nor substantially or permanently impair the appropriate use of adjacent properties.
6. The granting of the requested variance will represent the minimum deviation necessary to afford relief and will represent the least possible modification of the Zoning Ordinance. (4/15/21 Tr., 57:2-8).
7. The granting of the requested variance will in no way be injurious to the public health, safety, morals and general welfare of the Township.
8. The granting of the requested variance is necessary to implement the purposes of the Municipal Planning Code and the Zoning Ordinance.

Order

Based on the testimony and exhibits entered into and made part of the record before the Board, and for the reasons set forth on the record, the applicant's request is hereby **GRANTED**. The Board hereby determines that:

1. Variance relief from the requirements of Zoning Code Section 280-112 is hereby **GRANTED** to permit the Steep Slope Disturbances in the precise location and extent shown on the plans and specifications contained in Exhibit A-12 that was entered into and made part of the record, and otherwise as described in the testimony and exhibits entered into and made part of the record, to the extent consistent with Exhibit A-12;
2. Relief is granted only with respect to Zoning Code Section 280-112; and
3. No relief is granted with respect to any other provisions of the Zoning Code.

BY ORDER OF THE ZONING HEARING BOARD

/s/ JOHN F. REILLY, CHAIRMAN

/s/ RICHARD WEITZMAN, MEMBER

/s/ JOHN A. LORD, MEMBER

/s/ JAMIE B. FORMAN, ALTERNATE

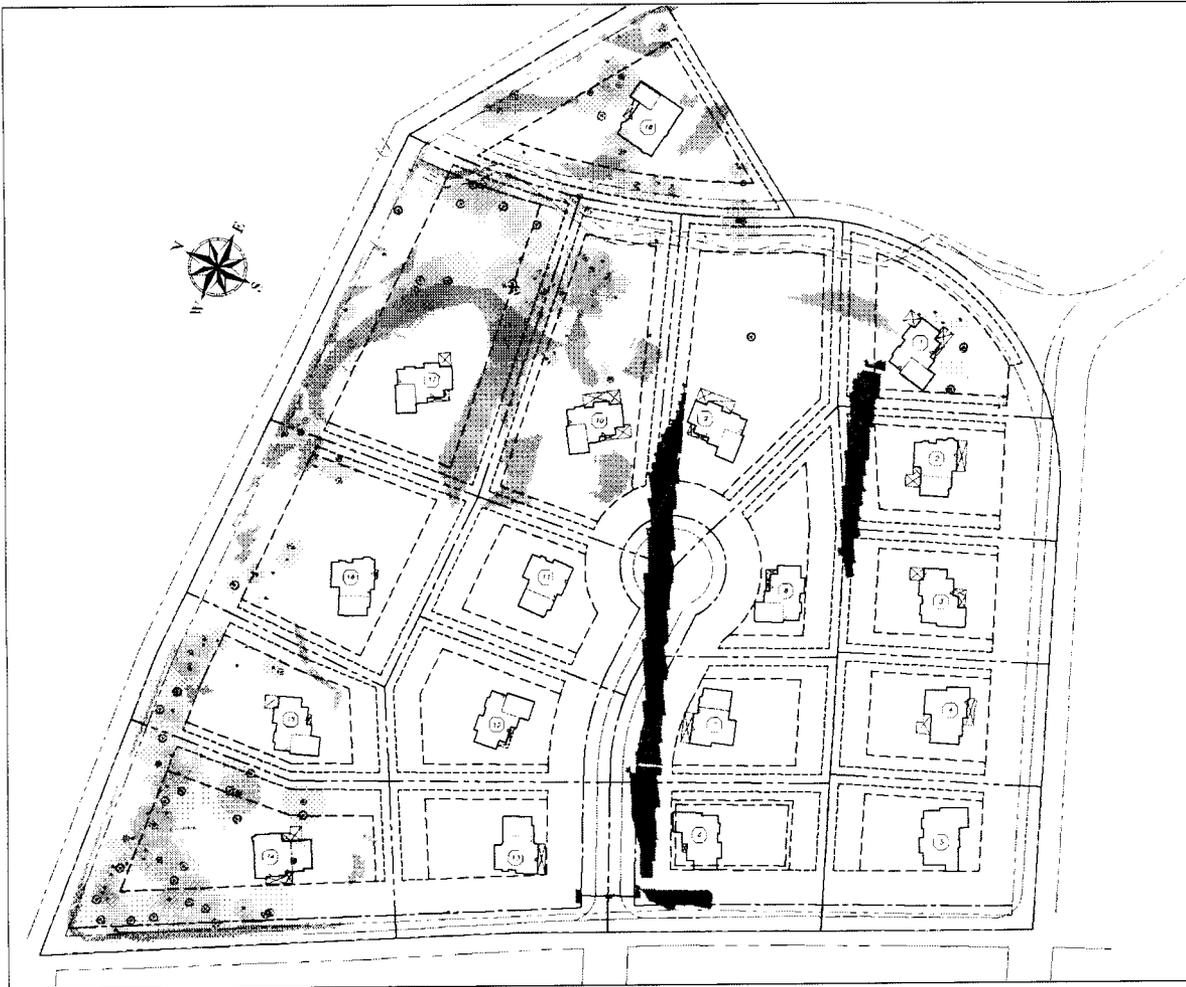
/s/ JOHN NAGLE, ALTERNATE

DATED: May 20, 2021

MAILED: June 26, 2021

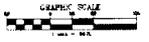
Vice Chairman George F. Nagle was present and abstained from this appeal. Board Member, Bradley Delizia was absent during the April 15, 2021 hearing. Board Member, Bradley Delizia was present at but did not participate in the May 20, 2021 hearing.

THIS DECISION WILL EXPIRE IF THE APPLICANTS FAIL TO OBTAIN A BUILDING PERMIT WITHIN SIX MONTHS OF THIS DATE: June 26, 2021.



PROPOSED LOTS			
LOT	AREA - ACRES	PERCENTAGE OF TOTAL AREA	PROPOSED USE
1	0.12	0.67%	RESIDENTIAL
2	0.15	0.83%	RESIDENTIAL
3	0.18	1.00%	RESIDENTIAL
4	0.21	1.17%	RESIDENTIAL
5	0.24	1.33%	RESIDENTIAL
6	0.27	1.50%	RESIDENTIAL
7	0.30	1.67%	RESIDENTIAL
8	0.33	1.83%	RESIDENTIAL
9	0.36	2.00%	RESIDENTIAL
10	0.39	2.17%	RESIDENTIAL
11	0.42	2.33%	RESIDENTIAL
12	0.45	2.50%	RESIDENTIAL
13	0.48	2.67%	RESIDENTIAL
14	0.51	2.83%	RESIDENTIAL
15	0.54	3.00%	RESIDENTIAL
16	0.57	3.17%	RESIDENTIAL
17	0.60	3.33%	RESIDENTIAL
18	0.63	3.50%	RESIDENTIAL

- - - - - EXISTING DRIVE TO FRONT
 - - - - - EXISTING DRIVE TO REAR
 - - - - - EXISTING DRIVE TO SIDE
 - - - - - EXISTING DRIVE TO ALLEY



SITE ENGINEERING CONCEPTS, LLC P.O. BOX 1992 SOUTHEASTERN, PA 19089 P. 610-263-2429 F. 610-263-2428 E. SA@SITEENGINEERING.COM 1001 BROADWAY, SUITE 1000 PHILADELPHIA, PA 19102	
CG MAINE, LLC EAGLE ROAD AND RADNOR STREET ROAD RADNOR, PA	
PROJECT NO. 18-01 SHEET NO. 1 OF 1	DATE: 08/15/18 DRAWN BY: J. J. JONES CHECKED BY: J. J. JONES APPROVED BY: J. J. JONES



GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

MEMORANDUM

Date: October 8, 2021

To: Steve Norcini, P.E.

From: Damon Drummond, P.E., PTOE

cc: Roger Phillips, P.E.
Leslie Salisbury, P.E.

Reference: CG Wayne, LLC - Eagle & Radnor Roads
Radnor Township, Delaware County
Transportation Review 6
G&A #20-10023

Our transportation review is complete for the Preliminary/Final Subdivision and Land Development plans prepared for Eagle & Radnor Street Roads. We offer the following comments for your consideration:

A. PROJECT DESCRIPTION

The Applicant, CG Wayne, LLC, is proposing a development consisting of 18 new single-family homes on a site bounded by Eagle Road, Radnor Street Road and Walnut Avenue. The main driveway will take access to Radnor Street Road opposite Beechtree Lane. There are several individual residences that will take direct access to either Eagle Road, Radnor Street Road or Walnut Avenue.

B. DOCUMENTS REVIEWED

1. Preliminary/Final Subdivision and Land Development Plans prepared by Site Engineering Concepts, LLC, prepared for CG Wayne, LLC, consisting of 18 sheets, dated September 15, 2020 and last revised September 16, 2021.
2. Traffic Response Letter prepared by Site Engineering Concepts, LLC, dated September 16, 2021.

C. TRANSPORTATION IMPROVEMENTS PROPOSED

1. The applicant will install a pedestrian walkway along Radnor Street Road and Walnut Avenue.
2. The applicant will widen the existing walkway along Radnor Street Road to Eagle Road.

3. The applicant will install a pedestrian walkway along Chamounix Road from the property to Paul Road. A pedestrian bridge is proposed crossing the creek along Chamounix Road.
4. The applicant will provide an easement at the intersection of Radnor Street Road and Eagle Road to allow for potential future construction activities.

D. WAIVERS REQUESTED

1. §255-12.A – To permit the land development application to proceed and be reviewed as a single preliminary/final land development plan.
2. §255-21.B(1)(n) – From providing man-made features within 500 feet of the site.

E. SUBDIVISION AND LAND DEVELOPMENT ORDINANCE COMMENTS

1. §255-28.B – The minimum stopping sight distance for a major collector (Eagle Road) is 275 feet. The plans indicate a sight distance of 202 and 256 feet at the Lot 18 driveway along Eagle Road. The plans shall be revised to indicate the required sight distance. If the Applicant is able to meet the Township minimum sight distance requirements; the plans should also include the PennDOT required sight distance and appropriate calculations. In addition, the sight line profile shown on Sheet 14 (looking right) should be revised to align with the proposed sight distance of 256 feet and to provide a minimum clearance of 6 inches over any given point of the roadway. The driveway sight distance will also be reviewed by PennDOT during the HOP process.

F. GENERAL TRANSPORTATION COMMENTS:

1. As a reminder, PennDOT will require a Highway Occupancy Permit (HOP) for the driveway access to Eagle Road (S.R. 1042) from Lot 18. The Township requests the opportunity to review all HOP plan submissions to PennDOT, as well as be given the opportunity to attend all meetings with PennDOT and copied on all correspondence regarding the same. **The applicant acknowledges and indicates the Township will be included in discussions and submissions to PennDOT.**
2. The applicant has offered to extend the Walnut Lane sidewalk to Paul Road provided adequate right-of-way exists or can be obtained by Radnor Township. A draft sketch has been provided. **The applicant is continuing to work with the Township to install the noted sidewalk improvements.**
3. Sheet 10, the ramp cross slope for the Beechtree Lane ADA Ramp on the Northeast Corner of Radnor Street Road exceeds the maximum of 2% along the depressed curb. Revise the spot elevations accordingly.



*Excellence Delivered **As Promised***

Date: October 5, 2021

To: Steve Norcini, PE Township Engineer

From: Roger Phillips, PE

cc: Kevin W. Kochanski, RLA, CZO – Director of Community Development
John Rice, Esq. – Grim, Biehn, and Thatcher
Damon Drummond, PE – Gilmore & Associates, Inc.
Patricia Sherwin – Radnor Township Engineering Department

RE: Eagle and Radnor Roads

Date Accepted: 10/06/2020
90 Day Review: 01/04/2021 extended to 10/29/2021

Gannett Fleming, Inc. has completed a review of the Preliminary Land Development Plan for the above referenced project for compliance with the Radnor Township Code. We have reviewed the plans based on a proposed zoning map revision that would convert this Parcel to R-2 from the current zoning designation of R-1 and PI. The map revision must be approved by the Board of Commissioners prior to this plan moving forward in the approval process. The applicant is proposing to construct 18 single family homes on individual lots. The Plan was reviewed for conformance with Subdivision and Land Development, Zoning and other applicable codes of the Township of Radnor.

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On June 26, 2021 the applicant received the attached Zoning Relief.

Eagle and Radnor Roads

Plans Prepared By: Site Engineering Concepts, LLC

Dated: 09/15/2020 and last revised 09/16/2021

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Subdivision and Land Development

1. §255-20-B(1)(n) – Existing principal buildings (and their respective uses) and driveways on the adjacent peripheral strip. Sewer lines, storm drains, culverts, bridges, utility easements, quarries, railroads and other significant man-made features within 500 feet of and within the site (this includes properties across streets) must be shown on the plans. The applicant has requested a partial waiver from this requirement.
2. §255.27.C(4) – When a subdivision abuts or contains an existing street of inadequate right-of-way width, the Board of Commissioners may require the reservation or dedication of rights-of-way to conform with the required standards. Radnor Street Road is a Minor Collector, with a right-of-way requirement is 60 feet. The applicant has indicated on the plans that the existing right-of-way is 33 feet. Walnut Avenue is a local Road, with a right-of-way requirement is 60 feet. The applicant has indicated on the plans that the existing right-of-way is 50 feet. A 25-foot half right-of-way from the existing cartway centerline

is being provided along Radnor Street Road. The existing Walnut Ave right-of-way is currently sufficient for the type and usage of roadway.

3. §255-43.1.B(1) – For all residential subdivisions or land developments involving a total of four or more lots and/or dwelling units, a minimum of 1,440 square feet or suitable park and recreation land shall be provided per dwelling unit within such subdivision/land development, unless the developer agrees to a fee in lieu of \$3,307 per dwelling unit (existing or proposed).
4. §255-49 – Where appropriate, the developer shall install or cause to be installed, at the developer’s expense, metal or fiberglass pole streetlights serviced by underground conduit in accordance with a plan to be prepared by the developer’s engineer and approved by the Board of Commissioners. Three streetlights are being provided.
5. §255-54.B – The central water system should be designed with adequate capacity and appropriately spaced fire hydrants for fire-fighting purposes pursuant to the specification of the National Fire Protection Association. Review and approval by the Township Engineer and the Township Fire Marshall shall be required in order to ensure that adequate fire protection is provided. A fire hydrant is being provided at the end of the cul-de-sac per discussions with the fire department. The applicant is preparing a water extension plan for review and approval by Aqua and Township.

Stormwater

1. The drainage boundary for the Pre-Development area on Sheet 14 of the plan set appears to have been turned off for Lot 18 and some other areas. Please revise the plans to show all drainage boundaries.
2. The Post-Bypass Total hydrograph in the stormwater report indicates a drainage area of 5.036 ac but the Post-Construction drainage area plan on Sheet 15 of the plan set appears to indicate a Post-Dev Bypass area of ~5.39 ac. The post-construction drainage area map shows some areas that contain drainage boundaries but no hatch, and some areas that contain a hatch but no drainage boundaries. Please revise this inconsistency and ensure that the drainage boundaries and hatches are consistent.
3. It appears that there are several inconsistencies between the Beechtree Storm Main Profile on Sheet 9 of the plan set and the Utility Plan on Sheet 11 of the plan set. Please address the following:
 - a. The profile shows Lot 12 water service ~15’ before PO11 but the Utility Plan appears to show PO11 just before the Lot 12 water service.

- b. The profile shows utility crossings of PP-R1C in sequence as Lot 16/17 Water, Lot 12 Sanitary, and Lot 16 Sanitary, but the Utility Plan appears to show Lot 12 Sanitary, Lot 16/17 Water, Lot 16 Sanitary, and Lot 17 Sanitary.
 - c. The Utility Plan shows PP-R4 crossing an existing sanitary main but it is not shown on the profile.
4. The Mid-Lot Storm Main Profile on Sheet 9 of the plan set indicates a sewer main crossing PP9, but there appears to be less than 18” of vertical clearance between the two pipes. Please revise the profile to provide at least 18” of vertical clearance.
5. The Beechtree Storm Main and Mid-Lot Storm Main profiles show portions of pipes upstream of the outfalls as having no cover. It is not recommended to propose a pipe with no cover.
6. The plans now show infiltration bed PIB-2 with an irregular shaped footprint that is inconsistent with the dimensions shown on Sheet 8 of the plan set. Please revise this inconsistency.
7. Final approval of the stormwater management plan will be required as part of the Grading Permit process. Any revisions to the size or location of the individual structures or other features will be addressed at that time.

Sanitary Sewer

1. The lateral for Lot 10 shall be relocated to not encroach on Lot 9. The lateral appears to be located on Lot 9 prior to the existing sanitary sewer easement. This must be revised.

General

1. The applicant has indicated that all retaining walls will be less than 4 feet high. Any revisions to the size or locations of the individual structures will be addressed with the grading permits.
2. The applicant appeared before the Shade Tree Commission on June 16, 2021 and was granted approval.

The applicant appeared before the Planning Commission on August 2, 2021. The Planning Commission recommended approval of the plan and requested waivers.

If you have any questions or require any additional information, please contact me.

Very truly yours,

GANNETT FLEMING, INC.

A handwritten signature in blue ink, consisting of a large, stylized 'R' followed by a horizontal line and a small flourish.

Roger A. Phillips, P.E.
Senior Project Manager

RADNOR TOWNSHIP ZONING HEARING BOARD

APPEAL NO. 3093

CG Wayne , LLC (“Applicants”), premises located at Eagle Road and Radnor Street Road (“Premises”) and zoned Planned Institutional (“PI”).

DECISION OF THE ZONING HEARING BOARD

Relief Requested

1. The applicant seeks to improve and disturb certain steep slopes to allow for the construction of 18 new dwellings designed under the R-1(A) provisions of the Code. (“Steep Slope Disturbance”).
2. To permit the Steep Slope Disturbance the applicant requests relief from Section 280-112 that prohibits the disturbance of steep slopes.

Findings of Fact

1. This application involves the premises located at Eagle Road and Radnor Street Road and zoned PI (“Premises”).
2. Testimony and evidence on this application were presented at the properly noticed hearings held on April 15, 2021 and May 20, 2021.
3. Applicant’s Exhibits A-1 through A-12 were entered into the record at the May 20, 2021 hearing. (May 20, 2021 Hearing Transcript, 33:11 - 34:12).
4. The Premises contains several steep slopes dispersed throughout the property. (April 15, 2021 Hearing Transcript, 27:21 – 34:12; Exh. A-5, A-3, A-6, & A-7).
5. The existing slopes on the premises were manmade and predate the permitting requirements of Chapter 175 of the Township’s Code. (4/15/21 Tr., 42:13 – 43:2).
6. The existing structures and large parking lot located on the Premises do not have any stormwater controls. (4/15/21 Tr., 43:17-19).
7. The applicant’s proposed development has less impervious coverage than currently exists on the Premises. (4/15/21 Tr., 44:7-8).
8. The existing manmade slopes present an undue hardship to any future development of the Premises. (4/15/21 Tr., 53:9-21, 54:3-9).
9. The applicant’s Steep Slope Disturbance will limit erosion, sedimentation, and stormwater runoff, and protect the existing watersheds. (4/15/21 Tr., 50:19 – 52:1).

10. The Township's letter of support for this application was entered into the record at the April 15, 2021 hearing. (4/15/21 Tr., 100:11-14).

Conclusions of Law

1. The unique physical conditions of the Premises, including the age of the manmade slopes, present an unnecessary hardship to its use.
2. A variance is necessary to allow the applicant to reasonably overcome the unnecessary hardship and to enable the reasonable use of the Premises.
3. The granting of the requested relief will significantly reduce the existing impervious coverage and will improve the stormwater controls.
4. The unnecessary hardship was not created by the applicant. (4/15/21 Tr., 54:10-12).
5. The granting of the requested variance will not alter the essential character of the neighborhood nor substantially or permanently impair the appropriate use of adjacent properties.
6. The granting of the requested variance will represent the minimum deviation necessary to afford relief and will represent the least possible modification of the Zoning Ordinance. (4/15/21 Tr., 57:2-8).
7. The granting of the requested variance will in no way be injurious to the public health, safety, morals and general welfare of the Township.
8. The granting of the requested variance is necessary to implement the purposes of the Municipal Planning Code and the Zoning Ordinance.

Order

Based on the testimony and exhibits entered into and made part of the record before the Board, and for the reasons set forth on the record, the applicant's request is hereby **GRANTED**. The Board hereby determines that:

1. Variance relief from the requirements of Zoning Code Section 280-112 is hereby **GRANTED** to permit the Steep Slope Disturbances in the precise location and extent shown on the plans and specifications contained in Exhibit A-12 that was entered into and made part of the record, and otherwise as described in the testimony and exhibits entered into and made part of the record, to the extent consistent with Exhibit A-12;
2. Relief is granted only with respect to Zoning Code Section 280-112; and
3. No relief is granted with respect to any other provisions of the Zoning Code.

BY ORDER OF THE ZONING HEARING BOARD

/s/ JOHN F. REILLY, CHAIRMAN

/s/ RICHARD WEITZMAN, MEMBER

/s/ JOHN A. LORD, MEMBER

/s/ JAMIE B. FORMAN, ALTERNATE

/s/ JOHN NAGLE, ALTERNATE

DATED: May 20, 2021

MAILED: June 26, 2021

Vice Chairman George F. Nagle was present and abstained from this appeal. Board Member, Bradley Delizia was absent during the April 15, 2021 hearing. Board Member, Bradley Delizia was present at but did not participate in the May 20, 2021 hearing.

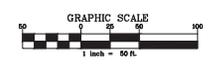
THIS DECISION WILL EXPIRE IF THE APPLICANTS FAIL TO OBTAIN A BUILDING PERMIT WITHIN SIX MONTHS OF THIS DATE: June 26, 2021.



PROPOSED LOTS				
LOT #	GROSS LOT AREA ROW & <50' SF	PROPOSED ROW & <50' WIDTH	FLOODPLAINS WETLANDS & >20% SLOPES (1)	PROPOSED LOT AREA 30,000 SF MIN. (2)
1	36,642	236	2,390	34,614
2	34,448	3,220	0	31,228
3	34,039	3,596	0	30,443
4	33,762	3,539	0	30,223
5	41,429	10,367	0	31,062
6	41,938	11,737	0	30,201
7	34,625	4,541	0	30,084
8	28,720	5,985	0	22,735
9	60,931	1,802	3,104	56,801
10	60,993	1,804	14,877	48,046
11	38,193	6,080	0	32,113
12	38,059	3,211	0	34,848
13	42,926	10,750	0	32,176
14	76,488	16,356	0	60,132
15	39,578	3,145	0	36,433
16	57,674	4,396	0	53,278
17	81,721	7,236	19,752	69,671
18	58,395	6,384	2,010	50,504

(1) INCLUDES MAN-MADE SLOPES. NO WETLANDS PRESENT PER 8/1/2019 WETLAND MAP PREPARED BY PENNON ASSOCIATES, INC.
 (2) LOT AREA = GROSS LOT AREA LESS ROW AND 75% OF EACH OF THE FOLLOWING: FLOODPLAINS, WETLANDS AND >20% SLOPES.

- 20%+ NATURAL SLOPES TO REMAIN
- 20%+ MAN MADE SLOPES TO REMAIN
- 20%+ MAN MADE SLOPES AROUND PARKING LOT TBR



1	5/20/2021	ZONING EXHIBIT							
NUM.	DATE	REVISION							
PLAN PREPARED BY:									
SITE ENGINEERING CONCEPTS, LLC									
P.O. BOX 1992									
SOUTHEASTERN, PA 19399									
P: 610-240-0450 F: 610-240-0451 E: INFO@SITE-ENGINEERS.COM									
PLAN PREPARED FOR:									
CG WAYNE, LLC									
EAGLE ROAD AND RADNOR STREET ROAD									
WAYNE, PA									
RADNOR TOWNSHIP			DELAWARE COUNTY			PENNSYLVANIA			
PROPOSED 18 LOT								SHEET	
SITE PLAN								1 of 1	





GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

MEMORANDUM

Date: October 8, 2021

To: Steve Norcini, P.E.

From: Damon Drummond, P.E., PTOE

cc: Roger Phillips, P.E.
Leslie Salisbury, P.E.

Reference: CG Wayne, LLC - Eagle & Radnor Roads
Radnor Township, Delaware County
Transportation Review 6
G&A #20-10023

Our transportation review is complete for the Preliminary/Final Subdivision and Land Development plans prepared for Eagle & Radnor Street Roads. We offer the following comments for your consideration:

A. PROJECT DESCRIPTION

The Applicant, CG Wayne, LLC, is proposing a development consisting of 18 new single-family homes on a site bounded by Eagle Road, Radnor Street Road and Walnut Avenue. The main driveway will take access to Radnor Street Road opposite Beechtree Lane. There are several individual residences that will take direct access to either Eagle Road, Radnor Street Road or Walnut Avenue.

B. DOCUMENTS REVIEWED

1. Preliminary/Final Subdivision and Land Development Plans prepared by Site Engineering Concepts, LLC, prepared for CG Wayne, LLC, consisting of 18 sheets, dated September 15, 2020 and last revised September 16, 2021.
2. Traffic Response Letter prepared by Site Engineering Concepts, LLC, dated September 16, 2021.

C. TRANSPORTATION IMPROVEMENTS PROPOSED

1. The applicant will install a pedestrian walkway along Radnor Street Road and Walnut Avenue.
2. The applicant will widen the existing walkway along Radnor Street Road to Eagle Road.

3. The applicant will install a pedestrian walkway along Chamounix Road from the property to Paul Road. A pedestrian bridge is proposed crossing the creek along Chamounix Road.
4. The applicant will provide an easement at the intersection of Radnor Street Road and Eagle Road to allow for potential future construction activities.

D. WAIVERS REQUESTED

1. §255-12.A – To permit the land development application to proceed and be reviewed as a single preliminary/final land development plan.
2. §255-21.B(1)(n) – From providing man-made features within 500 feet of the site.

E. SUBDIVISION AND LAND DEVELOPMENT ORDINANCE COMMENTS

1. §255-28.B – The minimum stopping sight distance for a major collector (Eagle Road) is 275 feet. The plans indicate a sight distance of 202 and 256 feet at the Lot 18 driveway along Eagle Road. The plans shall be revised to indicate the required sight distance. If the Applicant is able to meet the Township minimum sight distance requirements; the plans should also include the PennDOT required sight distance and appropriate calculations. In addition, the sight line profile shown on Sheet 14 (looking right) should be revised to align with the proposed sight distance of 256 feet and to provide a minimum clearance of 6 inches over any given point of the roadway. The driveway sight distance will also be reviewed by PennDOT during the HOP process.

F. GENERAL TRANSPORTATION COMMENTS:

1. As a reminder, PennDOT will require a Highway Occupancy Permit (HOP) for the driveway access to Eagle Road (S.R. 1042) from Lot 18. The Township requests the opportunity to review all HOP plan submissions to PennDOT, as well as be given the opportunity to attend all meetings with PennDOT and copied on all correspondence regarding the same. **The applicant acknowledges and indicates the Township will be included in discussions and submissions to PennDOT.**
2. The applicant has offered to extend the Walnut Lane sidewalk to Paul Road provided adequate right-of-way exists or can be obtained by Radnor Township. A draft sketch has been provided. **The applicant is continuing to work with the Township to install the noted sidewalk improvements.**
3. Sheet 10, the ramp cross slope for the Beechtree Lane ADA Ramp on the Northeast Corner of Radnor Street Road exceeds the maximum of 2% along the depressed curb. Revise the spot elevations accordingly.

SITE ENGINEERING CONCEPTS, LLC

Consulting Engineering and Land Development Services

September 16, 2021

Steve Norcini, P.E.
Township Engineer
Radnor Township
Iven Ave
Wayne, PA 19087

**Re: Response to Engineering Review
Eagle Road and Radnor Road
Preliminary Subdivision and Land Development Plan
Revision #5**

Dear Steve,

On behalf of the CG Wayne, LLC, SITE Engineering Concepts is pleased to submit the enclosed revision to this preliminary application. Revision #5 addresses the comments in the July 27, 2021 review memo from Roger Phillips, P.E., as follows:

Sewage Facilities Planning

Comment 1. Final plan approval will not be granted until Planning Approval or a Planning Exemption is received from the PA DEP. The applicant has submitted the planning module application to the Township on January 13, 2021 for review.

Response 1. The Applicant is working with Eastern University and the municipal authorities to transfer EDUs from the university to provide the four additional EDUs required.

Zoning

Comment 1. §280-112 – The applicant has received zoning relief as outlined in the attached zoning order. The man made slopes that relief was granted from must be shown on the plans as such.

Response 1. The approval note is on Sheet 4.

Subdivision and Land Development

Comment 1. §255-20-B(1)(n) – Existing principal buildings (and their respective uses) and driveways on the adjacent peripheral strip. Sewer lines, storm drains, culverts, bridges, utility easements, quarries, railroads and other significant man-made features within 500 feet of and within the site (this includes properties across streets) must be shown on the plans. The applicant has requested a partial waiver from this requirement.

Response 1. Aerial imagery on Sheet 1 is used to provide detail beyond the site boundaries where survey data cannot legally be collected (e.g.: private property). A partial waiver is requested to the extent necessary to not provide those items which are not visible on aerial imagery (e.g.: sewer lines, storm drains, easements, etc.) as noted on Sheet 3.

Comment 2. §255.27.C(4) – When a subdivision abuts or contains an existing street of inadequate right-of-way width, the Board of Commissioners may require the reservation or dedication of rights-of-way to conform with the required standards. Radnor Street Road is a Minor Collector, with a right-of-way requirement is 60 feet. The applicant has indicated on the plans that the existing right-of-way is 33 feet. Walnut Avenue is a local Road, with a right-of-way requirement is 60 feet. The applicant has indicated on the plans that the existing right-of-way is 50 feet. A 25-foot half

right-of-way from the existing cartway centerline is being provided along Radnor Street Road. The existing Walnut Ave right-of-way is currently sufficient for the type and usage of roadway

Response 2. Per discussions with township staff, a 25 foot half-ROW from the existing cartway centerline is provided along Radnor Street Road. Staff confirmed the Walnut Avenue right-of-way is sufficient.

Comment 3. §255-43.1.B(1) – For all residential subdivisions or land developments involving a total of four or more lots and/or dwelling units, a minimum of 1,440 square feet or suitable park and recreation land shall be provided per dwelling unit within such subdivision/land development, unless the developer agrees to a fee in lieu of \$3,307 per dwelling unit (existing or proposed).

Response 3. Acknowledged.

Comment 4. §255-49 – Where appropriate, the developer shall install or cause to be installed, at the developer's expense, metal or fiberglass pole streetlights serviced by underground conduit in accordance with a plan to be prepared by the developer's engineer and approved by the Board of Commissioners. Three streetlights are being provided.

Response 4. As discussed with the Township Engineer, three street light locations are shown along the Beechtree Lane extension on Sheet 11. One at the Radnor Street Road intersection, at the approximate mid-point and at the end of the cul-de-sac. A Hubbell Light fixture detail is added to sheet 14.

Comment 5. The central water system should be designed with adequate capacity and appropriately spaced fire hydrants for fire-fighting purposes pursuant to the specification of the National Fire Protection Association. Review and approval by the Township Engineer and the Township Fire Marshall shall be required in order to ensure that adequate fire protection is provided. A fire hydrant is being provided at the end of the cul-de-sac per discussions with the fire department. The applicant is preparing a water extension plan for review and approval by Aqua and Township.

Response 5. A fire hydrant is shown on Sheet 11 at the end of the cul-de-sac per discussion with the fire department. The water main extension plan is being prepared for review and approval by Aqua and the Township.

Stormwater

Comment 1. The Post-Construction drainage area map on Sheet 15 of the plan set identifies some drainage areas as Captured Post-Dev Area but they should actually be Post-Dev Bypass Area, specifically some portions of the drainage areas between Lots 16 and 17, and between Lots 17 and 10. Please revise the drainage areas to accurately reflect the conditions shown and ensure that drainage boundaries and hatches are consistent.

Response 1. Drainage boundaries and shading are updated to be consistent with current grading and stormwater controls.

Comment 2. The Post-Bypass Total hydrograph in the stormwater report indicates a drainage area of 4.741 ac but the Post-Construction drainage area plan on Sheet 15 of the plan set appears to indicate a Post-Dev Bypass area of ~5.45 ac. Please revise this inconsistency.

Response 2. The drainage areas are recalculated and the maps and hydrographs revised.

Comment 3. The A2 Outfall hydrograph report indicates a 5-year and 10-year peak flow of 0.112 cfs and 0.906 cfs, respectively, but the Peak Flows & Runoff Volumes per Outfall table on page 3 of the stormwater report identify these flows as 0.00 cfs and 0.11 cfs, respectively. Please revise these inconsistencies.

Response 3. The outflow table is revised to match the revised hydrographs results.

Comment 4. It appears that there are several inconsistencies between the Beechtree Storm Main Profile on Sheet 9 of the plan set and the Utility Plan on Sheet 11 of the plan set. Please address the following:

- a. PI-R1B is listed with a grate elevation of 392.53 but it appears to be shown on the profile and plans as above 395.

- b. *The Utility Plan shows the Lot 16 water lateral crossing PP-R1C, but it is not shown on the profile.*
- c. *The Utility Plan shows the Lot 11 water lateral crossing PP-R2, but it is not shown on the profile.*
- d. *The profile indicates the Lot 11 water service crossing PP-R3B but the Utility Plan shows this as Lot 10 water service.*
- e. *The profile identifies the utility mains crossings at PP-R4 as Communications, Electrical, and Gas, sequentially, but the Utility Plan appears to show this as Gas, Electrical, and Communications.*

Response 4. The profile is revised to be consistent with the plan.

Comment 5. The Mid-Lot Storm Main Profile on Sheet 9 of the plan set identifies PSTH-2 (rim = 380.2) and PP8 as the structure and pipe upstream of PSTH-1 but the Utility Plan on Sheet 11 of the plan set appears to indicate these as PIB-3 and PO-3. Please revise these inconsistencies and ensure that the rim elevations are consistent with the Utility Plan.

Response 5. The profile labels are revised for PIB-3 and PO-3.

Comment 6. The Utility Plan indicates sanitary and water mains crossing pipe PP9 but these are not shown on the Mid-Lot Storm Main profile on Sheet 9 of the plan set. Please revise this inconsistency.

Response 6. The sanitary and water mains have been added to the Mid-Lot Storm profile.

Comment 7. It appears that there are several inconsistencies between the Walnut Storm Main Profile on Sheet 9 of the plan set and the Utility Plan on Sheet 11 of the plan set. Please address the following:

- a. *The Utility Plan shows the Lot 3 sanitary lateral crossing PP-P6A, but it is not shown on the profile*
- b. *The profile shows a sanitary lateral crossing PP-P6B, but this is not shown on the Utility Plan*
- c. *The revised Utility Plan appears to show utility crossings at pipe PP-P7 in the following order downstream of PI-R7: Lot 2 Gas, PO-1, Water Main, Sanitary Main, Lot 1 Water, and Lot 1 Gas. The Walnut Storm Main Profile on sheet 9 of the plan set is inconsistent with the utility crossings shown on the Utility Plan. Please revise the profile to reflect the conditions shown on the plans.*

Response 7. Updated POCS markings on Walnut Ave indicate there is a 18" storm water sewer from Radnor Street Road intersection down to the stream. The basin outlets will be connected to the existing inlet and proposed Walnut Ave storm sewer is not needed.

Comment 8. The Beechtree Storm Main Profile and Mid-Lot Storm Main Profile show proposed grading immediately upstream of the outfalls but the Utility Plan does not show proposed grading in these areas. Please revise these inconsistencies.

Response 8. The proposed surface is corrected to meet the existing surface at the LOD line.

Comment 9. The Storm Profiles and Details on Sheet 9 of the plan set includes a profile from PI-RC to Existing Inlet but the revised layout no longer shows this connection. Please remove this profile if this is no longer proposed.

Response 9. Updated survey information indicated the existing inlet outlets along Radnor Street Road and the proposed connection is not required. The profile is removed.

Comment 10. Final approval of the stormwater management plan will be required as part of the Grading Permit process. Any revisions to the size or location of the individual structures or other features will be addressed at that time.

Response 10. Acknowledged

Sanitary Sewer

Comment 1. The label for the Lot 2 lateral appears to be in the incorrect location.

Response 1. The label is moved to identified the Lot 2 lateral.

Comment 2. The lateral for Lot 10 shall be relocated to not encroach on Lot 9.

Response 2. The Lot 10 lateral will run through the proposed sewer main easement.

Comment 3. The lateral for Lot 17 appears to be tying into the lateral for Lot 16. That is unacceptable. Each Lot must have a separate individual lateral.

Response 3. A Lot 17 lateral is added.

General

Comment 1. The applicant has indicated that all retaining walls will be less than 4 feet high. Any revisions to the size or locations of the individual structures will be addressed with the grading permits.

Response 1. Acknowledged.

Comment 2. The applicant appeared before the Shade Tree Commission on June 16, 2021 and was granted approval.

Response 2. Correct.

We trust these revisions satisfactorily address your comments. Should you have any questions and/or additional comments, please contact me at pspellman@site-engineers.com or 610.523.9002.

Sincerely,

A handwritten signature in blue ink that reads "Patrick Spellman". The signature is stylized and written in a cursive-like font.

Patrick Spellman, P.E.

SITE ENGINEERING CONCEPTS, LLC

Consulting Engineering and Land Development Services

September 16, 2021

Steve Norcini, P.E.
Township Engineer
Radnor Township
Iven Ave
Wayne, PA 19087

**Re: Response to Traffic Engineering Review
Eagle Road and Radnor Road
Preliminary Subdivision and Land Development Plan
Submission #5**

Dear Steve,

On behalf of the CG Wayne, LLC, SITE Engineering Concepts is pleased to submit the enclosed revision to this preliminary application. Submission #5 addresses the comments in the July 26, 2021 review memo from Damon Drummond, P.E., PTOE, as follows:

E. SUBDIVISION AND LAND DEVELOPMENT ORDINANCE COMMENTS

Comment E.1. §255-28.B – As stated previously, provide the available and proposed sight distance (both left and right) at the Lot 18 driveway along Eagle Road. The Applicant has provided a note on Sheet 10 and a sight distance profile on Sheet 14. The driver eye height of 3'6" shown on the profile is incorrectly scaled based on the vertical scale of 1"=10'. In addition, based on sight line on Sheet 10, the existing grading line does not seem to be consistent with the profile grades noted on Sheet 14. For example, on Sheet 10, 100 feet to the right of the driveway center line is between the contour of 383 and 384. The sight profile indicates this point will have an elevation of 382. Based on the incorrectly scaled drivers eye height and grading shown, it is unclear if the minimum sight distance requirements are met for this lot. Revise the plans and verify the minimum sight distance requirement will be met.

Response E.1. The sight distance profile is revised.

Comment E.2. §255-37.H – Sidewalks and pedestrian paths shall not exceed a seven-percent grade. There are multiple locations where the sidewalk will exceed 7%. If the proposed sidewalk exceeds 7%, the applicant should reduce the grade to the maximum extent feasible and may need to request a waiver.

Response E.2. The sidewalks are regraded to 7% or less except for the section along Radnor Street Road north of the Lot 16 driveway to connect to the existing path. The steep slopes and tree protection requirements allow for a 10% percent grade which matches the road slope in that section per PennDOT guidelines.

F. GENERAL TRANSPORTATION COMMENTS

Comment F.1. As a reminder, PennDOT will require a Highway Occupancy Permit (HOP) for the driveway access to Eagle Road (S.R. 1042) from Lot 20. The Township requests the opportunity to review all HOP plans submissions to PennDOT; as well as be given the opportunity to attend all meetings with PennDOT and copied on all correspondence regarding the same. The applicant acknowledges and indicates the Township will be included in discussions and submissions to PennDOT

Response F.1. Acknowledged. The Township will be included in discussion and submissions to the PennDOT.

*Comment F.2. The applicant has offered to extend the Walnut Lane sidewalk to Paul Road provided adequate right-of-way exists or can be obtained by Radnor Township. A draft sketch has been provided. **The applicant is continuing to work with the Township to install the noted sidewalk improvements.***

Response F.2. The Applicant continues to work with the Township to install the sidewalk from Walnut Lane, along Chamounix Lane to Fenimore Park.

Comment F.3. Revise Sheet 10 for the following signage at the Beechtree Lane intersection with Radnor Street Road.

- *Clearly, show the proposed location for the No Outlet sign for the Beechtree Lane Extension.*
- *Install R1-3 all-way plaques on the existing stop signs and the proposed stop sign for at the Beechtree Lane extension and Radnor Street Road Intersection.*

Response F.3. A separate label for the No Outlet sign location is added. Existing stop signs requiring the All Way plaque are also identified separately.

Comment F.4. Revise the style of the crosswalk in the detail and in the plan views to be consistent. The detail indicates a continental style crosswalk and the plan indicates a standard crosswalk with parallel lines.

Response F.4. The plan is revised to match the detail.

Comment F.5. As previously noted, revise the emergency vehicle turning template to eliminate the curb encroachment along the outer edge of the cul-de-sac bulb. We note the turning template vehicle was not shown on sheet 13 of 18.

Response F.5. The turning template is now shown on Sheet 13 and eliminates any curb encroachment.

Comment F.6. Sheet 10, the 2% ramp cross slopes for the Beechtree Lane ADA Ramp on the Northeast Corner of Radnor Street Road do not correspond with the spot elevations. Revise and verify the ramp will be ADA compliant.

Response F.6. The ramp spots are revised for a 2% cross slope.

We trust these revisions satisfactorily address your comments. Should you have any questions and/or additional comments, please contact me at pspellman@site-engineers.com or 610.523.9002.

Sincerely,



Patrick Spellman, P.E.

**SITE ENGINEERING CONCEPTS,
LLC**
CIVIL ENGINEERING AND CONSULTING SERVICES

TRANSMITTAL

TO:	Patricia Sherwin	FROM:	Patrick Spellman
COMPANY:	Radnor Township	DATE:	9/16/2021
STREET ADDRESS:	301 Iven Avenue	PHONE:	
CITY, ZIP:	Wayne, PA 19087	SENDER'S REFERENCE NUMBER:	36-02-978 Eagle & Radnor Rds
RE:	Preliminary/Final Land Development Plan Application, Revision #5 Eagle Rd & Radnor Rd Subdivision	CC:	CG Wayne, LLC, Owner & Applicant David Falcone, Counsel Mark Stanish, Architect Jonathon Alderson, Landscape Architect

COPIES	SHEETS	DATE	ITEM
2	4	9/19/2021	RESPONSE TO TOWNSHIP ENGINEER REVIEW MEMO
2	2	9/19/2021	RESPONSE TO TRAFFIC ENGINEER REVIEW MEMO
6	15	9/19/2021	PRELIMINARY LAND DEVELOPMENT PLAN, SHEETS 1 THROUGH 15, REVISION #7
6	3	7/9/2021	LANDSCAPE PLANS, SHEETS 16 THROUGH 18
2	234	9/19/2021	PCSM NARRATIVE, REVISION #5 (3 VOLUMES)
1	-	7/9/2021	FLASH DRIVE. ALSO AVAILABLE USING LINK: https://site.egnyte.com/fl/OgNI2GzA7r

NOTES/COMMENTS:

On behalf of CG Wayne, L.L.C., SITE Engineering Concepts is pleased to submit the attached revised documents for the land development plan application. Previous documents submitted in previous submission not revised by this submission are included by reference. If you have any questions or comments, please contact me at pspellman@site-engineers.com or 610.523.9002. Thank

September 13, 2021

VIA ELECTRONIC MAIL

Stephen F. Norcini, P.E.
Radnor Township Engineer
snorcini@radnor.org

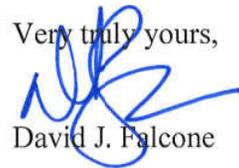
**Re: CG Wayne, LLC
Eagle and Radnor Roads
Preliminary/Final Subdivision and Land Development Plan**

Dear Steve:

As you are aware, applicant, the CG Wayne, LLC (the "CG Wayne"), submitted a Preliminary/Final Land Development Application to the Township on October 6, 2020 (the "Application"). The Application is pending before Radnor Township. Pursuant to the Pennsylvania Municipalities Code, the governing body shall render a decision and communicate it to the applicant not later than ninety (90) days following the date of the regular meeting next following the date that the application is filed. CG Wayne hereby extends until October 29, 2021, the deadline for Radnor Township to act on the above-referenced Application.

Thank you for your continued help with this project. Please feel free to call me if you have any questions, or if you would like to discuss this issue further.

Very truly yours,



David J. Falcone

cc: Roger Phillips, P.E.
John Rice, Esquire
Mr. Devin Tuohey



*Excellence Delivered **As Promised***

Date: August 3, 2021

To: Steve Norcini, PE Township Engineer

From: Roger Phillips, PE

cc: Kevin W. Kochanski, RLA, CZO – Director of Community Development
John Rice, Esq. – Grim, Biehn, and Thatcher
Damon Drummond, PE – Gilmore & Associates, Inc.
Patricia Sherwin – Radnor Township Engineering Department

RE: Eagle and Radnor Roads

Date Accepted: 10/06/2020
90 Day Review: 01/04/2021 extended to 09/30/2021

Gannett Fleming, Inc. has completed a review of the Preliminary Land Development Plan for the above referenced project for compliance with the Radnor Township Code. We have reviewed the plans based on a proposed zoning map revision that would convert this Parcel to R-2 from the current zoning designation of R-1 and PI. The map revision must be approved by the Board of Commissioners prior to this plan moving forward in the approval process. The applicant is proposing to construct 18 single family homes on individual lots. The Plan was reviewed for conformance with Subdivision and Land Development, Zoning and other applicable codes of the Township of Radnor.

The applicant has indicated in a January 15, 2021 letter that the following waivers are being requested:

1. §255-12.A – To permit the land development application to proceed and be reviewed as a single preliminary/final land development plan.
2. §255-21.B(1)(n) – Existing principal buildings (and their respective uses) and driveways on the adjacent peripheral strip. Sewer lines, storm drains, culverts, bridges, utility easements, quarries, railroads and other significant man-made features within 500 feet of and within the site (this includes properties across streets) must be shown on the plans. A partial waiver is being requested to not provide the items which are not visible on aerial imagery (sewer lines, storm drains, easements, etc.)

The applicant appeared before the Zoning Hearing Board April 15, 2020 and May 20, 2021. The applicant has requested a variance from the following:

Gannett Fleming, Inc.

Valley Forge Corporate Center • 1010 Adams Avenue • Audubon, PA 19403-2402
t: 610.650.8101 • f: 610.650.8190
www.gannettfleming.com

1. §280-112 – To permit disturbance of man-made steep slopes and such other relief as deemed necessary by the board.

On June 26, 2021 the applicant received the attached Zoning Relief.

Eagle and Radnor Roads

Plans Prepared By: Site Engineering Concepts, LLC

Dated: 09/15/2020 and last revised 07/10/2021

Sewage Facilities Planning

1. Final plan approval will not be granted until Planning Approval or a Planning Exemption is received from the PA DEP. The applicant has submitted the planning module application to the Township on January 13, 2021 for review.

Zoning

1. §280-112 – The applicant has received zoning relief as outlined in the attached zoning order. The man made slopes that relief was granted from must be shown on the plans as such.
2. The percentage of impervious coverage for lots 11, 12 and 17 must be verified.

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1. §255-20-B(1)(n) – Existing principal buildings (and their respective uses) and driveways on the adjacent peripheral strip. Sewer lines, storm drains, culverts, bridges, utility easements, quarries, railroads and other significant man-made features within 500 feet of and within the site (this includes properties across streets) must be shown on the plans. The applicant has requested a partial waiver from this requirement.
2. §255.27.C(4) – When a subdivision abuts or contains an existing street of inadequate right-of-way width, the Board of Commissioners may require the reservation or dedication of rights-of-way to conform with the required standards. Radnor Street Road is a Minor Collector, with a right-of-way requirement is 60 feet. The applicant has indicated on the plans that the existing right-of-way is 33 feet. Walnut Avenue is a local Road, with a right-of-way requirement is 60 feet. The applicant has indicated on the plans that the existing right-of-way is 50 feet. A 25-foot half right-of-way from the existing cartway centerline is being provided along Radnor Street Road. The existing Walnut Ave right-of-way is currently sufficient for the type and usage of roadway.

3. §255-43.1.B(1) – For all residential subdivisions or land developments involving a total of four or more lots and/or dwelling units, a minimum of 1,440 square feet of suitable park and recreation land shall be provided per dwelling unit within such subdivision/land development, unless the developer agrees to a fee in lieu of \$3,307 per dwelling unit (existing or proposed).
4. §255-49 – Where appropriate, the developer shall install or cause to be installed, at the developer’s expense, metal or fiberglass pole streetlights serviced by underground conduit in accordance with a plan to be prepared by the developer’s engineer and approved by the Board of Commissioners. Three streetlights are being provided.
5. §255-54.B – The central water system should be designed with adequate capacity and appropriately spaced fire hydrants for fire-fighting purposes pursuant to the specification of the National Fire Protection Association. Review and approval by the Township Engineer and the Township Fire Marshall shall be required in order to ensure that adequate fire protection is provided. A fire hydrant is being provided at the end of the cul-de-sac per discussions with the fire department. The applicant is preparing a water extension plan for review and approval by Aqua and Township.

Stormwater

1. The Post-Construction drainage area map on Sheet 15 of the plan set identifies some drainage areas as Captured Post-Dev Area but they should actually be Post-Dev Bypass Area, specifically some portions of the drainage areas between Lots 16 and 17, and between Lots 17 and 10. Please revise the drainage areas to accurately reflect the conditions shown and ensure that drainage boundaries and hatches are consistent.
2. The Post-Bypass Total hydrograph in the stormwater report indicates a drainage area of 4.741 ac but the Post-Construction drainage area plan on Sheet 15 of the plan set appears to indicate a Post-Dev Bypass area of ~5.45 ac. Please revise this inconsistency.
3. The A2 Outfall hydrograph report indicates a 5-year and 10-year peak flow of 0.112 cfs and 0.906 cfs, respectively, but the Peak Flows & Runoff Volumes per Outfall table on page 3 of the stormwater report identify these flows as 0.00 cfs and 0.11 cfs, respectively. Please revise these inconsistencies.
4. It appears that there are several inconsistencies between the Beechtree Storm Main Profile on Sheet 9 of the plan set and the Utility Plan on Sheet 11 of the plan set. Please address the following:

- a. PI-R1B is listed with a grate elevation of 392.53 but it appears to be shown on the profile and plans as above 395.
 - b. The Utility Plan shows the Lot 16 water lateral crossing PP-R1C, but it is not shown on the profile.
 - c. The Utility Plan shows the Lot 11 water lateral crossing PP-R2, but it is not shown on the profile.
 - d. The profile indicates the Lot 11 water service crossing PP-R3B but the Utility Plan shows this as Lot 10 water service.
 - e. The profile identifies the utility mains crossings at PP-R4 as Communications, Electrical, and Gas, sequentially, but the Utility Plan appears to show this as Gas, Electrical, and Communications.
5. The Mid-Lot Storm Main Profile on Sheet 9 of the plan set identifies PSTH-2 (rim = 380.2) and PP8 as the structure and pipe upstream of PSTH-1 but the Utility Plan on Sheet 11 of the plan set appears to indicate these as PIB-3 and PO-3. Please revise these inconsistencies and ensure that the rim elevations are consistent with the Utility Plan.
 6. The Utility Plan indicates sanitary and water mains crossing pipe PP9 but these are not shown on the Mid-Lot Storm Main profile on Sheet 9 of the plan set. Please revise this inconsistency.
 7. It appears that there are several inconsistencies between the Walnut Storm Main Profile on Sheet 9 of the plan set and the Utility Plan on Sheet 11 of the plan set. Please address the following:
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 8. The Beechtree Storm Main Profile and Mid-Lot Storm Main Profile show proposed grading immediately upstream of the outfalls but the Utility Plan does not show proposed grading in these areas. Please revise these inconsistencies.
 9. The Storm Profiles and Details on Sheet 9 of the plan set includes a profile from PI-RC to Existing Inlet but the revised layout no longer shows this connection. Please remove this profile if this is no longer proposed.

10. Final approval of the stormwater management plan will be required as part of the Grading Permit process. Any revisions to the size or location of the individual structures or other features will be addressed at that time.

Sanitary Sewer

1. The label for the Lot 2 lateral appears to be in the incorrect location.
2. The lateral for Lot 10 shall be relocated to not encroach on Lot 9.
3. The lateral for Lot 17 appears to be tying into the lateral for Lot 16. That is unacceptable. Each Lot much have a separate individual lateral.

General

1. The applicant has indicated that all retaining walls will be less than 4 feet high. Any revisions to the size or locations of the individual structures will be addressed with the grading permits.
2. The applicant appeared before the Shade Tree Commission on June 16, 2021 and was granted approval.

The applicant appeared before the Planning Commission on August 2, 2021. The Planning Commission recommended approval of the plan and requested waivers.

If you have any questions or require any additional information, please contact me.

Very truly yours,

GANNETT FLEMING, INC.



Roger A. Phillips, P.E.
Senior Project Manager

RADNOR TOWNSHIP ZONING HEARING BOARD

APPEAL NO. 3093

CG Wayne , LLC (“Applicants”), premises located at Eagle Road and Radnor Street Road (“Premises”) and zoned Planned Institutional (“PI”).

DECISION OF THE ZONING HEARING BOARD

Relief Requested

1. The applicant seeks to improve and disturb certain steep slopes to allow for the construction of 18 new dwellings designed under the R-1(A) provisions of the Code. (“Steep Slope Disturbance”).
2. To permit the Steep Slope Disturbance the applicant requests relief from Section 280-112 that prohibits the disturbance of steep slopes.

Findings of Fact

1. This application involves the premises located at Eagle Road and Radnor Street Road and zoned PI (“Premises”).
2. Testimony and evidence on this application were presented at the properly noticed hearings held on April 15, 2021 and May 20, 2021.
3. Applicant’s Exhibits A-1 through A-12 were entered into the record at the May 20, 2021 hearing. (May 20, 2021 Hearing Transcript, 33:11 - 34:12).
4. The Premises contains several steep slopes dispersed throughout the property. (April 15, 2021 Hearing Transcript, 27:21 – 34:12; Exh. A-5, A-3, A-6, & A-7).
5. The existing slopes on the premises were manmade and predate the permitting requirements of Chapter 175 of the Township’s Code. (4/15/21 Tr., 42:13 – 43:2).
6. The existing structures and large parking lot located on the Premises do not have any stormwater controls. (4/15/21 Tr., 43:17-19).
7. The applicant’s proposed development has less impervious coverage than currently exists on the Premises. (4/15/21 Tr., 44:7-8).
8. The existing manmade slopes present an undue hardship to any future development of the Premises. (4/15/21 Tr., 53:9-21, 54:3-9).
9. The applicant’s Steep Slope Disturbance will limit erosion, sedimentation, and stormwater runoff, and protect the existing watersheds. (4/15/21 Tr., 50:19 – 52:1).

10. The Township's letter of support for this application was entered into the record at the April 15, 2021 hearing. (4/15/21 Tr., 100:11-14).

Conclusions of Law

1. The unique physical conditions of the Premises, including the age of the manmade slopes, present an unnecessary hardship to its use.
2. A variance is necessary to allow the applicant to reasonably overcome the unnecessary hardship and to enable the reasonable use of the Premises.
3. The granting of the requested relief will significantly reduce the existing impervious coverage and will improve the stormwater controls.
4. The unnecessary hardship was not created by the applicant. (4/15/21 Tr., 54:10-12).
5. The granting of the requested variance will not alter the essential character of the neighborhood nor substantially or permanently impair the appropriate use of adjacent properties.
6. The granting of the requested variance will represent the minimum deviation necessary to afford relief and will represent the least possible modification of the Zoning Ordinance. (4/15/21 Tr., 57:2-8).
7. The granting of the requested variance will in no way be injurious to the public health, safety, morals and general welfare of the Township.
8. The granting of the requested variance is necessary to implement the purposes of the Municipal Planning Code and the Zoning Ordinance.

Order

Based on the testimony and exhibits entered into and made part of the record before the Board, and for the reasons set forth on the record, the applicant's request is hereby **GRANTED**. The Board hereby determines that:

1. Variance relief from the requirements of Zoning Code Section 280-112 is hereby **GRANTED** to permit the Steep Slope Disturbances in the precise location and extent shown on the plans and specifications contained in Exhibit A-12 that was entered into and made part of the record, and otherwise as described in the testimony and exhibits entered into and made part of the record, to the extent consistent with Exhibit A-12;
2. Relief is granted only with respect to Zoning Code Section 280-112; and
3. No relief is granted with respect to any other provisions of the Zoning Code.

BY ORDER OF THE ZONING HEARING BOARD

/s/ JOHN F. REILLY, CHAIRMAN

/s/ RICHARD WEITZMAN, MEMBER

/s/ JOHN A. LORD, MEMBER

/s/ JAMIE B. FORMAN, ALTERNATE

/s/ JOHN NAGLE, ALTERNATE

DATED: May 20, 2021

MAILED: June 26, 2021

Vice Chairman George F. Nagle was present and abstained from this appeal. Board Member, Bradley Delizia was absent during the April 15, 2021 hearing. Board Member, Bradley Delizia was present at but did not participate in the May 20, 2021 hearing.

THIS DECISION WILL EXPIRE IF THE APPLICANTS FAIL TO OBTAIN A BUILDING PERMIT WITHIN SIX MONTHS OF THIS DATE: June 26, 2021.



*Excellence Delivered **As Promised***

Date: July 27, 2021

To: Steve Norcini, PE Township Engineer

From: Roger Phillips, PE

cc: Kevin W. Kochanski, RLA, CZO – Director of Community Development
John Rice, Esq. – Grim, Biehn, and Thatcher
Damon Drummond, PE – Gilmore & Associates, Inc.
Patricia Sherwin – Radnor Township Engineering Department

RE: Eagle and Radnor Roads

Date Accepted: 10/06/2020
90 Day Review: 01/04/2021 extended to 08/31/2021

Gannett Fleming, Inc. has completed a review of the Preliminary Land Development Plan for the above referenced project for compliance with the Radnor Township Code. We have reviewed the plans based on a proposed zoning map revision that would convert this Parcel to R-2 from the current zoning designation of R-1 and PI. The map revision must be approved by the Board of Commissioners prior to this plan moving forward in the approval process. The applicant is proposing to construct 20 single family homes on individual lots. The Plan was reviewed for conformance with Subdivision and Land Development, Zoning and other applicable codes of the Township of Radnor.

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Eagle and Radnor Roads

Plans Prepared By: Site Engineering Concepts, LLC

Dated: 09/15/2020 and last revised 07/10/2021

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If you have any questions or require any additional information, please contact me.

Very truly yours,

GANNETT FLEMING, INC.



Roger A. Phillips, P.E.
Senior Project Manager



GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

MEMORANDUM

Date: July 26, 2021

To: Steve Norcini, P.E.

From: Damon Drummond, P.E., PTOE

cc: Roger Phillips, P.E.
Leslie Salisbury, P.E.

Reference: CG Wayne, LLC - Eagle & Radnor Roads
Radnor Township, Delaware County
Transportation Review 5
G&A #20-10023

Our transportation review is complete for the Preliminary/Final Subdivision and Land Development plans prepared for Eagle & Radnor Street Roads. We offer the following comments for your consideration:

A. PROJECT DESCRIPTION

The Applicant, CG Wayne, LLC, is proposing a development consisting of 20 new single-family homes on a site bounded by Eagle Road, Radnor Street Road and Walnut Avenue. The main driveway will take access to Radnor Street Road opposite Beechtree Lane. There are several individual residences that will take direct access to either Eagle Road, Radnor Street Road or Walnut Avenue.

B. DOCUMENTS REVIEWED

1. Preliminary/Final Subdivision and Land Development Plans prepared by Site Engineering Concepts, LLC, prepared for CG Wayne, LLC, consisting of 18 sheets, dated September 15, 2020 and last revised July 10, 2021.
2. Traffic Response Letter prepared by Site Engineering Concepts, LLC, dated July 9, 2021.
3. Waiver Request Letter prepared by Site Engineering Concepts, LLC, dated January 15, 2021.
4. Draft Sketch for the Chamounix Sidewalk Extension to Fenimore Park.

C. TRANSPORTATION IMPROVEMENTS PROPOSED

1. The applicant will install a pedestrian walkway along Radnor Street Road and Walnut Avenue.

2. The applicant will widen the existing walkway along Radnor Street Road to Eagle Road.
3. The applicant will install a pedestrian walkway along Chamounix Road from the property to Paul Road. A pedestrian bridge is proposed crossing the creek along Chamounix Road.
4. The applicant will provide an easement at the intersection of Radnor Street Road and Eagle Road to allow for potential future construction activities.

D. WAIVERS REQUESTED

1. §255-12.A – To permit the land development application to proceed and be reviewed as a single preliminary/final land development plan.
2. §255-21.B(1)(n) – From providing man-made features within 500 feet of the site.

E. SUBDIVISION AND LAND DEVELOPMENT ORDINANCE COMMENTS

1. §255-28.B – As stated previously, provide the available and proposed sight distance (both left and right) at the Lot 18 driveway along Eagle Road. The Applicant has provided a note on Sheet 10 and a sight distance profile on Sheet 14. The driver eye height of 3'6" shown on the profile is incorrectly scaled based on the vertical scale of 1"=10'. In addition, based on sight line on Sheet 10, the existing grading line does not seem to be consistent with the profile grades noted on Sheet 14. For example, on Sheet 10, 100 feet to the right of the driveway center line is between the contour of 383 and 384. The sight profile indicates this point will have an elevation of 382. Based on the incorrectly scaled drivers eye height and grading shown, it is unclear if the minimum sight distance requirements are met for this lot. Revise the plans and verify the minimum sight distance requirement will be met.
2. §255-37.H – Sidewalks and pedestrian paths shall not exceed a seven-percent grade. There are multiple locations where the sidewalk will exceed 7%. If the proposed sidewalk exceeds 7%, the applicant should reduce the grade to the maximum extent feasible and may need to request a waiver.

F. GENERAL TRANSPORTATION COMMENTS:

1. As a reminder, PennDOT will require a Highway Occupancy Permit (HOP) for the driveway access to Eagle Road (S.R. 1042) from Lot 20. The Township requests the opportunity to review all HOP plan submissions to PennDOT, as well as be given the opportunity to attend all meetings with PennDOT and copied on all correspondence regarding the same. **The applicant acknowledges and indicates the Township will be included in discussions and submissions to PennDOT.**
2. The applicant has offered to extend the Walnut Lane sidewalk to Paul Road provided adequate right-of-way exists or can be obtained by Radnor Township. A draft sketch has been provided. **The applicant is continuing to work with the Township to install the noted sidewalk improvements.**
3. Revise Sheet 10 for the following signage at the Beechtree Lane intersection with Radnor Street Road.

- Clearly, show the proposed location for the No Outlet sign for the Beechtree Lane Extension.
 - Install R1-3 all-way plaques on the existing stop signs and the proposed stop sign for at the Beechtree Lane extension and Radnor Street Road Intersection.
4. Revise the style of the crosswalk in the detail and in the plan views to be consistent. The detail indicates a continental style crosswalk and the plan indicates a standard crosswalk with parallel lines.
 5. As previously noted, revise the emergency vehicle turning template to eliminate the curb encroachment along the outer edge of the cul-de-sac bulb. We note the turning template vehicle was not shown on sheet 13 of 18.
 6. Sheet 10, the 2% ramp cross slopes for the Beechtree Lane ADA Ramp on the Northeast Corner of Radnor Street Road do not correspond with the spot elevations. Revise and verify the ramp will be ADA compliant.

SITE ENGINEERING CONCEPTS, LLC

Consulting Engineering and Land Development Services

July 9, 2021

Steve Norcini, P.E.
Township Engineer
Radnor Township
Iven Ave
Wayne, PA 19087

**Re: Response to Engineering Review
Eagle Road and Radnor Road
Preliminary Subdivision and Land Development Plan
Revision #4**

Dear Steve,

On behalf of the CG Wayne, LLC, SITE Engineering Concepts is pleased to submit the enclosed revision to this preliminary application. Revision #4 addresses the comments in the February 24, 2021 review memo from Roger Phillips, P.E., as follows:

Sewage Facilities Planning

Comment 1. Final plan approval will not be granted until Planning Approval or a Planning Exemption is received from the PA DEP. The applicant has submitted the planning module application to the Township on January 13, 2021 for review. The note on the plans that indicates the applicant requests final plan approval conditioned on received planning module approval prior to the construction of the final six homes. We note that the plans may not be recorded, and construction may not commence until planning approval for the entire project is received from the PA DEP. This statement must be revised.

Response 1. The Applicant is working with Eastern and the municipal authorities to transfer EDUs. The note is removed.

Zoning

Comment 1. §280-112 – There appears to be portion of the home on lot #1 located in the steep slope areas of greater than 20%. The applicant has indicated that these steep slope areas are man-made. Verification of the steep slopes being created by an approved Land Development Plan or Grading Permit must be provided. The applicant has submitted a slope determination memo to the Township for approval.

Response 1. On May 20, 2021, the Zoning Hearing Board granted relief for disturbance of steep slopes around the parking only. The plan has been revised to eliminate any encroachment of the remaining slopes.

Subdivision and Land Development

Comment 1. §255-20-B(1)(n) – Existing principal buildings (and their respective uses) and driveways on the adjacent peripheral strip. Sewer lines, storm drains, culverts, bridges, utility easements, quarries, railroads and other significant man-made features within 500 feet of and within the site (this includes properties across streets) must be shown on the plans. The applicant has requested a partial waiver from this requirement.

Response 1. Aerial imagery on Sheet 1 is used to provide detail beyond the site boundaries where survey data cannot legally be collected (e.g.: private property). A partial waiver is requested to

the extent necessary to not provide those items which are not visible on aerial imagery (e.g.: sewer lines, storm drains, easements, etc.) as noted on Sheet 3.

Comment 2. §255.27.C(4) – When a subdivision abuts or contains an existing street of inadequate right-of-way width, the Board of Commissioners may require the reservation or dedication of rights-of-way to conform with the required standards. Radnor Street Road is a Minor Collector, with a right-of-way requirement is 60 feet. The applicant has indicated on the plans that the existing right-of-way is 33 feet. Walnut Avenue is a local Road, with a right-of-way requirement is 60 feet. The applicant has indicated on the plans that the existing right-of-way is 50 feet. A 25-foot half right-of-way from the existing cartway centerline is being provided along Radnor Street Road. The existing Walnut Ave right-of-way is currently sufficient for the type and usage of roadway

Response 2. Per discussions with township staff, a 25 foot half-ROW from the existing cartway centerline is provided along Radnor Street Road. Staff confirmed the Walnut Avenue right-of-way is sufficient.

Comment 3. §255-43.1.B(1) – For all residential subdivisions or land developments involving a total of four or more lots and/or dwelling units, a minimum of 1,440 square feet or suitable park and recreation land shall be provided per dwelling unit within such subdivision/land development, unless the developer agrees to a fee in lieu of \$3,307 per dwelling unit (existing or proposed).

Response 3. Acknowledged .

Comment 4. §255-49 – Where appropriate, the developer shall install or cause to be installed, at the developer's expense, metal or fiberglass pole streetlights serviced by underground conduit in accordance with a plan to be prepared by the developer's engineer and approved by the Board of Commissioners. Three streetlights are being provided.

Response 4. As discussed with the Township Engineer, three street light locations are shown along the Beechtree Lane extension on Sheet 11. One at the Radnor Street Road intersection, at the approximate mid-point and at the end of the cul-de-sac. A Hubbell Light fixture detail is added to sheet 14.

Comment 5. The central water system should be designed with adequate capacity and appropriately spaced fire hydrants for fire-fighting purposes pursuant to the specification of the National Fire Protection Association. Review and approval by the Township Engineer and the Township Fire Marshall shall be required in order to ensure that adequate fire protection is provided. A fire hydrant is being provided at the end of the cul-de-sac per discussions with the fire department. The applicant is preparing a water extension plan for review and approval by Aqua and Township.

Response 5. A fire hydrant is shown on Sheet 11 at the end of the cul-de-sac per discussion with the fire department. The water main extension plan is being prepared for review and approval by Aqua and the Township.

Stormwater

Comment 1. The proposed drainage area map on Sheet 15 of the plan set has several instances where the drainage boundaries and the drainage area hatches do not align. Additionally, some of the drainage areas are indicated as Captured Post-Dev Area but they should actually be Post-Dev Bypass Area, and vice versa. Revise the drainage areas to accurately reflect the conditions shown and ensure that drainage boundaries and hatches are consistent.

Response 1. The maps are revised based on the lot reconfiguration.

Comment 2. The drainage areas on the plans do not appear to match the areas used in the hydrographs for Outfall A3, Outfall A6, and Post-Bypass. Revise these inconsistencies.

Response 2. The maps are revised based on the lot reconfiguration.

Comment 3. Please revise the Basin Volumes & Dewater Times per bed in the PCSM report to indicate that the infiltration rate for Lot #1 Infiltration Bed will be retested and provided with the grading permit application.

Response 3. The tables are revised basin on the lot reconfiguration.

Comment 4. The Lot 17 & 18 Storm Main Profile on Sheet 9 of the plan set indicates utility crossings in the following order (Lot 17 water, Lot 17 gas, Electric, Communications) but it appears that it should be Communications, Electric, Lot 17 gas, Lot 17 water. Please revise the profile to reflect the conditions shown on the plans. Additionally, it appears that several of the utilities do not provide adequate vertical separation. Revise the plans to provide a minimum of 18" vertical separation between the storm pipe and other utilities.

Response 4. The profiles are revised basin on the lot reconfiguration.

Comment 5. The Walnut Storm Main Profile on Sheet 9 of the plan set was revised to show utility crossings at PP-R7 but they do not appear to be entirely correct. The Lot 1 Gas Service appears to be improperly located and the crossing for the existing 8" DIP sanitary main is not shown. Revise the profile accordingly.

Response 5. The profiles are revised basin on the lot reconfiguration.

Comment 6. Revise the Radnor St Rd – Ex Inlet Profile to show the utility crossings.

Response 6. The profiles are revised basin on the lot reconfiguration.

Sanitary Sewer

Comment 1. The sanitary sewer profile indicates two separate Lot 17 lateral connections. This must be revised.

Response 1. The profiles are revised basin on the lot reconfiguration.

Comment 2. Please use the attached detail for standard Manhole Frames and Covers. The Detail provided on the plans are for the watertight covers in non-paved areas only.

Response 2. The standard manhole detail is added to Sheet 12.

General

Comment 1. The applicant has indicated that all retaining walls will be less than 4 feet high. Any revisions to the size or locations of the individual structures will be addressed with the grading permits.

Response 1. Acknowledged.

Comment 2. The applicant must appear before the Shade Tree Commission and gain approval prior to this plan being presented to the Board or Commissioners. The applicant was before the Shade Tree Commission on January 20, 2021 and gained approval.

Response 2. The Applicant presented the revised plan based on the zoning approval to the Shade Tree Commission at the June 16th meeting. The Commission recommended the plan for land development approval.

We trust these revisions satisfactorily address your comments. Should you have any questions and/or additional comments, please contact me at pspellman@site-engineers.com or 610.523.9002.

Sincerely,



Patrick Spellman, P.E.

SITE ENGINEERING CONCEPTS, LLC

Consulting Engineering and Land Development Services

July 9, 2021

Steve Norcini, P.E.
Township Engineer
Radnor Township
Iven Ave
Wayne, PA 19087

**Re: Response to Traffic Engineering Review
Eagle Road and Radnor Road
Preliminary Subdivision and Land Development Plan
Revision #4**

Dear Steve,

On behalf of the CG Wayne, LLC, SITE Engineering Concepts is pleased to submit the enclosed revision to this preliminary application. Revision #4 addresses the comments in the February 23, 2021 review memo from Damon Drummond, P.E., PTOE, as follows:

D. SUBDIVISION AND LAND DEVELOPMENT ORDINANCE COMMENTS

Comment E.1. §255-28.B – As stated previously, provide the available and proposed sight distance (both left and right) at the Lot 20 driveway along Eagle Road. The Applicant has provided a note on Sheet 10; however, this note is insufficient to determine if sight distance will be adequate to meet the minimum sight distance requirements. Note the minimum sight distance required and provide sight line profiles at the lot 20 driveway including the existing and proposed surface profiles as well as the driver and object height of 3.5 feet.

Response E.1. Sight line profiles are added to Sheet 14.

Comment E.2. §255-37.H – Sidewalks and pedestrian paths shall not exceed a seven-percent grade. Where sidewalk grades exceed 5%, a nonslip surface texture shall be used. As stated previously, provide labels for sidewalk grades to confirm compliance with this section including sidewalk along Walnut Avenue. The applicant indicates that the sidewalk matches the roadway slope ranging from 3.5-5.5%; however, it appears there are multiple locations where the sidewalk exceeds 7%. Revise the plans to label the slope along the proposed sidewalk at intervals of 50 feet. Provide textured surfaces along all areas exceeding 5%. If the sidewalk will exceed 7%, the applicant may consider requesting a waiver.

Response E.2. Additional labels are added to areas of the existing road with slopes up to 10 percent. A note is added to the detail requiring a nonslip surface for sections greater than 7% slope.

F. GENERAL TRANSPORTATION COMMENTS

Comment F.1. As a reminder, PennDOT will require a Highway Occupancy Permit (HOP) for the driveway access to Eagle Road (S.R. 1042) from Lot 20. The Township requests the opportunity to review all HOP plans submissions to PennDOT; as well as be given the opportunity to attend all meetings with PennDOT and copied on all correspondence regarding the same.

Response F.1. Acknowledged. The Township will be included in discussion and submissions to the PennDOT.

Comment F.2. The applicant has offered to extend the Walnut Lane sidewalk to Paul Road provided adequate right-of-way exists or can be obtained by Radnor Township. A draft sketch has been provided. These improvements would be in lieu of

pedestrian upgrades at the traffic signal of Eagle Road/Radnor Street Road. The Applicant is working with the Township to provide a traffic signal easement allowing future traffic signal modifications on the property's corner.

Response F.2. The Applicant continues to work with the Township to install the sidewalk from Walnut Lane, along Chamounix Lane to Fenimore Park. A traffic signal easement is added to the public sidewalk easement on Sheet 3.

Comment F.3. The applicant is proposing a wood chip path along Eagle Road. The proposed new woodchip path will not meet ADA requirements regarding a firm and stable surface and the slope grades. The proposed trail should meet the Accessibility Guidelines for Outdoor Recreation and Trails (2012).

Response F.3. The wood chip path is removed from the plan.

Comment F.4. Revise the note on Sheet 10 for the stop signs to indicate that a No Outlet sign is only to be installed for the Beechtree Lane Extension.

Response F.4. A No Outlet sign note is added for Beechtree Lane only.

Comment F.5. Revise the plans to indicate the size of the proposed Stop sign and No Outlet sign.

Response F.5. Sign size is now indicated on the details on Sheet 14.

Comment F.6. Indicate the color and size of the proposed crosswalk. In addition, label the width of the proposed crosswalk. A minimum width of six (6) feet should be provided.

Response F.6. A detail is added to Sheet 13 and dimension lines to the ADA grading details on Sheet 10.

Comment F.7. Revise the emergency vehicle turning template to eliminate the curb encroachment along the outer edge of the cul-de-sac bulb.

Response F.7. The detail is revised to clearly show the tire path and the overhang path. The tire path does not encroach onto the curb.

We trust these revisions satisfactorily address your comments. Should you have any questions and/or additional comments, please contact me at pspellman@site-engineers.com or 610.523.9002.

Sincerely,



Patrick Spellman, P.E.

SITE ENGINEERING CONCEPTS, LLC

Consulting Engineering and Land Development Services

January 15, 2021

Board of Commissioners Radnor Township
301 Iven Avenue
Wayne, PA 19087

Re: Waiver Requests
Preliminary/ Final Land Development Plan
Eagle Road and Radnor Road Subdivision

Dear Members of the Board:

CG Wayne, LLC respectfully requests the following waivers for the Eagle Road and Radnor Road Preliminary/Final Land Development Plan:

Waiver #1, Section 255-12.A, Preliminary Plan Submission

A waiver from Section 255-12.A of the Township Code to permit the above-referenced land development application to proceed and be reviewed as a single preliminary/final land development plan. Section 255-12.A requires, in relevant part, that an applicant must submit an individual preliminary application for a major subdivision.

Waiver #2, Section 255-21.B(1)(n), Man-Made Features within 500 Feet

Section 255-21.B(1)(n) requires significant man-made features within 500 feet of the site be provided on the plan. Aerial imagery is used to provide detail beyond the site boundaries where survey data cannot legally be collected (e.g.: private property). A partial waiver is request to the extent necessary to not provide those items which are not visible on aerial imagery (e.g.: sewer lines, storm drains, easements, etc.).

Should the Township have any questions or require additional information, please contact me at pspellman@site-engineers.com or 610.523.9002.

Sincerely,



Patrick Spellman, P.E.

SITE ENGINEERING CONCEPTS,
LLC
CIVIL ENGINEERING AND CONSULTING SERVICES

TRANSMITTAL

TO:	Patricia Sherwin	FROM:	Patrick Spellman
COMPANY:	Radnor Township	DATE:	7/9/2021
STREET ADDRESS:	301 Iven Avenue	PHONE:	
CITY, ZIP:	Wayne, PA 19087	SENDER'S REFERENCE NUMBER:	36-02-978 Eagle & Radnor Rds
RE:	Preliminary/Final Land Development Plan Application, Revision #4 Eagle Rd & Radnor Rd Subdivision	CC:	CG Wayne, LLC, Owner & Applicant David Falcone, Counsel Mark Stanish, Architect Jonathon Alderson, Landscape Architect

COPIES	SHEETS	DATE	ITEM
2	4	7/9/2021	RESPONSE TO TOWNSHIP ENGINEER REVIEW MEMO
2	2	7/9/2021	RESPONSE TO TRAFFIC ENGINEER REVIEW MEMO
2	1	1/15/2021	REQUEST FOR WAIVER OF PRELIMINARY APPROVAL
6	18	7/9/2021	PRELIMINARY LAND DEVELOPMENT PLAN, REVISION #6
6	1	7/8/2021	DRAFT CHAMOUNIX SIDEWALK EXTENSION TO FENIMORE PARK
2	231	7/9/2021	PCSM NARRATIVE, REVISION #4
1	-	7/9/2021	FLASH DRIVE. ALSO AVAILABLE USING LINK: https://site.egnyte.com/fl/gwLpKCHKS7

NOTES/COMMENTS:

On behalf of CG Wayne, L.L.C., SITE Engineering Concepts is pleased to submit the attached revised documents for the land development plan application. If you have any questions or comments, please contact me at pspellman@site-engineers.com or 610.523.9002. Thank

July 19, 2021

VIA ELECTRONIC MAIL

Stephen F. Norcini, P.E.
Radnor Township Engineer
snorcini@radnor.org

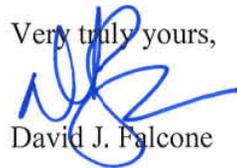
Re: *CG Wayne, LLC*
Eagle and Radnor Roads
Preliminary/Final Subdivision and Land Development Plan

Dear Steve:

As you are aware, applicant, the CG Wayne, LLC (the "CG Wayne"), submitted a Preliminary/Final Land Development Application to the Township on October 6, 2020 (the "Application"). The Application is pending before Radnor Township. Pursuant to the Pennsylvania Municipalities Code, the governing body shall render a decision and communicate it to the applicant not later than ninety (90) days following the date of the regular meeting next following the date that the application is filed. CG Wayne hereby extends until August 31, 2021, the deadline for Radnor Township to act on the above-referenced Application.

Thank you for your continued help with this project. Please feel free to call me if you have any questions, or if you would like to discuss this issue further.

Very truly yours,



David J. Falcone

cc: Roger Phillips, P.E.
 John Rice, Esquire
 Mr. Devin Tuohey

April 21, 2021

VIA ELECTRONIC MAIL

Stephen F. Norcini, P.E.
Radnor Township Engineer
snorcini@radnor.org

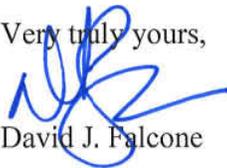
Re: *CG Wayne, LLC*
Eagle and Radnor Roads
Preliminary/Final Subdivision and Land Development Plan

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Thank you for your continued help with this project. Please feel free to call me if you have any questions, or if you would like to discuss this issue further.

Very truly yours,



David J. Falcone

cc: Roger Phillips, P.E.
 John Rice, Esquire
 Mr. Devin Touhey



*Excellence Delivered **As Promised***

Date: March 12, 2021

To: Steve Norcini, PE Township Engineer

From: Roger Phillips, PE

cc: Kevin W. Kochanski, RLA, CZO – Director of Community Development
John Rice, Esq. – Grim, Biehn, and Thatcher
Damon Drummond, PE – Gilmore & Associates, Inc.
Patricia Sherwin – Radnor Township Engineering Department

RE: Eagle and Radnor Roads

Date Accepted: 10/06/2020
90 Day Review: 01/04/2021 extended to 04/30/2021

Gannett Fleming, Inc. has completed a review of the Preliminary Land Development Plan for the above referenced project for compliance with the Radnor Township Code. We have reviewed the plans based on a proposed zoning map revision that would convert this Parcel to R-2 from the current zoning designation of R-1 and PI. The map revision must be approved by the Board of Commissioners prior to this plan moving forward in the approval process. The applicant is proposing to construct 20 single family homes on individual lots. The Plan was reviewed for conformance with Subdivision and Land Development, Zoning and other applicable codes of the Township of Radnor.

The applicant has indicated in a January 15, 2021 letter that the following waivers are being requested:

1. §255-12.A – To permit the land development application to proceed and be reviewed as a single preliminary/final land development plan.
2. §255-21.B(1)(n) – Existing principal buildings (and their respective uses) and driveways on the adjacent peripheral strip. Sewer lines, storm drains, culverts, bridges, utility easements, quarries, railroads and other significant man-made features within 500 feet of and within the site (this includes properties across streets) must be shown on the plans. A partial waiver is being requested to not provide the items which are not visible on aerial imagery (sewer lines, storm drains, easements, etc.)

Eagle and Radnor Roads

Plans Prepared By: Site Engineering Concepts, LLC
Dated: 09/15/2020 and last revised 02/16/2021

Gannett Fleming, Inc.

Sewage Facilities Planning

1. Final plan approval will not be granted until Planning Approval or a Planning Exemption is received from the PA DEP. The applicant has submitted the planning module application to the Township on January 13, 2021 for review. The note on the plans that indicates the applicant requests final plan approval conditioned on received planning module approval prior to the construction of the final six homes. We note that the plans may not be recorded, and construction may not commence until planning approval for the entire project is received from the PA DEP. This statement must be revised.

Zoning

1. §280-112 – There appears to be portion of the home on lot #1 located in the steep slope areas of greater than 20%. The applicant has indicated that these steep slope areas are man-made. Verification of the steep slopes being created by an approved Land Development Plan or Grading Permit must be provided. The applicant has submitted a slope determination memo to the Township for approval.

Subdivision and Land Development

1. §255-20-B(1)(n) – Existing principal buildings (and their respective uses) and driveways on the adjacent peripheral strip. Sewer lines, storm drains, culverts, bridges, utility easements, quarries, railroads and other significant man-made features within 500 feet of and within the site (this includes properties across streets) must be shown on the plans. The applicant has requested a partial waiver from this requirement.
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3. §255-43.1.B(1) – For all residential subdivisions or land developments involving a total of four or more lots and/or dwelling units, a minimum of 1,440 square feet or suitable park and recreation land shall be provided per dwelling unit within such subdivision/land development, unless the developer agrees to a fee in lieu of \$3,307 per dwelling unit (existing or proposed).

4. §255-49 – Where appropriate, the developer shall install or cause to be installed, at the developer’s expense, metal or fiberglass pole streetlights serviced by underground conduit in accordance with a plan to be prepared by the developer’s engineer and approved by the Board of Commissioners. Three streetlights are being provided.
5. §255-54.B – The central water system should be designed with adequate capacity and appropriately spaced fire hydrants for fire-fighting purposes pursuant to the specification of the National Fire Protection Association. Review and approval by the Township Engineer and the Township Fire Marshall shall be required in order to ensure that adequate fire protection is provided. A fire hydrant is being provided at the end of the cul-de-sac per discussions with the fire department. The applicant is preparing a water extension plan for review and approval by Aqua and Township.

Stormwater

1. The proposed drainage area map on Sheet 15 of the plan set has several instances where the drainage boundaries and the drainage area hatches do not align. Additionally, some of the drainage areas are indicated as Captured Post-Dev Area but they should actually be Post-Dev Bypass Area, and vice versa. Revise the drainage areas to accurately reflect the conditions shown and ensure that drainage boundaries and hatches are consistent.
2. The drainage areas on the plans do not appear to match the areas used in the hydrographs for Outfall A3, Outfall A6, and Post-Bypass. Revise these inconsistencies.
3. Please revise the Basin Volumes & Dewater Times per bed in the PCSM report to indicate that the infiltration rate for Lot #1 Infiltration Bed will be retested and provided with the grading permit application.
4. The Lot 17 & 18 Storm Main Profile on Sheet 9 of the plan set indicates utility crossings in the following order (Lot 17 water, Lot 17 gas, Electric, Communications) but it appears that it should be Communications, Electric, Lot 17 gas, Lot 17 water. Please revise the profile to reflect the conditions shown on the plans. Additionally, it appears that several of the utilities do not provide adequate vertical separation. Revise the plans to provide a minimum of 18” vertical separation between the storm pipe and other utilities.
5. The Walnut Storm Main Profile on Sheet 9 of the plan set was revised to show utility crossings at PP-R7 but they do not appear to be entirely correct. The Lot 1 Gas Service appears to be improperly located and the crossing for the existing 8” DIP sanitary main is not shown. Revise the profile accordingly.

6. Revise the Radnor St Rd – Ex Inlet Profile to show the utility crossings.

Sanitary Sewer

1. The sanitary sewer profile indicates two separate Lot 17 lateral connections. This must be revised.
2. Please use the attached detail for standard Manhole Frames and Covers. The Detail provided on the plans are for the watertight covers in non-paved areas only.

General

1. The applicant has indicated that all retaining walls will be less than 4 feet high. Any revisions to the size or locations of the individual structures will be addressed with the grading permits.
2. The applicant must appear before the Shade Tree Commission and gain approval prior to this plan being presented to the Board or Commissioners. The applicant was before the Shade Tree Commission on January 20, 2021 and gained approval.

The applicant appeared before the Planning Commission on March 1, 2021. The Planning Commission recommended preliminary approval of the plan with the following conditions: Compliance with the 2/24/21 Gannett Fleming review letter, Compliance with the 2/23/21 Gilmore Associates review letter, house renderings should be shown on plans, adoption of the Zoning Amendment, requires Zoning Hearing Board relief for steep slopes, and amend plans to show pedestrian bridge.

If you have any questions or require any additional information, please contact me.

Very truly yours,

GANNETT FLEMING, INC.



Roger A. Phillips, P.E.
Senior Project Manager

March 11, 2021

VIA ELECTRONIC MAIL

Stephen F. Norcini, P.E.
Radnor Township Engineer
snorcini@radnor.org

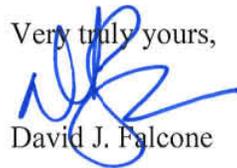
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Eagle and Radnor Roads
Preliminary/Final Subdivision and Land Development Plan

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Thank you for your continued help with this project. Please feel free to call me if you have any questions, or if you would like to discuss this issue further.

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David J. Falcone

cc: Roger Phillips, P.E.
 John Rice, Esquire
 Mr. Devin Touhey



*Excellence Delivered **As Promised***

Date: February 24, 2021

To: Steve Norcini, PE Township Engineer

From: Roger Phillips, PE

cc: Kevin W. Kochanski, RLA, CZO – Director of Community Development
Mary Eberle, Esq. – Grim, Biehn, and Thatcher
Damon Drummond, PE – Gilmore & Associates, Inc.
Patricia Sherwin – Radnor Township Engineering Department

RE: Eagle and Radnor Roads

Date Accepted: 10/06/2020
90 Day Review: 01/04/2021 extended to 03/31/2021

Gannett Fleming, Inc. has completed a review of the Preliminary Land Development Plan for the above referenced project for compliance with the Radnor Township Code. We have reviewed the plans based on a proposed zoning map revision that would convert this Parcel to R-2 from the current zoning designation of R-1 and PI. The map revision must be approved by the Board of Commissioners prior to this plan moving forward in the approval process. The applicant is proposing to construct 20 single family homes on individual lots. The Plan was reviewed for conformance with Subdivision and Land Development, Zoning and other applicable codes of the Township of Radnor.

The applicant has indicated in a January 15, 2021 letter that the following waivers are being requested:

1. §255-12.A – To permit the land development application to proceed and be reviewed as a single preliminary/final land development plan.
2. §255-21.B(1)(n) – Existing principal buildings (and their respective uses) and driveways on the adjacent peripheral strip. Sewer lines, storm drains, culverts, bridges, utility easements, quarries, railroads and other significant man-made features within 500 feet of and within the site (this includes properties across streets) must be shown on the plans. A partial waiver is being requested to not provide the items which are not visible on aerial imagery (sewer lines, storm drains, easements, etc.)

Eagle and Radnor Roads

Plans Prepared By: Site Engineering Concepts, LLC
Dated: 09/15/2020 and last revised 02/16/2021

Gannett Fleming, Inc.

Sewage Facilities Planning

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2. §255.27.C(4) – When a subdivision abuts or contains an existing street of inadequate right-of-way width, the Board of Commissioners may require the reservation or dedication of rights-of-way to conform with the required standards. Radnor Street Road is a Minor Collector, with a right-of-way requirement is 60 feet. The applicant has indicated on the plans that the existing right-of-way is 33 feet. Walnut Avenue is a local Road, with a right-of-way requirement is 60 feet. The applicant has indicated on the plans that the existing right-of-way is 50 feet. A 25-foot half right-of-way from the existing cartway centerline is being provided along Radnor Street Road. The existing Walnut Ave right-of-way is currently sufficient for the type and usage of roadway.
3. §255-43.1.B(1) – For all residential subdivisions or land developments involving a total of four or more lots and/or dwelling units, a minimum of 1,440 square feet or suitable park and recreation land shall be provided per dwelling unit within such subdivision/land development, unless the developer agrees to a fee in lieu of \$3,307 per dwelling unit (existing or proposed).

4. §255-49 – Where appropriate, the developer shall install or cause to be installed, at the developer’s expense, metal or fiberglass pole streetlights serviced by underground conduit in accordance with a plan to be prepared by the developer’s engineer and approved by the Board of Commissioners. Three streetlights are being provided.
5. §255-54.B – The central water system should be designed with adequate capacity and appropriately spaced fire hydrants for fire-fighting purposes pursuant to the specification of the National Fire Protection Association. Review and approval by the Township Engineer and the Township Fire Marshall shall be required in order to ensure that adequate fire protection is provided. A fire hydrant is being provided at the end of the cul-de-sac per discussions with the fire department. The applicant is preparing a water extension plan for review and approval by Aqua and Township.

Stormwater

1. The proposed drainage area map on Sheet 15 of the plan set has several instances where the drainage boundaries and the drainage area hatches do not align. Additionally, some of the drainage areas are indicated as Captured Post-Dev Area but they should actually be Post-Dev Bypass Area, and vice versa. Revise the drainage areas to accurately reflect the conditions shown and ensure that drainage boundaries and hatches are consistent.
2. The drainage areas on the plans do not appear to match the areas used in the hydrographs for Outfall A3, Outfall A6, and Post-Bypass. Revise these inconsistencies.
3. Please revise the Basin Volumes & Dewater Times per bed in the PCSM report to indicate that the infiltration rate for Lot #1 Infiltration Bed will be retested and provided with the grading permit application.
4. The Lot 17 & 18 Storm Main Profile on Sheet 9 of the plan set indicates utility crossings in the following order (Lot 17 water, Lot 17 gas, Electric, Communications) but it appears that it should be Communications, Electric, Lot 17 gas, Lot 17 water. Please revise the profile to reflect the conditions shown on the plans. Additionally, it appears that several of the utilities do not provide adequate vertical separation. Revise the plans to provide a minimum of 18” vertical separation between the storm pipe and other utilities.
5. The Walnut Storm Main Profile on Sheet 9 of the plan set was revised to show utility crossings at PP-R7 but they do not appear to be entirely correct. The Lot 1 Gas Service appears to be improperly located and the crossing for the existing 8” DIP sanitary main is not shown. Revise the profile accordingly.

6. Revise the Radnor St Rd – Ex Inlet Profile to show the utility crossings.

Sanitary Sewer

1. The sanitary sewer profile indicates two separate Lot 17 lateral connections. This must be revised.
2. Please use the attached detail for standard Manhole Frames and Covers. The Detail provided on the plans are for the watertight covers in non-paved areas only.

General

1. The applicant has indicated that all retaining walls will be less than 4 feet high. Any revisions to the size or locations of the individual structures will be addressed with the grading permits.
2. The applicant must appear before the Shade Tree Commission and gain approval prior to this plan being presented to the Board or Commissioners. The applicant was before the Shade Tree Commission on January 20, 2021 and gained approval.

If you have any questions or require any additional information, please contact me.

Very truly yours,

GANNETT FLEMING, INC.



Roger A. Phillips, P.E.
Senior Project Manager

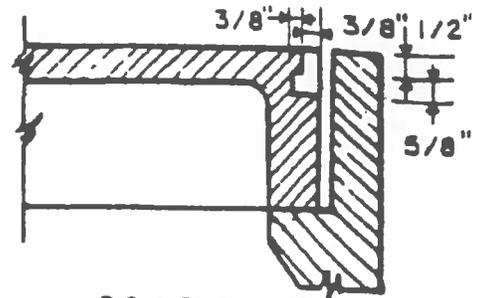
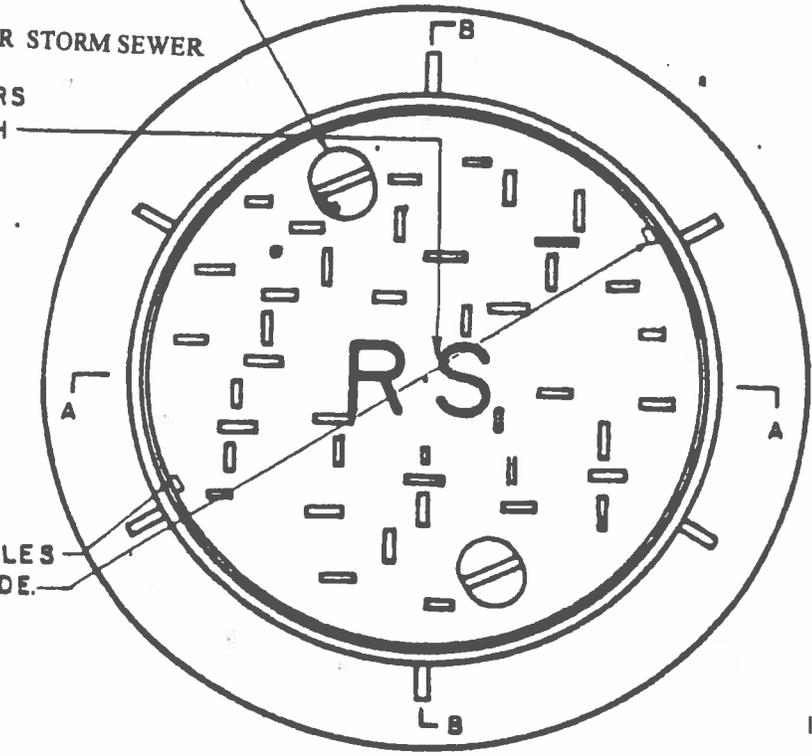
R S FOR SANITARY

STORM FOR STORM SEWER

4" LETTERS
1/4" HIGH

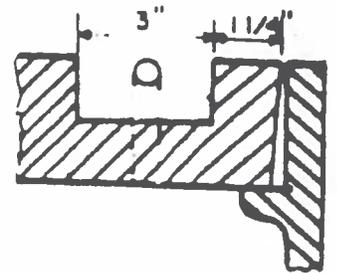
PICK HOLES
1 1/2" WIDE.

LIFTING RING (2 REQUIRED)
SEE SKETCH

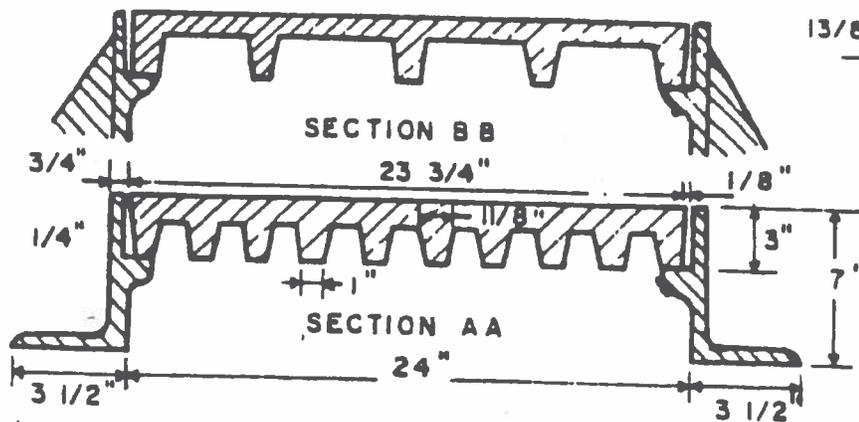


PICKHOLE DETAIL

FRAME 240 LB. MIN.
COVER 200 LB. MIN.



LIFTING RING



DETAIL OF MANHOLE COVER

RADNOR TOWNSHIP	DATE
SITE DESIGN & CONSTRUCTION STANDARDS	JUNE 1995
MANHOLE FRAME AND COVER	DRAWING NO.
	C-10



GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

MEMORANDUM

Date: February 23, 2021

To: Steve Norcini, P.E.

From: Damon Drummond, P.E., PTOE

cc: Roger Phillips, P.E.
Leslie Salisbury, P.E.

Reference: CG Wayne, LLC - Eagle & Radnor Roads
Radnor Township, Delaware County
Transportation Review 4
G&A #20-20023

Our transportation review is complete for the Preliminary/Final Subdivision and Land Development plans prepared for Eagle & Radnor Street Roads. We offer the following comments for your consideration:

A. PROJECT DESCRIPTION

The Applicant, CG Wayne, LLC, is proposing a development consisting of 20 new single-family homes on a site bounded by Eagle Road, Radnor Street Road and Walnut Avenue. The main driveway takes access to Radnor Street Road opposite Beechtree Lane. There are several individual residences that take direct access to either Eagle Road, Radnor Street Road or Walnut Avenue.

B. DOCUMENTS REVIEWED

1. Preliminary/Final Subdivision and Land Development Plans prepared by Site Engineering Concepts, LLC, prepared for CG Wayne, LLC, consisting of 17 sheets, dated September 15, 2020 and last revised February 16, 2021.
2. Traffic Response Letter prepared by Site Engineering Concepts, LLC, dated February 16, 2021.
3. Waiver Request Letter prepared by Site Engineering Concepts, LLC, dated January 15, 2021.
4. Draft Sketch for the Chamounix Sidewalk Extension to Fenimore Park.

C. TRANSPORTATION IMPROVEMENTS PROPOSED

1. Install a pedestrian walkway along Radnor Street Road and Walnut Avenue.
2. The applicant will widen the existing walkway along Radnor Street Road to Eagle Road.

3. Install a pedestrian walkway along Chamounix Road from the property to Paul Road. A pedestrian bridge crossing is proposed crossing the creek along Chamounix Road.
4. Provide an easement at the intersection of Radnor Street Road and Eagle Road to allow for potential future construction activities.

D. WAIVERS REQUESTED

1. §255-12.A – To permit the land development application to proceed and be reviewed as a single preliminary/final land development plan.
2. §255-21.B(1)(n) – From providing man-made features within 500 feet of the site.

E. SUBDIVISION AND LAND DEVELOPMENT ORDINANCE COMMENTS

1. §255-28.B – As stated previously, provide the available and proposed sight distance (both left and right) at the Lot 20 driveway along Eagle Road. The Applicant has provided a note on Sheet 10; however, this note is insufficient to determine if sight distance will be adequate to meet the minimum sight distance requirements. Note the minimum sight distance required and provide sight line profiles at the lot 20 driveway including the existing and proposed surface profiles as well as the driver and object height of 3.5 feet.
2. §255-37.H – Sidewalks and pedestrian paths shall not exceed a seven-percent grade. Where sidewalk grades exceed 5%, a nonslip surface texture shall be used. As stated previously, provide labels for sidewalk grades to confirm compliance with this section including sidewalk along Walnut Avenue. The applicant indicates that the sidewalk matches the roadway slope ranging from 3.5-5.5%; however, it appears there are multiple locations where the sidewalk exceeds 7%. Revise the plans to label the slope along the proposed sidewalk at intervals of 50 feet. Provide textured surfaces along all areas exceeding 5%. If the sidewalk will exceed 7%, the applicant may consider requesting a waiver.

F. GENERAL TRANSPORTATION COMMENTS:

1. As a reminder, PennDOT will require a Highway Occupancy Permit (HOP) for the driveway access to Eagle Road (S.R. 1042) from Lot 20. The Township requests the opportunity to review all HOP plans submissions to PennDOT; as well as be given the opportunity to attend all meetings with PennDOT and copied on all correspondence regarding the same.
2. The applicant has offered to extend the Walnut Lane sidewalk to Paul Road provided adequate right-of-way exists or can be obtained by Radnor Township. A draft sketch has been provided. These improvements would be in lieu of pedestrian upgrades at the traffic signal of Eagle Road/Radnor Street Road. The Applicant is working with the Township to provide a traffic signal easement allowing future traffic signal modifications on the property's corner.
3. The applicant is proposing a wood chip path along Eagle Road. The proposed new woodchip path will not meet ADA requirements regarding a firm and stable surface and the slope grades. The proposed trail should meet the Accessibility Guidelines for Outdoor Recreation and Trails (2012).
4. Revise the note on Sheet 10 for the stop signs to indicate that a No Outlet sign is only to be installed for the Beechtree Lane Extension.

5. Revise the plans to indicate the size of the proposed Stop sign and No Outlet sign.
6. Indicate the color and size of the proposed crosswalk. In addition, label the width of the proposed crosswalk. A minimum width of six (6) feet should be provided.
7. Revise the emergency vehicle turning template to eliminate the curb encroachment along the outer edge of the cul-de-sac bulb.

SITE ENGINEERING CONCEPTS, LLC

Consulting Engineering and Land Development Services

February 16, 2021

Steve Norcini, P.E.
Township Engineer
Radnor Township
Iven Ave
Wayne, PA 19087

**Re: Response to Engineering Review
Eagle Road and Radnor Road
Preliminary Subdivision and Land Development Plan
Revision #3**

Dear Steve,

On behalf of the CG Wayne, LLC, SITE Engineering Concepts is pleased to submit the enclosed revision to this preliminary application. Revision #3 addresses the comments in the January 26, 2021 review memo from Roger Phillips, P.E., as follows:

Sewage Facilities Planning

Comment 1. Final plan approval will not be granted until Planning Approval or a Planning Exemption is received from the PA DEP. The applicant has submitted the planning module application to the Township on January 13, 2021 for review. The note on the plans that indicates the applicant requests final plan approval conditioned on received planning module approval prior to the construction of the final six homes. This statement is incorrect. Plans may not be recorded, and construction may not commence until planning approval for the entire project is received from the PA DEP. This statement must be revised.

Response 1. The Township provided the signed Delaware County Planning Commission application and the application has been forwarded for the DCPC review. The application requests six additional EDU's as 14 currently exist with the houses to be removed. The applicant requests final plan approval conditioned on receiving planning module approval prior to the construction of the final six homes.

Zoning

Comment 1. §280-20-F – The applicant has provided a proposed impervious coverage chart. Additional information must be provided regarding the “other SF” column in the chart.

Response 1. A note is added to the Impervious Table on Sheet 7 explaining the “other” category.

Comment 2. The aggregate side yard for Lot #17 is shown as 100.8 ft in the proposed zoning summary. We believe this is incorrect. The applicant must verify and revise.

Response 2. The aggregate side yard setback is 100.8' as shown on Sheet 10 (45.3'+55.5')

Comment 3. The setbacks shown in the proposed zoning summary must be the most restrictive information. For example, Lot #5 has 2 front yard setbacks. One is 55.1 ft and the other is 45 ft. The table should indicate the 45 ft, not the 55.1 ft. This table should be revised.

Response 3. The zoning table on Sheet 7 is revised to show the more restrictive front yards for Lots 5 and 7.

Comment 4. §280-112 – There appears to be portion of the home on lot #1 located in the steep slope areas of greater than 20%. The applicant has indicated that these steep slope areas are man-made. Verification of the steep slopes being created by an approved Land Development Plan or Grading Permit must be provided.

Response 4. Revised survey data is incorporated and the slope are man-made per the February 10, 2021 Slope Determination memo prepared by SITE Engineering Concepts and submitted to Mr. Kevin Kochanski, Radnor Township Zoning Officer.

Subdivision and Land Development

Comment 1. §255-20-B(1)(n) – Existing principal buildings (and their respective uses) and driveways on the adjacent peripheral strip. Sewer lines, storm drains, culverts, bridges, utility easements, quarries, railroads and other significant man-made features within 500 feet of and within the site (this includes properties across streets) must be shown on the plans. The applicant has requested a partial waiver from this requirement.

Response 1. Aerial imagery on Sheet 1 is used to provide detail beyond the site boundaries where survey data cannot legally be collected (e.g.: private property). A partial waiver is requested to the extent necessary to not provide those items which are not visible on aerial imagery (e.g.: sewer lines, storm drains, easements, etc.) as noted on Sheet 3.

Comment 2. §255.27.C(4) – When a subdivision abuts or contains an existing street of inadequate right-of-way width, the Board of Commissioners may require the reservation or dedication of rights-of-way to conform with the required standards. Radnor Street Road is a Minor Collector, with a right-of-way requirement is 60 feet. The applicant has indicated on the plans that the existing right-of-way is 33 feet. Walnut Avenue is a local Road, with a right-of-way requirement is 60 feet. The applicant has indicated on the plans that the existing right-of-way is 50 feet. A 25-foot half ROW from the existing cartway centerline is being provided along Radnor Street Road. The existing Walnut Ave ROW is currently sufficient for the type and usage of roadway.

Response 2. Per discussions with township staff, a 25 foot half-ROW from the existing cartway centerline is provided along Radnor Street Road. Staff confirmed the Walnut Avenue right-of-way is sufficient.

Comment 3. §255.38.B – Street trees 2 ½ inches dbh at intervals of not more than 30 feet along both sides of new streets and along one or both sides of an existing street within the proposed subdivision or land development must be provided. The applicant has indicated that there is street frontage currently canopied by existing trees and not included in the calculations for the following: Radnor Street Road has 250 linear feet of canopied edge for the Northern stretch of the property and Eagle Road has adequate canopy for the entire length of the property.

Response 3. A street canopy plan is added to Sheet 18.

Comment 4. §255.38.H – All street trees provided must be in accordance with this section. We note there are numerous trees shown on the planting schedule not in accordance with this section.

Response 4. The trees provided are either listed in this Section or the Appendix A of Chapter 263 and is approved by the Shade Tree Committee.

Comment 5. §255-40.C(2) – Access and circulation for fire-fighting and other emergency equipment, moving vans, fuel trucks, garbage collection, deliveries and snow removal shall be planned for efficient operation and convenience. The turning template should provide the information regarding the vehicle used.

Response 5. A vehicle data sheet is added to Sheet 13.

Comment 6. §255-43.1.B(1) – For all residential subdivisions or land developments involving a total of four or more lots and/or dwelling units, a minimum of 1,440 square feet or suitable park and recreation land shall be provided per dwelling unit within such subdivision/land development, unless the developer agrees to a fee in lieu of \$3,307 per dwelling unit (existing or proposed).

Response 6. Acknowledged .

Comment 7. §255-49 – Where appropriate, the developer shall install or cause to be installed, at the developer's expense, metal or fiberglass pole streetlights serviced by underground conduit in accordance with a plan to be prepared by the developer's engineer and approved by the Board of Commissioners. Three streetlights are being provided.

Response 7. As discussed with the Township Engineer, three street light locations are shown along the Beechtree Lane extension on Sheet 11. One at the Radnor Street Road intersection, at the approximate mid-point and at the end of the cul-de-sac. A Hubbell Light fixture detail is added to sheet 14.

Comment 8. The central water system should be designed with adequate capacity and appropriately spaced fire hydrants for fire-fighting purposes pursuant to the specification of the National Fire Protection Association. Review and approval by the Township Engineer and the Township Fire Marshall shall be required in order to ensure that adequate fire protection is provided. A fire hydrant is being provided at the end of the cul-de-sac per discussions with the fire department. The applicant is preparing a water extension plan for review and approval by Aqua and Township.

Response 8. A fire hydrant is shown on Sheet 11 at the end of the cul-de-sac per discussion with the fire department. The water main extension plan is being prepared for review and approval by Aqua and the Township.

Stormwater

Comment 1. The proposed drainage area map on Sheet 14 of the plan set must be revised to clearly indicate the separate drainage areas used in the stormwater calculations (i.e. A1, A2, etc.). An increased scale is insufficient, as the plan is very busy and difficult to interpret where the boundaries of each individual drainage area are located. It may be helpful to provide a simplified map with many of the features turned off, similar to the Outfall Map provided in the PCSM report, or provide different colors for each proposed drainage area.

Response 1. The extraneous features are now hidden on the drainage map and drainage boundary lines are bolder to clarify each proposed area. This is now shown on Sheet 15.

Comment 2. The Lot #1 infiltration bed appears to utilize the infiltration rate from test 1B (1.6 in/hr) but uses the test elevation from test 1A (350.0). If the test elevation from test 1A is to be used, then the infiltration rate from that test must also be used. Test 1B did not investigate below 353.5 so the rate of 1.6 in/hr cannot be used at the design elevation of 350.5. Revise the Proposed Infiltration Bed Dimensions table on Sheet 8 of the plan set and the Basin Volumes & Dewater Times per bed in the PCSM report to be consistent and utilize the correct test pit ID information.

Response 2. The house placement and grading has been revised since the initial bed locations were selected. A note is added to the Bed Dimensions Table on Sheet 8 requiring additional testing at permitting to confirm soil conditions at the final bed location and depth design.

Comment 3. Sheet 8 of the plan set indicates a bed bottom elevation of 376.5 for the Lot #6 infiltration bed and an associated test pit ID of SWB-6, but the test elevation for SWB-6 was 368.0. The bed bottom elevation is outside of the test strata per the borehole log in the soil report (364.0 through ~376.2). The bed bottom elevation must be within the test strata in order to utilize the infiltration rates and elevation. Revise accordingly.

Response 3. The bed bottom depth is lowered 0.5' to be within the testing strata.

Comment 4. The infiltration bed footprints for Lot #17 and #18 are inconsistent between the PCSM report and the plans. The Basin Footprints in the Basin Volumes & Dewater Times per bed in the PCSM report indicates a 2,418 sf footprint for Lot #17 but the Proposed Infiltration Bed Dimensions table on Sheet 8 of the plan set indicates a 63'x38' (2,394 sf) footprint, as does Sheet 7 of the plans. The Basin Footprints in the Basin Volumes & Dewater Times per bed in the PCSM report indicates a 1,898 sf footprint for Lot #18 but the Proposed Infiltration Bed Dimensions table on Sheet 8 of the plan set indicates a 73'x19' (1,387 sf) footprint, as does Sheet 7 of the plans. These inconsistencies must be revised.

Response 4. The dimensions for Lot 17 and 18 beds are verified and the Dewater Times table revised.

Comment 5. The Mid-Lot Storm Main Profile on Sheet 9 of the plan set does not show Outfall A5. Revise the profile to show Outfall A5. The profile also indicates a rim elevation for PSTH-5 below the finished grade. Revise the structure to provide a logical rim elevation relative to the finished grade. The finished grading surrounding PSTH-5 is unclear. Revise the profile to clearly show the finished grading.

Response 5. The outfall is shown on the profile and grades clearly shown.

Comment 6. The pipe size for PP18 is listed as 8" on the Beechtree Storm Main Table but is listed as 12" on the Lot 17 & 18 Storm Main Profile. Revise this inconsistency.

Response 6. PP18 is now labeled as 8" on both profiles on Sheet 9.

Comment 7. The pipe size and downstream invert for PPR1C are listed as 15" and 381.98, respectively, on the Beechtree Storm Main Table but are listed as 8" and 383.77, respectively, on the Lot 17 & 18 Storm Main Profile. Revise these inconsistencies.

Response 7. Pipe diameters and inverts for structure PI-R2 are now consistent between the two profiles on Sheet 9.

Comment 8. The pipe invert out elevation for PPR2 is listed as 381.81 on the Beechtree Storm Main Table but is listed as 383.75 on the Lot 17 & 18 Storm Main Profile. Revise this inconsistency.

Response 8. Pipe diameters and inverts for structure PI-R2 are now consistent between the two profiles on Sheet 9.

Comment 9. The utility crossings on the Beechtree Storm Main Profile on Sheet 9 of the plans are inconsistent with the plans. The Utility Plan on Sheet 11 of the plan set appears to indicate the following utility crossings of the indicated storm pipes (in sequential order from upstream to downstream):

- a. PP-R1B: communications main, underground electric main, gas main.*
- b. PP-R1C: Lot 15 water lateral, Lot 7 communications lateral, Lot 7 electrical lateral, Lot 7 gas lateral, Lot 15 sanitary lateral, Lot 14 water lateral, Lot 8 communications lateral, Lot 8 electrical lateral, Lot 8 gas lateral, Lot 8 water lateral, Lot 14 storm pipe from infiltration bed, Lot 14 & 17 sanitary lateral, Lot 17 water lateral, Lot 18 water lateral.*
- c. PP-R2: Lot 18 sanitary lateral.*
- d. PP-R3B: Lot 13 sanitary lateral, Lot 19 water lateral, Lot 12 water lateral, Lot 11 water lateral.*
- e. PP-R4: gas main, underground electric main, communications main, Lot 11 water lateral.*
- f. The profile must be revised to accurately reflect these conditions that are shown on the plans. Be sure to include the entirety of Outfall A3 which appears to have been cut off during the latest revision to the plans.*

Response 9. The profile is revised to show crossings and the entire outfall.

Comment 10. The Mid-Lot Storm Main Profile on Sheet 9 of the plan set indicates a sanitary lateral crossing near PSTH-8 but there is no sanitary lateral shown on the plans at this location. Revise the profile to remove this crossing. Additionally, it appears that the sanitary main and water main crossings do not provide enough vertical separation. Revise the plans to provide a minimum of 18" vertical separation between the storm pipe and sanitary and water mains. The Mid-Lot Storm Main profile no longer shows Outfall A5. Revise the profile to include the outfall.

Response 10. The profile is revised to show the current configuration and crossings. The water and sanitary mains are separated.

Comment 11. The Utility Plan on Sheet 11 of the plan set appears to indicate at least 8 utility crossings of storm pipe PP-18 but none are shown on the Lot 17 & 18 Storm Main Profile. The profile must be revised to show all utility crossings.

Response 11. The profile is revised to show the current configuration and crossings.

Comment 12. The utility crossings on the Walnut Storm Main Profile on Sheet 9 of the plans are inconsistent with the plans. The Utility Plan on Sheet 11 of the plan set appears to indicate the following utility crossings of the indicated storm pipes (in sequential order from upstream to downstream):

- a. PP-R6: Lot 4 sanitary lateral, Lot 4 water lateral, Lot 4 gas lateral.
- b. PP-R6B: Lot 3 water lateral, Lot 3 gas lateral, Lot 3 sanitary lateral.
- c. PP-R7: Lot 2 water lateral, Lot 2 gas lateral, sanitary main PP-S6, water main, Lot 1 gas lateral, Lot 1 water lateral, existing 8" DIP sanitary main.
- d. The profile must be revised to accurately reflect these conditions that are shown on the plans. Additionally, several of the utility crossings do not provide enough vertical separation. Revise the plans to provide a minimum of 18" vertical separation between the storm pipe and sanitary and water pipes.

Response 12. The profile is revised to show the current crossings.

Comment 13. The Walnut Storm Main Profile on Sheet 9 of the plan set still does not show the proposed grade. The storm pipe profiles must show the proposed grading. Revise the Walnut Storm Main Profile to show all proposed grades.

Response 13. The profile is within the cartway and no changes to grade are proposed. Finish grade is the same as existing grade. A clarifying note is added.

Comment 14. The Lot 17 & 18 Storm Main Profile on Sheet 9 of the plan set indicates rim/invert elevations for PSTH-18 and PI-R2 that are below finished grade. Revise these structures to provide logical rim/grate elevations relative to the finished grade.

Response 14. The rim elevations match finished grades.

Comment 15. Provide a profile for inlet PI-R1D and the pipe connecting to PI-R1C.

Response 15. A storm profile for PP-R1D is added to Sheet 9.

Comment 16. The Yard Inlet table on the Utility Plan on Sheet 9 of the plan set lists grade elevations for inlets PI-1A, PI-1B, PI-20A, and PI-20B that do not appear to agree with the grading. Revise the Yard Inlet table and/or the proposed grading accordingly.

Response 16. The yard inlet table on Sheet 11 is consistent with the current proposed grading.

Comment 17. It appears that the location of PI-14A was revised but the associated features were not. Revise the plans to reconfigure PP-15A and any other related features and ensure the identification callout is properly located.

Response 17. The PI-14A features are revised to match the current configuration.

Sanitary Sewer

Comment 1. The invert information must be verified for the sanitary sewer in Walnut Lane.

Response 1. Additional survey data is added to the base map.

Comment 2. The finished grade is not shown on the sanitary sewer profile between MH PSAN5 to the existing MH of Walnut Avenue. This must be revised.

Response 2. The profile is updated with the additional survey data. Please note that finished grade matches existing grade approaching Walnut Avenue.

Comment 3. All utilities crossing the sanitary sewer must be shown on the sanitary sewer profile.

Response 3. The sanitary profiles show utility crossings for the current alignment.

Comment 4. A sanitary sewer manhole detail must be shown on the plans.

Response 4. The standard PennDOT details are replaced with Continental Concrete details on Sheet 12.

Comment 5. The lateral for Lot#14 is appears to be connected to the lateral for Lot #17. This is not permitted and must be revised.

Response 5. The Lot 14 lateral alignment is separated from Lot 17 on Sheet 11.

Comment 6. The water line and sanitary sewer lines must be a minimum of 10 feet horizontally. There is a note on the plan indicating this, but the lines are shown closer than 10 feet between MH PSAN4 to the existing MH on Walnut Avenue.

Response 6. The water main is relocated to be 10 feet from the sanitary main as shown on Sheet 11.

General

Comment 1. The patio for Lot 8 appears to be shown differently on the plans than on other lots. This must be revised to be consistent.

Response 1. A deck is proposed for Lot 8. The legend is updated to include decks.

Comment 2. The applicant has indicated that all retaining walls will be less than 4 feet high. Any revisions to the size or locations of the individual structures will be addressed with the grading permits.

Response 2. Acknowledged.

Comment 3. The applicant must appear before the Shade Tree Commission and gain approval prior to this plan being presented to the Board or Commissioners. The applicant was scheduled to be before the Shade Tree Commission on January 20, 2021.

Response 3. The Shade Tree Commission approved the plan on January 20, 2021.

We trust these revisions satisfactorily address your comments. Should you have any questions and/or additional comments, please contact me at pspellman@site-engineers.com or 610.523.9002.

Sincerely,



Patrick Spellman, P.E.

SITE ENGINEERING CONCEPTS, LLC

Consulting Engineering and Land Development Services

February 16, 2021

Steve Norcini, P.E.
Township Engineer
Radnor Township
Iven Ave
Wayne, PA 19087

**Re: Response to Traffic Engineering Review
Eagle Road and Radnor Road
Preliminary Subdivision and Land Development Plan
Revision #3**

Dear Steve,

On behalf of the CG Wayne, LLC, SITE Engineering Concepts is pleased to submit the enclosed revision to this preliminary application. Revision #3 addresses the comments in the January 26, 2021 review memo from Damon Drummond, P.E., PTOE, as follows:

SUBDIVISION AND LAND DEVELOPMENT ORDINANCE COMMENTS

Comment C.1. §255-20.B.(1)(m) – Show the existing streets adjacent to the site, including the curbline/ edge of pavement for the existing Beechtree Lane opposite the site to ensure proper alignment of the intersection. It appears that the roads may be offset. The proposed driveway may need to be adjusted to provide proper alignment through the intersection. The applicant has indicated additional survey is being collected to verify roadway alignment.

Response C.1. Survey of the existing conditions of the adjacent roads is added to the plan. The centerline of the Beechtree Lane extension aligns with the existing Beechtree Lane as shown on sheet 10.

Comment C.2. §255-21.B.(5)(c) & §255-27.D(3) – Update the proposed cross section profile of the cul-de-sac to include the cross grade to ensure it does not exceed 3%.

Response C.2. The cross slope is noted on the profile on Sheet 12.

Comment C.3. §255-28.B – As stated previously, provide the available and proposed sight distance (both left and right) at the Lot 20 driveway along Eagle Road.

Response C.3. Sight distance dimensions are added for Lot 20 on Sheet 10.

Comment C.4. §255-37.H – Sidewalks and pedestrian paths shall not exceed a seven-percent grade. As stated previously, provide labels for sidewalk grades to confirm compliance with this section including sidewalk along Walnut Avenue.

Response C.4. Existing grade for Walnut Avenue is added to Sheet 10. The proposed sidewalk matches the existing road grade.

Comment C.5. §255-48 – As stated previously, due to the addition of the fourth leg, include a note on the plans that all the existing supplemental “3-way” signs located under the stop signs are to be replaced with “all-way” (R1-3P) signs on all approaches.

Response C.5. Notes are added to Sheet 4 and Sheet 10.

D. GENERAL TRANSPORTATION COMMENTS

Comment D.1. As a reminder, PennDOT will require a Highway Occupancy Permit (HOP) for the driveway access to Eagle Road (S.R. 1042) from Lot 20. The Township requests the opportunity to review all HOP plans submissions to

PennDOT; as well as be given the opportunity to attend all meetings with PennDOT and copied on all correspondence regarding same.

Response D.1. Acknowledged. The Township will be included in discussion and submissions to the PennDOT.

Comment D.2. Provide 5-foot curb end tapers at the terminus of the proposed concrete curb along both Radnor Street Road and Walnut Avenue.

Response D.2. The taper is added at the end of the Walnut Curb. Radnor Street Road curb is to match the existing curb. Notes are added to clarify on Sheet 10.

Comment D.3. The applicant has offered to extend the Walnut Lane sidewalk to Paul Road provided adequate right-of way exists or can be obtained by Radnor Township. These improvements would be in lieu of pedestrian upgrades at the traffic signal Eagle Road/Radnor Street Road. We recommend the applicant provide a traffic signal easement to the Township allowing them to modify the sidewalk and install signal on the property's corner in the future.

Response D.3. The Applicant is working with the Township to gather survey data required to detail the improvements. A traffic signal easement is added to the public sidewalk easement on Sheet 3.

Comment D.4. The applicant has previously indicated the would widen the existing pedestrian between path between lot 16 and Eagle Road. We recommend a minimum pathway of 5 feet and the widening is to be shown on the plan.

Response D.4. The widening is shown to Sheet 7 and the easement is shown on Sheet 3.

We trust these revisions satisfactorily address your comments. Should you have any questions and/or additional comments, please contact me at pspellman@site-engineers.com or 610.523.9002.

Sincerely,



Patrick Spellman, P.E.

SITE ENGINEERING CONCEPTS,
LLC
CIVIL ENGINEERING AND CONSULTING SERVICES

TRANSMITTAL

TO:	Patricia Sherwin	FROM:	Patrick Spellman
COMPANY:	Radnor Township	DATE:	2/16/2021
STREET ADDRESS:	301 Iven Avenue	PHONE:	
CITY, ZIP:	Wayne, PA 19087	SENDER'S REFERENCE NUMBER:	36-02-978 Eagle & Radnor Rds
RE:	Preliminary/Final Land Development Plan Application, Revision #3 Eagle Rd & Radnor Rd Subdivision	CC:	CG Wayne, LLC, Owner & Applicant David Falcone, Counsel Mark Stanish, Architect Jonathon Alderson, Landscape Architect

COPIES	SHEETS	DATE	ITEM
2	6	2/16/2021	RESPONSE TO TOWNSHIP ENGINEER REVIEW MEMO
2	2	2/16/2021	RESPONSE TO TRAFFIC ENGINEER REVIEW MEMO
2	1	1/15/2021	REQUEST FOR WAIVER OF PRELIMINARY APPROVAL
6	17	2/16/2021	PRELIMINARY LAND DEVELOPMENT PLAN, REVISION #5
6	1	2/16/2021	DRAFT CHAMOUNIX SIDEWALK EXTENSION TO FENIMORE PARK
2	316	2/10/2021	PCSM NARRATIVE, REVISION #3
1	-	2/16/2021	FLASH DRIVE. ALSO AVAILABLE USING LINK: https://site.egnyte.com/fl/a5AMwRP0gj

NOTES/COMMENTS:

On behalf of CG Wayne, L.L.C., SITE Engineering Concepts is pleased to submit the attached revised documents for the land development plan application. If you have any questions or comments, please contact me at pspellman@site-engineers.com or 610.523.9002. Thank

SAUL EWING
ARNSTEIN
& LEHR LLP

David J. Falcone
Phone: (610) 251-5752
Fax: (610) 722-3270
David.Falcone@saul.com
www.saul.com

February 12, 2021

VIA ELECTRONIC MAIL

Stephen F. Norcini, P.E.
Radnor Township Engineer
snorcini@radnor.org

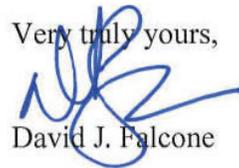
Re: *CG Wayne, LLC*
Eagle and Radnor Roads
Preliminary/Final Subdivision and Land Development Plan

Dear Steve:

As you are aware, applicant, the CG Wayne, LLC (the "CG Wayne"), submitted a Preliminary/Final Land Development Application to the Township on October 6, 2020 (the "Application"). The Application is pending before Radnor Township. Pursuant to the Pennsylvania Municipalities Code, the governing body shall render a decision and communicate it to the applicant not later than ninety (90) days following the date of the regular meeting next following the date that the application is filed. CG Wayne hereby extends until March 31, 2021, the deadline for Radnor Township to act on the above-referenced Application.

Thank you for your continued help with this project. Please feel free to call me if you have any questions, or if you would like to discuss this issue further.

Very truly yours,



David J. Falcone

cc: Roger Phillips, P.E.
 John Rice, Esquire
 Mr. Devin Touhey



Gannett Fleming

*Excellence Delivered **As Promised***

Date: January 26, 2021

To: Steve Norcini, PE Township Engineer

From: Roger Phillips, PE

cc: Kevin W. Kochanski, RLA, CZO – Director of Community Development
Mary Eberle, Esq. – Grim, Biehn, and Thatcher
Damon Drummond, PE – Gilmore & Associates, Inc.
Patricia Sherwin – Radnor Township Engineering Department

RE: Eagle and Radnor Roads

Date Accepted: 10/06/2020
90 Day Review: 01/04/2021 extended to 02/26/2021

Gannett Fleming, Inc. has completed a review of the Preliminary Land Development Plan for the above referenced project for compliance with the Radnor Township Code. We have reviewed the plans based on a proposed zoning map revision that would convert this Parcel to R-2 from the current zoning designation of PI. The map revision must be approved by the Board of Commissioners prior to this plan moving forward in the approval process. The applicant is proposing to construct 20 single family homes on individual lots. The Plan was reviewed for conformance with Subdivision and Land Development, Zoning and other applicable codes of the Township of Radnor.

The applicant has indicated in a January 15, 2021 letter that the following waivers are being requested:

1. §255-12.A – To permit the land development application to proceed and be reviewed as a single preliminary/final land development plan.
2. §255-21.B(1)(n) – Existing principal buildings (and their respective uses) and driveways on the adjacent peripheral strip. Sewer lines, storm drains, culverts, bridges, utility easements, quarries, railroads and other significant man-made features within 500 feet of and within the site (this includes properties across streets) must be shown on the plans. A partial waiver is being requested to not provide the items which are not visible on aerial imagery (sewer lines, storm drains, easements, etc.)

Eagle and Radnor Roads

Plans Prepared By: Site Engineering Concepts, LLC
Dated: 09/15/2020 and last revised 01/19/2021

Gannett Fleming, Inc.

Sewage Facilities Planning

1. Final plan approval will not be granted until Planning Approval or a Planning Exemption is received from the PA DEP. The applicant has submitted the planning module application to the Township on January 13, 2021 for review. The note on the plans that indicates the applicant requests final plan approval conditioned on received planning module approval prior to the construction of the final six homes. This statement is incorrect. Plans may not be recorded, and construction may not commence until planning approval for the entire project is received from the PA DEP. This statement must be revised.

Zoning

1. §280-20-F – The applicant has provided a proposed impervious coverage chart. Additional information must be provided regarding the “other SF” column in the chart.
2. The aggregate side yard for Lot #17 is shown as 100.8 ft in the proposed zoning summary. We believe this is incorrect. The applicant must verify and revise.
3. The setbacks shown in the proposed zoning summary must be the most restrictive information. For example, Lot #5 has 2 front yard setbacks. One is 55.1 ft and the other is 45 ft. The table should indicate the 45 ft, not the 55.1 ft. This table should be revised.
4. §280-112 – There appears to be portion of the home on lot #1 located in the steep slope areas of greater than 20%. The applicant has indicated that these steep slope areas are man-made. Verification of the steep slopes being created by an approved Land Development Plan or Grading Permit must be provided.

Subdivision and Land Development

1. §255-20-B(1)(n) – Existing principal buildings (and their respective uses) and driveways on the adjacent peripheral strip. Sewer lines, storm drains, culverts, bridges, utility easements, quarries, railroads and other significant man-made features within 500 feet of and within the site (this includes properties across streets) must be shown on the plans. The applicant has requested a partial waiver from this requirement.
2. §255.27.C(4) – When a subdivision abuts or contains an existing street of inadequate right-of-way width, the Board of Commissioners may require the reservation or dedication of rights-of-way to conform with the required standards. Radnor Street Road is a Minor Collector, with a right-of-way requirement is 60 feet. The applicant has indicated on the plans that the existing right-of-way is 33 feet. Walnut Avenue is a local Road, with a right-

of-way requirement is 60 feet. The applicant has indicated on the plans that the existing right-of-way is 50 feet. A 25-foot half ROW from the existing cartway centerline is being provided along Radnor Street Road. The existing Walnut Ave ROW is currently sufficient for the type and usage of roadway.

3. §255.38.B – Street trees 2 ½ inches dbh at intervals of not more than 30 feet along both sides of new streets and along one or both sides of an existing street within the proposed subdivision or land development must be provided. The applicant has indicated that there is street frontage currently canopied by existing trees and not included in the calculations for the following: Radnor Street Road has 250 linear feet of canopied edge for the Northern stretch of the property and Eagle Road has adequate canopy for the entire length of the property.
4. §255.38.H – All street trees provided must be in accordance with this section. We note there are numerous trees shown on the planting schedule not in accordance with this section.
5. §255-40.C(2) – Access and circulation for fire-fighting and other emergency equipment, moving vans, fuel trucks, garbage collection, deliveries and snow removal shall be planned for efficient operation and convenience. The turning template should provide the information regarding the vehicle used.
6. §255-43.1.B(1) – For all residential subdivisions or land developments involving a total of four or more lots and/or dwelling units, a minimum of 1,440 square feet or suitable park and recreation land shall be provided per dwelling unit within such subdivision/land development, unless the developer agrees to a fee in lieu of \$3,307 per dwelling unit (existing or proposed).
7. §255-49 – Where appropriate, the developer shall install or cause to be installed, at the developer’s expense, metal or fiberglass pole streetlights serviced by underground conduit in accordance with a plan to be prepared by the developer’s engineer and approved by the Board of Commissioners. Three streetlights are being provided.
8. §255-54.B – The central water system should be designed with adequate capacity and appropriately spaced fire hydrants for fire-fighting purposes pursuant to the specification of the National Fire Protection Association. Review and approval by the Township Engineer and the Township Fire Marshall shall be required in order to ensure that adequate fire protection is provided. A fire hydrant is being provided at the end of the cul-de-sac per discussions with the fire department. The applicant is preparing a water extension plan for review and approval by Aqua and Township.

Stormwater

1. The proposed drainage area map on Sheet 14 of the plan set must be revised to clearly indicate the separate drainage areas used in the stormwater calculations (i.e. A1, A2, etc.). An increased scale is insufficient, as the plan is very busy and difficult to interpret where the boundaries of each individual drainage area are located. It may be helpful to provide a simplified map with many of the features turned off, similar to the Outfall Map provided in the PCSM report, or provide different colors for each proposed drainage area.
2. The Lot #1 infiltration bed appears to utilize the infiltration rate from test 1B (1.6 in/hr) but uses the test elevation from test 1A (350.0). If the test elevation from test 1A is to be used, then the infiltration rate from that test must also be used. Test 1B did not investigate below 353.5 so the rate of 1.6 in/hr cannot be used at the design elevation of 350.5. Revise the Proposed Infiltration Bed Dimensions table on Sheet 8 of the plan set and the Basin Volumes & Dewater Times per bed in the PCSM report to be consistent and utilize the correct test pit ID information.
3. Sheet 8 of the plan set indicates a bed bottom elevation of 376.5 for the Lot #6 infiltration bed and an associated test pit ID of SWB-6, but the test elevation for SWB-6 was 368.0. The bed bottom elevation is outside of the test strata per the borehole log in the soil report (364.0 through ~376.2). The bed bottom elevation must be within the test strata in order to utilize the infiltration rates and elevation. Revise accordingly.
4. The infiltration bed footprints for Lot #17 and #18 are inconsistent between the PCSM report and the plans. The Basin Footprints in the Basin Volumes & Dewater Times per bed in the PCSM report indicates a 2,418 sf footprint for Lot #17 but the Proposed Infiltration Bed Dimensions table on Sheet 8 of the plan set indicates a 63'x38' (2,394 sf) footprint, as does Sheet 7 of the plans. The Basin Footprints in the Basin Volumes & Dewater Times per bed in the PCSM report indicates a 1,898 sf footprint for Lot #18 but the Proposed Infiltration Bed Dimensions table on Sheet 8 of the plan set indicates a 73'x19' (1,387 sf) footprint, as does Sheet 7 of the plans. These inconsistencies must be revised.
5. The Mid-Lot Storm Main Profile on Sheet 9 of the plan set does not show Outfall A5. Revise the profile to show Outfall A5. The profile also indicates a rim elevation for PSTH-5 below the finished grade. Revise the structure to provide a logical rim elevation relative to the finished grade. The finished grading surrounding PSTH-5 is unclear. Revise the profile to clearly show the finished grading.

6. The pipe size for PP18 is listed as 8” on the Beechtree Storm Main Table but is listed as 12” on the Lot 17 & 18 Storm Main Profile. Revise this inconsistency.
7. The pipe size and downstream invert for PPR1C are listed as 15” and 381.98, respectively, on the Beechtree Storm Main Table but are listed as 8” and 383.77, respectively, on the Lot 17 & 18 Storm Main Profile. Revise these inconsistencies.
8. The pipe invert out elevation for PPR2 is listed as 381.81 on the Beechtree Storm Main Table but is listed as 383.75 on the Lot 17 & 18 Storm Main Profile. Revise this inconsistency.
9. The utility crossings on the Beechtree Storm Main Profile on Sheet 9 of the plans are inconsistent with the plans. The Utility Plan on Sheet 11 of the plan set appears to indicate the following utility crossings of the indicated storm pipes (in sequential order from upstream to downstream):
 - a. PP-R1B: communications main, underground electric main, gas main.
 - b. PP-R1C: Lot 15 water lateral, Lot 7 communications lateral, Lot 7 electrical lateral, Lot 7 gas lateral, Lot 15 sanitary lateral, Lot 14 water lateral, Lot 8 communications lateral, Lot 8 electrical lateral, Lot 8 gas lateral, Lot 8 water lateral, Lot 14 storm pipe from infiltration bed, Lot 14 & 17 sanitary lateral, Lot 17 water lateral, Lot 18 water lateral.
 - c. PP-R2: Lot 18 sanitary lateral.
 - d. PP-R3B: Lot 13 sanitary lateral, Lot 19 water lateral, Lot 12 water lateral, Lot 11 water lateral.
 - e. PP-R4: gas main, underground electric main, communications main, Lot 11 water lateral
 - f. The profile must be revised to accurately reflect these conditions that are shown on the plans. Be sure to include the entirety of Outfall A3 which appears to have been cut off during the latest revision to the plans.
10. The Mid-Lot Storm Main Profile on Sheet 9 of the plan set indicates a sanitary lateral crossing near PSTH-8 but there is no sanitary lateral shown on the plans at this location. Revise the profile to remove this crossing. Additionally, it appears that the sanitary main and water main crossings do not provide enough vertical separation. Revise the plans to provide a minimum of 18” vertical separation between the storm pipe and sanitary and water mains. The Mid-Lot Storm Main profile no longer shows Outfall A5. Revise the profile to include the outfall.

11. The Utility Plan on Sheet 11 of the plan set appears to indicate at least 8 utility crossings of storm pipe PP-18 but none are shown on the Lot 17 & 18 Storm Main Profile. The profile must be revised to show all utility crossings.
12. The utility crossings on the Walnut Storm Main Profile on Sheet 9 of the plans are inconsistent with the plans. The Utility Plan on Sheet 11 of the plan set appears to indicate the following utility crossings of the indicated storm pipes (in sequential order from upstream to downstream):
 - a. PP-R6: Lot 4 sanitary lateral, Lot 4 water lateral, Lot 4 gas lateral.
 - b. PP-R6B: Lot 3 water lateral, Lot 3 gas lateral, Lot 3 sanitary lateral.
 - c. PP-R7: Lot 2 water lateral, Lot 2 gas lateral, sanitary main PP-S6, water main, Lot 1 gas lateral, Lot 1 water lateral, existing 8" DIP sanitary main.
 - d. The profile must be revised to accurately reflect these conditions that are shown on the plans. Additionally, several of the utility crossings do not provide enough vertical separation. Revise the plans to provide a minimum of 18" vertical separation between the storm pipe and sanitary and water pipes.
13. The Walnut Storm Main Profile on Sheet 9 of the plan set still does not show the proposed grade. The storm pipe profiles must show the proposed grading. Revise the Walnut Storm Main Profile to show all proposed grades.
14. The Lot 17 & 18 Storm Main Profile on Sheet 9 of the plan set indicates rim/invert elevations for PSTH-18 and PI-R2 that are below finished grade. Revise these structures to provide logical rim/grate elevations relative to the finished grade.
15. Provide a profile for inlet PI-R1D and the pipe connecting to PI-R1C.
16. The Yard Inlet table on the Utility Plan on Sheet 9 of the plan set lists grade elevations for inlets PI-1A, PI-1B, PI-20A, and PI-20B that do not appear to agree with the grading. Revise the Yard Inlet table and/or the proposed grading accordingly.
17. It appears that the location of PI-14A was revised but the associated features were not. Revise the plans to reconfigure PP-15A and any other related features and ensure the identification callout is properly located.

Sanitary Sewer

1. The invert information must be verified for the sanitary sewer in Walnut Lane.

2. The finished grade is not shown on the sanitary sewer profile between MH PSAN5 to the existing MH of Walnut Avenue. This must be revised.
3. All utilities crossing the sanitary sewer must be shown on the sanitary sewer profile.
4. A sanitary sewer manhole detail must be shown on the plans.
5. The lateral for Lot#14 is appears to be connected to the lateral for Lot #17. This is not permitted and must be revised.
6. The water line and sanitary sewer lines must be a minimum of 10 feet horizontally. There is a note on the plan indicating this, but the lines are shown closer than 10 feet between MH PSAN4 to the existing MH on Walnut Avenue.

General

1. The patio for Lot 8 appears to be shown differently on the plans then on other lots. This must be revised to be consistent.
2. The applicant has indicated that all retaining walls will be less than 4 feet high. Any revisions to the size or locations of the individual structures will be addressed with the grading permits.
3. The applicant must appear before the Shade Tree Commission and gain approval prior to this plan being presented to the Board or Commissioners. The applicant was scheduled to be before the Shade Tree Commission on January 20, 2021.

If you have any questions or require any additional information, please contact me.

Very truly yours,

GANNETT FLEMING, INC.



Roger A. Phillips, P.E.
Senior Project Manager



GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

MEMORANDUM

Date: January 26, 2021

To: Steve Norcini, P.E.

From: Damon Drummond, P.E., PTOE

cc: Roger Phillips, P.E.
Leslie Salisbury, P.E.

Reference: CG Wayne, LLC - Eagle & Radnor Roads
Radnor Township, Delaware County
Transportation Review 3
G&A #20-20023

Our transportation review is complete for the Preliminary/Final Subdivision and Land Development plans prepared for Eagle & Radnor Street Roads. We offer the following comments for your consideration:

A. PROJECT DESCRIPTION

The Applicant, CG Wayne, LLC, is proposing a development consisting of 20 new single-family homes on a site bounded by Eagle Road, Radnor Street Road and Walnut Avenue. The main driveway takes access to Radnor Street Road opposite Beechtree Lane. There are several individual residences that take direct access to either Eagle Road, Radnor Street Road or Walnut Avenue.

B. DOCUMENTS REVIEWED

1. Preliminary/Final Subdivision and Land Development Plans prepared by Site Engineering Concepts, LLC, prepared for CG Wayne, LLC, consisting of 17 sheets, dated September 15, 2020 and last revised January 19, 2021.
2. Traffic Response Letter prepared by Site Engineering Concepts, LLC, dated January 15, 2021.

C. SUBDIVISION AND LAND DEVELOPMENT ORDINANCE COMMENTS

1. §255-20.B.(1)(m) – Show the existing streets adjacent to the site, including the curbline/edge of pavement for the existing Beechtree Lane opposite the site to ensure proper alignment of the intersection. It appears that the roads may be offset. The proposed driveway may need to be adjusted to provide proper alignment through the intersection. The applicant has indicated additional survey is being collected to verify roadway alignment.
2. §255-21.B.(5)(c) & §255-27.D(3) – Update the proposed cross section profile of the cul-de-sac to include the cross grade to ensure it does not exceed 3%.

3. §255-28.B – As stated previously, provide the available and proposed sight distance (both left and right) at the Lot 20 driveway along Eagle Road.
4. §255-37.H – Sidewalks and pedestrian paths shall not exceed a seven-percent grade. As stated previously, provide labels for sidewalk grades to confirm compliance with this section including sidewalk along Walnut Avenue.
5. §255-48 – As stated previously, due to the addition of the fourth leg, include a note on the plans that all the existing supplemental “3-way” signs located under the stop signs are to be replaced with “all-way” (R1-3P) signs on all approaches.

D. GENERAL TRANSPORTATION COMMENTS:

1. As a reminder, PennDOT will require a Highway Occupancy Permit (HOP) for the driveway access to Eagle Road (S.R. 1042) from Lot 20. The Township requests the opportunity to review all HOP plans submissions to PennDOT; as well as be given the opportunity to attend all meetings with PennDOT and copied on all correspondence regarding same.
2. Provide a 5-foot curb end taper at the terminus of the proposed concrete curb along Radnor Street Road.
3. The applicant has offered to extend the Walnut Lane sidewalk to Paul Road provided adequate right-of way exists or can be obtained by Radnor Township. These improvements would be in lieu of pedestrian upgrades at the traffic signal Eagle Road/Radnor Street Road. We recommend the applicant provide a traffic signal easement to the Township allowing them to modify the sidewalk and install signal on the property’s corner in the future.
4. The applicant has previously indicated the would widen the existing pedestrian between path between lot 16 and Eagle Road. We recommend a minimum pathway of 5 feet and the widening is to be shown on the plan.

SITE ENGINEERING CONCEPTS, LLC

Consulting Engineering and Land Development Services

January 15, 2021

Board of Commissioners Radnor Township
301 Iven Avenue
Wayne, PA 19087

Re: Waiver Requests
Preliminary/ Final Land Development Plan
Eagle Road and Radnor Road Subdivision

Dear Members of the Board:

CG Wayne, LLC respectfully requests the following waivers for the Eagle Road and Radnor Road Preliminary/Final Land Development Plan:

Waiver #1, Section 255-12.A, Preliminary Plan Submission

A waiver from Section 255-12.A of the Township Code to permit the above-referenced land development application to proceed and be reviewed as a single preliminary/final land development plan. Section 255-12.A requires, in relevant part, that an applicant must submit an individual preliminary application for a major subdivision.

Waiver #2, Section 255-21.B(1)(n), Man-Made Features within 500 Feet

Section 255-21.B(1)(n) requires significant man-made features within 500 feet of the site be provided on the plan. Aerial imagery is used to provide detail beyond the site boundaries where survey data cannot legally be collected (e.g.: private property). A partial waiver is request to the extent necessary to not provide those items which are not visible on aerial imagery (e.g.: sewer lines, storm drains, easements, etc.).

Should the Township have any questions or require additional information, please contact me at pspellman@site-engineers.com or 610.523.9002.

Sincerely,



Patrick Spellman, P.E.

SITE ENGINEERING CONCEPTS, LLC

Consulting Engineering and Land Development Services

January 15, 2021

Steve Norcini, P.E.
Township Engineer
Radnor Township
Iven Ave
Wayne, PA 19087

**Re: Response to Engineering Review
Eagle Road and Radnor Road
Preliminary Subdivision and Land Development Plan
Revision #2**

Dear Steve,

On behalf of the CG Wayne, LLC, SITE Engineering Concepts is pleased to submit the enclosed revision to this preliminary application. Revision #2 addresses the comments in the December 28, 2020 review memo from Roger Phillips, P.E., as follows:

Sewage Facilities Planning

Comment 1. Final plan approval will not be granted until Planning Approval or a Planning Exemption is received from the PA DEP. The applicant has indicated on the plans that the planning modules have been submitted to the authorities for signature and will be forwarded to the PA DEP when completed. To date, the Township has not received a copy for review.

Response 1. The planning module application was submitted on January 13, 2021. The application requests six additional EDU's as 14 currently exist with the houses to be removed. The applicant requests final plan approval conditioned on receiving planning module approval prior to the construction of the final six homes.

Zoning

Comment 1. The proposed zoning table must be revised to show the requirements of the proposed development. Additionally, the zoning table must indicate the appropriate zoning district.

Response 1. The Zoning Requirements Table on Sheet 7 indicates the existing districts and proposed district.

Comment 2. The breakdown for how the impervious coverage was calculated for each lot must be provided.

Response 2. An Impervious Summary Table is added to Sheet 7.

Comment 3. There appears to be 2- 20 foot side yards for Lot 14 show on the plan. This must be revised to indicate on of the side yards must be a minimum of 25 feet.

Response 3. One of the yards is revised to be 25 feet.

Comment 4. Some of the numbers are different in the proposed lot table and the proposed zoning summary table. They must be verified and tables revised to be consistent. For example, on the proposed lot table, the proposed lot area for lot 15 is 21,623 SF, but on the proposed zoning table the proposed lot area for lot 15 is 21,923.

Response 4. The lot table and zoning table are updated to be consistent.

Comment 5. There appears to be part of the home lot #1 and the concrete aprons and sidewalk for Lot 1, lot 2, and lot 3 located in the steep slope areas of greater than 20%. The applicant has indicated that these steep slope areas are man-made. Verification of the steep slopes being created by an approved Land Development Plan or Grading Permit must be provided.

Response 5. There are no slopes along Walnut Avenue. The anomaly in the survey data is corrected.

Subdivision and Land Development

Comment 1. §255-20-B(1)(n) – Existing principal buildings (and their respective uses) and driveways on the adjacent peripheral strip. Sewer lines, storm drains, culverts, bridges, utility easements, quarries, railroads and other significant man-made features within 500 feet of and within the site (this includes properties across streets) must be shown on the plans. The applicant has requested a partial waiver from this requirement.

Response 1. Aerial imagery is used to provide detail beyond the site boundaries where survey data cannot legally be collected (e.g.: private property). A partial waiver is request to the extent necessary to not provide those items which are not visible on aerial imagery (e.g.: sewer lines, storm drains, easements, etc.).

Comment 2. §255.27.C(4) – When a subdivision abuts or contains an existing street of inadequate right-of-way width, the Board of Commissioners may require the reservation or dedication of rights-of-way to conform with the required standards. Radnor Street Road is a Minor Collector. The right-of-way requirement is 60 feet. The applicant has indicated on the plans that the right-of-way is 33 feet. Walnut Road is a local Road. The right-of-way requirement is 60 feet. The applicant has indicated on the plans that the right-of-way is 50 feet. Eagle Road is a Major Collector. The right-of-way requirement is 80 feet. The applicant has indicated on the plans that the right-of-way is 40 feet.

Response 2. Per discussions with township staff, a 25 foot half-ROW from the existing cartway centerline is provided along Radnor Street Road. Staff confirmed the existing Eagle Road and Walnut Avenue rights-of-way are sufficient.

Comment 3. §255.27.H(6) – Minimum curb radii at street intersections shall be 25 feet for local streets; 30 feet for collectors; 35 feet for arterials; and 10 feet for driveways. Radnor Street Road is a minor collector so the curb radii must be 30 feet, not 25 as shown on the plans..

Response 3. The curb radii are updated to reflect 30' at the Radnor Street Road intersections with Beechtree Lane and Walnut Lane.

Comment 4. §255.37.G – Sidewalks and pedestrian paths shall be laterally pitched at a slope of not less than ¼ inch per foot to provide for adequate surface drainage.

Response 4. A 2% cross slope is provided for the sidewalk and is indicated on the detail on sheet 13.

Comment 5. §255.38B – Street trees 2 ½ inches dbh at intervals of not more than 30 feet along both sides of new streets and along one or both sides of an existing street within the proposed subdivision or land development must be shown on the plans. The plan indicates that there are 76 street trees provided. The applicant must provide the calculations that breaks down how the number of street trees were calculated.

Response 5. A Street Tree Calculation table is now provided on Sheet 15.

Comment 6. §255-40.C(2) – Access and circulation for fire-fighting and other emergency equipment, moving vans, fuel trucks, garbage collection, deliveries and snow removal shall be planned for efficient operation and convenience. The turning templates provided on sheet 13 are incomplete.

Response 6. The turning template on Sheet 13 is revised to show the circulation for a tower fire truck to represent all truck traffic. Snow stockpile are is shown.

Comment 7. §255-43.1.B(1) – For all residential subdivisions or land developments involving a total of four or more lots and/or dwelling units, a minimum of 1,440 square feet or suitable park and recreation land shall be provided per dwelling unit within such subdivision/land development, unless the developer agrees to a fee in lieu of \$3,307 per dwelling unit (existing or proposed).

Response 7. Acknowledged .

Comment 8. §255-49 – Where appropriate, the developer shall install or cause to be installed, at the developer's expense, metal or fiberglass pole streetlights serviced by underground conduit in accordance with a plan to be prepared by the developer's engineer and approved by the Board of Commissioners.

Response 8. Per discussions with Township staff, 3 street light locations are shown along the Beechtree Lane extension . One at the Radnor Street Road intersection, at the approximate mid point and at the end of the cul-de-sac. A shadow box fixture detail is added to sheet 13.

Comment 9. §255-54.B – The central water system should be designed with adequate capacity and appropriately spaced fire hydrants for fire-fighting purposes pursuant to the specification of the National Fire Protection Association. Review and approval by the Township Engineer and the Township Fire Marshall shall be required in order to ensure that adequate fire protection is provided. We note that the applicant is working with the Township Engineer and Township Fire Marshall and will incorporate their input as applicable.

Response 9. A fire hydrant is shown at the end of the cul-de-sac per discussion with the fire department. The water main extension plan is being prepared for review and approval by Aqua and the Township.

Stormwater

Comment 1. Please revise the proposed drainage area map on Sheet 14 of the plan set to clearly indicate the separate drainage areas used in the stormwater calculations (i.e. A1, A2, etc.).

Response 1. The drainage area map scale is increased.

Comment 2. Lot #19 Infiltration Bed: Outlet pipe slope is listed as 12.20% on the plans and is listed as 12.50% in the hydrograph report. Please revise this inconsistency.

Response 2. The plan is revised to match the report.

Comment 3. Please revise the endwall at Outfalls A2, A3, and A4 to a level spreader to discharge runoff in a disperse, unconcentrated manner. Please provide a level spreader detail.

Response 3. A level spreader design worksheet is added to the storm report and a level spreader detail for Outfalls A1, A2, A4, A6 and A7 is added to the plan set. A riprap discharge apron is better suited for the discharge for the flows from 15 inch diameter pipes at Outfalls A3 and A5. A riprap discharge apron design worksheet is added to the storm report and detail to the plan.

Comment 4. It appears the infiltration test elevation does not correspond to the bed bottom elevation for Lots #1, #6, and #20. Please revise the bed bottom elevations to incorporate to the appropriate elevation and provide at least two feet above any limiting zone.

Response 4. The bottom elevations for the beds are within the test strata per the borehole logs in the soil report. For example the test for Lot 1A was conducted at elevation 350.0. The uniform strata containing the test elevation ranges from elevation 345.5 through 352.5. The proposed Lot 1 bed bottom elevation of 350.5 is located within the same material.

Comment 5. The proposed bed bottom elevation for Lot #11 has been revised to 360.5, which is only 1.9 feet above limiting zone. Please revise the bed bottom elevation to provide at least two feet above any limiting zone.

Response 5. The Lot 11 bed elevation is raised 0.5' to meet the limiting zone separation requirement. As discussed in Response 4 above, the bed bottom elevation is within the test strata per the borehole log.

Comment 6. The Basin Footprints on the Basin Volumes & Dewater Times Per Bed in the stormwater report are inconsistent with the bed footprints found on the plans for Lots #17, #18, & #20. Please revise these inconsistencies.

Response 6. The basin footprints are revised to match the dimensions in the storm report.

Comment 7. The location of storm pipe PP-11 and Outfall A5 have been relocated to avoid interference with infiltration bed PIB-1 and to provide adequate cover. Please update the Mid-Lot Storm Main Profile on Sheet 9 of the plan set to reflect the updated conditions.

Response 7. The profiles are revised to match the current alignments.

Comment 8. The pipe size of PP-R1C on PI-R2 is listed as 15" in the Radnor/Beechtree Storm Main table on Sheet 11 of the plans but is indicated as 8" in the Lot 17 & 18 Storm Main Profile on Sheet 9 of the plans. Please revise this inconsistency.

Response 8. The profile is revised to contain all pipe information and the pipe run tables are removed.

Comment 9. The invert of PO-13 on PI-R3B is listed as "REF!" in the Radnor/Beechtree Storm Main table on Sheet 11 of the plans but is indicated as 384.07 in the Beechtree Storm Main Profile on Sheet 9 of the plans. Please revise this inconsistency.

Comment 10. The profile is revised to contain all pipe information and the pipe run tables are removed.

Comment 11. 10. The invert of PO-12 on PI-R4 is listed as "REF!" in the Radnor/Beechtree Storm Main table on Sheet 11 of the plans but is indicated as 382.48 in the Beechtree Storm Main Profile on Sheet 9 of the plans. Please revise this inconsistency.

Comment 12. The profile is revised to contain all pipe information and the pipe run tables are removed.

Comment 13. The invert of PP-R4 on PI-R4 is listed as 380.13 in the Radnor/Beechtree Storm Main table on Sheet 11 of the plans and in the Pipe Run Table on Sheet 12 of the plans but is indicated as 380.11 in the Beechtree Storm Main Profile on Sheet 9 of the plans. Please revise this inconsistency.

Comment 14. The profile is revised to contain all pipe information and the pipe run tables are removed.

Comment 15. The invert of PO-6 on PSTMH-3 is listed as 372.78 in the Mid-Lot Storm Main table on Sheet 11 of the plans but is indicated as 372.63 in the Mid-Lot Storm Main Profile on Sheet 9 of the plans. Please revise this inconsistency.

Comment 16. The profile is revised to contain all pipe information and the pipe run tables are removed.

Comment 17. The invert of PP-11 on Outfall A5 is listed as 360.13 in the Pipe Run Table on Sheet 12 of the plans but is indicated as 360.3 in the Mid-Lot Storm Main Profile on Sheet 9 of the plans. Please revise this inconsistency.

Comment 18. The profile is revised to contain all pipe information and the pipe run tables are removed.

Comment 19. The invert of PO-3 on PI-R6B is listed as 359.30 in the West Walnut Storm Main table on Sheet 11 of the plans but is indicated as 361.68 in the Walnut Storm Main Profile on Sheet 9 of the plans. Please revise this inconsistency.

Comment 20. The profile is revised to contain all pipe information and the pipe run tables are removed.

Comment 21. The slope and length of PP-R6A are listed as 3.1% and 151.00 LF, respectively, in the Pipe Run Table on Sheet 12 of the plans but is indicated as 5.0% and 178 LF, respectively, in the Walnut Storm Main Profile on Sheet 9 of the plans. Please revise these inconsistencies.

Comment 22. The profile is revised to contain all pipe information and the pipe run tables are removed.

Comment 23. The slope, length, and upstream invert of PP-R6B are listed as 2.4%, 131.00 LF, and 359.28, respectively, in the Pipe Run Table on Sheet 12 of the plans but is indicated as 5.5%, 134 LF, and 361.01, respectively,

in the Walnut Storm Main Profile on Sheet 9 of the plans. The upstream invert is listed as 359.28 in the West Walnut Storm Main table on Sheet 11 of the plans. Please revise these inconsistencies.

Comment 24. The profile is revised to contain all pipe information and the pipe run tables are removed.

Comment 25. The invert of PO-2 on PI-R7 is listed as 355.20 in the West Walnut Storm Main table on Sheet 11 of the plans but is indicated as 355.56 in the Walnut Storm Main Profile on Sheet 9 of the plans. Please revise this inconsistency.

Comment 26. The profile is revised to contain all pipe information and the pipe run tables are removed.

Comment 27. The slope, length, and upstream invert of PP-R7 are listed as 3.7%, 157.10 LF, and 355.18, respectively, in the Pipe Run Table on Sheet 12 of the plans but is indicated as 5.5%, 112 LF, and 355.54, respectively, in the Walnut Storm Main Profile on Sheet 9 of the plans. The upstream invert is listed as 355.18 in the West Walnut Storm Main table on Sheet 11 of the plans. Please revise these inconsistencies.

Comment 28. The profile is revised to contain all pipe information and the pipe run tables are removed.

Comment 29. The pipe size of EX A on Outfall A7 is listed as 15" in the West Walnut Storm Main table on Sheet 11 of the plans but is indicated as 8" in the Walnut Storm Main Profile on Sheet 9 of the plans. Please revise this inconsistency.

Comment 30. The profile is revised to contain all pipe information and the pipe run tables are removed.

Comment 31. It appears that several utility crossings are missing from the Beechtree Storm Main Profile on Sheet 9 of the plans. The Utility Plan on Sheet 11 appear to show 25 utility crossings but the profile indicates 10. Please revise the profile to include all utility crossings.

Response 9. The utility crossings are updated to reflect the current alignment.

Comment 32. The Mid-Lot Storm Main Profile on Sheet 9 of the plan set indicates a sanitary lateral that interferes with storm pipe PP-10, but this sanitary lateral does not appear to cross this storm pipe, as seen on Sheet 11. Please clarify or revise the profile to reflect the conditions shown on the plans.

Response 10. The profiles are revised to match the current alignments.

Comment 33. Please revise the Radnor Storm Main Profile on Sheet 9 to show the proposed sanitary sewer crossings along storm pipes PP-R1A and PP-R1B.

Response 11. The sanitary sewer crossing is now reflected in the profile.

Comment 34. Please revise the Lot 17 & 18 Storm Main Profile on Sheet 9 to show the proposed utility crossings near PI-R2.

Response 12. The profiles are revised to include the crossings.

Comment 35. The Walnut Storm Main Profile on Sheet 9 of the plan set indicates many utility crossings that are inconsistent with the Utility Plan on Sheet 11. Please revise the profile to reflect the conditions shown on the plans.

Response 13. The profiles are revised to match the current alignments and crossings

Comment 36. Please revise the Radnor Storm Main Profile and Walnut Storm Main Profile on Sheet 9 of the plan set to display the proposed grade.

Response 14. The profiles are updated to reflect the proposed grade.

Comment 37. The Lot 17 & 18 Storm Main Profile on Sheet 9 of the plan set appears to indicate that storm pipe PP-18 does not have adequate cover. Please revise the plans to provide at least one foot of cover.

Response 15. The profiles are updated to insure property cover..

Comment 38. The Mid-Lot Storm Main Profile on Sheet 9 of the plan set appears to indicate that storm pipe PP-P9A does not have adequate cover. Please revise the plans to provide at least one foot of cover.

Response 16. The profiles are revised to match the current alignments and minimum cover verified.

Sanitary Sewer

Comment 1. The profile provided must include the sanitary sewer run PSANH-1 to PSANH-4A.

Response 1. PSANH-1 to PSANH-4A are now included.

Comment 2. The size of the proposed 8" sanitary sewer must be shown on the profile.

Response 2. The sewer pipe size is added to the profile.

Comment 3. Sanitary sewer Laterals for Lot #1 and Lot #2 must be shown on the plans.

Response 3. Lot 1 and 2 laterals are labeled for clarity.

Comment 4. The lateral for Lot #20 appears to be tying into the existing lateral and directly into the existing sanitary sewer. The condition of the existing lateral must be verified and approved by the Township prior to connection.

Response 4. A note is added to the plan requiring the lateral be verified during the grading permit review and if deemed unsatisfactory to the Township be replaced.

Comment 5. The lateral for lot #11 does not appear to be tying into the sanitary sewer.

Response 5. The Lot 11 lateral is extended to the revised main alignment. A profile is added showing the water main crossing.

Comment 6. Laterals cannot tie directly into manholes. The lateral for Lot #12 is tying into an existing manhole. This must be revised.

Response 6. The Lot 12 lateral is revised to connect to the main.

Comment 7. Sanitary sewer branches must not tie into manholes at acute angles to the flow.

Response 7. Laterals are revised to eliminate acute angles.

Comment 8. A note must be added to the plans stating no planting will be done in the Sanitary Sewer easements.

Response 8. The note is added to Sheet 3 and 11.

Comment 9. Sheet 3 indicates that the easement between lots 13 and 14 will be a private utility easement. If the sanitary sewers will be dedicated to Radnor Township, this must be revised.

Response 9. The easement is meant to be private with individual laterals from Lots 17 and 18 to the Beechtree sewer main.

Comment 10. Additional information must be provided regarding the decommissioning of the existing sanitary sewer.

Response 10. Additional decommissioning information is now provided.

Comment 11. The invert information must be verified for the sanitary sewer in Walnut Lane.

Response 11. Additional survey data is being provided and will be incorporated with the grading permit applications.

Comment 12. All sanitary sewer lines must be located in the paved area to the maximum extent possible. The proposed sanitary sewer line in Radnor Street Road must be located in the travel lane.

Response 12. The proposed sewer is now located within travel lane.

General

Comment 1. The applicant has indicated that all retaining walls will be under 4 feet high. Any revisions to the size or locations of the individual structures will be addressed with the grading permits.

Response 1. Acknowledged.

Comment 2. The applicant must appear before the Shade Tree Commission and gain approval prior to this plan being presented to the Board or Commissioners.

Response 2. The Applicant is scheduled to appear before the Shade Tree Commission on January 20, 2021.

Steve Norcini, P.E.

January 15, 2021

Re: Eagle Road and Radnor Road Preliminary Subdivision & LD Plan, Revision #2

Page 7 of 7

We trust these revisions satisfactorily address your comments. Should you have any questions and/or additional comments, please contact me at pspellman@site-engineers.com or 610.523.9002.

Sincerely,

A handwritten signature in blue ink, appearing to read "Patrick Spellman". The signature is stylized and cursive.

Patrick Spellman, P.E.

SITE ENGINEERING CONCEPTS, LLC

Consulting Engineering and Land Development Services

January 15, 2021

Steve Norcini, P.E.
Township Engineer
Radnor Township
Iven Ave
Wayne, PA 19087

**Re: Response to Traffic Engineering Review
Eagle Road and Radnor Road
Preliminary Subdivision and Land Development Plan
Revision #2**

Dear Steve,

On behalf of the CG Wayne, LLC, SITE Engineering Concepts is pleased to submit the enclosed revision to this preliminary application. Revision #2 addresses the comments in the December 28, 2020 review memo from Damon Drummond, P.E., PTOE, as follows:

SUBDIVISION AND LAND DEVELOPMENT ORDINANCE COMMENTS

Comment C.1. §255-20.B.(1)(m) – Show the existing streets adjacent to the site, including the curbline/edge of pavement for the existing Beechtree Lane opposite the site to ensure proper alignment of the intersection. It appears that the roads may be offset. The proposed driveway may need to be adjusted to provide proper alignment through the intersection.

Response C.1. Additional survey data is being collected to verify road alignment.

Comment C.2. §255-21.B.(5)(a)[1] – As stated previously, label the proposed centerline with bearing distances. The label does not appear to be included on Sheet 13, as indicated in the response letter.

Response C.2. The bearings are now included on sheet 3.

Comment C.3. §255-21.B.(5)(c) & §255-27.D(3) – Update the typical section of the proposed cul-de-sac to include the cross grade to ensure it does not exceed 3%.

Response C.3. The grade of the cul-de-sac is 2% with a 0% cross slope to promote drainage to the inlet.

Comment C.4. §255-28.B – As stated previously, provide the available and proposed sight distance (both left and right) at each driveway for Lots 1-5 along Walnut Avenue, Lots 6 and 16 along Radnor Street Road, and Lot 20 along Eagle Road.

Response C.4. The additional sight lines are added to sheet 10.

Comment C.5. §255-37.H – Sidewalks and pedestrian paths shall not exceed a seven-percent grade. As stated previously, provide labels for sidewalk grades to confirm compliance with this section.

Response C.5. Proposed sidewalk along existing roadways follows the grade of the road per PADOT requirements. Additional grade and slopes are now included on Sheet 10.

Comment C.6. §255-47.C. – As a reminder, improvements shall be made to the existing street on which a subdivision or land development abuts. We note that the applicant indicates that the necessary road improvements will be discussed with Township. The following half widths for the roadways are required per this section:

	Right-of-Way/ Cartway
Eagle Road (Major Collector)	40 feet/ 24 feet
Radnor Street Road (Minor Collector)	30 feet/ 18 feet
Walnut Avenue (Local Street)	30 feet/ 14 feet.

Response C.6. Per discussion with Township staff, a 25 foot half ROW is added to Radnor Street Road. Staff confirmed the existing right-of-way for Eagle Road and Walnut Avenue are sufficient.

Comment C.7. §255-48 – Include the proposed location for a street name sign, “Stop”/”All-way” sign and “No Outlet” sign on the plans. In addition, the intersection of Radnor Street Road and Beechtree Lane is currently a 3-way stop condition. Due to the addition of the fourth leg, include a note on the plans that all the existing supplemental “3-way” signs located under the stop signs are to be replaced with “all-way” (R1-3P) signs on all approaches.

Response C.7. The sign locations are added to sheet 7. Details are added to Sheet 14.

D. GENERAL TRANSPORTATION COMMENTS

Comment D.1. As a reminder, PennDOT will require a Highway Occupancy Permit (HOP) for the driveway access to Eagle Road (S.R. 1042) from Lot 20. The Township requests the opportunity to review all HOP plans submissions to PennDOT; as well as be given the opportunity to attend all meetings with PennDOT and copied on all correspondence regarding same.

Response D.1. Acknowledged. The Township will be included in discussion and submissions to the PennDOT.

Comment D.2. Update the ADA ramp details to include widths in order to verify the slopes indicated. Additionally, although a maximum ramp slope of 8.33% is allowed, it is recommended to use a maximum design slope of 7.5% to account for construction tolerances to ensure the ramps will meet the maximum ADA slope requirements.

Response D.2. Widths are added and grades revised as suggested.

Comment D.3. As stated previously, provide an ADA connection at the intersection of Eagle Road/Radnor Street Road. Consider removing the existing steps and construct an ADA accessible walkway to the intersection. We note that the applicant indicates that ADA accommodations at this location will be discussed with PennDOT and the Township.

Response D.3. As discussed with Township Staff, the Eagle Road intersection is not part of this project. The Applicant has offered to extend the Walnut Lane sidewalk to Paul Road provided adequate right-of-way exists or can be obtained by Radnor Township and no Eagle Road intersection improvements are required.

Comment D.4. As stated previously, provide ADA compliant crossings at the intersection of Eagle Road and Radnor Chester Road crossing the eastern and northern leg of the intersection. The crossing improvement would include curb ramps, pedestrian signal heads and push buttons. We note that the applicant indicates that ADA requirements will be discussed with PennDOT and the Township.

Response D.4. See Response D.3.

Comment D.5. Provide 5-foot curb end tapers at the terminus of the proposed concrete curb along both Radnor Street Road and Walnut Avenue.

Response D.5. Tapers are added to the curb terminus.

Comment D.6. Confirm all the driveway grades shown on the plan (i.e. Lot 14).

Response D.6. Driveway grades are confirmed and labels added.

Comment D.7. There is an ADA ramp indicated at the eastern terminus of the sidewalk along Walnut Avenue. However, if there is no receiving ramp on the opposite side of the roadway (mid-block crossing), we recommend removal of the ramp.

Response D.7. There is no receiving ramp and the ramp is removed.

Comment D.8. The applicant should discuss with the Township the possibility of extending the pedestrian facilities to Paul Road and Fenimore Park.

Response D.8. Please see Response D.3.

Steve Norcini, P.E.
January 15, 2021
Re: Eagle Road and Radnor Road Subdivision and LD Plan, Revision #2
Page 3 of 3

Comment D.9. On Sheet 10, the details for the ramp on the southeast corner of Radnor Street Road & Beechtree Lane shows a conflict between the ramp flare and the proposed Type C inlet top. The Type C inlet top cannot be located in the flare. Relocate the inlet to eliminate the conflict.

Response D.9. The inlet is relocated out of the flare.

Comment D.10. The emergency vehicle turning template does not show any information. Update the template to show that vehicles can access the driveway and move within the site.

Response D.10. The turning template layer is now shown in the viewport.

We trust these revisions satisfactorily address your comments. Should you have any questions and/or additional comments, please contact me at pspellman@site-engineers.com or 610.523.9002.

Sincerely,

A handwritten signature in blue ink, appearing to read "Patrick Spellman". The signature is stylized and cursive.

Patrick Spellman, P.E.

January 5, 2021

VIA ELECTRONIC MAIL

Stephen F. Norcini, P.E.
Radnor Township Engineer
snorcini@radnor.org

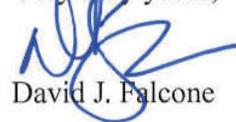
Re: CG Wayne, LLC
Eagle and Radnor Roads
Preliminary/Final Subdivision and Land Development Plan

Dear Steve:

As you are aware, applicant, the CG Wayne, LLC (the "CG Wayne"), submitted a Preliminary/Final Land Development Application to the Township on October 6, 2020 (the "Application"). The Application is pending before Radnor Township. Pursuant to the Pennsylvania Municipalities Code, the governing body shall render a decision and communicate it to the applicant not later than ninety (90) days following the date of the regular meeting next following the date that the application is filed. CG Wayne hereby extends until February 26, 2021, the deadline for Radnor Township to act on the above-referenced Application.

Thank you for your continued help with this project. Please feel free to call me if you have any questions, or if you would like to discuss this issue further.

Very truly yours,



David J. Falcone

cc: John Rice, Esquire
Mr. Devin Touhey



*Excellence Delivered **As Promised***

Date: December 28, 2020

To: Steve Norcini, PE Township Engineer

From: Roger Phillips, PE

cc: Kevin W. Kochanski, RLA, CZO – Director of Community Development
Mary Eberle, Esq. – Grim, Biehn, and Thatcher
Damon Drummond, PE – Gilmore & Associates, Inc.
Patricia Sherwin – Radnor Township Engineering Department

RE: Eagle and Radnor Roads

Date Accepted: 10/06/2020
90 Day Review: 01/04/2021 extended to 01/31/2021

Gannett Fleming, Inc. has completed a review of the Preliminary Land Development Plans for the above referenced project for compliance with the Radnor Township Code. We have reviewed the plans based on a proposed zoning map revision that would convert this Parcel to R-2 from the current zoning designation of PI. The map revision must be approved by the Board of Commissioners prior to this plan moving forward in the approval process. The applicant is proposing to construct 20 single family homes on individual lots. The Plans were reviewed for conformance with Subdivision and Land Development, Zoning and other applicable codes of the Township of Radnor.

The applicant has indicated in a December 11, 2020 letter that the following waiver is being requested:

1. §255-12.A – To permit the land development application to proceed and be reviewed as a single preliminary/final land development plan.
2. §255-21.B(1)(n) – Existing principal buildings (and their respective uses) and driveways on the adjacent peripheral strip. Sewer lines, storm drains, culverts, bridges, utility easements, quarries, railroads and other significant man-made features within 500 feet of and within the site (this includes properties across streets) must be shown on the plans. A partial waiver is being requested to not provide the items which are not visible on aerial imagery (sewer lines, storm drains, easements, etc.)

Eagle and Radnor Roads

Plans Prepared By: Site Engineering Concepts, LLC
Dated: 09/15/2020 and last revised 12/7/2020

Gannett Fleming, Inc.

Sewage Facilities Planning

1. Final plan approval will not be granted until Planning Approval or a Planning Exemption is received from the PA DEP. The applicant has indicated on the plans that the planning modules have been submitted to the authorities for signature and will be forwarded to the PA DEP when completed. To date, the Township has not received a copy for review.

Zoning

1. The proposed zoning table must be revised to show the requirements of the proposed development. Additionally, the zoning table must indicate the appropriate zoning district.
2. The breakdown for how the impervious coverage was calculated for each lot must be provided.
3. There appears to be 2- 20 foot side yards for Lot 14 show on the plan. This must be revised to indicate on of the side yards must be a minimum of 25 feet.
4. Some of the numbers are different in the proposed lot table and the proposed zoning summary table. They must be verified and tables revised to be consistent. For example, on the proposed lot table, the proposed lot area for lot 15 is 21,623 SF, but on the proposed zoning table the proposed lot area for lot 15 is 21,923.
5. There appears to be part of the home lot #1 and the concrete aprons and sidewalk for Lot 1, lot 2, and lot 3 located in the steep slope areas of greater than 20%. The applicant has indicated that these steep slope areas are man-made. Verification of the steep slopes being created by an approved Land Development Plan or Grading Permit must be provided.

Subdivision and Land Development

1. §255-20-B(1)(n) – Existing principal buildings (and their respective uses) and driveways on the adjacent peripheral strip. Sewer lines, storm drains, culverts, bridges, utility easements, quarries, railroads and other significant man-made features within 500 feet of and within the site (this includes properties across streets) must be shown on the plans. The applicant has requested a partial waiver from this requirement.
2. §255.27.C(4) – When a subdivision abuts or contains an existing street of inadequate right-of-way width, the Board of Commissioners may require the reservation or dedication of rights-of-way to conform with the required standards. Radnor Street Road is a Minor Collector. The right-of-way requirement is 60 feet. The applicant has indicated on the

plans that the right-of-way is 33 feet. Walnut Road is a local Road. The right-of-way requirement is 60 feet. The applicant has indicated on the plans that the right-of-way is 50 feet. Eagle Road is a Major Collector. The right-of-way requirement is 80 feet. The applicant has indicated on the plans that the right-of-way is 40 feet.

3. §255.27.H(6) – Minimum curb radii at street intersections shall be 25 feet for local streets; 30 feet for collectors; 35 feet for arterials; and 10 feet for driveways. Radnor Street Road is a minor collector so the curb radii must be 30 feet, not 25 as shown on the plans.
4. §255.37.G – Sidewalks and pedestrian paths shall be laterally pitched at a slope of not less than ¼ inch per foot to provide for adequate surface drainage.
5. §255.38B – Street trees 2 ½ inches dbh at intervals of not more than 30 feet along both sides of new streets and along one or both sides of an existing street within the proposed subdivision or land development must be shown on the plans. The plan indicates that there are 76 street trees provided. The applicant must provide the calculations that breaks down how the number of street trees were calculated.
6. §255-40.C(2) – Access and circulation for fire-fighting and other emergency equipment, moving vans, fuel trucks, garbage collection, deliveries and snow removal shall be planned for efficient operation and convenience. The turning templates provided on sheet 13 are incomplete.
7. §255-43.1.B(1) – For all residential subdivisions or land developments involving a total of four or more lots and/or dwelling units, a minimum of 1,440 square feet or suitable park and recreation land shall be provided per dwelling unit within such subdivision/land development, unless the developer agrees to a fee in lieu of \$3,307 per dwelling unit (existing or proposed).
8. §255-49 – Where appropriate, the developer shall install or cause to be installed, at the developer’s expense, metal or fiberglass pole streetlights serviced by underground conduit in accordance with a plan to be prepared by the developer’s engineer and approved by the Board of Commissioners.
9. §255-54.B – The central water system should be designed with adequate capacity and appropriately spaced fire hydrants for fire-fighting purposes pursuant to the specification of the National Fire Protection Association. Review and approval by the Township Engineer and the Township Fire Marshall shall be required in order to ensure that adequate fire protection is provided. We note that the applicant is working with the Township Engineer and Township Fire Marshall and will incorporate their input as applicable.

Stormwater

1. Please revise the proposed drainage area map on Sheet 14 of the plan set to clearly indicate the separate drainage areas used in the stormwater calculations (i.e. A1, A2, etc.).
2. Lot #19 Infiltration Bed: Outlet pipe slope is listed as 12.20% on the plans and is listed as 12.50% in the hydrograph report. Please revise this inconsistency.
3. Please revise the endwall at Outfalls A2, A3, and A4 to a level spreader to discharge runoff in a disperse, unconcentrated manner. Please provide a level spreader detail.
4. It appears the infiltration test elevation does not correspond to the bed bottom elevation for Lots #1, #6, and #20. Please revise the bed bottom elevations to incorporate to the appropriate elevation and provide at least two feet above any limiting zone.
5. The proposed bed bottom elevation for Lot #11 has been revised to 360.5, which is only 1.9 feet above limiting zone. Please revise the bed bottom elevation to provide at least two feet above any limiting zone.
6. The Basin Footprints on the Basin Volumes & Dewater Times Per Bed in the stormwater report are inconsistent with the bed footprints found on the plans for Lots #17, #18, & #20. Please revise these inconsistencies.
7. The location of storm pipe PP-11 and Outfall A5 have been relocated to avoid interference with infiltration bed PIB-1 and to provide adequate cover. Please update the Mid-Lot Storm Main Profile on Sheet 9 of the plan set to reflect the updated conditions.
8. The pipe size of PP-R1C on PI-R2 is listed as 15” in the Radnor/Beechtree Storm Main table on Sheet 11 of the plans but is indicated as 8” in the Lot 17 & 18 Storm Main Profile on Sheet 9 of the plans. Please revise this inconsistency.
9. The invert of PO-13 on PI-R3B is listed as “REF!” in the Radnor/Beechtree Storm Main table on Sheet 11 of the plans but is indicated as 384.07 in the Beechtree Storm Main Profile on Sheet 9 of the plans. Please revise this inconsistency.
10. The invert of PO-12 on PI-R4 is listed as “REF!” in the Radnor/Beechtree Storm Main table on Sheet 11 of the plans but is indicated as 382.48 in the Beechtree Storm Main Profile on Sheet 9 of the plans. Please revise this inconsistency.
11. The invert of PP-R4 on PI-R4 is listed as 380.13 in the Radnor/Beechtree Storm Main table on Sheet 11 of the plans and in the Pipe Run Table on Sheet 12 of the plans but is indicated

- as 380.11 in the Beechtree Storm Main Profile on Sheet 9 of the plans. Please revise this inconsistency.
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 19. The pipe size of EX A on Outfall A7 is listed as 15" in the West Walnut Storm Main table on Sheet 11 of the plans but is indicated as 8" in the Walnut Storm Main Profile on Sheet 9 of the plans. Please revise this inconsistency.

20. It appears that several utility crossings are missing from the Beechtree Storm Main Profile on Sheet 9 of the plans. The Utility Plan on Sheet 11 appear to show 25 utility crossings but the profile indicates 10. Please revise the profile to include all utility crossings.
21. The Mid-Lot Storm Main Profile on Sheet 9 of the plan set indicates a sanitary lateral that interferes with storm pipe PP-10, but this sanitary lateral does not appear to cross this storm pipe, as seen on Sheet 11. Please clarify or revise the profile to reflect the conditions shown on the plans.
22. Please revise the Radnor Storm Main Profile on Sheet 9 to show the proposed sanitary sewer crossings along storm pipes PP-R1A and PP-R1B.
23. Please revise the Lot 17 & 18 Storm Main Profile on Sheet 9 to show the proposed utility crossings near PI-R2.
24. The Walnut Storm Main Profile on Sheet 9 of the plan set indicates many utility crossings that are inconsistent with the Utility Plan on Sheet 11. Please revise the profile to reflect the conditions shown on the plans.
25. Please revise the Radnor Storm Main Profile and Walnut Storm Main Profile on Sheet 9 of the plan set to display the proposed grade.
26. The Lot 17 & 18 Storm Main Profile on Sheet 9 of the plan set appears to indicate that storm pipe PP-18 does not have adequate cover. Please revise the plans to provide at least one foot of cover.
27. The Mid-Lot Storm Main Profile on Sheet 9 of the plan set appears to indicate that storm pipe PP-P9A does not have adequate cover. Please revise the plans to provide at least one foot of cover.

Sanitary Sewer

1. The profile provided must include the sanitary sewer run PSANH-1 to PSANH-4A.
2. The size of the proposed 8" sanitary sewer must be shown on the profile.
3. Sanitary sewer Laterals for Lot #1 and Lot #2 must be shown on the plans.
4. The lateral for Lot #20 appears to be tying into the existing lateral and directly into the existing sanitary sewer. The condition of the existing lateral must be verified and approved by the Township prior to connection.

5. The lateral for lot #11 does not appear to be tying into the sanitary sewer.
6. Laterals cannot tie directly into manholes. The lateral for Lot #12 is tying into an existing manhole. This must be revised.
7. Sanitary sewer branches must not tie into manholes at acute angles to the flow.
8. A note must be added to the plans stating no planting will be done in the Sanitary Sewer easements.
9. Sheet 3 indicates that the easement between lots 13 and 14 will be a private utility easement. If the sanitary sewers will be dedicated to Radnor Township, this must be revised.
10. Additional information must be provided regarding the decommissioning of the existing sanitary sewer.
11. The invert information must be verified for the sanitary sewer in Walnut Lane.
12. All sanitary sewer lines must be located in the paved area to the maximum extent possible. The proposed sanitary sewer line in Radnor Street Road must be located in the travel lane.

General

1. The applicant has indicated that all retaining walls will be under 4 feet high. Any revisions to the size or locations of the individual structures will be addressed with the grading permits.
2. The applicant must appear before the Shade Tree Commission and gain approval prior to this plan being presented to the Board or Commissioners.

If you have any questions or require any additional information, please contact me.

Very truly yours,

GANNETT FLEMING, INC.



Roger A. Phillips, P.E.
Senior Project Manager



GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

MEMORANDUM

Date: December 28, 2020

To: Steve Norcini, P.E.

From: Damon Drummond, P.E., PTOE

cc: Roger Phillips, P.E.
Leslie Salisbury, P.E.

Reference: CG Wayne, LLC - Eagle & Radnor Roads
Radnor Township, Delaware County
Transportation Review 2
G&A #20-20023

Our transportation review is complete for the Preliminary/Final Subdivision and Land Development plans prepared for Eagle & Radnor Street Roads. We offer the following comments for your consideration:

A. PROJECT DESCRIPTION

The Applicant, CG Wayne, LLC, is proposing a development consisting of 20 new single-family homes on a site bounded by Eagle Road, Radnor Street Road and Walnut Avenue. The main driveway takes access to Radnor Street Road opposite Beechtree Lane. There are several individual residences that take direct access to either Eagle Road, Radnor Street Road or Walnut Avenue .

B. DOCUMENTS REVIEWED

1. Preliminary/Final Subdivision and Land Development Plans prepared by Site Engineering Concepts, LLC, prepared for CG Wayne, LLC, consisting of 16 sheets, dated September 15, 2020 and last revised December 7, 2020.
2. Traffic Response Letter prepared by Site Engineering Concepts, LLC, dated December 11, 2020.

C. SUBDIVISION AND LAND DEVELOPMENT ORDINANCE COMMENTS

1. §255-20.B.(1)(m) – Show the existing streets adjacent to the site, including the curbline/edge of pavement for the existing Beechtree Lane opposite the site to ensure proper alignment of the intersection. It appears that the roads may be offset. The proposed driveway may need to be adjusted to provide proper alignment through the intersection.
2. §255-21.B.(5)(a)[1] – As stated previously, label the proposed centerline with bearing distances. The label does not appear to be included on Sheet 13, as indicated in the response letter.

3. §255-21.B.(5)(c) & §255-27.D(3) – Update the typical section of the proposed cul-de-sac to include the cross grade to ensure it does not exceed 3%.
4. §255-28.B – As stated previously, provide the available and proposed sight distance (both left and right) at each driveway for Lots 1-5 along Walnut Avenue, Lots 6 and 16 along Radnor Street Road, and Lot 20 along Eagle Road.
5. §255-37.H – Sidewalks and pedestrian paths shall not exceed a seven-percent grade. As stated previously, provide labels for sidewalk grades to confirm compliance with this section.
6. §255-47.C. – As a reminder, improvements shall be made to the existing street on which a subdivision or land development abuts. We note that the applicant indicates that the necessary road improvements will be discussed with Township. The following half widths for the roadways are required per this section:

Right-of-Way/Cartway

- | | |
|--|-----------------|
| • Eagle Road (Major Collector) | 40 feet/24 feet |
| • Radnor Street Road (Minor Collector) | 30 feet/18 feet |
| • Walnut Avenue (Local Street) | 30 feet/14 feet |

7. §255-48 – Include the proposed location for a street name sign, “Stop”/”All-way” sign and “No Outlet” sign on the plans. In addition, the intersection of Radnor Street Road and Beechtree Lane is currently a 3-way stop condition. Due to the addition of the fourth leg, include a note on the plans that all the existing supplemental “3-way” signs located under the stop signs are to be replaced with “all-way” (R1-3P) signs on all approaches.

D. GENERAL TRANSPORTATION COMMENTS:

1. As a reminder, PennDOT will require a Highway Occupancy Permit (HOP) for the driveway access to Eagle Road (S.R. 1042) from Lot 20. The Township requests the opportunity to review all HOP plans submissions to PennDOT; as well as be given the opportunity to attend all meetings with PennDOT and copied on all correspondence regarding same.
2. Update the ADA ramp details to include widths in order to verify the slopes indicated. Additionally, although a maximum ramp slope of 8.33% is allowed, it is recommended to use a maximum design slope of 7.5% to account for construction tolerances to ensure the ramps will meet the maximum ADA slope requirements.
3. As stated previously, provide an ADA connection at the intersection of Eagle Road/Radnor Street Road. Consider removing the existing steps and construct an ADA accessible walkway to the intersection. We note that the applicant indicates that ADA accommodations at this location will be discussed with PennDOT and the Township.
4. As stated previously, provide ADA compliant crossings at the intersection of Eagle Road and Radnor Chester Road crossing the eastern and northern leg of the intersection. The crossing improvement would include curb ramps, pedestrian signal heads and push buttons. We note that the applicant indicates that ADA requirements will be discussed with PennDOT and the Township.
5. Provide 5-foot curb end tapers at the terminus of the proposed concrete curb along both Radnor Street Road and Walnut Avenue.

6. Confirm all the driveway grades shown on the plan (i.e. Lot 14).
7. There is an ADA ramp indicated at the eastern terminus of the sidewalk along Walnut Avenue. However, if there is no receiving ramp on the opposite side of the roadway (mid-block crossing), we recommend removal of the ramp.
8. The applicant should discuss with the Township the possibility of extending the pedestrian facilities to Paul Road and Fenimore Park.
9. On Sheet 10, the details for the ramp on the southeast corner of Radnor Street Road & Beechtree Lane shows a conflict between the ramp flare and the proposed Type C inlet top. The Type C inlet top cannot be located in the flare. Relocate the inlet to eliminate the conflict.
10. The emergency vehicle turning template does not show any information. Update the template to show that vehicles can access the driveway and move within the site.

SAUL EWING
ARNSTEIN
& LEHR ^{LLP}

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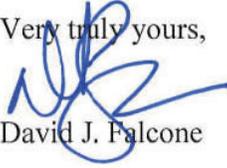
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Re: CG Wayne, LLC
Eagle and Radnor Roads
Preliminary/Final Subdivision and Land Development Plan

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Very truly yours,

David J. Falcone

cc: JohP d lcrSEsqWir
Mt4v r, tP ToWirR



DELAWARE COUNTY PLANNING DEPARTMENT

1055 E. Baltimore Pike – Suite 100

Media, PA 19063

Phone: (610) 891-5200

Email: planning_department@co.delaware.pa.us

COUNCIL

BRIAN P. ZIDEK
CHAIRMAN

DR. MONICA TAYLOR
VICE CHAIR

KEVIN M. MADDEN
ELAINE PAUL SCHAEFER
CHRISTINE A. REUTHER

LINDA F. HILL
DIRECTOR

November 20, 2020

Mr. William White
Radnor Township
301 Iven Avenue
Wayne, PA 19087-5297

RE: Name of Dev't: Eagle & Radnor Roads
DCPD File No.: 34-7571-20
Developer: CG Wayne, LLC Attn: Devin Tuohey
Location: Southeast corner of Eagle Road and Radnor
Street Road
Recv'd in DCPD: October 29, 2020

Dear Mr. White:

In accordance with the provisions of Section 502 of the Pennsylvania Municipalities Planning Code, the above described proposal has been sent to the Delaware County Planning Commission for review. At a meeting held on November 19, 2020, the Commission took action as shown in the recommendation of the attached review.

Please refer to the DCPD file number shown above in any future communications related to this application.

Very truly yours,

A handwritten signature in blue ink that reads "Linda Hill" with a stylized flourish at the end.

Linda F. Hill
Director

cc: CG Wayne, LLC Attn: Devin Tuohey
Site Engineering Concepts, LLC



1055 E. Baltimore Pike
Media, PA 19063
Phone: (610) 891-5200
Email: planning_department@co.delaware.pa.us

Date: November 19, 2020
File No.: 34-7571-20

PLAN TITLE: Eagle & Radnor Roads

DATE OF PLAN: September 15, 2020

OWNER OR AGENT: CG Wayne, LLC Attn: Devin Tuohey

LOCATION: Southeast corner of Eagle Road and Radnor Street Road

MUNICIPALITY: Radnor Township

TYPE OF REVIEW: Final subdivision and land development

ZONING DISTRICT: PI, but being reviewed under R-2 per a pending rezoning petition

SUBDIVISION ORDINANCE: Local

PROPOSAL: Subdivision: Subdivide 19.530 acres into 20 lots

Land development: Develop 20 single-family detached dwellings and a cul-de-sac street

UTILITIES: Public

RECOMMENDATIONS: Subdivision: Revise and resubmit, contingent on obtaining the required rezoning and variances



Date: November 19, 2020
File No.: 34-7571-20

Land development: Revise and resubmit, contingent on obtaining the required rezoning, variances, confirming compliance with code Sections 280-75, and with consideration given to staff comments

STAFF REVIEW BY: Michael A. Leventry

REMARKS:

CURRENT PROPOSAL

The applicant proposes, contingent on a concurrent rezoning petition, to subdivide the parcel and develop 20 single-family detached dwellings and a cul-de-sac street.

SITE CHARACTERISTICS

The site contains multiple dwellings and a parking lot that currently serves Eastern University. The property is bounded by neighborhoods consisting of single-family detached dwellings with exception to the north, with is abutted by the Valley Forge Military Academy.

APPLICABLE ZONING

The proposal is being reviewed under R-2 district provisions per a pending rezoning application.

NONCONFORMITIES

The proposed setbacks of the dwellings for Lots 17, 18, and 19 do not appear to comply with the regulations as established within the Municipal zoning code. Per Section 280-4, the front yard setback of interior lots must be increased by 1.4 equaling 56'.

Date: November 19, 2020
File No.: 34-7571-20

REMARKS (continued):

The proposed areas for Lots 17 and 18 do not appear to comply with the regulations as established within the Municipal zoning code. Per Section 280-4, the area of interior lots shall not be less than two acres.

COMPLIANCE

The applicant must obtain the necessary rezoning, obtain necessary variances, and confirm compliance with Section 280-75 to comply with the Municipality's zoning provisions.

ZONING CONFORMITY TABLE CALCULATIONS

The applicant must update the proposal's zoning conformity table to reflect that the maximum building coverage is 18% and maximum allowable total imperviousness is 30% (currently shown as 30% and 35% respectively). Additionally, the related calculations for all dwellings should be provided to ensure compliance. Finally, the lot area calculation for Parcel 15 must be corrected. After communicating with the applicant's engineer, it's confirmed that all dwellings/parcels do meet R-2 building coverage and imperviousness requirements.

INTERIOR LOTS AND DEVELOPMENT

Per SALDO Section 255-34.E, the depth of a lot shall generally not exceed their width by more than 2.5 times. A waiver may be required.

STREET AND STORMWATER SYSTEM OWNERSHIP

The applicant should specify if the cul-de-sac street shown and related stormwater system is to be privately owned/maintained or if it is to be dedicated to the Township. In the event dedication is proposed, a developer agreement should be drafted prior to final

Date: November 19, 2020
File No.: 34-7571-20

REMARKS (continued):

plan approval and it is suggested that said agreement warrant the street from defects for a minimum of one year. If any portion of infrastructure is to be maintained by a homeowner's association, the applicant should provide the related association by-law documentation for review by the Township to ensure long-term maintenance viability.

A pass-through road should be considered instead of the proposed cul-de-sac. A pass-through road would be better for emergency responders and more functional from a maintenance standpoint.

STORMWATER MANAGEMENT

There do not appear to be any stormwater infiltration/containment facilities proposed to address runoff from the proposed cul-de-sac street. Per Section 280-75.F: Any application submitted to the Township that would cause the elevation of the one-hundred-year floodplain to change shall require the Township to notify the immediate neighbors within 500 feet of the property under review (upstream and downstream). The Municipal Engineer must verify the adequacy of all proposed stormwater management facilities.

HIGHWAY OCCUPANCY PERMIT

In accordance with Section 508(6) of the Pennsylvania Municipalities Planning Code, the plan will need a highway occupancy permit(s) for access onto Eagle Road (S.R. 1042).

SEWAGE FACILITIES

The developer should contact the Pennsylvania Department of Environmental Protection regarding the need for sewage facilities planning approval.

Date: November 19, 2020
File No.: 34-7571-20

REMARKS (continued):

The Municipality should confirm receipt of any necessary Pennsylvania Department of Environmental Protection planning approval prior to final approval.

RECORDING

In accordance with Section 513(a) of the Pennsylvania Municipalities Planning Code (MPC), final plans must be recorded within ninety (90) days of municipal approval.

SITE ENGINEERING CONCEPTS, LLC

Consulting Engineering and Land Development Services

December 11, 2020

Steve Norcini, P.E.
Township Engineer
Radnor Township
Iven Ave
Wayne, PA 19087

**Re: Response to Engineering Review
Eagle Road and Radnor Road
Preliminary Subdivision and Land Development Plan
Revision #1**

Dear Steve,

On behalf of the CG Wayne, LLC, SITE Engineering Concepts is pleased to submit the enclosed revision to this preliminary application. Revision #1 addresses the comments in the October 23, 2020 review memo from Roger Phillips, P.E., as follows:

Sewage Facilities Planning

Comment 1. Final plan approval will not be granted until Planning Approval or a Planning Exemption is received from the PA DEP. The applicant has indicated on the plans that the planning modules have been submitted to the authorities for signature and will be forwarded to the PA DEP when completed. To date, the Township has not received a copy for review.

Response 1. PADEP has responded to the mailer with the coding numbers. Planning modules are being prepared for signature by the appropriate agencies and approval by the township then submitted to the PADEP for final approval. The PADEP must approve the required sewage planning modules before any grading or building permits will be issued.

Zoning

Comment 1. The zoning table must be revised to indicate the appropriate zoning district in which the project is located.

Response 2. The zoning requirement tables are revised to show PI, R-1 and R-2 requirements.

Comment 2. §280-20.B – Not more than 18% of the area of each lot may be occupied by buildings. The zoning table on sheet 7 of the plans indicates 30%. This must be revised.

Response 3. The zoning summary tables are revised with the correct percentages.

Comment 3. §280-20.F – The maximum impervious surfaces in 30%. The zoning table on sheet 7 of the plans indicates 35%. This must be revised.

Response 4. The zoning summary tables are revised with the correct percentages.

Comment 4. The zoning table must indicate the actual conditions for the setback and impervious and building coverage in addition to the requirements. The applicant has indicated on the zoning table that the yard setbacks and coverage estimates are based on a preliminary sketch. Actual coverage to be determined at the time of permitting, and not to exceed amounts permitted by applicable code requirements.

Response 5. The zoning summary tables show the preliminary setbacks and coverages. The setbacks and coverage may be revised at the time of permitting.

Comment 5. The Height requirements must be added to the Zoning Table.

Response 6. Height is added to the zoning summary tables.

Comment 6. §280-112.C. – Areas of steep slopes containing slopes steeper than 14% shall be outlined as following (1) Areas containing slopes steeper than 14% but less than 20% shall be distinguished from the areas containing slopes of 20% or steeper. (2) Areas containing slopes of 20% and steeper shall be separately identified. The applicant has shown these on the plan, but the way the slopes are defined on the plans are hard to interpret. We suggest that be revised to an easier way to clearly located the steep slopes.

Response 7. The slopes hatching and legend are revised.

Subdivision and Land Development

Comment 1. §255-20-B(1)(e)[5] – The site plan must show the size of the units (in bedrooms), if known.

Response 1. The anticipated number of bedrooms is added to the plan.

Comment 2. §255-20-B(1)(n) – Existing principal buildings (and their respective uses) and driveways on the adjacent peripheral strip. Sewer lines, storm drains, culverts, bridges, utility easements, quarries, railroads and other significant man-made features within 500 feet of and within the site (this includes properties across streets) must be shown on the plans.

Response 2. A 500 foot offset line is added to the cover sheet. A partial waiver is requested for features not shown on the aerial.

Comment 3. §255-20-B(1)(o)[8] – All streetlights must be shown on the site plan.

Response 3. Existing street lamps are added to the base map. Proposed street lights will be added if required by the Board.

Comment 4. §255-20-B(1)(o)[9] – All fire hydrants must be shown on the site plan.

Response 4. A fire hydrant is added at the end of the cul-de-sac.

Comment 5. §255-27-C(1) – The right of way, ultimate right of way, cartway, curbing and sidewalks must be shown and clearly labeled along Radnor Street Road and Walnut Road.

Response 5. Right-of-ways are shown and labeled.

Comment 6. §255.27.C(4) – When a subdivision abuts or contains an existing street of inadequate right-of-way width, the Board of Commissioners may require the reservation or dedication of rights-of-way to conform with the required standards. Radnor Street Road is a Minor Collector. The right-of-way requirement is 60 feet. The applicant has indicated on the plans that the right-of-way is 33 feet. Walnut Road is a local Road.

Response 6. The Applicant will review additional ROW and cartway requests with the Board.

Comment 7. §255.27.D(2) – Cul-de-sac shall have at the closed end a turnaround with a right-of-way having a minimum outside radius of not less than 60 feet and shall be paved to a radius of not less than 40 feet. This must be shown on the plan.

Response 7. The dimensions are added to Sheet 10.

Comment 8. §255.27.H(6) – Minimum curb radii at street intersections shall be 25 feet for local streets; 30 feet for collectors; 35 feet for arterials; and 10 feet for driveways. This must be shown on the plans.

Response 8. The dimensions are added to Sheet 10.

Comment 9. §255.37.G – The minimum width of all sidewalks and pedestrian paths shall be four feet. This must be dimensioned on the plans.

Response 9. The dimension is added to Sheet 10.

Comment 10. §255.37.G – Sidewalks and pedestrian paths shall be laterally pitched at a slope of not less than 1/4 inch per foot to provide for adequate surface drainage.

Response 10. The cross slope is included in the contour grading and is noted on the detail.

Comment 11. §255.38B – Street trees 2 ½ inches dbh at intervals of not more than 30 feet along both sides of new streets and along one or both sides of an existing street within the proposed subdivision or land development must be shown on the plans. Street trees must be provided. The landscape plan submitted only shows the replacement trees.

Response 11. Street trees are added to the landscape plan.

Comment 12. §255-40.C(2)– Access and circulation for fire-fighting and other emergency equipment, moving vans, fuel trucks, garbage collection, deliveries and snow removal shall be planned for efficient operation and convenience. Turning templates for the culs-de-sac must be provided.

Response 12. A turning template is added to Sheet 14.

Comment 13. §255-43.1.B(1) – For all residential subdivisions or land developments involving a total of four or more lots and/or dwelling units, a minimum of 1,440 square feet or suitable park and recreation land shall be provided per dwelling unit within such subdivision/land development, unless the developer agrees to a fee in lieu of \$3,307 per dwelling unit (existing or proposed).

Response 13. The Applicant is aware of the requirement.

Comment 14. §255-49 – Where appropriate, the developer shall install or cause to be installed, at the developer's expense, metal or fiberglass pole streetlights serviced by underground conduit in accordance with a plan to be prepared by the developer's engineer and approved by the Board of Commissioners.

Response 14. Proposed street lights will be added if required by the Board.

Comment 15. §255-54.B – The central water system should be designed with adequate capacity and appropriately spaced fire hydrants for fire-fighting purposes pursuant to the specification of the National Fire Protection Association. Review and approval by the Township Engineer and the Township Fire Marshall shall be required in order to ensure that adequate fire protection is provided. We note that the applicant is working with the Township Engineer and Township Fire Marshall and will incorporate their input as applicable.

Response 15. Agreed.

Stormwater

Comment 1. The narrative in the stormwater report says the “drainage area map on sheet X of the plan set”. Please revise this statement to indicate the correct sheet of the plan set that the drainage area map can be found.

Response 1. The report is revised.

Comment 2. The narrative in the stormwater report claims the limit of disturbance and stormwater regulatory area is 11,631 sf but the actual area is much greater. Please update this with the correct area.

Response 2. The report is updated with the correct area.

Comment 3. A drainage area map is provided but it does not appear that the drainage areas are shown. Please revise the drainage area map to more clearly identify the extents of the drainage areas. Please provide a drainage area map for both the pre-construction and post- construction conditions.

Response 3. The drainage maps are on Sheet 14.

Comment 4. Basin Volumes & Dewater Times Per Bed in stormwater report: the elevation and volume for the upper elevation of the Lot #14 bed in the of the stormwater report are not filled in. Please revise the report to include these values.

Response 4. The table is updated.

Comment 5. Please provide calculations on how the SCS curve numbers were calculated.

Response 5. The curve number calculations are added to the report.

Comment 6. Please revise the plans to include an overlay of the soil names and boundaries.

Response 6. The soil boundaries are added to the PCSM plan.

Comment 7. Lot #1 Infiltration Bed: Outlet invert is listed as 358.00 on the plans and is listed as 353.75 in the hydrograph report. Please revise this inconsistency.

Response 7. The plan tables and details are now consistent with the hydrograph report.

Comment 8. Lot #2 Infiltration Bed: Outlet invert and outlet pipe length are listed as 356.00 and 22.00', respectively, on the plans and are listed as 355.25 and 10.00', respectively, in the hydrograph report. Please revise these inconsistencies.

Response 8. The plan tables and details are now consistent with the hydrograph report.

Comment 9. Lot #3 Infiltration Bed: Outlet pipe length is listed as 19.80' on the plans and is listed as 10.00' in the hydrograph report. Please revise this inconsistency.

Response 9. The plan tables and details are now consistent with the hydrograph report.

Comment 10. Lot #6 Infiltration Bed: Slope is listed as 14.20% on the plans and 15.50% in the hydrograph report. Please revise this inconsistency.

Response 10. The plan tables and details are now consistent with the hydrograph report.

Comment 11. Lot #7 Infiltration Bed: Outlet pipe length and slope are listed as 156.00' and 2.00%, respectively, on the plans and are listed as 51.60' and 15.50%, respectively, in the hydrograph report. Please revise these inconsistencies.

Response 11. The plan tables and details are now consistent with the hydrograph report.

Comment 12. Lot #8 Infiltration Bed: Barrel length, outlet invert, outlet pipe length, and slope are listed as 60', 380.00, 8.00', and 2.00%, respectively, on the plans and are listed as 70', 379.75, 51.60', and 15.50%, respectively, in the hydrograph report. Please revise these inconsistencies.

Response 12. The plan tables and details are now consistent with the hydrograph report.

Comment 13. Lot #9 Infiltration Bed: Outlet pipe length is listed as 10.00' on the plans and is listed as 20.00' in the hydrograph report. Please revise this inconsistency.

Response 13. The plan tables and details are now consistent with the hydrograph report.

Comment 14. Lot #10 Infiltration Bed: Outlet invert is listed as 372.00 on the plans and is listed as 371.75 in the hydrograph report. Please revise this inconsistency.

Response 14. The plan tables and details are now consistent with the hydrograph report.

Comment 15. Lot #11 Infiltration Bed: Outlet invert and slope are listed as 362.00 and 1.50%, respectively, on the plans and are listed as 361.50 and 0.75%, respectively, in the hydrograph report. Please revise these inconsistencies.

Response 15. The plan tables and details are now consistent with the hydrograph report.

Comment 16. Lot #12 Infiltration Bed: Barrel invert, barrel length, outlet invert, outlet pipe length, and slope are listed as -6.00, 60', 383.00, and 26.00', respectively, on the plans and are listed as 380.00, 70', 382.50, and 47.00', respectively, in the hydrograph report. Additionally, it appears that the Min Final Grade, Top of Stone Elevation, and Bed Bottom Elevation on the plan table are incorrect. Please revise these values and inconsistencies.

Response 16. The plan tables and details are now consistent with the hydrograph report.

Comment 17. Lot #13 Infiltration Bed: Outlet invert and outlet pipe length are listed as 385.00 and 46.40', respectively, on the plans and are listed as 384.50 and 47.00', respectively, in the hydrograph report. Please revise these inconsistencies.

Response 17. The plan tables and details are now consistent with the hydrograph report.

Comment 18. Lot #14 Infiltration Bed: Outlet invert is listed as 389.00 on the plans and is listed as 388.00 in the hydrograph report. Please revise these inconsistencies.

Response 18. The plan tables and details are now consistent with the hydrograph report.

Comment 19. Lot #16 Infiltration Bed: Outlet invert and slope are listed as 403.00 and 1.69%, respectively, on the plans and are listed as 403.50 and 2.25%, respectively, in the hydrograph report. Please revise these inconsistencies.

Response 19. The plan tables and details are now consistent with the hydrograph report.

Comment 20. Lot #17 Infiltration Bed: Outlet invert, outlet pipe length, and slope are listed as 407.00, 150.60', and 3.80%, respectively, on the plans and are listed as 406.75, 89.00', and 2.25%, respectively, in the hydrograph report. Please revise these inconsistencies.

Response 20. The plan tables and details are now consistent with the hydrograph report.

Comment 21. Lot #18 Infiltration Bed: Outlet pipe length and slope are listed as 46.40' and 3.71%, respectively, on the plans and are listed as 11.00' and 2.00%, respectively, in the hydrograph report. Please revise these inconsistencies.

Response 21. The plan tables and details are now consistent with the hydrograph report.

Comment 22. Lot #19 Infiltration Bed: Outlet invert and slope are listed as 394.50 and 11.00%, respectively, on the plans and are listed as 394.00 and 11.30%, respectively, in the hydrograph report. Please revise these inconsistencies.

Response 22. The plan tables and details are now consistent with the hydrograph report.

Comment 23. Lot #20 Infiltration Bed: Barrel invert and outlet invert are listed as 353.00 and 356.00, respectively, on the plans and is listed as 359.00 and 361.50, respectively in the hydrograph report. Please revise these inconsistencies.

Response 23. The plan tables and details are now consistent with the hydrograph report.

Comment 24. It appears that storm pipe PP-PP11 and Outfall A5 may pose a risk of eroding Infiltration Bed #1. Please revise these items to minimize risk to the infiltration bed.

Response 24. The outfall and basin are relocated farther apart.

Comment 25. Please revise the endwall at Outfalls A2, A3, and A4 to a level spreader to discharge runoff in a disperse, unconcentrated manner. Please provide a level spreader detail.

Response 25. Endwall and discharge apron details are added to Sheet 9.

Comment 26. The 2-year pre-development volume is listed as 46,928 cf in the Retention Volume Compliance Summary table and is listed as 58,591 cf in the hydrograph report. Please revise this inconsistency and ensure that the correct value is used for the 2-year post-development volume as well.

Response 26. The compliance summary is revised to be consistent with the hydrograph report for the pre and post development volumes.

Comment 27. Peak Flows & Runoff Volumes Per Outfall table:

- a. The 2-year volume for Outfall A3 appears to be calculated incorrectly. Please revise this calculation to include all applicable volumes, including Hydrograph 39 "12-Post-Bed Inflow".*
- b. The 2-year volume for Outfall A4 is inconsistent with the value found in the hydrograph report. Please revise this inconsistency.*
- c. Please update the 2-year volume for POI-A Total to reflect these revisions.*

Response 27. The volume table is revised to be consistent with the hydrograph report.

Comment 28. It appears that the infiltration rate in the Basin Volumes & Dewater Times Per Bed table and the Test Pit IDs in the Proposed Infiltration Bed Dimensions table are inconsistent with the Infiltration Testing Report for Lots #1, #6, #10, and #20. Please revise so that the correct infiltration rates and test pit IDs are referenced within these tables.

Response 28. The table is revised to be consistent with the testing results. Please note that not all basin are associated with a test pit with the same number.

Comment 29. It appears the infiltration test elevation does not correspond to the bed bottom elevation for Lots #1, #6, #8, #11, #18, and #20. Please revise the bed bottom elevations to incorporate to the appropriate elevation.

Response 29. The table is revised to be consistent with the testing results.

Comment 30. It appears that the proposed bed bottom elevation for Lot #11 (358.5) is less than two feet from the perched water limiting zone shown on the Infiltration Testing Report (358.6). Please revise the design to provide a bed bottom at least two feet above any limiting zone.

Response 30. The basin is redesigned to be at least two feet above the report limiting zone.

Comment 31. The Overall Bed Dimensions on the Proposed Infiltration Bed Dimensions table on the plans are inconsistent with the bed footprints found on the plans for Lot #2, #10, #12, #17, #18, and #19. Please revise these inconsistencies.

Response 31. The plan view and tables are now consistent with the hydrograph report.

Comment 32. The Basin Footprints on the Basin Volumes & Dewater Times Per Bed in the stormwater report are inconsistent with the bed footprints found on the plans for Lots #1-3, #6-14, and #16-20. Please revise these inconsistencies.

Response 32. The plan view and tables are now consistent with the hydrograph report.

Comment 33. The Min. Final Grade is listed as 376.00 for Lot #9, and 359.00 for Lot #20 on the Proposed Infiltration Bed Dimensions table but it appears that the plans show a lower final grade. Please revise this inconsistency.

Response 33. The Lot 20 contours are revised and the Lot 9 basin relocated.

Comment 34. The Impervious Used in Storm Design exceeds the impervious area used in the hydrograph calculations for every lot. Please revise this column to accurately reflect the impervious area used in the stormwater design.

Response 34. The table is revised to be consistent with the hydrograph report.

Comment 35. It appears that the area used for the Water Quality Volume calculation in the Compliance Summary table is less than the area found in the hydrograph report. Please revise these values to be consistent.

Response 35. The table is revised to be consistent with the hydrograph report.

Comment 36. It appears that stormwater piping (PP-11 to Outfall A5) will cross proposed infiltration bed PIB-1. It also appears that this pipe will not have adequate cover. Please clarify, or revise the layout of the piping and/or infiltration bed to avoid this interference, and to provide at least one foot of cover.

Response 36. The outfall and basin are relocated farther apart and 1 foot of cover provided.

Comment 37. Please provide conveyance pipe capacity calculations.

Response 37. Pipe capacity is added to the Sheet 12.

Comment 38. Please revise all storm profiles to include all pipe and utility crossings.

Response 38. The crossings are added to the profiles.

Comment 39. Please revise the Radnor Storm Main Profile and Walnut Storm Main Profile to display the proposed grade.

Response 39. The proposed graded is added to the profile.

Comment 40. It appears that storm pipe PP-18 will not have adequate cover. Please revise the plans to provide at least one foot of cover.

Response 40. The pipe run is revised to provide 1 foot of cover.

Comment 41. It appears that storm pipe PP-P9A will not have adequate cover. Please revise the plans to provide at least one foot of cover.

Response 41. The pipe run is revised to provide 1 foot of cover.

Comment 42. Please provide an endwall detail.

Response 42. An endwall detail is added to Sheet 9.

Comment 43. Final approval of the stormwater management plan will be required as part of the Grading Permit process. Any revisions to the size or location of the individual structures or other features will be addressed at that time.

Response 43. Acknowledged.

Sanitary Sewer

Comment 1. The sanitary sewer line in Radnor Street Road and Walnut Avenue must be shown on the plans.

Response 1. The sewer lines are now shown on the base map.

Comment 2. The existing sanitary sewer connections and disposition of the laterals must be provided on the plans.

Response 2. The existing connections are shown on Sheet 2 and a decommission note is added to Sheet 4.

Comment 3. All manholes not located in the paved areas must be equipped with watertight frames and covers.

Response 3. The note is added to the detail on Sheet 11.

Comment 4. Manholes in non-improved areas must be extended 18 inches above grade.

Response 4. The note is added to the detail on Sheet 11.

Comment 5. All utilities crossing the sanitary sewers must be shown on the profile view to insure adequate vertical clearance.

Response 5. The crossings are added to the profiles.

Comment 6. Rim and invert elevations of the sanitary manholes must be shown on profile view.

Response 6. The manhole elevations are shown on the profile view.

Comment 7. The size and type of sewer must be shown on the profile view.

Response 7. The pipe size and type are added to the profiles.

Comment 8. Minimum depth of cover for all pipe sewers shall be 5 feet. There are numerous locations where this condition is not met and it appears that the coverage is approximately 2 feet.

Response 8. The sanitary sewer main pipe inverts are revised to provide 5 feet of cover.

Comment 9. When pipe is to be laid in fill, the embankment height shall be at least four feet above the top of pipe before the trench is excavated. Compact embankment material to a minimum final density of not less than 90% of the maximum dry weight density at its optimum moisture content.

Response 9. The note is added to Sheet 11 and 12.

Comment 10. The grades of the sewer runs must be shown on the profiles.

Response 10. The grades are added to the profiles.

Comment 11. A minimum 10-foot horizontal and 18-inch vertical separation must be maintained between the sanitary sewer and the water and storm sewer lines.

Response 11. The lines are revised to maintain a 10-foot horizontal separation.

Comment 12. Profiles of the sanitary sewer laterals must be provided.

Response 12. A profile is provided for laterals with potential utility conflicts. All sewer lateral connections are shown on the main profiles.

Comment 13. Depressed curbing (12 feet) is required where the sewer line leaves the street to provide access in the easement to the sanitary sewer line.

Response 13. The curb depression is noted on Sheet 10.

Comment 14. Laterals cannot tie directly into manholes.

Response 14. Laterals 7, 12, 17 and 18 are revised.

Comment 15. Sanitary sewer branches must not tie into manholes at acute angles to the flow.

Response 15. PSANH-5 is revised to remove the acute angle connections.

Comment 16. A note must be added to the plans stating no planting will be done in the Sanitary Sewer easements.

Response 16. The note is added to Sheet 3 and 11.

Comment 17. A note should be added to the plans stating who the owner of the sanitary sewer system will be and who will be responsible for its maintenance.

Response 17. The applicant plans to dedicate the sewers to the Township. A note is added to Sheet 3 and 11.

Comment 18. The laterals for lot #19 and #16 do not connect into the sanitary sewer.

Response 18. Lots 16 and 19 laterals are revised.

Comment 19. The lateral for lot #18 requires an easement crossing lot #17.

Response 19. The Lot 18 lateral is relocated to preclude the need for an easement.

Comment 20. The attached Radnor Township frame and cover detail and cast-iron trap detail must be added to the plans.

Response 20. The details are added to Sheet 12.

General

Comment 1. The Radnor Township Tree protection detail must be added to the plans.

Response 1. The detail is on Sheet 5.

Comment 2. Will the Beech Lane extension roadway be public or private?

Response 2. The applicant plans to dedicate the roadway to the Township. A note is added to Sheet 3.

Comment 3. Information for the retaining walls located on several of the lots must be provided.

Response 3. All walls are under 4 feet high. Any revisions to the size or location of the individual structures or other features will be addressed with the grading permits.

Comment 4. The applicant must appear before the Shade Tree Commission and gain approval prior to this plan being presented to the Board or Commissioners.

Response 4. The Applicant is aware.

We trust these revisions satisfactorily address your comments. Should you have any questions and/or additional comments, please contact me at pspellman@site-engineers.com or 610.523.9002.

Sincerely,

A handwritten signature in blue ink, appearing to read "Patrick Spellman". The signature is fluid and cursive, with the first name "Patrick" and last name "Spellman" clearly distinguishable.

Patrick Spellman, P.E.

SITE ENGINEERING CONCEPTS, LLC

Consulting Engineering and Land Development Services

December 11, 2020

Steve Norcini, P.E.
Township Engineer
Radnor Township
Iven Ave
Wayne, PA 19087

**Re: Response to Traffic Engineering Review
Eagle Road and Radnor Road
Preliminary Subdivision and Land Development Plan
Revision #1**

Dear Steve,

On behalf of the CG Wayne, LLC, SITE Engineering Concepts is pleased to submit the enclosed revision to this preliminary application. Revision #1 addresses the comments in the October 22, 2020 review memo from Damon Drummond, P.E., PTOE, as follows:

SUBDIVISION AND LAND DEVELOPMENT ORDINANCE COMMENTS

Comment C.1. §255-20.B.(1)(m) – Show the existing streets adjacent to the site with rights-of-way.

Response C.1. The view port on Sheet 7 is widened to show the right-of-way on both sides of the adjacent streets.

Comment C.2. §255-20.B.(1)(o)[1] & §255-21.B.(1)(o)[1] – Label the proposed cartway width of the Beechtree Lane Extension.

Response C.2. A cartway width is dimensioned on Sheet 10.

Comment C.3. §255-20.B.(1)(o)[7] & §255-21.B.(1)(o)[7] – Label the proposed sidewalk width.

Response C.3. A sidewalk width is dimensioned on Sheet 10.

Comment C.4. §255-21.B.(5)(a)[1] - Label the proposed centerline with bearing distances.

Response C.4. The center line bearings are added to Sheet 13.

Comment C.5. §255-21.B.(5)(a)[2] - Label the proposed intersection radii.

Response C.5. A intersection radii are now dimensioned on Sheet 10.

Comment C.6. §255-21.B.(5)(b)[2] - On the centerline profile, provide proposed center-line grade, with percent on tangents and elevations at fifty-foot intervals.

Response C.6. The grade and elevations are added to the profile on Sheet 12.

Comment C.7. §255-21.B.(5)(c) – Provide a typical section for the proposed cul-de-sac. Label the centerline, cross grade, and right-of-way.

Response C.7. The cul-de-sac cross section is added to Sheet 12.

Comment C.8. §255-27.D(2) – Label the paved and right-of-radius of the proposed cul-de-sac.

Response C.8. .

Comment C.9. §255-28.B – Provide the available and proposed sight distance at the intersection of Beechtree Lane and Radnor Street Road. Provide the sight distance at the driveway for Lot 1-6,16, and Lot 20.

Response C.9. Sight Distance triangles are provided on Sheet 10.

Comment C.10. §255-37.C – Provide an easement for the existing and proposed sidewalk along Radnor Street Road and Walnut Avenue.

Response C.10. The easement is added to Sheet 3.

Comment C.11. §255-37.H –Sidewalks and pedestrian paths shall not exceed a seven-percent grade. Provide labels for sidewalk grades.

Response C.11. The paths are revised to not exceed 7% except for stretches along the existing road where the existing grade exceeds 7%.

Comment C.12. §255-47.C. - Along the existing street on which a subdivision or land development abuts (hereinafter called a "boundary street"), improvements shall be made to the street. The improvements to the boundary street shall be determined by the width of the required cartway and built to the specifications established by the Township §255- 27.C(1). The following half widths for the roadway are required.

	ROW/ Cartway
• Eagle Road (Major Collector)	40 feet/ 24 feet
• Radnor Street Road (Minor Collector)	30 feet/ 18 feet
• Walnut Avenue (Local Street)	30 feet/ 14 feet

Response C.12. The Applicant will review additional ROW and cartway requests with the Board.

D Traffic Impact Assessment Comments

Comment D.1. The Traffic Impact Study was conducted following acceptable standards. There are very minor technical analysis input discrepancies which will not impact the overall conclusions. We find the Traffic Impact Study acceptable.

Response C.13. Thank you.

E. GENERAL COMMENTS

Comment E.1. PennDOT will require a Highway Occupancy Permit (HOP) for the access to Eagle Road (S.R. 1042) on Lot 20. The Township requests the opportunity to review all HOP plans submissions to PennDOT; as well as be given the opportunity to attend all meetings with PennDOT and carbon copied on all correspondence regarding same.

Response E.1. Acknowledged.

Comment E.2. Provide spot elevations at the bottom of curb, top of curb, at minimum 25' intervals along the proposed curblin e and at minimum 10' intervals along radius returns. In Additional spot elevations and slope labels must be provided within the areas of curb ramps, driveway aprons, crosswalks, and sidewalk to ensure ADA compliance.

Response E.2. Spot elevations are provided on the grading plan, Sheet 10.

Comment E.3. Revise the plans to include the details for the proposed sidewalk, curb, ADA compliant ramps and crosswalk on Beechtree Lane.

Response E.3. Additional details are provided on Sheet 10.

Comment E.4. Provide an ADA ramp at Radnor Street Road and Walnut Avenue with the proposed sidewalk at the intersection.

Response E.4. The ramp is shown on Sheet 7 and detailed on Sheet 10.

Comment E.5. A shared driveway is proposed for Lot 17 and Lot 18. In lieu of a shared access, consider, having one of the lots access Eagle Road. If a shared access remains, it will require an access easement between the two lots.

Response E.5. The Applicant considered access to Eagle Road but it was concerned potentially hazardous and would impact tree designated to be saved. An access easement will be provided.

Comment E.6. Provide ADA connection at the intersection of Eagle Road/Radnor Street Road. Consider removing the existing steps and construct an ADA accessible walkway to the intersection.

Response E.6. ADA requirements and deposition the existing steps will be investigated with PennDOT and the Township.

Steve Norcini, P.E.
December 11, 2020
Re: Eagle Road and Radnor Road Subdivision and LD Plan, Revision #1
Page 3 of 3

Comment E.7. Provide ADA compliant crossings at the intersection of Eagle Road and Radnor Chester Road. Provide crosswalks for crossing the eastern and northern leg for the intersection. The crossing improvement would include curb ramps, pedestrian signal heads and push buttons.

Response E.7. ADA requirements will be investigated with PennDOT and the Township.

We trust these revisions satisfactorily address your comments. Should you have any questions and/or additional comments, please contact me at pspellman@site-engineers.com or 610.523.9002.

Sincerely,

A handwritten signature in blue ink that reads "Patrick Spellman". The signature is written in a cursive style with a large initial "P".

Patrick Spellman, P.E.

SITE ENGINEERING CONCEPTS, LLC

Consulting Engineering and Land Development Services

December 11, 2020

Board of Commissioners Radnor Township
301 Iven Avenue
Wayne, PA 19087

Re: Waiver Requests
Preliminary/ Final Land Development Plan
Eagle Road and Radnor Road Subdivision

Dear Members of the Board:

CG Wayne, LLC respectfully requests the following waivers for the Eagle Road and Radnor Road Preliminary/Final Land Development Plan:

Waiver #1, Section 255-12.A, Preliminary Plan Submission

A waiver from Section 255-12.A of the Township Code to permit the above-referenced land development application to proceed and be reviewed as a single preliminary/final land development plan. Section 255-12.A requires, in relevant part, that an applicant must submit an individual preliminary application for a major subdivision.

Waiver #2, Section 255-21.B(1)(n), Man-Made Features within 500 Feet

Section 255-21.B(1)(n) requires significant man-made features within 500 feet of the site be provided on the plan. Aerial imagery is used to provide detail beyond the site boundaries where survey data cannot legally be collected (e.g.: private property). A partial waiver is request to the extent necessary to not provide those items which are not visible on aerial imagery (e.g.: sewer lines, storm drains, easements, etc.).

Should the Township have any questions or require additional information, please contact me at pspellman@site-engineers.com or 610.523.9002.

Sincerely,



Patrick Spellman, P.E.

SITE ENGINEERING CONCEPTS, LLC
CIVIL ENGINEERING AND CONSULTING SERVICES

TRANSMITTAL

TO:	Patricia Sherwin	FROM:	Patrick Spellman
COMPANY:	Radnor Township	DATE:	12/11/2020
STREET ADDRESS:	301 Iven Avenue	PHONE:	
CITY, ZIP:	Wayne, PA 19087	SENDER'S REFERENCE NUMBER:	36-02-978 Eagle & Radnor Rds
RE:	Preliminary/Final Land Development Plan Application, Revision #1 Eagle Rd & Radnor Rd Subdivision	CC:	CG Wayne, LLC, Owner & Applicant

COPIES	SHEETS	DATE	ITEM
2	8	12/11/2020	RESPONSE TO TOWNSHIP ENGINEER REVIEW MEMO
2	3	12/11/2020	RESPONSE TO TRAFFIC ENGINEER REVIEW MEMO
2	1	12/11/2020	REQUEST FOR WAIVER OF PRELIMINARY APPROVAL
6	16	12/11/2020	PRELIMINARY LAND DEVELOPMENT PLAN, REVISION #1
2	294	12/11/2020	PCSM NARRATIVE, REVISION #1
1	-	12/11/2020	FLASH DRIVE. ALSO AVAILABLE USING LINK: https://site.egnyte.com/fl/eXjVpKQBqu

NOTES/COMMENTS:

On behalf of 210 N Aberdeen Associates, LLC, SITE Engineering Concepts, LLC. is pleased to submit the attached revised documents for the land development plan application. If you have any questions or comments, please contact me at pspellman@site-engineers.com or 610.523.9002. Thank you.



DELAWARE COUNTY PLANNING DEPARTMENT

1055 E. Baltimore Pike – Suite 100
Media, PA 19063

Phone: (610) 891-5200

Email: planning_department@co.delaware.pa.us

COUNCIL

BRIAN P. ZIDEK
CHAIRMAN

DR. MONICA TAYLOR
VICE CHAIR

KEVIN M. MADDEN
ELAINE PAUL SCHAEFER
CHRISTINE A. REUTHER

LINDA F. HILL
DIRECTOR

October 29, 2020

Mr. William White
Radnor Township
301 Iven Avenue
Wayne, PA 19087-5297

RE: Title: Eagle & Radnor Road
Applicant(s): CG Wayne, LLC Attn: Devin Tuohey
File Number: 34-7571-20
Meeting Date: 11/19/2020
Municipality: Radnor Township
Location: Southeast corner of Eagle Road and Radnor Street Road
Received: 10/29/2020

Dear Mr. White,

This is to acknowledge receipt of the above referenced application for review and report. The Commission has tentatively scheduled consideration of the application for its public meeting on the date shown above at 4:00 p.m. This meeting will be held online and available for public and applicant participation. For instructions to access the meeting, email giftp@co.delaware.pa.us Participation is not required but is welcomed.

NOTE: In order to avoid processing delays, the DCPD file number shown above MUST be provided in any transactions with the county regarding this or future applications related to this location.

Very truly yours,


Michael A. Leventry
Manager, Plan and Ordinance Review

cc: CG Wayne, LLC Attn: Devin Tuohey
Site Engineering Concepts, LLC



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& LEHR LLP

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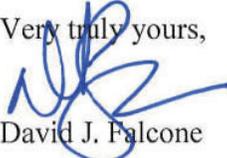
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Re: CG Wayne, LLC
Eagle and Radnor Roads
Preliminary/Final Subdivision and Land Development Plan

v rnt uyr, r:

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Very truly yours,

David J. Falcone

cc: JohP d lcrSEsqWir
Mt4v r, tP ToWirR



*Excellence Delivered **As Promised***

Date: October 22, 2020

To: Steve Norcini, PE Township Engineer

From: Roger Phillips, PE

cc: Kevin W. Kochanski, RLA, CZO – Director of Community Development
Mary Eberle, Esq. – Grim, Biehn, and Thatcher
Damon Drummond, PE – Gilmore & Associates, Inc.
Patricia Sherwin – Radnor Township Engineering Department

RE: Eagle and Radnor Roads

Date Accepted: 10/06/2020

90 Day Review: 01/04/2021

Gannett Fleming, Inc. has completed a review of the Preliminary Land Development for compliance with the Radnor Township Code. We have reviewed the plans based on a proposed zoning map revision that would convert this Parcel to R-2 from the current zoning designation of PI. The map revision must be approved by the Board of Commissioners prior to this plan moving forward in the approval process. The Plans were reviewed for conformance with Subdivision and Land Development, Zoning and other applicable codes of the Township of Radnor.

The applicant is proposing to construct 20 single family homes on individual lots.

The applicant has indicated in a September 28, 2020 letter that the following waiver is being requested:

- §255.12.A – To submit the plan as a preliminary/final plan

Eagle and Radnor Roads

Plans Prepared By: Site Engineering Concepts, LLC

Dated: 09/15/2020

Sewage Facilities Planning

1. Final plan approval will not be granted until Planning Approval or a Planning Exemption is received from the PA DEP. The applicant has indicated on the plans that the planning modules have been submitted to the authorities for signature and will be forwarded to the PA DEP when completed. To date, the Township has not received a copy for review.

Gannett Fleming, Inc.

Valley Forge Corporate Center • 1010 Adams Avenue • Audubon, PA 19403-2402

t: 610.650.8101 • f: 610.650.8190

www.gannettfleming.com

Zoning

1. The zoning table must be revised to indicate the appropriate zoning district in which the project is located.
2. §280-20.B – Not more than 18% of the area of each lot may be occupied by buildings. The zoning table on sheet 7 of the plans indicates 30%. This must be revised.
3. §280-20.F – The maximum impervious surfaces in 30%. The zoning table on sheet 7 of the plans indicates 35%. This must be revised.
4. The zoning table must indicate the actual conditions for the setback and impervious and building coverage in addition to the requirements. The applicant has indicated on the zoning table that the yard setbacks and coverage estimates are based on a preliminary sketch. Actual coverage to be determined at the time of permitting, and not to exceed amounts permitted by applicable code requirements.
5. The Height requirements must be added to the Zoning Table.
6. §280-112.C. – Areas of steep slopes containing slopes steeper than 14% shall be outlined as following (1) Areas containing slopes steeper than 14% but less than 20% shall be distinguished from the areas containing slopes of 20% or steeper. (2) Areas containing slopes of 20% and steeper shall be separately identified. The applicant has shown these on the plan, but the way the slopes are defined on the plans are hard to interpret. We suggest that be revised to an easier way to clearly located the steep slopes.

Subdivision and Land Development

1. §255-20-B(1)(e)[5] – The site plan must show the size of the units (in bedrooms), if known.
2. §255-20-B(1)(n) – Existing principal buildings (and their respective uses) and driveways on the adjacent peripheral strip. Sewer lines, storm drains, culverts, bridges, utility easements, quarries, railroads and other significant man-made features within 500 feet of and within the site (this includes properties across streets) must be shown on the plans.
3. §255-20-B(1)(o)[8] – All streetlights must be shown on the site plan.
4. §255-20-B(1)(o)[9] – All fire hydrants must be shown on the site plan.

5. §255-27-C(1) – The right of way, ultimate right of way, cartway, curbing and sidewalks must be shown and clearly labeled along Radnor Street Road and Walnut Road.
6. §255.27.C(4) – When a subdivision abuts or contains an existing street of inadequate right-of-way width, the Board of Commissioners may require the reservation or dedication of rights-of-way to conform with the required standards. Radnor Street Road is a Minor Collector. The right-of-way requirement is 60 feet. The applicant has indicated on the plans that the right-of-way is 33 feet. Walnut Road is a local Road.
7. §255.27.D(2) – Cul-de-sac shall have at the closed end a turnaround with a right-of-way having a minimum outside radius of not less than 60 feet and shall be paved to a radius of not less than 40 feet. This must be shown on the plan.
8. §255.27.H(6) – Minimum curb radii at street intersections shall be 25 feet for local streets; 30 feet for collectors; 35 feet for arterials; and 10 feet for driveways. This must be shown on the plans.
9. §255.37.G – The minimum width of all sidewalks and pedestrian paths shall be four feet. This must be dimensioned on the plans.
10. §255.37.G – Sidewalks and pedestrian paths shall be laterally pitched at a slope of not less than ¼ inch per foot to provide for adequate surface drainage.
11. §255.38B – Street trees 2 ½ inches dbh at intervals of not more than 30 feet along both sides of new streets and along one or both sides of an existing street within the proposed subdivision or land development must be shown on the plans. Street trees must be provided. The landscape plan submitted only shows the replacement trees.
12. §255-40.C(2) – Access and circulation for fire-fighting and other emergency equipment, moving vans, fuel trucks, garbage collection, deliveries and snow removal shall be planned for efficient operation and convenience. Turning templates for the culs-de-sac must be provided.
13. §255-43.1.B(1) – For all residential subdivisions or land developments involving a total of four or more lots and/or dwelling units, a minimum of 1,440 square feet of suitable park and recreation land shall be provided per dwelling unit within such subdivision/land development, unless the developer agrees to a fee in lieu of \$3,307 per dwelling unit (existing or proposed).
14. §255-49 – Where appropriate, the developer shall install or cause to be installed, at the developer's expense, metal or fiberglass pole streetlights serviced by underground conduit

in accordance with a plan to be prepared by the developer's engineer and approved by the Board of Commissioners.

15. §255-54.B – The central water system should be designed with adequate capacity and appropriately spaced fire hydrants for fire-fighting purposes pursuant to the specification of the National Fire Protection Association. Review and approval by the Township Engineer and the Township Fire Marshall shall be required in order to ensure that adequate fire protection is provided. We note that the applicant is working with the Township Engineer and Township Fire Marshall and will incorporate their input as applicable.

Stormwater

1. The narrative in the stormwater report says the “drainage area map on sheet X of the plan set”. Please revise this statement to indicate the correct sheet of the plan set that the drainage area map can be found.
2. The narrative in the stormwater report claims the limit of disturbance and stormwater regulatory area is 11,631 sf but the actual area is much greater. Please update this with the correct area.
3. A drainage area map is provided but it does not appear that the drainage areas are shown. Please revise the drainage area map to more clearly identify the extents of the drainage areas. Please provide a drainage area map for both the pre-construction and post-construction conditions.
4. Basin Volumes & Dewater Times Per Bed in stormwater report: the elevation and volume for the upper elevation of the Lot #14 bed in the of the stormwater report are not filled in. Please revise the report to include these values.
5. Please provide calculations on how the SCS curve numbers were calculated.
6. Please revise the plans to include an overlay of the soil names and boundaries.
7. Lot #1 Infiltration Bed: Outlet invert is listed as 358.00 on the plans and is listed as 353.75 in the hydrograph report. Please revise this inconsistency.
8. Lot #2 Infiltration Bed: Outlet invert and outlet pipe length are listed as 356.00 and 22.00', respectively, on the plans and are listed as 355.25 and 10.00', respectively, in the hydrograph report. Please revise these inconsistencies.

9. Lot #3 Infiltration Bed: Outlet pipe length is listed as 19.80' on the plans and is listed as 10.00' in the hydrograph report. Please revise this inconsistency.
10. Lot #6 Infiltration Bed: Slope is listed as 14.20% on the plans and 15.50% in the hydrograph report. Please revise this inconsistency.
11. Lot #7 Infiltration Bed: Outlet pipe length and slope are listed as 156.00' and 2.00%, respectively, on the plans and are listed as 51.60' and 15.50%, respectively, in the hydrograph report. Please revise these inconsistencies.
12. Lot #8 Infiltration Bed: Barrel length, outlet invert, outlet pipe length, and slope are listed as 60', 380.00, 8.00', and 2.00%, respectively, on the plans and are listed as 70', 379.75, 51.60', and 15.50%, respectively, in the hydrograph report. Please revise these inconsistencies.
13. Lot #9 Infiltration Bed: Outlet pipe length is listed as 10.00' on the plans and is listed as 20.00' in the hydrograph report. Please revise this inconsistency.
14. Lot #10 Infiltration Bed: Outlet invert is listed as 372.00 on the plans and is listed as 371.75 in the hydrograph report. Please revise this inconsistency.
15. Lot #11 Infiltration Bed: Outlet invert and slope are listed as 362.00 and 1.50%, respectively, on the plans and are listed as 361.50 and 0.75%, respectively, in the hydrograph report. Please revise these inconsistencies.
16. Lot #12 Infiltration Bed: Barrel invert, barrel length, outlet invert, outlet pipe length, and slope are listed as -6.00, 60', 383.00, and 26.00', respectively, on the plans and are listed as 380.00, 70', 382.50, and 47.00', respectively, in the hydrograph report. Additionally, it appears that the Min Final Grade, Top of Stone Elevation, and Bed Bottom Elevation on the plan table are incorrect. Please revise these values and inconsistencies.
17. Lot #13 Infiltration Bed: Outlet invert and outlet pipe length are listed as 385.00 and 46.40', respectively, on the plans and are listed as 384.50 and 47.00', respectively, in the hydrograph report. Please revise these inconsistencies.
18. Lot #14 Infiltration Bed: Outlet invert is listed as 389.00 on the plans and is listed as 388.00 in the hydrograph report. Please revise these inconsistencies.
19. Lot #16 Infiltration Bed: Outlet invert and slope are listed as 403.00 and 1.69%, respectively, on the plans and are listed as 403.50 and 2.25%, respectively, in the hydrograph report. Please revise these inconsistencies.

20. Lot #17 Infiltration Bed: Outlet invert, outlet pipe length, and slope are listed as 407.00, 150.60', and 3.80%, respectively, on the plans and are listed as 406.75, 89.00', and 2.25%, respectively, in the hydrograph report. Please revise these inconsistencies.
21. Lot #18 Infiltration Bed: Outlet pipe length and slope are listed as 46.40' and 3.71%, respectively, on the plans and are listed as 11.00' and 2.00%, respectively, in the hydrograph report. Please revise these inconsistencies.
22. Lot #19 Infiltration Bed: Outlet invert and slope are listed as 394.50 and 11.00%, respectively, on the plans and are listed as 394.00 and 11.30%, respectively, in the hydrograph report. Please revise these inconsistencies.
23. Lot #20 Infiltration Bed: Barrel invert and outlet invert are listed as 353.00 and 356.00, respectively, on the plans and is listed as 359.00 and 361.50, respectively in the hydrograph report. Please revise these inconsistencies.
24. It appears that storm pipe PP-PP11 and Outfall A5 may pose a risk of eroding Infiltration Bed #1. Please revise these items to minimize risk to the infiltration bed.
25. Please revise the endwall at Outfalls A2, A3, and A4 to a level spreader to discharge runoff in a disperse, unconcentrated manner. Please provide a level spreader detail.
26. The 2-year pre-development volume is listed as 46,928 cf in the Retention Volume Compliance Summary table and is listed as 58,591 cf in the hydrograph report. Please revise this inconsistency and ensure that the correct value is used for the 2-year post-development volume as well.
27. Peak Flows & Runoff Volumes Per Outfall table:
 - a. The 2-year volume for Outfall A3 appears to be calculated incorrectly. Please revise this calculation to include all applicable volumes, including Hydrograph 39 "12-Post-Bed Inflow".
 - b. The 2-year volume for Outfall A4 is inconsistent with the value found in the hydrograph report. Please revise this inconsistency.
 - c. Please update the 2-year volume for POI-A Total to reflect these revisions.
28. It appears that the infiltration rate in the Basin Volumes & Dewater Times Per Bed table and the Test Pit IDs in the Proposed Infiltration Bed Dimensions table are inconsistent with the Infiltration Testing Report for Lots #1, #6, #10, and #20. Please revise so that the correct infiltration rates and test pit IDs are referenced within these tables.

29. It appears the infiltration test elevation does not correspond to the bed bottom elevation for Lots #1, #6, #8, #11, #18, and #20. Please revise the bed bottom elevations to incorporate to the appropriate elevation.
30. It appears that the proposed bed bottom elevation for Lot #11 (358.5) is less than two feet from the perched water limiting zone shown on the Infiltration Testing Report (358.6). Please revise the design to provide a bed bottom at least two feet above any limiting zone.
31. The Overall Bed Dimensions on the Proposed Infiltration Bed Dimensions table on the plans are inconsistent with the bed footprints found on the plans for Lot #2, #10, #12, #17, #18, and #19. Please revise these inconsistencies.
32. The Basin Footprints on the Basin Volumes & Dewater Times Per Bed in the stormwater report are inconsistent with the bed footprints found on the plans for Lots #1-3, #6-14, and #16-20. Please revise these inconsistencies.
33. The Min. Final Grade is listed as 376.00 for Lot #9, and 359.00 for Lot #20 on the Proposed Infiltration Bed Dimensions table but it appears that the plans show a lower final grade. Please revise this inconsistency.
34. The Impervious Used in Storm Design exceeds the impervious area used in the hydrograph calculations for every lot. Please revise this column to accurately reflect the impervious area used in the stormwater design.
35. It appears that the area used for the Water Quality Volume calculation in the Compliance Summary table is less than the area found in the hydrograph report. Please revise these values to be consistent.
36. It appears that stormwater piping (PP-11 to Outfall A5) will cross proposed infiltration bed PIB-1. It also appears that this pipe will not have adequate cover. Please clarify, or revise the layout of the piping and/or infiltration bed to avoid this interference, and to provide at least one foot of cover.
37. Please provide conveyance pipe capacity calculations.
38. Please revise all storm profiles to include all pipe and utility crossings.
39. Please revise the Radnor Storm Main Profile and Walnut Storm Main Profile to display the proposed grade.

40. It appears that storm pipe PP-18 will not have adequate cover. Please revise the plans to provide at least one foot of cover.
41. It appears that storm pipe PP-P9A will not have adequate cover. Please revise the plans to provide at least one foot of cover.
42. Please provide an endwall detail.
43. Final approval of the stormwater management plan will be required as part of the Grading Permit process. Any revisions to the size or location of the individual structures or other features will be addressed at that time.

Sanitary Sewer

1. The sanitary sewer line in Radnor Street Road and Walnut Avenue must be shown on the plans.
2. The existing sanitary sewer connections and disposition of the laterals must be provided on the plans.
3. All manholes not located in the paved areas must be equipped with watertight frames and covers.
4. Manholes in non-improved areas must be extended 18 inches above grade.
5. All utilities crossing the sanitary sewers must be shown on the profile view to insure adequate vertical clearance.
6. Rim and invert elevations of the sanitary manholes must be shown on profile view.
7. The size and type of sewer must be shown on the profile view.
8. Minimum depth of cover for all pipe sewers shall be 5 feet. There are numerous locations where is condition is not met and it appears that the coverage is approximately 2 feet.
9. When pipe is to be laid in fill, the embankment height shall be at least four feet above the top of pipe before the trench is excavated. Compact embankment material to a minimum final density of not less than 90% of the maximum dry weight density at its optimum moisture content.
10. The grades of the sewer runs must be shown on the profiles.

11. A minimum 10-foot horizontal and 18-inch vertical separation must be maintained between the sanitary sewer and the water and storm sewer lines.
12. Profiles of the sanitary sewer laterals must be provided.
13. Depressed curbing (12 feet) is required where the sewer line leaves the street to provide access in the easement to the sanitary sewer line.
14. Laterals cannot tie directly into manholes.
15. Sanitary sewer branches must not tie into manholes at acute angles to the flow.
16. A note must be added to the plans stating no planting will be done in the Sanitary Sewer easements.
17. A note should be added to the plans stating who the owner of the sanitary sewer system will be and who will be responsible for its maintenance.
18. The laterals for lot #19 and #16 do not connect into the sanitary sewer.
19. The lateral for lot #18 requires an easement crossing lot #17.
20. The attached Radnor Township frame and cover detail and cast-iron trap detail must be added the plans.

General

1. The Radnor Township Tree protection detail must be added to the plans.
2. Will the Beech Lane extension roadway be public or private?
3. Information for the retaining walls located on several of the lots must be provided.
4. The applicant must appear before the Shade Tree Commission and gain approval prior to this plan being presented to the Board or Commissioners.

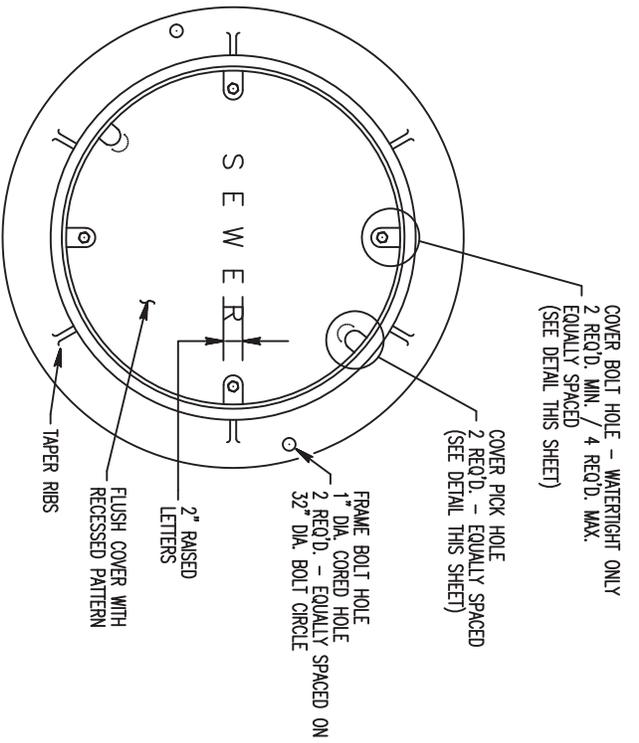
If you have any questions or require any additional information, please contact me.

Very truly yours,

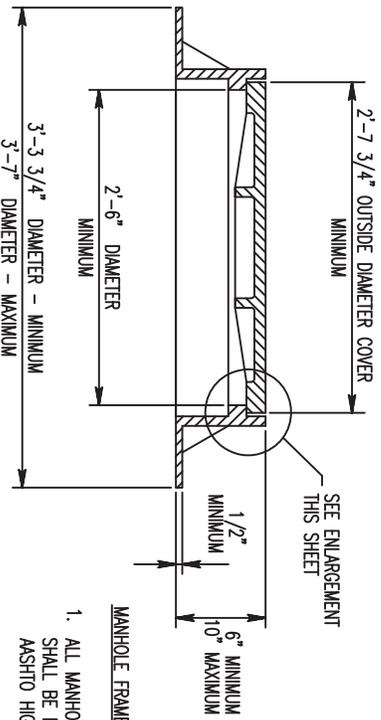
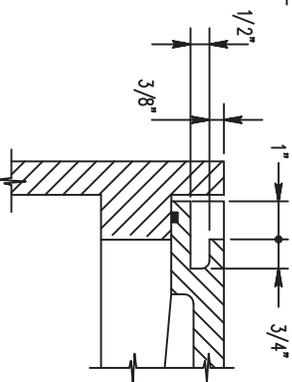
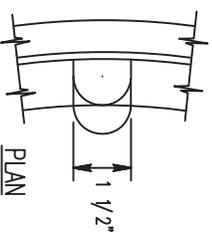
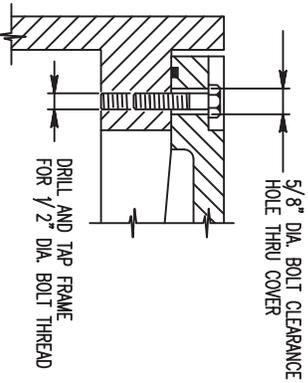
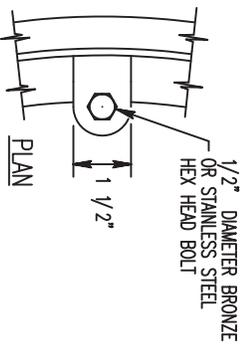
GANNETT FLEMING, INC.

A handwritten signature in blue ink, consisting of a large, stylized 'R' followed by a horizontal line and a small flourish.

Roger A. Phillips, P.E.
Senior Project Manager



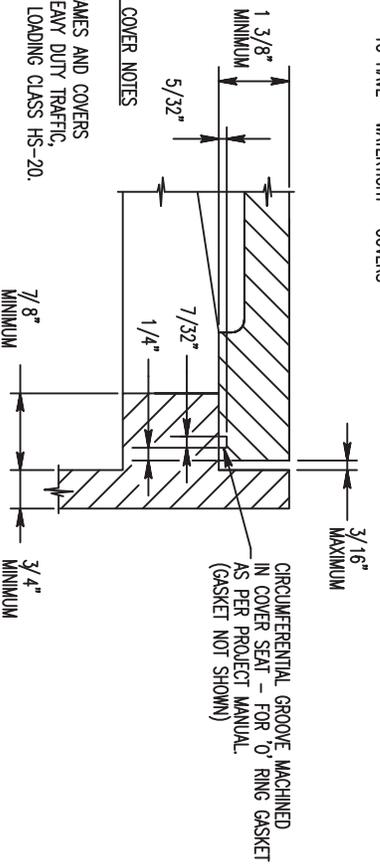
PLAN



SECTIONAL ELEVATION

MANHOLE FRAME AND COVER NOTES

1. ALL MANHOLE FRAMES AND COVERS SHALL BE FOR HEAVY DUTY TRAFFIC, ASPHALT HIGHWAY LOADING CLASS HS-20.



ENLARGEMENT

COVER BOLT HOLE

REQUIRED ONLY ON MANHOLES DESIGNATED TO HAVE "WATERTIGHT" COVERS

COVER PICK HOLE

STANDARD AND WATERTIGHT
MANHOLE FRAME AND COVER





GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

MEMORANDUM

Date: October 23, 2020

To: Steve Norcini, P.E.

From: Damon Drummond, P.E., PTOE

cc: Leslie Salsbury, P.E.

Reference: CG Wayne, LLC - Eagle & Radnor Roads
Radnor Township, Delaware County
Transportation Review 1

G&A #20-20023

Our transportation review is complete for the Subdivision plans prepared for Eagle & Radnor Roads; we offer the following comments for your consideration:

A. PROJECT DESCRIPTION

The Applicant, CG Wayne, LLC, is proposing a 20 new single-family homes development on the corner of Eagle Road and Radnor Street Road.

B. DOCUMENTS REVIEWED

1. Preliminary/Final Subdivision and Land Development Plans prepared by Site Engineering Concepts, LLC, prepared for CG Wayne, LLC, consisting of 13 sheets and dated September 15, 2020.
2. Traffic Impact Assessment prepared by F. Tavani and Associates, Inc., dated March 30, 2020.

C. SUBDIVISION AND LAND DEVELOPMENT ORDINANCE COMMENTS

1. §255-20.B.(1)(m) – Show the existing streets adjacent to the site with rights-of-way.
2. §255-20.B.(1)(o)[1] & §255-21.B.(1)(o)[1] – Label the proposed cartway width of the Beechtree Lane Extension.
3. §255-20.B.(1)(o)[7] & §255-21.B.(1)(o)[7] – Label the proposed sidewalk width.
4. §255-21.B.(5)(a)[1] - Label the proposed centerline with bearing distances.
5. §255-21.B.(5)(a)[2] - Label the proposed intersection radii.
6. §255-21.B.(5)(b)[2] - On the centerline profile, provide proposed center-line grade, with percent on tangents and elevations at fifty-foot intervals.

7. §255-21.B.(5)(c) – Provide a typical section for the proposed cul-de-sac. Label the centerline, cross grade, and right-of-way.
8. §255-27.D(2) – Label the paved and right-of-radius of the proposed cul-de-sac.
9. §255-28.B – Provide the available and proposed sight distance at the intersection of Beechtree Lane and Radnor Street Road. Provide the sight distance at the driveway for Lot 1-6,16, and Lot 20.
10. §255-37.C – Provide an easement for the existing and proposed sidewalk along Radnor Street Road and Walnut Avenue.
11. §255-37.H – Sidewalks and pedestrian paths shall not exceed a seven-percent grade. Provide labels for sidewalk grades.
12. §255-47.C. - Along the existing street on which a subdivision or land development abuts (hereinafter called a "boundary street"), improvements shall be made to the street. The improvements to the boundary street shall be determined by the width of the required cartway and built to the specifications established by the Township §255-27.C(1). The following half widths for the roadway are required.

Right-of-Way/Cartway

- | | |
|--|-----------------|
| • Eagle Road (Major Collector) | 40 feet/24 feet |
| • Radnor Street Road (Minor Collector) | 30 feet/18 feet |
| • Walnut Avenue (Local Street) | 30 feet/14 feet |

D. TRAFFIC IMPACT ASSESSMENT COMMENTS:

1. The Traffic Impact Study was conducted following acceptable standards. There are very minor technical analysis input discrepancies which will not impact the overall conclusions. We find the Traffic Impact Study acceptable.

E. GENERAL TRANSPORTATION COMMENTS:

1. PennDOT will require a Highway Occupancy Permit (HOP) for the access to Eagle Road (S.R. 1042) on Lot 20. The Township requests the opportunity to review all HOP plans submissions to PennDOT; as well as be given the opportunity to attend all meetings with PennDOT and carbon copied on all correspondence regarding same.
2. Provide spot elevations at the bottom of curb, top of curb, at minimum 25' intervals along the proposed curblines and at minimum 10' intervals along radius returns. In Additional spot elevations and slope labels must be provided within the areas of curb ramps, driveway aprons, crosswalks, and sidewalk to ensure ADA compliance.
3. Revise the plans to include the details for the proposed sidewalk, curb, ADA compliant ramps and crosswalk on Beechtree Lane.
4. Provide an ADA ramp at Radnor Street Road and Walnut Avenue with the proposed sidewalk at the intersection.
5. A shared driveway is proposed for Lot 17 and Lot 18. In lieu of a shared access, consider, having one of the lots access Eagle Road. If a shared access remains, it will require an access easement between the two lots.

6. Provide ADA connection at the intersection of Eagle Road/Radnor Street Road. Consider removing the existing steps and construct an ADA accessible walkway to the intersection.
7. Provide ADA compliant crossings at the intersection of Eagle Road and Radnor Chester Road. Provide crosswalks for crossing the eastern and northern leg for the intersection. The crossing improvement would include curb ramps, pedestrian signal heads and push buttons.

SITE ENGINEERING CONCEPTS, LLC

Consulting Engineering and Land Development Services

September 28, 2020

Board of Commissioners Radnor Township
301 Iven Avenue
Wayne, PA 19087

Re: Waiver Request
Section 255-12.A, Preliminary Submission
Eagle Road and Radnor Road Subdivision

Dear Members of the Board:

CG Wayne, LLC respectfully requests a waiver from Section 255-12.A of the Township Code to permit the above-referenced land development application to proceed and be reviewed as a single preliminary/final land development plan. Section 255-12.A requires, in relevant part, that an applicant must submit an individual preliminary application for a major subdivision. Should the Township have any questions or require additional information, please contact me at pspellman@site-engineers.com or 610.523.9002.

Sincerely,



Patrick Spellman, P.E.

Cc: Devin Touhey, CG Wayne
Will Collins, CG Wayne
David Falcone, Saul Ewing

SITE ENGINEERING CONCEPTS, LLC
CIVIL ENGINEERING AND CONSULTING SERVICES

TRANSMITTAL

TO:	Patricia Sherwin	FROM:	Patrick Spellman
COMPANY:	Radnor Township	DATE:	9/15/2020
STREET ADDRESS:	301 Iven Avenue	PHONE:	
CITY, ZIP:	Wayne, PA 19087	SENDER'S REFERENCE NUMBER:	36-02-978 Eagle & Radnor Rds
RE:	Preliminary Subdivision & Land Development Plan Application Eagle and Radnor Roads	CC:	CG Wayne, LLC, Owner & Applicant

COPIES	SHEETS	DATE	ITEM
2	2	9/14/2020	SALDO APPLICATION
1	#1038	9/10/2020	\$10,500 LAND DEVELOPMENT APPLICATION FEE
2	2	9/14/2020	ACT 247 APPLICATION
1	#4452	9/15/2020	\$350 COUNTY REVIEW FEE
2	3	5/9/2019	PROOF OF OWNERSHIP
2	9	4/2/2018	TITLE REPORT
13	13	9/15/2020	PLAN SET, FULL SCALE
7	13	9/15/2020	PLAN SET, HALF- SCALE
2	283	9/9/2020	PCSM NARRATIVE & CALCULATIONS
2	102	3/30/2020	TRAFFIC REPORT
2	1	6/2/2020	AQUA AVAILABILITY LETTER
1	-	9/15/2020	FLASH DRIVE

NOTES/COMMENTS:

On behalf of CG Wayne, LLC, SITE Engineering Concepts, LLC. is pleased to submit the attached subdivision and land development plan application. Please note the sewage planning mailer has been sent to DEP. If you have any questions or comments, please contact me at pspellman@site-engineers.com or 610.523.9002. Thank you.

DELAWARE COUNTY PLANNING COMMISSION

APPLICATION FOR ACT 247 REVIEW

Incomplete applications will be returned and will not be considered “received” until all required information is provided.

Please type or print legibly

DEVELOPER/APPLICANT

Name CG WAYNE, LLC ATTN: DEVIN TUOHEY E-mail DTOUHEY@CONCORDIAGROUP.BIZ

Address 161 LEVERINGTON AVE, STE 101, PHILADELPHIA, PA 19147 Phone 347.330.0048

Name of Development SE Corner of Eagle and Radnor Roads (36-02-0097810) & 1052/1056 Eagle Road (36-02-0097820)

Municipality RADNOR

ARCHITECT, ENGINEER, OR SURVEYOR

Name of Firm SITE ENGINEERING CONCEPTS, LLC Phone 610.523.9002

Address PO BOX 1992, SOUTHEASTERN, PA 19399

Contact PATRICK SPELLMAN E-mail PSPELLMAN@SITE-ENGINEERS.COM

Type of Review	Plan Status	Utilities		Environmental Characteristics
		Existing	Proposed	
<input type="checkbox"/> Zoning Change	<input type="checkbox"/> Sketch	<input checked="" type="checkbox"/> Public Sewerage	<input checked="" type="checkbox"/> Public Sewerage	
<input checked="" type="checkbox"/> Land Development	<input checked="" type="checkbox"/> Preliminary	<input type="checkbox"/> Private Sewerage	<input type="checkbox"/> Private Sewerage	<input type="checkbox"/> Wetlands
<input checked="" type="checkbox"/> Subdivision	<input checked="" type="checkbox"/> Final	<input checked="" type="checkbox"/> Public Water	<input checked="" type="checkbox"/> Public Water	<input type="checkbox"/> Floodplain
<input type="checkbox"/> PRD	<input type="checkbox"/> Tentative	<input type="checkbox"/> Private Water	<input type="checkbox"/> Private Water	<input type="checkbox"/> Steep Slopes

Zoning District Currently PI, Proposed Map change to R-2

Tax Map # 36 / 06 / 004:010

Tax Folio # 36 / 02 / 00978 / 10

STATEMENT OF INTENT

WRITING "SEE ATTACHED PLAN" IS NOT ACCEPTABLE.

Existing and/or Proposed Use of Site/Buildings:

EXISTING: 14 DETACHED SINGLE FAMILY HOMES AND COLLEGE PARKING LOT ON 2 LOTS.

PROPOSED: 20 DETACHED SINGLE FAMILY HOMES ON 20 LOTS

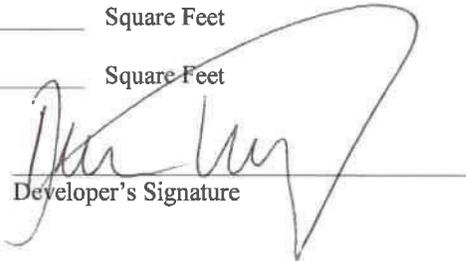
Total Site Area 19.53 Acres

Size of All Existing Buildings 19913 Square Feet

Size of All Proposed Buildings 65300 Square Feet

Size of Buildings to be Demolished 19913 Square Feet

DEVIN TOUHEY
 Print Developer's Name



Developer's Signature

MUNICIPAL SECTION

ALL APPLICATIONS AND THEIR CONTENT ARE A MUNICIPAL RESPONSIBILITY.

Local Planning Commission Regular Meeting _____

Local Governing Body Regular Meeting _____

Municipal request for DCPD staff comments prior to DCPC meeting, to meet municipal meeting date:

Actual Date Needed _____

IMPORTANT: If previously submitted, show assigned DCPD File # _____

Print Name and Title of Designated Municipal Official _____ Phone Number _____

Official's Signature _____ Date _____

FOR DCPD USE ONLY

Review Fee: Check # _____ Amount \$ _____ Date Received _____

Applications with original signatures must be submitted to DCPD.

RADNOR TOWNSHIP
301 IVEN AVE
WAYNE PA 19087
P) 610 688-5600
F) 610 971-0450
WWW.RADNOR.COM

SUBDIVISION ~ LAND DEVELOPMENT
SE Corner of Eagle and Radnor Roads (36-02-0097810) & 1052/1056

Location of Property Eagle Road (36-02-0097820)

Zoning District Currently PI; Proposed Application No. _____
Map Change to R-2 (Twp. Use)

Fee _____ Ward No. 1 Is property in HARB District NO

Applicant: (Choose one) Owner _____ Equitable Owner X

Name CG WAYNE, LLC ATTN: DEVIN TUOHEY

Address 161 LEVERINGTON AVE, STE 101, PHILADELPHIA, PA 19147

Telephone 347.330.0048 Fax _____ Cell _____

Email DTOUHEY@CONCORDIAGROUP.BIZ

Designer: (Choose one) Engineer X Surveyor _____

Name SITE ENGINEERING CONCEPTS, LLC

Address PO BOX 1992, SOUTHEASTERN, PA 19399

Telephone 610.523.9002 Fax _____

Email PSPELLMAN@SITE-ENGINEERS.COM

Area of property 850,624 SF (19.53 AC) Area of disturbance 597,276 SF (13.71 AC)

Number of proposed buildings 20 Proposed use of property 20 SINGLE FAMILY
DETACHED HOMES

Number of proposed lots 20

Plan Status: Sketch Plan _____ Preliminary X Final X Revised _____
Are there any requirements of Chapter 255 (SALDO) that are not in compliance with? NO

Are there any requirements of Chapter 255 (SALDO) not being adhered to?
Explain the reason for noncompliance.

NO

Are there any infringements of Chapter 280 (Zoning), and if so what and why?

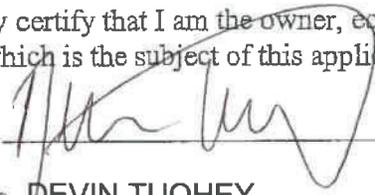
NO. DEVELOPMENT IS BASED ON THE PROPOSED ZONING MAP CHANGE
FROM PI TO R-2 FOR THE PARCELS.

Individual/Corporation/Partnership Name

CG WAYNE, LLC

I do hereby certify that I am the owner, equitable owner or authorized representative of the property which is the subject of this application.

Signature



Print Name DEVIN TUOHEY

By filing this application, you are hereby granting permission to Township officials to visit the site for review purposes.

NOTE: All requirements of Chapter 255 (Subdivision of Lane) of the Code of the Township of Radnor must be complied with whether or not indicated in this application.



June 2, 2020

David J. Sanders, P. E.
Site Engineering Concepts, LLC
PO Box 1992
Southeastern, PA 19399

Re: Water Availability
Concordia – Eagle and Radnor Road
Radnor Township, Delaware County

Dear Mr. Sanders:

This letter will serve as confirmation that the above referenced property is situated within Aqua Pennsylvania Inc.'s ("Aqua") service territory. Service will be provided in accordance with Aqua's Rules and Regulations.

This proposed development will require a main extension(s) for service to be available. A main extension from Aqua's existing 8-inch main in Radnor Road will be required. A main extension plan utilizing Aqua plan standards must be prepared and submitted to this office for review and approval. Following approval of the main extension design and plan, construction of the main extension project would be completed by the Builder under our standard Builder's Extension Agreement.

Flow data information may be obtained from our Production Department so that you may determine the adequacy of our supply for your project needs. Please fax a written request to Lisa Thomas Oliva at 610-645-1162 containing the address, street, cross street and municipality and all pertinent contact information.

If I can be of further assistance, you may contact me at (610) 645-4230.

Sincerely,

A handwritten signature in black ink that reads "Michael Linkiewicz". The signature is fluid and cursive, with a long, sweeping underline that extends to the right.

Michael Linkiewicz
New Business Representative

 First American Title™	ALTA Commitment for Title Insurance
	Issued By First American Title Insurance Company
Commitment	

COMMITMENT FOR TITLE INSURANCE
Issued By
FIRST AMERICAN TITLE INSURANCE COMPANY

NOTICE

IMPORTANT-READ CAREFULLY: THIS COMMITMENT IS AN OFFER TO ISSUE ONE OR MORE TITLE INSURANCE POLICIES. ALL CLAIMS OR REMEDIES SOUGHT AGAINST THE COMPANY INVOLVING THE CONTENT OF THIS COMMITMENT OR THE POLICY MUST BE BASED SOLELY IN CONTRACT.

THIS COMMITMENT IS NOT AN ABSTRACT OF TITLE, REPORT OF THE CONDITION OF TITLE, LEGAL OPINION, OPINION OF TITLE, OR OTHER REPRESENTATION OF THE STATUS OF TITLE. THE PROCEDURES USED BY THE COMPANY TO DETERMINE INSURABILITY OF THE TITLE, INCLUDING ANY SEARCH AND EXAMINATION, ARE PROPRIETARY TO THE COMPANY, WERE PERFORMED SOLELY FOR THE BENEFIT OF THE COMPANY, AND CREATE NO EXTRACTIONAL LIABILITY TO ANY PERSON, INCLUDING A PROPOSED INSURED.

THE COMPANY'S OBLIGATION UNDER THIS COMMITMENT IS TO ISSUE A POLICY TO A PROPOSED INSURED IDENTIFIED IN SCHEDULE A IN ACCORDANCE WITH THE TERMS AND PROVISIONS OF THIS COMMITMENT. THE COMPANY HAS NO LIABILITY OR OBLIGATION INVOLVING THE CONTENT OF THIS COMMITMENT TO ANY OTHER PERSON.

COMMITMENT TO ISSUE POLICY

Subject to the Notice; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and the Commitment Conditions, First American Title Insurance Company, a Nebraska Corporation (the "Company"), commits to issue the Policy according to the terms and provisions of this Commitment. This Commitment is effective as of the Commitment Date shown in Schedule A for each Policy described in Schedule A, only when the Company has entered in Schedule A both the specified dollar amount as the Proposed Policy Amount and the name of the Proposed Insured.

If all of the Schedule B, Part I-Requirements have not been met within six months after the Commitment Date, this Commitment terminates and the Company's liability and obligation end.

First American Title Insurance Company



Dennis J. Gilmore, President



Jeffrey S. Robinson, Secretary

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This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by Sage Premier Settlements. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I — Requirements; and Schedule B, Part II — Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

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COMMITMENT CONDITIONS

1. DEFINITIONS

- (a) "Knowledge" or "Known": Actual or imputed knowledge, but not constructive notice imparted by the Public Records.
- (b) "Land": The land described in Schedule A and affixed improvements that by law constitute real property. The term "Land" does not include any property beyond the lines of the area described in Schedule A, nor any right, title, interest, estate, or easement in abutting streets, roads, avenues, alleys, lanes, ways, or waterways, but this does not modify or limit the extent that a right of access to and from the Land is to be insured by the Policy.
- (c) "Mortgage": A mortgage, deed of trust, or other security instrument, including one evidenced by electronic means authorized by law.
- (d) "Policy": Each contract of title insurance, in a form adopted by the American Land Title Association, issued or to be issued by the Company pursuant to this Commitment.
- (e) "Proposed Insured": Each person identified in Schedule A as the Proposed Insured of each Policy to be issued pursuant to this Commitment.
- (f) "Proposed Policy Amount": Each dollar amount specified in Schedule A as the Proposed Policy Amount of each Policy to be issued pursuant to this Commitment.
- (g) "Public Records": Records established under state statutes at the Commitment Date for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without Knowledge.
- (h) "Title": The estate or interest described in Schedule A.

2. If all of the Schedule B, Part I-Requirements have not been met within the time period specified in the Commitment to Issue Policy, this Commitment terminates and the Company's liability and obligation end.

3. The Company's liability and obligation is limited by and this Commitment is not valid without:

- (a) the Notice;
- (b) the Commitment to Issue Policy;
- (c) the Commitment Conditions;
- (d) Schedule A;
- (e) Schedule B, Part I-Requirements;
- (f) Schedule B, Part II-Exceptions; and
- (g) a counter-signature by the Company or its issuing agent that may be in electronic form.

4. COMPANY'S RIGHT TO AMEND

The Company may amend this Commitment at any time. If the Company amends this Commitment to add a defect, lien, encumbrance, adverse claim, or other matter recorded in the Public Records prior to the Commitment Date, any liability of the Company is limited by Commitment Condition 5. The Company shall not be liable for any other amendment to this Commitment.

5. LIMITATIONS OF LIABILITY

- (a) The Company's liability under Commitment Condition 4 is limited to the Proposed Insured's actual expense incurred in the interval between the Company's delivery to the Proposed Insured of the Commitment and the delivery of the amended Commitment, resulting from the Proposed Insured's good faith reliance to:
 - (i) comply with the Schedule B, Part I-Requirements;
 - (ii) eliminate, with the Company's written consent, any Schedule B, Part II-Exceptions; or
 - (iii) acquire the Title or create the Mortgage covered by this Commitment.
- (b) The Company shall not be liable under Commitment Condition 5(a) if the Proposed Insured requested the amendment or had Knowledge of the matter and did not notify the Company about it in writing.
- (c) The Company will only have liability under Commitment Condition 4 if the Proposed Insured would not have incurred the expense had the Commitment included the added matter when the Commitment was first delivered to the Proposed Insured.
- (d) The Company's liability shall not exceed the lesser of the Proposed Insured's actual expense incurred in good faith and described in Commitment Conditions 5(a)(i) through 5(a)(iii) or the Proposed Policy Amount.
- (e) The Company shall not be liable for the content of the Transaction Identification Data, if any.

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- (f) In no event shall the Company be obligated to issue the Policy referred to in this Commitment unless all of the Schedule B, Part I-Requirements have been met to the satisfaction of the Company.
- (g) In any event, the Company's liability is limited by the terms and provisions of the Policy.

6. LIABILITY OF THE COMPANY MUST BE BASED ON THIS COMMITMENT

- (a) Only a Proposed Insured identified in Schedule A, and no other person, may make a claim under this Commitment.
- (b) Any claim must be based in contract and must be restricted solely to the terms and provisions of this Commitment.
- (c) Until the Policy is issued, this Commitment, as last revised, is the exclusive and entire agreement between the parties with respect to the subject matter of this Commitment and supersedes all prior commitment negotiations, representations, and proposals of any kind, whether written or oral, express or implied, relating to the subject matter of this Commitment.
- (d) The deletion or modification of any Schedule B, Part II-Exception does not constitute an agreement or obligation to provide coverage beyond the terms and provisions of this Commitment or the Policy.
- (e) Any amendment or endorsement to this Commitment must be in writing and authenticated by a person authorized by the Company.
- (f) When the Policy is issued, all liability and obligation under this Commitment will end and the Company's only liability will be under the Policy.

7. IF THIS COMMITMENT HAS BEEN ISSUED BY AN ISSUING AGENT

The issuing agent is the Company's agent only for the limited purpose of issuing title insurance commitments and policies. The issuing agent is not the Company's agent for the purpose of providing closing or settlement services.

8. PRO-FORMA POLICY

The Company may provide, at the request of a Proposed Insured, a pro-forma policy illustrating the coverage that the Company may provide. A pro-forma policy neither reflects the status of Title at the time that the pro-forma policy is delivered to a Proposed Insured, nor is it a commitment to insure.

9. ARBITRATION

The Policy contains an arbitration clause. All arbitrable matters when the Proposed Policy Amount is \$2,000,000.00 or less shall be arbitrated at the option of either the Company or the Proposed Insured as the exclusive remedy of the parties. A Proposed Insured may review a copy of the arbitrations rules at <http://www.alta.org/arbitration>.

Issued By
First American Title Insurance Company

Transaction Identification Data for reference only:

Issuing Agent: Sage Premier Settlements
Issuing Office: Sage Prem-BRMS
Issuing Office's ALTA® Registry ID: 1004955
Loan ID Number:
Commitment Number: 258938BRMS
Property Address: 1300 Eagle Road (West Campus), Wayne, PA 19087

SCHEDULE A

1. Commitment Date: **May 20, 2019, at 8:00 am**

2. Policy to be issued:

- (a) Owner's Policy: 2006 ALTA® Owner's Policy
 ALTA® Homeowner's Policy

Proposed Insured: **CG Wayne, LLC**

Proposed Policy Amount: **\$7,500,000.00**

- (b) Loan Policy: ALTA® Loan Policy (6/17/2006)
 ALTA® Short Form Residential Loan Policy (6/17/2006)

Proposed Insured: **N/A**

Proposed Policy Amount: **\$0.00**

3. The estate or interest in the Land described or referred to in this Commitment is **Fee Simple**

4. The Title is, at the Commitment Date, vested in: **Eastern University, a Pennsylvania non-profit corporation**

BEING the same premises which Valley Forge Military Academy Foundation, a Pennsylvania non-profit corporation, by Deed dated 05/20/2010 and recorded 05/21/2010 in the Office of the Recorder of Deeds in and for the County of Delaware in Record Book 4744, Page 1451, granted and conveyed unto Eastern University, a Pennsylvania non-profit corporation.

5. The Land is described as follows:
SEE ATTACHED EXHIBIT A

First American Title Insurance Company

BY:



Authorized Countersignature
Sage Premier Settlements
Company
Broomall, PA
City, State

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EXHIBIT "A"

The land referred to herein below is situated in the County of Delaware, State of Pennsylvania, and described as follows:

PREMISES A:

ALL THAT CERTAIN tract or piece of land with the buildings and improvements thereon erected, Situate in the Township of Radnor, County of Delaware and State of Pennsylvania, being Sections "A" and "B" on Plan of Edgewood Lake made by Samuel M. Garrigues, Esquire, Civil Engineer, said plan being recorded in the Office for the Recording of Deeds in and for the County of Delaware in Deed Book Z-9 Page 622, bounded and described as follows, to wit:

BEGINNING at a stone set at the intersection of the middle line of Walnut Avenue with the middle line of Radnor Street Road; thence along the middle line of said road by land now or late of H. Wendell North 26 degrees 18 minutes West 481.56 feet to a stone set at the intersection of the middle line of Beech Tree Lane; thence still along the middle line of said road by land of Reginald L. Hart and John W. Morrison the two (2) following courses and distances: (1) North 26 degrees 18 minutes West 106.85 feet to a stone; and (2) North 28 degrees 40 minutes West 540.14 feet to a stone set at the intersection of the middle line of Eagle Road; thence along the middle line of said Road by land of Edward deV. Morrell the two (2) following courses and distances: (1) North 85 degrees 11 minutes East 366.63 feet to a stone and (2) North 89 degrees 45 minutes East 663.70 feet to a stone set at the intersection of the middle line of Chamouni Drive; thence along the middle line of said Drive on a line curving to the left with a radius of 870.66 feet the distance 135.52 feet to a stone at the intersection of the middle line of Beech Tree Lane (the chord of said curved line has a bearing South 04 degrees 42 minutes East and length of 135.39 feet); thence still along the middle line of said Drive on a line curving to the left with a radius of 870.66 feet the distance of 306.05 feet to a stone (the chord of said curved line has a bearing South 18 degrees East and length 304.47 feet); and thence still along the middle line of said Drive on a line curving to the right with a radius of 300.00 feet the distance of 499.86 feet to a stone in the middle line of Walnut Avenue aforesaid (the chord of said curved line has a bearing South 19 degrees 40 minutes West and length 444.01 feet); thence along the middle line of said Walnut Avenue South 67 degrees 25 minutes West 500.00 feet to the place of beginning.

FOLIO NO. 36020097810 Containing 18.1132 acres, more or less

PREMISES B:

ALL THAT CERTAIN lot or piece of ground Situate in the Township of Radnor, County of Delaware and State of Pennsylvania, described according to a Map of Property of J. D. Otley, made by M. R. and J. B. Yerkes, Civil Engineers, Bryn Mawr, Pa., on December 30, 1948 and revised January 19, 1955, as follows, to wit:

BEGINNING at a point in the middle line of Eagle Road (40 feet wide) measured the two (2) following courses and distances along said middle line from its intersection with the middle line of Paul Road; (1) South 88 degrees 05 minutes West 170.49 feet to a point; and (2) North 57 degrees 00 minutes West 353.89 feet to a point; thence extending from said beginning point along land late of the Grantors South 33 degrees 00 minutes West 305.41 feet to a point in the middle line of Chamouni Avenue (not built); thence extending along the middle line of Chamouni Avenue (not built) the two (2) following courses and distances: (1) on the arc of a circle curving to the left with a radius of 300.00 feet the arc distance of 10.00 feet (the chord of said arc bears North 27 degrees 21 minutes 07 seconds West 9.98 feet) to a point; and (2) on the arc of a circle curving to the right with a radius of 870.66 feet the arc distance of 441.57 feet (the chord of said arc bears North 13 degrees 33 minutes West 436.85 feet) to a stone marking the intersection of the middle lines of Chamouni Avenue (not built) and Eagle Road; thence extending along the middle line of Eagle Road South 57 degrees 00 minutes East 325.80 feet to the first mentioned point and place of beginning.

FOLIO NO. 36020097820 Containing 1.341 acres, more or less

Being the same premises which Valley Forge Military Academy Foundation, a Pennsylvania Non-Profit Corporation, b Deed dated 05/20/2010 and recorded 05/21/2010 in the Office of the Recorder of Deeds in and for the County of Delaware in Record Book 4744, Page 1451, granted and conveyed unto Eastern University, a Pennsylvania Non-Profit Corporation

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**SCHEDULE B, PART I
Requirements**

All of the following Requirements must be met:

1. The Proposed Insured must notify the Company in writing of the name of any party not referred to in this Commitment who will obtain an interest in the Land or who will make a loan on the Land. The Company may then make additional Requirements or Exceptions.
2. Pay the agreed amount for the estate or interest to be insured.
3. Pay the premiums, fees, and charges for the Policy to the Company.
4. Documents satisfactory to the Company that convey the Title or create the Mortgage to be insured, or both, must be properly authorized, executed, delivered, and recorded in the Public Records.
5. Original photo identification for all parties to the transaction must be provided.
6. Proof to be furnished that as to each grantor/mortgagor who is an individual, if presently married, that he/she is neither separated from his/her spouse nor a party to any pending divorce proceeding in any jurisdiction, otherwise, the non-record spouse must join in the deed or mortgage contemplated hereunder.
7. Proof that there are no overdue support obligations of record with the Domestic Relations Section of the parties to this transaction, up through the date of recording of the instruments to be insured.
8. Town, County and School Taxes and Water and Sewer Rents for the prior three years. (Receipts to be produced and filed with the Company.) If certification of payment or amount due is obtained from the taxing and municipal authorities in lieu of such receipts, proof must be provided that the taxing and municipal authorities have not turned collection of any unpaid amounts over to a collection agency or law firm. Absent such proof, or if the taxing or municipal authorities have turned collection over to a collection agency or law firm, then additional certification of payment or amount due to be obtained from such collection agency or law firm.
9. Real Estate Taxes and Municipal Claims (If paid, receipts are to be produced and filed with the Company.)
 PARCEL IDENTIFICATION NUMBER: 36020097810 (Premises A)
 ASSESSMENT: \$2,974,710.00 (Exempt)
10. The Company may make other requirements or exceptions upon its review of the documents creating the estate or interest to be insured or otherwise ascertaining details of the transaction.
11. Mortgages: NONE
12. Judgments: NONE
13. SUIT: Debra Jacono vs. Eastern University (1300 Eagle Road St. Davids, PA 19085), et al. filed 09/21/2018 in Case No. CV-2018-007471.
14. SUIT: Christina Perrone vs. Eastern University (1300 Eagle Road St. Davids, PA 19087) filed 10/11/2018 in Case No. CV-2018-008012.
15. SUIT: Karissa Brady vs. Eastern University (1300 Eagle Road St. Davids, PA 19087) filed 01/24/2019 in Case No. CV-2019-000599.
16. Financing Statements: None

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17. As to Eastern University, a Pennsylvania non-profit corporation, proof must be furnished:
 - a. Of proper Resolution of the Board of Directors in accordance with their By Laws.
 - b. Certificate of Good Standing must be furnished (only if the corporation is a foreign corporation, i.e. incorporated in a state other than Pennsylvania).
 - c. Certified copy of the By Laws with all amendments, must be furnished.
18. Real estate taxes returned to the Tax Claim Bureau of Delaware County not certified. Proper certification to be obtained from said bureau.
19. Real Estate Taxes and Municipal Claims (If paid, receipts are to be produced and filed with the Company).
Tax Account Number: 36020097810 (Premises A) Assessment: \$2,974,710.00 (Exempt)
20. Real Estate Taxes and Municipal Claims (If paid, receipts are to be produced and filed with the company).
Tax Account Number: 36020097820 (Premises B) Assessment: \$391,280.00 (Exempt)

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SCHEDULE B, PART II
Exceptions

THIS COMMITMENT DOES NOT REPUBLISH ANY COVENANT, CONDITION, RESTRICTION, OR LIMITATION CONTAINED IN ANY DOCUMENT REFERRED TO IN THIS COMMITMENT TO THE EXTENT THAT THE SPECIFIC COVENANT, CONDITION, RESTRICTION, OR LIMITATION VIOLATES STATE OR FEDERAL LAW BASED ON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, GENDER IDENTITY, HANDICAP, FAMILIAL STATUS, OR NATIONAL ORIGIN.

The Policy will not insure against loss or damage resulting from the terms and provisions of any lease or easement identified in Schedule A, and will include the following Exceptions unless cleared to the satisfaction of the Company:

1. Any defect, lien, encumbrance, adverse claim, or other matter that appears for the first time in the Public Records or is created, attaches, or is disclosed between the Commitment Date and the date on which all of the Schedule B, Part I-Requirements are met.
2. Rights or claims by parties in possession or under the terms of any unrecorded lease or agreement(s) of sale.
3. Any variation in location of lines or dimensions or other matters which an accurate survey would disclose.
4. Easements, or claims of easements, not shown by the Public Records.
5. Any lien or right to a lien, for services, labor or material heretofore or hereafter furnished, imposed by law and not shown by the Public Records.
6. Possible additional tax increase based on additional assessments.
7. Accuracy of area content not insured.
8. Title to that part of the premises lying in the bed and right of way of all roads, driveways and alleyways is subject to the public and private rights therein.
9. Any claim that the Title is subject to a trust or lien created under The Perishable Agricultural Commodities Act, 1930 (7 U.S.C. §§499a, et seq.) or the Packers and Stockyards Act (7 U.S.C. §§181 et seq.) or under similar state laws.
10. Subject to all matters shown on the Plan as recorded in the Recorder's Office of Delaware County, Pennsylvania in Deed Book Z-9, Page 622.
11. Rights granted to The Bell Telephone Company of Pennsylvania as set forth in Volume 1282, Page 2129 and Deed Book 2055, Page 613.
12. Rights granted to Bell Atlantic - Pennsylvania, Inc. as set forth in Volume 2071, Page 2089.
13. Rights granted to Philadelphia Electric Company as set forth in Volume 21, Page 1459; Volume 544, Page 1197; Volume 840, Page 2031; Volume 43, Page 1446; Deed Book 1426, Page 196; Deed Book 2154, Page 376; Deed Book 2226, Page 67 and Deed Book 953, Page 269.
14. Rights granted to Philadelphia Suburban Water Company as set forth in Record Book 2396, Page 1395.
15. Easement Agreement as set forth in Volume 1574, Page 853.
16. Deed of Grant of Easement as set forth in Volume 24, Page 1421.
17. Restrictions and other matters, if any, appearing of record in Deed Book I-10, Page 276 and Deed Book S-6, Page 57 (As to Premises B), but deleting any covenant, condition, or restriction indicating a preference, limitation or discrimination based on race, color, religion, sex, handicap, familial status, or national origin to the extent such covenants, conditions or restrictions violate 42

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USC 3604(c).

18. Sewer Easement Agreement as set forth in Deed Book 2526, Page 453.
19. Settlement Agreement as set forth in Record Book 4987, Page 317; Assignment and Assumption in Record Book 5284, Page 880.
20. Subject to rights of other littoral/riparian owners abutting Gulph Creek, a body of water which flows through or along the subject premises.
21. Subject to rights of other littoral/riparian owners abutting unnamed, a body of water which flows through or along the subject premises.
22. Conditions as disclosed by Boundary & Topographic Survey, File No. CP 10028 dated 3/31/2010 for Eastern University by Control Point Associates, Inc., 1600 Manor Drive, Suite 120, Chalfont, PA 18914

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AGREEMENT OF SALE

Between

EASTERN UNIVERSITY

Seller

- and -

CG WAYNE, LLC

Purchaser

Dated: May 9, 2019

Property: Eastern University West Campus

AGREEMENT OF SALE

9th THIS AGREEMENT OF SALE (the "Agreement") is dated as of the day of May, 2019 by and between EASTERN UNIVERSITY, a Non-Profit Corporation organized under the laws of the Commonwealth of Pennsylvania (the "Seller"), and CG WAYNE, LLC, a limited liability company organized under the laws of the Commonwealth of Pennsylvania (the "Purchaser").

BACKGROUND

Seller is the owner of certain Parcels of real estate (as hereinafter defined) located at 1300 Eagle Road, Radnor Township, Delaware County, Pennsylvania, being more commonly known as the West Campus, Folio Numbers 36-02-00978-10 and 36-02-00978-20. Seller now desires to sell and Purchaser desires to purchase the Premises, upon the terms and conditions set forth in this Agreement.

NOW, THEREFORE, in consideration of the covenants and agreements contained in this Agreement and other good and valuable consideration, and intending to be legally bound, Seller and Purchaser agree as follows:

1. Agreement to Sell and Purchase.

Subject to the terms and conditions of this Agreement, Seller agrees to sell to Purchaser, and Purchaser agrees to purchase from Seller the following:

1.1. Parcels. The land included in each Property (each, a "Parcel" and collectively, the "Parcels"). Each Parcel is described by metes and bounds under its Property Name in **Exhibit 1.1**.

1.2. Improvements. The buildings and other improvements located on the Parcels, including all fixtures, electrical, heating, ventilating, air conditioning, plumbing, security, fire suppression and other mechanical systems (the "Improvements").

1.3. Appurtenances. All easements, rights of way, licenses, privileges, hereditaments and appurtenances, if any, belonging to or inuring to the benefit of the Parcels, and all right, title and interest of Seller in and to any land lying in the bed of any highway, street, road or avenue, opened or proposed, in front of or abutting or adjoining the Parcels (collectively, the "Appurtenances").

The Parcels, Improvements and Appurtenances are referred to collectively as the "Premises".

IN WITNESS WHEREOF, intending to be legally bound hereby, Purchaser and Seller have executed this Agreement as of the date first above written.

SELLER:

EASTERN UNIVERSITY

By: Ronald A. Matthews
Name: Ronald A. Matthews
Title: President

PURCHASER:

CG WAYNE, LLC

By: Darin Turkey
Name: Darin Turkey
Title: Manager



MEMO TO: Richard Eisenstaedt, General Counsel
Eastern University

FROM: Marjorie A. Kelly, Closing Officer

RE: Radnor Road and Eagle Road
Radnor Township, Delaware Co., PA

DATE: December 13, 2010

Enclosed you will find the following:

- 1) Original recorded Deed
- 2) Owner's policy of Title Insurance #8122638-80873617

Please don't hesitate to call me should you require additional information or if you have any questions.

1436 LANCASTER AVENUE

P.O. BOX 568

PAOLI, PA 19301

P: 610.889.9670

F: 610.647.0243



36-RADNOR \$150,000.00

THOMAS J. JUDGE SR. ROD

DELAWARE
COUNTY

Prepared by/Return to:
General Search & Abstract, LLC
312 West State Street
Kennett Square, PA 19348

Parcel No.: 36-02-00978-10 and 36-02-00978-20
(which parcels were originally Part of 36-02-00978-00)

This Indenture Made this 20th day of May, 2010

Between

Valley Forge Military Academy Foundation, a Pennsylvania non-profit corporation
(hereinafter called the Grantor),

And

Eastern University, a Pennsylvania non-profit corporatio (hereinafter called the Grantee),

Witnesseth That the said Grantor for and in consideration of the sum of **(\$10,000,000.00)**
Ten Million and 00/100 Dollars

lawful money of the United States of America, unto it well and truly paid by the said Grantee, at or before the sealing and delivery hereof, the receipt whereof is hereby acknowledged, has granted, bargained and sold, released and confirmed, and by these presents does grant, bargain and sell, release and confirm unto the said Grantee, its successors and assigns,

(SEE ATTACHED SCHEDULE C)

Together with all and singular the buildings and improvements, ways, streets, alleys, driveways, passages, waters, water-courses, rights, liberties, privileges, hereditaments and appurtenances, whatsoever unto the hereby granted premises belonging, or in any wise appertaining, and the reversions and remainders, rents, issues, and profits thereof; and all the estate, right, title, interest, property, claim and demand whatsoever of the said Grantor, as well at law as in equity, of, in, and to the same.

To have and to hold the said lot or piece of ground above described with the buildings and improvements thereon erected hereditaments and premises hereby granted, or mentioned, and intended so to be, with the appurtenances, unto the said Grantee, its successors and assigns, to and for the only proper use and behoof of the said Grantee, its successors and assigns forever.

Under and subject to restrictions which appear on record.

And the said Grantor for itself and its successors does by these presents, covenant, grant and agree, to and with the said Grantee, its Successors and Assigns, that it, the said Grantor all and singular the Hereditaments and premises herein above described and granted, or mentioned and intended so to be with the Appurtenances unto the said Grantee, its Successors and Assigns, against it the said Grantor and against all and every Person or Persons whomsoever lawfully claiming or to claim the same or any part

Schedule C Description and Recital

PARCEL 1:

ALL THAT CERTAIN tract or piece of land with the buildings and improvements thereon erected, Situate in the Township of Radnor, County of Delaware and State of Pennsylvania being Sections "A" and "B" on Plan of Edgewood Lake made by Samuel M. Garrigues, Esquire, Civil Engineer, said plan being recorded in the Office for the Recording of Deeds in and for the County of Delaware in Deed Book Z-9 page 622, bounded and described as follows, to wit:

BEGINNING at a stone set at the intersection of the middle line of Walnut Avenue with the middle line of Radnor Street Road; thence along the middle line of said road by land now or late of H. Wendell North 26 degrees 18 minutes West 481.56 feet to a stone set at the intersection of the middle line of Beech Tree Lane; thence still along the middle line of said road by land of Reginald L. Hart and John W. Morrison the two (2) following courses and distances: (1) North 26 degrees 18 minutes West 106.85 feet to a stone; and (2) North 28 degrees 40 minutes West 540.14 feet to a stone set at the intersection of the middle line of Eagle Road; thence along the middle line of said Road by land of Edward deV. Morrell the two (2) following courses and distances: (1) North 85 degrees 11 minutes East 366.63 feet to a stone and (2) North 89 degrees 45 minutes East 663.70 feet to a stone set at the intersection of the middle line of Chamouni Drive; thence along the middle line of said Drive on a line curving to the left with a radius of 870.66 feet the distance 135.52 feet to a stone at the intersection of the middle line of Beech Tree Lane (the chord of said curved line has a bearing South 04 degrees 42 minutes East and length of 135.39 feet); thence still along the middle line of said Drive on a line curving to the left with a radius of 870.66 feet the distance of 306.05 feet to a stone (the chord of said curved line has a bearing South 18 degrees East and length 304.47 feet); and thence still along the middle line of said Drive on a line curving to the right with a radius of 300.00 feet the distance of 499.86 feet to a stone in the middle line of Walnut Avenue aforesaid (the chord of said curved line has a bearing South 19 degrees 40 minutes West and length 444.01 feet); thence along the middle line of said Walnut Avenue South 67 degrees 25 minutes West 500.00 feet to the place of beginning.

CONTAINING 18.1132 acres, more or less.

PARCEL 2:

ALL THAT CERTAIN lot or piece of ground Situate in the Township of Radnor, County of Delaware and State of Pennsylvania described according to a Map of Property of J. D. Otley, made by M. R. and J. B. Yerkes, Civil Engineers, Bryn Mawr, Pa., on December 30, 1948 and revised January 19, 1955, as follows, to wit:

BEGINNING at a point in the middle line of Eagle Road (40 feet wide) measured the two (2) following courses and distances along said middle line from its intersection with the middle line of Paul Road; (1) South 88 degrees 05 minutes West 170.49 feet to a point; and (2) North 57 degrees 00 minutes West 353.89 feet to a point; thence extending from said beginning point along land late of the Grantors South 33 degrees 00 minutes West 305.41 feet to a point in the middle line of Chamouni Avenue (not built); thence extending along the middle line of Chamouni Avenue (not built) the two (2) following courses and distances: (1) on the arc of a circle curving to the left with a radius of 300.00 feet the arc distance of 10.00 feet (the chord of said arc bears North 27 degrees 21 minutes 07 seconds West 9.98 feet) to a point; and (2) on the arc of a circle curving to the right with a radius of 870.66 feet the arc distance of 441.57 feet (the chord of said arc bears North 13 degrees 33 minutes West 436.85 feet) to a stone marking the intersection of the middle lines of

Chamouni Avenue (not built) and Eagle Road; thence extending along the middle line of Eagle Road South 57 degrees 00 minutes East 325.80 feet to the first mentioned point and place of beginning.

CONTAINING 1.341 acres more or less.

Tax ID / Parcel No. 36-02-00978-00 (part of)

Being as to Parcel 1: The same premises which The Pennsylvania Company for Banking and Trusts, et al, by Deed dated 5/13/1953 and recorded 5/19/1953 in Delaware County in Deed Book 1572 Page 575 conveyed unto The Valley Forge Military Academy Foundation, in fee.

Being as to Parcel 2: The same premises which James D. Otley and Catherine H. Otley, his wife, by Deed dated 7/18/1955 and recorded 7/27/1955 in Delaware County in Deed Book 1776 Page 458 conveyed unto The Valley Forge Military Academy Foundation, in fee.

Policy No.: PA0831-81-3061267-2010.8122638-80873617

OWNER'S POLICY OF TITLE INSURANCE

Issued by
Commonwealth Land Title Insurance Company

Any notice of claim and any other notice or statement in writing required to be given to the Company under this Policy must be given to the Company at the address shown in Section 18 of the Conditions.

COVERED RISKS

SUBJECT TO THE EXCLUSIONS FROM COVERAGE, THE EXCEPTIONS FROM COVERAGE CONTAINED IN SCHEDULE B, AND THE CONDITIONS, COMMONWEALTH LAND TITLE INSURANCE COMPANY, a Nebraska corporation (the "Company") insures, as of Date of Policy and, to the extent stated in Covered Risks 9 and 10, after Date of Policy, against loss or damage, not exceeding the Amount of Insurance, sustained or incurred by the Insured by reason of:

1. Title being vested other than as stated in Schedule A.
2. Any defect in or lien or encumbrance on the Title. This Covered Risk includes but is not limited to insurance against loss from
 - (a) A defect in the Title caused by
 - (i) forgery, fraud, undue influence, duress, incompetency, incapacity or impersonation;
 - (ii) failure of any person or Entity to have authorized a transfer or conveyance;
 - (iii) a document affecting Title not properly created, executed, witnessed, sealed, acknowledged, notarized, or delivered;
 - (iv) failure to perform those acts necessary to create a document by electronic means authorized by law;
 - (v) a document executed under a falsified, expired, or otherwise invalid power of attorney;
 - (vi) a document not properly filed, recorded, or indexed in the Public Records including failure to perform those acts by electronic means authorized by law; or
 - (vii) a defective judicial or administrative proceeding.
 - (b) The lien of real estate taxes or assessments imposed on the Title by a governmental authority due or payable, but unpaid.
3. Unmarketable Title.
4. No right of access to and from the Land.
5. The violation or enforcement of any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (a) the occupancy, use, or enjoyment of the Land;
 - (b) the character, dimensions, or location of any improvement erected on the Land;
 - (c) the subdivision of land; or
 - (d) environmental protectionif a notice, describing any part of the Land, is recorded in the Public Records setting forth the violation or intention to enforce, but only to the extent of the violation or enforcement referred to in that notice.
6. An enforcement action based on the exercise of a governmental police power not covered by Covered Risk 5 if a notice of the enforcement action, describing any part of the Land, is recorded in the Public Records, but only to the extent of the enforcement referred to in that notice.
7. The exercise of the rights of eminent domain if a notice of the exercise, describing any part of the Land, is recorded in the Public Records.
8. Any taking by a governmental body that has occurred and is binding on the rights of a purchaser for value without Knowledge.
9. Title being vested other than as stated in Schedule A or being defective
 - (a) as a result of the avoidance in whole or in part, or from a court order providing an alternative remedy, of a transfer of all or any part of the title to or any interest in the Land occurring prior to the transaction vesting Title as shown in Schedule A because that prior transfer constituted a fraudulent or preferential transfer under federal bankruptcy, state insolvency, or similar creditors' rights laws; or
 - (b) because the instrument of transfer vesting Title as shown in Schedule A constitutes a preferential transfer under federal bankruptcy, state insolvency, or similar creditors' rights laws by reason of the failure of its recording in the Public Records
 - (i) to be timely, or
 - (ii) to impart notice of its existence to a purchaser for value or to a judgment or lien creditor.
10. Any defect in or lien or encumbrance on the Title or other matter included in Covered Risks 1 through 9 that has been created or attached or has been filed or recorded in the Public Records subsequent to Date of Policy and prior to the recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

The Company will also pay the costs, attorneys' fees, and expenses incurred in defense of any matter insured against by this Policy, but only to the extent provided in the Conditions.

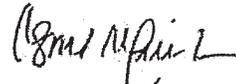
IN WITNESS WHEREOF, the Company has caused this Policy to be signed with the facsimile signatures of its President and Secretary and sealed as required by its By-Laws.

By: 
Authorized Signatory
Marjorie A. Kelly

PA0831 3061267
General Search & Abstract LLC
312 W State Street
Kennett Square, PA 19348
Tel: (610) 889-9670
Fax: (610) 647-0243



COMMONWEALTH LAND TITLE INSURANCE COMPANY

By: 

ATTEST



President

Secretary

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 and 10); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A, is
 - (a) a fraudulent conveyance or fraudulent transfer; or
 - (b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.
5. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

CONDITIONS

1. DEFINITION OF TERMS

The following terms when used in this policy mean:

- (a) "Amount of Insurance": The amount stated in Schedule A, as may be increased or decreased by endorsement to this policy, increased by Section 8(b), or decreased by Sections 10 and 11 of these Conditions.
- (b) "Date of Policy": The date designated as "Date of Policy" in Schedule A.
- (c) "Entity": A corporation, partnership, trust, limited liability company, or other similar legal entity.
- (d) "Insured": The Insured named in Schedule A.
 - (i) The term "Insured" also includes
 - (A) successors to the Title of the Insured by operation of law as distinguished from purchase, including heirs, devisees, survivors, personal representatives, or next of kin;
 - (B) successors to an Insured by dissolution, merger, consolidation, distribution, or reorganization;
 - (C) successors to an Insured by its conversion to another kind of Entity;
 - (D) a grantee of an Insured under a deed delivered without payment of actual valuable consideration conveying the Title
 - (1) if the stock, shares, memberships, or other equity interests of the grantee are wholly-owned by the named Insured,
 - (2) if the grantee wholly owns the named Insured,
 - (3) if the grantee is wholly-owned by an affiliated Entity of the named Insured, provided the affiliated Entity and the named Insured are both wholly-owned by the same person or Entity, or
 - (4) if the grantee is a trustee or beneficiary of a trust created by a written instrument established by the Insured named in Schedule A for estate planning purposes.
 - (ii) With regard to (A), (B), (C), and (D) reserving, however, all rights and defenses as to any successor that the Company would have had against any predecessor Insured.

- (e) "Insured Claimant": An Insured claiming loss or damage.
- (f) "Knowledge" or "Known": Actual knowledge, not constructive knowledge or notice that may be imputed to an Insured by reason of the Public Records or any other records that impart constructive notice of matters affecting the Title.
- (g) "Land": The land described in Schedule A, and affixed improvements that by law constitute real property. The term "Land" does not include any property beyond the lines of the area described in Schedule A, nor any right, title, interest, estate, or easement in abutting streets, roads, avenues, alleys, lanes, ways, or waterways, but this does not modify or limit the extent that a right of access to and from the Land is insured by this policy.
- (h) "Mortgage": Mortgage, deed of trust, trust deed, or other security instrument, including one evidenced by electronic means authorized by law.
- (i) "Public Records": Records established under state statutes at Date of Policy for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without Knowledge. With respect to Covered Risk 5(d), "Public Records" shall also include environmental protection liens filed in the records of the clerk of the United States District Court for the district where the Land is located.
- (j) "Title": The estate or interest described in Schedule A.
- (k) "Unmarketable Title": Title affected by an alleged or apparent matter that would permit a prospective purchaser or lessee of the Title or lender on the Title to be released from the obligation to purchase, lease, or lend if there is a contractual condition requiring the delivery of marketable title.

2. CONTINUATION OF INSURANCE

The coverage of this policy shall continue in force as of Date of Policy in favor of an Insured, but only so long as the Insured retains an estate or interest in the Land, or holds an obligation secured by a purchase money Mortgage given by a purchaser from the Insured, or only so long as the Insured shall have liability by reason of warranties in any transfer or conveyance of the Title. This policy shall not continue in force in favor of any purchaser from the Insured of either (i) an estate or interest in the Land, or (ii) an obligation secured by a purchase money Mortgage given to the Insured.

3. NOTICE OF CLAIM TO BE GIVEN BY INSURED CLAIMANT

The Insured shall notify the Company promptly in writing (i) in case of any litigation as set forth in Section 5(a) of these Conditions, (ii) in case Knowledge shall come to an Insured hereunder of any claim of title or interest that is adverse to the Title, as insured, and that might cause loss or damage for which the Company may be liable by virtue of this policy, or (iii) if the Title, as insured, is rejected as Unmarketable Title. If the Company is prejudiced by the failure of the Insured Claimant to provide prompt notice, the Company's liability to the Insured Claimant under the policy shall be reduced to the extent of the prejudice.

4. PROOF OF LOSS

In the event the Company is unable to determine the amount of loss or damage, the Company may, at its option, require as a condition of payment that the Insured Claimant furnish a signed proof of loss. The proof of loss must describe the defect, lien, encumbrance, or other matter insured against by this policy that constitutes the basis of loss or damage and shall state, to the extent possible, the basis of calculating the amount of the loss or damage.

5. DEFENSE AND PROSECUTION OF ACTIONS

(a) Upon written request by the Insured, and subject to the options contained in Section 7 of these Conditions, the Company, at its own cost and without unreasonable delay, shall provide for the defense of an Insured in litigation in which any third party asserts a claim covered by this policy adverse to the Insured. This obligation is limited to only those stated causes of action alleging matters insured against by this policy. The Company shall have the right to select counsel of its choice (subject to the right of the Insured to object for reasonable cause) to represent the Insured as to those stated causes of action. It shall not be liable for and will not pay the fees of any other counsel. The Company will not pay any fees, costs, or expenses incurred by the Insured in the defense of those causes of action that allege matters not insured against by this policy.

(b) The Company shall have the right, in addition to the options contained in Section 7 of these Conditions, at its own cost, to institute and prosecute any action or proceeding or to do any other act that in its opinion may be necessary or desirable to establish the Title, as insured, or to prevent or reduce loss or damage to the Insured. The Company may take any appropriate action under the terms of this policy, whether or not it shall be liable to the Insured. The exercise of these rights shall not be an admission of liability or waiver of any provision of this policy. If the Company exercises its rights under this subsection, it must do so diligently.

(c) Whenever the Company brings an action or asserts a defense as required or permitted by this policy, the Company may pursue the litigation to a final determination by a court of competent jurisdiction, and it expressly reserves the right, in its sole discretion, to appeal any adverse judgment or order.

6. DUTY OF INSURED CLAIMANT TO COOPERATE

(a) In all cases where this policy permits or requires the Company to prosecute or provide for the defense of any action or proceeding and any appeals, the Insured shall secure to the Company the right to so prosecute or provide defense in the action or proceeding, including the right to use, at its option, the name of the Insured for this purpose. Whenever requested by the Company, the Insured, at the Company's expense, shall give the Company all reasonable aid (i) in securing evidence, obtaining witnesses, prosecuting or defending the action or proceeding, or effecting settlement, and (ii) in any other lawful act that in the opinion of the Company may be necessary or desirable to establish the Title or any other matter as insured. If the Company is prejudiced by the failure of the Insured to furnish the required cooperation, the Company's obligations to the Insured under the policy shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, with regard to the matter or matters requiring such cooperation.

(b) The Company may reasonably require the Insured Claimant to submit to examination under oath by any authorized representative of the Company and to produce for examination, inspection, and copying, at such reasonable times and places as may be designated by the authorized representative of the Company, all records, in whatever

medium maintained, including books, ledgers, checks, memoranda, correspondence, reports, e-mails, disks, tapes, and videos whether bearing a date before or after Date of Policy, that reasonably pertain to the loss or damage. Further, if requested by any authorized representative of the Company, the Insured Claimant shall grant its permission, in writing, for any authorized representative of the Company to examine, inspect, and copy all of these records in the custody or control of a third party that reasonably pertain to the loss or damage. All information designated as confidential by the Insured Claimant provided to the Company pursuant to this Section shall not be disclosed to others unless, in the reasonable judgment of the Company, it is necessary in the administration of the claim. Failure of the Insured Claimant to submit for examination under oath, produce any reasonably requested information, or grant permission to secure reasonably necessary information from third parties as required in this subsection, unless prohibited by law or governmental regulation, shall terminate any liability of the Company under this policy as to that claim.

7. OPTIONS TO PAY OR OTHERWISE SETTLE CLAIMS; TERMINATION OF LIABILITY

In case of a claim under this policy, the Company shall have the following additional options:

(a) To Pay or Tender Payment of the Amount of Insurance.

To pay or tender payment of the Amount of Insurance under this policy together with any costs, attorneys' fees, and expenses incurred by the Insured Claimant that were authorized by the Company up to the time of payment or tender of payment and that the Company is obligated to pay. Upon the exercise by the Company of this option, all liability and obligations of the Company to the Insured under this policy, other than to make the payment required in this subsection, shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation.

(b) To Pay or Otherwise Settle With Parties Other Than the Insured or With the Insured Claimant.

(i) To pay or otherwise settle with other parties for or in the name of an Insured Claimant any claim insured against under this policy. In addition, the Company will pay any costs, attorneys' fees, and expenses incurred by the Insured Claimant that were authorized by the Company up to the time of payment and that the Company is obligated to pay; or

(ii) To pay or otherwise settle with the Insured Claimant the loss or damage provided for under this policy, together with any costs, attorneys' fees, and expenses incurred by the Insured Claimant that were authorized by the Company up to the time of payment and that the Company is obligated to pay.

Upon the exercise by the Company of either of the options provided for in subsections (b)(i) or (ii), the Company's obligations to the Insured under this policy for the claimed loss or damage, other than the payments required to be made, shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation.

8. DETERMINATION AND EXTENT OF LIABILITY

This policy is a contract of indemnity against actual monetary loss or damage sustained or incurred by the Insured Claimant who has suffered loss or damage by reason of matters insured against by this policy.

(a) The extent of liability of the Company for loss or damage under this policy shall not exceed the lesser of

(i) the Amount of Insurance; or

(ii) the difference between the value of the Title as insured and the value of the Title subject to the risk insured against by this policy.

(b) If the Company pursues its rights under Section 5 of these Conditions and is unsuccessful in establishing the Title, as insured,

(i) the Amount of Insurance shall be increased by 10%, and

(ii) the Insured Claimant shall have the right to have the loss or damage determined either as of the date the claim was made by the Insured Claimant or as of the date it is settled and paid.

- (c) In addition to the extent of liability under (a) and (b), the Company will also pay those costs, attorneys' fees, and expenses incurred in accordance with Sections 5 and 7 of these Conditions.

9. LIMITATION OF LIABILITY

- (a) If the Company establishes the Title, or removes the alleged defect, lien, or encumbrance, or cures the lack of a right of access to or from the Land, or cures the claim of Unmarketable Title, all as insured, in a reasonably diligent manner by any method, including litigation and the completion of any appeals, it shall have fully performed its obligations with respect to that matter and shall not be liable for any loss or damage caused to the Insured.
- (b) In the event of any litigation, including litigation by the Company or with the Company's consent, the Company shall have no liability for loss or damage until there has been a final determination by a court of competent jurisdiction, and disposition of all appeals, adverse to the Title, as insured.
- (c) The Company shall not be liable for loss or damage to the Insured for liability voluntarily assumed by the Insured in settling any claim or suit without the prior written consent of the Company.

10. REDUCTION OF INSURANCE; REDUCTION OR TERMINATION OF LIABILITY

All payments under this policy, except payments made for costs, attorneys' fees, and expenses, shall reduce the Amount of Insurance by the amount of the payment.

11. LIABILITY NONCUMULATIVE

The Amount of Insurance shall be reduced by any amount the Company pays under any policy insuring a Mortgage to which exception is taken in Schedule B or to which the Insured has agreed, assumed, or taken subject, or which is executed by an Insured after Date of Policy and which is a charge or lien on the Title, and the amount so paid shall be deemed a payment to the Insured under this policy.

12. PAYMENT OF LOSS

When liability and the extent of loss or damage have been definitely fixed in accordance with these Conditions, the payment shall be made within 30 days.

13. RIGHTS OF RECOVERY UPON PAYMENT OR SETTLEMENT

- (a) Whenever the Company shall have settled and paid a claim under this policy, it shall be subrogated and entitled to the rights of the Insured Claimant in the Title and all other rights and remedies in respect to the claim that the Insured Claimant has against any person or property, to the extent of the amount of any loss, costs, attorneys' fees, and expenses paid by the Company. If requested by the Company, the Insured Claimant shall execute documents to evidence the transfer to the Company of these rights and remedies. The Insured Claimant shall permit the Company to sue, compromise, or settle in the name of the Insured Claimant and to use the name of the Insured Claimant in any transaction or litigation involving these rights and remedies.

If a payment on account of a claim does not fully cover the loss of the Insured Claimant, the Company shall defer the exercise of its right to recover until after the Insured Claimant shall have recovered its loss.

- (b) The Company's right of subrogation includes the rights of the Insured to indemnities, guaranties, other policies of insurance, or bonds, notwithstanding any terms or conditions contained in those instruments that address subrogation rights.

14. ARBITRATION

Either the Company or the Insured may demand that the claim or controversy shall be submitted to arbitration pursuant to the Title

Insurance Arbitration Rules of the American Land Title Association ("Rules"). Except as provided in the Rules, there shall be no joinder or consolidation with claims or controversies of other persons. Arbitrable matters may include, but are not limited to, any controversy or claim between the Company and the Insured arising out of or relating to this policy, any service in connection with its issuance or the breach of a policy provision, or to any other controversy or claim arising out of the transaction giving rise to this policy. All arbitrable matters when the Amount of Insurance is \$2,000,000 or less shall be arbitrated at the option of either the Company or the Insured. All arbitrable matters when the Amount of Insurance is in excess of \$2,000,000 shall be arbitrated only when agreed to by both the Company and the Insured. Arbitration pursuant to this policy and under the Rules shall be binding upon the parties. Judgment upon the award rendered by the Arbitrator(s) may be entered in any court of competent jurisdiction.

15. LIABILITY LIMITED TO THIS POLICY; POLICY ENTIRE CONTRACT

- (a) This policy together with all endorsements, if any, attached to it by the Company is the entire policy and contract between the Insured and the Company. In interpreting any provision of this policy, this policy shall be construed as a whole.
- (b) Any claim of loss or damage that arises out of the status of the Title or by any action asserting such claim shall be restricted to this policy.
- (c) Any amendment of or endorsement to this policy must be in writing and authenticated by an authorized person, or expressly incorporated by Schedule A of this policy.
- (d) Each endorsement to this policy issued at any time is made a part of this policy and is subject to all of its terms and provisions. Except as the endorsement expressly states, it does not (i) modify any of the terms and provisions of the policy, (ii) modify any prior endorsement, (iii) extend the Date of Policy, or (iv) increase the Amount of Insurance.

16. SEVERABILITY

In the event any provision of this policy, in whole or in part, is held invalid or unenforceable under applicable law, the policy shall be deemed not to include that provision or such part held to be invalid, but all other provisions shall remain in full force and effect.

17. CHOICE OF LAW; FORUM

- (a) Choice of Law: The Insured acknowledges the Company has underwritten the risks covered by this policy and determined the premium charged therefor in reliance upon the law affecting interests in real property and applicable to the interpretation, rights, remedies, or enforcement of policies of title insurance of the jurisdiction where the Land is located. Therefore, the court or an arbitrator shall apply the law of the jurisdiction where the Land is located to determine the validity of claims against the Title that are adverse to the Insured and to interpret and enforce the terms of this policy. In neither case shall the court or arbitrator apply its conflicts of law principles to determine the applicable law.
- (b) Choice of Forum: Any litigation or other proceeding brought by the Insured against the Company must be filed only in a state or federal court within the United States of America or its territories having appropriate jurisdiction.

18. NOTICES, WHERE SENT

Any notice of claim and any other notice or statement in writing required to be given to the Company under this policy must be given to the Company at P.O. Box 45023, Jacksonville, FL 32232-5023.

Policy of Title Insurance

Commonwealth Land Title Insurance Company

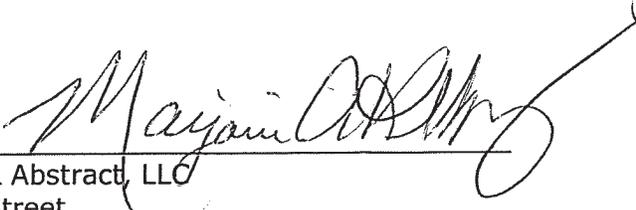
Schedule A

File No.: 3061267 Policy No.: 8122638-80873617
Address Reference: 1001 Eagle Road
Radnor Township
Delaware County, PA

Amount of Insurance: \$10,000,000.00
Date of Policy: May 21, 2010

1. Name of Insured
Eastern University
2. The estate or interest in the Land that is insured by this policy is:
Fee Simple
3. Title is vested in:
Eastern University, a Pennsylvania non-profit corporation by virtue of a Deed from Valley Forge Military Academy Foundation recorded May 21, 2010 in Record Book 04744 page 1451.
4. The land referred to in this policy is described as follows:
See attached Exhibit A

Countersigned:



General Search & Abstract, LLC
312 West State Street
Kennett Square, PA 19348

Exhibit A

Policy Number: 8122638-80873617

PARCEL 1:

ALL THAT CERTAIN tract or piece of land with the buildings and improvements thereon erected, Situate in the Township of Radnor, County of Delaware and State of Pennsylvania being Sections "A" and "B" on Plan of Edgewood Lake made by Samuel M. Garrigues, Esquire, Civil Engineer, said plan being recorded in the Office for the Recording of Deeds in and for the County of Delaware in Deed Book Z-9 page 622, bounded and described as follows, to wit:

BEGINNING at a stone set at the intersection of the middle line of Walnut Avenue with the middle line of Radnor Street Road; thence along the middle line of said road by land now or late of H. Wendell North 26 degrees 18 minutes West 481.56 feet to a stone set at the intersection of the middle line of Beech Tree Lane; thence still along the middle line of said road by land of Reginald L. Hart and John W. Morrison the two (2) following courses and distances: (1) North 26 degrees 18 minutes West 106.85 feet to a stone; and (2) North 28 degrees 40 minutes West 540.14 feet to a stone set at the intersection of the middle line of Eagle Road; thence along the middle line of said Road by land of Edward deV. Morrell the two (2) following courses and distances: (1) North 85 degrees 11 minutes East 366.63 feet to a stone and (2) North 89 degrees 45 minutes East 663.70 feet to a stone set at the intersection of the middle line of Chamouni Drive; thence along the middle line of said Drive on a line curving to the left with a radius of 870.66 feet the distance 135.52 feet to a stone at the intersection of the middle line of Beech Tree Lane (the chord of said curved line has a bearing South 04 degrees 42 minutes East and length of 135.39 feet); thence still along the middle line of said Drive on a line curving to the left with a radius of 870.66 feet the distance of 306.05 feet to a stone (the chord of said curved line has a bearing South 18 degrees East and length 304.47 feet); and thence still along the middle line of said Drive on a line curving to the right with a radius of 300.00 feet the distance of 499.86 feet to a stone in the middle line of Walnut Avenue aforesaid (the chord of said curved line has a bearing South 19 degrees 40 minutes West and length 444.01 feet); thence along the middle line of said Walnut Avenue South 67 degrees 25 minutes West 500.00 feet to the place of beginning.

CONTAINING 18.1132 acres, more or less.

PARCEL 2:

ALL THAT CERTAIN lot or piece of ground Situate in the Township of Radnor, County of Delaware and State of Pennsylvania described according to a Map of Property of J. D. Otley, made by M. R. and J. B. Yerkes, Civil Engineers, Bryn Mawr, Pa., on December 30, 1948 and revised January 19, 1955, as follows, to wit:

BEGINNING at a point in the middle line of Eagle Road (40 feet wide) measured the two (2) following courses and distances along said middle line from its intersection with the middle line of Paul Road; (1) South 88 degrees 05 minutes West 170.49 feet to a point; and (2) North 57 degrees 00 minutes West 353.89 feet to a point; thence extending from said beginning point along land late of the Grantors South 33 degrees 00 minutes West 305.41 feet to a point in the middle line of Chamouni Avenue (not built); thence extending along the middle line of Chamouni Avenue (not built) the two (2) following courses and distances: (1) on the arc of a circle curving to the left with a radius of 300.00 feet the arc distance of 10.00 feet (the chord of said arc bears North 27 degrees 21 minutes 07 seconds West 9.98 feet) to a point; and (2) on the arc of a circle curving to the right with a radius of 870.66 feet the arc distance of 441.57 feet (the chord of said arc bears North 13 degrees 33

Exhibit A continued

Policy Number: 8122638-80873617

minutes West 436.85 feet) to a stone marking the intersection of the middle lines of Chamouni Avenue (not built) and Eagle Road; thence extending along the middle line of Eagle Road South 57 degrees 00 minutes East 325.80 feet to the first mentioned point and place of beginning.

CONTAINING 1.341 acres more or less.

Tax ID / Parcel No. 36-02-00978-00 (part of)

Schedule B

Exceptions from Coverage

Policy Number: 8122638-80873617

In the event that one or more of the Exceptions listed below references covenants, conditions and/or restrictions, please note that the Exception(s) specifically exclude any provisions therein that is or are based on race, color, religion, sex, handicap, familial status or national origin, if any, unless and only to the extent that the restriction is not in violation of state or federal law, or relates to a handicap, but does not discriminate against handicapped people.

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Rights or claims of parties in possession of the land not shown by the public record.
2. Easements, encroachments, overlaps, shortages of area, boundary line disputes and other matters affecting title that an accurate and complete survey would disclose.
3. Real estate taxes for the current and prior tax years which are hereafter assessed and are not yet due and payable.
4. Rights of the public and others entitled thereto in and to the use of that portion of the premises within the bounds of Eagle Road, Radnor Road, Walnut Avenue, Chamouni Avenue, and Beech Tree Lane.
5. Rights granted to Bell Telephone Company of Pennsylvania as in Deed Book 2055 page 613 and Volume 1282 page 2129.
6. Rights granted to Philadelphia Electric Company as in Deed Books 953 page 269, 1426 page 196, 2154 page 376 and 2226 page 67, and Volumes 21 page 1459, 43 page 1446, 544 page 1197 and 840 page 2031.
7. Easement Agreement as in Volume 1574 page 853.
8. Restrictions as in Deed Books I-10 page 276 and S-6 page 57. (Parcel 2 only)
9. Sewer Easement Agreement as in Deed Book 2526 page 453.
10. Deed of Grant of Easement as in Volume 24 page 1421.
11. Rights granted to Bell Atlantic-Pennsylvania, Inc. in Volume 2071 page 2089.
12. Rights granted to Philadelphia Suburban Water Company in Volume 2396 page 1395.
13. Conditions as disclosed by Sewer Easement Plan dated 4/27/2010, for Eastern University by Associated Engineering Consultants Incorporated, 485 Devon Park Drive, Suite 113 Wayne, Pa. 19087.

Schedule B

Exceptions from Coverage continued

Policy Number: 8122638-80873617

14. Conditions as disclosed by Boundary & Topographic Survey, File No. CP10028, dated 3/31/2010, for Eastern University by Control Point Associates, Inc., 1600 Manor Drive, Suite 120, Chalfont, PA 18914.
15. Terms of any unrecorded lease or rights of parties in possession.
16. Open-End Mortgage in the maximum principal sum of \$5,000,000.00 by and between Eastern University and Valley Forge Military Academy Foundation recorded May 21, 2010 in Record Book 04744 page 1455.
17. UCC Financing Statement recorded May 21, 2010 in Record Book 04744 page 1468:
Eastern University - Debtor, Valley Forge Military Academy Foundation - Secured Party

SITE ENGINEERING CONCEPTS,
LLC
CIVIL ENGINEERING AND CONSULTING SERVICES

TRANSMITTAL

TO:	Patricia Sherwin	FROM:	Patrick Spellman
COMPANY:	Radnor Township	DATE:	7/15/2021
STREET ADDRESS:	301 Iven Avenue	PHONE:	
CITY, ZIP:	Wayne, PA 19087	SENDER'S REFERENCE NUMBER:	36-02-978 Eagle & Radnor Rds
RE:	Eagle & Radnor Subdivision Neighbor Notification Letters - Postmarked Forms	CC:	

COPIES	SHEETS	DATE	ITEM
1	25	7/15/2021	ORIGINAL POSTMARKED PS FORM 3877 FOR NEIGHBOR NOTIFICATION LETTERS

NOTES/COMMENTS:

As requested. If you have any questions or comments, please contact me at pspellman@site-engineers.com or 610.523.9002. Thank



Firm Mailing Book For Accountable Mail

Name and Address of Sender

RADNOR TOWNSHIP
ENGINEERING
301 IVEN AVENUE
WAYNE, PA 19087

- Check type of mail or service
- Adult Signature Required
 - Adult Signature Restricted Delivery
 - Certified Mail
 - Certified Mail Restricted Delivery
 - Collect on Delivery (COD)
 - Insured Mail
 - Priority Mail
 - Priority Mail Express
 - Registered Mail
 - Return Receipt for Merchandise
 - Signature Confirmation
 - Signature Confirmation Restricted Delivery

USPS Tracking/Article Number

Addressee (Name, Street, City, State, & ZIP Code™)

1.	EPPS WALAN & ELLEN M 511 WOODLAND CT WAYNE, PA 19087
2.	SULLIVAN JOSEPH J JR & RUTH W 24 FARISTON RD WAYNE, PA 19087
3.	KEOHANE RICHARD B & KURYLOSKI SONJA HW 20 FARISTON ROAD WAYNE, PA 19087
4.	MICHAU PAUL J & ELIZABETH R 18 FARISTON RD WAYNE, PA 19087
5.	CHURCH CRAIG R & MCSORLEY MARYANN B 17 FARISTON RD RADNOR, PA 19087
6.	DESTEFANO MATTHEW & ERIKA 19 FARISTON RD WAYNE, PA 19087
7.	FORTE FRANCIS C & JANNA M 21 FARISTON RD WAYNE, PA 19087
8.	PIZZARIELLO STEPHEN & PATRICIA C 23 FARISTON RD WAYNE, PA 19087

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Postmaster, Per (Name of receiving employee)

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Service) Fee	Charge	if Registered	Value	Sender if COD	Fee	Fee	RR Fee	SC Fee	SCRD Fee	SH Fee
	Handling Charge - if Registered and over \$50,000 in value									
					Adult Signature Restricted Delivery					
					Ad It Signature Required					
					Restricted Delivery					
					Return Receipt				Signature Confirmation	
									Signature Confirmation Restricted Delivery	
										Special Handling



Name and Address of Sender

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USPS Tracking/Article Number

	Postage	(Extra Service) Fee	Handling Charge	Actual Value if Registered	Insured Value	Due Sender if COD	ASR Fee	ASRD Fee	RD Fee	RR Fee	SC Fee	SCRD Fee	SH Fee
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2.													
3.													
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Total Number of Pieces Listed by Sender

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Postmaster, Per (Name of receiving employee)

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 - Priority Mail Express
 - Registered Mail
 - Return Receipt for Merchandise
 - Signature Confirmation
 - Signature Confirmation Restricted Delivery

USPS Tracking/Article Number

Addressee (Name, Street, City, State, & ZIP Code™)

1. VALLEY FORGE MILITARY ACADEMY
1001 EAGLE ROAD
WAYNE, PA 19087

2. HIGGINS JAMES C JR & IDA MARIE
501 CHESTNUT LANE
WAYNE, PA 19087

3. KENNEDY EDWARD A & MARY E
503 CHESTNUT LN
WAYNE, PA 19087

4. BROOKINS VIRGINIA C
907 EAGLE ROAD
WAYNE, PA 19087

5. SUTO KOGE JR & CONNIE E
500 CHESTNUT LN
WAYNE, PA 19087

6. MONAHAN NANCY & EDWARD
424 CHESTNUT LA
WAYNE, PA 19087

7. MONAHAN EDWARD J III & NANCY K
424 CHESTNUT LN
WAYNE, PA 19087

8. STAVRAKOS CHRISTOPHER & MARTIN JILL
M
425 CHESTNUT LN
WAYNE, PA 19087

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Service) Fee	Charge	Insured Value	Registered Value	Due Sender if COD	ASR Fee	ASRD Fee	RD Fee	RR Fee	SC Fee	SCRD Fee	SH Fee
	Handling Charge - if Registered and over \$50,000 in value				Ad It Signature Required	Adult Signature Restricted Delivery	Restricted Delivery	Return Receipt	Signature Confirmation	Signature Confirmation Restricted Delivery	



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- Priority Mail Express
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- Return Receipt for Merchandise
- Signature Confirmatic
- Signature Confirmatic Restricted Delivery

USPS Tracking/Article Number

1. BARTLETT DAVID E & BRENDA BORGH
503 WOODLAND COURT
WAYNE, PA 19087

2. FREDERICKS ERIC & MARIE L
505 WOODLAND CT
WAYNE, PA 19087

3. KLAUSS RAYMOND J & CAROL L
507 WOODLAND COURT
WAYNE, PA 19087

4. MILLER MICHAEL B & AMY A
509 WOODLAND CT
WAYNE, PA 19087

5. LEIDY DAVID S & PATRICIA V
723 EAGLE RD
WAYNE, PA 19087

6. MASSEY EUGENE H & LINDA L
131 E BEECHTREE LANE
WAYNE, PA 19087

7. BABIN EDWARD G
406 WOODLAND AVE
WAYNE, PA 19087

8. HOSMER CAMERON & EMILY
410 WOODLAND AVE
WAYNE, PA 19087

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USPS Tracking/Article Number	Addressee (Name, Street, City, State, & ZIP Code™)	Service Fee	Charge	if registered	Value	sender if COD	Fee	Fee	RR Fee	SC Fee	SCRD Fee	SH Fee
1.	BARTLETT DAVID E & BRENDA BORGH 503 WOODLAND COURT WAYNE, PA 19087											
2.	FREDERICKS ERIC & MARIE L 505 WOODLAND CT WAYNE, PA 19087											
3.	KLAUSS RAYMOND J & CAROL L 507 WOODLAND COURT WAYNE, PA 19087											
4.	MILLER MICHAEL B & AMY A 509 WOODLAND CT WAYNE, PA 19087											
5.	LEIDY DAVID S & PATRICIA V 723 EAGLE RD WAYNE, PA 19087											
6.	MASSEY EUGENE H & LINDA L 131 E BEECHTREE LANE WAYNE, PA 19087											
7.	BABIN EDWARD G 406 WOODLAND AVE WAYNE, PA 19087											
8.	HOSMER CAMERON & EMILY 410 WOODLAND AVE WAYNE, PA 19087											
Total Number of Pieces Listed by Sender		Postmaster, Per (Name of receiving employee)										
Total Number of Pieces Received at Post Office												



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 - Signature Confirmation Restricted Delivery

USPS Tracking/Article Number	Addressee (Name, Street, City, State, & ZIP Code™)	Postage (Excl. of Service) Fee	Handling Charge	if Registered	Value	Sender if COD	Fee	Restricted Delivery	RR Fee	SC Fee	SCRD Fee	SH Fee
1.	HAMILTON MICHAEL G & GLENIS E 233 E BEECHTREE LA WAYNE, PA 19087											
2.	ANTRAM SHAUN & HILLNER KATRIN 304 RADNOR STREET RD WAYNE, PA 19087											
3.	CARR MOLLY C & LARSEN CLIFFORD T 230 E BEECHTREE LN WAYNE, PA 19087											
4.	MAYOCK MICHAEL F JR & MILES AMANDA 224 E BEECHTREE LN WAYNE, PA 19087											
5.	HOTALING BRUCE THOMAS & JENNIFER WINSOR 222 E BEECHTREE LN WAYNE, PA 19087											
6.	PACKER CHRISTOPHER 218 E BEECHTREE LN WAYNE, PA 19087											
7.	MERRIAM WILLIAM G & JOANNA D BELL 214 E BEECHTREE LA WAYNE, PA 19087											
8.	HALBERSTADT ETHAN N 210 E BEECHTREE LA WAYNE, PA 19087											
Total Number of Pieces Listed by Sender		Postmaster, Per (Name of receiving employee)										
Total Number of Pieces Received at Post Office												

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 Adult Signature Restricted Delivery Registered Mail
 Certified Mail Return Receipt for Merchandise
 Certified Mail Restricted Delivery Signature Confirmation
 Collect on Delivery (COD) Signature Confirmation Restricted Delivery
 Insured Mail Signature Confirmation Restricted Delivery
 Priority Mail

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USPS Tracking/Article Number	Addressee (Name, Street, City, State, & ZIP Code™)	Postage	(Extra Service) Fee	Handling Charge	Actual Value if Registered	Insured Value	Due Sender if COD	ASR Fee	ASRD Fee	RD Fee	RR Fee	SC Fee	SCRD Fee	SH Fee
1.	PAOLANTONIO JACQUELINE & STEPHEN 206 WALNUT AVE WAYNE, PA 19087													
2.	BIRKETT BERNARD & MARIE 219 POPLAR AVE WAYNE, PA 19087													
3.	CLEVELAND RICHARD SCOTT & PATRICIA R 217 POPLAR AVE WAYNE, PA 19087													
4.	CHILDS MARION C 215 POPLAR AVE WAYNE, PA 19087													
5.	MERIN MICHAEL G & ELIZABETH R 213 POPLAR AVE WAYNE, PA 19087													
6.	WHELAN COLLIN & COLLEEN CASEY 211 POPLAR AVE WAYNE, PA 19087													
7.	HOLIDAY GEROGY K III & ANNE 209 POPLAR AVE WAYNE, PA 19087													
8.	HOLLAND EMILIE P.O. BOX 1692 KINGSTON, RI 02881													
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 Signature Confirmation Restricted Delivery

USPS Tracking/Article Number	Addressee (Name, Street, City, State, & ZIP Code™)	Postage	(Extra Service) Fee	Handling Charge	Actual Value if Registered	Insured Value	Due Sender if COD	Adult Signature Restricted Delivery Fee	Restricted Delivery Fee	Return Receipt Fee	Signature Confirmation Fee	SC Fee	SCRD Fee	SH Fee
1.	BOWES JAMES J 1 FENIMORE LANE ST DAVIDS, PA 19087													
2.	DRAKE JONATHAN L & CATHERINE C 3 FENIMORE LN ST DAVIDS, PA 19087													
3.	BEHRMANN DARRYL F & INES MAGALI 312 CHAMOUNIX RD ST DAVIDS, PA 19087													
4.	WALKER ROCKLAN & MARY LOU 314 CHAMOUNIX RD WAYNE, PA 19087													
5.	DONNELLA MICHAEL A 310 CHAMOUNIX RD WAYNE, PA 19087													
6.	MCKENNA STEPHEN P & PATRICIA D 333 CHAMOUNIX RD ST DAVIDS, PA 19087													
7.	MASON-CICCOTELLI MAUREEN & CICCOTELLI RICHARD E 725 WOODCREST RD RADNOR, PA 19087													
8.	BLISARD JOHN PETER & KAREN MICHELLE 200 WALNUT AVE WAYNE, PA 19087													
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 301 IVEN AVENUE
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USPS Tracking/Article Number	Addressee (Name, Street, City, State, & ZIP Code™)	Postage	(Extra Service) Fee	Handling Charge	Actual Value if Registered	Insured Value	Due Sender if COD	ASK Fee	ASRU Fee	KU Fee	RR Fee	SC Fee	SCRD Fee	SH Fee
1.	GRATTON EILEEN B 216 WALNUT AVE WAYNE, PA 19087													
2.	BOLES M LAVALETTE 214 WALNUT AVE WAYNE, PA 19087													
3.	RANCK RICHARD S & MCINNES ANNE B 210 WALNUT AVE WAYNE, PA 19087													
4.	CONLAN WILLIAM & PATRICIA 250 RADNOR STREET RD WAYNE, PA 19087													
5.	MANDERACK JOHN R & SHARON L 221 POPLAR AVE WAYNE, PA 19087													
6.	SMITH IAN B & IRENE B 223 POPLAR AVE WAYNE, PA 19087													
7.	WALSH PAULA & CINDY C 225 POPLAR AVE WAYNE, PA 19087													
8.	TAGHAVI KAVEH & NAYAK SANDHYA 227 POPLAR AVE WAYNE, PA 19087													
Total Number of Pieces Listed by Sender	Total Number of Pieces Received at Post Office	Postmaster, Per (Name of receiving employee)												



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Addressee (Name, Street, City, State, & ZIP Code™)

1. HENDERSON ROBERT F & DEBORAH M
225 RADNOR STREET RD
WAYNE, PA 19087
2. OBLACK STEVEN M
223 RADNOR STREET ROAD
WAYNE, PA 19087
3. SPENCER RUSSELL & CLARE
135 GRUBB RD
MALVERN, PA 19355
4. SPENCER RUSSELL & CLARE
135 GRUBB RD
MALVERN, PA 19355
5. SKLAR KENNETH A & MCBRIDE CLAUDIA
318 CHAMOUNIX RD
ST DAVIDS, PA 19087
6. DETHLEFS SVEN & LANGKAFEL ESTHER
324 CHAMOUNIX RD
WAYNE, PA 19087
7. LEDEREMAN LEDNARD
330 CHAMOUNIX RD
ST DAVIDS, PA 19087
8. SHEEHAN ANDREW J & HEATHER G
340 CHAMOUNIX RD
ST DAVIDS, PA 19087

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Postage	(Extra Service) Fee	Handling Charge	Actual Value if Registered	Insured Value	Use Sender if COD	Fee	D Fee	RR Fee	SC Fee	SCRD Fee	SH Fee
		Handling Charge - if Registered and over \$50,000 in value					Adult Signature Restricted Delivery	Return Receipt	Signature Confirmation	Signature Confirmation Restricted Delivery	Special Handling



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1.	K & J PHELAN FAMILY LP 726 CEDAR LA VILLANOVA, PA 19085
2.	KEARNS KENNETH 221 WALNUT AVE WAYNE, PA 19087
3.	FERGUSON HOLLY B & JEREMY L 223 WALNUT AVE WAYNE, PA 19087
4.	MALVIN PATRICK E 227 WALNUT AVE WAYNE, PA 19087
5.	MELVIN PATRICK E 227 WALNUT AVE WAYNE, PA 19087
6.	SKVORTSOVA OLGA 302 RADNOR STREET RD WAYNE, PA 19087
7.	MCQUESTEN MARC & PATRICIA 233 WALNUT AVE WAYNE, PA 19087
8.	GONZALEZ EDUARDO LLORENTE & ALVAREZ ELENA FERNANDEZ 235 WALNUT AVE WAYNE, PA 19087

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Service) Fee	Charge	if Registered	Value	Sender II COD	Ad It Signature Required	Adult Signature Restricted Delivery	RD Fee	RR Fee	SC Fee	SCRD Fee	SH Fee
	Handling Charge - if Registered and over \$50,000 in value										
									Signature Confirmation	Signature Confirmation Restricted Delivery	
									Return Receipt		
											Special Handling



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1.	MARINO REYNOLDS FAMILY TRUST 2 PAUL RD RADNOR, PA 19087									
2.	BAYLESS JONATHAN & SCHUETZ STEPHANIE 10 PAUL RD WAYNE, PA 19087									
3.	ROGERS JAMES G 8 PAUL RD ST DAVIDS, PA 19087									
4.	ROTH RUDOLF R 6 PAUL RD ST DAVIDS, PA 19087									
5.	VANDEBEEK M LOUIS & DIANE 4 PAUL RD ST DAVIDS, PA 19087									
6.	RADNOR TOWNSHIP 301 IVEN AVENUE RADNOR, PA 19087									
7.	O'CONNOR PAUL J & DANIELLE D 4 FENIMORE LA ST DAVIDS, PA 19087									
8.	HAMMER FREDERICK P 2 FENIMORE LN ST DAVIDS, PA 19087									

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1.	THE WALNUT TRUST 50 PARK ROW WEST STE 113 PROVIDENCE, RI 02903													
2.	LAMBERT CAREN S TRUSTEE 50 PARK ROW WEST - STE 113 PROVIDENCE, RI 02903													
3.	TOOMEY VIRGINIA W 332 WALNUT AVE WAYNE, PA 19087													
4.	RUBINOFF AMY HOPE 324 WALNUT AVE WAYNE, PA 19087													
5.	JOHNSON BRIAN K & KIMBERLY L 227 RADNOR ST RD WAYNE, PA 19087													
6.	CROMBIE PATRICK & PERRONE CHRISTINA 234 WALNUT AVE WAYNE, PA 19087													
7.	MARSHALL MATTHEW 228 WALNUT AVE WAYNE, PA 19087													
8.	WILSON MELVIN L & CANDYCE W 220 WALNUT AVE WAYNE, PA 19087													
Total Number of Pieces Listed by Sender	Total Number of Pieces Received at Post Office	Postmaster, Per (Name of receiving employee)												

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 - Signature Confirmation Restricted Delivery

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BERWYN, PA
19312
JUL 15 2017



AMOUNT
\$3.52

R2305P151726-01



USPS Tracking/Article Number	Addressee (Name, Street, City, State, & ZIP Code™)	Fee	Handling Charge - if Registered and over \$50,000 in value	Adult Signature Required	Adult Signature Restricted Delivery	Restricted Delivery	Return Receipt	Signature Confirmation	Signature Confirmation Restricted Delivery	SH Fee
1.	DREXELIUS BRETT 316 CHAMOUNIX RD ST DAVIDS, PA 19087									
2.	DUNN SHARON A 308 CHAMOUNIX ROAD ST DAVIDS, PA 19087									
3.	BUCKLEY PATRICK J & KATHERINE W 306 CHAMOUNIX RD ST DAVIDS, PA 19087									
4.	FRITZ GARY B & BROOKE O 309 CHAMOUNIX RD WAYNE, PA 19087									
5.										
6.										
7.										
8.										
Total Number of Pieces Listed by Sender	Postmaster, Per (Name of receiving employee)									
Total Number of Pieces Received at Post Office										



Firm Mailing Book For Accountable Mail

- Check type of mail or service
- Adult Signature Required
 - Adult Signature Restricted Delivery
 - Certified Mail
 - Certified Mail Restricted Delivery
 - Collect on Delivery (COD)
 - Insured Mail
 - Priority Mail
 - Priority Mail Express
 - Registered Mail
 - Return Receipt for Merchandise
 - Signature Confirmation
 - Signature Confirmation Restricted Delivery

Name and Address of Sender
**RADNOR TOWNSHIP
 ENGINEERING
 301 IVEN AVENUE
 WAYNE, PA 19087**



U.S. POSTAGE PAID
 BERWYN, PA
 19312
 JUL 15 2017
\$3.52
 R2305P151726-01

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USPS Tracking/Article Number	Addressee (Name, Street, City, State, & ZIP Code™)	Service Fee	Charge	if Registered	Value	Sender if COD	Fee	Fee	Restricted Delivery	Return Receipt	Signature Confirmation	Signature Confirmation Restricted Delivery	SH Fee
1.	JOHNSTON CHRISTOPHER 425 HIGHVIEW DR WAYNE, PA 19087												
2.	RUSH PETER & MORRISON ERIC 264 WILLOW AVE WAYNE, PA 19087												
3.	RUSH PETER 264 WILLOW AVE WAYNE, PA 19087												
4.	K C PROPERTY MGMT LLC P.O. BOX 88 MALVERN, PA 19355												
5.	BAKER THOMAS M & SCARAMELLA ALISON C 109 RADNOR STREET RD WAYNE, PA 19087												
6.	BUTWIN MAUREEN S & JOSEPH F 109 RADNOR STREET RD WAYNE, PA 19087												
7.	PASCAU RUBEN C & MARIA DEL MAR TORRES 113 RADNOR STREET RD WAYNE, PA 19087												
8.	WITZE ERIC S & HEATHER P 111 RADNOR STREET RD WAYNE, PA 19087												
Total Number of Pieces Listed by Sender	Total Number of Pieces Received at Post Office												
	Postmaster, Per (Name of receiving employee)												



U.S. POSTAGE PAID

- Check type of mail or service
- Adult Signature Required
 - Adult Signature Restricted Delivery
 - Certified Mail
 - Certified Mail Restricted Delivery
 - Collect on Delivery (COD)
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 - Priority Mail
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 - Return Receipt for Merchandise
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 - Signature Confirmation Restricted Delivery

Name and Address of Sender
**RADNOR TOWNSHIP
 ENGINEERING
 301 IVEN AVENUE
 WAYNE, PA 19087**



\$3.52
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USPS Tracking/Article Number	Addressee (Name, Street, City, State, & ZIP Code™)	Postage	(Extra Service) Fee	Handling Charge	Actual Value if Registered	Insured Value	Due Sender if COD	Adult Signature Required	Adult Signature Restricted Delivery	Restricted Delivery	Return Receipt	Signature Confirmation	Signature Confirmation Restricted Delivery	SH Fee
1.	TAYLOR KENNETH C 242 WILLOW AVE WAYNE, PA 19087													
2.	FLYNN CHRISTINE B & JAMES B 236 N ABERDEEN AVE WAYNE, PA 19087													
3.	GILL LAURA J & PATRICK S 244 N ABERDEEN AVE WAYNE, PA 19087													
4.	ADAMS JOHN V & ROSEMARIE 246 NORTH ABERDEEN AVE WAYNE, PA 19087													
5.	FEELEY MICHAEL J & DOLORES M 244 WILLOW AVE WAYNE, PA 19087													
6.	GAUTHRON PATRICK D & NINA 3 RADNOR WAY RADNOR, PA 19087													
7.	FANTUZZO JOHN W & CHRISTINE E P O BOX 675 WAYNE, PA 19087													
8.	TADDEO AMERICO J & RUHL LAUREL H 248 WILLOW AVENUE WAYNE, PA 19087													
Total Number of Pieces Listed by Sender	Postmaster, Per (Name of receiving employee)													
Total Number of Pieces Received at Post Office														



Firm Mailing Book For Accountable Mail

- Name and Address of Sender
**RADNOR TOWNSHIP
 ENGINEERING
 301 IVEN AVENUE
 WAYNE, PA 19087**
- Check type of mail or service
 Adult Signature Required Priority Mail Express
 Adult Signature Restricted Delivery Registered Mail
 Certified Mail Return Receipt for Merchandise
 Certified Mail Restricted Delivery Signature Confirm
 Collect on Delivery (COD) Signature Confirm Restricted Delivery
 Insured Mail Priority Mail

USPS Tracking/Article Number	Addressee (Name, Street, City, State, & ZIP Code™)	Postage	(Extra Service) Fee	Handling Charge	Actual Value if Registered	Value	Sender if COD	Fee	RD Fee	RR Fee	SC Fee	SCRD Fee	SH Fee
1.	BUZAN VIRGINIE 233 PLANT AVE WAYNE, PA 19087												
2.	GROVER NOEL G & MARY E 230 WILLOW AVE WAYNE, PA 19087												
3.	F & A DESIGNS INC 1428 BEAUMONT DR GLADWYNE, PA 19035												
4.	MERCURI MICHAEL J 234 N ABERDEEN AVE WAYNE, PA 19087												
5.	MUI COREY KEW GEE 234 WILLOW AVE WAYNE, PA 19087												
6.	505 HARMON ROAD LLC 34 E GERMANTOWN PIKE NORRISTOWN, PA 19401												
7.	SZIVOS JAMES 238 WILLOW AVE WAYNE, PA 19087												
8.	GUSA ALEXANDRA LEE & ONEILL MAURICE F IV 240 WILLOW AVE WAYNE, PA 19087												
Total Number of Pieces Listed by Sender		Total Number of Pieces Received at Post Office		Postmaster, Per (Name of receiving employee)									

U.S. POSTAGE PAID
 BERWYN, PA
 JUL 15, 2017
 AMOUNT
\$3.52
 R2305P151726-01



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U.S. MAIL Mailing Book For Accountable Mail

- Name and Address of Sender
**RADNOR TOWNSHIP
 ENGINEERING
 301 IVEN AVENUE
 WAYNE, PA 19087**
- Check type of mail or service
 Adult Signature Required Priority Mail Express
 Adult Signature Restricted Delivery Registered Mail
 Certified Mail Return Receipt for Merchandise
 Certified Mail Restricted Delivery Signature Confirmation
 Collect on Delivery (COD) Signature Confirmation Restricted Delivery
 Insured Mail
 Priority Mail

U.S. POSTAGE PAID
 BERWYN, PA
 19312
 JUL 15 21
 AMOUNT
\$3.52
 R230SP151726-01



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USPS Tracking/Article Number	Addressee (Name, Street, City, State, & ZIP Code™)	Postage	(Extra Service) Fee	Handling Charge	Actual Value if Registered	Insured Value	Sender if COD	Fee	Restricted Delivery	Return Receipt	Signature Confirmation	Signature Confirmation Restricted Delivery	SH Fee
1.	PAHIDES STEPHEN M 176 BROOKLEA RD ROSEMONT, PA 19010												
2.	MCCLAIN GARY P O BOX 414 WAYNE, PA 19087												
3.	LOCKARD RYAN R & EMMA C 254 N ABERDEEN AVE WAYNE, PA 19087			Registered and over \$50,000 in value					Adult Signature Restricted Delivery	Return Receipt	Signature Confirmation	Signature Confirmation Restricted Delivery	
4.	EVERSON MARGARET M 252 WILLOW AVE WAYNE, PA 19087												
5.	GILL, JUDITH ANN 254 WILLOW AVE WAYNE, PA 19087												
6.	HOLTS KENNETH W & RITA M 256 N ABERDEEN AVE WAYNE, PA 19087								Adult Signature Required				
7.	AGUILEGIA PROPERTIES LLC 411 N BELEVUE AVE WAYNE, PA 19087			Handling Charge - if									
8.	PETER THOMPSON & HAYES JENNIFER 3092 BROADMOOR DR CENTER VALLEY, PA 18034												
Total Number of Pieces Listed by Sender	Postmaster, Per (Name of receiving employee)												
Total Number of Pieces Received at Post Office													



For Accountable Mail

- Name and Address of Sender
**RADNOR TOWNSHIP
 ENGINEERING
 301 IVEN AVENUE
 WAYNE, PA 19087**
- Check type of mail or service
 Adult Signature Required Priority Mail Express
 Adult Signature Restricted Delivery Registered Mail
 Certified Mail Return Receipt for Merchandise
 Certified Mail Restricted Delivery Signature Confirmation
 Collect on Delivery (COD) Signature Confirmation
 Insured Mail Signature Confirmation Restricted Delivery
 Priority Mail

USPS Tracking/Article Number

Addressee (Name, Street, City, State, & ZIP Code™)

1. AZZARANO MICHAEL J & CARMIN M
243 WILLOW AVE
WAYNE, PA 19087

2. SORGI RONALD & KATHLEEN B
239 WILLOW AVE
WAYNE, PA 19087

3. STARBUCK SUZANNE B & FRISHMAN ERIC
237 WILLOW AVE
WAYNE, PA 19087

4. MURPHY MAURA P
235 WILLOW AVE
WAYNE, PA 19087

5. VASSALLO JAMES J
233 WILLOW AVE
WAYNE, PA 19087

6. OSULLIVAN FRANCIS & MARY
113 WOODLAND AVE
WAYNE, PA 19087

7. CNP SELECT REALTY LLC
558 HILAIRE ROAD
WAYNE, PA 19087

8. TERZIAN RAFFI
6 ACADEMY LANE
WAYNE, PA 19087

Total Number of Pieces Listed by Sender

Total Number of Pieces Received at Post Office

Postmaster, Per (Name of receiving employee)



U.S. POSTAGE PAID
BERWYN, PA
19312
JUL 15 2017
AMOUNT
\$3.52
R2305P151726-01

0000

Postage	(Extra Service) Fee	Handling Charge	Actual Value if Registered	Insured Value	Due Sender if COD	ASR Fee	ASRD Fee	RD Fee	RR Fee	SC Fee	SCRD Fee	SH Fee
		Handling Charge - If Registered and over \$50,000 in value					Adult Signature Restricted Delivery	Restricted Delivery	Return Receipt	Signature Confirmation	Signature Confirmation Restricted Delivery	Special Handling
						Ad If Signature Required	Adult Signature Restricted Delivery	Restricted Delivery				



For Accountable Mail

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 WAYNE, PA 19087**



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1.	HAWK THOMAS R & ELAINE D 205 POPLAR AVE WAYNE, PA 19087												
2.	BERNSTEIN STEWART A & KAREN 203 POPLAR AVE WAYNE, PA 19087												
3.	HAUPTFUHRER BRUCE A 205 WOODLAND AVE WAYNE, PA 19087												
4.	FLUCK THEODORE W & KAREN LYN 200 POPLAR AVE WAYNE, PA 19087												
5.	WARREN JAMES R 202 POPLAR AVE WAYNE, PA 19087												
6.	DONATO ARTHUR T JR & GILSON JUNE E 204 POPLAR AVE WAYNE, PA 19087												
7.	DEMITIS DOMINIC A JR & LISA 206 POPLAR AVE WAYNE, PA 19087												
8.	FRISBY JEFFREY D & DEBORAH C 208 POPLAR AVE WAYNE, PA 19087												
Total Number of Pieces Listed by Sender		Postmaster, Per (Name of receiving employee)											
Total Number of Pieces Received at Post Office													



Firm Mailing Book For Accountable Mail

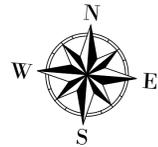
Name and Address of Sender
**RADNOR TOWNSHIP
 ENGINEERING
 301 IVEN AVENUE
 WAYNE, PA 19087**

Check type of mail or service
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 Certified Mail Restricted Delivery
 Collect on Delivery (COD)
 Insured Mail
 Priority Mail
 Priority Mail Express
 Registered Mail
 Return Receipt for Merchandise
 Signature Confirmation
 Signature Confirmation Restricted Delivery

Affix Stamp Here
(for additional copies of this receipt).
Postmark with Date of Receipt.

USPS Tracking/Article Number	Addressee (Name, Street, City, State, & ZIP Code™)	Postage	(Extra Service) Fee	Handling Charge	Actual Value if Registered	Insured Value	Due Sender if COD	ASR Fee	ASRD Fee	RD Fee	RR Fee	SC Fee	SCRD Fee	SH Fee
1.	BARTOW WILLIAM & KELLY 208 BEACHTREE LANE WAYNE, PA 19087													
2.	MAHONEY HARRY G & JEAN B 200 E BEECHTREE LANE WAYNE, PA 19087													
3.	GUILLAUME JOHN & LISA 132 E BEECH TREE LA WAYNE, PA 19087													
4.	BROOKS MICHAEL & LOIS L 135 WALNUT AVE WAYNE, PA 19087													
5.	HARTMAN IAN & JULIE MICHELLE 201 WALNUT AVE WAYNE, PA 19087													
6.	ESELGROTH PETER W 207 WALNUT AVE WAYNE, PA 19087													
7.	BLACKNEY KEVIN ROGER & BARBARA ELLEN KRAUS 211 WALNUT AVE WAYNE, PA 19087													
8.	STEELEY, JOHN D 451 GLENMARY RD ST DAVIDS, PA 19087													
Total Number of Pieces Listed by Sender		Postmaster, Per (Name of receiving employee)												
Total Number of Pieces Received at Post Office														

PRELIMINARY/FINAL SUBDIVISION AND LAND DEVELOPMENT PLAN EAGLE & RADNOR ROADS, WAYNE



ADJOINING PROPERTIES:

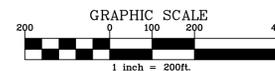
LANDS N/F:*

1. FOLIO # 36-0201268-00
2 PAUL RD
MARINO REYNOLDS FAMILY TRUST
MAP #36-06-055:000
BOOK 5952 PAGE 0258
2. FOLIO # 36-02-00979050
4 PAUL RD
VANDEBEEK M LOUIS & DIANE
MAP #36-06-055:004
BOOK 1040 PAGE 2020

* PER BASE PLAN



VICINITY MAP INCLUDING STRUCTURES WITHIN 500' OF SITE
DVRPC 2015 AERIAL IMAGERY, TILE PA-X28-Y082, PASDA WEBSITE



DRAWING SCHEDULE

1. COVER SHEET
 2. EXISTING FEATURES PLAN
SOIL, VEGETATION & WATER RESOURCES MAP
 3. SUBDIVISION PLAN
 4. E&SC PLAN & DEMOLITION PLAN
 5. E&SC NOTES & DETAILS
 6. E&SC DETAILS
 7. PRELIMINARY LAND DEVELOPMENT PLAN &
PCSM PLAN
 8. PCSM DETAILS & NOTES
 9. STORM PROFILES & DETAILS
 10. DETAILED GRADING AND DIMENSIONS PLAN
 11. UTILITY PLAN
 12. SANITARY PROFILES & CONSTRUCTION DETAILS
 13. CONSTRUCTION DETAILS
 14. DETAILS AND PRE-CONSTRUCTION DRAINAGE
AREAS
 15. POST-CONSTRUCTION DRAINAGE AREAS
- PLANS PREPARED BY JONATHAN ALDERSON
LANDSCAPE ARCHITECTS:
16. L001 - TREE REMOVALS AND PRESERVATION
PLAN
 17. L101 - PLANTING PLAN
 18. L102 - EXISTING STREET TREE CANOPY

CIVIL ENGINEER:

SITE ENGINEERING CONCEPTS, LLC
ATTN: PATRICK SPELLMAN, P.E.
P.O. BOX 1992 SOUTHEASTERN, PA 19399
P: 610-523-9002
E: PSPELLMAN@SITE-ENGINEERS.COM

LANDSCAPE ARCHITECT:

JONATHAN ALDERSON LANDSCAPE
ARCHITECTS
ATTN: JONATHAN ALDERSON
P.O. BOX 661
WAYNE, PA 19087
P: 610-341-9925
E: JONATHAN@JONATHANALDERSON.COM

ATTORNEY:

SAUL EWING ARNSTEIN & LEHR LLP
ATTN: DAVID J. FALCONE
1200 LIBERTY RIDGE, SUITE 200
WAYNE, PA 19087-5569
P: 610-251-5752
E: DAVID.FALCONE@SAUL.COM

OWNER/APPLICANT:

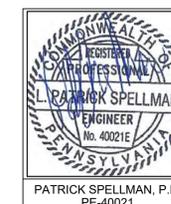
CG WAYNE, LLC
ATTN: DEVIN TUOHEY
161 LEVERINGTON AVENUE, SUITE 101
PHILADELPHIA, PA 19147
P: 347-330-0048
E: DTUOHEY@CONCORDIAGROUP.BIZ

NUM.	DATE	REVISION
7.	9/16/2021	REVISE PER JULY 2021 TOWNSHIP REVIEW LETTERS
6a.	7/10/2021	REVISE PER ZHB APPROVAL & TOWNSHIP REVIEW LETTERS
5.	2/16/2021	REVISE PER TOWNSHIP 3RD REVIEW LETTERS
4.	1/19/2021	UPDATE PROFILES
3.	1/15/2021	REVISE PER TOWNSHIP 2ND REVIEW LETTERS AND PC INPUT
2.	12/7/2020	REVISE PER TOWNSHIP REVIEW LETTERS AND PC INPUT

PLAN PREPARED BY:
SITE ENGINEERING CONCEPTS, LLC
P.O. BOX 1992
SOUTHEASTERN, PA 19399
P: 610-240-0450 F: 610-240-0451 E: INFO@SITE-ENGINEERS.COM

**PRELIMINARY/FINAL SUBDIVISION AND LAND
DEVELOPMENT PLAN**
PLAN PREPARED FOR:
CG WAYNE, LLC
EAGLE & RADNOR ROAD, WAYNE, PA 19087

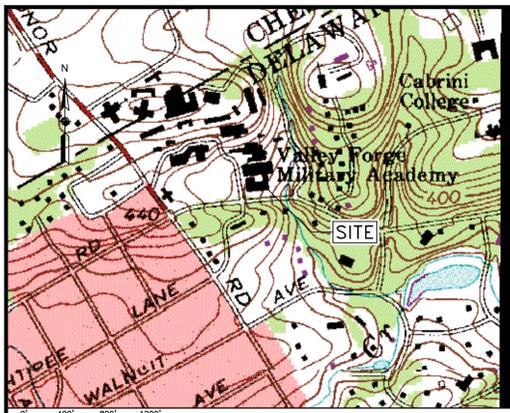
RADNOR TOWNSHIP DELAWARE COUNTY PENNSYLVANIA
SEPT. 15, 2020



COVER SHEET

**SHEET
1 of 18**

SCALE: 1" = 200'



LOCATION MAP
USGS VALLEY FORGE QUADRANGLE
Map Scale: 1" = 800'-0"

NOTE: THE EXACT LOCATION AND DEPTH OF EXISTING UTILITIES CANNOT BE GUARANTEED. ALL UTILITIES DEPICTED ON THIS PLAN HAVE BEEN DEVELOPED FROM ABOVE GROUND OBSERVATIONS AND/OR EXISTING RECORDS. CONTRACTOR MUST VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. PENNSYLVANIA STATE LAW REQUIRES NOTIFICATION TO 1-800-242-1776 3-10 BUSINESS DAYS PRIOR TO ANY EXCAVATION.

BASE PLAN S/N: 20192664614



SECTION 255-20.B(2) SOIL MAP
(a) SOIL TYPES: SEE BELOW TABLE.
(b) CONTOUR LINES: SEE EXISTING SURVEY PLAN.
(c) DATUM: SEE EXISTING SURVEY PLAN.
(d) FLOODPLAIN AREAS: NONE PER PANEL 42045C0017F, EFFECTIVE 11/18/2009.
(e) BASE FLOOD ELEVATION: NONE.
(f) FLOODPLAIN SOILS: NONE.
(g) STEEP SLOPE AREAS: SEE EXISTING SURVEY PLAN.

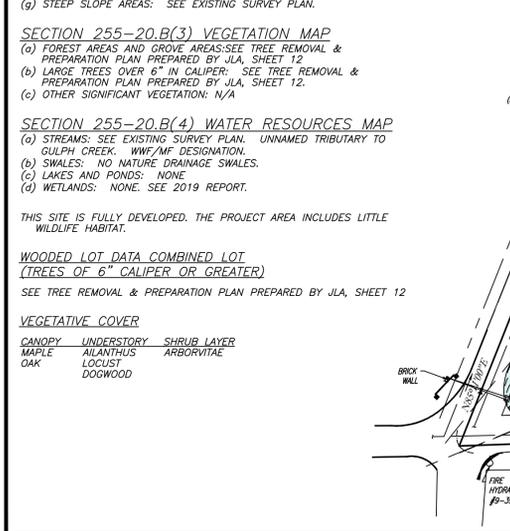
SECTION 255-20.B(3) VEGETATION MAP
(a) FOREST AREAS AND GROVE AREAS: SEE TREE REMOVAL & PREPARATION PLAN PREPARED BY JLA, SHEET 12.
(b) LARGE TREES OVER 6" IN CALIPER: SEE TREE REMOVAL & PREPARATION PLAN PREPARED BY JLA, SHEET 12.
(c) OTHER SIGNIFICANT VEGETATION: N/A

SECTION 255-20.B(4) WATER RESOURCES MAP
(a) STREAMS: SEE EXISTING SURVEY PLAN. UNNAMED TRIBUTARY TO GULPH CREEK. WWF/MF DESIGNATION.
(b) SWALES: NO NATURE DRAINAGE SWALES.
(c) LAKES AND PONDS: NONE.
(d) WETLANDS: NONE. SEE 2019 REPORT.

THIS SITE IS FULLY DEVELOPED. THE PROJECT AREA INCLUDES LITTLE WILDLIFE HABITAT.

WOODED LOT DATA COMBINED LOT (TREES OF 6" CALIPER OR GREATER)
SEE TREE REMOVAL & PREPARATION PLAN PREPARED BY JLA, SHEET 12

VEGETATIVE COVER
CANOPY UNDERSTORY SHRUB LAYER
MAPLE ALNANTHUS ARBORVITAE
OAK LOCUST DOGWOOD



SOIL DATA 255-20.B(2)
(PER WEB SOIL SURVEY, USDA, NRCS AS OF SEPTEMBER 1, 2020)

MAP SYMBOL	SOIL NAME	% SLOPE	INCHES TO HIGH WATER	INCHES TO BEDROCK	LAND CAPABILITY	DRAINAGE CLASS	HSG	HYDRIC SOIL	DWELLING W/BASEMENT	LAWNS	ROADS	SEPTIC D-RIP	DEEP INFILTRATION
GeB	GLENELG CHANNERY LOAM	3-8	>80"	60-80"	2e (NONIRRIC)	WELL	B	NO	NOT	SOMEWHAT	SOMEWHAT	SLIGHTLY	SOMEWHAT
GeC	GLENELG CHANNERY LOAM	8-15	>80"	40-60"	3e (NONIRRIC)	WELL	B	NO	SOMEWHAT	SOMEWHAT	SOMEWHAT	SLIGHTLY	SOMEWHAT
GeC2	GLENELG CHANNERY LOAM	8-15	>80"	>80"	3e (NONIRRIC)	WELL	B	NO	VERY	VERY	VERY	SEVERELY	SEVERELY
GnB	GLENVILLE SILT LOAM	3-8	0-6"	29-31"	2e (NONIRRIC)	MODERATE	C/D	NO	VERY	VERY	VERY	VERY	SEVERELY
Me	MADE LANDS	0-8	>80"	40-72"	7e (NONIRRIC)	WELL	C	NO	SOMEWHAT	SOMEWHAT	SOMEWHAT	SLIGHTLY	SOMEWHAT



EXISTING CONDITIONS ZONING SUMMARY

ORDINANCE ITEM	PI PLANNED REQUIREMENT	R-1 RESIDENTIAL REQUIREMENT	R-2 RESIDENTIAL REQUIREMENT	PARCEL A	PARCEL B
MIN. LOT AREA	10 AC (435,600 SF)	1 AC (43,560 SF)	20,000 SF	677,097 SF	50,504 SF
LOT WIDTH @ BLDG	100 FT	120 FT	100 FT	500 FT	323 FT
MIN. SETBACKS					
FRONT	**	60 FT	40 FT	60 FT	60 FT
SIDE (MIN/AGG)	***	25/60 FT	20/45 FT	N/A	30/70 FT
REAR	***	40 FT	40 FT	60 FT	N/A
MAX. BUILDING HEIGHT	38 FT	35 FT	35 FT	<35 FT	<35 FT
MAX. BUILDING COVERAGE	30%	15%	18%	2.2%	4.6%
MAX. IMPERV SURFACE	45%	22%	30%	19.9%	11.1%
RIPARIAN BUFFER	35 FT	35 FT	35 FT	25 FT	28 FT

** PI FRONT SETBACK FROM STREET ROW: STRUCTURES - 120 FT; PARKING - 60.
*** REAR & SIDE YARD:
CATEGORY 1: RESIDENTIAL ADJONNER- 125 FT; OTHERS- 75 FT
CATEGORY 2: RESIDENTIAL ADJONNER- 200 FT; OTHERS- 75 FT
SEE CHAPTER 280, ARTICLE XVI OF THE RADNOR CODE FOR ALL PI DISTRICT REQUIREMENTS.



BASE SURVEY PLAN
BOUNDARY & TOPOGRAPHIC SURVEY PREPARED FOR EASTERN UNIVERSITY, PREPARED BY CONTROL POINT ASSOCIATES, INC., DATED MARCH 31, 2010, LAST REVISED DECEMBER 20, 2019.

- BASE SURVEY NOTES
- PROPERTY KNOWN AS FOLIO 36-02-0097810 & FOLIO 36-02-0097820 AS IDENTIFIED ON THE TAX MAPS OF DELAWARE COUNTY, RADNOR TOWNSHIP, COMMONWEALTH OF PENNSYLVANIA.
 - AREA = 850,552 SQUARE FEET OR 19,526 ACRES.
 - LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE. LOCATIONS AND SIZES ARE BASED ON UTILITY MARK-OUTS, ABOVE GROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE FIELD, AND THE MAPS AS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY. AVAILABLE AS-BUILT PLANS AND UTILITY MARKOUT DOES NOT ENSURE MAPPING OF ALL UNDERGROUND UTILITIES AND STRUCTURES. BEFORE ANY EXCAVATION IS TO BEGIN, ALL UNDERGROUND UTILITIES SHOULD BE VERIFIED AS TO THEIR LOCATION, SIZE AND TYPE BY THE PROPER UTILITY COMPANIES. CONTROL POINT ASSOCIATES, INC. DOES NOT GUARANTEE THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED.
 - THIS PLAN IS BASED ON INFORMATION PROVIDED. BY A SURVEY PREPARED IN THE FIELD BY CONTROL POINT ASSOCIATES, INC. AND OTHER REFERENCE MATERIAL AS LISTED HEREON.
 - BY GRAPHIC PLOTTING ONLY PROPERTY IS LOCATED IN FLOOD HAZARD ZONE "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER REF. #2.
 - THE EXISTENCE OF UNDERGROUND STORAGE TANKS, IF ANY, WAS NOT KNOWN AT THE TIME OF THE FIELD SURVEY.
 - ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88, BASED ON GPS OBSERVATIONS UTILIZING THE KEYSTONE VRS NETWORK (KEYTGPS)).
 - THE OFFSETS SHOWN ARE NOT TO BE USED FOR THE CONSTRUCTION OF ANY STRUCTURE, FENCE, PERMANENT ADDITION, ETC.

- BASE SURVEY REFERENCES:
- MAP #6 OF THE OFFICIAL TAX MAPS OF DELAWARE COUNTY, RADNOR TOWNSHIP, COMMONWEALTH OF PENNSYLVANIA.
 - MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, FIRM, FLOOD INSURANCE RATE MAP, DELAWARE COUNTY, PENNSYLVANIA (ALL JURISDICTIONS) PANEL 17 OF 250" PREPARED BY FEDERAL EMERGENCY MANAGEMENT AGENCY, MAP REVISED NOVEMBER 18, 2009, MAP NUMBER 42045C0017F.
 - MAP ENTITLED "RECORD PLAN PREPARED FOR MICHAEL G. & JEANNE D. O'NEILL, RADNOR TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA" PREPARED BY TURNER-PAHUTSKI ASSOCIATES, INC., DATED OCTOBER 4, 1991, LAST REVISED JANUARY 1992, SHEET 1 OF 5. RECORDED AS PLAN VOLUME 17, PAGE 410.
 - MAP ENTITLED "MAIN EXTENSION FOR CHAMOUNIX ROAD, RADNOR, DELAWARE COUNTY" PREPARED BY AQUA PENNSYLVANIA INCORPORATED, DATED 1-11-08, PROJECT #561.07, PLATE F19.620, SHEET 2 OF 16
 - MAP ENTITLED "WATER MAIN REPLACEMENT FOR: EAGLE ROAD (S.R. 1042) FROM RADNOR ROAD TO KING OF PRUSSIA ROAD, RADNOR TOWNSHIP, DELAWARE CO., PENNSYLVANIA" PREPARED BY AQUA PENNSYLVANIA, INC., DATED 01/2007.
 - MAP ENTITLED "GRID MAP NO. 40C3-EH12, DELAWARE COUNTY" DELCO MAP NO. 2018, DATED 10-5-06, SHEET 1 OF 1.
 - MAP ENTITLED "GRID MAP NO. 40C2-CD78, DELCHESTER REGION" DATED 11-30-06, SHEET 1 OF 1.
 - MAP ENTITLED "TREE EVALUATION FOR THE EASTERN DEVELOPMENT", PREPARED BY JONATHAN ANDERSON LANDSCAPE ARCHITECTS, INC. DATED 9/4/2019.
 - UTILITY LOCATION MAPS OBTAINED FROM PECO ENERGY COMPANY.

NET LOT CALCULATION (SF)

	PARCEL A	PARCEL B
GROSS LOT AREA	792,229	58,395
LESS		
RIGHT OF WAYS (R DISTRICTS)	88,612	6,384
FLAG LOT ACCESS STRIP	0	0
75% OF:		
FLOODPLAIN	16782	12,587
WETLANDS	0	0
SLOPES GREAT THAN 20%	18578	13,934
NET LOT AREA	677,097	50,504

EXISTING IMPERVIOUS COVERAGE SUMMARY (SQ. FT.)

	PARCEL A	PARCEL B
GROSS LOT AREA	792,229	58,395
BUILDINGS	17,244	2,669
WALKWAYS/SIDEWALKS	18,723	398
PATIOS, DECKS	0	0
DRIVEWAY	122,024	3,166
OTHER	0	244
TOTAL IMPERVIOUS COVERAGE	157,991	6,477
TOTAL BUILDING %	2.2%	4.6%
TOTAL IMPERV %	19.9%	11.1%

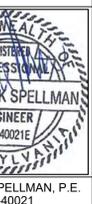
PROJECT NARRATIVE
THE APPLICANT PROPOSES REMOVE THE 14 EXISTING DWELLING AND ALL ASSOCIATED IMPROVEMENTS AND SUBDIVIDE PARCEL A AND B INTO 18 SINGLE FAMILY LOTS.

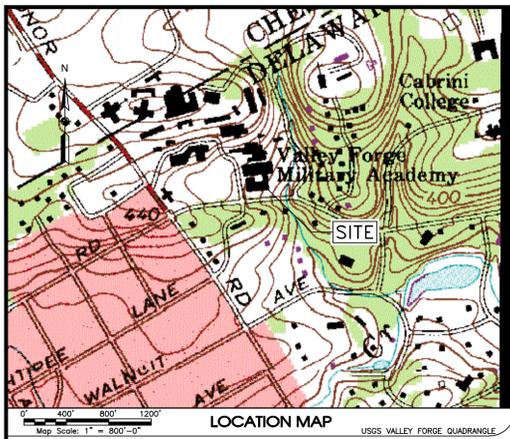
7.	9/16/2021	REVISE PER JULY 2021 TOWNSHIP REVIEW LETTERS
6a.	7/10/2021	REVISE PER ZHB APPROVAL & TOWNSHIP REVIEW LETTERS
5.	2/16/2021	REVISE PER TOWNSHIP 3RD REVIEW LETTERS
4.	1/19/2021	UPDATE PROFILES
3.	1/15/2021	REVISE PER TOWNSHIP 2ND REVIEW LETTERS AND PC INPUT
2.	12/7/2020	REVISE PER TOWNSHIP REVIEW LETTERS AND PC INPUT
NUM.	DATE	REVISION

PLAN PREPARED BY:
SITE ENGINEERING CONCEPTS, LLC
P.O. BOX 1992
SOUTHEASTERN, PA 19399
P: 610-240-0450 F: 610-240-0451 E: INFO@SITE-ENGINEERS.COM

PRELIMINARY/FINAL SUBDIVISION AND LAND DEVELOPMENT PLAN
PLAN PREPARED FOR:
CG WAYNE, LLC
EAGLE & RADNOR ROAD, WAYNE, PA 19087

RADNOR TOWNSHIP DELAWARE COUNTY PENNSYLVANIA
SEPT. 15, 2020
EXISTING FEATURES PLAN SOILS, VEGETATION, AND WATER RESOURCES MAP
SHEET 2 of 18
SCALE: 1" = 60'





EASEMENT PLANTING PROHIBITED
PLANTINGS OTHER THAN GRASS ARE PROHIBITED WITHIN THE SANITARY SEWER EASEMENTS

BASE SURVEY PLAN
"BOUNDARY & TOPOGRAPHIC SURVEY" PREPARED FOR EASTERN UNIVERSITY, PREPARED BY CONTROL POINT ASSOCIATES, INC., DATED MARCH 31, 2010, LAST REVISED DECEMBER 20, 2019. SEE EXISTING FEATURES SHEET FOR COMPLETE LIST OF NOTES AND REFERENCES.

OFFER OF SEWER DEDICATION

APPLICANT AND ITS SUCCESSORS AND ASSIGNS IN TITLE TO THE PROPERTY HEREBY MAKES A CONTINUING OFFER OF DEDICATION, AT NO COST, TO RADNOR TOWNSHIP TO DEDICATE THE PUBLIC SANITARY AND STORM SEWER AND ASSOCIATED EASEMENTS AS SHOWN ON THIS PLAN. THIS OFFER OF DEDICATION SHALL BE A RESTRICTIVE COVENANT THAT RUNS WITH THE LAND WHICH MAY BE ENFORCED AND ACCEPTED BY THE TOWNSHIP AGAINST ALL SUCCESSORS AND ASSIGNS IN TITLE.

OFFER OF RIGHT OF WAY DEDICATION

APPLICANT AND ITS SUCCESSORS AND ASSIGNS IN TITLE TO THE PROPERTY HEREBY MAKES A CONTINUING OFFER OF DEDICATION, AT NO COST, TO RADNOR TOWNSHIP TO DEDICATE THE PROPOSED BEECHTREE LANE RIGHT OF WAY AS SHOWN ON THIS PLAN. THIS OFFER OF DEDICATION SHALL BE A RESTRICTIVE COVENANT THAT RUNS WITH THE LAND WHICH MAY BE ENFORCED AND ACCEPTED BY THE TOWNSHIP AGAINST ALL SUCCESSORS AND ASSIGNS IN TITLE.

WAIVERS REQUESTED

THE APPLICANT RESPECTFULLY REQUESTS THE FOLLOWING WAIVERS:
A) SECTION 255-12A REQUIRING A PRELIMINARY LAND DEVELOPMENT PLAN FOR A MAJOR SUBDIVISION. THE WAIVER IS REQUESTED TO THE EXTENT NECESSARY FOR PERMIT REVIEW AND APPROVAL OF THIS APPLICATION AS A PRELIMINARY/FINAL LAND DEVELOPMENT PLAN.
B) PARTIAL WAIVER OF 255-21.8(1)(n) REQUIRING SIGNIFICANT MAN-MADE FEATURES WITHIN 500 FEET OF THE SITE BE PROVIDED ON THE PLAN. AERIAL IMAGERY IS USED TO PROVIDE DETAIL BEYOND THE SITE BOUNDARIES WHERE SURVEY DATA CAN NOT LEGALLY BE COLLECTED (E.G.: PRIVATE PROPERTY). A PARTIAL WAIVER IS REQUESTED TO THE EXTENT NECESSARY TO NOT PROVIDE THOSE ITEMS WHICH ARE NOT VISIBLE ON AERIAL IMAGERY (E.G.: SEWER LINES, STORM DRAINS, EASEMENTS, ETC.).

EXISTING CONDITIONS ZONING SUMMARY

ORDINANCE ITEM	EXISTING DISTRICTS	PROPOSED
MIN. LOT AREA	10 AC (435,600 SF)	1 AC (43,560 SF)
MIN. LOT WIDTH @ BLDG	100 FT	120 FT
MIN. SETBACKS		
FRONT	**	60 FT
SIDE (MIN/AGG)	**	25/60 FT
REAR	***	40 FT
MAX. BUILDING HEIGHT	38 FT	35 FT
MAX BUILDING COVERAGE	30%	15%
MAX. IMPERV. SURFACE	45%	22%
RIPIARIAN BUFFER	35 FT	35 FT

* PARENT TRACTS IN P1 & R-1. ZONING MAP CHANGE TO R-2 ZONING PROPOSED FOR SUBDIVISION.
** P1 FROM STREET ROW: STRUCTURES - 120 FT; PARKING - 60.
*** REAR & SIDE YARD: CATEGORY 1: RESIDENTIAL ADJOINER- 125 FT; OTHERS- 75 FT. CATEGORY 2: RESIDENTIAL ADJOINER- 200 FT; OTHERS- 75 FT. SEE CHAPTER 280, ARTICLE XVI OF THE RADNOR CODE FOR ALL P1 DISTRICT REQUIREMENTS.

PROPOSED LOTS

LOT #	GROSS LOT AREA SF	PROPOSED ROW & <50' WIDTH	FLOODPLAINS & >20% SLOPES (1)	PROPOSED LOT AREA 30,000 SF MIN. (2)	ALLOWABLE IMPERVIOUS (30%)	LOT WIDTH @ BLDG LINE (100' MIN)	DEPTH TO STREET LINE	DEPTH/WIDTH RATIO 2.5:1 MAX (3)
1	36,642	236	915	35,720	10,993	100	232	2.3
2	33,166	3,093	0	30,073	9,950	140	223	1.6
3	33,970	3,604	0	30,366	10,191	141	215	1.5
4	33,725	3,548	0	30,177	10,118	141	215	1.5
5	42,603	10,493	0	32,110	12,781	151	214	1.4
6	41,989	11,737	0	30,252	12,597	140	217	1.6
7	34,933	4,417	0	30,516	10,480	153	209	1.4
8	42,542	6,092	0	36,450	12,763	198	134	0.7
9	61,733	1,802	2,125	58,337	18,520	100	206	2.1
10	58,429	1,895	5,470	52,432	17,529	100	231	2.3
11	36,061	5,906	0	30,155	10,818	166	219	1.3
12	36,800	3,065	0	33,735	11,040	107	197	1.8
13	44,176	10,901	0	33,275	13,253	146	216	1.5
14	75,820	16,357	0	59,463	22,746	233	319	1.4
15	45,247	3,542	0	41,705	13,574	154	254	1.6
16	52,674	3,996	0	48,678	15,802	224	250	1.1
17	81,721	7,236	13,700	64,210	24,516	358	207	0.6
18	58,406	6,384	1,037	51,244	17,522	286	185	0.6

(1) INCLUDES MAN-MADE SLOPES. NO WETLANDS PRESENT PER 8/1/2019 WETLAND MAP PREPARED BY PENNONI ASSOCIATES, INC.
(2) LOT AREA = GROSS LOT AREA LESS ROW AND 75% OF EACH OF THE FOLLOWING: FLOODPLAINS, WETLANDS AND >20% SLOPES.

ARCHITECTURAL FINISH MATERIALS
THE ARCHITECTURE FOR THE HOUSES LOCATED ON THE PROPERTY SHALL BE SIMILAR TO THE RENDERINGS ATTACHED AS AND EXHIBIT TO THIS LAND DEVELOPMENT PLAN. THE MATERIALS TO BE USED ON THE EXTERIOR SURFACES OF THE PRIMARY RESIDENCES SHALL BE AS FOLLOWS:

- THE ROOF WILL BE CONSTRUCTED OF WOOD SHINGLE, SLATE SHINGLE, UNGLAZED TERRA COTTA TILE, STANDING SEAM METAL (PAINTED OR UNPAINTED), OR ASPHALT DIMENSIONAL SHINGLE.
- THE EXTERIOR WALL MATERIALS FOR THE PRIMARY RESIDENCE SHALL BE LIMITED TO:
 - NATURAL FIELD STONE OR QUARRIED STONE LAID IN A MINIMUM VENEER THICKNESS OF TWO (2) INCHES OR ARCHITECTURAL CAST STONE.
 - UNGLAZED BRICK IN COLORS DERIVED FROM THE NATURAL CLAYS USING ENGLISH, FLEMISH, COMMON OR AMERICAN BOND. BRICK MAY BE PAINTED.
 - HORIZONTAL OR VERTICAL WOOD SIDING OR FIBER CEMENT SIDING (BEVELED, OR FLUSH, MOLDED OR SQUARE EDGED), WOOD OR FIBER CEMENT SHINGLES (SHAKES). IN ADDITION, PROVIDED THE SAME IS APPROVED BY THE EXECUTIVE BOARD OR DECLARANT, POLYMERIC CLADDING MAY BE USED.

THE COLOR AND LOCATION OF THE MATERIALS AS WELL AS THE LOCATION OF PORCHES AND EXTERIOR ELEVATIONS WILL VARY FROM HOUSE TO HOUSE BASED ON SIZE AND LOCATION OF INDIVIDUAL LOTS AS WELL AS TO PROVIDE VISUAL DIVERSITY AMONG THE INDIVIDUAL HOUSES. ADDITIONALLY, A MINIMUM OF TWO HOUSES LOCATED ON WALNUT AVENUE WILL INCLUDE PORCHES ON THE FRONT ELEVATION.

LOT #17 METES & BOUNDS

COURSE	BEARING	DISTANCE
1	N89°45'00"E	362.29
2	CHORD	ARC= 206.80'; RADIUS= 870.66'; CHORD= 208.42'
3	S82°40'04"W	361.34
4	N09°39'32"W	251.12

LOT #16 METES & BOUNDS

COURSE	BEARING	DISTANCE
1	S09°39'32"E	251.12
2	S89°45'00"W	222.53
3	N00°15'00"W	198.86
4	N89°45'00"E	198.86

LOT #15 METES & BOUNDS

COURSE	BEARING	DISTANCE
1	S00°15'00"E	250.00
2	S89°45'00"W	20.00
3	S61°20'00"W	114.63
4	N29°31'42"W	95.02
5	N04°49'00"W	213.25
6	N85°11'00"E	76.07
7	N89°45'00"E	102.55

LOT #14 METES & BOUNDS

COURSE	BEARING	DISTANCE
1	S29°31'42"E	95.02
2	S61°20'00"W	174.34
3	N28°40'00"E	407.40
4	N85°11'00"E	280.56
5	S04°49'00"E	213.25

LOT #13 METES & BOUNDS

COURSE	BEARING	DISTANCE
1	S65°00'11"E	177.55
2	N28°25'42"W	106.24
3	N28°40'00"E	132.74
4	N61°20'00"E	185.98
5	S29°42'28"E	250.60

LOT #12 METES & BOUNDS

COURSE	BEARING	DISTANCE
1	S04°44'08"E	249.26
2	S79°03'54"W	29.48
3	CHORD	ARC= 59.18'; RADIUS= 241.12'; CHORD= 59.08'
4	S64°58'33"W	7.98
5	N25°42'28"W	250.60
6	N61°20'00"E	102.97
7	N89°45'00"E	90.11

LOT #18 METES & BOUNDS

COURSE	BEARING	DISTANCE
1	S33°00'00"W	305.58
2	CHORD	ARC= 10.00'; RADIUS= 300.00'; CHORD= 10.00'
3	CHORD	ARC= 306.05'; RADIUS= 870.66'; CHORD= 304.48'
4	CHORD	ARC= 135.52'; RADIUS= 870.66'; CHORD= 135.39'
5	S57°00'00"E	325.66

LOT #11 METES & BOUNDS

COURSE	BEARING	DISTANCE
1	S09°34'08"E	220.50
2	S79°03'55"W	156.07
3	N04°44'08"W	249.26
4	N89°45'00"E	152.42

LOT #10 METES & BOUNDS

COURSE	BEARING	DISTANCE
1	CHORD	ARC= 118.45'; RADIUS= 870.66'; CHORD= 116.37'
2	S71°33'42"W	303.94
3	N04°44'08"W	100.00
4	N09°34'08"W	220.50
5	N82°40'04"E	361.34

LOT #9 METES & BOUNDS

COURSE	BEARING	DISTANCE
1	CHORD	ARC= 118.21'; RADIUS= 870.66'; CHORD= 116.21'
2	S69°21'21"W	210.83
3	N67°58'55"W	270.32
4	N54°39'51"E	100.00
5	N71°33'42"E	303.94
6	CHORD	ARC= 118.21'; RADIUS= 870.66'; CHORD= 116.21'
7	CHORD	ARC= 10.00'; RADIUS= 300.00'; CHORD= 10.00'

LOT #8 METES & BOUNDS

COURSE	BEARING	DISTANCE
1	N25°42'28"W	229.38
2	N79°03'56"E	110.56
3	S67°58'55"E	270.32
4	S60°17'07"W	136.14
5	S67°25'00"W	153.17

LOT #7 METES & BOUNDS

COURSE	BEARING	DISTANCE
1	N25°42'28"W	248.75
2	N64°59'04"E	12.99
3	CHORD	ARC= 59.18'; RADIUS= 241.12'; CHORD= 59.08'
4	N79°03'54"E	75.00
5	S29°42'28"E	229.38
6	S67°25'00"E	144.21

LOT #6 METES & BOUNDS

COURSE	BEARING	DISTANCE
1	N67°25'00"E	140.61
2	S22°35'00"E	239.84
3	S67°25'00"W	140.61
4	N22°35'00"W	239.84

LOT #5 METES & BOUNDS

COURSE	BEARING	DISTANCE
1	S22°35'00"W	239.84
2	S67°25'00"W	159.84
3	N26°18'00"W	240.34
4	N67°25'00"W	185.42

LOT #4 METES & BOUNDS

COURSE	BEARING	DISTANCE
1	N67°25'00"E	140.61
2	S22°35'00"E	239.84
3	S67°25'00"W	140.61
4	N22°35'00"W	239.84

LOT #3 METES & BOUNDS

COURSE	BEARING	DISTANCE
1	N67°25'00"E	141.64
2	S22°35'00"E	239.84
3	N67°25'00"E	141.64
4	N22°35'00"W	239.84

LOT #2 METES & BOUNDS

COURSE	BEARING	DISTANCE
1	N60°17'07"E	136.14
2	S22°35'22"E	243.79
3	CHORD	ARC= 88.45'; RADIUS= 300.95'; CHORD= 86.13'
4	S67°25'00"W	47.90
5	N22°35'00"W	239.84

LOT #1 METES & BOUNDS

COURSE	BEARING	DISTANCE
1	N26°18'02"W	10.81
2	N23°45'17"E	6.47
3	N13°36'46"W	32.51
4	CHORD	ARC= 80.88'; RADIUS= 60.00'; CHORD= 80.87'
5	CHORD	ARC= 77.48'; RADIUS= 152.44'; CHORD= 76.65'
6	N47°28'10"W	44.79
7	S89°11'00"W	6.98
8	N26°18'02"W	27.25
9	N85°11'00"E	27.25
10	S83°16'02"E	27.25
11	S85°11'00"E	13.52
12	S47°30'24"E	40.23
13	CHORD	ARC= 79.93'; RADIUS= 187.05'; CHORD= 79.17'
14	CHORD	ARC= 81.07'; RADIUS= 201.75'; CHORD= 81.07'
15	S13°38'09"E	32.63
16	S15°00'14"E	19.24

LOT #1 METES & BOUNDS

COURSE	BEARING	DISTANCE
1	S17°23'06"W	327.33'
2	N22°35'00"W	243.79
3	N85°21'21"E	210.83

LOT #2 METES & BOUNDS

COURSE	BEARING	DISTANCE
1	N60°17'07"E	136.14
2	S22°35'22"E	243.79
3	CHORD	ARC= 88.45'; RADIUS= 300.95'; CHORD= 86.13'
4	S67°25'00"W	47.90
5	N22°35'00"W	239.84

LOT #3 METES & BOUNDS

COURSE	BEARING	DISTANCE
1	N67°25'00"E	141.64
2	S22°35'00"E	239.84
3	N67°25'00"E	141.64
4	N22°35'00"W	239.84

LOT #4 METES & BOUNDS

COURSE	BEARING	DISTANCE
1	N67°25'00"E	140.61
2	S22°35'00"E	239.84
3	S67°25'00"W	140.61
4	N22°35'00"W	239.84

LOT #5 METES & BOUNDS

COURSE	BEARING	DISTANCE
1	S22°35'00"W	239.84
2	S67°25'00"W	159.84
3	N26°18'00"W	240.34
4	N67°25'00"W	185.42

LOT #6 METES & BOUNDS

COURSE	BEARING	DISTANCE
1	S22°35'00"W	239.84
2	S67°25'00"W	159.84
3	N26°18'00"W	240.34
4	N67°25'00"W	185.42

LOT #7 METES & BOUNDS

COURSE	BEARING	DISTANCE
1	N25°42'28"W	248.75
2	N64°59'04"E	12.99
3	CHORD	ARC= 59.18'; RADIUS= 241.12'; CHORD= 59.08'
4	N79°03'54"E	75.00
5	S29°42'28"E	229.38
6	S67°25'00"E	144.21

LOT #8 METES & BOUNDS

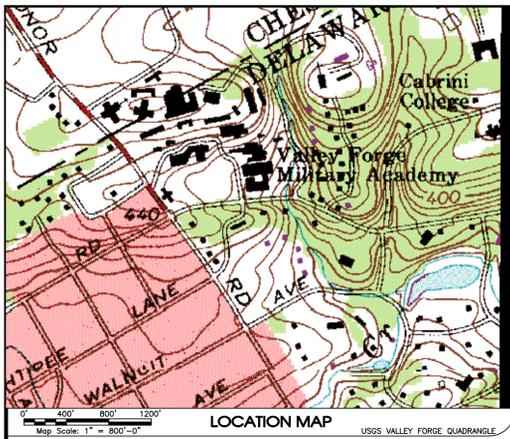
COURSE	BEARING	DISTANCE
1	N25°42'28"W	229.38
2	N79°03'56"E	110.56
3	S67°58'55"E	270.32
4	S60°17'07"W	136.14
5	S67°25'00"W	153.17

LOT #9 METES & BOUNDS

COURSE	BEARING	DISTANCE
1	N25°42'28"W	248.75
2	N64°59'04"E	12.99
3	CHORD	ARC= 59.18'; RADIUS= 241.12'; CHORD= 59.08'
4	N79°03'54"E	75.00
5	S29°42'28"E	229.38
6	S67°25'00"E	144.21

LOT #10 METES & BOUNDS

COURSE



LOCATION MAP
USGS VALLEY FORGE QUADRANGLE
Map Scale: 1" = 800'-0"

NOTE: THE EXACT LOCATION AND DEPTH OF EXISTING UTILITIES CANNOT BE GUARANTEED. ALL UTILITIES DEPICTED ON THIS PLAN HAVE BEEN DEVELOPED FROM ABOVE-GROUND OBSERVATIONS AND/OR EXISTING RECORDS. CONTRACTOR MUST VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. PENNSYLVANIA STATE LAW REQUIRES NOTIFICATION TO 1-800-242-1776 3-10 BUSINESS DAYS PRIOR TO ANY EXCAVATION.
BASE PLAN S/N: 2019266414

- PLAN LEGEND**
- RED LINES: TBR
 - BOLD LINES: E&S PROPOSED
 - 1' INTERVAL CONTOUR
 - 5' INTERVAL CONTOUR
 - ST--- STORM SEWER PIPING
 - SW--- SANITARY SEWER PIPING
 - G--- GAS MAIN
 - W--- WATER MAIN / SERVICE
 - E--- UNDERGROUND ELECTRIC
 - OHW--- OVERHEAD WIRES
 - T--- COMMUNICATIONS
 - EDGE OF LANDSCAPING
 - LIMIT OF DISTURBANCE LINE
 - BUILDING SETBACK LINE
 - RIGHT-OF-WAY
 - STREAM
 - TWP RIPARIAN SETBACK
 - BUILDINGS
 - ASPHALT
 - WALKS & PADS
 - WALLS
 - Xxxxxx SPOT ELEVATION
 - DSxxxx DOOR SILL
 - GSxxxx GARAGE SILL
 - Hydrant HYDRANT
 - WV WATER VALVE
 - WM WATER METER
 - OSAN VENT SANITARY VENT
 - OSAN CO SANITARY CLEAN OUT
 - OSAN MH SANITARY MANHOLE
 - GM GAS METER
 - OVV GAS VALVE
 - MONU MONUMENT OR PIN
 - F&H FOUND AND HELD
 - STORM MH STORMWATER MANHOLE
 - STORM INLET STORMWATER INLET
 - STORM CLEAN OUT DOWNSPOUT
 - 14-20% NATURAL SLOPES
 - 20%+ NATURAL SLOPES
 - 14-20% MAN-MADE
 - 20%+ MAN MADE
 - 14-20% MAN MADE TBR PER ZHB VARIANCE
 - 20%+ MAN MADE TBR
 - Soil SOIL BOUNDARY & MAP SYMBOL

CONSTRUCTION ENTRANCE NOTES
CONSTRUCTION ENTRANCE LOCATION CONTINGENT ON OBTAINING A HIGHWAY OCCUPANCY PERMIT FOR PennDOT.



- LEGEND - E & S CONTROL FEATURES**
- 8" COMPOST SOCK
 - 12" COMPOST SOCK
 - CONSTRUCTION FENCING
 - TREE PROTECTION FENCING
 - ROCK CONSTRUCTION ENTRANCE
 - SOIL BOUNDARY & MAP SYMBOL
 - SLOPE LENGTH CALCULATION TO CALCULATION
 - INLET PROTECTION
 - TREES TO BE REMOVED

SOIL DATA 102.4.(b)(5)(D)
(PER WEB SOIL SURVEY, USDA, NRCS AS OF APRIL 27, 2018)

MAP SYMBOL	SOIL NAME	% SLOPE	INCHES TO HIGH WATER	INCHES TO BEDROCK	LAND CAPABILITY	DRAINAGE CLASS	HSG	DWELLING W/BASEMENT	LAWNS	ROADS	SEPTIC -DRIP	DEEP INFILTRATION
G&B	GLADSTONE GRAVELLY LOAM	3-8	>80"	60-80"	2e (NONIRRIG)	WELL	B	NOT	SOMEWHAT	SOMEWHAT	SLIGHTLY	SOMEWHAT
G&C	GLADSTONE GRAVELLY LOAM	8-15	>80"	65-67"	3e (NONIRRIG)	WELL	B	SOMEWHAT	SOMEWHAT	SOMEWHAT	SLIGHTLY	SOMEWHAT
Ha	HARBORO SILT LOAM	0-3	0-6"	60-99"	4w (NONIRRIG)	POORLY	D	VERY	VERY	VERY	VERY	SEVERELY
ToA	TOWHEE SILT LOAM	0-3	0-6"	48-96"	4w (NONIRRIG)	POORLY	D	VERY	VERY	VERY	VERY	SEVERELY

ZONING VARIANCE GRANTED
ON MAY 20, 2021, THE ZONING HEARING BOARD GRANTED THE FOLLOWING:
1. VARIANCE RELIEF FROM THE REQUIREMENTS OF ZONING CODE SECTION 280-112 TO PERMIT THE STEEP SLOPE DISTURBANCES IN THE PRECISE LOCATION AND EXTENT SHOWN ON THE PLANS AND SPECIFICATIONS CONTAINED IN EXHIBIT A-12.

- E&S CONTROL NOTES**
- E&S CONTROL FOR FINAL CONSTRUCTION WILL CONSIST OF PLACING EXCAVATED MATERIAL ON THE UPHILL SIDE OF THE TRENCH AND BACKFILLING AND STABILIZING WITHIN THE SAME WORK DAY.
 - EROSION AND SEDIMENT BMPs MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMPs.
 - AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPs MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMPs MUST BE STABILIZED IMMEDIATELY.
 - CONTRACTOR MUST CLEAN DRIVEWAY AND ROAD OF ANY SEDIMENT AT THE END OF EACH WORK DAY.
 - STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
 - UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPs MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.

- EROSION CONTROL MAINTENANCE REQUIREMENTS**
- SILT BARRIER, TREE PROTECTION FENCING, AND THE ROCK CONSTRUCTION ENTRANCE MUST BE CHECKED ON A DAILY BASIS AND AFTER ALL STORM EVENTS TO ENSURE THAT THEY ARE STILL FUNCTIONING PROPERLY. IF NOT, THEY SHALL BE REPLACED OR CLEANED OF SEDIMENT.
 - SEDIMENT MUST BE REMOVED FROM SILT BARRIER WHEN ACCUMULATIONS REACH 1/2 OF THE ABOVE GROUND HEIGHT OF THE FENCE OR AS RECOMMENDED BY MANUFACTURER.
 - ANY SECTION OF SILT BARRIER WHICH HAS BEEN UNDERMINED OR TOPPED MUST BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET.
 - DIVERSION BERMS, STONED CONSTRUCTION STAGING AREAS, AND INLETS/PIPING SHALL BE PROVIDED AS REQUIRED OR AS DIRECTED BY THE TOWNSHIP SO AS TO ENSURE ACCEPTABLE CONDITIONS DURING THE CONSTRUCTION PHASE.

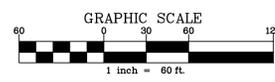
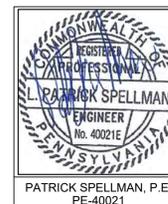
BASE SURVEY PLAN
"BOUNDARY & TOPOGRAPHIC SURVEY" PREPARED FOR EASTERN UNIVERSITY, PREPARED BY CONTROL POINT ASSOCIATES, INC., DATED MARCH 31, 2010, LAST REVISED DECEMBER 20, 2019. SEE EXISTING FEATURES SHEET FOR COMPLETE LIST OF NOTES AND REFERENCES.

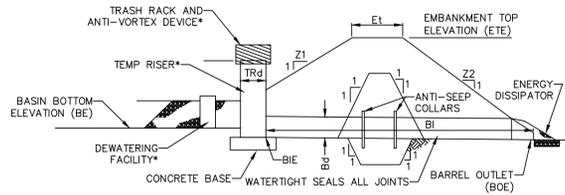
NUM.	DATE	REVISION
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		REVISION

PLAN PREPARED BY:
SITE ENGINEERING CONCEPTS, LLC
P.O. BOX 1992
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P: 610-240-0450 F: 610-240-0451 E: INFO@SITE-ENGINEERS.COM

PRELIMINARY/FINAL SUBDIVISION AND LAND DEVELOPMENT PLAN
PLAN PREPARED FOR:
CG WAYNE, LLC
EAGLE & RADNOR ROAD, WAYNE, PA 19087

RADNOR TOWNSHIP DELAWARE COUNTY PENNSYLVANIA
SEPT. 15, 2020
EROSION & SEDIMENT CONTROL PLAN
DEMOLITION PLAN
SHEET 4 of 18
SCALE: 1" = 60'





* ALSO REFER TO SEDIMENT BASIN TEMPORARY RISER, EMERGENCY SPILLWAY, ENERGY DISSIPATOR, TRASH RACK AND ANTI-VORTEX DEVICE, AND SEDIMENT STORAGE DEWATERING FACILITY DETAILS.

BASIN NO.	TEMPORARY RISER			BARREL			LENGTH (FT)	OUTLET ELEV BOE (FT)		
	Z1 (FT)	Z2 (FT)	CREST ELEV TRCE (FT)	DIA TRd (IN)	MAT'L	DIA Bd (IN)			INLET ELEV BIE (FT)	
1	2	3	15	355.25	HDPE	8	353.5	HDPE	85	348

EMBANKMENT	TOP ELEV ETE (FT)	TOP WIDTH ETw (FT)	KEY TRENCH DEPTH (FT)	KEY TRENCH WIDTH (FT)	CLEANOUT ELEV COE (FT)	BOTTOM ELEV BE (FT)

NOTES:
SEDIMENT BASINS, INCLUDING ALL APPURTENANT WORKS, SHALL BE CONSTRUCTED TO THE DETAIL AND DIMENSIONS SHOWN ON THE E&S PLAN DRAWINGS.

AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO A DEPTH OF TWO FEET PRIOR TO ANY PLACEMENT AND COMPACTION OF EARTHEN FILL. FILL MATERIAL FOR THE EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN LAYERED LIFTS OF NOT MORE THAN 6 TO 9 IN. THE MAXIMUM ROCK SIZE SHALL BE NO GREATER THAN 2/3 THE LIFT THICKNESS. UPON COMPLETION, THE EMBANKMENT SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED ACCORDING TO THE SPECIFICATIONS OF THE E&S PLAN DRAWINGS. TREES SHALL NOT BE PLANTED ON THE EMBANKMENT.

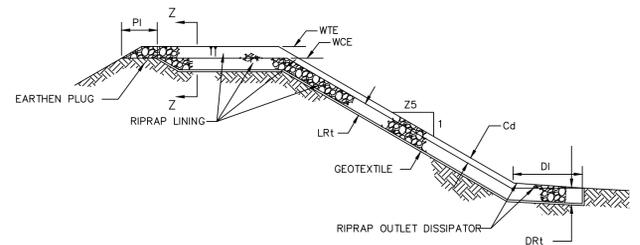
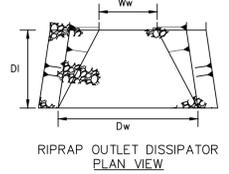
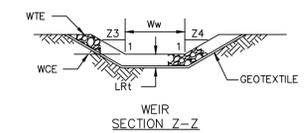
ACCESS SHALL BE PROVIDED FOR SEDIMENT REMOVAL AND OTHER REQUIRED MAINTENANCE ACTIVITIES.

A CLEAN OUT STAKE SHALL BE PLACED NEAR THE CENTER OF EACH BASIN. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED THE CLEAN OUT ELEVATION ON THE STAKE AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS. DISPOSE OF MATERIALS REMOVED FROM THE BASIN IN THE MANNER DESCRIBED IN THE E&S PLAN.

INSPECT ALL SEDIMENT BASINS ON AT LEAST A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. CHECK BASIN EMBANKMENTS, SPILLWAYS, AND OUTLETS FOR EROSION, PIPING AND SETTLEMENT. NECESSARY REPAIRS SHALL BE MADE IMMEDIATELY. DISPLACED RIPRAP WITHIN THE OUTLET ENERGY DISSIPATOR SHALL BE REPLACED IMMEDIATELY. ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISTURBED AREAS SHALL BE STABILIZED INSIDE THE BASIN BEFORE CONVERSION TO A STORMWATER MANAGEMENT FACILITY. THE DEVICE SHOWN IN STANDARD CONSTRUCTION DETAIL #7-16 MAY BE USED TO DEWATER SATURATED SEDIMENT PRIOR TO ITS REMOVAL. ROCK FILTERS SHALL BE ADDED AS NECESSARY.

**STANDARD CONSTRUCTION DETAIL #7-6
SEDIMENT BASIN EMBANKMENT AND SPILLWAY DETAILS
PERFORATED RISER**

NOT TO SCALE



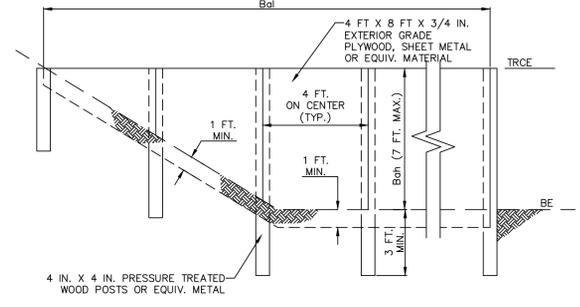
EMBANKMENT SECTION ALONG EMERGENCY SPILLWAY

BASIN NO.	WEIR			CREST ELEV WCE (FT)	WIDTH Ww (FT)	LINING		CHANNEL		DISSIPATOR			
	Z3 (FT)	Z4 (FT)	TOP ELEV WTE (FT)			RIPRAP SIZE (R-)	RIPRAP THICK. LRT (IN)	Z5 (FT)	DEPTH Cd (FT)	LENGTH DI (FT)	WIDTH Dw (FT)	RIPRAP SIZE (R-)	RIPRAP THICK. DRT (IN)
1	3	3	359	358	20	5	15	5	.5	10	5	5	15

NOTES:
DIMENSION P1 SHALL BE 5' MINIMUM.
DISPLACED RIPRAP WITHIN THE SPILLWAY AND/OR OUTLET CHANNEL SHALL BE REPLACED IMMEDIATELY.

**STANDARD CONSTRUCTION DETAIL #7-12
SEDIMENT BASIN EMERGENCY SPILLWAY
WITH RIPRAP LINING**

NOT TO SCALE



BASIN OR TRAP NO.	BAFFLE		TEMPORARY RISER CREST ELEV. TRCE (FT)	BOTTOM ELEV BE (FT)
	LENGTH Bal (FT)	HEIGHT Bah (FT)		
1	188	4	357.3	353.5

NOTES:
SEE APPROPRIATE BASIN DETAIL FOR PROPER LOCATION AND ORIENTATION.
AN ACCEPTABLE ALTERNATIVE IS TO INSTALL A SUPER SILT FENCE AT THE BAFFLE LOCATION
IN POOLS WITH DEPTHS EXCEEDING 7', THE TOP OF THE PLYWOOD BAFFLE DOES NOT NEED TO EXTEND TO THE TEMPORARY RISER CREST. SUPER SILT FENCE BAFFLES NEED NOT EXTEND TO TRCE ELEVATION.
BAFFLES SHALL BE TIED INTO ONE SIDE OF THE BASIN UNLESS OTHERWISE SHOWN ON THE PLAN DRAWINGS.
SUBSTITUTION OF MATERIALS NOT SPECIFIED IN THIS DETAIL SHALL BE APPROVED BY THE DEPARTMENT OR THE LOCAL CONSERVATION DISTRICT BEFORE INSTALLATION.
DAMAGED OR WARPED BAFFLES SHALL BE REPLACED WITHIN 7 DAYS OF INSPECTION.
BAFFLES REQUIRING SUPPORT POSTS SHALL NOT BE INSTALLED IN BASINS REQUIRING IMPERVIOUS LINERS.

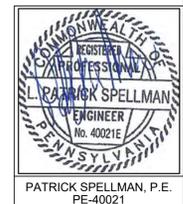
**STANDARD CONSTRUCTION DETAIL #7-14
BAFFLE**

NOT TO SCALE

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PLAN PREPARED BY:
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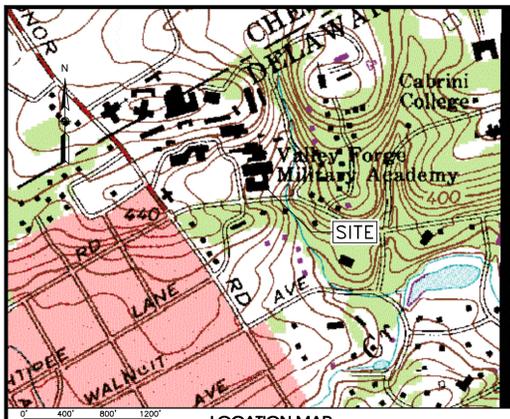
PRELIMINARY/FINAL SUBDIVISION AND LAND DEVELOPMENT PLAN
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EAGLE & RADNOR ROAD, WAYNE, PA 19087
RADNOR TOWNSHIP DELAWARE COUNTY PENNSYLVANIA



E&S DETAILS

SHEET
6 of 18

SCALE: 1" = NTS



LOCATION MAP

NOTE: THE EXACT LOCATION AND DEPTH OF EXISTING UTILITIES CANNOT BE GUARANTEED. ALL UTILITIES DEPICTED ON THIS PLAN HAVE BEEN DEVELOPED FROM ABOVE GROUND OBSERVATIONS AND/OR EXISTING RECORDS. CONTRACTOR MUST VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. PENNSYLVANIA STATE LAW REQUIRES NOTIFICATION TO 1-800-242-1776 3-10 BUSINESS DAYS PRIOR TO ANY EXCAVATION.
 BASE PLAN S/N: 20192646414

PLAN LEGEND

BOLD LINES: PROPOSED
FADED LINES: EXISTING

- ST- 5' INTERVAL CONTOUR
- S- STORM SEWER PIPING
- L- SANITARY SEWER MAIN
- G- SANITARY LATERAL
- M- GAS MAIN
- W- WATER MAIN / SERVICE
- E- UNDERGROUND ELECTRIC
- OHW- OVERHEAD WIRES
- X- COMMUNICATIONS
- EDGE OF LANDSCAPING
- EDGE OF PAVEMENT
- FENCE LINE
- PROPERTY LINE
- RIGHT-OF-WAY
- BUILDING SETBACK LINE
- ACCESSORY SETBACK LINE
- STREAM
- TWP RIPARIAN SETBACK

BUILDINGS

- ASPHALT
- WALKS & PADS
- WALLS
- DECKS

SPOT ELEVATION

- OSxxx.xx DOOR SILL
- GSxxx.xx GARAGE SILL
- OSxxx.xx HYDRANT
- OSxxx.xx WATER VALVE
- OSxxx.xx WATER METER
- OSxxx.xx SANITARY VENT
- OSxxx.xx SANITARY CLEAN OUT
- OSxxx.xx SANITARY MANHOLE
- OSxxx.xx GAS METER
- OSxxx.xx GAS VALVE
- OSxxx.xx MONUMENT OR PIN
- OSxxx.xx FOUND AND HELD
- OSxxx.xx STORMWATER MANHOLE
- OSxxx.xx STORMWATER INLET
- OSxxx.xx STORM CLEAN OUT
- OSxxx.xx DOWNSPOUT

SLOPES

- 14-20% NATURAL
- 20%+ NATURAL
- 14-20% MAN-MADE
- 20%+ MAN-MADE

SOIL BOUNDARY & MAP SYMBOL



ZONING REQUIREMENTS

ORDINANCE ITEM	EXISTING			PROPOSED		
	PI PLANNED INSTITUTIONAL REQUIREMENT	R-1 RESIDENTIAL REQUIREMENT	R-2 RESIDENTIAL REQUIREMENT	PI PLANNED INSTITUTIONAL REQUIREMENT	R-1 RESIDENTIAL REQUIREMENT	R-2 RESIDENTIAL REQUIREMENT
MIN. LOT AREA	10 AC (435,600 SF)	1 AC (43,560 SF)	20,000 SF	10 AC (435,600 SF)	1 AC (43,560 SF)	20,000 SF
LOT WIDTH @ BLDG	100 FT	120 FT	100 FT	100 FT	120 FT	100 FT
MIN. SETBACKS						
FRONT	(1)	60 FT	40 FT	(1)	60 FT	40 FT
SIDE (MIN/AGG)	(2)	25/60 FT	20/45 FT	(2)	25/60 FT	20/45 FT
REAR	(2)	40 FT	40 FT	(2)	40 FT	40 FT
MAX. BUILDING HEIGHT	38 FT	35 FT	35 FT	38 FT	35 FT	35 FT
MAX. BUILDING COVERAGE	30%	15%	18%	30%	15%	18%
MAX. IMPERV SURFACE	45%	22%	30%	45%	22%	30%
RIPIARIAN BUFFER	35 FT	35 FT	35 FT	35 FT	35 FT	35 FT

UNIT SIZE (# OF BEDROOMS)
 THE APPLICANT ANTICIPATES OFFERING HOMES WITH 5 BEDROOMS.

(1) PI FRONT SETBACK FROM STREET ROW: STRUCTURES - 120 FT; PARKING - 60.
 (2) REAR & SIDE YARD: CATEGORY 1: RESIDENTIAL ADJOINER- 125 FT; OTHERS- 75 FT; CATEGORY 2: RESIDENTIAL ADJOINER- 200 FT; OTHERS- 75 FT

PROPOSED ZONING SUMMARY

LOT #	LOT AREA SF ⁽¹⁾	LOT WIDTH @ BLDG FT	FRONT YARD FT ⁽²⁾	MINIMUM SIDE YARD FT ⁽²⁾	AGGREGATE SIDE YARD FT ⁽²⁾	REAR YARD FT ⁽²⁾	BUILDING HEIGHT FT ⁽²⁾
1	35,720	100	164.7	71.3	143.5	78.7	<35'
2	30,073	140	81.1	22.7	55.1	69.3	<35'
3	30,366	141	72.0	20.0	49.5	58.1	<35'
4	30,177	141	57.4	22.4	64.3	40.0	<35'
5	32,110	151	47.7	40.0	N/A	40.0	<35'
6	30,252	140	41.6	20.9	51.5	114.9	<35'
7	30,516	153	40.0	29.1	N/A	75.2	<35'
8	36,450	198	42.0	21.8	56.6	66.2	<35'
9	58,337	100	40.3	20.9	50.7	73.7	<35'
10	52,432	100	41.1	20.0	45.0	50.7	<35'
11	30,155	166	58.7	25.8	55.3	215.1	<35'
12	33,735	107	65.0	26.5	77.9	238.7	<35'
13	33,275	146	52.5	20.0	49.6	55.9	<35'
14	59,463	233	45.0	22.8	56.0	56.2	<35'
15	41,705	154	40.7	32.3	N/A	57.4	<35'
16	48,678	224	41.0	41.9	N/A	41.5	<35'
17	64,210	358	184.0	45.3	100.8	40.4	<35'
18	51,244	286	96.0	25.0	N/A	46.4	<35'

(1) LOT AREA = TOTAL AREA LESS ROW AND 75% OF EACH OF THE FOLLOWING: FLOODPLAINS, WETLANDS AND 20%+ SLOPES.
 (2) YARD SETBACKS AND COVERAGE ESTIMATES BASED ON PRELIMINARY SKETCH, ACTUAL COVERAGE TO BE DETERMINED WITH GRADING PERMIT APPLICATIONS, AND NOT TO EXCEED AMOUNTS PERMITTED BY APPLICABLE CODE REQUIREMENTS.

PROPOSED IMPERVIOUS COVERAGE

LOT #	GROSS LOT AREA SF	BUILDING COVERAGE SF ⁽¹⁾	% BLDG CVR (%)	WALKS/ SIDEWALKS SF ⁽¹⁾	PATIOS, DECKS SF ⁽¹⁾	DRIVE WAY SF ⁽¹⁾	OTHER SF ⁽¹⁾	TOTAL IMPERVIOUS COVERAGE SF ⁽¹⁾	% IMP CVR (%)
1	36,642	3,220	8.8%	299	442	2,384	0	6,345	17.3%
2	33,166	3,320	10.0%	359	470	2,382	0	6,531	19.7%
3	33,970	3,125	9.2%	209	418	1,985	0	5,737	16.9%
4	33,725	3,250	9.6%	374	249	2,117	0	5,990	17.8%
5	42,603	3,021	7.1%	382	474	1,980	0	5,857	13.7%
6	41,989	2,720	6.5%	348	327	1,807	0	5,202	12.4%
7	34,933	2,980	8.5%	281	327	1,995	0	5,583	16.0%
8	42,542	2,850	6.7%	279	263	2,174	0	5,566	13.1%
9	61,733	3,400	5.5%	274	320	2,382	0	6,376	10.3%
10	58,429	3,575	6.1%	293	320	1,966	47	6,201	10.6%
11	36,061	2,790	7.7%	319	363	2,131	0	5,603	15.5%
12	36,800	2,790	7.6%	319	363	2,347	0	5,819	15.8%
13	44,176	2,925	6.6%	268	381	1,933	0	5,507	12.5%
14	75,820	3,350	4.4%	146	249	3,931	120	7,796	10.3%
15	45,247	2,900	6.4%	324	433	1,585	0	5,242	11.6%
16	52,674	2,700	5.1%	264	442	4,353	0	7,759	14.7%
17	81,721	3,050	3.7%	272	442	1,256	0	5,020	6.1%
18	58,406	3,425	5.9%	310	313	3,659	93	7,800	13.4%

(1) IMPERVIOUS CATEGORIES BASED ON RADNOR TOWNSHIP GRADING PERMIT APPLICATION IMPERVIOUS SURFACE TABLE.
 "OTHER" CATEGORY FOR ANY IMPERVIOUS NOT INCLUDED IN FIRST 4 CATEGORIES (E.G.: WALLS). COVERAGE ARE ESTIMATES BASED ON PRELIMINARY SKETCH, ACTUAL COVERAGE TO BE DETERMINED WITH GRADING PERMIT APPLICATIONS, AND NOT TO EXCEED AMOUNTS PERMITTED BY APPLICABLE CODE REQUIREMENTS.
 (2) IMPERVIOUS AND BUILDING COVERAGE PERCENTAGE BASED ON GROSS LOT AREA.

FULL GRADING AND UTILITY PLANS
 1' CONTOURS AND SPOT ELEVATIONS NOT SHOWN FOR CLARITY. SEE SHEET 10 FOR FULL GRADING PLAN WITH SPOT ELEVATIONS AND DIMENSIONS.

SOME UTILITIES NOT SHOWN FOR CLARITY. SEE SHEET 11 FOR FULL UTILITY PLAN.

PROJECT NARRATIVE
 THE APPLICANT PROPOSES REMOVE THE 14 EXISTING DWELLING AND ALL ASSOCIATED IMPROVEMENTS AND SURVIVOR PARCELS A AND B INTO 18 SINGLE FAMILY LOTS.

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PLAN PREPARED BY:
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PRELIMINARY/FINAL SUBDIVISION AND LAND DEVELOPMENT PLAN

PLAN PREPARED FOR:
CG WAYNE, LLC
 EAGLE & RADNOR ROAD, WAYNE, PA 19087

RADNOR TOWNSHIP DELAWARE COUNTY PENNSYLVANIA
 SEPT. 15, 2020

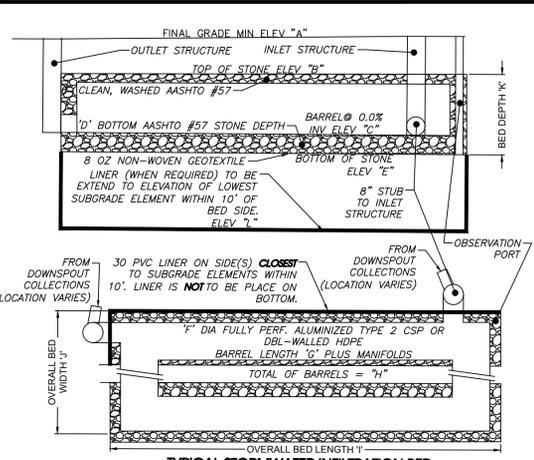
PRELIMINARY LAND DEVELOPMENT & PCSM PLAN

SHEET 7 of 18

SCALE: 1" = 50'

GRAPHIC SCALE: 1 inch = 50 ft.

PACKET SPELLMAN, P.E. PE-40021



STORMWATER INFILTRATION BED NOTES

- BED BOTTOM DEPTH REQUIRED PER STORMWATER SOIL EVALUATION REPORT.
- A 30 MIL PVC LINER, OR TOWNSHIP-APPROVED EQUIVALENT, IS TO BE PLACED ALONG ALL BED SIDE(S) WITHIN 10' OF A SUBGRADE ELEMENT IF THE ELEMENT ELEVATION IS BELOW BOTTOM BED ELEVATION. THE BOTTOM OF THE LINER IS TO EXTEND FROM THE BED TOP ELEVATION TO THE LOWEST SUBGRADE ELEMENT ELEVATION. LINERS ARE NOT TO BE PLACED ON BED BOTTOMS.
- THE EXCAVATION FOR THE INFILTRATION BED SHOULD BE PERFORMED WITH EQUIPMENT THAT WILL NOT COMPACT THE BOTTOM OF THE FACILITY.
- SCAFFOLD BOTTOM OF BED, TAKING CARE NOT TO COMPACT SOIL.
- PERFORATIONS SHALL MEET AASHTO CLASS II PATTERN FOR PIPE DIAMETER.
- ENTIRE BED SIDES TOP AND BOTTOM, SHALL BE WRAPPED IN SYNTHETIC INDUSTRIES NON-WOVEN #801 OR ENGINEER APPROVED EQUAL, PROVIDE A MINIMUM 1' OVERLAP AT ALL SEAMS AND JOINTS. WHERE PROTRUSIONS OR PENETRATIONS OCCUR, GEOTEXTILE SHALL BE PERMANENTLY AFFIXED TO OBJECT.
- CARE SHOULD BE TAKEN IN THE PLACING OF STONE, ATOP THE GEOTEXTILE SO AS TO AVOID TEARING OR RIPPING OF THE FABRIC. STONE SHOULD NOT BE DUMPED UNTIL A 6" LAYER OF STONE IS IN PLACE.
- THERE ARE NO PROVISIONS FOR THE CONNECTIONS OF SUMP PUMPS AND FOUNDATION DRAINS TO THE INFILTRATION BED AND ANY PROVISIONS FOR FUTURE CONNECTIONS OF SUMP PUMPS, THE INFILTRATION BED WILL REQUIRE A RE-DESIGN IF THESE OR OTHER CONNECTIONS NOT INCLUDED IN THE DESIGN ARE INSTALLED.
- GUTTER LEAF GUARDS OR OTHER DEBRIS COLLECTORS SHOULD BE PROVIDED FOR THE RUNOFF ENTERING THE INFILTRATION BED. INVISIFLOW SELF-CLEANING DOWNSPOUT FILTERS OR EQUIVALENT WILL BE AN ACCEPTABLE ALTERNATIVE.
- ALL INLETS AND DRAIN BEDS THAT DRAIN DIRECTLY TO INFILTRATION BEDS SHALL SUMPED AND CLEANED PER O&M REQUIREMENTS.

BED CONSTRUCTION SEQUENCE

- INSTALL ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS.
- INSTALL IMMEDIATELY ADJACENT TO THE BED MUST BE STABILIZED IN ACCORDANCE WITH THE PADEP'S EROSION AND SEDIMENTATION CONTROL PROGRAM MANUAL (2000 OR LATEST EDITION) PRIOR TO BED CONSTRUCTION.
- PREPARE SITE FOR EXCAVATION AND/OR EMBANKMENT CONSTRUCTION.
- ALL EXISTING VEGETATION SHOULD REMAIN IF FEASIBLE AND SHOULD ONLY BE REMOVED IF NECESSARY FOR CONSTRUCTION.
- CARE SHOULD BE TAKEN TO PREVENT COMPACTION OF THE BED BOTTOM.
- IF EXCAVATION IS REQUIRED, CLEAR THE AREA TO BE EXCAVATED OF ALL VEGETATION, REMOVE ALL TREE ROOTS, ROCKS, AND Boulders ONLY IN EXCAVATION AREA.
- EXCAVATE BOTTOM OF BED TO DESIRED ELEVATION (IF NECESSARY).
- INSTALL SURROUNDING EMBANKMENTS AND INLET AND OUTLET CONTROL STRUCTURES.
- GRADE SUBSOIL IN BOTTOM OF BED, TAKING CARE TO PREVENT COMPACTION. COMPACT SURROUNDING EMBANKMENT AREAS AND AROUND INLET AND OUTLET STRUCTURES.
- APPLY AND GRADE PLANTING SOIL.
- APPLY GEO-TEXTILES AND OTHER EROSION-CONTROL MEASURES.
- SEED, PLANT AND MULCH ACCORDING TO PLANTING BOULDER ONLY IN EXCAVATION AREA.
- INSTALL ANY ANTI-GRAZING MEASURES, IF NECESSARY.

MAINTENANCE, INSPECTION AND REPLACEMENT REQUIREMENTS

MAINTENANCE ISSUES

MAINTENANCE IS NECESSARY TO ENSURE PROPER FUNCTIONALITY OF THE EXTENDED DETENTION BED AND SHOULD TAKE PLACE ON A QUARTERLY BASIS. A BED MAINTENANCE PLAN SHOULD BE DEVELOPED WHICH INCLUDES THE FOLLOWING MEASURES:

- ALL BED STRUCTURES EXPECTED TO RECEIVE AND/OR TRAP DEBRIS AND SEDIMENT SHOULD BE INSPECTED FOR CLOGGING AND EXCESSIVE DEBRIS AND SEDIMENT ACCUMULATION AT LEAST FOUR TIMES PER YEAR, AS WELL AS AFTER EVERY STORM GREATER THAN 1 INCH.
- STRUCTURES INCLUDE BED BOTTOMS, TRASH RACKS, OUTLETS STRUCTURES, RIPRAP OR GABION STRUCTURES, AND INLETS.
- SEDIMENT REMOVAL SHOULD BE CONDUCTED WHEN THE BED IS COMPLETELY DRY. SEDIMENT SHOULD BE DISPOSED OF PROPERLY AND ONCE SEDIMENT IS REMOVED, DISTURBED AREAS NEED TO BE IMMEDIATELY STABILIZED AND REVEGETATED.
- MOWING AND/OR TRIMMING OF VEGETATION SHOULD BE PERFORMED AS NECESSARY TO SUSTAIN THE SYSTEM, BUT ALL DETRITUS SHOULD BE REMOVED FROM THE BED.
- VEGETATED AREAS SHOULD BE INSPECTED ANNUALLY FOR EROSION.
- VEGETATED AREAS SHOULD BE INSPECTED ANNUALLY FOR UNWANTED GROWTH OF EXOTIC/INVASIVE SPECIES.
- VEGETATIVE COVER SHOULD BE MAINTAINED AT A MINIMUM OF 95 PERCENT. IF VEGETATIVE COVER HAS BEEN REDUCED BY 10%, VEGETATION SHOULD BE REESTABLISHED.

PROPOSED INFILTRATION BED DIMENSIONS

IMPERVIOUS USED IN STORM DESIGN (SF) (1)	'A' MIN FINAL GRADE	'B' TOP OF STONE ELEV	'C' BARREL INVERT ELEV	'D' BOTTOM STONE DEPTH (FT)	'E' BED BOTTOM ELEV	'F' BARREL DIA (IN)	'G' BARREL LENGTH (FT)	'H' # OF BARRELS	'I' 'J' 'K' OVERALL BED DIM (FT)	TEST PIT ID (2)(3)
PIB #										
1	6,595	359	357.5	353	0.5	352.5	48	65	3	78x19x5 SWB-2
2	5,849	364	361.5	357	0.5	356.5	48	75	3	88x38x5 SWB-3
3	8,824	384	379.5	375	0.5	374.5	48	65	4	78x26x5 SWB-7
4	7,289	384	379.5	375	0.5	374.5	48	70	3	83x19x5 SWB-8
5	4,707	379	375	370.5	0.5	370	48	65	2	78x14x5 SWB-10
6	7,096	365	363	358.5	0.5	358	48	75	4	88x26x5 SWB-1B
7	8,746	381	379.5	375	0.5	374.5	48	60	3	73x19x5 SWB-12
8	4,547	387	385.5	381	0.5	380.5	48	60	4	73x26x5 SWB-13
9	13,689	393	391.5	387	0.5	386.5	48	75	6	88x38x5 SWB-14
10	10,338	403	401.5	397	0.5	396.5	48	90	4	103x26x5 SWB-16
11	4,677	405	403.5	399	0.5	398.5	48	50	4	63x26x5 SWB-18
12	7,726	406	404.5	400	0.5	399.5	48	100	3	113x19x5 SWB-19
13	5,273	375	373.5	369	0.5	368.5	48	60	2	73x14x5 SWB-21

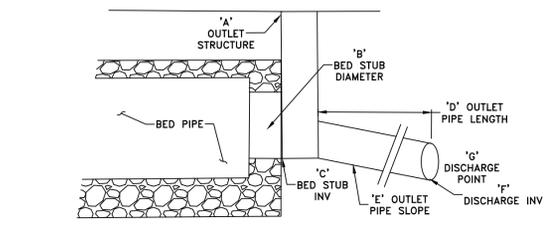
(1) COVERED ESTIMATES BASED ON PRELIMINARY SKETCH PLUS ALLOWANCE FOR FUTURE IMPERVIOUS. ACTUAL COVERAGE TO BE DETERMINED WITH GRADING PERMIT APPLICATIONS AND NOT TO EXCEED AMOUNTS PERMITTED BY APPLICABLE CODE REQUIREMENTS.

(2) SEE 'INFILTRATION TESTING REPORT, RADNOR STREET & EAGLE ROADS DEVELOPMENT - PROPOSED STORMWATER MANAGEMENT FACILITIES' PREPARED BY GEOSTRUCTURES, DATED MAY 22, 2020. FOR DETAILS.

(3) VERIFY FINAL BEDS LOCATIONS ARE WITHIN 25' OF AN INFILTRATION TEST PIT. IF NOT THE BED LOCATION MUST BE RETESTED FOR INFILTRATION AND LOCATION APPROVED BY THE TOWNSHIP AND DCCD BEFORE CONSTRUCTION.

PROPOSED BED OUTLET DIMENSIONS

PO-#	'A' OUTLET STRUCTURE	'B' BED STUB DIA (IN)	'C' BED STUB INV	'D' PIPE LENGTH (FT)	'E' SLOPE (%)	'F' DISCHARGE INV	'G' RECEIVING STRUCTURE
1	CLEAN OUT	8	355.75	47.2	4.3%	353.70	EX STORM PIPE
2	CLEAN OUT	8	358.6	40.8	2.5%	357.59	EX STORM PIPE
3	CLEAN OUT	8	377	65.8	6.7%	372.60	PSTH-1
4	CLEAN OUT	8	377	33.7	18.6%	370.73	PP-8
5	CLEAN OUT	8	372	25.6	28.8%	364.62	PSTH-2
6	CLEAN OUT	8	361.5	20	3.0%	360.90	OUTFALL A-2
7	CLEAN OUT	8	376	12.9	2.0%	375.74	PP-R4
8	CLEAN OUT	8	384	26.4	14.7%	380.13	PI-R3
9	CLEAN OUT	8	388	31.9	9.7%	384.91	PP-R1C
10	CLEAN OUT	8	399	33.4	1.0%	398.66	PP-R1A
11	CLEAN OUT	8	401.25	20.2	8.1%	384.91	PP-R1C
12	CLEAN OUT	8	402.5	21.6	7.7%	385.91	PI-R2
13	CLEAN OUT	8	372	33.5	9.0%	369.00	OUTFALL A-4



STORMWATER MANAGEMENT FACILITY OWNERSHIP AND MAINTENANCE NOTES:

THE RESPONSIBILITY FOR THE CONTINUED MAINTENANCE AND OPERATION OF THE DETENTION BED AND OTHER FACILITIES SHALL BE THE OBLIGATION OF THE PERMITTEE OR CURRENT PROPERTY OWNER.

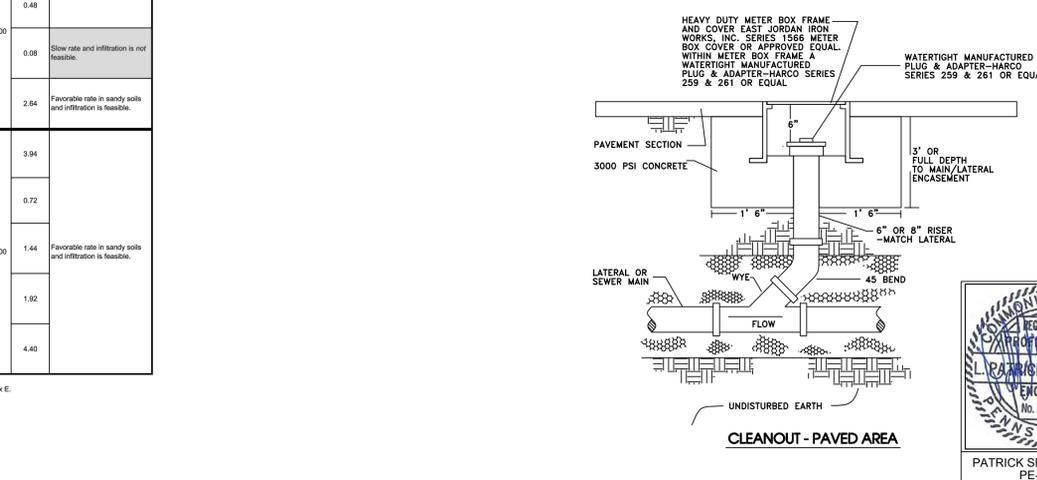
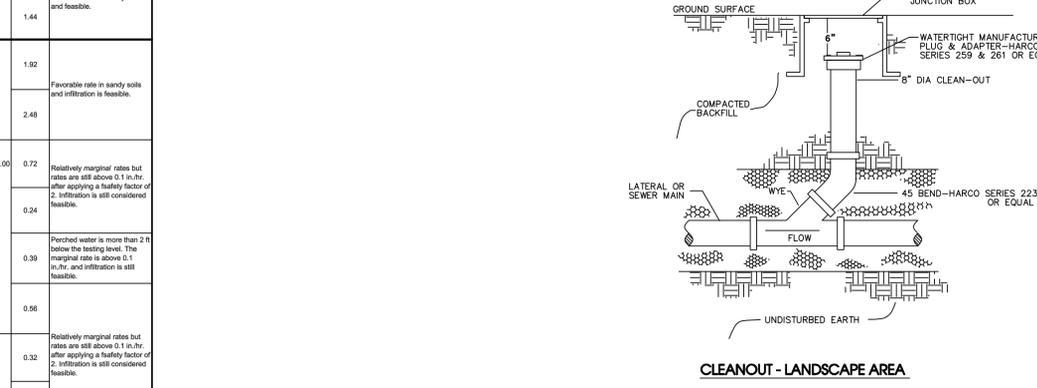
- THE INFILTRATION BED MUST BE INSPECTED FOR ROUTINE MAINTENANCE A MINIMUM OF TWO TIMES A YEAR, ONCE IN THE EARLY SPRING AND ONCE IN THE FALL AFTER THE MAJORITY OF THE LEAVES HAVE FALLEN.
- VISUAL OBSERVATION OF THE GROUND SURFACE TO DETECT PONDING OF WATER OR GROUND SETTLEMENTS THAT WOULD PREVENT ALL RUNOFF FROM ENTERING INLETS AS DESIGNED MUST BE MADE. THE DRAINAGE AREAS DESIGN FOR THE SYSTEM MUST BE MAINTAINED. ADJUSTMENTS TO THE GRADING OF INLETS MUST BE MADE TO ENSURE THAT THE SYSTEM IS FUNCTIONING AS DESIGNED. SMALL SINKHOLES CAN BE REPAIRED EASILY BY FILLING WITH TOPSOIL AND MAY BE THE RESULT OF SETTLEMENT OF THE SOILS. LARGER SINKHOLES OR SINKHOLES THAT REAPPEAR IN THE SAME LOCATION MAY INDICATE A BREACH IN THE GEOTEXTILE LINER, INLET BOX STRUCTURE, PIPE CONNECTION, OR BREAK IN A STORM CONVEYANCE LINE. THESE TYPES OF SINKHOLES MUST BE EXCAVATED AND REPAIRED IMMEDIATELY IN ORDER TO PREVENT SOIL FROM ENTERING THE INFILTRATION BED AND CLOGGING IT OR REDUCING THE CAPACITY OF THE BED FOR RECHARGE OF RUNOFF.
- ALL SEDIMENT TRAPS AND INLETS MUST BE VISUALLY INSPECTED SEVERAL TIMES A YEAR FOR ACCUMULATED SOIL AND DEBRIS. INLET GRATES MUST BE KEPT FREE OF LEAVES, STICKS, MULCH, AND OTHER LAWN DEBRIS OR TRASH THAT WOULD PREVENT INFLOW OF RUNOFF. SUMPS IN SEDIMENT TRAPS OR INLET BOTTOMS MUST HAVE ACCUMULATED SEDIMENT REMOVED TO ENSURE DESIGN CAPACITY SUFFICIENT TO TRAP SEDIMENT AND DEBRIS FROM ENTERING ANY INFILTRATION BED.
- ONCE A YEAR, THE INFILTRATION BED MUST BE INSPECTED TO DETERMINE IF IT IS DRAINING WITHIN THE REQUIRED TIME PERIOD (USUALLY TWENTY-FOUR HOURS). THE INSPECTION PORT SHALL BE OPENED AT LEAST TWENTY-FOUR HOURS FOLLOWING A STORM AND THE LEVEL OF WATER IN THE BED NOTED. IF IT IS DETERMINED THAT THE SYSTEM WILL NOT RECHARGE THE STORMWATER RUNOFF AS DESIGNED, THE SYSTEM WILL NEED TO BE MODIFIED OR REPLACED. THE TOWNSHIP SHALL BE CONTACTED FOR APPROVAL OF ANY MODIFICATION OR REPLACEMENT OF THE SYSTEM.
- ANY CLEAN-OUT OR INLET THAT HAS BEEN DAMAGED BY LAWN EQUIPMENT MUST BE REPLACED OR REPAIRED. CLEAN-OUTS THAT BECOME BURIED SHOULD BE RAISED TO GRADE. THE CONFIGURATION MUST NOT ALLOW SOIL OR OTHER DEBRIS TO CLOG THE COLLECTION PIPE. ALL COLLECTION PIPES MUST BE CHECKED ANNUALLY TO ENSURE THEY ARE FLOWING FREELY. IF THE COLLECTION PIPES BECOME CLOGGED, THE FAILURE IDENTIFIED AND REPAIRED IMMEDIATELY AT THE CLEAN-OUTS. ADDITIONAL PROTECTION MUST BE MADE AT THE SEDIMENT TRAP DURING JET CLEANING TO ENSURE THAT DEBRIS IS NOT TRANSMITTED TO THE INFILTRATION BED.
- THE OUTLET PIPE, OR CONNECTION OF THE OUTLET OF THE INFILTRATION BED MUST BE CHECKED TO ENSURE THAT IT IS PERMITTING FREE FLOW OF WATER OUT OF THE BED. LEVEL SPREADER AT THE TERMINATION OF THE BED OUTLET SHALL BE CHECKED, STONE SHALL BE REPLACED WITH EQUAL OR LARGER SIZE STONE IF THE DISSIPATOR IS OBSERVED TO BE INEFFECTIVE. PERFORATED PIPE AND GEOTEXTILE SHALL BE INSPECTED AND REPAIRED AS REQUIRED.
- SMALL TREES THAT BEGIN TO GROW IN THE VICINITY OF INFILTRATION BEDS OR STRUCTURES MUST BE REMOVED TO ENSURE THAT THE ROOTS DO NOT PUNCTURE THE FILTER FABRIC OF THE SEEPAGE BED OR DAMAGE ANY STORMWATER COLLECTION/CONVEYANCE STRUCTURE.
- ROOF GUTTER SYSTEMS THAT ARE INTEGRAL WITH THE INFILTRATION BED MUST BE FUNCTIONAL. REPAIRS TO GUTTERS THAT BECOME SEPARATED, SAG, OR OTHERWISE DO NOT FUNCTION AS DESIGNED MUST BE MADE.
- PREVENTATIVE MAINTENANCE WOULD INCLUDE REMOVAL OF LEAVES FROM GUTTER SYSTEMS AND LAWN AREAS AS SOON AS POSSIBLE TO AVOID CONTAMINATION OR CLOGGING OF THE SYSTEM. LOCATING LANDSCAPE-MULCHED AREAS AWAY FROM CONCENTRATED RUNOFF AREAS OR SWALES THAT COULD WASH MULCH INTO INLETS IS RECOMMENDED.

PCSM LONG TERM OPERATIONS AND MAINTENANCE REQUIREMENTS

UNTIL THE PERMITTEE OR CO-PERMITTEE HAS RECEIVED WRITTEN APPROVAL OF A NOTICE OF TERMINATION, THE PERMITTEE OR CO-PERMITTEE WILL REMAIN RESPONSIBLE FOR COMPLIANCE WITH THE PERMIT TERMS AND CONDITIONS INCLUDING LONG-TERM OPERATION AND MAINTENANCE OF ALL PCSM BMPs ON THE PROJECT SITE AND IS RESPONSIBLE FOR VIOLATIONS OCCURRING ON THE PROJECT SITE. THE PERMITTEE OR CO-PERMITTEE SHALL BE RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF PCSM BMPs UNLESS A DIFFERENT PERSON IS IDENTIFIED IN THE NOTICE OF TERMINATION AND HAS AGREED TO LONG-TERM OPERATION AND MAINTENANCE OF PCSM BMPs. FOR ANY PROPERTY CONTAINING A PCSM BMP, THE PERMITTEE OR CO-PERMITTEE SHALL RECORD AN INSTRUMENT WITH THE RECORDER OF DEEDS WHICH WILL ASSURE DISCLOSURE OF THE PCSM BMP AND THE RELATED OBLIGATIONS IN THE ORDINARY COURSE OF A TITLE SEARCH OF THE SUBJECT PROPERTY. THE RECORDED INSTRUMENT MUST IDENTIFY THE PCSM BMP, PROVIDE FOR NECESSARY ACCESS RELATED TO LONG-TERM OPERATION AND MAINTENANCE FOR PCSM BMPs AND PROVIDE NOTICE THAT THE RESPONSIBILITY FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMP IS A COVENANT THAT RUNS WITH THE LAND THAT IS BINDING UPON AND ENFORCEABLE BY SUBSEQUENT GRANTEE, AND PROVIDE PROOF OF FILING WITH THE NOTICE OF TERMINATION UNDER PA CODE CHAPTER 102.7(b)(5) (RELATING TO PERMIT TERMINATION). THE PERSON RESPONSIBLE FOR PERFORMING LONG-TERM OPERATION AND MAINTENANCE MAY ENTER INTO AN AGREEMENT WITH ANOTHER PERSON INCLUDING A CONSERVATION DISTRICT, NONPROFIT ORGANIZATION, MUNICIPALITY, AUTHORITY, PRIVATE CORPORATION OR OTHER PERSON, TO TRANSFER THE RESPONSIBILITY FOR PCSM BMPs OR TO PERFORM LONG-TERM OPERATION AND MAINTENANCE AND PROVIDE NOTICE THEREOF TO THE DEPARTMENT. A PERMITTEE OR CO-PERMITTEE THAT FAILS TO TRANSFER LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMP OR OTHERWISE FAILS TO COMPLY WITH THIS REQUIREMENT SHALL REMAIN JOINTLY AND SEVERALLY RESPONSIBLE WITH THE LANDOWNER FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMPs LOCATED ON THE PROPERTY.

PROJECT NOTES

- EROSION AND SEDIMENT BMPs MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMPs.
- AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPs MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMPs MUST BE STABILIZED IMMEDIATELY.
- VEHICLES AND EQUIPMENT MAY NEVER ENTER DIRECTLY NOR EXIT DIRECTLY WITHOUT TRAVERSING A ROCK CONSTRUCTION ENTRANCE SHOULD THE CLEANING OF TIRES PROVE INEFFECTIVE.
- STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
- UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPs MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPs AFTER EACH RUNOFF EVENT AND ON A DAILY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RETENING MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMPs FAIL TO PERFORM AS EXPECTED, MODIFICATIONS OR REPLACEMENT BMPs WILL BE REQUIRED.
- THE MAXIMUM TIME OF EXPOSURE FOR BARE SOIL AREAS SHALL BE TWENTY (20) DAYS BEFORE STABILIZATION MEASURES ARE IMPLEMENTED.
- NEWLY CREATED SLOPES GREATER THAN 4:1 (25%) SHALL BE STABILIZED WITH SOIL AND/OR JUTE NETTING AND SEED.
- ALL WOODY VEGETATION TO BE RETAINED WITHIN 25' FEET OF A BUILDING SITE OR DISTURBED AREA SHALL BE PROTECTED FROM EQUIPMENT DAMAGE BY FENCING PLACED AT THE DRIPLINES. SINCE THE TREE PROTECTION FENCE HAS NOT BEEN SHOWN AT THE DRIPLINES OF ALL TREES TO REMAIN, THE TOWNSHIP ARBORIST MUST APPROVE THE LOCATION OF THE TREE PROTECTION FENCE.
- NO IMPROVISED COVER SHALL BE PERMITTED WITHIN THE DRIPLINES OF TREES TO REMAIN UNLESS APPROVED BY THE TOWNSHIP ARBORIST. THE TOWNSHIP ARBORIST MUST APPROVE THE LOCATION AND EXTENT OF THE PAVING IF THE IMPACTED TREES ARE SCHEDULED TO REMAIN.
- GRADE CHANGES AROUND THE DRIPLINES OF TREES TO BE RETAINED SHALL BE MINIMIZED. IMPACTED TREES SHALL BE CLEARLY IDENTIFIED ON THE PLAN. TREATMENT OF THE IMPACTED TREES PRIOR TO CONSTRUCTION TO PROTECT THE ROOT SYSTEM SHALL BE PERFORMED IF/AS DIRECTED BY THE TOWNSHIP ARBORIST. THE TOWNSHIP ARBORIST MUST ALSO APPROVE THE PROCEDURE.
- CONTRACTOR TO DEEP ROOT FERTILIZE TREES IMPACTED BY CONSTRUCTION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE TOWNSHIP ARBORIST MUST APPROVE THE PROCEDURE.
- SHOULD ANY TREES NOT SCHEDULED OR PERMITTED TO BE REMOVED BE IRREPARABLY DAMAGED DURING CONSTRUCTION AND DIE WITHIN EIGHTEEN (18) MONTHS OF THE CONCLUSION OF CONSTRUCTION ACTIVITIES, THESE TREES WILL BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE PROVISIONS OF TOWNSHIP ORDINANCE SECTION 101-5(2). SLOW GROW SHALL BE POSTED TO GUARANTEE THE SURVIVAL OF THE IMPACTED TREES UNTIL THE ALLOTTED TIME HAS EXPIRED.
- IF TRENCHES FOR UTILITIES OR STORM SEWERS ARE PROPOSED WITHIN THE DRIPLINES OF TREES, ALL DISTURBED ROOTS MUST BE CUT AS CLEANLY AS POSSIBLE. THE TRENCH MUST BE BACKFILLED AS QUICKLY AS POSSIBLE, AVOIDING COMPACTION.
- MINIMAL GRADING AND DISTURBANCE IS NECESSARY WITHIN DRIPLINES OF SOME OF THE TREES ON THIS PROPERTY. CONTRACTOR SHALL MAKE EVERY EFFORT TO SAVE TREES, HOWEVER SOME OF THE TREES MAY BE DAMAGED AND HAVE TO BE REMOVED DUE TO PROXIMITY OF GRADING/DISTURBANCE.
- THE ARCHITECTURAL PLANS MUST BE COORDINATED WITH BUILDING HEIGHT CALCULATION AND MUST COMPLY WITH THE GRADING AND DISTURBANCE PROVISIONS BY THIS PERMIT PLAN.
- STORMWATER COLLECTION PIPING SHALL BE 'X' SMOOTH WALL HIGH DENSITY POLYETHYLENE (SHWPE) @ 0.02 FT/FT MIN. CLEANOUTS SHALL BE PROVIDED AT ALL CHANGES IN GRADE AND/OR DIRECTION.
- GAS, ELECTRIC, WATER OR ANY OTHER UTILITIES TO BE ABANDONED SHALL BE PROPERLY SEALED/REMOVED.
- THE EXISTING SERVICE UTILITIES TO REMAIN WITHIN THE LIMITS OF DISTURBANCE SHALL BE PROPERLY PROTECTED DURING CONSTRUCTION.
- PROPOSED WATER, STORM SEWER, AND ELECTRIC SERVICE SHALL HAVE A MINIMUM OF X FEET OF COVER.



STORMWATER BLANKET EASEMENT

A BLANKET EASEMENT IN THE PROJECT AREA AS SHOWN ON THE PLANS IS HEREBY GRANTED GIVING THE TOWNSHIP THE RIGHT, BUT NOT THE OBLIGATION, TO ENTER THE PROPERTY TO PERFORM ANY REQUIRED INSPECTION AND MAINTENANCE WHICH HAS NOT BEEN PROPERTY PERFORMED IN A TIMELY MANNER. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR THE COST OF ANY MAINTENANCE WHICH IS PERFORMED BY THE TOWNSHIP.

§102.8(f)(10) MAINTENANCE, INSPECTION AND REPLACEMENT REQUIREMENTS

MAINTENANCE ISSUES

SUBSURFACE INFILTRATION IS GENERALLY LESS MAINTENANCE INTENSIVE THAN OTHER PRACTICES OF ITS TYPE. GENERALLY SPEAKING, VEGETATION ASSOCIATED WITH SUBSURFACE INFILTRATION PRACTICES IS LESS SUBSTANTIAL THAN PRACTICES SUCH AS RECHARGE GARDENS AND VEGETATED SWALES AND THEREFORE REQUIRES LESS MAINTENANCE. MAINTENANCE ACTIVITIES REQUIRED FOR THE SUBSURFACE BED ARE SIMILAR TO THOSE OF ANY INFILTRATION SYSTEM AND FOCUS ON REGULAR SEDIMENT AND DEBRIS REMOVAL. THE FOLLOWING REPRESENTS THE RECOMMENDED MAINTENANCE EFFORTS:

- ALL CATCH BEDS AND INLETS SHOULD BE INSPECTED AND CLEANED AT LEAST 2 TIMES PER YEAR.
- THE OVERLIEING VEGETATION OF SUBSURFACE INFILTRATION FEATURES SHOULD BE MAINTAINED IN GOOD CONDITION, AND ANY BARE SPOTS REVEGETATED AS SOON AS POSSIBLE.
- VEHICULAR ACCESS ON SUBSURFACE INFILTRATION AREAS SHOULD BE PROHIBITED, AND CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY MOWERS. IF ACCESS IS NEEDED, USE OF PERMEABLE, TURF REINFORCEMENT SHOULD BE CONSIDERED.

§102.11(A)(2) INFILTRATION AND DETENTION BED FAILURE

BEDS DEFINED AS FAILED IF ONE OF THE FOLLOWING IS OBSERVED:

- STANDING WATER IN OBSERVATION PORTS AFTER THE REQUIRED DETAIRING TIME (72 HOURS).
- WATER DISCHARGING FOR INLETS NOT DESIGNED AS OUTLET STRUCTURE.

CONSTRUCTION SEQUENCE

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE. PERMITTEE OR PERMITTEE'S DESIGNEE SHALL CONTACT THE TOWNSHIP AT 610-688-5600 TO ARRANGE THE PRE-CONSTRUCTION CONFERENCE WITH THE TOWNSHIP ENGINEER. THE PRE-CONSTRUCTION CONFERENCE MUST BE HELD PRIOR TO COMMENCEMENT OF ANY WORK ASSOCIATED WITH THE DRAINAGE PERMIT.

- INSTALL ROCK CONSTRUCTION ENTRANCE.
- INSTALL SLIT FENCE AND TREE PROTECTION FENCING.
- FIELD LOCATE ALL UTILITIES AND COORDINATE WITH UTILITIES FOR SHUTOFF/ REMOVAL/ CONSTRUCTION AS NECESSARY. IMMEDIATELY STABILIZE ANY DISTURBED AREAS.
- REMOVE EXISTING IMPROVEMENTS, STRIP TOPSOIL AND ROUGH GRADE AREA OF PROPOSED IMPROVEMENTS. IMMEDIATELY STABILIZE DORMANT DISTURBED AREAS WITH THE APPROPRIATE SEED MIXTURE. TOPSOIL STOCKPILES ARE TO BE LIMITED TO 15 FEET WITH A MAXIMUM SIDE SLOPE OF 2:1. IMMEDIATELY STABILIZE STOCKPILE.
- CONSTRUCT NEW IMPROVEMENTS.
- COMPLETE CONSTRUCTION. A MINIMUM OF 4 INCHES OF TOPSOIL SHOULD BE PROVIDED OVER ALL DISTURBED AREAS PRIOR TO SEEDING OPERATIONS. IMMEDIATELY STABILIZE DORMANT DISTURBED AREAS WITH THE APPROPRIATE SEED MIXTURE.
- NOTIFY TOWNSHIP ENGINEER PRIOR TO CONSTRUCT PERMANENT STORMWATER BMPs.
- CONSTRUCT THE STORMWATER BED AND CONVEYANCE SYSTEM. SUB-GRADE SHALL NOT BE COMPACTED OR SUBJECT TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC. ANY SEDIMENT THAT ACCUMULATES IN THE BED SHALL BE REMOVED.
- THE CONVEYANCE SYSTEM OR BED SHOULD NOT RECEIVE RUNOFF FROM UNSTABILIZED AREAS. ALL AREAS TRIBUTARY TO THE BED SHALL ACHIEVED A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER BEFORE RUNOFF IS ALLOWED TO ENTER THE STORMWATER SYSTEM.
- ONCE SITE IS STABILIZED WITH 70% COVERAGE, CONTRACTOR MUST REMOVE EROSION AND SEDIMENTATION CONTROLS. AREAS DISTURBED DURING REMOVAL MUST BE STABILIZED IMMEDIATELY.

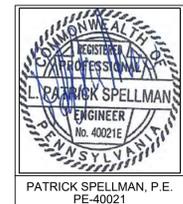
ANTICIPATED START OF CONSTRUCTION - WINTER 2021
ANTICIPATED COMPLETION OF CONSTRUCTION - SUMMER 2023

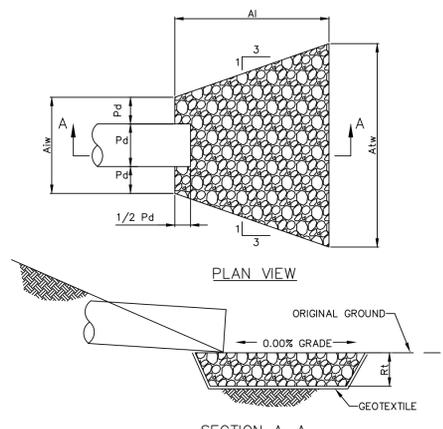
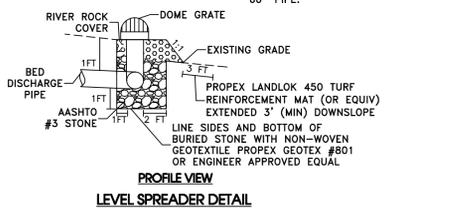
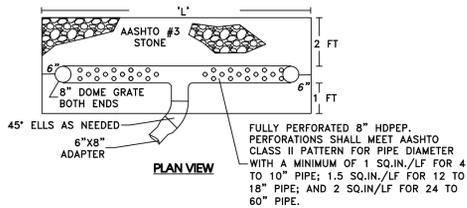
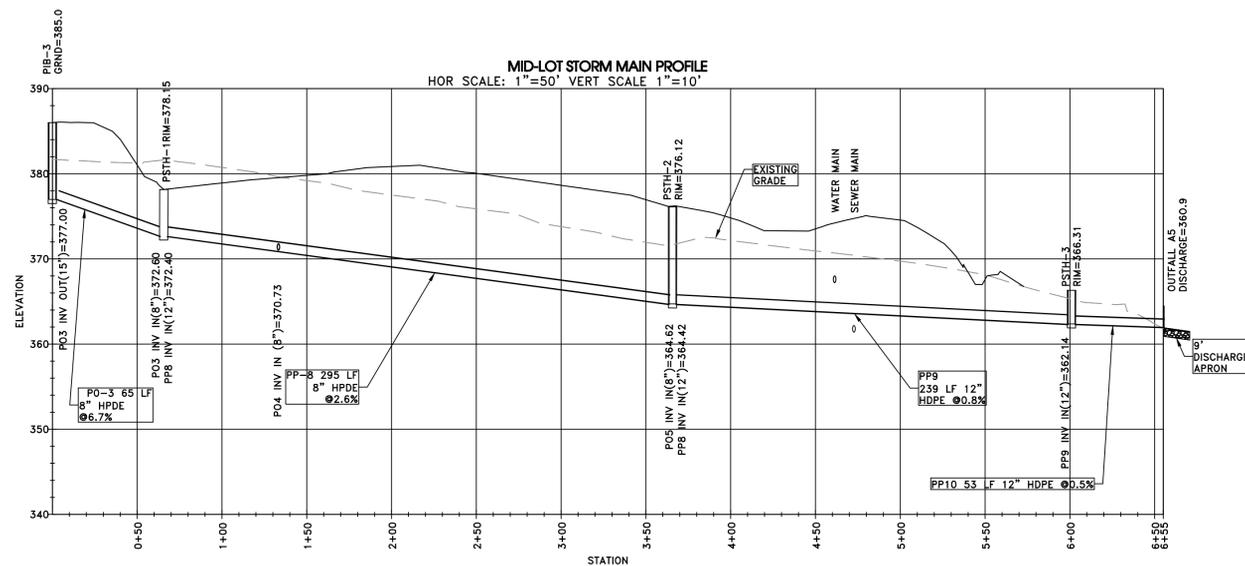
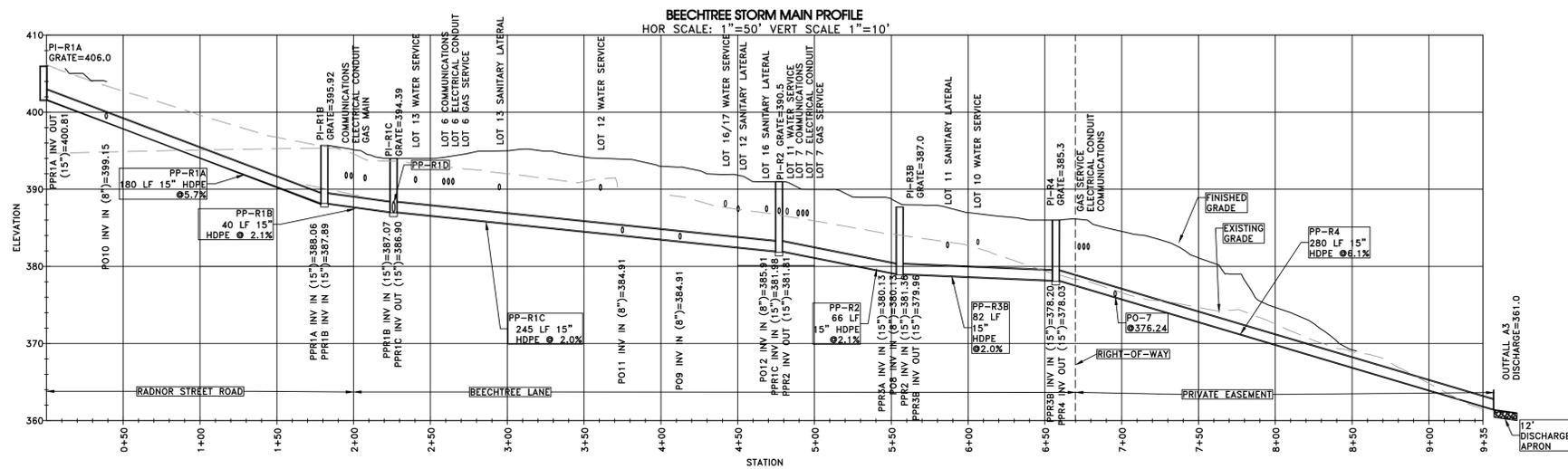
7.	9/16/2021	REVISE PER JULY 2021 TOWNSHIP REVIEW LETTERS
6a.	7/10/2021	REVISE PER ZHB APPROVAL & TOWNSHIP REVIEW LETTERS
5.	2/16/2021	REVISE PER TOWNSHIP 3RD REVIEW LETTERS
4.	1/19/2021	UPDATE PROFILES
3.	1/15/2021	REVISE PER TOWNSHIP 2ND REVIEW LETTERS AND PC INPUT
2.	12/7/2020	REVISE PER TOWNSHIP REVIEW LETTERS AND PC INPUT
NUM.	DATE	REVISION

PLAN PREPARED BY:
SITE ENGINEERING CONCEPTS, LLC
P.O. BOX 1992
SOUTHEASTERN, PA 19399
P: 610-240-0450 F: 610-240-0451 E: INFO@SITE-ENGINEERS.COM

PRELIMINARY/FINAL SUBDIVISION AND LAND DEVELOPMENT PLAN
PLAN PREPARED FOR:
CG WAYNE, LLC
EAGLE & RADNOR ROAD, WAYNE, PA 19087
RADNOR TOWNSHIP DELAWARE COUNTY PENNSYLVANIA

PCSM AND CONSTRUCTION DETAILS AND NOTES
SHEET 8 of 18
SCALE: 1" = NTS





OUTLET NO.	PIPE DIA Pd (IN)	RIPRAP		APRON	
		SIZE Rc-	THICK Rt (IN)	LENGTH Al (FT)	TERMINAL WIDTH Atr (FT)
A2	12	4	12	12	4.0
A3	15	4	12	12	4.0

NOTES:

ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.

ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

EXTEND RIPRAP ON BACK SIDE OF APRON TO AT LEAST 1/2 DEPTH OF PIPE ON BOTH SIDES TO PREVENT SCOUR AROUND THE PIPE.

RIPRAP APRON AT PIPE OUTLET

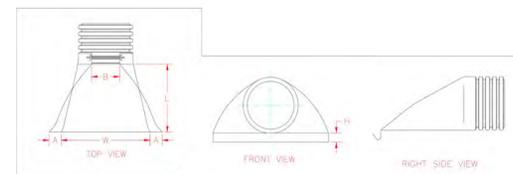
ADS FLARED END SECTION SPECIFICATION

Scope
This specification describes 12- through 36-inch (300 to 900mm) ADS Flared End Sections for use in culvert and drainage outlet applications.

Requirements
The ADS Flared End Section shall be high density polyethylene meeting ASTM D3350 minimum cell classification 213320C; contact manufacturer for additional cell classification information. When provided, the metal threaded fastening rod shall be stainless steel.

Installation
Installation shall be in accordance with ADS installation instructions and with those issued by state or local authorities. Contact your local ADS representative or visit www.ads-pipe.com for the latest installation instructions.

Diameter in (mm)	PIPE DIAMETER, in (mm)				
	12 (300)	15 (375)	18 (450)	24 (600)	30 (750)
A	6.5	6.5	7.5	7.5	7.5
in (mm)	(165)	(165)	(191)	(191)	(191)
B (max)	10.0	10.0	15.0	15.0	22.0
in (mm)	(254)	(254)	(381)	(381)	(559)
H	6.5	6.5	6.5	6.5	3.6
in (mm)	(165)	(165)	(165)	(165)	(218)
L	25.0	25.0	32.0	36.0	58.0
in (mm)	(635)	(635)	(813)	(914)	(1473)
W	29.0	29.0	35.0	45.0	63.0
in (mm)	(737)	(737)	(889)	(1143)	(1600)



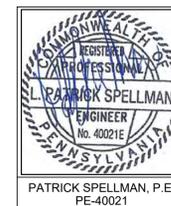
*Product detail may differ slightly from actual product appearance

Outfall	Q ₁₀₀	v	A	H	Required L	Provided L
1						
2						
3						
4	1.18	3	0.39	0.04	10	16

NUM.	DATE	REVISION
7.	9/16/2021	REVISE PER JULY 2021 TOWNSHIP REVIEW LETTERS
6a.	7/10/2021	REVISE PER ZHB APPROVAL & TOWNSHIP REVIEW LETTERS
5.	2/16/2021	REVISE PER TOWNSHIP 3RD REVIEW LETTERS
4.	1/19/2021	UPDATE PROFILES
3.	1/15/2021	REVISE PER TOWNSHIP 2ND REVIEW LETTERS AND PC INPUT
2.	12/7/2020	REVISE PER TOWNSHIP REVIEW LETTERS AND PC INPUT

PLAN PREPARED BY:
SITE ENGINEERING CONCEPTS, LLC
P.O. BOX 1992
SOUTHEASTERN, PA 19399
P: 610-240-0450 F: 610-240-0451 E: INFO@SITE-ENGINEERS.COM

PRELIMINARY/FINAL SUBDIVISION AND LAND DEVELOPMENT PLAN
PLAN PREPARED FOR:
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RADNOR TOWNSHIP DELAWARE COUNTY PENNSYLVANIA
SEPT. 15, 2020



STORM PROFILES AND DETAILS



PARCEL B
FOLIO 36-03-0097820
TMP 36-06-004-020
LANDS N/F
EASTERN UNIVERSITY
D.B. 4744, PG. 1484
UP #155

CHAMOUNIX ROAD
(A.K.A. CHAMOUNI AVENUE)
(NOT OPEN/NOT IMPROVED)

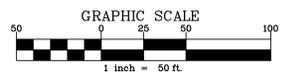
PARCEL A
D.LIO 36-03-0097810
TMP 36-06-004-010
LANDS N/F
EASTERN UNIVERSITY
D.B. 4744, PG. 1451

SANITARY LINES MIN DEPTH & SEPARATION
• MINIMUM DEPTH OF COVER FOR ALL PIPE SEWERS SHALL BE 5 FEET.
• A MINIMUM 10-FOOT HORIZONTAL AND 18-INCH VERTICAL SEPARATION MUST BE MAINTAINED BETWEEN THE SANITARY SEWER AND THE WATER AND STORM SEWER LINES.

EASEMENT PLANTING PROHIBITED
PLANTINGS OTHER THAN GRASS ARE PROHIBITED WITHIN THE SANITARY SEWER EASEMENTS

SANITARY LINES PLACED IN FILL
WHEN PIPE IS TO BE LAID IN FILL, THE EMBANKMENT HEIGHT SHALL BE AT LEAST FOUR FEET ABOVE THE TOP OF PIPE BEFORE THE TRENCH IS EXCAVATED. COMPACT EMBANKMENT MATERIAL TO A MINIMUM FINAL DENSITY OF NOT LESS THAN 90% OF THE MAXIMUM DRY WEIGHT DENSITY AT ITS OPTIMUM MOISTURE CONTENT.

- PLAN LEGEND**
- BOLD LINES: PROPOSED
 - FADED LINES: EXISTING
 - 1" INTERVAL CONTOUR
 - 5" INTERVAL CONTOUR
 - STORM SEWER PIPING
 - SANITARY SEWER MAIN
 - SANITARY LATERAL
 - GAS MAIN
 - WATER MAIN / SERVICE
 - UNDERGROUND ELECTRIC
 - OVERHEAD WIRES
 - COMMUNICATIONS
 - EDGE OF LANDSCAPING
 - EDGE OF PAVEMENT
 - FENCE LINE
 - PROPERTY LINE
 - RIGHT-OF-WAY
 - BUILDING SETBACK LINE
 - ACCESSORY SETBACK LINE
 - STREAM
 - TWP RIPARIAN SETBACK
- BUILDINGS
 - ASPHALT
 - WALKS & PADS
 - WALLS
 - DECKS
- xxx.xx SPOT ELEVATION
 - DSxxx.xx DOOR SILL
 - GSxxx.xx GARAGE SILL
 - HYDRANT
 - WV WATER VALVE
 - W/M WATER METER
 - W/SAN VENT SANITARY VENT
 - W/SAN CO SANITARY CLEAN OUT
 - W/SAN MH SANITARY MANHOLE
 - GM GAS METER
 - GV GAS VALVE
 - MONU MONUMENT OR PIN
 - F&H FOUND AND HELD
 - STRM MH STORMWATER MANHOLE
 - INLET STORMWATER INLET
 - CO STORM CLEAN OUT
 - DS DOWNSPOUT

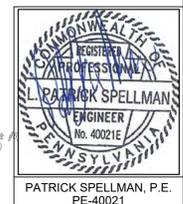


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		REVISION

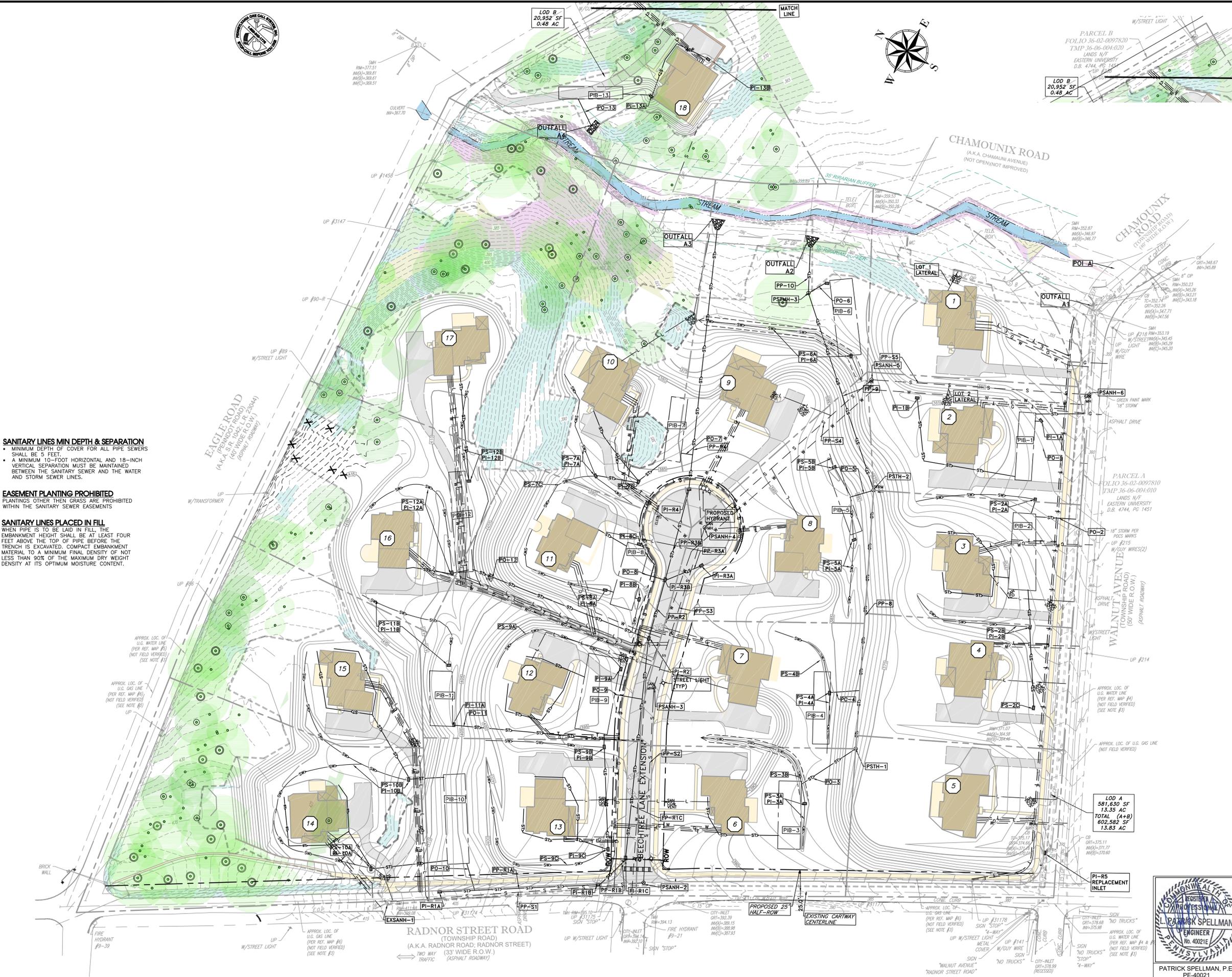
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SEPT. 15, 2020

UTILITY PLAN
SHEET 11 of 18
SCALE: 1" = 50'



PATRICK SPELLMAN, P.E.
PE-40021



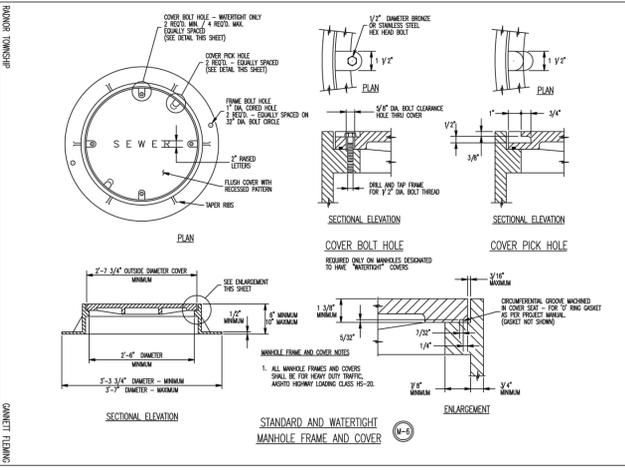
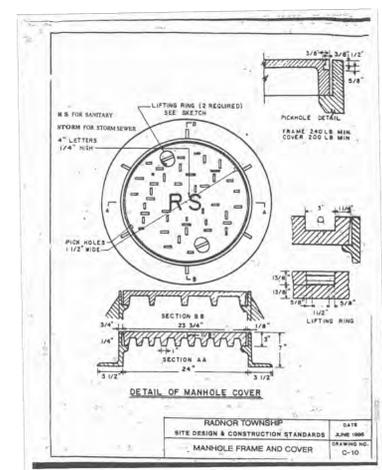
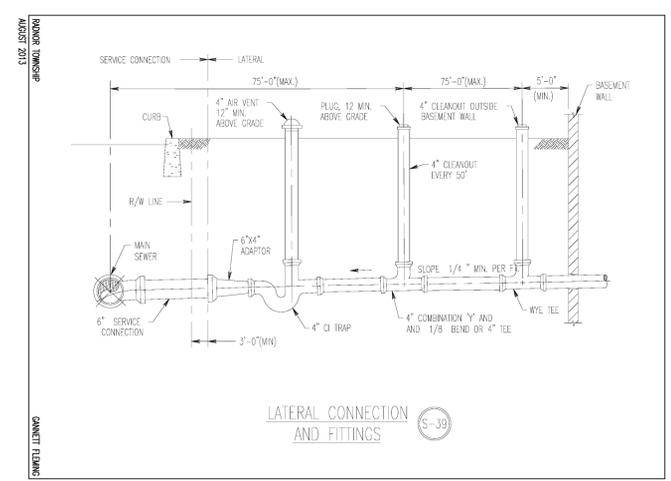
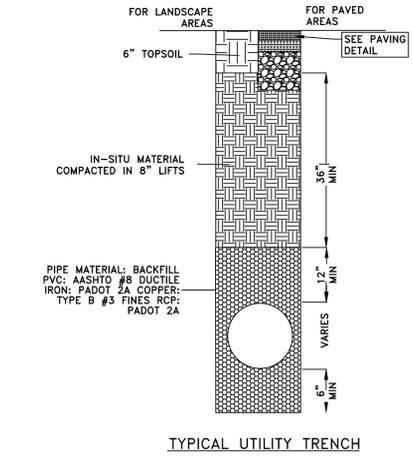
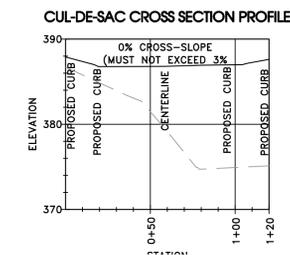
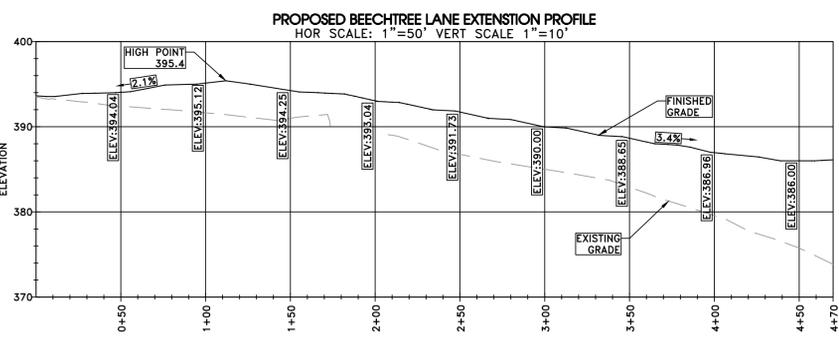
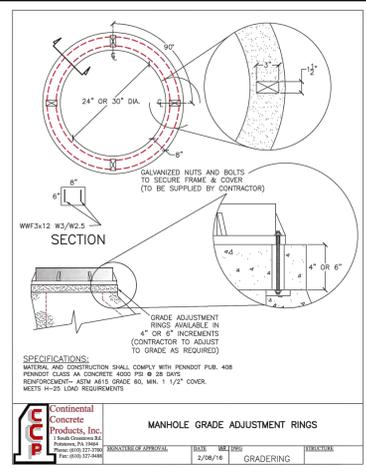
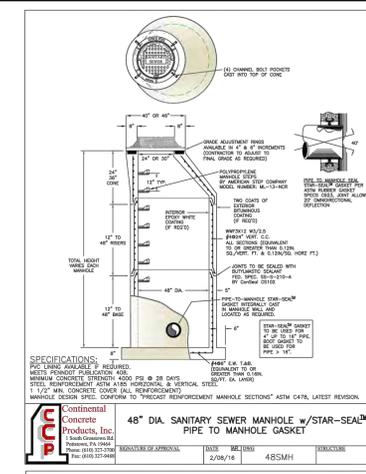
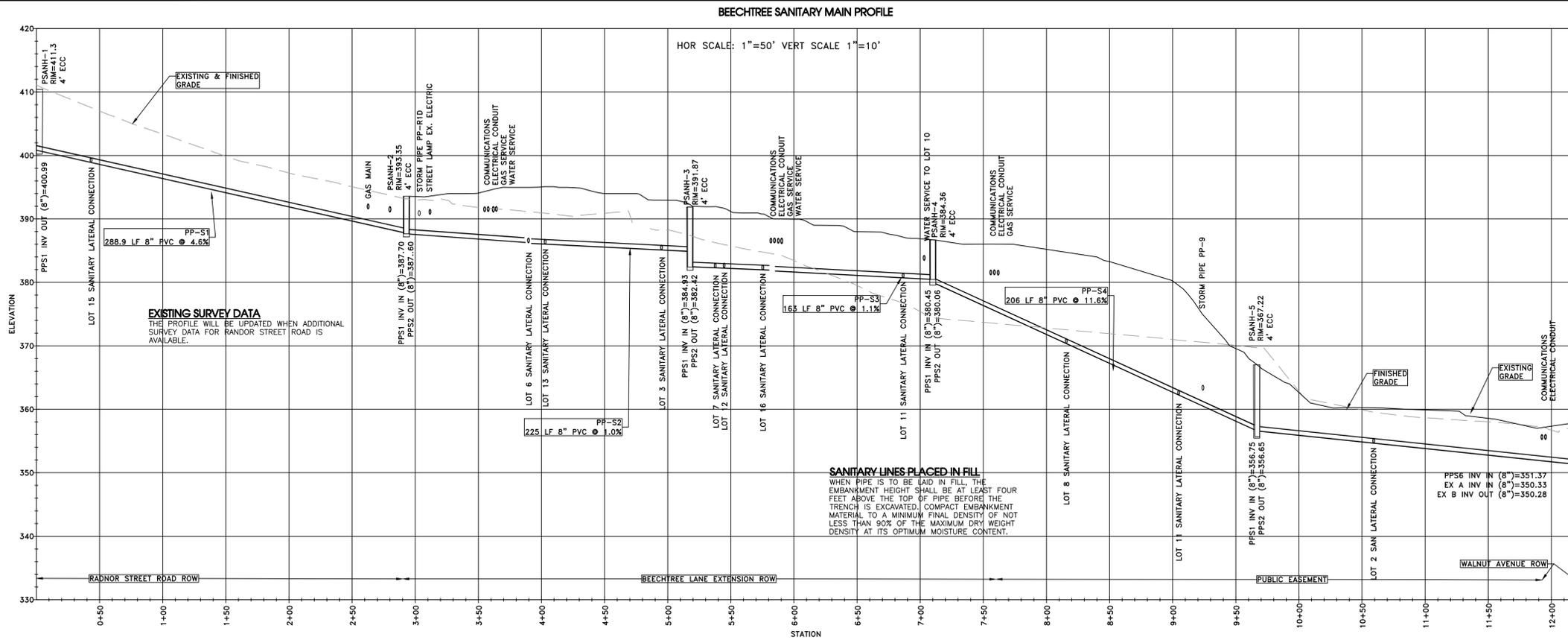
RADNOR STREET ROAD
(TOWNSHIP ROAD)
(A.K.A. RADNOR ROAD; RADNOR STREET)
TWO WAY TRAFFIC (ASPHALT ROADWAY)

LOD A
581,630 SF
13.35 AC
TOTAL
602,582 SF
13.83 AC

PI-RS REPLACEMENT INLET

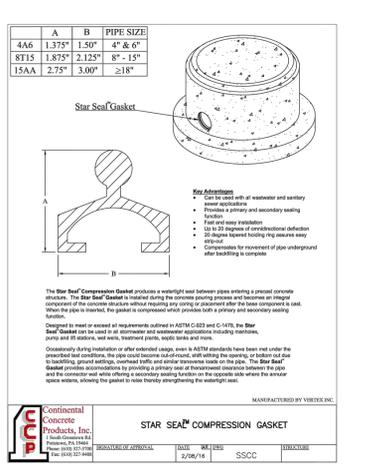
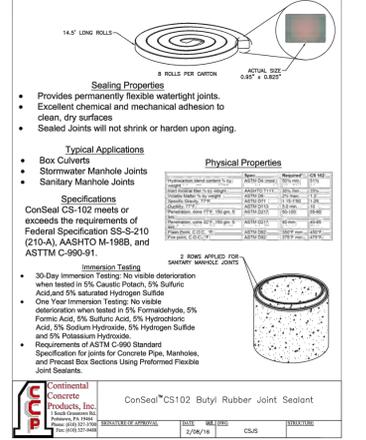
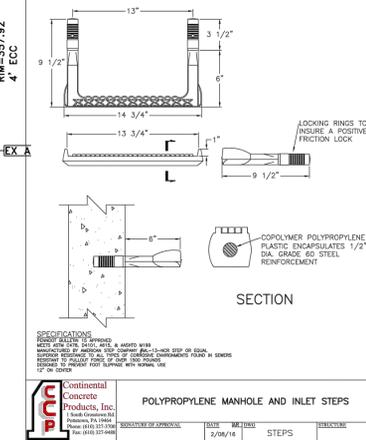
PROPOSED 25' HALF-ROW

EXISTING CARTWAY CENTERLINE



SANITARY MANHOLE LID ELEVATIONS

- ALL MANHOLES NOT LOCATED IN THE PAVED AREAS MUST BE EQUIPPED WITH WATER TIGHT FRAMES AND COVERS.
- MANHOLES IN NON-IMPROVED AREAS MUST BE EXTENDED 18 INCHES ABOVE GRADE.

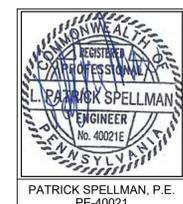


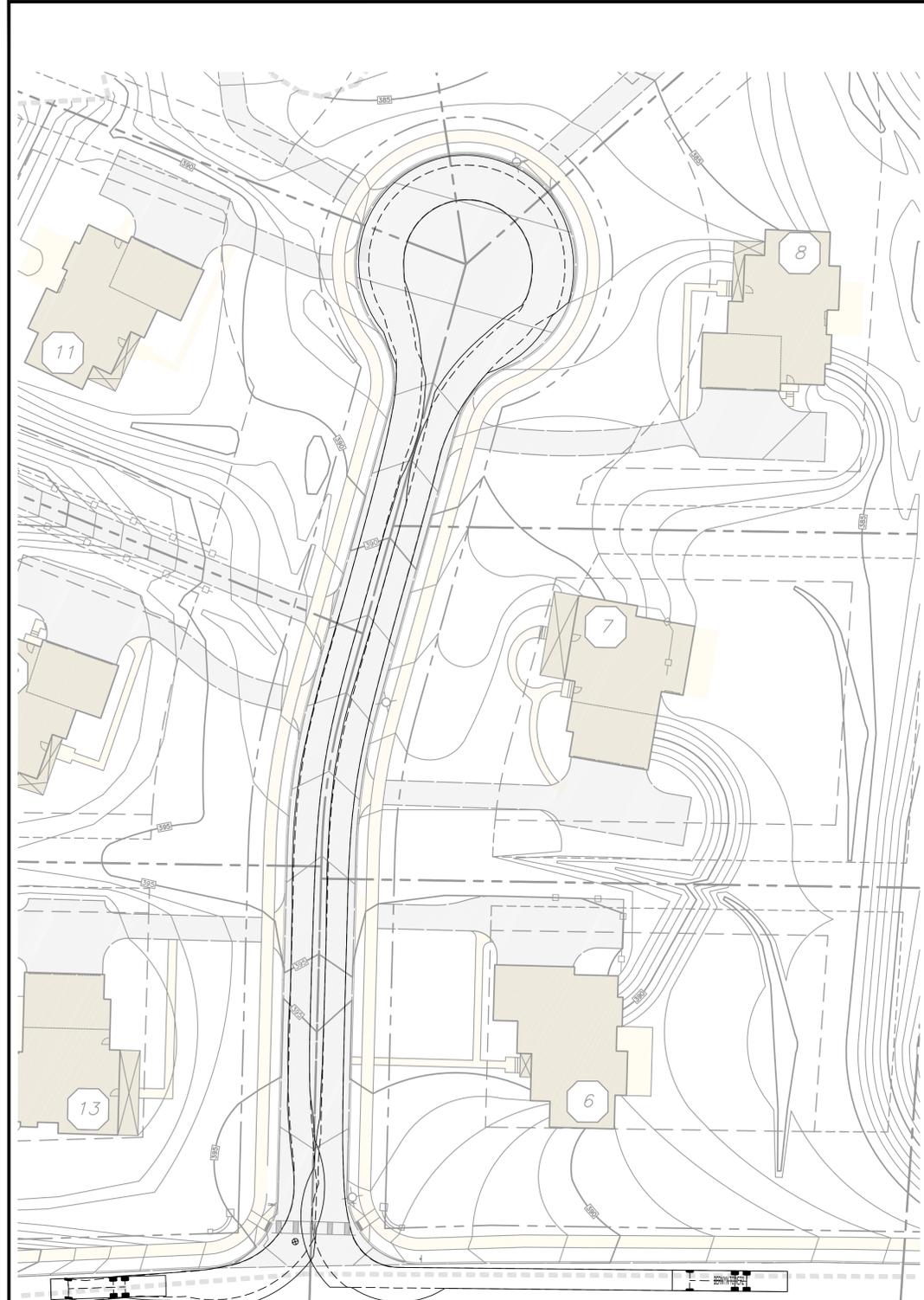
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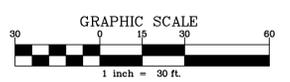
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RADNOR TOWNSHIP DELAWARE COUNTY PENNSYLVANIA
 SEPT. 15, 2020
SANITARY PROFILES AND CONSTRUCTION DETAILS
 SHEET 12 of 18
 AS NOTED





EMERGENCY VEHICLE TURNING TEMPLATE



VEHICLE DATA
E-ONE HPSS Mid Mount Tractor
 Tractor (with driver controlled steering)
 Fire Tender (Unspecified)

Description: No data
Notes: No data
Datum: Front Primary Axle

Front Axle(s):
 1 Ackerman (axes fixed, wheels turn)
 Primary Front Axle Offset: 0.000ft (Auto Calculated)
 Effective Front Axle Offset: 45.000ft (Any Front Wheel)
 Maximum Wheel Angle: Active Non Self-Steered
 8.333ft

Truck Width:
 Total Width: 2 (positioned at the ends of the axle)
 0.833ft (Auto Calculated - proportion of Truck Width)
 Tire Width: 2.917ft (Auto Calculated - proportion of Truck Width)
 Tire Diameter: 2.917ft (Auto Calculated - proportion of Truck Width)

Rear Axle(s):
 2 Fixed (All axes identical)
 Primary Rear Axle Offset: 18.417ft (Innermost Axle behind Front Primary Axle)
 Effective Rear Axle Offset: 20.833ft (Auto Calculated)
 Maximum Wheel Angle: Unlimited
 4.833ft

Stair:
 Active Non Self-Steered
 8.333ft

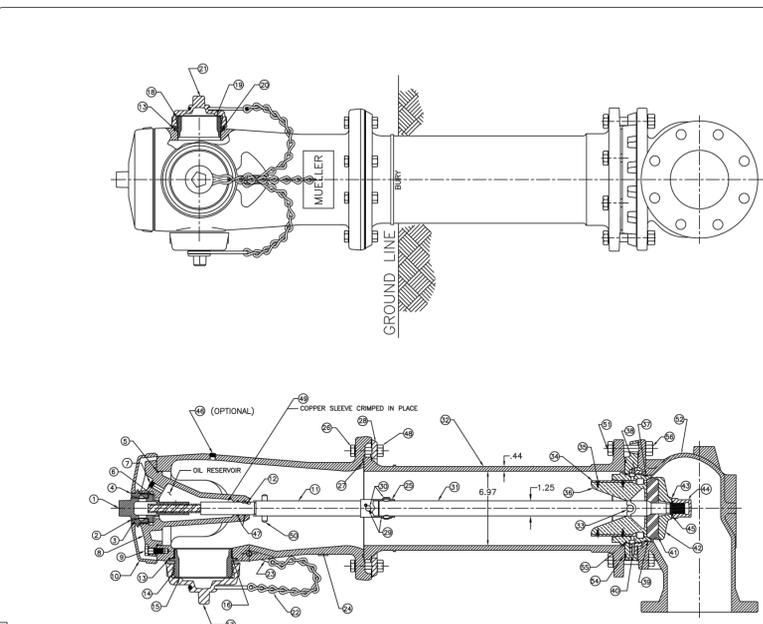
Truck Width:
 Total Width: 2 (positioned at the ends of the axle)
 0.833ft (Auto Calculated - proportion of Truck Width)
 Tire Width: 2.917ft (Auto Calculated - proportion of Truck Width)
 Tire Diameter: 2.917ft (Auto Calculated - proportion of Truck Width)

Steering:
 Maximum Wheel Angle: See Front Axles: Maximum Wheel Angle
 Calculated Maximum Wheel Angle: 45.000deg
 Lock-to-Lock Time (Twd/Rev): 6.0sec / 6.0sec
 Driver / Pilot: -2.995ft (in front of Front Primary Axle)
 Driver Offset Longitudinally: -1.969ft (Right of Centerline)
 Driver Height: 8.202ft (Above ground level)
 None

Front Coupling: None

Rear Coupling: None

Body outline (plan):
 Outline Type: Rectangle
 Offset (X,Y): -7.917ft, 0.000ft
 Length / Width: 47.750ft / 8.333ft



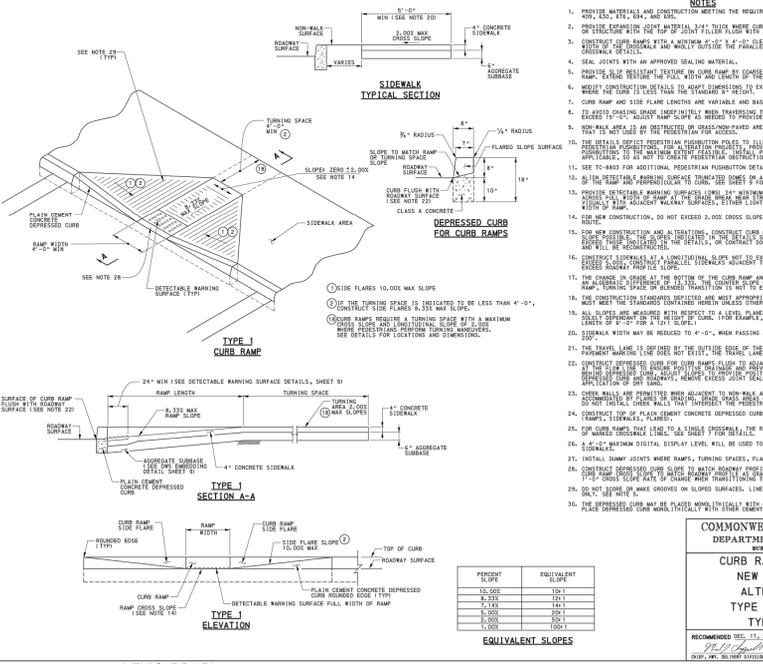
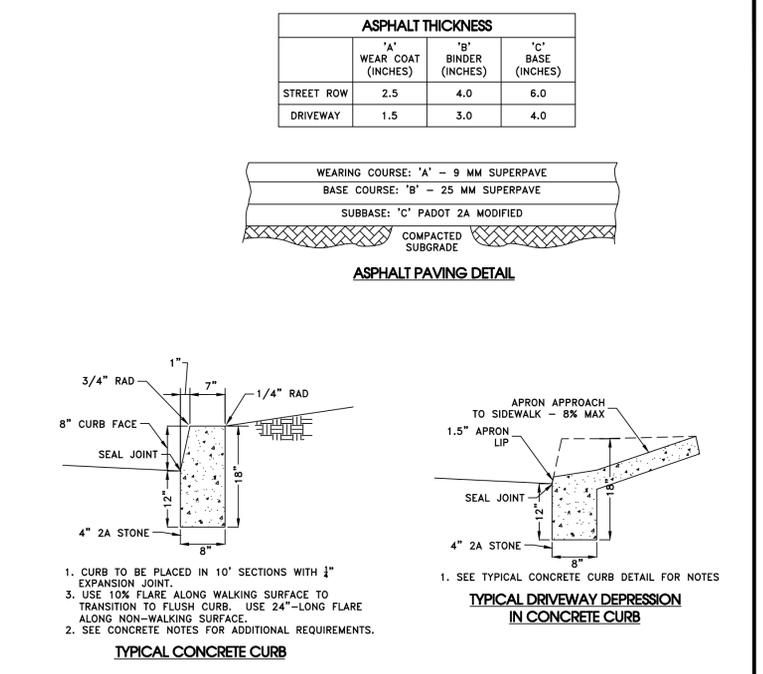
PARTS LIST

NO.	DESCRIPTION	QTY.	MATERIAL	UNIT
1	OPERATING NUT	1	BRONZE	3/8" ALLOY C83600
2	WIPER RING	1	RUBBER	3/8" EPDM
3	WIPER RING	1	RUBBER	3/8" EPDM
4	HOLD DOWN NUT	1	BRONZE	3/8" ALLOY C83600
5	BONNET W/ RING	1	RUBBER	3/8" EPDM
6	WIPER RING	1	RUBBER	3/8" EPDM
7	WIPER RING	1	RUBBER	3/8" EPDM
8	WIPER RING	1	RUBBER	3/8" EPDM
9	HOUSING BOLT	8	STEEL	A-191 BIPROX W/ B
10	WIPER RING	1	RUBBER	3/8" EPDM
11	UPPER STEM	1	CARBON STEEL	A-191 GR. 11447
12	WIPER RING	1	RUBBER	3/8" EPDM
13	WIPER RING	1	RUBBER	3/8" EPDM
14	PUMP NOZZLE	1	BRONZE	3/8" ALLOY C83600
15	WIPER RING	1	RUBBER	3/8" EPDM
16	WIPER RING	1	RUBBER	3/8" EPDM
17	WIPER RING	1	RUBBER	3/8" EPDM
18	HOSE NOZZLE	2	BRONZE	3/8" ALLOY C83600
19	WIPER RING	2	RUBBER	3/8" EPDM
20	WIPER RING	2	RUBBER	3/8" EPDM
21	HOSE NOZZLE	2	BRONZE	3/8" ALLOY C83600
22	COUPLER PIN	3	STEEL	A-191 GR. 11447
23	CHAM HOOD	1	STEEL	ELECTRO GALV
24	UPPER BARREL	1	CAST IRON	CLASS B
25	WIPER RING	1	RUBBER	3/8" EPDM
26	WIPER RING	1	RUBBER	3/8" EPDM
27	WIPER RING	1	RUBBER	3/8" EPDM
28	SAFETY FLANGE	1	CAST IRON	CLASS B
29	COUPLER PIN	2	STEEL	A-191 GR. 11447
30	CLIPPER PIN	2	STEEL	A-191 GR. 11447
31	LOWER STEM	1	CARBON STEEL	A-191 GR. 11447
32	LOWER BARREL	1	CAST IRON	CLASS B
33	WIPER RING	2	RUBBER	3/8" EPDM
34	DOWN WALK RING	2	4B POLYURETHANE	LS 900-20
35	DOWN WALK RING SCREW	4	STEEL	A-191 GR. 11447
36	UPPER WALK RING	1	BRONZE	3/8" ALLOY C83600
37	BITUM SPAL W/ RING	1	RUBBER	3/8" EPDM
38	DOWN WALK RING	1	CAST IRON	CLASS B
39	SEAT RING	1	BRONZE	3/8" ALLOY C83600
40	DOWN RING	1	BRONZE	3/8" ALLOY C83600
41	MAN VALVE	1	BRONZE	3/8" ALLOY C83600
42	LOWER VALVE PLATE	1	CAST IRON	CLASS B
43	LOWER VALVE	1	CAST IRON	CLASS B
44	VALVE NUT	1	CAST IRON	CLASS B
45	WALK WIPER	1	RUBBER	NOTICE
46	PIPE PLUG	1	RUBBER	NOTICE
47	DOWN RING	2	RUBBER	3/8" EPDM
48	DOWN RING	2	RUBBER	3/8" EPDM
49	SLAVE	1	COPPER	3/8" ALLOY 122
50	UPPER STEM	1	STEEL	A-191 GR. 11447
51	HEX BOLT	6	STEEL	A-191 GR. 11447
52	SHOULDER BOLT	1	STEEL	A-191 GR. 11447
53	PIPE GLAND	1	CAST IRON	CLASS B
54	DOWN WALK RING	1	RUBBER	3/8" EPDM
55	TOP	1	RUBBER	3/8" EPDM
56	HEX NUT	6	STEEL	A-191 GR. 11447



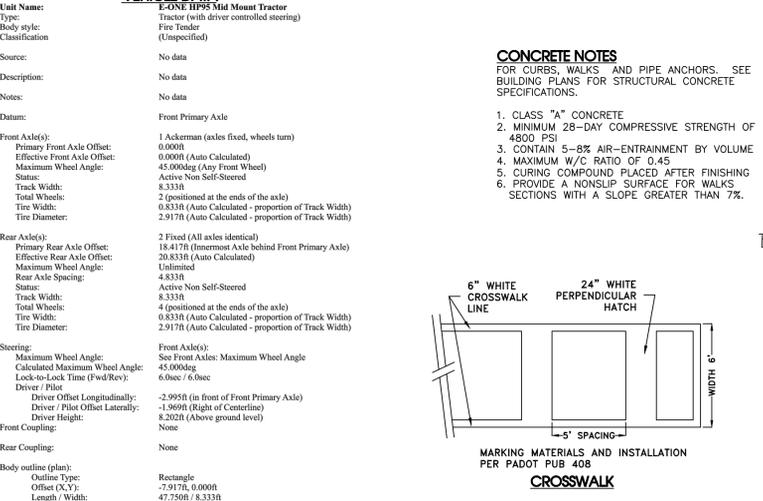
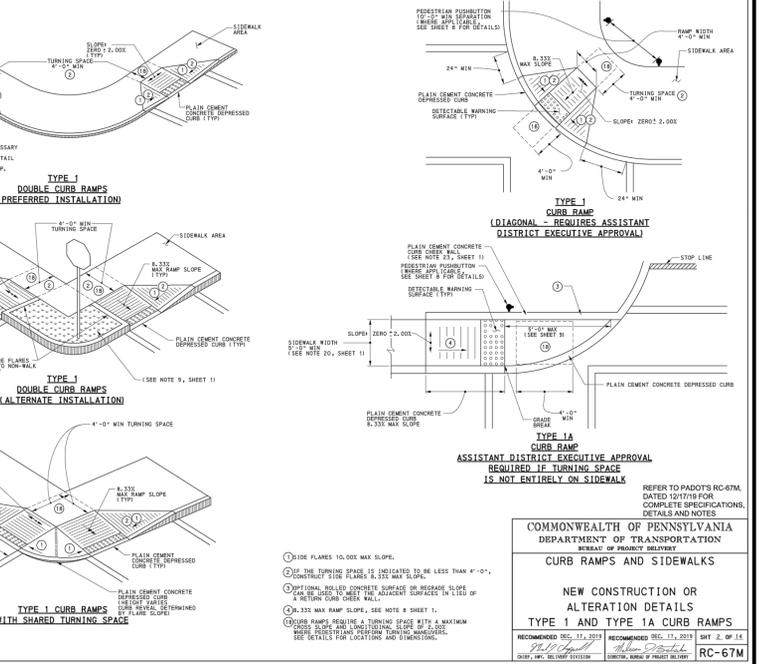
ASPHALT THICKNESS

	'A' WEAR COAT (INCHES)	'B' BINDER (INCHES)	'C' BASE (INCHES)
STREET ROW	2.5	4.0	6.0
DRIVEWAY	1.5	3.0	4.0



NOTES

1. PROVIDE MATERIALS AND CONSTRUCTION METHODS TO THE REQUIREMENTS OF PUBLICATION 408, SECTIONS 305, 400, AND 401.
2. SPECIFY EXPANSION JOINTS AT 10' INTERVALS. PROVIDE CURB EXPANSION JOINTS AT 10' INTERVALS. PROVIDE EXPANSION JOINTS AT 10' INTERVALS.
3. CONSTRUCT CURB RAMPS WITH A MAXIMUM FLARE OF 1\"/>



CONCRETE THICKNESS

	'D' REINFORCEMENT	'E' CONCRETE THICKNESS (IN)	'F' STONE BASE THICKNESS (IN)
SIDEWALK ROW	6 x 6/1.4-1.4 W.W.F.	4.0	4.0
WALKWAY	0.00	4.0	4.0
DRIVEWAY APRON	#4'S @ 10\"/>		

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF PROJECT DELIVERY

CURB RAMPS AND SIDEWALKS
 NEW CONSTRUCTION OR ALTERATION DETAILS
 TYPE 1 CURB RAMPS AND TYPICAL SECTIONS

RECOMMENDED DEC. 11, 2019
 RECOMMENDED DEC. 17, 2019
 SHEET 2 OF 14
 RC-67M

CONCRETE THICKNESS

	'D' REINFORCEMENT	'E' CONCRETE THICKNESS (IN)	'F' STONE BASE THICKNESS (IN)
SIDEWALK ROW	6 x 6/1.4-1.4 W.W.F.	4.0	4.0
WALKWAY	0.00	4.0	4.0
DRIVEWAY APRON	#4'S @ 10\"/>		

CONCRETE THICKNESS

	'A' WEAR COAT (INCHES)	'B' BINDER (INCHES)	'C' BASE (INCHES)
STREET ROW	2.5	4.0	6.0
DRIVEWAY	1.5	3.0	4.0

CONCRETE THICKNESS

	'A' WEAR COAT (INCHES)	'B' BINDER (INCHES)	'C' BASE (INCHES)
STREET ROW	2.5	4.0	6.0
DRIVEWAY	1.5	3.0	4.0

CONCRETE THICKNESS

	'A' WEAR COAT (INCHES)	'B' BINDER (INCHES)	'C' BASE (INCHES)
STREET ROW	2.5	4.0	6.0
DRIVEWAY	1.5	3.0	4.0

CONCRETE THICKNESS

	'A' WEAR COAT (INCHES)	'B' BINDER (INCHES)	'C' BASE (INCHES)
STREET ROW	2.5	4.0	6.0
DRIVEWAY	1.5	3.0	4.0

CONCRETE THICKNESS

	'A' WEAR COAT (INCHES)	'B' BINDER (INCHES)	'C' BASE (INCHES)
STREET ROW	2.5	4.0	6.0
DRIVEWAY	1.5	3.0	4.0

CONCRETE THICKNESS

	'A' WEAR COAT (INCHES)	'B' BINDER (INCHES)	'C' BASE (INCHES)
STREET ROW	2.5	4.0	6.0
DRIVEWAY	1.5	3.0	4.0

CONCRETE THICKNESS

	'A' WEAR COAT (INCHES)	'B' BINDER (INCHES)	'C' BASE (INCHES)
STREET ROW	2.5	4.0	6.0
DRIVEWAY	1.5	3.0	4.0

CONCRETE THICKNESS

	'A' WEAR COAT (INCHES)	'B' BINDER (INCHES)	'C' BASE (INCHES)
STREET ROW	2.5	4.0	6.0
DRIVEWAY	1.5	3.0	4.0

CONCRETE THICKNESS

	'A' WEAR COAT (INCHES)	'B' BINDER (INCHES)	'C' BASE (INCHES)
STREET ROW	2.5	4.0	6.0
DRIVEWAY	1.5	3.0	4.0

CONCRETE THICKNESS

	'A' WEAR COAT (INCHES)	'B' BINDER (INCHES)	'C' BASE (INCHES)
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CONCRETE THICKNESS

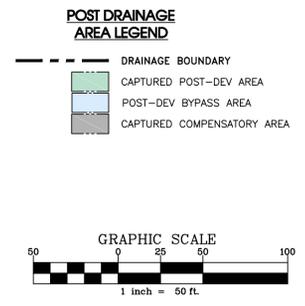
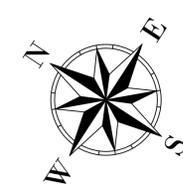
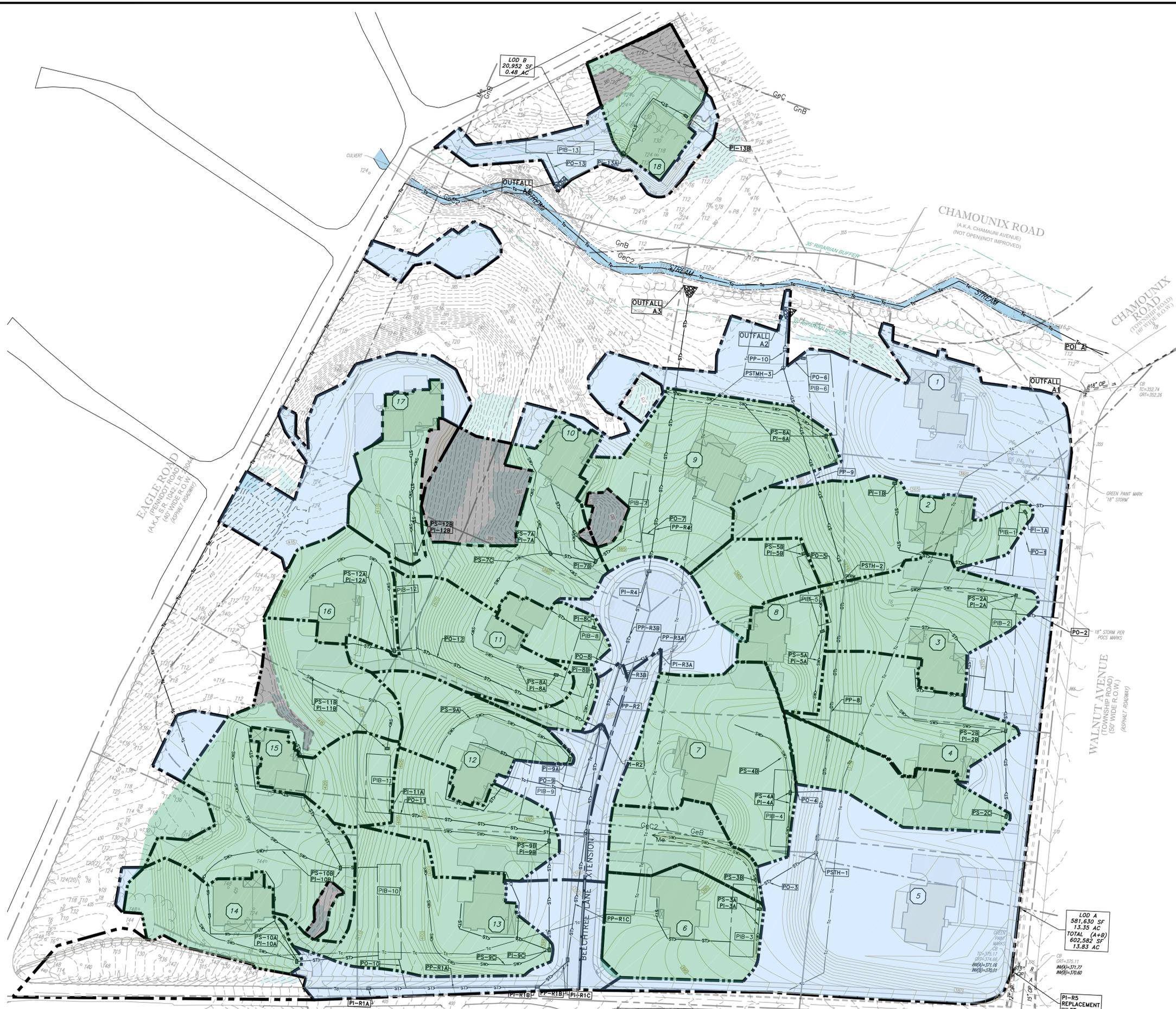
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CONCRETE THICKNESS

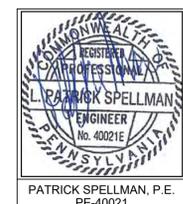
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NUM.	DATE	REVISION
7.	9/16/2021	REVISE PER JULY 2021 TOWNSHIP REVIEW LETTERS
6a.	7/10/2021	REVISE PER ZHB APPROVAL & TOWNSHIP REVIEW LETTERS
5.	2/16/2021	REVISE PER TOWNSHIP 3RD REVIEW LETTERS
4.	1/19/2021	UPDATE PROFILES
3.	1/15/2021	REVISE PER TOWNSHIP 2ND REVIEW LETTERS AND PC INPUT
2.	12/7/2020	REVISE PER TOWNSHIP REVIEW LETTERS AND PC INPUT

PLAN PREPARED BY:
SITE ENGINEERING CONCEPTS, LLC
 P.O. BOX 1992
 SOUTHEASTON, PA 19399
 P: 610-240-0450 F: 610-240-0451 E: INFO@SITE-ENGINEERS.COM

PRELIMINARY/FINAL SUBDIVISION AND LAND DEVELOPMENT PLAN
 PLAN PREPARED FOR:
CG WAYNE, LLC
 EAGLE & RADNOR ROAD, WAYNE, PA 19087
 RADNOR TOWNSHIP DELAWARE COUNTY PENNSYLVANIA
 SEPT. 15, 2020



POST-CONSTRUCTION DRAINAGE AREAS

SHEET 15 of 18

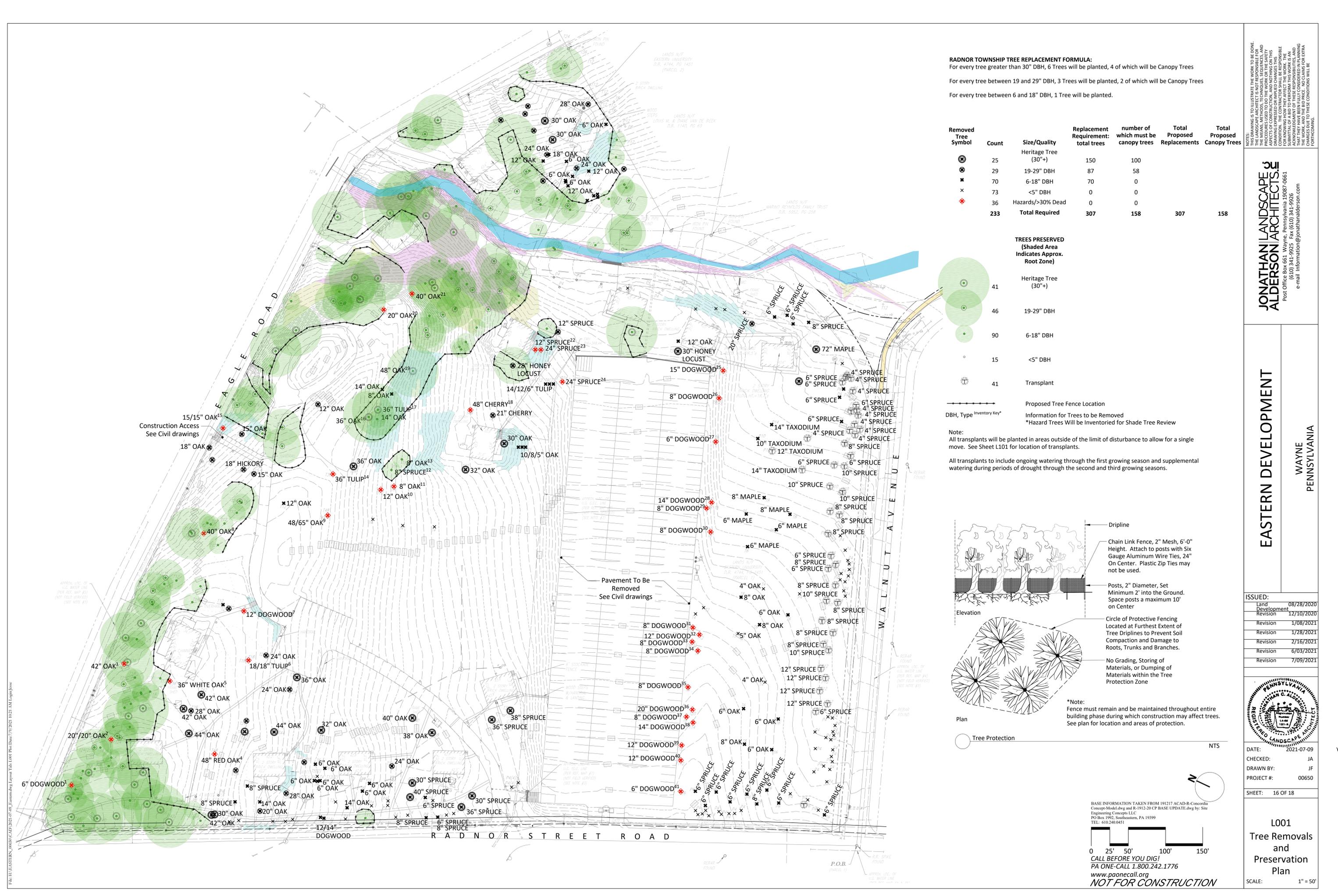
AS NOTED

LOD A
 581,630 SF
 13.35 AC
 TOTAL (A+B)
 602,582 SF
 13.83 AC

LOD B
 20,952 SF
 0.48 AC

PI-R5
 REPLACEMENT
 INLET

PATRICK SPELLMAN, P.E.
 PE-40021



RADNOR TOWNSHIP TREE REPLACEMENT FORMULA:
 For every tree greater than 30" DBH, 6 Trees will be planted, 4 of which will be Canopy Trees
 For every tree between 19 and 29" DBH, 3 Trees will be planted, 2 of which will be Canopy Trees
 For every tree between 6 and 18" DBH, 1 Tree will be planted.

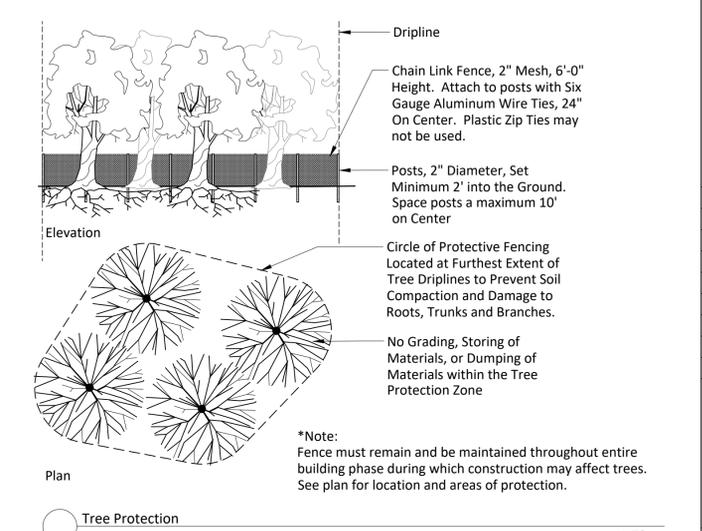
Removed Tree Symbol	Count	Size/Quality	Replacement Requirement: total trees	number of which must be canopy trees	Total Proposed Replacements	Total Proposed Canopy Trees
⊗	25	Heritage Tree (30"+)	150	100		
⊕	29	19-29" DBH	87	58		
*	70	6-18" DBH	70	0		
x	73	<5" DBH	0	0		
+	36	Hazards/>30% Dead	0	0		
	233	Total Required	307	158	307	158

TREES PRESERVED (Shaded Area Indicates Approx. Root Zone)

⊗	41	Heritage Tree (30"+)
⊕	46	19-29" DBH
*	90	6-18" DBH
x	15	<5" DBH
⊕	41	Transplant

DBH, Type Inventory Key*
 Proposed Tree Fence Location
 Information for Trees to be Removed
 *Hazard Trees Will be Inventoried for Shade Tree Review

Note:
 All transplants will be located in areas outside of the limit of disturbance to allow for a single move. See Sheet L101 for location of transplants.
 All transplants to include ongoing watering through the first growing season and supplemental watering during periods of drought through the second and third growing seasons.



DATE: 2021-07-09
 CHECKED BY: JA
 DRAWN BY: JF
 PROJECT #: 00650
 SHEET: 16 OF 18

BASE INFORMATION TAKEN FROM 191217 ACAD-R-Conceptoria Concept-Model.dwg and R-1912-20 CP BASE UPDATE.dwg by: Site Engineering Concepts LLC
 PO Box 1992, Southeastern, PA 19399
 TEL: 610.240.0451

CALL BEFORE YOU DIG!
 PA ONE-CALL 1.800.242.1776
 www.paonecall.org
NOT FOR CONSTRUCTION

THIS DRAWING IS TO ILLUSTRATE THE WORK TO BE DONE. THE LANDSCAPE ARCHITECT IS NOT RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED AND PROCEDURES USED TO DO THE WORK OR THE SAFETY ASPECTS OF CONSTRUCTION, AND NOTHING ON THIS DRAWING SHALL BE CONSIDERED A CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KNOWING HOW THEY AFFECT THE WORK. THE LANDSCAPE ARCHITECT SHALL BE RESPONSIBLE FOR ACKNOWLEDGING THESE RESPONSIBILITIES, AND THAT THEY HAVE BEEN FULLY CONSIDERED IN PLANNING AND DESIGNING THE WORK. CHARGES DUE TO THESE CONDITIONS WILL BE FORTHCOMING.

JONATHAN LANDSCAPE ARCHITECTS, LLC
 Post Office Box 661, Wayne, Pennsylvania 19087-0661
 (610) 341-9925 Fax (610) 341-9926
 e-mail: Information@jonathanlandscape.com

EASTERN DEVELOPMENT
 WAYNE
 PENNSYLVANIA

ISSUED:
 Land Development 08/28/2020
 Revision 12/10/2020
 Revision 1/08/2021
 Revision 1/28/2021
 Revision 2/16/2021
 Revision 6/03/2021
 Revision 7/09/2021

PENNSYLVANIA
 REGISTERED LANDSCAPE ARCHITECT
 JONATHAN LANDSCAPE ARCHITECTS, LLC
 191217 ACAD-R-Conceptoria
 12/10/2020

DATE: 2021-07-09
 CHECKED BY: JA
 DRAWN BY: JF
 PROJECT #: 00650
 SHEET: 16 OF 18

L001
Tree Removals and Preservation Plan
 SCALE: 1" = 50'



Existing Street Tree, Typ.
Tree Protection Fencing, Typ.

EXISTING STREET TREES
One tree required for every 30 Linear Feet of Road
Existing Street Trees are outlined in Dashed Line

Eagle Road: 1,314 Linear Feet - 44 Trees Required,
44 Existing Trees Preserved

Radnor Street Road: 220 Linear Feet: 8 Trees
required, 8 Existing Trees Preserved



BASE INFORMATION TAKEN FROM: 191217 AC-AD-R-Concordia
Concept Model.dwg and R-1912-20 CP BASE UPDATE.dwg by: Site
Engineering Concepts LLC
PO Box 1992, Southeastern, PA 19399
TEL: 610.240.0451

AERIAL INFORMATION TAKEN FROM:
Google Maps, 2019
Pennsylvania Emergency Management Agency, via Pennsylvania
Spatial Data Access, 2019



CALL BEFORE YOU DIG!
PA ONE-CALL 1.800.242.1776

www.paonecall.org
NOT FOR CONSTRUCTION

ENLARGEMENT A - EXISTING STREET TREES

NOTES:
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DRAWING IS TO BE CONSIDERED A CONTRACT DOCUMENT.
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FOR KNOWING HOW THEY AFFECT THE WORK. THE
LANDSCAPE ARCHITECT SHALL NOT BE RESPONSIBLE FOR
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**JONATHAN LANDSCAPE
ALDERSON ARCHITECTS, PC**

Post Office Box 661, Wayne, Pennsylvania 19087-0661
(610) 341-9925 Fax (610) 341-9926
e-mail: Information@jonathanalderson.com

EASTERN DEVELOPMENT

WAYNE
PENNSYLVANIA

ISSUED:

Revision	01/28/2021
Revision	02/16/2021
Revision	06/03/2021
Revision	07/09/2021



DATE: 2021-07-09
CHECKED BY: JA
DRAWN BY: JF
PROJECT #: 00650

SHEET: 18 OF 18

L102

Existing Street
Trees Plan

SCALE: 1" = 50'

ORDINANCE 2021-___

**TOWNSHIP OF RADNOR
Delaware County, Pennsylvania**

AN ORDINANCE AUTHORIZING THE INCURRENCE BY THE TOWNSHIP OF RADNOR OF NONELECTORAL DEBT BY THE ISSUANCE OF GENERAL OBLIGATION BONDS, SERIES A OF 2021 (FEDERALLY TAXABLE) IN AN AGGREGATE PRINCIPAL AMOUNT NOT TO EXCEED \$15,500,000 FOR THE PURPOSE OF PROVIDING FUNDS TO ADVANCE REFUND ALL OR A PORTION OF THE TOWNSHIP'S OUTSTANDING GENERAL OBLIGATION NOTES, SERIES B OF 2013 (TAX-EXEMPT) AND TO PAY THE COSTS OF ISSUANCE OF THE BONDS; AUTHORIZING THE PREPARATION AND FILING OF A DEBT STATEMENT AND OTHER DOCUMENTATION; PROVIDING FOR THE ADVANCE REFUNDING OF THE DEBT BEING REFUNDED AND AUTHORIZING A PLEDGE AND ESCROW AGREEMENT FOR SUCH PURPOSE; COVENANTING TO CREATE A SINKING FUND AND TO BUDGET, APPROPRIATE AND PAY DEBT SERVICE ON THE BONDS; PLEDGING THE FULL FAITH, CREDIT AND TAXING POWER OF THE TOWNSHIP FOR THE PROMPT AND FULL PAYMENT OF THE BONDS; SETTING FORTH THE SUBSTANTIAL FORM OF THE BONDS; SETTING FORTH THE STATED PRINCIPAL MATURITY OR SINKING FUND REDEMPTION DATES AND MAXIMUM PRINCIPAL AMOUNTS, MAXIMUM INTEREST RATES AND INTEREST PAYMENT DATES, PLACE OF PAYMENT, SINKING FUND PROVISIONS AND OTHER DETAILS OF THE BONDS; APPROVING THE CONTENT AND FORM OF A PRELIMINARY OFFICIAL STATEMENT AND AUTHORIZING THE DISTRIBUTION THEREOF AND AUTHORIZING THE PREPARATION, EXECUTION AND DELIVERY OF AN OFFICIAL STATEMENT; AUTHORIZING THE EXECUTION OF A PAYING AGENT AGREEMENT AND A CONTINUING DISCLOSURE AGREEMENT OR SUPPLEMENT; FINDING THAT A PRIVATE NEGOTIATED SALE OF THE BONDS IS IN THE BEST FINANCIAL INTEREST OF THE TOWNSHIP; ACCEPTING A PROPOSAL FOR THE PURCHASE OF THE BONDS WITHIN CERTAIN PARAMETERS; APPOINTING A PAYING AGENT AND SINKING FUND DEPOSITORY; AND AUTHORIZING OTHER NECESSARY ACTION.

WHEREAS, pursuant to the Local Government Unit Debt Act, 53 Pa. Cons. Stat. §8001 *et seq.* (the "Act"), the Township of Radnor, Delaware County, Pennsylvania (the "Township") may incur indebtedness for the purpose of refunding prior indebtedness; and

WHEREAS, on June 13, 2013, the Township issued nonelectoral debt evidenced by its \$14,350,000 principal amount General Obligation Notes, Series B of 2013 (Tax-Exempt) (DCED Approval No. GON-13061003, June 10, 2013) (the "2013B Notes"), which were issued to (i) advance refund the Township's General Obligation Bonds, Series of 2004 (the "2004 Bonds"); and (ii) fund the costs and expenses of issuing the 2013B Notes; and

WHEREAS, the 2004 Bonds were issued to (i) currently refund the Township's General Obligation Note, Series of 2003 (the "2003 Note"); (ii) fund the construction and renovation of the Township Municipal Building and various capital projects; (iii) make loans to the Wayne Art

Center (the “Art Center”) and the Radnor Memorial Library (the “Library”); and (iv) fund the costs and expenses of issuing the 2004 Bonds; and

WHEREAS, the Township has determined to undertake a refinancing to achieve debt service savings (the “Refunding Program”) consisting of the advance refunding of all or a portion of the outstanding 2013B Notes, in the outstanding principal amount of \$12,845,000 (the notes being so refunded, all of which are nonelectoral debt, are referred to herein as the “Refunded Notes”); and

WHEREAS, the Township proposes to issue its General Obligation Bonds, Series A of 2021 (Federally Taxable) (the “Bonds”) in the maximum aggregate principal amount of \$15,500,000 to provide funds to finance (i) the advance refunding of the Refunded Notes; and (ii) the payment of the costs and expenses of issuing the Bonds; and

WHEREAS, the Board of Commissioners of the Township (the “Board”) has determined that the net savings to be generated by the Refunding Program (the “Required Savings”) must be equal to at least three percent (3.0%) of the principal amount of the Refunded Notes ; and

WHEREAS, the Board has considered the possible manners of sale provided for in the Act with respect to the sale of the Bonds, such manners of sale being at public sale or private sale by negotiation or upon invitation; and

WHEREAS, the Township has determined that it is in the best financial interest of the Township to sell the Bonds at private negotiated sale, and the Township has received a proposal for the purchase of the Bonds (the “Purchase Proposal”) from Boenning & Scattergood, Inc., of West Conshohocken, Pennsylvania (the “Underwriter”), containing the financial parameters for, and conditions to, the underwriting and issuance of the Bonds (the “Parameters”), which will be supplemented by an addendum to the Purchase Proposal (the “Addendum”) containing the final terms of the Bonds, consistent with the Parameters and the Required Savings; and

WHEREAS, the Board desires to approve the issuance of the Bonds, approve the Refunding Program, and accept the Purchase Proposal of the Underwriter; and

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners of the Township of Radnor and IT IS HEREBY RESOLVED, as follows:

1. Authorization of the Refunding Program and Incurrence of Indebtedness; and Purpose of the Refunding Program. The Township hereby approves the Refunding Program as described in the preambles to this Ordinance, and shall incur indebtedness, pursuant to the Act, in an aggregate principal amount not to exceed \$15,500,000 to finance the costs of the Refunding Program and the costs and expenses of issuing the Bonds.

It is hereby determined and set forth that the purpose of the Refunding Program is to reduce the total debt service that would otherwise be payable on the Refunded Notes over the life of the issue. Attached hereto as **Exhibit B** and made a part hereof is the schedule of the estimated debt service savings in connection with the refinancing of the Refunded Notes computed in accordance with Section 8242(b) of the Act.

The 2013B Notes were issued to (i) advance refund the 2004 Bonds; and (ii) fund the costs and expenses of issuing the 2013B Notes

The 2004 Bonds were issued to (i) currently refund the 2003 Note; (ii) fund the construction and renovation of the Township Municipal Building and various capital projects; (iii) make loans to the Art Center (the “2004 Art Center Loan”) and the Library (the “Library Loan”); and (iv) fund the costs and expenses of issuing the 2004 Bonds.

The 2003 Note was issued to finance the cost of construction and acquisitions of various capital improvements for the Township facilities. The estimated useful lives of the projects financed with the proceeds of the 2003 Note was determined by the Township to be 29.21 years, which is currently 11.21 years.

The estimated useful life of the construction and renovation of the Township Municipal Building and various capital projects financed with the proceeds of the 2004 Bonds was determined by the Township to be thirty-five (35) years, which is currently eighteen (18) years.

The estimated useful life of the project financed from the 2004 Art Center Loan, which loan was financed with the proceeds of the 2004 Bonds, was determined to be thirty (30) years, which is currently thirteen (13) years.

The estimated useful life of the project financed from the Library Loan, which loan was financed with the proceeds of the 2004 Bonds, was determined to be twenty-five (25) years, which is currently eight (8) years.

A portion of the proceeds of the 2004 Bonds allocable to the Library Loan was returned to the Township and repurposed for Township purposes. The ordinance of the Township authorizing the issuance of the 2013B Notes amended the original purpose for which the such portion of the 2004 Bonds were originally issued to include the financing of various parking lot and building improvements at the Township Municipal Building, including, but not limited to, installing an expanded parking field (approx. 25 additional spaces) on the site as well as internal building improvements including the construction of new walls, electrical wiring, network connections, and other necessary appurtenances to accommodate the relocation of the Police Administration to the ground floor of the building (the “Repurposed Funds Projects”). The estimated useful lives of the Repurposed Funds Projects were determined to be not less than the estimated useful life of the projects that were to be financed with the Library Loan, which was twenty-five (25) years. The remaining useful lives of the Repurposed Funds Projects is currently at least eight (8) years.

The Township further determined that the 2004 Bonds and the 2013B Notes were scheduled to mature in accordance with the limitations set forth in the Act.

The realistic estimated useful lives of the projects described above were determined at the time of issuance of the 2003 Note and the 2004 Bonds and, with respect to the Repurposed Funds Projects, the 2013B Notes. Such determinations are hereby ratified and confirmed, and the principal amount of the Bonds equal to the separate cost of the portions of such projects having an unexpired shorter useful lives than the period during which the Bonds will be outstanding have been scheduled to mature prior to the end of such useful life and the balance prior to the end of the

longest unexpired useful life. The maturities of the Bonds will not extend beyond the final maturity of the 2013B Notes.

2. **Authorization of Issuance of the Bonds.** The Township shall issue, pursuant to the Act and this Ordinance, its General Obligation Bonds, Series A of 2021 (Federally Taxable), in a maximum aggregate principal amount not to exceed \$15,500,000, in order to provide funds for and toward the costs of the Refunding Program and paying the costs of issuing the Bonds as authorized and provided in Section 1 hereof. The Township reserves the right to issue the Bonds in an amount less than the maximum principal amount authorized hereunder and to cancel any unused authorization hereunder in accordance with the terms of the Act. The Bonds may be issued in one or more separate series, at any one time or from time to time, and if issued in more than one series, each series shall be appropriately designated by year and specific series name. In the event the Bonds are issued from time to time, all authorizations and approvals set forth herein shall extend to such additional documents and actions of the type expressly authorized and approved herein with respect to such additional series of Bonds, including, but not limited to, additional Preliminary Official Statements, Official Statements, Addendums, Continuing Disclosure Agreements, Paying Agent agreements, and sinking funds as necessary in connection with the issuance of such series of Bonds.

3. **Type of Indebtedness.** The indebtedness evidenced by the Bonds is nonelectoral debt.

4. **Execution of Debt Statement; Bonds and Other Documents.** The President or Vice President of the Board and the Secretary of the Township and their successors are hereby authorized and directed to file the Debt Statement required by Section 8110 of the Act, to execute and deliver the Bonds in the name and on behalf of the Township and to take all other action required by the Act or this Ordinance in order to effect the issuance of the Bonds. Said officers or any of them are further authorized to apply to the Department of Community and Economic Development for approval of the debt herein authorized and to file with such application a transcript of the proceedings including a certified copy of this Ordinance, the Debt Statement, a Borrowing Base Certificate signed by the appropriate officials of the Township or by the accountants of the Township responsible for auditing its financial affairs, and to take any and all such further action and to execute and deliver such other documents as may be necessary or proper to comply with all requirements of the Act or to carry out the intent and purpose of this Ordinance. Said officers and their successors are further hereby authorized if, in their opinion, it is advisable to do so, to prepare and file such statements and documents as may be required by Sections 8024 or 8026 of the Act in order to qualify all or any portion of the existing indebtedness of the Township or of the Bonds as subsidized debt or self-liquidating debt.

5. **Type of Bonds.** The Bonds when issued will be general obligation bonds.

6. **Covenant to Pay Debt Service - Pledge of Taxing Power.** The Township hereby covenants with the registered owners of the Bonds: (a) that the Township will include in its budget for each fiscal year for the life of the Bonds, the amount of the debt service on the Bonds issued hereunder which will be payable in each such fiscal year so long as the Bonds shall remain outstanding; (b) that the Township shall appropriate from its general revenues such amounts to the payment of such debt service; (c) that the Township shall duly and punctually pay or cause to be

paid from the Sinking Fund (as hereinafter defined) or any of its other revenues or funds the principal of every Bond and the interest thereon at the dates and places and in the manner stated in the Bonds according to the true intent and meaning thereof; and (d) for such budgeting, appropriation and payment the Township hereby pledges its full faith, credit and taxing power. This covenant shall be specifically enforceable. The maximum amounts to be budgeted, appropriated and paid pursuant to the foregoing covenants shall not exceed those set forth in **Exhibit C** attached hereto and made a part hereof which are hereby incorporated in the foregoing covenant with the same effect as if the same were specified in the text of such covenant.

7. Form of Bonds. The Bonds shall be substantially in the form set forth in **Exhibit A** hereto, with appropriate omissions, insertions and variations.

8. Terms of Bonds. The Bonds shall be issued in fully registered form, in the denomination of \$5,000 or any integral multiple thereof and shall be dated the date of issuance thereof or such other date as the Township and the Underwriter shall agree. The Bonds shall be issued in an aggregate principal amount not to exceed \$15,500,000. The interest rates on the Bonds shall not exceed five and a half percent (5.500%) per annum. No yield on the Bonds for any stated maturity date in the last two-thirds of the period of the Bonds may be less than that stated for the immediately preceding year. The Bonds shall mature or be subject to sinking fund redemption in annual principal amounts not to exceed the maximum principal amount for each fiscal year as set forth in **Exhibit C** hereto.

The Bonds are being amortized so that the debt service on all outstanding debt of the Township following the issuance of the Bonds will be brought more nearly into an overall level annual debt service plan.

The principal of the Bonds shall be payable in lawful money of the United States of America at the corporate trust office of U.S. Bank National Association, in Philadelphia Pennsylvania, which is hereby appointed paying agent and registrar for the Bonds and the sinking fund depository (the "Paying Agent"). Interest on the Bonds shall be payable in the manner provided in the form of Bonds set forth in **Exhibit A** hereto.

9. Redemption of Bonds. The Bonds shall be subject to redemption prior to maturity, at the option of the Township, as a whole or in part from time to time, in any order of maturity or portion of a maturity as selected by the Township, on a date not earlier than the eighth (8th) anniversary of the issuance of such Bonds, or any date thereafter upon payment of a redemption price of 100% of principal amount plus interest accrued to the redemption date. If any of the Bonds are to be issued and delivered as term bonds, (i) such term bonds shall be subject to mandatory sinking fund redemption on such date or dates and in such principal amount or amounts as shall be necessary to conform to the principal retirement schedule set forth in **Exhibit C** hereto and (ii) in lieu of such mandatory sinking fund redemption, the Paying Agent, with the approval of the Township, may purchase from money in the Sinking Fund, at a price not to exceed the principal amount thereof plus accrued interest, or the Township may tender to the Paying Agent, all or part of the Bonds subject to being drawn for redemption in any such year

If less than an entire year's maturity of Bonds is to be redeemed at any particular time, such Bonds so to be called for redemption shall be chosen by lot by the Paying Agent.

In the event that a portion, but not all of the term bonds are redeemed pursuant to optional redemption, then the principal amount of any remaining mandatory sinking fund redemptions and the final maturity applicable to such term bonds shall be proportionately reduced (subject to the Paying Agent making such adjustments as it deems necessary to be able to affect future redemptions of such Bonds in authorized denominations) unless the Township directs an alternate reduction of such mandatory sinking fund redemptions and final maturity.

For the purpose of selection of Bonds for redemption, any Bond of a denomination greater than \$5,000 shall be treated as representing such number of separate Bonds, each of the denomination of \$5,000, as is obtained by dividing the actual principal amount of such Bond by \$5,000. Any Bond which is to be redeemed only in part shall be surrendered at the corporate trust office of the Paying Agent in Philadelphia, Pennsylvania, together with a duly executed instrument of transfer in form satisfactory to the Paying Agent, and the registered owner of such Bond shall receive, without service charge, a new Bond or Bonds, of any authorized denomination as requested by such registered owner in aggregate principal amount equal to and in exchange for the unredeemed portion of the principal of the Bond so surrendered.

On the date designated for redemption, and upon deposit with the Paying Agent of funds sufficient for payment of the principal of and accrued interest on the Bonds called for redemption, interest on the Bonds or portions thereof so called for redemption shall cease to accrue and the Bonds or portions thereof so called for redemption shall cease to be entitled to any benefit of security hereunder, and registered owners of the Bonds so called for redemption shall have no rights with respect to the Bonds or portions thereof so called for redemption, except to receive payment of the principal of and accrued interest on the Bonds so called for redemption to the date fixed for redemption.

Notice of any redemption shall be given by first class mail, postage prepaid, mailed by the Paying Agent not less than 20 or more than 60 days before the redemption date to the registered owners of the Bonds at their addresses as they appear on the bond register maintained by the Paying Agent. Such notice shall also be filed by the Paying Agent with the Municipal Securities Rulemaking Board. Such notice shall be given in the name of the Township, shall identify the Bonds to be redeemed (and, in the case of a partial redemption of any Bonds, the respective principal amounts thereof to be redeemed), shall specify the redemption date and the redemption price, and shall state that on the redemption date the Bonds called for redemption will be payable at the corporate trust office of the Paying Agent in Philadelphia, Pennsylvania and that from the date of redemption interest will cease to accrue. The Paying Agent shall use "CUSIP" numbers (if then generally in use) in notices of redemption as a convenience to Bond owners, provided that any such redemption notice shall state that no representation is made as to the correctness of such numbers either as printed on the Bonds or as contained in any notice of redemption and that reliance may be placed only on the identification numbers prefixed "R-" printed on the Bonds. Failure to mail any notice of redemption, or any defect therein, or in the mailing thereof, with respect to any Bond shall not affect the validity of any proceeding for redemption of other Bonds so called for redemption.

With respect to any optional redemption of the Bonds, if at the time of mailing such notice of redemption, the Township shall not have deposited with the Paying Agent monies sufficient to redeem all the Bonds called for redemption, such notice may state that it is conditional, that is,

subject to the deposit of the redemption monies with the Paying Agent not later than the redemption date, and such notice shall be of no effect unless such monies are so deposited.

10. Appointment of Securities Depository. The Depository Trust Company, New York, New York (“DTC”), shall act as securities depository for the Bonds on behalf of the firms which participate in the DTC book-entry system (“DTC Participants”). The ownership of one fully registered Bond for each maturity of the Bonds will be registered in the name of Cede & Co., as nominee for DTC. Each Bond certificate will be in the aggregate principal amount of such maturity. The Township shall cause the Bonds to be delivered to DTC or the Paying Agent, as custodian for DTC, on or before the date of issuance of the Bonds.

Pursuant to the book-entry only system, any person for whom a DTC Participant acquires an interest in the Bonds (the “Beneficial Owner”) will not receive bond certificates and will not be the registered owner thereof. Ownership interest in the Bonds may be purchased by or through DTC Participants. Each DTC Participant will receive a credit balance in the records of DTC in the amount of such DTC Participant’s interest in the Bonds, which will be confirmed in accordance with DTC’s standard procedures. Receipt by the Beneficial Owners (through any DTC Participant) of timely payment of principal, premium, if any, and interest on the Bonds, is subject to DTC making such payment to DTC Participants and such DTC Participants making payment to Beneficial Owners. Neither the Township nor the Paying Agent will have any direct responsibility or obligation to such DTC Participants or the persons for whom they act as nominees for any failure of DTC to act or make any payment with respect to the Bonds.

The Township is authorized to execute such documents as may be necessary or desirable in connection with DTC’s services as securities depository including a blanket letter of representation obligating the Township to give certain notices to DTC and to meet certain requirements relating to Bond payments.

If DTC determines to discontinue providing its services as securities depository with respect to the Bonds at any time, the Township officials then holding the offices set forth in Section 4 of this Ordinance are hereby authorized to designate a successor securities depository or to deliver certificates to or upon the order of the registered owners of the Bonds.

The Township shall give notice or cause the Paying Agent to give notice, to DTC in accordance with the Blanket Letter of Representations for the redemption or other retirement of all of the Bonds. The Township will provide for the form of notice. Upon receipt of such notice, DTC will forward the notice to the DTC Participants for subsequent forwarding of such notice to the Beneficial Owners of the Bonds. The Township will pay the customary charges for such mailing.

11. Sale of Bonds. The Bonds shall be sold at private sale by negotiation as hereinafter set forth in Section 14. After due consideration, the Board hereby finds and determines, on the basis of all available information, that a private negotiated sale of the Bonds is in the best financial interest of the Township.

12. Creation of and Deposits in Sinking Fund. The Township covenants that there shall be and there is hereby established and that it shall hereafter maintain a sinking fund

designated “Sinking Fund - General Obligation Bonds, Series A of 2021 (Federally Taxable)” for the Bonds (the “Sinking Fund”) to be held by the Paying Agent (or such substitute or successor Paying Agent which shall hereafter be appointed in accordance with the provisions of the Act) in the name of the Township, but subject to withdrawal only by the Paying Agent.

The Township covenants and agrees to deposit in such Sinking Fund no later than each Interest Payment Date (as defined in the form of the Bonds attached hereto), the debt service payable on the Bonds on such dates, which shall not exceed the maximum amounts set forth in **Exhibit C** attached hereto, or such greater or lesser amount as at the time shall be sufficient to pay principal of and interest on the Bonds becoming due on each such date.

Pending application to the purpose for which such Sinking Fund is established, the President or Vice President of the Board is hereby authorized and directed to cause the monies therein to be invested or deposited and insured or secured as permitted and required by Section 8224 of the Act. All income received on such deposits or investments of monies in such Sinking Fund during each applicable period shall be added to such Sinking Fund and shall be credited against the deposit next required to be made in such Sinking Fund.

The Paying Agent is hereby authorized and directed, without further action by the Township, to pay from such Sinking Fund the principal of and interest on the Bonds as the same become due and payable in accordance with the terms thereof and the Township hereby covenants that such monies, to the extent required, will be applied to such purpose.

All monies deposited in the Sinking Fund for the payment of the Bonds which have not been claimed by the registered owners thereof after two years from the date when payment is due, except where such monies are held for the payment of outstanding checks, drafts or other instruments of the Paying Agent, shall be returned to the Township. Nothing contained herein shall relieve the Township of its liability to the registered owners of the unrepresented Bonds.

13. No Taxes Assumed. The Township shall not assume the payment of any tax or taxes in consideration of the purchase of the Bonds.

14. Award and Sale of Bonds. The Township hereby awards and sells the Bonds to the Underwriter at a price of no less than ninety percent (90%) and no more than one hundred twenty percent (120%) of the principal amount of the Bonds (including original issue discount or premium and the underwriter’s discount) plus accrued interest from the dated date of the Bonds to the date of delivery and in accordance with the other terms and conditions contained or incorporated in the Purchase Proposal of the Underwriter dated November 8, 2021 which is hereby approved and accepted. The underwriter’s discount for the Bonds shall not exceed 0.70% of the principal amount of the Bonds. A copy of said Purchase Proposal shall be attached to this Ordinance and lodged with the official minutes of this meeting and is hereby incorporated herein by reference. The proper officers of the Township are hereby authorized and directed to endorse the acceptance of the Township on said Purchase Proposal and to deliver executed copies thereof to the Underwriter. The Township Manager or the Director of Finance is authorized to accept the Addendum to the Purchase Proposal setting forth the final terms of the Bonds within the Parameters set forth in this Ordinance, and at such time as the Required Savings are achieved in

the case of Bonds issued for the Refunding Program. The Required Savings must be equal to at least three percent (3.0%) of the principal amount of the Refunded Notes.

15. Contract with Paying Agent. The proper officers of the Township are authorized to contract with U.S. Bank National Association, Philadelphia, Pennsylvania, in connection with the performance of its duties as the Paying Agent and Sinking Fund Depository on usual and customary terms, including an agreement to observe and comply with the provisions of this Ordinance and of the Act.

16. Redemption of Refunded Notes. The Township shall enter into a Pledge and Escrow Agreement (the "Pledge Agreement") with the paying agent for the Refunded Notes, U.S. Bank National Association, Philadelphia, Pennsylvania (the "Escrow Agent"), providing, among other things for: (a) the certification to the Escrow Agent of the amounts required to pay the principal and interest on the Refunded Notes to the date of maturity or redemption; (b) the deposit with the Escrow Agent of amounts which, together with the interest thereon, will meet such requirements; (c) the irrevocable pledge of all amounts and investments held under the Pledge Agreement for the payment of the Refunded Notes to the date of maturity or redemption and the application of the principal of and interest on the investments to such purposes. The Pledge Agreement shall be in form and substance as approved by the signing officers of the Township. The President or Vice President and the Secretary or Assistant Secretary of the Township are hereby authorized and directed to execute such Pledge Agreement and to deliver the same to the Escrow Agent on behalf of the Township and to appoint a verification agent as required in connection with the Pledge Agreement and the refunding of the Refunded Notes.

The Township hereby calls the Refunded Notes for redemption on July 15, 2023, subject to the issuance of the Bonds.

The officers of the Township are hereby authorized and directed to execute all documents and to take such other action as may be necessary or advisable to effect the refunding, redemption and payment of the Refunded Notes. Upon redemption of the Refunded Notes, any excess moneys shall be transferred by the Escrow Agent to the Paying Agent, and the Paying Agent shall deposit the same in the Sinking Fund for the Bonds.

The Township hereby authorizes the Escrow Agent, the Financial Advisor, the Underwriter or their respective representatives to subscribe for U.S. Treasury State and Local Government Series Securities, or to purchase such other obligations as further determined by the Township and set forth in the Pledge Agreement, for deposit into the escrow account under the Pledge Agreement.

17. Execution and Authentication of Bonds. As provided in Section 4, the Bonds shall be executed by the President or the Vice President of the Board and the Secretary of the Township and each such execution shall be by manual or facsimile signature. If any officer whose signature appears on the Bonds shall cease to hold such office before the actual delivery date of the Bonds, such signature shall nevertheless be valid and sufficient for all purposes as if such person had remained in such office until the actual delivery date of the Bonds. The Bonds shall be authenticated by the manual signature of an authorized representative of the Paying Agent.

18. Application of Bond Proceeds. The purchase price for the Bonds, and any accrued interest payable by the Underwriter, shall be paid by the Underwriter to the Paying Agent on behalf of the Township. Upon receipt of the purchase price for the Bonds, including interest thereon accrued to the date of delivery, if any, the Paying Agent shall deposit the same in a settlement account. From the settlement account, the Paying Agent shall pay, or establish reserves for payment of, the costs and expenses of the financing, and shall deposit certain of the proceeds of Bonds with the Escrow Agent, and the proper officers of the Township are authorized to direct the Paying Agent to pay such amounts on behalf of the Township and to make such deposits, all as set forth in written directions to the Paying Agent.

19. Approval of Official Statement. The Township hereby approves and “deems final” the Preliminary Official Statement for the Bonds for purposes of United States Securities and Exchange Commission Rule 15c2-12. A final Official Statement containing the final terms of the Bonds, shall be prepared and delivered to the Underwriter within seven (7) business days from the date of establishment of the final terms of the Bonds, and the Township hereby approves the use thereof in connection with the public offering and sale of the Bonds.

20. Continuing Disclosure. The Township hereby authorizes and directs the appropriate officers to execute and deliver a Continuing Disclosure Agreement or a supplement to an existing Continuing Disclosure Agreement of the Township (the “Continuing Disclosure Agreement”) if and to the extent required by law. The Township further covenants and agrees that it will comply with and carry out all of the provisions of the Continuing Disclosure Agreement. Notwithstanding any other provision of this Ordinance, failure of the Township to comply with the Continuing Disclosure Agreement shall not be considered an event of default hereunder or under the Bonds; however, the Paying Agent, any Participating Underwriter (as defined in the Continuing Disclosure Agreement), or any Bondholder may take such actions as may be necessary and appropriate, including seeking specific performance by court order, to cause the Township to comply with its obligations under this Section.

21. Covenant to Pledge Sufficient Funds. The Township hereby covenants and agrees that, concurrently with the issuance of and payment for the Bonds:

1. The Township will have irrevocably pledged with the Escrow Agent, amounts sufficient, together with interest, if any, to be earned thereon, to pay: all interest on the Refunded Notes to the date of redemption thereof; and the principal of the Refunded Notes at the date of redemption thereof so that the Refunded Notes will no longer be outstanding under the Act; and

2. Said Escrow Agent will have invested the monies required by any escrow agreement or directions in accordance with the terms thereof.

22. Officers Authorized to Act. For the purpose of expediting the closing and the issuance and delivery of the Bonds, or in the event that the President of the Board or the Secretary of the Township shall be absent or otherwise unavailable for the purpose of executing documents, or for the purpose of taking any other action which they or any of them may be authorized to take pursuant to this Ordinance, the Vice President of the Board or the Assistant Secretary of the

Township, respectively, are hereby authorized and directed to execute documents, or otherwise to act on behalf of the Township in their stead.

23. Contract with Bond Owners. This Ordinance constitutes a contract with the registered owners of the Bonds outstanding hereunder and shall be enforceable in accordance with the provisions of the laws of the Commonwealth of Pennsylvania.

24. Binding Effect of Covenants and Agreements. All covenants, obligations and agreements of the Township set forth in this Ordinance and in the documents authorized hereby shall be deemed to be the covenants, obligations and agreements of the Township to the full extent authorized or permitted by law, and all such covenants, obligations and agreements shall be binding upon the Township and its successors from time to time and upon any board or body to which any powers or duties affecting the same shall be transferred by or in accordance with law. Except as otherwise provided in this Ordinance, all rights, powers and privileges conferred and duties and liabilities imposed upon the Township or the members thereof by the provisions of this Ordinance or the documents authorized hereby shall be exercised or performed, by such members, officers or other representatives of the Township as may be required or permitted by law to exercise or perform the same. No covenant, obligation or agreement herein contained or contained in any documents authorized hereby shall be deemed to be a covenant, obligation or agreement of any commissioner, officer, agent or employee of the Township in his or her individual capacity and neither the Commissioners of the Township nor any officer executing the other documents authorized by this Ordinance shall be liable personally thereunder or be subject to any personal liability or accountability by reason of the execution and delivery thereof.

25. Bond Counsel. The Township hereby appoints Cozen O'Connor to act as Bond Counsel to the Township with respect to the transactions contemplated by this Ordinance.

26. Further Action. The proper officers of the Township are hereby authorized and directed to take all such action, execute, deliver, file and/or record all such documents, publish all notices and otherwise comply with the provisions of this Ordinance and the Act in the name and on behalf of the Township, including, but not limited to, executing an amended and/or restated loan agreement and promissory note with the Art Center, if necessary or desirable, in connection with the issuance of the Bonds.

27. Act Applicable to Bonds. This Ordinance is enacted pursuant to, and the Bonds issued hereunder shall be subject to, the provisions of the Act and all of the mandatory provisions thereof shall apply hereunder whether or not explicitly stated herein.

28. Severability. In case any one or more of the provisions contained in this Ordinance or in any Bond shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision of this Ordinance or of said Bonds, and this Ordinance or said Bonds shall be construed and enforced as if such invalid, illegal or unenforceable provisions had never been contained therein.

29. Repealer. All ordinances and parts of ordinances heretofore enacted to the extent that the same are inconsistent herewith are hereby repealed.

30. Effective Date. This Ordinance shall take effect on the earliest date permitted by the Act.

ENACTED this 8th day of November, 2021.

(TOWNSHIP SEAL)

TOWNSHIP OF RADNOR

ATTEST

Secretary

President
Board of Commissioners

EXHIBIT A

[FORM OF BOND]

UNITED STATES OF AMERICA

COMMONWEALTH OF PENNSYLVANIA

TOWNSHIP OF RADNOR

GENERAL OBLIGATION BOND, SERIES A OF 2021
(FEDERALLY TAXABLE)

No. R- _____ \$ _____

INTEREST RATE	MATURITY DATE	ORIGINAL ISSUANCE DATE	CUSIP
	_____, ____	_____, 2021	

REGISTERED OWNER: CEDE & CO.

PRINCIPAL SUM: _____ DOLLARS

Township of Radnor, Delaware County, Pennsylvania (the "Township"), a political subdivision of the Commonwealth of Pennsylvania, for value received, hereby promises to pay to the registered owner hereof on the Maturity Date set forth above the Principal Sum set forth above, unless this Bond shall have been called for redemption and payment of the redemption price shall have been made or duly provided for, and to pay interest thereon from the Original Issuance Date set forth above or the most recent Interest Payment Date to which interest has been paid or duly, provided for, semiannually on _____ and _____ of each year, commencing _____, 20__ (each, an "Interest Payment Date"), at the interest rate specified above, calculated on the basis of a 360-day year of twelve 30-day months until the principal sum is paid or has been provided for.

Interest is payable to the registered owner of this Bond from the Interest Payment Date next preceding the authentication date of the Bond, unless: (a) this Bond is authenticated as of an Interest Payment Date, in which event it shall bear interest from such Interest Payment Date; (b) this Bond is registered and authenticated after a Regular Record Date (hereinafter defined) and before the next succeeding Interest Payment Date, in which event it shall bear interest from such succeeding Interest Payment Date; (c) such Bond is registered and authenticated on or prior to the Regular Record Date preceding _____, 20__, in which event it shall bear interest from _____, 20__; or (d) as shown by the records of the Paying Agent interest on this Bond

shall be in default, in which event it shall bear interest from the date on which interest was last paid on this Bond.

The principal of this Bond is payable upon presentation and surrender hereof at the corporate trust office of U.S. Bank National Association, in Philadelphia, Pennsylvania (the "Paying Agent"). Interest on this Bond will be paid on each Interest Payment Date by check mailed to the person in whose name this Bond is registered on the registration books of the Township maintained by the Paying Agent, as bond registrar, at the address appearing, thereon at the close of business on the fifteenth (15th) day (whether or not a day on which the Paying Agent is open for business) next preceding such Interest Payment Date (the "Regular Record Date"). Any such interest not so timely paid or duly provided for shall cease to be payable to the person who is the registered owner hereof as of the Regular Record Date, and shall be payable to the person who is the registered owner hereof at the close of business on a Special Record Date for the payment of such defaulted interest. Such Special Record Date shall be fixed by the Paying Agent whenever monies become available for payment of the defaulted interest, and notice of the Special Record Date and payment date for such interest shall be given by first class mail to the registered owners of the Bonds not less than ten (10) days prior to the Special Record Date. Such notice shall be mailed to the persons in whose names the Bonds are registered at the close of business on the fifth (5th) day preceding the date of mailing. The principal of and interest on this Bond are payable in lawful money of the United States of America.

Notwithstanding the foregoing, so long as this Bond is registered in the name of The Depository Trust Company ("DTC") or its nominee, Cede & Co., payment of principal and interest on this Bond shall be payable in the manner and at the respective times of payment provided for in DTC's Operational Arrangements, as they may be amended from time to time.

This Bond is one of a duly authorized issue of General Obligation Bonds, Series A of 2021 (Federally Taxable), of the Township in the aggregate principal amount of \$_____ (the "Bonds") issued in fully registered form in denominations of \$5,000 and integral multiples of \$5,000 in excess thereof, all issued in accordance with the Local Government Unit Debt Act, 53 Pa. Cons. Stat. §8001 et seq., as amended (the "Act"), and pursuant to an Ordinance of the Board of Commissioners of the Township duly enacted on November 8, 2021 (the "Ordinance") and a Paying Agent Agreement between the Township and the Paying Agent dated as of _____, 2021 (the "Paying Agent Agreement"). The Bonds are issued for the purpose of financing a refunding program, and paying the costs of issuing the Bonds, as described in the Ordinance.

Under the laws of the Commonwealth of Pennsylvania, this Bond and the interest thereon shall at all times be free from taxation within the Commonwealth of Pennsylvania, but this exemption shall not extend to gift, estate, succession or inheritance taxes or to any other taxes not levied or assessed directly on this Bond or the interest thereon. Profits, gains or income derived from the sale, exchange, or other disposition of this Bond are subject to state and local taxation.

The Bonds maturing on or after _____, 20__ are subject to redemption prior to maturity at the option of the Township as a whole or from time to time in part, in any order of maturity or portion of a maturity as selected by the Township on _____, 20__ or any date thereafter, upon payment of a redemption price of 100% of principal amount plus interest accrued to the redemption date. If less than an entire year's maturity of Bonds are to be redeemed at any

particular time, such Bonds so to be called for redemption shall be chosen by lot by the Paying Agent.

The Bonds stated to mature on _____, _____ and _____ (the "Term Bonds") are subject to mandatory redemption prior to their stated maturity by lot by the Township from monies to be deposited in the Sinking Fund established under the Ordinance at a redemption price of 100% of the principal amount thereof plus accrued interest to the date fixed for redemption. The Township hereby covenants that it will cause the Paying Agent to select by lot, to give notice of redemption and to redeem Term Bonds at said price from monies deposited in the Sinking Fund sufficient to effect such redemption (to the extent that Term Bonds shall not have been previously purchased from said monies by the Township as permitted under the Ordinance) on _____ of the years, from the maturities and in the annual principal amounts set forth in the following schedule (or such lesser principal amount as shall at the time represent all Term Bonds which shall then be outstanding):

Mandatory Redemption Schedule

Redemption Date (_____)	Maturity From <u>Which Selected</u>	Principal Amount to be <u>Redeemed or Purchased</u>
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In the event that a portion, but not all of the Term Bonds are redeemed pursuant to optional redemption, then the principal amount of any remaining mandatory sinking fund redemptions and the final maturity applicable to the Term Bonds shall be proportionately reduced (subject to the Paying Agent making such adjustments as it deems necessary to be able to affect future redemptions of such Bonds in authorized denominations) unless the Township directs an alternate reduction of such mandatory sinking fund redemptions and final maturity.

For the purpose of selection of Bonds for redemption, any Bond of a denomination greater than \$5,000 shall be treated as representing such number of separate Bonds, each of the denomination of \$5,000, as is obtained by dividing the actual principal amount of such Bond by \$5,000. Any Bond which is to be redeemed only in part shall be surrendered at the corporate trust office of the Paying Agent in Philadelphia, Pennsylvania, together with a duly executed instrument of transfer in form satisfactory to the Paying Agent, and the registered owner of such Bond shall receive, without service charge, a new Bond or Bonds, of any authorized denomination as requested by such registered owner in aggregate principal amount equal to and in exchange for the unredeemed portion of the principal of the Bond so surrendered.

On the date designated for redemption, and upon deposit with the Paying Agent of funds sufficient for payment of the principal of and accrued interest on the Bonds called for redemption, interest on the Bonds or portions thereof so called for redemption shall cease to accrue and the Bonds or portions thereof so called for redemption shall cease to be entitled to any benefit of security hereunder, and registered owners of the Bonds so called for redemption shall have no rights with respect to the Bonds or portions thereof so called for redemption, except to receive payment of the principal of and accrued interest on the Bonds so called for redemption to the date fixed for redemption.

Notice of any redemption shall be given by first class mail, postage prepaid, mailed by the Paying Agent not less than 20 or more than 60 days before the redemption date to the registered owners of the Bonds at their addresses as they appear on the Bond register maintained by the Paying Agent. Such notice shall be given in the name of the Township, shall identify the Bonds to be redeemed (and, in the case of a partial redemption of any Bonds, the respective principal amounts thereof to be redeemed), shall specify the redemption date and the redemption price, and shall state that on the redemption date the Bonds called for redemption will be payable at the corporate trust office of the Paying Agent in Philadelphia, Pennsylvania and that from the date of redemption interest will cease to accrue. The Paying Agent shall use "CUSIP" numbers (if then generally in use) in notices of redemption as a convenience to Bond owners, provided that any such redemption notice shall state that no representation is made as to the correctness of such numbers either as printed on the Bonds or as contained in any notice of redemption and the reliance may be placed only on the identification numbers prefixed "R-" printed on the Bonds. Failure to mail any notice of redemption, or any defect therein, or in the mailing thereof, with respect to any Bond shall not affect the validity of any proceeding for redemption of other Bonds so called for redemption.

With respect to any optional redemption of the Bonds, if at the time of mailing such notice of redemption, the Township shall not have deposited with the Paying Agent monies sufficient to redeem all the Bonds called for redemption, such notice may state that it is conditional, that is, subject to the deposit of the redemption monies with the Paying Agent not later than the redemption date, and such notice shall be of no effect unless such monies are so deposited.

The Township and the Paying Agent may treat the person in whose name this Bond is registered on the Bond register maintained by the Paying Agent as the absolute owner of this Bond for all purposes and neither the Township nor the Paying Agent shall be affected by any notice to the contrary. The Bonds are being issued by means of a book-entry system, with actual bond certificates evidencing ownership of the Bonds immobilized at either DTC, New York, New York (the "Securities Depository"), or its successor as Securities Depository or with the Paying Agent, as custodian for DTC. Transfers of beneficial ownership of the Bonds shall be effected on the records of the Securities Depository and its participants pursuant to the rules and procedures established by the Securities Depository.

So long as the Bonds are issued in book-entry form, actual bond certificates are not available for distribution to the beneficial owners and the principal and interest on the Bonds are payable to Cede & Co., as nominee of the Securities Depository. Transfer of principal and interest payments to participants of the Securities Depository is the responsibility of the Securities Depository; transfers of principal and interest to beneficial owners of the Bonds by participants of the Securities Depository will be the responsibility of such participants and other nominees of beneficial owners. The Township and the Paying Agent are not responsible or liable for maintaining, supervising or reviewing the records maintained by the Securities Depository, its participants or persons acting through such participants. If the Bonds are no longer registered to a Securities Depository or its nominee, the Bonds are transferable by the registered owners thereof, subject to payment of any required tax, fee or other governmental charge, upon presentation and surrender at the corporate trust office of the Paying Agent in, Philadelphia, Pennsylvania, together with a duly executed instrument of transfer in form satisfactory to the Paying Agent. The Paying Agent shall not be required: (i) to issue, transfer or exchange any of the Bonds during a period

beginning at the close of business on the fifth (5th) day next preceding the day of selection of Bonds to be redeemed and ending at the close of business on the day on which such notice is given, or (ii) to transfer or exchange any Bond selected for redemption in whole or in part.

No recourse shall be had for the payment of the principal of or interest on this Bond, or for any claim based hereon, against any commissioner, officer or employee, past, present or future, of the Township or of any successor body, as such, either directly or through the Township or through any such successor body under any constitutional provision, statute or rule of law, or by the enforcement of any assessment or by any legal or equitable proceeding or otherwise, and all such liability of such commissioners, officers or employees is released as a condition of and as consideration for the execution and issuance of this Bond.

Whenever the due date for payment of interest on or principal of this Bond shall be a Saturday, Sunday, a legal holiday or a day on which banking institutions in the Commonwealth of Pennsylvania or in the jurisdiction in which the corporate trust or payment office of the paying agent is located are authorized or required by law or executive order to close (a "Holiday"), then the payment of such interest or principal need not be made on such date, but may be made on the succeeding day which is not a Holiday, with the same force and effect as if made on the due date for payment of principal or interest.

It is hereby certified that the approval of the Department of Community and Economic Development of the Commonwealth of Pennsylvania for the Township to issue and deliver this Bond has been duly given pursuant to the Act; that all acts, conditions and things required by the laws of the Commonwealth of Pennsylvania to exist, to have happened or to have been performed, precedent to or in the issuance of this Bond or in the creation of the debt of which this Bond is evidence, exist, have happened and have been performed in regular and due form and manner as required by law; that this Bond, together with all other indebtedness of the Township, is within every debt and other limit prescribed by the Constitution and the statutes of the Commonwealth of Pennsylvania; that the Township has established a sinking fund for the Bonds and shall deposit therein amounts sufficient to pay the principal of and interest on the Bonds as the same shall become due and payable; and that for the prompt and full payment of all obligations of this Bond, the full faith, credit and taxing power of the Township are hereby irrevocably pledged.

This Bond shall not be entitled to any benefit under the Ordinance or be valid or become obligatory for any purpose until this Bond shall have been authenticated by the Paying Agent by execution of the certificate endorsed hereon.

IN WITNESS WHEREOF, the Township of Radnor, Delaware County, Pennsylvania has caused this Bond to be signed in its name and on its behalf by the signature of the President of its Board of Commissioners and an impression of its corporate seal to be hereunto affixed, duly attested by the signature of the Secretary of the Township.

TOWNSHIP OF RADNOR

By: _____
President, Board of Commissioners

Attest: _____
Secretary

(SEAL)

AUTHENTICATION CERTIFICATE

This Bond is one of the Township of Radnor General Obligation Bonds, Series A of 2021 (Federally Taxable), described in the within mentioned Ordinance.

DATE OF AUTHENTICATION:

U.S. BANK NATIONAL ASSOCIATION,
Paying Agent

By: _____
Authorized Representative

ASSIGNMENT AND TRANSFER

FOR VALUE RECEIVED, the undersigned hereby sells, assigns and transfers unto

PLEASE INSERT SOCIAL SECURITY OR
EMPLOYER IDENTIFICATION NUMBER OF
ASSIGNEE

/_____/

the within Bond and all rights thereunder, and hereby irrevocably constitutes and appoints

attorney to transfer said Bond on the
books of the within named Paying Agent, with full power of substitution in the premises.

Dated:

Signature Guaranteed by:

NOTICE: Signature(s) must be guaranteed
by an eligible guarantor institution, an
institution which is a participant in a
Securities Transfer Association recognized
signature guaranteed program.

NOTICE: The signature to this Assignment
must correspond with the name as it appears
upon the face of the within Bond in every
particular, without alteration or enlargement or
any change whatever.

(Authorized Signature)

[END OF BOND FORM]

TOWNSHIP OF RADNOR

General Obligation Bonds, Series A of 2021
(Federally Taxable)

EXHIBIT B

**SCHEDULE OF ESTIMATED DEBT SERVICE SAVINGS RELATED TO THE
REFUNDING OF THE REFUNDED NOTES
IN ACCORDANCE WITH SECTION 8242(b) OF THE ACT**

Year Ending	New Debt Service	Refunded Bond Debt Service	Savings
12/31/2022	352,655.00	393,150.00	40,495.00
12/31/2023	353,016.50	393,150.00	40,133.50
12/31/2024	1,222,232.50	1,263,150.00	40,917.50
12/31/2025	1,224,152.50	1,268,350.00	44,197.50
12/31/2026	1,226,912.50	1,266,950.00	40,037.50
12/31/2027	1,218,457.50	1,260,962.50	42,505.00
12/31/2028	1,212,129.50	1,257,012.50	44,883.00
12/31/2029	1,214,069.50	1,257,312.50	43,243.00
12/31/2030	1,188,953.50	1,229,162.50	40,209.00
12/31/2031	1,187,866.50	1,230,850.00	42,983.50
12/31/2032	1,185,298.50	1,226,400.00	41,101.50
12/31/2033	1,190,657.00	1,232,800.00	42,143.00
12/31/2034	1,183,644.00	1,227,200.00	43,556.00
Total	\$13,960,045.00	\$14,506,450.00	\$546,405.00

TOWNSHIP OF RADNOR

General Obligation Bonds, Series A of 2021
(Federally Taxable)

EXHIBIT C

MAXIMUM BOND AMORTIZATION SCHEDULE

Date	Principal	Coupon	Interest	Total P+i	Fiscal Total
11/15/2021	-	-	-	-	-
01/15/2022	-	-	142,083.33	142,083.33	-
07/15/2022	1,150,000.00	5.500%	426,250.00	1,576,250.00	1,718,333.33
01/15/2023	-	-	394,625.00	394,625.00	-
07/15/2023	1,150,000.00	5.500%	394,625.00	1,544,625.00	1,939,250.00
01/15/2024	-	-	363,000.00	363,000.00	-
07/15/2024	1,150,000.00	5.500%	363,000.00	1,513,000.00	1,876,000.00
01/15/2025	-	-	331,375.00	331,375.00	-
07/15/2025	1,160,000.00	5.500%	331,375.00	1,491,375.00	1,822,750.00
01/15/2026	-	-	299,475.00	299,475.00	-
07/15/2026	1,165,000.00	5.500%	299,475.00	1,464,475.00	1,763,950.00
01/15/2027	-	-	267,437.50	267,437.50	-
07/15/2027	1,170,000.00	5.500%	267,437.50	1,437,437.50	1,704,875.00
01/15/2028	-	-	235,262.50	235,262.50	-
07/15/2028	1,200,000.00	5.500%	235,262.50	1,435,262.50	1,670,525.00
01/15/2029	-	-	202,262.50	202,262.50	-
07/15/2029	1,200,000.00	5.500%	202,262.50	1,402,262.50	1,604,525.00
01/15/2030	-	-	169,262.50	169,262.50	-
07/15/2030	1,230,000.00	5.500%	169,262.50	1,399,262.50	1,568,525.00
01/15/2031	-	-	135,437.50	135,437.50	-
07/15/2031	1,230,000.00	5.500%	135,437.50	1,365,437.50	1,500,875.00
01/15/2032	-	-	101,612.50	101,612.50	-
07/15/2032	1,230,000.00	5.500%	101,612.50	1,331,612.50	1,433,225.00
01/15/2033	-	-	67,787.50	67,787.50	-
07/15/2033	1,235,000.00	5.500%	67,787.50	1,302,787.50	1,370,575.00
01/15/2034	-	-	33,825.00	33,825.00	-
07/15/2034	1,230,000.00	5.500%	33,825.00	1,263,825.00	1,297,650.00
Total	\$15,500,000.00	-	\$5,771,058.33	\$21,271,058.33	-

CERTIFICATE OF SECRETARY

The undersigned, Secretary of the Township of Radnor HEREBY CERTIFIES that:

The foregoing Ordinance authorizing the issuance of General Obligation Bonds, Series A of 2021 (Federally Taxable) of the Township was duly moved and seconded and enacted by a majority vote of all the Board of Commissioners of said Township at a duly called and convened meeting of said Board held on November 8, 2021; that public notice of said meeting was given as required by law; and that the roll of the Board of Commissioners was called and such members voted or were absent as follows:

<u>Name</u>	<u>Vote</u>
Jack Larkin, President	_____
Moir Mulrone, Esq., Vice President	_____
Jake Abel	_____
Catherine Agnew	_____
Richard F. Booker, Esq.	_____
Lisa Borowski	_____
Sean Farhy	_____

and that such Ordinance and the votes thereon have been duly recorded in the minutes.

WITNESS my hand and seal of the Township this 8th day of November, 2021.

William M. White, Secretary

(TOWNSHIP SEAL)

RESOLUTION 2021-123

A RESOLUTION OF RADNOR TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA, AUTHORIZING THE TOWNSHIP MANAGER TO ENGAGE PFM TO PROVIDE FINANCIAL ADVISORY SERVICES FOR THE TOWNSHIP'S PROPOSED 2021A GENERAL OBLIGATION BONDS FOR ADVANCE REFUNDING THE SERIES 2013B BONDS

WHEREAS, the GFOA best practices recommend the hiring of a Financial Advisor (FA) to insure the best interests of the Township are being met with regards to bond financing; and

WHEREAS, PFM has served in this same capacity for the Township in the following previous transactions:

- Series 2014 Open Space bond transaction
- Series 2015 Library/Park/Trail Bonds
- Series 2019 Sewer Notes
- Series 2019 General Obligation Capital Improvement Bonds
- Series 2020 and 2020A, refunding the Series 2014 and Series 2012 respectively
- Series 2021, refunding the Series 2015A and Series 2016 respectively

with all of the above having been accomplished to the satisfaction of the Administration and the benefit of the taxpayers; and

WHEREAS, the Township will realize a savings in the debt service over the remaining 13-year life of the bonds estimated at \$41,000 per year and \$530,000 in the aggregate.

NOW, THEREFORE, it is hereby *RESOLVED* by the Radnor Township Board of Commissioners appoints PFM to serve as the Disclosure and Pricing Agent for the proposed bond issuance at a price not to exceed \$9,700, with all costs being capitalized.

SO RESOLVED, this 18th day of October, A.D., 2021.

RADNOR TOWNSHIP

By: _____
Name: Jack Larkin
Title: President

ATTEST: _____
Name: William M. White
Title: Township Manager / Secretary

Radnor Township

PROPOSED LEGISLATION



DATE: October 18, 2021

TO: Board of Commissioners

FROM: Robert V. Tate, Jr., Finance Director

Robert V. Tate, Jr.

LEGISLATION: Resolution 2021-123 authorizing the Township to engage PFM as an Independent Disclosure and Pricing Agent relating to the Township's upcoming bond transactions.

PURPOSE AND EXPLANATION: The Government Finance Officers Association (GFOA) has developed a series of best practices on the issuance of debt. Specific to this topic, GFOA's recommendation is that regardless of whether a municipality is doing a negotiated or competitive bond sale, which they hire a financial advisor to provide expertise and ensure that the Township's best interests are being met during the transaction.

Radnor has engaged PFM in prior financing transactions with excellent success.

FISCAL IMPACT: The cost of the engagement is set at \$9,700 for the bond transaction and will be capitalized in the cost of issuance.

RECOMMENDED ACTION: The Administration recommends that Board of Commissioners adopt Resolution 2021-123 to engage PFM at the October 18, 2021 meeting.

RESOLUTION 2021-22

A RESOLUTION OF RADNOR TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA, AUTHORIZING THE TOWNSHIP MANAGER TO ENGAGE COZEN O’CONNER AS BOND COUNSEL FOR THE TOWNSHIP’S PROPOSED 2021A GENERAL OBLIGATION BOND ISSUE FOR ADVANCE REFUNDING OF THE SERIES 2013B BONDS

WHEREAS, the Board of Commissioners appointed Cozen O’Conner as Bond Counsel for Radnor Township with the adoption of Resolution 2010-42; and

WHEREAS, Resolution 2010-42 recognized that the Township will continue to have on-going responsibilities associated with the various debt obligations that are currently outstanding or will be issued in the future and will need to insure that it has proper legal representation to prepare, assist and review all documents relative to those obligations; and

WHEREAS, the Township is considering a new money bond issuance for financing stormwater capital improvements and needs to ensure that it has necessary legal representation to prepare and review all documents relative to the proceedings.

NOW, THEREFORE, it is hereby *RESOLVED* by the Radnor Township Board of Commissioners authorize the Administration to utilize the services of Cozen O’Conner for the proposed bond issuance not to exceed \$15.5MM at a price not to exceed \$38,000 or 0.245%, to be capitalized.

SO RESOLVED, this 18th day of October, A.D.,2021.

RADNOR TOWNSHIP

By: _____
Name: Jack Larkin
Title: President

ATTEST: _____
Name: William M. White
Title: Township Manager / Secretary

Radnor Township

PROPOSED LEGISLATION



DATE: October 18, 2021

TO: Board of Commissioners

FROM: Robert V. Tate, Jr., Director of Finance

Robert V. Tate, Jr.

LEGISLATION: Authorizing the Township to proceed with Cozen O'Conner as Bond Counsel for the proposed Series 2021A General Obligation Bonds for Advance Refunding the Series 2013B Bonds.

LEGISLATIVE HISTORY: The Board of Commissioners appointed Cozen O'Conner as Bond Counsel with the adoption of Resolution 2010-42, adopted Monday September 13, 2010. Included in that Resolution was the recognition that future debt issues will arise and will require specialized legal assistance (from Bond Counsel). The Resolution for Monday night recognizes that Cozen O'Conner is the Township's Bond Counsel.

PURPOSE AND EXPLANATION: Municipal debt issuance is highly regulated both Federally and by State laws. As such, specialized legal counsel is recommended by both the ICMA and GFOA as best practice to ensure that the Township is properly advised and protected on all legal matters surrounding a debt transaction. Cozen O'Conner has served the Township since 2010 and has done an exemplary job. Suzanne Mayes has been professional, comprehensive and understanding in all matters surrounding these transactions; from dealing with the underwriter, to ensuring Federal Taxation Laws are considered and managed appropriately, to responding to the Board and Public to ensure questions are answered respectfully and thoughtfully.

FISCAL IMPACT: The cost of the legal services associated with a bond issuance not to exceed \$15.5MM will not exceed \$38,000 or 0.245% of the total amount being transacted. Similar to other issuance costs, the bond counsel cost will be capitalized into the refunding and paid at closing.

RECOMMENDED ACTION: The Administration respectfully recommends that the Board of Commissioners adopt this legislation.

RADNOR TOWNSHIP

ENGINEERING DEPARTMENT



Memorandum

To: Radnor Township Board of Commissioners

From: Stephen F. Norcini, PE, Township Engineer

Stephen F. Norcini

CC: William M. White, Township Manager

Date: October 10, 2021

904 Drexel Lane – Stormwater Waiver Request, GP #204215

The applicant is proposing to construct a 4,769 SF single-family dwelling, 606 SF of walkways, 2,197 SF of patios/decks, and a 2,341 SF driveway, for a total of 9,913 square feet of new impervious surface at 904 Drexel Lane.

The applicant's lot does not meet the Township's infiltration requirements, in fact infiltration is zero. The Stormwater Management Ordinance requires the applicant to request a waiver from the Commissioners when they are unable to provide groundwater infiltration.

The plans and Gannett Fleming review letters are attached.



*Excellence Delivered **As Promised***

Date: August 25, 2021

To: Stephen Norcini, P.E. – Township Engineer

From: Roger Phillips, PE

RE: 904 Drexel Lane – Stormwater Waiver Request
Grading Permit Application – GP App #204215

The applicant has submitted a grading permit for the construction of a 4,769 SF single-family dwelling, 606 SF walkways, 2,197 SF patios/decks, and a 2,341 SF driveway. The applicant is requesting a waiver from §245-22 Groundwater Recharge in accordance with §245-22.A(2)(c)[2] of the Township's Stormwater Management Ordinance. The minimum infiltration requirement of 0.50 inches cannot be achieved.

The applicant conducted two test pits on the site. Soil features in test pit 1 exhibited redoximorphic features indicative of a high water table from 12" to 48". Groundwater was encountered at 48". Permeability testing was conducted for test pit 1 at 12" and 24" and both failed with a permeability rate of 0 in/hr. Soil features in test pit 2 exhibited redoximorphic features indicative of a high water table from 12" to 108". Groundwater was encountered at 108". Permeability testing was conducted for test pit 2 at 36" and 48" and both failed with a permeability rate of 0 in/hr. The applicant is proposing a rain garden and four shade trees to provide water quality and rate control benefits.

The applicant has requested to appear before the Board of Commissioners to request a waiver from the above-mentioned section of the Ordinance and the implementation of the above-mentioned stormwater system.

In addition to the waiver request, the applicant must address the following item(s) prior to the issuance of the Grading Permit:

1. The applicant must address all other outstanding grading permit review comments.

If you have any questions or require any additional information, please contact me.

Very truly yours,

GANNETT FLEMING, INC.

A handwritten signature in blue ink, appearing to read "R. Phillips", written over a light blue circular stamp or watermark.

Roger A. Phillips, P.E.
Senior Project Manager

Gannett Fleming, Inc.

YOHN ENGINEERING, LLC

555 Second Avenue, Suite B-205

Collegeville, PA 19426-3674

610-489-4580

www.yohnengineering.com

August 24, 2021

Mr. Stephen F. Norcini, PE

Radnor Township

301 Iven Avenue

Wayne, PA 19087

**RE: 904 Drexel Lane – Stormwater Management Permit Plans
Radnor Township, Delaware County**

File No. 17-086

Mr. Norcini,

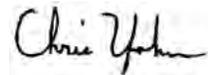
In conjunction with a Stormwater Management Permit at the above referenced site the Applicant would like to request a waiver of the following code section:

- §245-22 - To provide groundwater recharge – Double Ring Infiltrometer Testing was performed in several locations on the site in order to verify the characteristics of the existing soils and limiting zones. Tests indicated a limiting zone at 1 to 4 feet deep due to mottling and zero infiltration, which was unfortunately, likely, due to the proximity to Meadowbrook Run, which traverses west of the site as well as the associated floodplain. Due to the shallow limiting zone, a rain garden is proposed and although infiltrating the net 2-year volume was unachievable, ½ inch over the proposed impervious was provided below the lowest orifice. Additionally, the Applicant is proposing the installation of four shade trees not required by the Shade Tree Commission in order to provide additional water quality on the site.

Please call with any questions or concerns or if you require any additional information.

Regards,

Yohn Engineering, LLC



Christopher C. Yohn, P.E., CPESC

17086L01_RT.docx

Impervious Surface

Complete the impervious surface table (required).

Location: 904 Drexel Lane

Project Description: Single Family Dwelling

Gross Lot Area 58,999 Sq. Ft.

To be Completed by Radnor Township	
Permit Number:	_____
Submission Date:	_____
Shade Tree Approval Date:	_____
Final Approval Date:	_____
Zoning Approval:	_____
	Zoning Officer
Grading Permit Approval:	_____
	Township Engineer

Complete All Yellow Fields						
Cover Type	Existing Area (square feet)	Percentage of existing impervious surface area of your lot	Area of Impervious Removed (square feet)	Area of Added Impervious Cover (square feet)	Total Area (square feet)	Percentage of total impervious surface of your lot, as proposed
Building	2662		2662	4769	4769	
Walkway/sidewalk	343		343	606	606	
Patios, decks	0		0	2197	2197	
Driveway	1871		1871	2341	2341	
Other	528		528	0	0	
Total	5404	9.2 %	5404	9913	9913	18.4 %

Estimated Cubic Yards of Dirt Involved 2000 Will this fill be taken off site ___ Yes No

Number of trees to be removed (over 6" in diameter) 3 Is Property in Historical District ___ Yes No

Place a check in the box of the Zoning District applicable to your lot. (required)

Zoning Table								
Zoning District	Maximum Impervious Cover (%)	<input type="checkbox"/>	Zoning District	Maximum Impervious Cover (%)	<input type="checkbox"/>	Zoning District	Maximum Impervious Cover (%)	<input type="checkbox"/>
R-1	22	<input checked="" type="checkbox"/>	CO 2,3 stories	50	<input type="checkbox"/>	GH_CR	95	<input type="checkbox"/>
R-2	30	<input type="checkbox"/>	C1	60	<input type="checkbox"/>	GH-BC	50	<input type="checkbox"/>
R-3	35	<input type="checkbox"/>	C-2	70	<input type="checkbox"/>	GH-OS	15	<input type="checkbox"/>
R-4	40	<input type="checkbox"/>	C-3	65	<input type="checkbox"/>	WBOD	NA	<input type="checkbox"/>
R-5 Semi/2 family detached	40	<input type="checkbox"/>	PI	45	<input type="checkbox"/>	PB	55	<input type="checkbox"/>
R-5 Multi Dwelling	36	<input type="checkbox"/>	PA	50	<input type="checkbox"/>	PLO	55	<input type="checkbox"/>
R-6	70	<input type="checkbox"/>	GH-N	60	<input type="checkbox"/>	FC	NA	<input type="checkbox"/>
R-IA	30	<input type="checkbox"/>	GH-GA	80	<input type="checkbox"/>	PLU	45	<input type="checkbox"/>

Serial Number: 2021-104-5311
CALL BEFORE YOU DIG!
 PENNSYLVANIA LAW REQUIRES
**3 WORKING DAYS NOTICE FOR
 CONSTRUCTION PHASE AND 10 WORKING
 DAYS IN DESIGN STAGE-STOP CALL**
 Pennsylvania One Call System, Inc.
 1-800-242-1776

ALL LOCATIONS OF EXISTING UTILITIES, SHOWN
 ON THIS PLAN, HAVE BEEN DEVELOPED FROM
 FIELD LOCATIONS OF VISIBLE ABOVE GROUND
 UTILITY STRUCTURES AND INFORMATION
 FURNISHED BY THE UTILITY COMPANIES.

ALL LOCATIONS SHOULD BE CONSIDERED
 APPROXIMATE. COMPLETENESS OR
 ACCURACY OF THE LOCATIONS AND DEPTH OF
 ALL STRUCTURES CANNOT BE GUARANTEED.
 CONTRACTORS MUST VERIFY ALL LOCATIONS
 AND DEPTHS OF ALL UNDERGROUND UTILITIES
 AND FACILITIES BEFORE THE START OF ANY
 WORK.

AS PER ACT 187 HOUSE BILL 2627, BEFORE
 THE START OF ANY EXCAVATION WORK THE
 CONTRACTOR SHALL NOTIFY THE AFFECTED
 UTILITY COMPANIES THROUGH THE
 PENNSYLVANIA "ONE CALL SYSTEM"
 1-800-242-1776 THREE DAYS PRIOR TO THE
 START OF ANY EXCAVATION. THE
 CONTRACTOR SHALL VERIFY THE LOCATION
 AND DEPTH OF ALL UTILITIES PRIOR TO THE
 START OF ANY CONSTRUCTION.

- REFERENCE PLANS:**
1. TOPOGRAPHIC SURVEY PLAN PREPARED FOR MARK & LILIAN WANG BY JEFFREY P. TURNER, P.L.S., COLLEGEVILLE, PA, DATED JANUARY 11, 2018, PLAN NO. D-36-46-031.
 2. ARCHITECTURAL PLANS PREPARED BY R.A. HOFFMAN ARCHITECTS DATED AUGUST 17, 2018, PROJECT NO 201784.
 3. LIDAR TOPOGRAPHY AND OTHER GIS INFORMATION OBTAINED ELECTRONICALLY FROM SHAPE FILES DISTRIBUTED BY DELAWARE VALLEY REGIONAL PLANNING COMMISSION. FILES WERE OBTAINED VIA WWW.PASDA.PSU.EDU.
 4. AERIAL PHOTOGRAPH OBTAINED FROM THE MICROSOFT CORPORATION BING MAPS.
 5. SOILS INFORMATION VIA THE NATURAL RESOURCES CONSERVATION SERVICE WEB SOIL SURVEY (WEBSOILSURVEY.SCGOV.USDA.GOV.)

- REFERENCE PLAN #1 NOTES:**
1. OUTLINE DESCRIPTION AND LOCATION SHOWN IN ACCORDANCE WITH ACTUAL FIELD INSTRUMENT SURVEY CONDUCTED UPON THE GROUNDS BY JEFFREY P. TURNER, PLS FROM VARIOUS DEEDS AND PLANS OF RECORD; SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT; PROPERTY MAY BE SUBJECT TO CERTAIN RIGHTS OF OTHERS.
 2. THIS SURVEY IS NOT TO BE USED FOR TREE REMOVAL ALONG PROPERTY LINES. TREE LOCATIONS ARE APPROXIMATE. FOR TREE REMOVAL PURPOSES, PROPERTY LINES MUST BE FIELD MARKED WITH STAKES SET TO ESTABLISH EXACT TREE OWNERSHIP.
 3. CONTOURS PLOTTED FROM FIELD RUN SURVEY. GPS CONTROL PERFORMED ONSITE TO ESTABLISH BENCHMARK. DATUM NAD83/NAVD83.
 4. THERE IS AN IDENTIFIABLE FLOOD PLAIN AREAS WITHIN THE PROJECT SITE AS ILLUSTRATED ON COMMUNITY PANEL NUMBER 420428-0039F OF THE FLOOD INSURANCE RATE MAP AS PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FOR THE TOWNSHIP OF RADNOR, PENNSYLVANIA. FLOODPLAIN SHOWN HAS BEEN DOWNLOADED FROM
[HTTP://WWW.PAMAP.DCNR.STATE.PA.US/PAMAP/DATA_SOURCE.ASPX](http://www.pamap.dcnr.state.pa.us/pamap/data_source.aspx)
 5. EXISTING SUBSURFACE UTILITY INFORMATION INDICATED IS BASED UPON VISUAL FIELD INSPECTION BY JEFFREY P. TURNER, PLS. SUCH INFORMATION CONCERNING THE SIZE, LOCATION, DEPTH, QUANTITY, ETC. OF SUBSURFACE UTILITIES IS APPROXIMATE IN NATURE AND HAS BEEN OBTAINED AS A SUPPLEMENT TO THE SITE SURVEY. THE INFORMATION PROVIDED IS REPRESENTATIVE OF SUBSURFACE CONDITIONS ONLY AT LOCATIONS AND DEPTHS WHERE SUCH INFORMATION WAS OBTAINED. THERE IS NO EXPRESSED OR IMPLIED AGREEMENT THAT UTILITY SIZE, LOCATION, DEPTH, QUANTITY, ETC. AS SHOWN EXISTS BETWEEN EXPLORED LOCATIONS. ACCORDINGLY, UTILITY INFORMATION SHOWN SHOULD NOT BE RELIED UPON FOR CONSTRUCTION PURPOSES. IT IS INCUMBENT UPON THE CONTRACTOR TO VERIFY THE SIZE, LOCATION, DEPTH, QUANTITY, ETC. OF ALL UTILITIES BEFORE EXCAVATION.

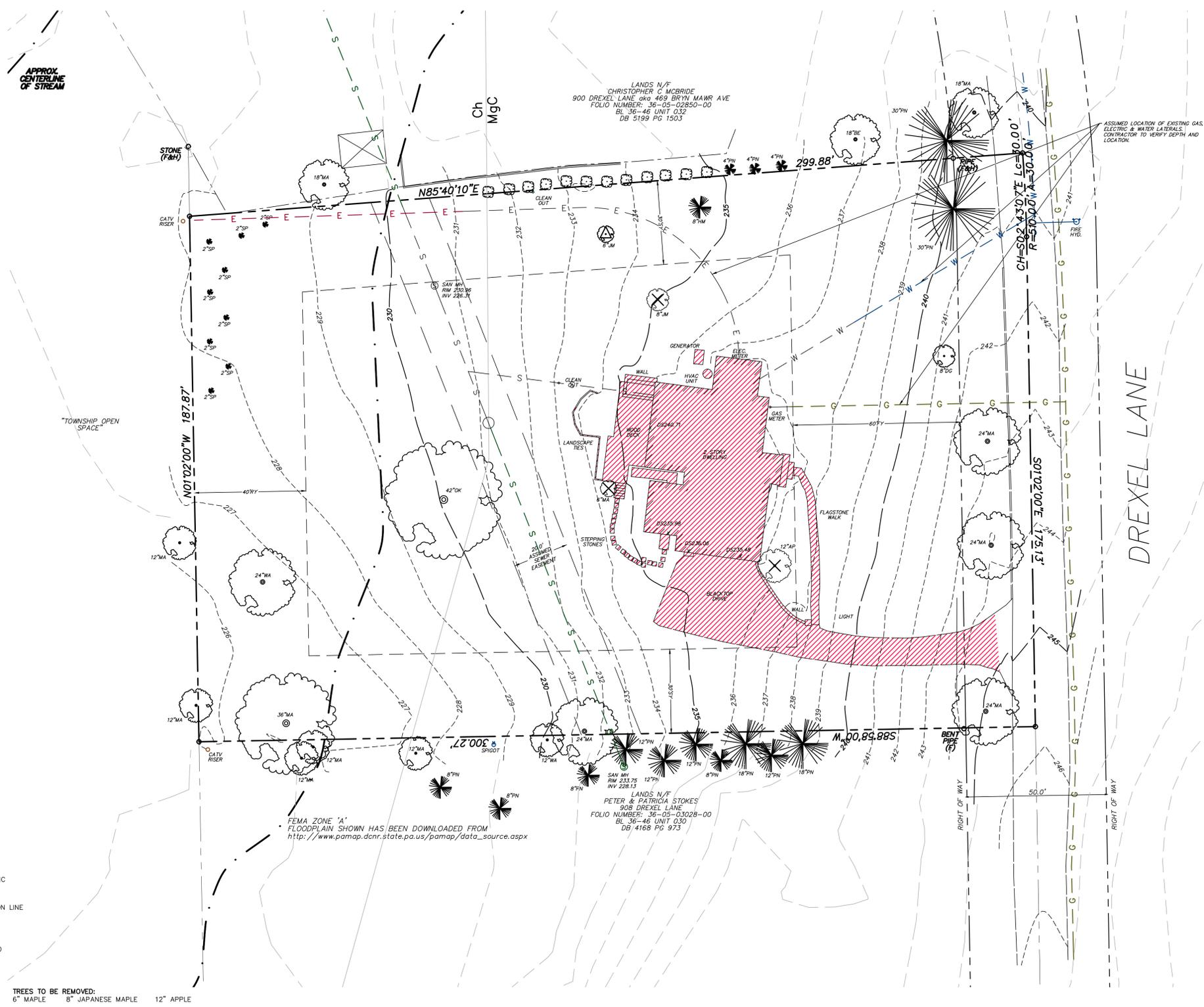
LINE TYPE LEGEND

---	EXISTING PROPERTY LINE
---	EXISTING RIGHT OF WAY
---	EXISTING BUILDING SETBACK
---	EXISTING FENCE
- - - - -	EXISTING 1' CONTOUR
- - - - -	EXISTING 5' CONTOUR
---	EXISTING OVERHEAD ELECTRIC
---	EXISTING ELECTRIC LINE
---	EXISTING GAS LINE
---	EXISTING TELECOMMUNICATION LINE
---	EXISTING WATER LINE
---	EXISTING SANITARY LINE
---	EXISTING STORM PIPES
---	IMPERVIOUS TO BE REMOVED
---	14%-20% SLOPES
---	>20% SLOPES

SOILS INFORMATION

SYMBOL	NAME	%SLOPE	HYDROLOGIC GROUP	DEPTH TO WATER	DEPTH TO BEDROCK
Ch	CHEWACLA SILT LOAM	NOT RATED	B	1.50	6.6+
MgC	MANOR LOAM	8 TO 15 PERCENT SLOPES	B	6.6+	7.11

NOTES: IF THE PROPOSED EROSION AND SEDIMENTATION CONTROL MEASURES ARE INSTALLED AND MAINTAINED PROPERLY, NO UNFORESEEN SOIL LIMITATIONS OR PROBLEMS ARE LIKELY. NEVERTHELESS, IF A PROBLEM DOES DEVELOP, THE DEVELOPER MUST TEMPORARILY SEED AND MULCH THE DISTURBED AREA. SUITABLE TOPSOIL SHALL BE IMPORTED TO SITE IF INADEQUATE QUANTITIES OF SUITABLE TOPSOIL EXIST ON SITE. ADEQUACY OF SOIL TO BE DETERMINED BY SITE GEOTECHNICAL ENGINEER IN CONJUNCTION WITH THE LANDSCAPE ARCHITECT. SOIL AMENDMENTS SHALL BE ADDED AS REQUIRED. ALL UNSUITABLE MATERIAL SHALL BE DISPOSED OF PROPERLY. SITE GEOTECHNICAL ENGINEER SHALL ALSO BE CONTACTED DURING WINTER GRADING OPERATIONS.



TREES TO BE REMOVED:
 6" MAPLE 8" JAPANESE MAPLE 12" APPLE

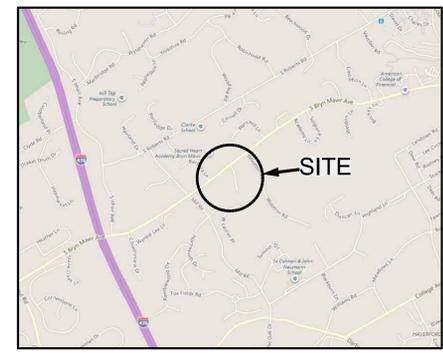
TREE REPLACEMENT FORMULA:
 6 - 18 INCH DBH REMOVED = 1 REPLACEMENT TREE
 19 - 29 INCH DBH REMOVED = 3 REPLACEMENT TREES, 2 BEING LARGE CANOPY TREES
 30 INCH DBH & GREATER REMOVED = 6 REPLACEMENT TREES, 4 BEING LARGE CANOPY TREES

TOTAL TREES BEING REMOVED:
 6 - 18 INCH DBH = 3
 19 - 29 INCH DBH = 0
 30 INCH DBH & GREATER = 0
 TOTAL = 3

REPLACEMENT TREES REQUIRED:
 6 - 18 INCH DBH = 3 TREES X 1 = 0 REPLACEMENT TREES
 19 - 29 INCH DBH = 0 TREE X 3 = 0 REPLACEMENT TREES
 30 INCH DBH & GREATER = 0 TREES X 6 = 0 REPLACEMENT TREES
 TOTAL = 0 REPLACEMENT TREES

NO REPLACEMENT TREES ARE REQUIRED BECAUSE LESS THAN SIX TREES ARE PROPOSED TO BE REMOVED.

SHOULD ANY ADDITIONAL TREES BE REMOVED, ADDITIONAL REPLACEMENT TREES SHALL BE PROVIDED IN ACCORDANCE WITH THE RADNOR TOWNSHIP ORDINANCE No. 2012-05.



LOCATION MAP
 SCALE: 1" = 2,000'

ZONING DATA R1:(SINGLE FAMILY DISTRICT) REQUIRED

MINIMUM LOT AREA PER FAMILY	1.0 AC
MINIMUM LOT WIDTH	120 FT
MINIMUM FRONT YARD	60 FT
MINIMUM SIDE YARD EACH	25 FT
MINIMUM SIDE YARD AGGREGATE	60 FT
MINIMUM REAR YARD	40 FT
MAXIMUM BUILDING HEIGHT	35 FT
MAXIMUM BUILDING COVERAGE	15%
MAXIMUM IMPERVIOUS COVERAGE	22%

FOR MORE DETAILED INFORMATION REFER TO THE ZONING CODE OF RADNOR TOWNSHIP, LATEST EDITION.

EXISTING LOT DATA:

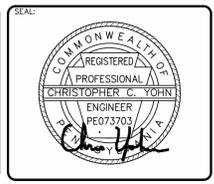
RECORD OWNER:	MARK & LILIAN WANG
PARCEL ID:	904 DREXEL LANE BRYN MAWR, PA 19010
TAXMAP ID:	36-05-03029-00
DEED BOOK & PAGE NO:	36-46-031
GROSS LOT AREA:	5170 & 1043
NET LOT AREA:	58,999 SF (1.3544 AC)
	53,888 SF (1.2371 AC)

EXISTING IMPERVIOUS COVERAGE:

BUILDING	2,662 SF (4.5%)
WALKWAY/SIDEWALK	343 SF
PATIOS, DECKS	0 SF
DRIVEWAY	1,871 SF
OTHER	528 SF
TOTAL	5,404 SF (9.2%)

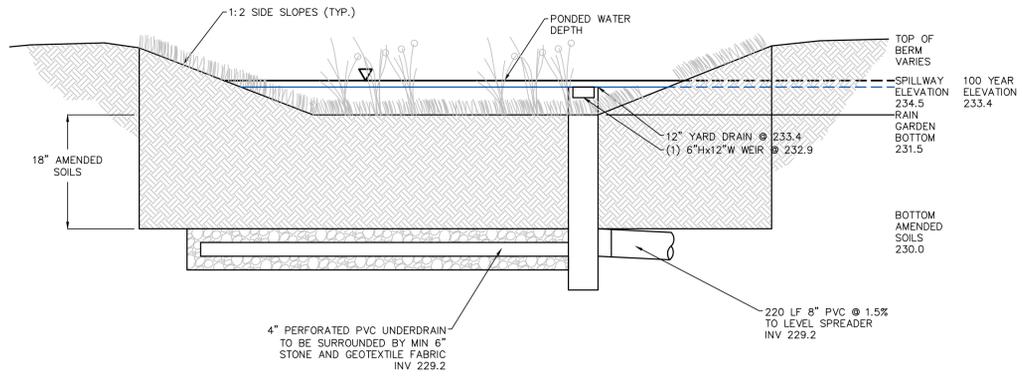


2	08/24/21	TWP ENG
1	08/16/21	TWP ENG
REV	DATE	COMMENTS

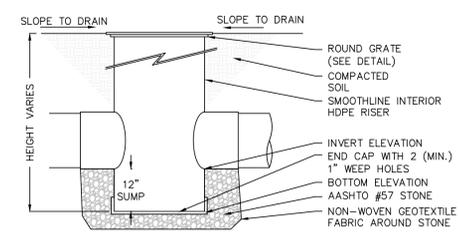


PROJECT:	SINGLE FAMILY DWELLING	
PROJECT ADDRESS:	904 DREXEL LANE, BRYN MAWR, PA 19010	
MUNICIPALITY:	RADNOR TOWNSHIP	COUNTY: DELAWARE COUNTY
PLAN SET:	STORMWATER MANAGEMENT PERMIT PLAN SET	
SHEET NAME:	EXISTING CONDITIONS / DEMOLITION PLAN	

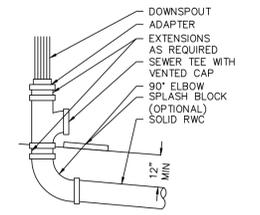
PREPARED FOR:	OWNER / APPLICANT MARK & LILIAN WANG 904 DREXEL LANE BRYN MAWR, PA 19010	DATE:	JUNE 15, 2021
		SCALE:	1" = 20'
		ONE CALL NUMBER:	2021-104-5311
		DRAWN BY:	CCY
		PROJECT NUMBER:	17-086
PREPARED BY:	YOHN ENGINEERING, LLC 555 SECOND AVENUE, SUITE B-205 COLLEGEVILLE, PA 19426 610-489-4580 WWW.YOHNEENGINEERING.COM		
		SHEET:	1 OF 5



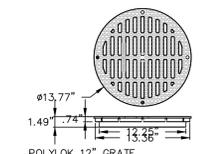
RAIN GARDEN DETAIL
NOT TO SCALE



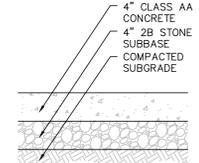
YARD DRAIN DETAIL (OR APPROVED EQUAL)
NOT TO SCALE



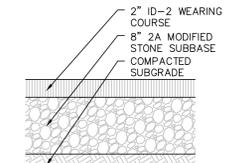
DOWNSPOUT CONNECTION DETAIL
NOT TO SCALE



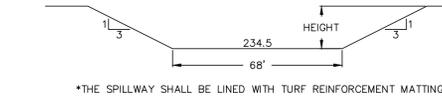
12" GRATE DETAIL (OR EQUAL)
NOT TO SCALE



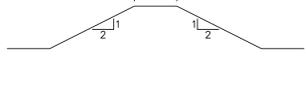
CONCRETE CROSS SECTION
NOT TO SCALE



DRIVEWAY CROSS SECTION
NOT TO SCALE



RAIN GARDEN OVERFLOW DETAIL
NOT TO SCALE



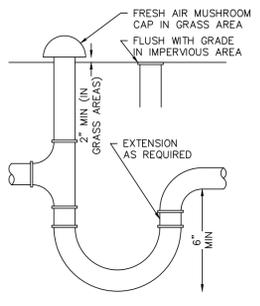
RAIN GARDEN BERM DETAIL
NOT TO SCALE

RAIN GARDEN BERM CONSTRUCTION:
AREA UNDER BERM SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO A DEPTH OF TWO FEET PRIOR TO ANY PLACEMENT AND COMPACTION OF EARTHEN FILL. FILL MATERIAL FOR THE EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN LAYERED LIFTS OF NOT MORE THAN 6 TO 9 IN. THE MAXIMUM ROCK SIZE SHALL BE NO GREATER THAN 2/3 THE LIFT THICKNESS. UPON COMPLETION, THE EMBANKMENT SHALL BE SEEDED OR OTHERWISE STABILIZED ACCORDING TO THE SPECIFICATIONS OF THE E&S PLAN DRAWINGS. TREES SHALL NOT BE PLANTED ON THE EMBANKMENT.

- POST CONSTRUCTION STORMWATER MANAGEMENT INSTALLATION:**
- THE EXISTING SUBGRADE UNDER THE RAIN GARDEN AREAS SHOULD NOT BE COMPACTED OR SUBJECT TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC PRIOR TO INSTALLATION.
 - STABILIZE GRADING WITHIN THE LIMIT OF DISTURBANCE EXCEPT WITHIN THE RAIN GARDEN AREA.
 - EXCAVATE RAIN GARDEN TO PROPOSED INVERT DEPTH AND SCARIFY THE EXISTING SOIL SURFACES. DO NOT COMPACT IN-SITU SOILS. WHERE EROSION OF SUBGRADE HAS CAUSED ACCUMULATION OF FINE MATERIALS AND/OR SURFACE PONDING, THIS MATERIAL SHOULD BE REMOVED WITH LIGHT EQUIPMENT AND THE UNDERLYING SOILS SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES WITH A YORK RAKE (OR EQUIVALENT) AND LIGHT TRACTOR. ALL FINE GRADING SHOULD BE DONE BY HAND. ALL RAIN GARDEN BOTTOMS SHOULD BE AT LEVEL GRADE.
 - SITE PLANTING SOIL SHALL BE NATIVE ON-SITE SOILS CAPABLE OF SUPPORTING A HEALTHY VEGETATIVE COVER. SOILS SHOULD BE AMENDED WITH A COMPOSTED ORGANIC MATERIAL. A TYPICAL ORGANIC AMENDED SOIL IS COMBINED WITH 5-10% ORGANIC MATERIAL (COMPOST), AND 70-80% SOIL BASE (PREFERABLY TOPSOIL). PLANTING SOIL SHOULD BE APPROXIMATELY 4 INCHES DEEPER THAN THE BOTTOM OF THE LARGEST ROOT BALL.
 - THE MODIFIED SOILS / PLANTING MIX SHALL BE PLACED IMMEDIATELY AFTER APPROVAL OF SUBGRADE PREPARATION. OVERFILLING IS RECOMMENDED TO ACCOUNT FOR SETTLEMENT. LIGHT HAND TAMPING IS ACCEPTABLE IF NECESSARY.
 - PRESOAK THE PLANTING SOIL PRIOR TO PLANTING VEGETATION TO AID IN SETTLEMENT.
 - SPREAD ERNIX ERNMX-180 RAIN GARDEN MIX (OR EQUAL) TO SUPPLIER'S RECOMMENDATIONS AND ONLY FROM MID-MARCH THROUGH THE END OF JUNE OR FROM MID-SEPTEMBER THROUGH MID-NOVEMBER.
 - COMPLETE FINAL GRADING TO ACHIEVE PROPOSED DESIGN ELEVATIONS, LEAVING SPACE FOR UPPER LAYER OF COMPOST, MULCH OR TOPSOIL.
 - INSTALL 2-3" SHREDDED HARDWOOD MULCH (MINIMUM AGE 6 MONTHS), LEAF COMPOST MULCH OR OTHER COMPARABLE PRODUCT UNIFORMLY IMMEDIATELY AFTER RAIN GARDEN MIX IS SEEDING WITH RAIN GARDEN MIX. DO NOT APPLY MULCH IN AREAS WHERE GROUND COVER IS TO BE GRASS OR WHERE COVER WILL BE ESTABLISHED BY SEEDING. WOOD CHIPS SHOULD BE AVOIDED AS THEY TEND TO FLOAT DURING INUNDATION PERIODS.
 - WATER VEGETATION AT THE END OF EACH DAY FOR TWO WEEKS AFTER PLANTING IS COMPLETED. WHILE VEGETATION IS BEING ESTABLISHED, PRUNING AND WEEDING MAY BE REQUIRED.
 - CONTRACTOR SHOULD PROVIDE A ONE-YEAR 80% CARE AND REPLACEMENT WARRANTY FOR ALL PLANTING BEGINNING AFTER INSTALLATION AND INSPECTION OF ALL PLANTS.

STORMWATER MANAGEMENT OPERATION AND MAINTENANCE PROCEDURES:
RESPONSIBLE PARTY:
MARK & LILIAN WANG

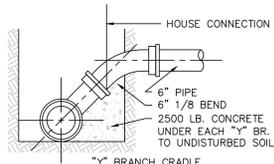
- THE RESPONSIBILITY FOR THE INSTALLATION, MAINTENANCE AND OPERATION OF THE STORMWATER MANAGEMENT SYSTEM AND OTHER ASSOCIATED FACILITIES DURING CONSTRUCTION SHALL BE THE OBLIGATION OF THE CONTRACTOR.
- THE RESPONSIBILITY FOR THE CONTINUED MAINTENANCE AND OPERATION OF THE STORMWATER MANAGEMENT SYSTEM AND OTHER ASSOCIATED FACILITIES SHALL BE THE OBLIGATION OF THE PROPERTY OWNER.
- THE PERMITTED STORMWATER CONTROLS AND BMP'S ARE FIXTURES OF THE PROPERTY THAT CAN BE ALTERED OR REMOVED ONLY AFTER APPROVAL BY THE TOWNSHIP.
- THE POST CONSTRUCTION STORMWATER MANAGEMENT SYSTEM MUST BE INSPECTED FOR ROUTINE MAINTENANCE A MINIMUM OF TWO TIMES A YEAR, ONCE IN THE EARLY SPRING AND ONCE IN THE FALL AFTER THE MAJORITY OF THE LEAVES HAVE FALLEN.
- VISUAL OBSERVATIONS OF THE GROUND SURFACE TO DETECT PONDING OF WATER OR GROUND SETTLEMENTS THAT WOULD PREVENT RUNOFF FROM ENTERING INLETS AS DESIGNED MUST BE MADE. THE DRAINAGE AREAS DESIGNED FOR THE SYSTEM MUST BE MAINTAINED. ADJUSTMENTS TO THE GRADING OR INLETS MUST BE MADE TO ENSURE THAT THE SYSTEM IS FUNCTIONING AS DESIGNED. SMALL SINKHOLES CAN BE REPAIRED EASILY BY FILLING WITH TOPSOIL AND MAY BE THE RESULT OF SETTLEMENT OF THE SOIL. LARGER SINKHOLES OR SINKHOLES THAT REAPPEAR IN THE SAME LOCATION MAY INDICATE A BREACH IN THE GEOTEXTILE LINER. INLET BOX STRUCTURE, PIPE CONNECTION OR A BREAK IN A STORM CONVEYANCE LINE. THESE TYPES OF SINKHOLES MUST BE EXCAVATED AND THE FAILURE IDENTIFIED AND REPAIRED IMMEDIATELY IN ORDER TO PREVENT SOIL FROM ENTERING THE POST CONSTRUCTION STORMWATER MANAGEMENT SYSTEM AND CLOGGING IT OR REDUCING THE CAPACITY OF THE BMP FOR RECHARGE OF RUNOFF.
- ALL SEDIMENT TRAPS AND INLETS MUST BE VISUALLY INSPECTED SEVERAL TIMES A YEAR FOR ACCUMULATED SOIL AND DEBRIS. INLET GRATES MUST BE KEPT FREE OF LEAVES, STICKS, MULCH, AND OTHER LAWN DEBRIS OR TRASH THAT WOULD PREVENT INFLOW OF RUNOFF. SUMPS IN SEDIMENT TRAPS OR INLET BOTTOMS MUST HAVE ACCUMULATED SEDIMENT REMOVED TO ENSURE DESIGN CAPACITY SUFFICIENT TO TRAP SEDIMENT AND DEBRIS FROM ENTERING ANY SEEPAGE BED. ANY WEEP HOLES IN THE BOTTOM OF THE INLETS OR SEDIMENT TRAP SHOULD BE CLEARED TO ALLOW WATER TO SEEP OUT.
- ONCE A YEAR, THE POST CONSTRUCTION STORMWATER MANAGEMENT SYSTEM MUST BE INSPECTED TO DETERMINE IF IT IS DRAINING WITHIN THE REQUIRED TIME PERIOD (USUALLY TWENTY-FOUR HOURS.) THE INSPECTION PORT SHALL BE OPENED AT LEAST TWENTY-FOUR HOURS FOLLOWING A STORM AND THE LEVEL OF WATER IN THE BED NOTED. VENTED CLEAN-OUTS MUST BE CHECKED TO ENSURE OPENINGS ARE CLEAR. ADJUSTMENTS TO THE CLEAN-OUTS MUST BE MADE IF SOIL OR OTHER LAWN DEBRIS IS OBSERVED TO BE ENTERING THE SYSTEM.
- RAIN GARDEN: SHALL BE INSPECTED 72 HOURS FOLLOWING ALL RAIN EVENTS EXCEEDING 1" OF RAINFALL. IF STANDING WATER IS VISIBLE AT THAT TIME WITHIN THE RAIN GARDEN, THE RAIN GARDEN MUST BE EXCAVATED AND RECONSTRUCTED TO OBTAIN AN INFILTRATION RATE APPROVED BY TRAPPE BOROUGHS.
- RAIN GARDEN MAINTENANCE:
 - DETRITUS MAY ALSO NEED TO BE REMOVED EVERY YEAR. PERENNIAL PLANTINGS MAY BE CUT DOWN AT THE END OF THE GROWING SEASON.
 - MULCH SHOULD BE RE-SPREAD WHEN EROSION IS EVIDENT AND BE REPLISHED AS NEEDED. ONCE EVERY 2 TO 3 YEARS THE ENTIRE AREA MAY REQUIRE MULCH REPLACEMENT.
 - BIORETENTION AREAS SHOULD BE INSPECTED AT LEAST TWO TIMES PER YEAR FOR SEDIMENT BUILDUP, EROSION, VEGETATIVE CONDITIONS, ETC.
 - DURING PERIODS OF EXTENDED DROUGHT, BIORETENTION AREAS MAY REQUIRE WATERING.
 - TREES AND SHRUBS SHOULD BE INSPECTED TWICE PER YEAR TO EVALUATE HEALTH.
 - ANY CLEAN-OUT, INLET OR LEVEL SPREADER THAT HAS BEEN DAMAGED BY LAWN EQUIPMENT MUST BE REPAIRED OR REPLACED. CLEAN-OUTS THAT BECOME BURIED SHOULD BE RAISED TO GRADE. THE CONFIGURATION MUST NOT ALLOW SOIL OR OTHER DEBRIS TO CLOG THE COLLECTION PIPE. ALL COLLECTION PIPES MUST BE CHECKED ANNUALLY TO ENSURE THEY ARE FLOWING FREELY. IF THE COLLECTION PIPES BECOME CLOGGED, JET CLEANING MUST BE PERFORMED AT THE CLEAN-OUTS. ADDITIONAL PROTECTION MUST BE MADE AT THE SEDIMENT TRAP DURING JET CLEANING TO ENSURE THAT DEBRIS IS NOT TRANSMITTED TO THE SEEPAGE BED.
 - SMALL TREES THAT BEGIN TO GROW IN THE VICINITY OF SEEPAGE BEDS OR STRUCTURES MUST BE REMOVED TO ENSURE THAT THE ROOTS DO NOT PUNCTURE THE FILTER FABRIC OF THE SEEPAGE BED OR DAMAGE ANY STORMWATER COLLECTION/CONVEYANCE STRUCTURE.
- ROOF GUTTER SYSTEMS THAT ARE INTEGRAL WITH THE SEEPAGE BED MUST BE FUNCTIONAL. REPAIRS TO GUTTERS THAT BECOME SEPARATED, SAG OR OTHERWISE DO NOT FUNCTION AS DESIGNED MUST BE MADE.
- PREVENTATIVE MAINTENANCE WOULD INCLUDE REMOVAL OF LEAVES FROM GUTTER SYSTEMS AND LAWN AREAS AS SOON AS POSSIBLE TO AVOID CONTAMINATION OF CLOGGING OF THE SYSTEM. LOCATING LANDSCAPE-MULCHED AREAS AWAY FROM CONCENTRATED RUNOFF AREAS OR SWALES THAT COULD WASH MULCH INTO INLET OR LEVEL SPREADER IS RECOMMENDED.



SEWER VENT AND TRAP DETAIL
NOT TO SCALE

PIPE SIZE	HOLES PER LINEAR FOOT (1/2" HOLES)	HOLES PER LINEAR FOOT (3/4" HOLES)
6"	68	12
8"	90	16
10"	113	20
12"	136	24
15"	169	30
18"	203	36
24"	271	48
30"	339	60
36"	407	72
48"	542	96
60"	678	120
72"	813	144

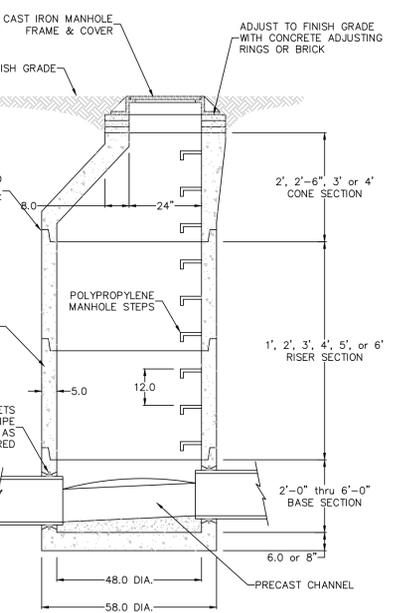
NOTE: PIPE PERFORATIONS SHALL BE NOT LESS THAN 5/16 INCH IN DIAMETER AND PROVIDE AN OPENING AREA NOT LESS THAN 3.31 SQUARE INCHES PER SQUARE FOOT OF PIPE SURFACE.



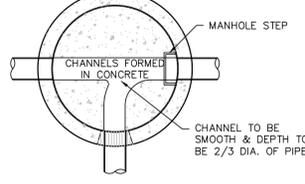
PIPE SIZE	A	B
8"	16"	4"
10"	20"	4"
12"	24"	4"
15"	24"	4"
18"	30"	5"
21"	36"	5"
24"	42"	6"
30"	48"	6"

NOTE: TO BE USED AS DIRECTED BY THE TOWNSHIP ENGINEER.

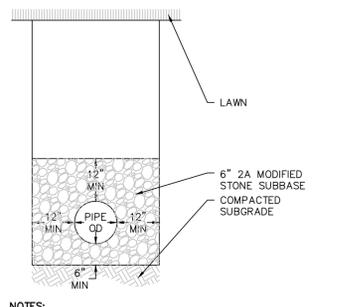
SANITARY SEWER CRADLE CONNECTION (IN EARTH)
NOT TO SCALE



48" PRECAST SANITARY SEWER MANHOLE DETAIL
NOT TO SCALE

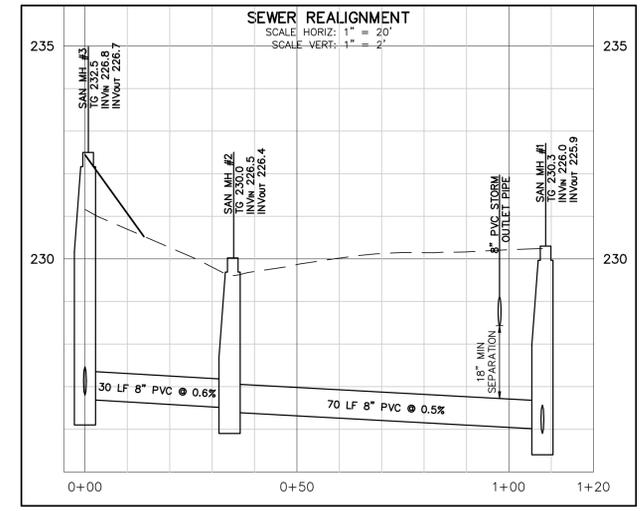


- SANITARY SEWER NOTES:**
- THE CONTRACTOR IS TO VERIFY THE EXISTING SANITARY LINES BEFORE CONSTRUCTION.
 - EXFILTRATION TESTS TO BE PERFORMED ON ALL 8" SANITARY SEWER LINES IN ACCORDANCE WITH PA DEPARTMENT OF ENVIRONMENTAL PROTECTION.
 - CONSTRUCTION IN ACCORDANCE WITH TOWNSHIP STANDARDS AND SPECIFICATIONS.

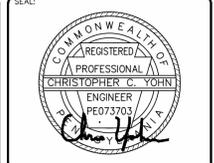


TRENCH AND ROADWAY RESTORATION DETAIL
NOT TO SCALE

- CONSTRUCTION NOTES:**
- THE CONTRACTOR SHALL VERIFY ALL DEPTHS AND LOCATIONS OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. ANY DISCREPANCIES WITH THE PLANS FOUND IN THE FIELD SHALL BE BROUGHT IMMEDIATELY TO THE ATTENTION OF THE OWNER AND ENGINEER.
 - PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL APPLY FOR AND SECURE ALL PROPER PERMITS FROM THE APPROPRIATE AUTHORITIES.
 - A HIGHWAY PERMIT IS REQUIRED FOR ALL WORK WITHIN THE RIGHT OF WAY FROM THE RADNOR TOWNSHIP PUBLIC WORKS DEPARTMENT.
 - A SEWER PERMIT IS REQUIRED FOR THE CONNECTION OF THE SEWER LATERAL FROM THE RADNOR TOWNSHIP PUBLIC WORKS DEPARTMENT.
 - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE RADNOR TOWNSHIP STANDARDS.
 - ALL EXCAVATIONS AND PEOPLE ENTERING EXCAVATIONS OR OTHER BELOW GRADE STRUCTURES SHALL COMPLY WITH OSHA REQUIREMENTS.
 - THE OWNER AND ENGINEER ARE NOT RESPONSIBLE FOR THE CONTRACTOR'S MEANS AND METHODS OF CONSTRUCTION.
 - ANY EXISTING UTILITIES, PAVEMENT, CURBS, SIDEWALKS, STRUCTURES, TREES, ETC., NOT PLANNED FOR REPAIR OR REMOVAL THAT ARE DAMAGED OR REMOVED SHALL BE REPAIRED OR REPLACED AT CONTRACTOR'S EXPENSE.
 - ALL PVC STORMWATER PIPES SHALL BE SDR 35 OR GREATER.
 - ALL HDPE STORMWATER PIPES SHALL BE SMOOTHLINE INTERIOR.
 - ALL HMP SHALL BE ALUMINUM OR ALUMINIZED STEEL.
 - ALL STORMWATER FITTINGS SHALL BE WATER TIGHT.
 - GEOTEXTILE FABRIC (PERMEABLE FILTER FABRIC) SHALL BE CLASS 1 NON-WOVEN AND SHALL COMPLY WITH PENNDOT SPECIFICATIONS.
 - STONE WITHIN THE STORMWATER MANAGEMENT SYSTEM SHALL BE CLEAN-WASHED, UNIFORMLY GRADED AGGREGATE WITH MINIMUM 40% VOID SPACE.
 - BASEMENT WALLS WITHIN 20' OF SWALES SHALL BE WATERPROOFED.
 - ALL YARD DRAINS SHALL BE GRADED IN A 12" MINIMUM SUMP CONDITION.
 - ALL YARD DRAINS AND SUMP BOXES SHALL INCLUDE A 12" MINIMUM SUMP BELOW THE LOWEST INVERT ELEVATION.
 - CLEANOUTS ARE REQUIRED AT ALL CHANGES IN SLOPE OR DIRECTION.
 - ALL RAINWATER CONDUCTOR (RWC) PIPING SHALL BE DIRECTED TO UNDERGROUND STORMWATER MANAGEMENT SYSTEM. ADJACENT TO THE FOUNDATION SHALL BE SLOPED AWAY FROM THE BUILDING AT A SLOPE OF NOT LESS THAN 1% (5%) PERCENT FOR A MINIMUM DISTANCE OF 10 FEET MEASURED PERPENDICULAR TO THE FACE OF THE WALL. IF PHYSICAL OBSTRUCTIONS OR LOT LINES PROHIBIT 10 FEET OF HORIZONTAL DISTANCE, A FIVE (5%) PERCENT SLOPE SHALL BE PROVIDED TO AN APPROVED ALTERNATIVE METHOD OF DIVERTING WATER AWAY FROM THE FOUNDATION. SWALES USED FOR THIS PURPOSE SHALL BE SLOPED A MINIMUM OF TWO (2%) PERCENT WHERE LOCATED WITHIN 10 FEET OF THE BUILDING FOUNDATION. IMPERVIOUS SURFACES WITHIN 10 FEET OF THE BUILDING FOUNDATION SHALL BE SLOPED A MINIMUM OF TWO (2%) PERCENT AWAY FROM THE BUILDING.
 - THE EXCAVATION OUTSIDE THE FOUNDATION SHALL BE BACKFILLED WITH SOIL THAT IS FREE OF ORGANIC MATERIAL, CONSTRUCTION DEBRIS, COBBLES AND BOULDERS OR WITH A CONTROLLED LOW-STRENGTH MATERIAL (CLSM). THE BACKFILL SHALL BE PLACED IN LIFTS AND COMPACTED IN A MANNER THAT DOES NOT DAMAGE THE FOUNDATION OR THE WATERPROOFING OR DAMPROOFING MATERIAL.
 - THE PROCEDURE USED TO ESTABLISH THE FINAL GROUND LEVEL ADJACENT TO THE FOUNDATION SHALL ACCOUNT FOR ADDITIONAL SETTLEMENT OF THE BACKFILL.
 - STAIRS AND RAILINGS (IF REQUIRED) SHALL BE IN ACCORDANCE WITH THE RADNOR TOWNSHIP STANDARDS.
 -



REV	DATE	COMMENTS
2	08/24/21	TWP ENG
1	08/16/21	TWP ENG



PROJECT: SINGLE FAMILY DWELLING
PROJECT ADDRESS: 904 DREXEL LANE, BRYN MAWR, PA 19010
MUNICIPALITY: RADNOR TOWNSHIP **COUNTY:** DELAWARE COUNTY

PLAN SET: STORMWATER MANAGEMENT PERMIT PLAN SET
SHEET NO.: POST CONSTRUCTION STORMWATER MANAGEMENT NOTES AND DETAILS

PREPARED FOR: OWNER / APPLICANT
MARK & LILIAN WANG
904 DREXEL LANE
BRYN MAWR, PA 19010

DATE: JUNE 15, 2021
SCALE: NO SCALE
ONE CALL NUMBER: 2021-104-5311
DRAWN BY: CCY
PROJECT NUMBER: 17-086

PREPARED BY: YOHN ENGINEERING, LLC
555 SECOND AVENUE, SUITE B-205
COLLEGEVILLE, PA 19426
610-489-4580
WWW.YOHNEENGINEERING.COM

SHEET: 3 OF 5

Serial Number: 2021-104-5311
CALL BEFORE YOU DIG!
 PENNSYLVANIA LAW REQUIRES
**3 WORKING DAYS NOTICE FOR
 CONSTRUCTION PHASE AND 10 WORKING
 DAYS IN DESIGN STAGE-STOP CALL**
 Pennsylvania One Call System, Inc.
 1-800-242-1776

ALL LOCATIONS OF EXISTING UTILITIES, SHOWN
 ON THIS PLAN, HAVE BEEN DEVELOPED FROM
 FIELD LOCATIONS OF VISIBLE ABOVE GROUND
 UTILITY STRUCTURES AND INFORMATION
 FURNISHED BY THE UTILITY COMPANIES.

ALL LOCATIONS SHOULD BE CONSIDERED
 APPROXIMATE. COMPLETENESS OR
 ACCURACY OF THE LOCATIONS AND DEPTH OF
 ALL STRUCTURES CANNOT BE GUARANTEED.
 CONTRACTORS MUST VERIFY ALL LOCATIONS
 AND DEPTHS OF ALL UNDERGROUND UTILITIES
 AND FACILITIES BEFORE THE START OF ANY
 WORK.

AS PER ACT 187 HOUSE BILL 2627, BEFORE
 THE START OF ANY EXCAVATION WORK THE
 CONTRACTOR SHALL NOTIFY THE AFFECTED
 UTILITY COMPANIES THROUGH THE
 PENNSYLVANIA "ONE CALL SYSTEM"
 1-800-242-1776 THREE DAYS PRIOR TO THE
 START OF ANY EXCAVATION. THE
 CONTRACTOR SHALL VERIFY THE LOCATION
 AND DEPTH OF ALL UTILITIES PRIOR TO THE
 START OF ANY CONSTRUCTION.

- REFERENCE PLANS:**
1. TOPOGRAPHIC SURVEY PLAN PREPARED FOR MARK & LILIAN WANG BY JEFFREY P. TURNER, P.L.S., COLLEGEVILLE, PA, DATED JANUARY 11, 2018, PLAN NO. D-36-46-031.
 2. ARCHITECTURAL PLANS PREPARED BY R.A. HOFFMAN ARCHITECTS DATED AUGUST 17, 2018, PROJECT NO 201784.
 3. LIDAR TOPOGRAPHY AND OTHER GIS INFORMATION OBTAINED ELECTRONICALLY FROM SHAPE FILES DISTRIBUTED BY DELAWARE VALLEY REGIONAL PLANNING COMMISSION. FILES WERE OBTAINED VIA WWW.PASDA.PSU.EDU.
 4. AERIAL PHOTOGRAPH OBTAINED FROM THE MICROSOFT CORPORATION BING MAPS.
 5. SOILS INFORMATION VIA THE NATURAL RESOURCES CONSERVATION SERVICE WEB SOIL SURVEY (WEBSOILSURVEY.SCGOV.USDA.GOV.)

REFERENCE PLAN #1 NOTES:

1. OUTLINE DESCRIPTION AND LOCATION SHOWN IN ACCORDANCE WITH ACTUAL FIELD INSTRUMENT SURVEY CONDUCTED UPON THE GROUNDS BY JEFFREY P. TURNER, PLS FROM VARIOUS DEEDS AND PLANS OF RECORD; SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT; PROPERTY MAY BE SUBJECT TO CERTAIN RIGHTS OF OTHERS.
2. THIS SURVEY IS NOT TO BE USED FOR TREE REMOVAL ALONG PROPERTY LINES. TREE LOCATIONS ARE APPROXIMATE. FOR TREE REMOVAL PURPOSES, PROPERTY LINES MUST BE FIELD MARKED WITH STAKES SET TO ESTABLISH EXACT TREE OWNERSHIP.
3. CONTOURS PLOTTED FROM FIELD RUN SURVEY. GPS CONTROL PERFORMED ONSITE TO ESTABLISH BENCHMARK. DATUM NAD83/NAVD83.
4. THERE IS AN IDENTIFIABLE FLOOD PLAIN AREAS WITHIN THE PROJECT SITE AS ILLUSTRATED ON COMMUNITY PANEL NUMBER 420428-0039F OF THE FLOOD INSURANCE RATE MAP AS PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FOR THE TOWNSHIP OF RADNOR, PENNSYLVANIA. FLOODPLAIN SHOWN HAS BEEN DOWNLOADED FROM
[HTTP://WWW.PAMAP.DCNR.STATE.PA.US/PAMAP/DATA_SOURCE.ASPX](http://www.pamap.dcnr.state.pa.us/pamap/data_source.aspx)
 EXISTING SUBSURFACE UTILITY INFORMATION INDICATED IS BASED UPON VISUAL FIELD INSPECTION BY JEFFREY P. TURNER, PLS. SUCH INFORMATION CONCERNING THE SIZE, LOCATION, DEPTH, QUANTITY, ETC. OF SUBSURFACE UTILITIES IS APPROXIMATE IN NATURE AND HAS BEEN OBTAINED AS A SUPPLEMENT TO THE SITE SURVEY. THE INFORMATION PROVIDED IS REPRESENTATIVE OF SUBSURFACE CONDITIONS ONLY AT LOCATIONS AND DEPTHS WHERE SUCH INFORMATION WAS OBTAINED. THERE IS NO EXPRESSED OR IMPLIED AGREEMENT THAT UTILITY SIZE, LOCATION, DEPTH, QUANTITY, ETC. AS SHOWN EXISTS BETWEEN EXPLORED LOCATIONS. ACCORDINGLY, UTILITY INFORMATION SHOWN SHOULD NOT BE RELIED UPON FOR CONSTRUCTION PURPOSES. IT IS INCUMBENT UPON THE CONTRACTOR TO VERIFY THE SIZE, LOCATION, DEPTH, QUANTITY, ETC. OF ALL UTILITIES BEFORE EXCAVATION.

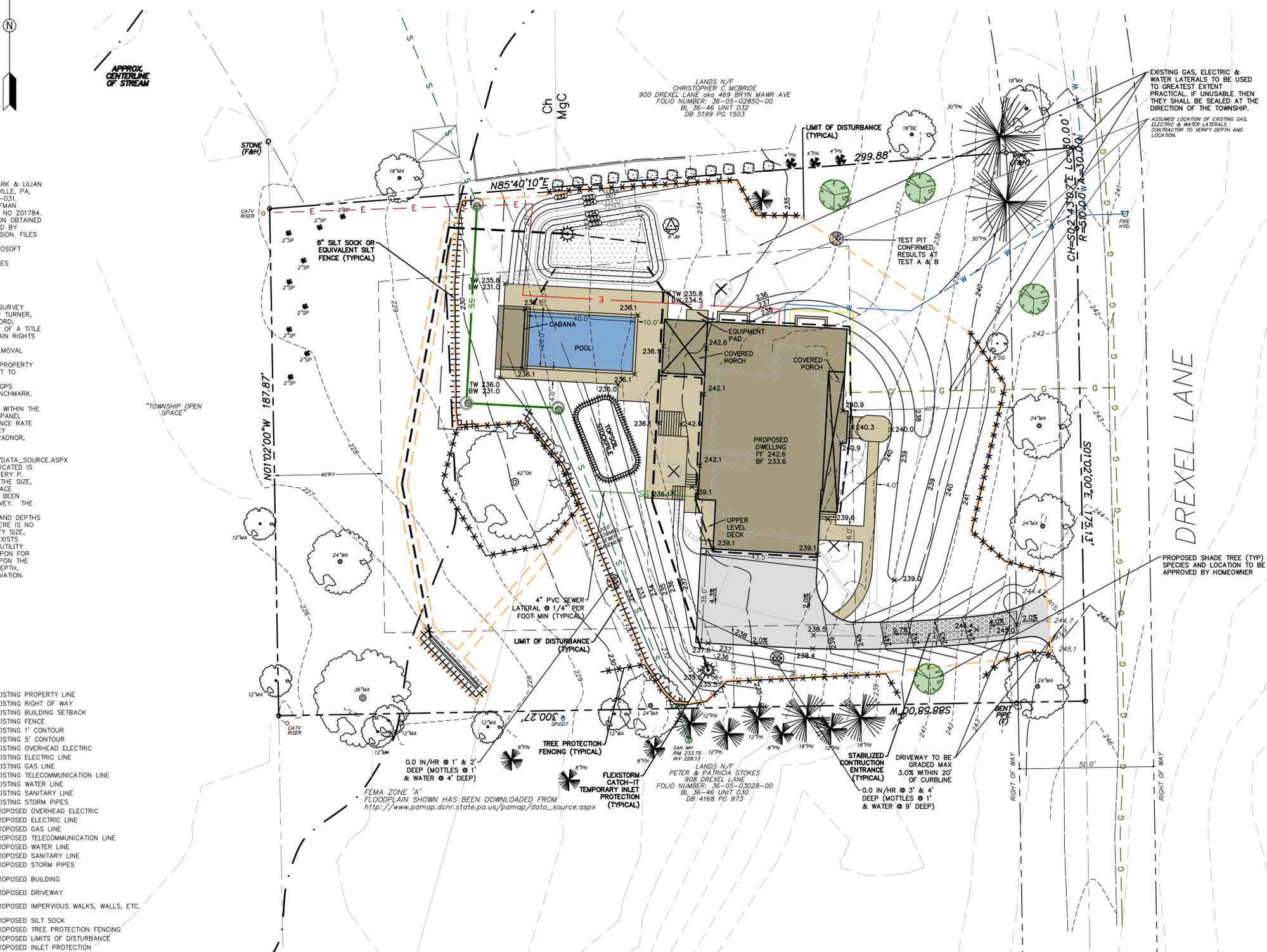
LINETYPE LEGEND

---	EXISTING PROPERTY LINE
- - - -	EXISTING RIGHT OF WAY
- - - -	EXISTING BUILDING SETBACK
- - - -	EXISTING FENCE
- - - -	EXISTING 1" CONTOUR
- - - -	EXISTING 5" CONTOUR
- - - -	EXISTING OVERHEAD ELECTRIC
- - - -	EXISTING ELECTRIC LINE
- - - -	EXISTING GAS LINE
- - - -	EXISTING TELECOMMUNICATION LINE
- - - -	EXISTING WATER LINE
- - - -	EXISTING SANITARY LINE
- - - -	PROPOSED OVERHEAD ELECTRIC
- - - -	PROPOSED ELECTRIC LINE
- - - -	PROPOSED GAS LINE
- - - -	PROPOSED TELECOMMUNICATION LINE
- - - -	PROPOSED WATER LINE
- - - -	PROPOSED SANITARY LINE
- - - -	PROPOSED STORM PIPES
- - - -	PROPOSED BUILDING
- - - -	PROPOSED DRIVEWAY
- - - -	PROPOSED IMPERVIOUS WALKS, WALLS, ETC.
- - - -	PROPOSED SILT SOCK
- - - -	PROPOSED TREE PROTECTION FENCING
- - - -	PROPOSED LIMITS OF DISTURBANCE
- - - -	PROPOSED INLET PROTECTION

SOILS INFORMATION

SYMBOL	NAME	%SLOPE	HYDROLOGIC GROUP	DEPTH TO SH WATER	DEPTH TO BEDROCK
Ch	CHEWACLA SILT LOAM	NOT RATED	B	1.50	6.6+
MgC	MANOR LOAM	8 TO 15 PERCENT SLOPES	B	6.6+	7.11

NOTES: IF THE PROPOSED EROSION AND SEDIMENTATION CONTROL MEASURES ARE INSTALLED AND MAINTAINED PROPERLY, NO UNFORESEEN SOIL LIMITATIONS OR PROBLEMS ARE LIKELY. NEVERTHELESS, IF A PROBLEM DOES DEVELOP, THE DEVELOPER MUST TEMPORARILY SEED AND MULCH THE SUITABLE AREA. SUITABLE TOPSOIL SHALL BE IMPORTED TO SITE IF INADEQUATE QUANTITIES OF SUITABLE TOPSOIL EXIST ON SITE. ADEQUACY OF SOIL TO BE DETERMINED BY SITE GEOTECHNICAL ENGINEER IN CONJUNCTION WITH THE LANDSCAPE ARCHITECT. SOIL AMENDMENTS SHALL BE ADDED AS REQUIRED. ALL UNSUITABLE MATERIAL SHALL BE DISPOSED OF PROPERLY. SITE GEOTECHNICAL ENGINEER SHALL ALSO BE CONSULTED DURING WINTER GRADING OPERATIONS.

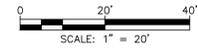


LOCATION MAP
 SCALE: 1" = 200'

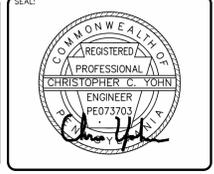
DISTURBED AREA: 29,000± SF (0.67 AC)
UNDISTURBED AREA: 30,000± SF (0.69 AC)

- CONSTRUCTION TIMING AND SEQUENCE NOTES:**
1. THE TOWNSHIP ENGINEER SHALL BE NOTIFIED FOLLOWING THE INSTALLATION OF PROTECTIVE BARRIERS AND 48 HOURS PRIOR TO THE START OF EARTHMOVING ACTIVITIES AS WELL AS 48 HOURS PRIOR TO THE INSTALLATION OF THE PERVIOUS WALKWAYS AND STORMWATER MANAGEMENT SYSTEM AND ASSOCIATED FACILITIES.
 2. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE OF CONSTRUCTION. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.
- CONSTRUCTION TIMING AND SEQUENCE:**
1. ANTICIPATED START OF CONSTRUCTION: AUGUST 2021.
 2. INSTALL THE TREE PROTECTION FENCING AND SILT FENCE OR COMPOST FILTER SOCKS AND NOTIFY TOWNSHIP FOR APPROVAL AND 48 HOURS PRIOR TO THE START OF EARTHMOVING ACTIVITIES.
 3. INSTALL THE STABILIZED CONSTRUCTION ENTRANCE. ALL CONSTRUCTION VEHICLES SHALL UTILIZE THIS ENTRANCE TO EXIT THE SITE.
 4. STRIP TOPSOIL AND STOCKPILE FOR FUTURE USE. SURROUND STOCKPILE WITH SILT FENCE AND IMMEDIATELY STABILIZE.
 5. BEGIN REMOVAL OF ALL FEATURES DESIGNATED TO BE REMOVED AND CLEAR AND GRUB THE SITE WITHIN THE LIMITS OF DISTURBANCE. UPON TEMPORARY CESSATION OF AN EARTH DISTURBANCE OR ANY STAGE OR PHASE OF AN ACTIVITY WHERE A CESSATION OF EARTH DISTURBANCE ACTIVITIES EXCEED 4 DAYS, THE SITE SHALL BE IMMEDIATELY SEEDED, MULCHED OR OTHERWISE PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION PENDING FUTURE EARTH DISTURBANCE ACTIVITIES.
 6. CONCURRENT WITH REMOVALS, ROUGH GRADE THE SITE. ANY WATER PUMPED FROM WORK AREAS SHALL BE TREATED FOR SEDIMENT REMOVAL PRIOR TO DISCHARGING TO A SURFACE WATER THROUGH THE USE OF A PUMPED WATER FILTER BAG OR OTHER APPROVED DEVICE.
 7. INSTALL THE SITES UTILITIES AND THE STONE BASE FOR THE DRIVEWAY.
 8. CONCURRENT WITH UTILITIES AND DRIVEWAY STONE, BEGIN BUILDING CONSTRUCTION.
 9. ONCE THE ROOF IS COMPLETE, INSTALL RAINWATER CONDUCTOR PIPING, INLETS, SUMP BOX AND ASSOCIATED PIPING.
 10. FINAL GRADE THE SITE AND INSTALL THE WALKWAYS AND FINAL PAVING. NEWLY GRADED SLOPES OF OVER TWENTY-FIVE (25%) PERCENT MUST BE STABILIZED WITH SOD OR JUTE NETTING AND SEED.
 11. SPREAD TOPSOIL, SEED AND IMMEDIATELY STABILIZE.
 12. UPON SITE STABILIZATION INSTALL THE POST CONSTRUCTION STORMWATER MANAGEMENT FACILITIES. NOTIFY THE TOWNSHIP ENGINEER 48 HOURS PRIOR TO THE INSTALLATION OF THE STORMWATER MANAGEMENT SYSTEMS AND ASSOCIATED FACILITIES. THE STORMWATER MANAGEMENT SYSTEMS SHALL NOT RECEIVE RUNOFF WITHOUT THE PRIOR APPROVAL FROM THE TOWNSHIP ENGINEER AND UNTIL THE ENTIRE DRAINAGE AREA CONTRIBUTORY HAS ACHIEVED FINAL STABILIZATION.
 13. REMOVE THE EROSION AND SEDIMENTATION CONTROLS AND IMMEDIATELY STABILIZE DENuded AREAS. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION, CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
 14. ANTICIPATED END OF CONSTRUCTION: AUGUST 2022.

DREXEL LANE



REV	DATE	COMMENTS
2	08/24/21	TWP ENG
1	08/16/21	TWP ENG



PROJECT: SINGLE FAMILY DWELLING	
PROJECT ADDRESS: 904 DREXEL LANE, BRYN MAWR, PA 19010	
MUNICIPALITY: RADNOR TOWNSHIP	COUNTY: DELAWARE COUNTY
PLAN SET: STORMWATER MANAGEMENT PERMIT PLAN SET	
SHEET NAME: EROSION AND SEDIMENTATION CONTROL PLAN	
PREPARED FOR: OWNER / APPLICANT MARK & LILIAN WANG 904 DREXEL LANE BRYN MAWR, PA 19010	DATE: JUNE 15, 2021 SCALE: 1" = 20' ONE CALL NUMBER: 2021-104-5311 DRAWN BY: CCY PROJECT NUMBER: 17-086
PREPARED BY: YOHN ENGINEERING, LLC 555 SECOND AVENUE, SUITE B-205 COLLEGEVILLE, PA 19426 610-489-4580 WWW.YOHNEENGINEERING.COM	SHEET: 4 OF 5

STANDARD E&S PLAN NOTES:

- ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
- AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
- ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE MUNICIPALITY PRIOR TO IMPLEMENTATION.
- AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, AND OTHER OBSTACLES. MATERIALS TO BE REMOVED SHALL BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
- TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAP(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 15 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.
- IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE MUNICIPALITY.
- ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
- ALL WASTE AND DEBRIS MUST BE REMOVED FROM THE SITE AND APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FILL MATERIAL MUST BE OBTAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALITY FILL USED TO ANALYTICAL TESTING.
- ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.
- UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPs SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, AND RETREATING MUST BE COMPLETED IMMEDIATELY. IF THE E&S BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
- SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEEP INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
- SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
- AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES - 6 TO 12 INCHES ON COMPACTED SOILS PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 6 INCHES OF TOPSOIL TO BE PLACED TO MEET THE REQUIREMENTS OF THIS PLAN. IN NO CASE SHALL FILL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH THE DEPARTMENT'S CONSTRUCTION SPECIFICATIONS.
- ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
- FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, RODS, SOIL, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
- FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
- SEDS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
- ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
- IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE AREAS WITH MULCH, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
- PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UPLAND, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION, CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING SLIDING, OR OTHER MOVEMENTS.
- E&S BMPs SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE MUNICIPALITY.
- UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION ALL DISTURBED AREAS, THE OPERATOR AND/OR OPERATOR SHALL CONTACT THE MUNICIPALITY FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPs.
- AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPs MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT AREAS. AREAS TO BE REMOVED DURING REMOVAL OR CONVERSION OF THE BMPs SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
- UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE MUNICIPALITY TO SCHEDULE A FINAL INSPECTION.
- FAILURE TO CORRECTLY INSTALL E&S BMPs, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPs MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$100,000 PER DAY IN CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.
- CONCRETE WASH WATER SHALL BE HANDLED IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. IN NO CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATERS OR GROUNDWATER SYSTEMS.
- SEDIMENT BASINS AND/OR TRAPS SHALL BE KEPT FREE OF ALL CONSTRUCTION WASTE, WASH WATER, AND OTHER DEBRIS HAVING POTENTIAL TO CLOG THE BASIN/TRAP OUTLET STRUCTURES AND/OR POLLUTE THE SURFACE WATERS.
- SEDIMENT BASINS AND/OR TRAPS SHALL BE PROTECTED FROM UNAUTHORIZED ACTS BY THIRD PARTIES.
- ANY DAMAGE THAT OCCURS IN WHOLE OR IN PART AS A RESULT OF BASIN OR TRAP DISCHARGE SHALL BE IMMEDIATELY REPAIRED BY THE OPERATOR AT HIS OWNERS FACTORY TO THE MUNICIPALITY, LOCAL CONSERVATION DISTRICT, AND THE OWNER OF THE DAMAGED PROPERTY.
- SOD OR EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES 4H:1V OR STEEPER, WITHIN 50 FEET OF A SURFACE WATER AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE PLAN MAPS AND/OR DETAIL SHEETS.
- HAY OR STRAW MULCH MUST BE APPLIED AT 3.0 TONS PER ACRE.
- STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.
- GRADING AND EARTHMOVING OPERATIONS SHALL BE MINIMIZED DURING THE PERIOD FROM NOVEMBER 15 TO APRIL 1 WHEN RE-VEGETATION OF EXPOSED GROUND SURFACE IS DIFFICULT. MULCH, STRAW, STONE AND/OR SOD SHALL BE USED TO STABILIZE ALL AREAS DENuded DURING THIS TIME PERIOD.
- THE RUNOFF CROSSING TO THE ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASE OF THE PROJECT SHALL BE MANAGED SO THAT THE WATER QUALITY / QUANTITY IMPACT IS MINIMIZED TO THE ADJACENT PROPERTIES. ADDITIONAL DIVERSION BERMS, STONED CONSTRUCTION STAGING AREAS, AND INLETS/PIPING SHALL BE PROVIDED AS NECESSARY / DIRECTED IN ORDER TO ENSURE ACCEPTABLE CONDITIONS DURING THE CONSTRUCTION PHASE.
- TOPSOIL SHALL REMAIN ON SITE UNLESS OTHERWISE DIRECTED BY THE OWNER.
- FILL MATERIAL AND TOPSOIL STOCKPILES AND ACCESS TO THEM SHALL NOT BE LOCATED WITHIN THE DRIPLINE OF EXISTING TREES.
- THE MAXIMUM TIME OF EXPOSURE FOR BARE SOIL AREAS SHALL BE TWENTY (20) DAYS BEFORE STABILIZATION MEASURES ARE IMPLEMENTED.

CLEAN FILL AND ENVIRONMENTAL DUE DILIGENCE NOTES:

- IF THE SITE WILL HAVE EXCESS FILL THAT WILL NEED TO BE EXPORTED TO AN OFF SITE LOCATION, THE RESPONSIBILITY OF CLEAN FILL DETERMINATION AND ENVIRONMENTAL DUE DILIGENCE RESTS ON THE APPLICANT. IF ALL CUT AND FILL MATERIALS WILL BE USED ON THE SITE, A CLEAN FILL DETERMINATION IS NOT REQUIRED BY THE OPERATOR UNLESS THERE IS A BELIEF THAT A SPILL OR RELEASE OF REGULATED SUBSTANCE OCCURRED ON SITE.
- APPLICANTS AND/OR OPERATORS MUST USE ENVIRONMENTAL DUE DILIGENCE TO ENSURE THAT THE FILL MATERIAL ASSOCIATED WITH THE PROJECT QUALIFIES AS CLEAN FILL. ALL FILL MATERIAL MUST BE USED IN ACCORDANCE WITH THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL", DOCUMENT NUMBER 258-2182-773. A COPY OF THIS POLICY IS AVAILABLE ONLINE AS WWW.DEPWATER.PA.GOV.
- CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE.)
- CLEAN FILL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE: FILL MATERIALS AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE STILL QUALIFIES AS CLEAN FILL PROVIDED THE TESTING REVEALS THAT THE FILL MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT ARE BELOW THE RESIDENTIAL LIMITS IN TABLES FP-1A AND FP-1B FOUND IN THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL".
- ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FP-001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO RECEIVING THE MATERIAL AS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL. A COPY OF FORM FP-001 CAN BE FOUND AT THE END OF THESE INSTRUCTIONS.
- ENVIRONMENTAL DUE DILIGENCE: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC BASE SEARCHES, VISUAL PROPERTY INSPECTIONS, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OR THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL".
- FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE DEPARTMENT'S MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA. CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE.

TOPSOIL APPLICATION:

- GRADED AREAS SHOULD BE SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES TO PERMIT BONDING OF THE TOPSOIL TO THE SURFACE AREAS AND TO PROVIDE A ROUGHENED SURFACE TO PREVENT TOPSOIL FROM SLIDING DOWN SLOPE.
- TOPSOIL SHOULD BE UNIFORMLY DISTRIBUTED ACROSS THE DISTURBED AREA TO A DEPTH OF 4 TO 8 INCHES MINIMUM. 2 INCHES ON FILL OUTSPORES. SPREADING SHOULD BE DONE IN A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL PREPARATION OR TILLAGE. IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOIL PLACEMENT SHOULD BE CORRECTED IN ORDER TO PREVENT FORMATION OF DEPRESSIONS UNLESS SUCH DEPRESSIONS ARE PART OF THE PCSM PLAN.
- TOPSOIL SHOULD NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION. WET TOPSOIL SHOULD BE SCARIFIED TO A DEPTH OF 12 INCHES ALONG CONTOUR WHEREVER POSSIBLE PRIOR TO SEEDING.

TURFGROSS ESTABLISHMENT:

- SOIL TESTING
 - A SOIL TEST TO DETERMINE LIME AND FERTILIZER REQUIREMENTS PROVIDES THE BEST GUIDE FOR PROPER TURFGROSS ESTABLISHMENT. ROUGH-GRADING
 - REMOVE ALL DEBRIS, INCLUDING LARGE STONES.
 - TILL SOIL AND BRING AREA TO ROUGH-GRADE PRIOR TO LIMING OR FERTILIZATION.
 - WHERE TOPSOIL IS TO BE REPLACED OR BROUGHT IN, FIRST ROUGH-GRADE THE AREA TO THE CONTOUR OF THE FINISHED GRADE TO FACILITATE UNIFORM DISTRIBUTION OF TOPSOIL.

LIMING:

- WHERE A TEST HAS BEEN MADE, BROADCAST AND WORK INTO A 4 TO 6-INCH SOIL DEPTH TO MEET THE REQUIREMENT SHOWN BY THE TEST.
- WHERE LIME REQUIREMENT EXCEEDS 200 LBS. PER 1,000 SF, APPLY ONE HALF THE TOTAL REQUIREMENT, TILL, APPLY THE REMAINING ONE HALF, AND RETILL.
- WHERE A TEST IS NOT AVAILABLE, BROADCAST AND WORK INTO A 4 TO 6-INCH SOIL DEPTH A MINIMUM OF 100 LBS. PER 1,000 SF BASIC FERTILIZATION
 - WHERE A TEST HAS BEEN MADE, BROADCAST THE RECOMMENDED FERTILIZER AND WORK INTO THE SOIL TO A 4 TO 6-INCH DEPTH.
 - WHERE A TEST HAS NOT BEEN MADE, BROADCAST AND WORK INTO THE SOIL TO A 4 TO 6-INCH DEPTH 25 TO 35 LBS. OF 0-46-0 FERTILIZER OR EQUIVALENT PER 1,000 SF.

SOIL AMENDMENTS:

- WHERE A TEST INDICATES THE SOIL HAS A LOW ORGANIC MATTER CONTENT, WORK THE RECOMMENDED ORGANIC MATTER INTO THE SOIL TO A 4 TO 6-INCH DEPTH BEFORE APPLYING THE STARTER FERTILIZER.
- REED SEDGE PEAT, MOSS PEAT, OR A COMBINATION OF THE TWO MATERIALS IS RECOMMENDED AS A SOURCE OF ORGANIC MATTER.

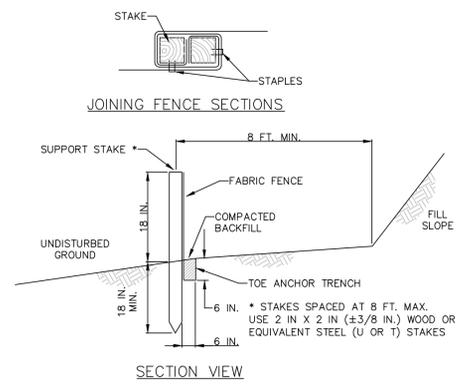
FINISH-GRADING:

- RAKE AREA TO FINISH-GRADE PRIOR TO SEEDING. LIGHT ROLLING WILL INDICATE LOW SPOTS OR OTHER IRREGULARITIES OF THE AREA. STARTER FERTILIZATION
 - IMMEDIATELY PRIOR TO SEEDING, BROADCAST AND WORK INTO THE TOP INCH OF SOIL 40 LBS. OF A 10-5-5, 10-6-4 OR 25 LBS. OF A 16-6-8 FERTILIZER OR THE EQUIVALENT PER 1,000 SF. THE FERTILIZER MUST BE TURF GRADE, HAVING AN APPROXIMATE 2-1-1 RATIO AND CONTAINING 35 PERCENT OR MORE OF THE TOTAL NITROGEN AS WATER INSOLUBLE OR CONTROLLED RELEASE NITROGEN.
- LATE SUMMER TO EARLY FALL IS THE BEST TIME FOR SEEDING PERMANENT TURFGROSS.
 - SOW RECOMMENDED SEED MIXTURE ADAPTED TO USE AND CLIMATIC CONDITIONS OF THE AREA.
 - DIVIDE TOTAL SEED QUANTITY INTO TWO EQUAL LOTS, SOWING ONE LOT IN ONE DIRECTION AND THE SECOND LOT AT RIGHT ANGLES TO THE FIRST WITH A MECHANICAL SEEDER OR SPREADER.
- COVER SEED
 - RAKE LIGHTLY OR DRAG AREA TO COVER SEED NO DEEPER THAN 1/4 IN. SOIL CONTACT
 - ROLL LIGHTLY TO FIRM SOIL AROUND SEED.
- MULCHING
 - MULCH SEEDED AREA WITH CLEAN STRAW OR MARSH HAY AT 3.0 TONS PER ACRE. LIGHT MULCHES (SOME SOIL SHOWING THROUGH MULCH) MAY BE LEFT ON THE AREA TO DECOMPOSE. HEAVY MULCHES (COMPLETE SOIL COVERAGE) SHOULD BE REMOVED FROM THE AREA WITHIN A FEW DAYS AFTER SEED GERMINATION.

PERMANENT SEED MIXTURES		
SPECIES	% OF MIXTURE	SEED RATE
SUNNY AREAS AND WELL-DRAINED SOILS		
KENTUCKY BLUEGRASS	100%	2-3 LB/1,000 SF
KENTUCKY BLUEGRASS	80-90%	3-4 LB/1,000 SF
PERENNIAL RYEGRASS	10-20%	
KENTUCKY BLUEGRASS	40-60%	3-4 LB/1,000 SF
FINE FESCUES	40-60%	
PERENNIAL RYEGRASS	10-20%	
TURF-TYPE TALL FESCUE	100%	6-8 LB/1,000 SF
TURF-TYPE PERENNIAL RYEGRASS	100%	4-5 LB/1,000 SF
PARTIALLY SHADED AREAS		
FINE FESCUES	40-50%	
KENTUCKY BLUEGRASS	40-50%	4 LB/1,000 SF
PERENNIAL RYEGRASS	10-20%	
FINE FESCUES	100%	4-5 LB/1,000 SF
TURF-TYPE TALL FESCUE	100%	6-8 LB/1,000 SF
FINE FESCUES	100%	4-5 LB/1,000 SF
FINE FESCUES	100%	4-5 LB/1,000 SF
FINE FESCUES	100%	4-5 LB/1,000 SF
ROUGH BLUEGRASS	100%	2-3 LB/1,000 SF
TEMPORARY SEED MIXTURE		
SPECIES	% OF MIXTURE	SEED RATE
ANNUAL OR ITALIAN RYEGRASS	100%	4-5 LB/1,000 SF

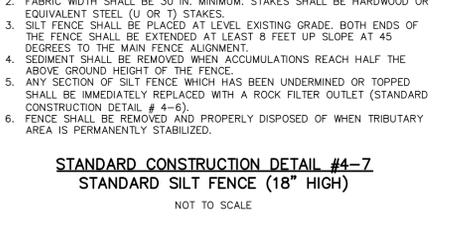
SEED MIXTURE NOTES:

- SEEDING AND TURFGROSS INFORMATION TAKEN FROM THE PENN STATE COLLEGE OF AGRICULTURAL SCIENCES. FOR ADDITIONAL INFORMATION REFER TO [HTTP://PLANTSOCIETY.PSU.EDU/RESEARCH/CENTERS/TURF/](http://plantscience.psu.edu/research/centers/turf/).
- THE PERCENTAGE OF WEED SEEDS SHOULD NOT EXCEED 1.0% BY WEIGHT IN THE CONTAINER. GOOD QUALITY GRASS SEED USUALLY CONTAINS NO MORE THAN 0.5% WEED SEEDS.
- SEDS OR SEED MIXTURES CONTAINING TIMOTHY, MEADOW FESCUE, ORCHARDGRASS, TALL FESCUE, ANNUAL RYEGRASS OR CLOVER ARE GENERALLY NOT SUGGESTED FOR TURFGROSS USE.
- ALL SEEDING RATES IN THIS PUBLICATION ARE IN POUNDS PER 1000 SQUARE FEET. IF CONVERTING TO AN ACRE BASIS, MULTIPLY BY 43.
- IT IS SUGGESTED THAT 3-5 VARIETIES OF KENTUCKY BLUEGRASS BE USED IN THE BLEND OR MIXTURE.
- WHEREVER SEED AND MULCH IS APPLIED BY HYDROSEEDING METHODS, THE SEED AND MULCH SHOULD BE APPLIED IN SEPARATE APPLICATIONS WITH THE SEED BEING APPLIED FIRST AND THE MULCH SPRAYED ON TOP OF THE SEED.
- IN CRITICAL AREAS (E.G. ADJACENT TO OR WITHIN 50 FEET OF STREAMS, PONDS, OR WETLANDS) A PROTECTIVE BLANKET SHOULD BE PROVIDED FOR ALL SEEDED AREAS.



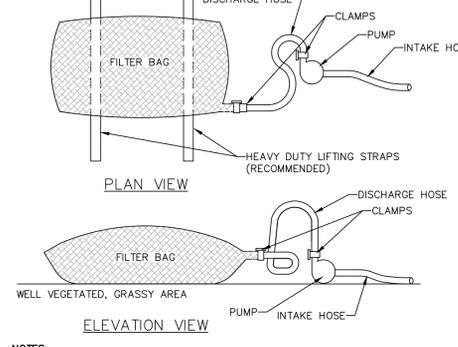
STANDARD CONSTRUCTION DETAIL #4-7 STANDARD SILT FENCE (18" HIGH)

NOT TO SCALE



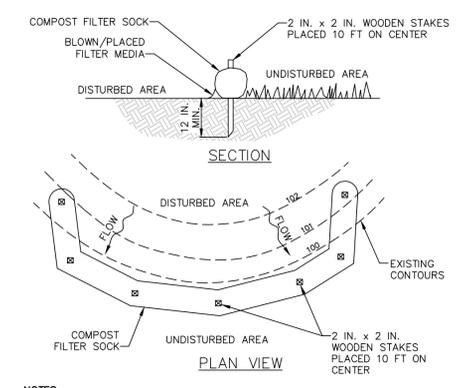
STANDARD CONSTRUCTION DETAIL #4-1 COMPOST FILTER SOCK

NOT TO SCALE



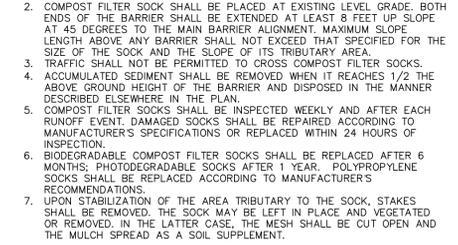
STANDARD CONSTRUCTION DETAIL #3-16 PUMPED WATER FILTER BAG

NOT TO SCALE



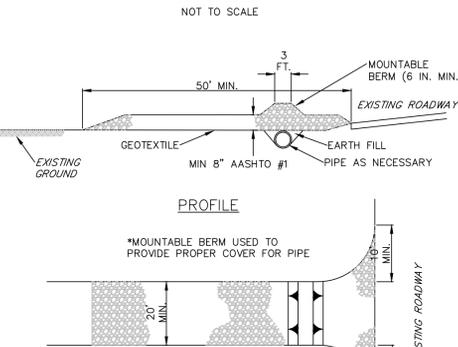
STANDARD CONSTRUCTION DETAIL #4-1 COMPOST FILTER SOCK

NOT TO SCALE



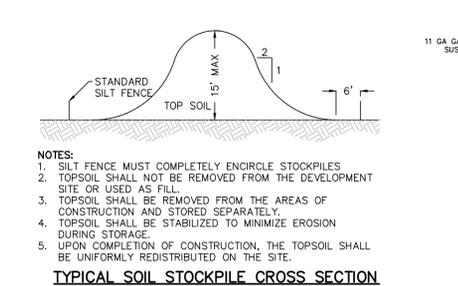
STANDARD CONSTRUCTION DETAIL #3-1 ROCK CONSTRUCTION ENTRANCE

NOT TO SCALE



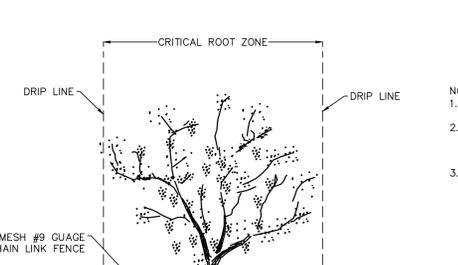
STANDARD CONSTRUCTION DETAIL #3-16 PUMPED WATER FILTER BAG

NOT TO SCALE



TYPICAL SOIL STOCKPILE CROSS SECTION

NOT TO SCALE



FLEXSTORM CATCH IT (OR EQUAL)

NOT TO SCALE

- INSTALLATION INSTRUCTIONS:**
- REMOVE THE GRATE FROM THE CASTING OR CONCRETE DRAINAGE STRUCTURE.
 - CLEAN THE LEDGE (LIP) OF THE CASTING FRAME OR DRAINAGE STRUCTURE TO ENSURE IT IS FREE OF STONE AND DIRT.
 - DROP IN THE FLEXSTORM INLET FILTER THROUGH THE CLEAR OPENING AND BE SURE THE SUSPENSION HANGERS REST FIRMLY ON THE INSIDE LEDGE (LIP) OF THE CASTING.
 - REPLACE THE GRATE AND CONFIRM IT IS ELEVATED NO MORE THAN 1/8", WHICH IS THE THICKNESS OF THE STEEL HANGERS.
- FREQUENCY OF INSPECTIONS:**
- CONSTRUCTION SITE INSPECTION SHOULD OCCUR FOLLOWING EACH 1/2" OR MORE RAIN EVENT.
 - POST CONSTRUCTION INSPECTIONS SHOULD OCCUR THREE TIMES PER YEAR (EVERY FOUR MONTHS) IN AREAS WITH RARE RAIN AND THREE TIMES PER YEAR (EVERY THREE MONTHS) IN AREAS WITH RAINY SEASONS BEFORE AND AFTER SNOWFALL SEASON.
 - INDUSTRIAL APPLICATION SITE INSPECTIONS (LOADING RAMPS, WASH RACKS, MAINTENANCE FACILITIES) SHOULD OCCUR ON A REGULARLY SCHEDULED BASIS NO LESS THAN THREE TIMES PER YEAR.
- DO NOT:**
- ALLOW RUN OFF OF SPILLAGE OF DAMAGING MATERIALS INTO THE AREA BELOW ANY TREE CANOPY.
 - STORE MATERIALS, STOCKPILE SOIL, OR PARK OR DRIVE VEHICLES WITHIN THE TFC.
 - CUT, BRUISE SKIN, OR BRUISE ROOTS, BRANCHES OR TRUNKS WITHOUT FIRST OBTAINING AUTHORIZATION FROM THE CONSULTING ARBORIST.
 - ALLOW FIRES UNDER AND ADJACENT TO TREES.
 - DISCHARGE EXHAUST INTO FOULAGE.
 - SECURE CABLE, CHAIN, OR ROPE TO TREES OR SHRUBS.
 - TRENCH, DIG, OR OTHERWISE EXCAVATE THE DRIPLINE OR TRUNK OF THE TREE(S) WITHOUT FIRST OBTAINING AUTHORIZATION FROM THE CONSULTING ARBORIST.
 - APPLY SOIL STERILANTS UNDER PAVEMENT NEAR EXISTING TREES.

MAINTENANCE GUIDELINES:

- EMPTY THE SEDIMENT BAG IF MORE THAN HALF FILLED WITH SEDIMENT AND DEBRIS, OR AS DIRECTED BY THE ENGINEER.
- REMOVE THE GRATE, ENGAGE THE LIFTING BARS OR HANDLES WITH THE FLEXSTORM REMOVAL TOOL, AND LIFT FROM THE DRAINAGE STRUCTURE.
- DISPOSE OF THE SEDIMENT OR DEBRIS AS DIRECTED BY THE ENGINEER OR MAINTENANCE CONTRACTOR IN ACCORDANCE WITH EPA GUIDELINES.
- AS AN ALTERNATIVE, AN INDUSTRIAL VACUUM MAY BE USED TO COLLECT THE ACCUMULATED SEDIMENT.
- REMOVE ANY CAKED ON SILT FROM THE SEDIMENT BAG AND REVERSE FLUSH THE BAG WITH MEDIUM SPRAY FOR OPTIMAL FLTRATION.
- REFIT THE BAG IF TORN OR PUNCTURED TO 1/2" DIAMETER OR GREATER ON THE LOWER HALF OF THE BAG.
- POST CONSTRUCTION PC BAGS MAINT: AT 50% SATURATION, THE AVERAGE 2' X 2' ADSORB-IT LINED PC FILTER WILL RETAIN APPROXIMATELY 75 OZ (4.2 LBS) OF OIL AND SHOULD BE SERVICED. IT CAN BE CENTRIFUGED OR PASSED THROUGH A WRINGER TO RECOVER THE OILS, AND THE FABRIC REUSED WITH 85% TO 90% EFFICACY. IT MAY ALSO BE RECYCLED FOR ITS FUEL VALUE THROUGH WASTE TO ENERGY INCINERATION.
- MYCELX SKIMMER POUCHES: THE SKIMMERS START YELLOW IN COLOR AND WILL GRADUALLY TURN BROWN AS THEY BECOME SATURATED, INDICATING TIME FOR REPLACEMENT. EACH MYCELX SKIMMER POUCH WILL ABSORB APPROXIMATELY 89 OZ (5 LBS) OF OIL BEFORE REQUIRING REPLACEMENT.
- DISPOSE OF ALL OIL CONTAMINATED PRODUCTS IN ACCORDANCE WITH EPA GUIDELINES.

SEDIMENT BAG REPLACEMENT:

- REMOVE THE BAG BY LOOSENING OR CUTTING OFF THE CLAMPING BAND.
- TAKE THE NEW SEDIMENT BAG, WHICH IS EQUIPPED WITH A STAINLESS STEEL WORM DRIVE CLAMPING BAND, AND USE A SCREW DRIVER TO TIGHTEN THE BAG AROUND THE FRAME CHANNEL.
- ENSURE THE BAG IS SECURE AND THAT THERE IS NO SLACK AROUND THE PERIMETER OF THE BAND.

TREE PROTECTION SPECIFICATIONS:

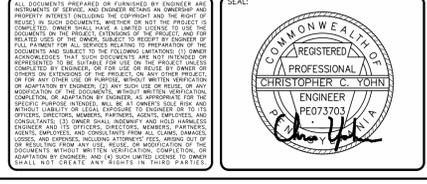
- A 4" LAYER OF COARSE MULCH OR WOODCHIPS IS TO BE PLACED BENEATH THE DRIPLINE OF THE PROTECTED TREES. MULCH IS TO BE KEPT 12" FROM THE TRUNK.
- A PROTECTIVE BARRIER OF 6" CHAIN LINK FENCING SHALL BE INSTALLED AROUND THE DRIPLINE OF PROTECTED TREE(S). THE FENCING CAN BE MOVED WITHIN THE DRIPLINE IF AUTHORIZED BY THE CONSULTING ARBORIST BUT NOT CLOSER THAN 2' FROM THE TRUNK OF ANY TREE. FENCE POSTS SHALL BE 2.0" IN DIAMETER AND ARE TO BE DRIVEN 2" INTO THE GROUND. THE DISTANCE BETWEEN POSTS SHALL NOT BE MORE THAN 10'. THIS ENCLOSED AREA IS THE TREE PROTECTION ZONE (TPZ).
- MOVABLE BARRIERS OF CHAIN LINK FENCING SECURED TO CEMENT BLOCKS CAN BE SUBSTITUTED FOR "FIXED" FENCING IF THE CONSULTING ARBORIST AGREES THAT THE FENCING WILL HAVE TO BE MOVED TO ACCOMMODATE CERTAIN PHASES OF CONSTRUCTION. THE BUILDER MAY NOT MOVE THE FENCE WITHOUT AUTHORIZATION FROM THE CONSULTING ARBORIST.
- WHERE THE CONSULTING ARBORIST HAS DETERMINED THAT TREE PROTECTION FENCING WILL INTERFERE WITH THE SAFETY OF WORK CREWS, TREE WRAP MAY BE USED AS AN ALTERNATIVE FORM OF TREE PROTECTION. WOODEN SLATS AT LEAST ONE INCH THICK ARE TO BE BOUND SECURELY EDGE TO EDGE AROUND THE TRUNK OF A SINGLE LAYER OR MORE OF ORANGE PLASTIC CONSTRUCTION FENCING IS TO BE WRAPPED AND SECURED AROUND THE OUTSIDE OF THE WOODEN SLATS. MAJOR SCAFFOLD LIMBS MAY REQUIRE PROTECTION AS DETERMINED BY THE CONSULTING ARBORIST. STRAW WADDE MAY ALSO BE USED AS A TRUNK WRAP BY COILING THE WADDE AROUND THE TRUNK UP TO A MINIMUM HEIGHT OF 5 FEET FROM GRADE. A SINGLE LAYER OR MORE OF ORANGE PLASTIC CONSTRUCTION FENCING IS TO BE WRAPPED AND SECURED AROUND THE STRAW WADDE.

TREE PROTECTION DETAIL

NOT TO SCALE

PROJECT:	SINGLE FAMILY DWELLING	
PROJECT ADDRESS:	904 DREXEL LANE, BRYN MAWR, PA 19010	
MUNICIPALITY:	RADDOR TOWNSHIP	COUNTY: DELAWARE COUNTY
PLAN SET:	STORMWATER MANAGEMENT PERMIT PLAN SET	
SHEET NAME:	EROSION AND SEDIMENTATION CONTROL NOTES AND DETAILS	
REV	DATE	COMMENTS
2	08/24/21	TWP ENG
1	08/16/21	TWP ENG

DATE:	JUNE 15, 2021
SCALE:	NO SCALE
ONE CALL NUMBER:	2021-104-5311
DRAWN BY:	CCY
PROJECT NUMBER:	17-086
PREPARED FOR:	OWNER / APPLICANT MAYRE & LILIAN WANG 904 DREXEL LANE BRYN MAWR, PA 19010
PREPARED BY:	YOHN ENGINEERING, LLC 555 SECOND AVENUE, SUITE B-205 COLLEGEVILLE, PA 19426 610-489-4580 WWW.YOHNEENGINEERING.COM
SHEET:	5 OF 5



RADNOR TOWNSHIP

ENGINEERING DEPARTMENT



Memorandum

To: Board of Commissioners

From: Stephen F. Norcini, PE, Township Engineer *Stephen F. Norcini*

CC: William M. White, Township Manager

Date: October 11th, 2021

123 Hickory Lane, Stormwater Management Ordinance Waiver Request

The applicant is proposing to construct an addition to the existing house, totaling 576 square feet of new impervious surface. The Ordinance requires that new impervious surface, between 500 SF and 1,499 SF, be managed by means of a groundwater recharge system.

The infiltration rate of the soils does not meet the required rate as prescribed by the ordinance, requiring the applicant to request a waiver from the Board of Commissioners.

Andrew Allen Construction
2502 Slifer Valley Rd.
Rigelsville, PA 18077
[610-972-4491](tel:610-972-4491)

10/8/2021

To whom it may concern:

My client is requesting a variance from meeting the stormwater infiltration requirement for 123 Hickory Lane in Radnor due to lack of infiltration (which is the result of shallow restricted drainage and a high water table).

The report documenting those facts is attached.

Please review the enclosed and contact me with any questions or concerns. We will be glad to discuss the project in the depth and breadth that is required to assure all concerned that this site will not allow infiltration of stormwater.

Thank you for your consideration... and please don't hesitate to contact me with questions or comments or if you need additional information or details.

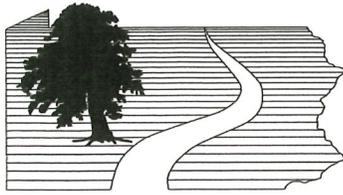
Sincerely;

Andrew Allen
Contractor

RECEIVED

OCT 11 2021

**RADNOR TOWNSHIP
ENGINEERING DEPARTMENT**



Penn's Trail Environmental, LLC

21 E. Lincoln Ave-Suite 160

Hatfield, PA 19440

Phone: (215) 362-4610

Fax: (215) 362-4620

e-mail: staff@pennstrail.com

Mr. Andrew Allen
2502 Slifer Valley Road
Riegelsville, PA 18077

November 13, 2017

RE: Evaluation for a Proposed Stormwater Facility
123 Hickory Lane
Radnor Twp., Delaware Co., PA
PTE # 3204

Dear Mr. Allen:

As requested, we are pleased to provide you with an evaluation of stormwater management options based on the detailed soil evaluation conducted on this site. The intent of this investigation is to evaluate the methods of storm water control that would best conform to Phase 2 NPDES Stormwater management policies and procedures as outlined by the Pennsylvania Department of Environmental Protection (PADEP), Township and County Conservation District. These initiatives guide the applicant/developer to consider the use of Best Management Storm Water controls and to incorporate water quality initiatives in their management plan.

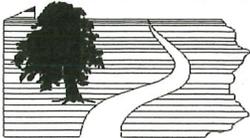
Penn's Trail Environmental, LLC has evaluated a backhoe-excavated test pit on the referenced parcel. The test pit was described by a professional soil scientist and licensed geologist in accordance with United States Department of Agriculture-Natural Resource Conservation Service (USDA-NRCS) methodology. The intent of this evaluation was to determine the general subsurface characteristics as they relate to the suitability of this site for stormwater infiltration. Certain conditions, including redoximorphic features (mottling), fragipan (dense firm layer within the soil profile), are evidence that a soil is slowly to very slowly permeable. Direct observation and evaluation of the soil profile by a qualified soil scientist can indicate extremely limited potential stormwater infiltration. Detailed testing conducted during by this office confirmed this mapping. Redoximorphic features indicative of a seasonal saturation were observed and were observed immediately below the existing ground surface.

Having identified indications of the seasonal high/perched water table we have concluded that there are severe limitations to the volume of stormwater that can be infiltrated on this site. Detailed testing conducted for the purpose of delineating stormwater infiltration system(s) found that this site has severely limited suitable area for this use. Infiltration testing in areas to be used for a proposed system indicated that water would not infiltrate at acceptable rates. The observation of a fragipan and gleying from twenty inches and below in most areas indicates that infiltration into the underlying soil is limited.

In summary, there is extremely limited potential for stormwater disposal through infiltration on this site. Under these conditions stormwater management is best served through proposing a structure that allows for stormwater overflow to the ditch alongside the property. On behalf of the owners of the property at 123 Hickory Lane, we are hereby requesting a waiver from Section 245-22 of the Radnor Township Stormwater Management Ordinance which requires the maximizing of the ground water recharge capacity of the area being developed. The ordinance requires the design of infiltration facilities to consider ground water recharge to compensate for the reduction in the recharge that occurs when the ground surface is disturbed or impervious surface is created.

The ordinance recognizes that infiltration may not be feasible on every site due to site-specific limitations such as soil type and states that the design professional is responsible to show that this cannot be physically accomplished.

Penn's Trail Environmental, LLC



21 East Lincoln Ave - Suite 160
 Hatfield, PA 19440
 ph. (215) 362-4610
 fax (215) 362-4620

Date: 11/2/2017 Pit # 001 PTE # 3204
 Project: Stewart residence
 Location: 123 Hickory Lane
Radnor Twp., Delaware Co., PA
 Soil Series: Made Land - Glenville

Horizon	Depth (In.)	Color	Redox Features	Texture	Structure	Consistence	Boundary
A fill	0-13	10YR 4/4		channery silt loam	moderate medium abk	friable	abrupt wavy
C fill	10-34	10YR 4/1	many prominent	very gravelly silty clay loam	massive weak fine sbk	friable/firm	clear wavy
Cg	25-44	Gley1 4/10Y	few prominent	silt loam	massive	firm	

Soil Scientist: Paul A. Golrick, PG

Notes:

EPIPEDON

Ochric

SUBSURFACE HORIZON(S)

Argillic

SOIL ORDER

Ultisol

DRAINAGE CLASS

Poorly drained

LANDFORM

Upland

POSITION

Toeslope

PARENT MATERIAL

fill
Residuum

BEDROCK LITHOLOGY

Schist

REDOX FEATURES

Abundance

Few <2%
 Common.. 2-20%
 Many.....>20%

Contrast

faint

hue & chroma of matrix and redox are closely related.

distinct

matrix & redox features vary 1-2 units of hue and several units of chroma & value.

prominent

Matrix & redox features vary several units in hue, value, & chroma.

STRUCTURE

Grade

Structureless - No observable aggregation or arrangement of lines of weakness.

Weak - Poorly formed, indistinct peds barely observable in place.

Moderate - Well-formed, distinct peds moderately durable & evident in place.

Strong - Durable peds evident in undisturbed soil & become separated when disturbed.

COARSE FRAGMENTS (% of profile)

15-35%	35-65%	>65%
gravelly	very gravelly	extremely gravelly
channery	very channery	extremely channery
cobbly	very cobbly	extremely cobbly
flaggy	very flaggy	extremely flaggy
stony	very stony	extremely stony

BOUNDARY

Distinctness

abrupt...<1" (thick) *gradual...2.5-5"*
clear.....1-2.5" *diffuse.....>5"*

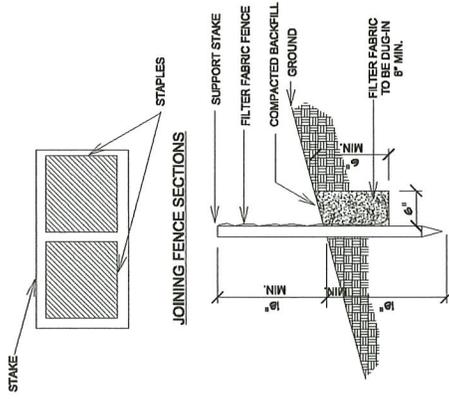
Topography

smooth - boundary is nearly level
wavy - pockets with width greater than depth
irregular - pockets with depth greater than width

Type

pl - platy
pr - prismatic
cpr - columnar
gr - granular
abk - angular blocky
sbk - subangular blocky

ONE STORY REAR ADDITION FOR THE STEWART RESIDENCE 123 HICKORY LANE, RADNOR, PA



18" STANDARD FILTER FABRIC FENCE DETAIL

STAKES SPACED @ 8' MAXIMUM USING 2"x2" WOOD OR EQUIVALENT STEEL STAKES. FILTER FABRIC FENCE MUST BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE BARRIER MUST BE EXTENDED AT LEAST 8' UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT.

SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE FENCE.

ANY SECTION OF FILTER FABRIC FENCE WHICH HAS BEEN UNDERMINED OR TOPPED MUST BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET.

CONTRACTOR SHALL INSTALL SILT FENCE ALONG PERIMETER PRIOR TO ANY EXCAVATION

EXISTING GRADING SHALL NOT BE MODIFIED OR ALTERED

EXISTING TREES WILL NOT BE DISTURBED AND ARE NOT CLOSE TO THE AREA OF CONSTRUCTION

CURRENT CONDITIONS HAVE MINIMAL SLOPES AS LOT IS FAIRLY LEVEL

CONTRACTOR SHALL REMOVE ALL EXCAVATED MATERIAL FROM SITE

EARTH DISTURBANCE FOR NEW FOUNDATION WILL BE LIMITED TO LESS THAN 300SF ASSUMING A 2' WIDE TRENCH & LESS THAN 15 CUBIC YARDS

CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO MINIMIZE ANY MATERIAL BEING LEFT ON SIDEWALKS, CURBS OR STREETS

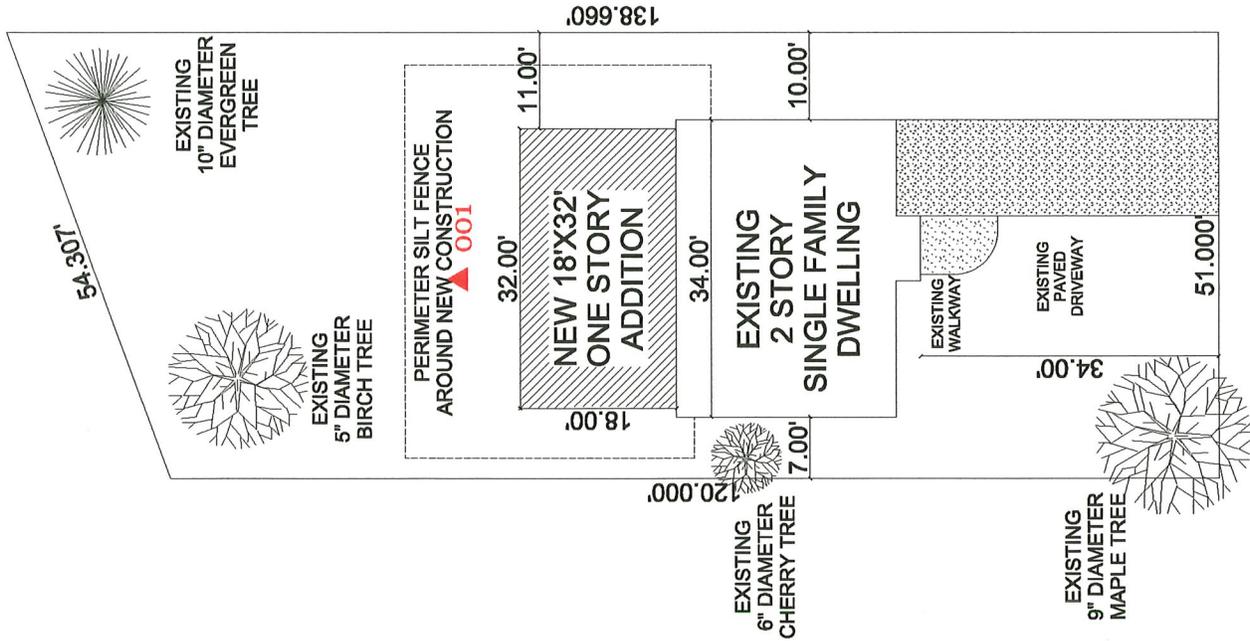
**123 HICKORY LANE
RADNOR TOWNSHIP
DELAWARE COUNTY**

LOT SIZE	6,596SF
EXISTING BLDG	1,020SF
NEW ADDITION	576SF
TOTAL BLDG COVERAGE	1,596SF 24.2%
EXISTING PAVED DRIVE	350SF
EXISTING FRONT WALK	75SF
EXISTING WALK	2,021SF
TOTAL IMPERVIOUS	30.6%

ZONE	R-4
FRONT YARD	30'
REAR YARD	30'
SIDE YARDS	12'/30'
BUILDING COVERAGE	30%
MAX. IMPERVIOUS	40%

SITE PLAN

1" = 10'



▲ Stormwater infiltration test location

Here's The Plan, LLC
541 Street Road, 2nd floor, Southampton, PA 18966
Office: 215-355-1262 Fax: 215-355-2502 Email: herestheplanllc@gmail.com

ONE STORY REAR ADDITION FOR
THE STEWART RESIDENCE

DRAWN BY: RA
DATE: OCTOBER 6, 2011
REV.
DRAWING NUMBER
51 of 1

HICKORY LANE

Radnor Township
PROPOSED LEGISLATION
ADOPTION



FROM: Kevin W. Kochanski, Community Development Director
SUBJECT: Garrett Hill – Zoning Ordinance Amendment
DATE: October 12, 2021

LEGISLATION:

Ordinance #2021-07 Amending Chapter 280 of the Radnor Code, Zoning Ordinance, to permit a 5' increase in building height in the Garrett Hill Garrett Avenue Neighborhood (GH-N) and Garrett Hill Garrett Avenue (GH-GA) Districts. In addition, outdoor dining would be permitted in the Garrett Hill Conestoga Road (GH-CR) District.

LEGISLATIVE HISTORY:

This ordinance was authorized to be forwarded to the Township and County Planning Commissions for review and comments.

Delaware County Planning Commission – County staff was supportive, with comments, of the proposed amendment per their memo dated July 15, 2021. Their recommendation is attached.

Radnor Township Planning Commission – The Township Planning Commission recommended approval at their July 13, 2021 meeting. Their recommendation is attached.

A town hall meeting was hosted by Commissioner Farhy on September 29, 2021 at the Township Building.

FISCAL IMPACT:

This ordinance is not expected to have a negative impact on the Budget.

RECOMMENDED ACTION:

The Staff would respectfully recommend that this Ordinance be adopted.

Thank you for your consideration.

ORDINANCE NO. 2021-07

AN ORDINANCE OF RADNOR TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA, REVISING THE GARRETT HILL GARRETT AVENUE NEIGHBORHOOD (GH-N) AND GARRETT HILL GARRETT AVENUE (GH-GA) PROVISIONS OF THE ZONING ORDINANCE TO INCREASE THE MAXIMUM BUILDING HEIGHT AND TO PERMIT LIMITED OUTDOOR DINING FACILITIES IN THE GARRETT HILL CONESTOGA ROAD (GH-CR) DISTRICT

WHEREAS, the Radnor Township Planning Commission and Delaware County Planning Commission have reviewed proposed modifications to Article 1A, Garrett Hill Zoning District; and

WHEREAS, the Radnor Township Board of Commissioners desires to modify the height requirements in a portion of the Garrett Hill Zoning District and to permit limited outdoor dining in the GH-CR District.

Now, therefore, the Radnor Township Board of Commissioners does hereby ENACT and ORDAIN as follows:

Section I. Section 280-49.6. A.(2)(a)[1], Garrett Avenue Neighborhood (GH-N), is hereby revised to change the maximum building height from 30 (thirty) feet to 35 (thirty-five) feet.

Section II. Section 280-49.7 A. (2) (a) [1] and [2], Garrett Avenue (GH-GA), is hereby revised to change the maximum building height from 30 (thirty) feet to 35 (thirty-five) feet for a pitched roof and 25 (twenty-five) to 30 (thirty) for a flat roof.

Section III. Section 115.4. Outdoor dining regulations., Subsection A. is hereby revised to read as follows:

- A. Within the C-1, C-2, C-3, WBOD, PB and GH-CR Districts, outdoor dining shall be permitted as an accessory use on the same premises as a licensed food establishment (restaurant) that has indoor seating. To assure quality standards for customers and food safety, the following provisions shall apply:

(Subsections 115.4. A (1) through (15) shall remain in full force and effect)

Section IV. Section 115.4 Outdoor dining regulations, Subsection C. is hereby revised to read as follows:

- B. Outdoor dining shall be permitted by special exception in all other zoning districts, as an accessory use on the same premises as an existing licensed nonconforming food establishment that has indoor

seating and shall be subject to the provisions of 280-115.4. A.

Section V. Section 115.4 (10) is hereby revised, adding a new subsection (f) to read as follows:

(f) The setbacks and requirements of Subsections A. (10), (b), (c), and (d) shall not apply to properties in the GH-CR District, however, a fifty (50) foot setback shall be required between the outdoor dining area and any adjacent detached single-family dwelling.

Section VI. Repealer. All ordinances or parts of ordinances which are inconsistent herewith are hereby repealed.

Section VII. Severability. If any clause, sentence, paragraph, section, subsection, part, or provision of this Ordinance is, for any reason, found to be unconstitutional, illegal, or invalid by a court of competent jurisdiction, such unconstitutionality, illegality, or invalidity shall not affect the validity of this Ordinance as a whole or any part thereof other than that portion specifically declared invalid. It is hereby declared as the intent of the Board of Commissioners of Radnor Township, that this Ordinance would have been adopted had such unconstitutional, illegal, or invalid clause, sentence, paragraph, section, subsection, part, provision, or part thereof not been included therein.

Section VIII. Effective Date. This Ordinance shall become effective in accordance with the Radnor Township Home Rule Charter.

ENACTED and **ORDAINED** by the Board of Commissioners this ____ day of _____, 2021.

**RADNOR TOWNSHIP
BOARD OF COMMISSIONERS**

By: _____
Name: Jack Larkin
Title: President

ATTEST: _____

MARY C. EBERLE
JOHN B. RICE
DIANNE C. MAGEE *
DALE EDWARD CAYA
DAVID P. CARO ♦
DANIEL J. PACI ♦ †
JONATHAN J. REISS ◊
GREGORY E. GRIM †
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126TH ANNIVERSARY 1895-2021

www.grimlaw.com

John B. Rice
e-mail: jrice@grimlaw.com

J. LAWRENCE GRIM, JR., OF COUNSEL
JOHN FREDERIC GRIM, OF COUNSEL

104 S. SIXTH STREET
P.O. BOX 215
PERKASIE, PA. 18944-0215
(215) 257-6811
FAX (215) 257-5374
(215) 536-1200
FAX (215) 538-9588
(215) 348-2199
FAX (215) 348-2520

September 15, 2021

Delaware County Law Library
Delaware County Courthouse
201 W. Front Street
Media, PA 19063

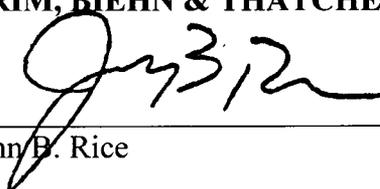
Re: Radnor Township – Garrett Hill/Outdoor Dining Ordinance

Dear Sir/Madam:

Enclosed for filing with the Delaware County Law Library, please find a true and correct copy of a proposed Ordinance which the Radnor Township Board of Commissioners will consider for possible adoption after a public hearing on October 18, 2021. Please keep the enclosed Ordinance available for public inspection and/or photocopying through the hearing date.

Sincerely,

GRIM, BIEHN & THATCHER

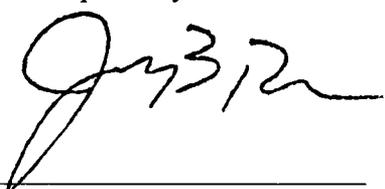
By: 
John B. Rice

JBR/hlp
Enclosure

cc: Bill White, Township Manager (w/encl.) – via email
Kevin Kochanski (w/encl.) – via email
Peggy Hagan (w/encl.) – via email
Steve Norcini (w/encl.) – via email

ATTEST:

I do hereby certify that this is a true and correct copy of the proposed Ordinance of Radnor Township, being advertised for possible adoption by the Radnor Township Board of Commissioners on October 18, 2021.

A handwritten signature in black ink, appearing to read "JBR", written over a horizontal line.

John B. Rice, Esquire
Grim, Biehn & Thatcher
Township Solicitor

RADNOR TOWNSHIP

ENGINEERING DEPARTMENT



Memorandum

To: Radnor Township Board of Commissioners

From: Stephen F. Norcini, PE, Township Engineer *Stephen F. Norcini*

CC: William M. White, Township Manager
Kevin Kochanski, Director of Community Development

Date: July 29, 2021

Height Requirements in Garrett Hill - Zoning Ordinance Amendment-Garrett Hill and Outdoor Dining Regulations Article XIA and XX

The Radnor Township Planning Commission convened July 13th, 2021. The Planning Commission reviewed the above referenced item as presented by staff. *The Planning Commission voted 8-0, recommending that the Board of Commissioners approve the amendment as written for the outdoor dining and the 35ft height maximum.*



JACK LARKIN
President
MOIRA MULRONEY, ESQ
Vice President
JAKE ABEL
CATHERINE H. AGNEW
RICHARD F. BOOKER, ESQ.
LISA BOROWSKI
SEAN FARHY

RADNOR TOWNSHIP
301 IVEN AVENUE
WAYNE, PENNSYLVANIA 19087-5297

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

WILLIAM M. WHITE
Township Manager
Township Secretary

JOHN B. RICE, ESQ.
Solicitor

KATHRYN GARTLAND
Treasurer

June 23, 2021

Linda Hill, Director
Delaware County Planning Department
1055 E. Baltimore Pike
Elwyn, PA 19063

SUBJECT: PROPOSED ZONING AMENDMENT – RADNOR TOWNSHIP

Dear Ms. Hill:

Enclosed please find a copy of a proposed Zoning Ordinance amendment for Radnor Township. Please review in accordance with the applicable requirements of the Municipalities Planning Code. The proposed regulations amending our Garrett Hill and Outdoor Dining regulations Articles XIA and XX, respectively.

This amendment is being provided to you in accordance with MPC Section 609(e); which requires that a copy be provided to the County Planning Agency for recommendations at least 30 days prior to the public hearing.

Sincerely,

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

CC: William White, Township Manager
John Rice, Township Solicitor
Steve Norcini, Township Engineer



DELAWARE COUNTY PLANNING COMMISSION

1055 E. Baltimore Pike – Suite 100
Media, PA 19063

Phone: (610) 891-5200

Email: planning_department@co.delaware.pa.us

COUNCIL

BRIAN P. ZIDEK
CHAIRMAN

DR. MONICA TAYLOR
VICE CHAIR

KEVIN M. MADDEN
ELAINE PAUL SCHAEFER
CHRISTINE A. REUTHER

LINDA F. HILL
DIRECTOR

July 16, 2021

Mr. William White
Radnor Township
301 Iven Avenue
Wayne, PA 19087-5297

RE: Name of Petition: Height Requirements and Outdoor Dining
in GH
DCPD File No.: ZA-34-7000-12-13-21
Petitioner: Radnor Township
Recv'd in DCPD: June 23, 2021

Dear Mr. White:

In accordance with the provisions of Section 609 of the Pennsylvania Municipalities Planning Code, the above described proposal has been sent to the Delaware County Planning Commission for review. At a meeting held on July 15, 2021, the Commission took action as shown in the recommendation of the attached review.

Please refer to the DCPD file number shown above in any future communications related to this application.

Very truly yours,

Thomas P. Shaffer
Interim Director



1055 E. Baltimore Pike
Media, PA 19063
Phone: (610) 891-5200
Email: planning_department@co.delaware.pa.us

Date: July 15, 2021
File No.: ZA-34-7000-12-13-21

PETITION: Height Requirements and Outdoor Dining in GH

DATE OF PETITION: June 23, 2021

PETITIONER: Radnor Township

MUNICIPALITY: Radnor Township

TYPE OF REVIEW: Zoning text amendment

PROPOSAL: Amend the text of the Township zoning ordinance to modify height requirements in Garrett Hill and permit limited outdoor dining facilities

RECOMMENDATIONS: Adoption, with consideration of staff comments

PREPARED BY: Michael A. Leventry

REMARKS:

ZONING TEXT AMENDMENT

The proposal requests to change the zoning code to address factors including height requirements and outdoor dining for the Garrett Hill districts.

PROPOSED AMENDMENT

GARRETT HILL AVENUE DISTRICT - HEIGHT PROVISIONS

Currently, within the Garrett Hill Neighborhood District, the maximum height for a building with a flat roof is 20' and a pitched roof 30'. The proposed amendment will modestly increase those heights to 25' and 35' respectively.



Date: July 15, 2021
File No.: ZA-34-7000-12-13-21

REMARKS (continued):

OUTSIDE DINING PROVISIONS FOR GARRETT HILL

The proposed petition modifies the Township's outdoor dining regulations to allow outdoor dining with the Garrett Hill - Conestoga Road (GH-CR) district. Additionally, a section of text, which expressly forbids outdoor dining as a special exception within all of the Garrett Hill districts, is to be removed. Finally, language is proposed requiring a 50' minimum buffer for any proposed outdoor dining from any existing adjacent single-family detached residence within said district.

COMPREHENSIVE PLAN

The proposed outdoor amendments, which provide support for Garrett Hill restaurants and their adaptation to market adjustments and other circumstances, is supported by the Delaware County Comprehensive Plan/Economic Development Plan. The Plan's goals support adaptation to the changing market needs of businesses.

STAFF RECOMMENDATIONS

Outdoor dining should not be allowed in any instance that creates or exacerbates a code nonconformity.

The residential buffer should apply to all types of single-family dwelling units including attached (row/townhome), semidetached (twin), as well as detached. Additionally, the Township should clarify if the 50' residential buffer is measured from the residential property line or from the residential dwelling structure.

Consideration should be given to providing a means for allowing, while also mitigating impacts of, outdoor dining within the GH-CR district in the event an existing restaurant is within 50' of an

Date: July 15, 2021
File No.: ZA-34-7000-12-13-21

REMARKS (continued):

existing single-family dwelling. It is recommended that such mitigating measures could include solid fencing to dampen sound/light pollution, prohibition of outdoor music (both live and via sound system), and limited hours of operation for the outdoor dining area. Staff does support the 50' outdoor dining setback as written, for any new restaurants proposed after the date of this amendment's adoption.

The Township should coordinate with PennDOT regarding any applicable State right-of-way requirements.

TEXT AMENDMENT FINDINGS

Staff finds the Township's proposed adjustment of its height requirements for buildings within the Garrett Avenue Neighborhood as reasonable. Additionally, suggested clarifications/amendments have been offered for the proposed outdoor dining provisions. Inclusion of outdoor dining provisions for Garrett Hill - Conestoga Road and the elimination of the prohibition of outdoor dining within the rest of the Garrett Hill districts will provide the potential for new local business opportunities and economic growth, however, it must be done in a way that is sensitive to impacts on the surrounding residential community.

ADOPTION

In accordance with Section 609(g) of the PA Municipalities Planning Code, an executed copy of the amendment must be forwarded to the County Planning Department within thirty (30) days of enactment.

MARY C. EBERLE
JOHN B. RICE
DIANNE C. MAGEE *
DALE EDWARD CAYA
DAVID P. CARO *
DANIEL J. PACI * †
JONATHAN J. REISS ◊
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September 14, 2021

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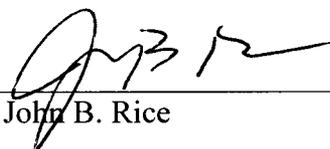
Re: Radnor Township –Verizon Wireless Land Lease Agreement/Ordinance

Dear Sir/Madam:

Enclosed for filing with the Delaware County Law Library, please find a true and correct copy of a proposed Ordinance which the Radnor Township Board of Commissioners will consider for possible adoption after a public hearing on October 18, 2021. Please keep the enclosed Ordinance available for public inspection and/or photocopying through the hearing date.

Sincerely,

GRIM, BIEHN & THATCHER

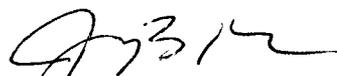
By: 
John B. Rice

JBR/hlp
Enclosure

cc: Bill White, Township Manager (w/encl.) – via email
Kevin Kochanski (w/encl.) – via email
Peggy Hagan (w/encl.) – via email
Steve Norcini (w/encl.) – via email

ATTEST:

I do hereby certify that this is a true and correct copy of the proposed Ordinance of Radnor Township, being advertised for possible adoption by the Radnor Township Board of Commissioners on October 18, 2021.



John B. Rice, Esquire
Grim, Biehn & Thatcher
Township Solicitor

ORDINANCE NO. 2021-11

AN ORDINANCE OF RADNOR TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA, APPROVING THE FIRST AMENDMENT TO LAND LEASE AGREEMENT BETWEEN THE TOWNSHIP OF RADNOR AND CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS

WHEREAS, Radnor Township and Cellco Partnership, d/b/a Verizon Wireless previously entered into a Land Lease Agreement dated March 25, 1997, for a portion of property owned by Radnor Township for the installation of utilities at the property located at 301 Iven Avenue, Wayne, PA; and

WHEREAS, Cellco Partnership, d/b/a Verizon Wireless desires to extend the term of its lease for four (4) additional extension terms of five (5) years each; and

WHEREAS § 3.01 of the Radnor Township Home Rule Charter permits the lease of real property by the Township for a term in excess of three years by ordinance.

NOW, THEREFORE, be it hereby *ENACTED* and *ORDAINED* that the Radnor Township Board of Commissioners hereby approves the Land Lease Agreement with Cellco Partnership, d/b/a Verizon Wireless, effective October 1, 2021 for a four (4) additional extension terms of five (5) years each, a copy of which is attached hereto and incorporated herein.

ENACTED AND ORDAINED this ____ day of October, 2021.

RADNOR TOWNSHIP

By: _____
Name: Jack Larkin
Title: President

ATTEST: _____
William White, Secretary

FIRST AMENDMENT TO LAND LEASE AGREEMENT

This First Amendment to Land Lease Agreement, hereinafter referred to as the "Amendment", is made this _____ day of _____, 2021 (the "Effective Date"), between Radnor Township, a Pennsylvania municipal corporation, with its principal office located at 301 Iven Avenue, Wayne, Pennsylvania 19087, hereinafter referred to as "Lessor", and Cellco Partnership, a Delaware general partnership, d/b/a Verizon Wireless, with its principal offices located at One Verizon Way, Mail Stop 4AW100, Basking Ridge, New Jersey 07920, hereinafter referred to as "Lessee". At times, Lessor and Lessee may be referred to collectively as "the Parties".

WITNESETH

WHEREAS, the Parties entered into that certain Land Lease Agreement dated March 25, 1997 (the "Agreement"), whereby Lessee leased a portion of the property owned by Lessor, together with rights of ingress and egress and for the installation of utilities at the property located at 301 Iven Avenue in Radnor Township, Wayne, Delaware County, Pennsylvania (the "Property"), said Property identified as Parcel Number 22-04300029940 Map 36-22 on the Delaware County Tax Map, designated as Delaware County Folio Number 36030163410, and being further identified in Deed Book Volume 37 at Page 1380 as recorded in the office of the Delaware County Recorder of Deeds; and

WHEREAS, Lessee desires to make extend its tenancy at the Property and to make certain other changes to the Agreement, to all of which Lessor is amenable.

NOW, THEREFORE, in exchange for the promises hereinafter made and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. The Parties hereby agree that, in addition to the original four (4) five (5) year extension terms provided for in section 4 of the Agreement, the Agreement shall automatically be further extended for four (4) additional extension terms of five (5) years each unless Lessee terminates the Agreement by giving Lessor written notice of its intention to so terminate at least six (6) months prior to the end of the then-current extension term. The Parties hereby stipulate that such additional extension terms shall run as follows: (i) fifth (5th) extension term October 1, 2021 – September 30, 2026; (ii) sixth (6th) extension term October 1, 2026 – September 30, 2031; (iii) seventh (7th) extension term October 1, 2031 – September 30, 2036; and (iv) eighth (8th) extension term October 1, 2036 – September 30, 2041.

2. As of the Effective Date, Section 6 of the Agreement is further amended by the addition of the following:

“If at the end of the eighth (8th) five (5) year extension term this Lease has not been terminated by either Party by giving to the other Party written notice of an intention to terminate it at least three (3) months prior to the end of such term, then this Agreement shall continue in force upon the same covenants, terms and conditions for a term of five (5) years and for five (5) year terms thereafter until terminated by either Party by giving to the other Party written notice of an intention to terminate it at least three (3) months prior to the end of such term. Annual rental for each year of any such additional term(s) shall be equal to 103.5% of the rental paid for the immediately preceding year.”

3. Notwithstanding anything to the contrary in the Agreement, the Parties hereby agree that the annual rental for each year of the fifth (5th) five (5) year extension term commencing October 1, 2021 and for each year of each subsequent five (5) year extension term thereafter shall be equal to one hundred three and one-half percent (103.5%) of the annual rental payable for the immediately preceding year.

4. As of the Effective Date hereof, Section 18 of the Agreement is hereby amended such that (i) notices may be sent by either party to the other via commercial courier, provided the courier's regular business is delivery service and provided further that it guarantees delivery to the addressee by the end of the next business day following the courier's receipt from the sender and (ii) written notices to Lessee shall be sent to Lessee at the following address: “Cellco Partnership d/b/a Verizon Wireless, 180 Washington Valley Road, Bedminster, New Jersey 07921, Attention: Network Real Estate”.

5. The following provision is hereby added to the Agreement as a new Section 26:

“TAXES.

(a). LESSOR shall invoice and LESSEE shall pay any applicable transaction tax (including sales, use, gross receipts, or excise tax) imposed on the LESSEE and required to be collected by the LESSOR based on any service, rental space, or equipment provided by the LESSOR to the LESSEE. LESSEE shall pay all personal property taxes, fees, assessments, or other taxes and charges imposed by any Government Entity that are imposed on the LESSEE and required to be paid by the LESSEE that are directly attributable to the LESSEE's equipment or LESSEE's use and occupancy of the Premises. Payment shall be made by LESSEE within 60 days after presentation of a receipted bill and/or assessment notice which is the basis for such taxes or charges. LESSOR shall pay all ad valorem, personal property, real estate, sales and use taxes, fees, assessments or other taxes or charges that are attributable to LESSOR's Property or any portion thereof imposed by any Government Entity.

(b). LESSEE shall have the right, at its sole option and at its sole cost and expense, to appeal, challenge or seek modification of any tax assessment or

billing for which LESSEE is wholly or partly responsible for payment. LESSOR shall reasonably cooperate with LESSEE at LESSEE's expense in filing, prosecuting and perfecting any appeal or challenge to taxes as set forth in the preceding sentence, including but not limited to, executing any consent, appeal or other similar document. In the event that as a result of any appeal or challenge by LESSEE, there is a reduction, credit or repayment received by the LESSOR for any taxes previously paid by LESSEE, LESSOR agrees to promptly reimburse to LESSEE the amount of said reduction, credit or repayment. In the event that LESSEE does not have the standing rights to pursue a good faith and reasonable dispute of any taxes under this paragraph, LESSOR will pursue such dispute at LESSEE's sole cost and expense upon written request of LESSEE."

6. TOWER LEASE. Notwithstanding anything in the Agreement to the contrary, the Parties acknowledge that the Agreement is contingent upon the continuation of that certain Lease of Site for Communications Facilities dated November 7, 1996 (the "Tower Agreement"), originally between LESSEE and Adelphia Cablevision Associates of Radnor, L.P., and its successors and assigns, as such Tower Agreement may have been amended from time to time. If for any reason such Tower Agreement expires or is otherwise terminated by either party thereto, then the Agreement shall be coterminous and, at LESSEE's sole discretion and upon written notice to LESSOR, the Agreement shall also terminate effective on the same date as the termination date of the Tower Agreement or on another date of LESSEE's choosing.

7. Except as modified herein, all other terms and conditions of the Agreement are hereby ratified and shall remain in full force and effect. In the event of any conflict between the Agreement and the provisions of this Amendment, the provisions herein shall prevail and shall supersede conflicting terms and conditions, if any. This First Amendment may be executed in electronic signatures transmitted and received via electronic transmission of a scanned document (e.g., pdf, DocuSign or similar format) are true and valid signatures for this First Amendment and, shall have the same force and effect as original ink signatures, and shall bind the Parties hereto.

IN WITNESS WHEREOF, the Parties have set their hands and affixed their respective seals the date and year first above written.

Lessor:

Witness:

Radnor Township
A Pennsylvania municipal corporation

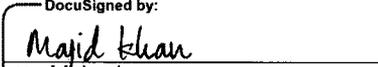
By: _____
William White
Its: Township Manager
Date: _____

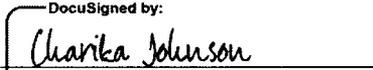
Name: _____

Lessee:

Witness:

Cellco Partnership d/b/a Verizon Wireless

By: 
Name: Majid Khan
Title: Director - Tristate Network Engineering
Date: Jun 14, 2021

Name: 
Charika Johnson
1A0FF1FEF11B48B...

**RADNOR TOWNSHIP BOARD OF COMMISSIONERS
RESOLUTION OF ADMONISHMENT AND CENSURE OF INTERIM
COMMISSIONER, CATHERINE AGNEW**

WHEREAS, Interim Commissioner Catherine Agnew, is an interim member of the Board of Commissioners of Radnor Township (the “Board”), appointed on May 24, 2021; and

WHEREAS, on September 11, 2021, Interim Commissioner Agnew improperly used her position to attempt to intimidate and to threaten – both verbally and physically – a Radnor resident without justification, in the following ways:

1. Interim Commissioner Agnew made hand to body contact with a Radnor resident by poking and/or placing her hands on a Radnor Resident several times. Photographs taken from a video made at the time of the incident at the subject property of the physical contact that Commissioner Agnew made with the resident, are attached hereto as Exhibit A.

2. Interim Commissioner Agnew continued with her verbal harassment of a Radnor resident for an extended period, even when requested several times to leave a private property. Commissioner Agnew’s refusal to leave said property after repeated requests to do so;

3. Interim Commissioner Agnew improperly and incorrectly accused a Radnor resident and the property owner of violating Township law; but refused to identify any infraction, stating that she did not have to waste her time informing the Radnor residents of the type of laws that she claimed were being violated;

4. Interim Commissioner Agnew weaponized the Radnor Police Department by requesting the police to the said property in an attempt to intimidate and harass the residents who were exercising their constitutional rights to free assembly and speech.

WHEREAS, Commissioner Agnew was not truthful when she stated at the September 13, 2021 Board of Commissioners’ meeting, that she was harassed and threatened, and therefore she had called the Police for that reason; and

WHEREAS, the police report (attached hereto as Exhibit A) indicates that on September 11, 2021, a female called the police regarding a political sign (which was on private property); the only sign at the property was the 9/11 remembrance sign, and the police report indicates that the person who called was not present, and that conditions were “normal and okay” and there is no indication that any female was harassed and/or threatened; and

WHEREAS, Commissioner Agnew knowingly made several other false statements at the September 13, 2021 Board of Commissioners' meeting related to the incident that was the subject of the police report; and

WHEREAS, §39-2 (Responsibilities of public officers and employees) of the Radnor Township Code, requires that "Public officials" are "bound to uphold the Constitution of the United States and the Constitution of this state" and that "[t]heir conduct in both their official and private affairs should be above reproach"; and

WHEREAS Interim Commissioner Agnew's attempt intimidate, threaten and to weaponize the Radnor Police Department against her constituents exercising their constitutional rights to free speech and assembly violates §39-2 of the Radnor Township Code, and constitutes private conduct by a public official that is not above reproach as required thereunder.

NOW, THEREFORE BE IT RESOLVED, that the Board hereby admonishes and censures Interim Commissioner Agnew for her actions as aforesaid. The Board hereby directs that this type of behavior is prohibited by Township Code, and hereby notifies Interim Commissioner Agnew that any such similar future actions will not be tolerated.

IN WITNESS HEREOF, the Board has authorized and adopted the foregoing Resolution and caused it to be duly executed as of the date first above written.

SO RESOLVED this 18th day of October A.D., 2021

RADNOR TOWNSHIP

Jack Larkin, President

ATTEST: _____
William M. White, Manger/Secretary

Radnor Twp PD Incident Report Form

RT-21-11872
09/11/2021
DELCOM INFO ONLY

Primary Officer: OFC JOSHUA MCCANN - JMCCAN

- | | | | | |
|--|--|--|--|--|
| <input type="checkbox"/> Juvenile Involved | <input type="checkbox"/> Investigation | <input type="checkbox"/> Video Available | <input type="checkbox"/> Gang Related | <input type="checkbox"/> Paperless |
| <input type="checkbox"/> Domestic Related | <input type="checkbox"/> Suspects | <input type="checkbox"/> Bias Crime | <input type="checkbox"/> Accident | <input type="checkbox"/> Administrative |
| <input type="checkbox"/> Alcohol Involved | <input type="checkbox"/> Arrests Made | <input type="checkbox"/> Drugs Involved | <input type="checkbox"/> Ready for DA / Prosecutor | <input type="checkbox"/> Alarm Activated |

Log Number RT-21-11872	Incident Number	File Number	Case Number	UCR
Incident Type DELCOM INFO ONLY			Dispatcher	Source PERSON
			District 7622	Status CLOSED

Incident Date / Times **Incident Occurred At or Between**

Date Received 09/11/2021	Day Rec'd Saturday	Rcvd 1256	Disp	Arrv 1256	Clrd 1310	Earliest Date and Time	Latest Date and Time
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Disposition	Cleared by Exception	<input type="checkbox"/> Suspended			
UCR Clearance	UCR Occur Date	UCR Clear Date	UCR Count	UCR Human Traffic Code	UCR HT Count

Location		<input type="checkbox"/> Intersection	
418 ST DAVIDS AV WAYNE PA 19087		Cross Street	
Municipality:		GPS Loc X	GPS Loc Y
Business Name	Premise Code	Arson Value	

Weather

Modus Operandi Coding	Victim:
Entry:	Property:
Exit:	Area:
Method:	Time of Day:

WEAPON USED:

Caller / Complainant Type **Normal** **Anonymous** **Hangup** **Refused**

RESPONDING / INVOLVED UNITS, OFFICERS, TIMES			
Division PATR	Supervisor / ID SGT CHRISTOPHER FOUR	CFOUR	
Unit Number	Officer / ID (Ofcr1 / Ofcr2)	Officer / ID (Ofcr3 / Ofcr4)	
	OFC JOSHUA MCCANN	JMCCAN	

COMMENTS / NARRATIVES	
Title INITIAL	
Narrative Created By / Creation Date OFC JOSHUA MCCANN	09/11/2021 Narrative Updated By / Update On OFC JOSHUA MCCANN 09/11/2021
Narrative Approved By / Approved Date	

C: Officers working the porch fest detail advised me that a female would like to make a report in regards to a political sign on someone's property and would meet me at the above location.
REPORT: I arrived and checked the area for the female with negative results. Everything appeared normal and okay at that time.

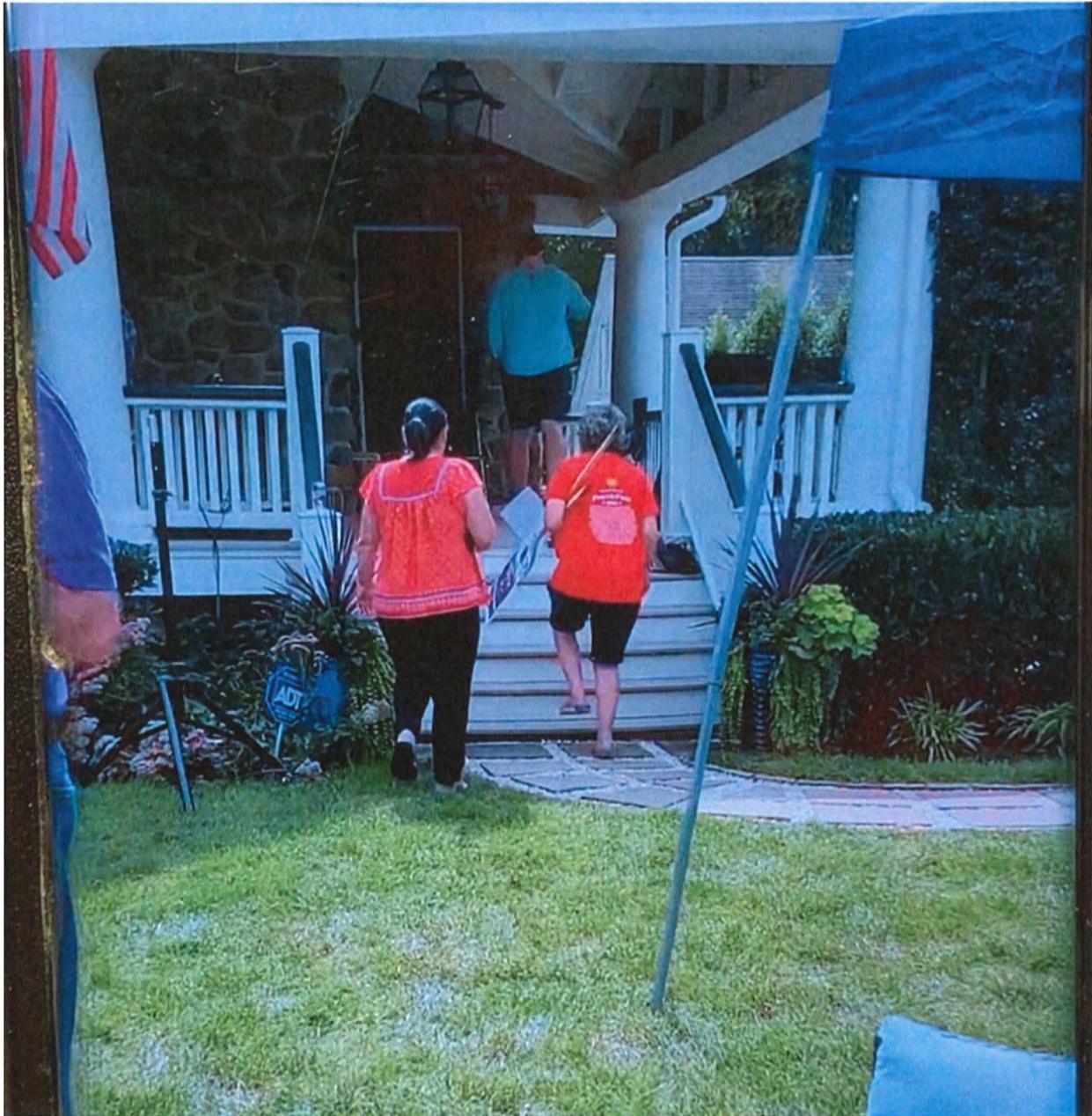
Radnor Twp PD
Incident Report Form

RT-21-11872
09/11/2021
DELCOM INFO ONLY

Assist: Kester
McCann #126











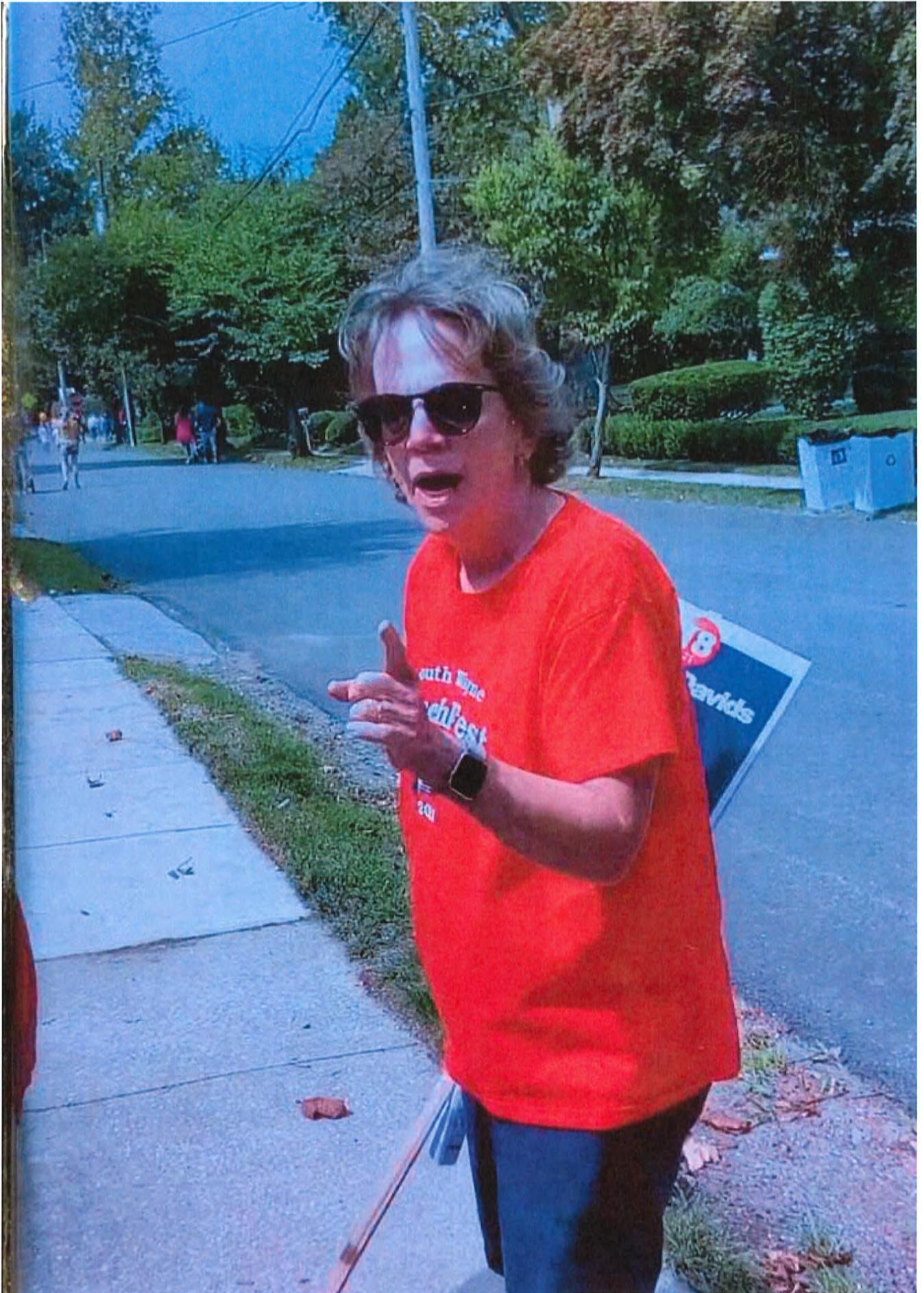














SIGN UP TO VOLUNTEER AT PORCHFEST!



**JOIN US
NOW!**

DM, email, or visit southwayneporchfest.com

Reports of Standing Committees

Old Business

New Business

a. PECO contractor
incident.

(Commissioner
Farhy)

Public Participation

Adjournment