### EAST GOSHEN TOWNSHIP PLANNING COMMISSION Meeting Agenda Wednesday, November 1, 2017 7:00 PM

- A. Call to Order / Pledge of Allegiance and Moment of Silence
- B. Chairman will ask if anyone is going to record the meeting
- C. Review of Tracking Log / Determine need for Workshop Meeting
- D. Public Comment on Non-Agenda Items
- E. Approval of Minutes
  - 1. October 4, 2017
  - 2. October 18, 2017
- F. Subdivision and Land Development Applications
  - 1. Applebrook GC (LD)
  - 2. 1003-1007 Taylor Ave. (SD)
- G. Conditional Uses and Variances
  - 1. Malvern Institute (Variances and Special Exception)
- H. Ordinance Amendments
  - 1. Wall Signs in the BP and I Districts (Draft Ordinance)
- I. 2017 Goals
  - 1. Drones / Emerging Housing Trends
- J. Any Other Matter
- K. Liaison Reports
- L. Correspondence

Bold Items indicate new information to review.

#### East Goshen Township Planning Commission Tracking Log

Application Name	Application (CU,LD,O, SD,V, SE, CA)	ype (Sk, P, F)	)ate Filed	start Date	)ate to Township Engineer	Date to CCPC	0ate to Abutting Prop. / ABC's	ixtension	C NLT Action Date	3OS NLT Action Date	learing Date	)rop Dead date	Comments
Malvern Institute 940 King Rd	V SF	P	3/27/17	3/27/17	NA	NA	3/30/17	3	11/15/17	12/5/17	12/12/17	12/19/17	
Applebrook Associates	LD	P/F	8/28/2017	8/28/2017	8/30/2017	8/30/2017	8/31/2017	<u> </u>	11/1/2017	12/5/2017	NA	12/5/2017	
Taylor Partners, 1007 Taylor Ave	SD	P/F	9/25/2017	10/4/2017	9/27/2017	9/27/2017	9/29/2017		12/6/2017	1/2/2018	NA	1/2/2017	
Bold = New Application or PC action required													
Synthes USA	CU	Р	8/28/2017	8/28/2017	8/30/2017	8/30/2017	8/31/2017		10/4/2017	10/17/2017	10/17/2017	10/27/2017	
1506 Meadowbrook Dr.	V	Р	7/10/17	7/10/17	NA	NA	7/13/17		8/2/17	8/15/17	9/7/17	9/8/17	APPVD
1380 Enterprise Drive	V	Р	7/17/17	7/17/17	NA	NA	7/27/17		8/2/17	9/5/17	9/11/17	9/15/17	APPVD
1007 Taylor Ave.	V	Р	7/11/17	7/11/17	NA	NA	7/13/17		8/2/17	8/15/17	8/29/17	9/9/17	APPVD
Crown Castle, DAS Nodes	CU	P/F	7/3/17	7/4/17	NA	NA	7/5/17		8/2/17	8/15/17	8/15/17	8/31/17	APPVD
14 Reservoir Rd.	SK	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1420 E. Strasburg Rd. / Brakman	SD/LD	P/F	5/18/16	6/1/16	5/19/16	5/19/16	5/20/16	3	3/1/17	3/21/17	NA	3/29/17	APPVD
1506 Meadowbrook Dr.	SD / V	Sk	4/24/17	NA	NA	NA	NA		NA	NA	NA	NA	NA
1007 Taylor Ave.	SD / V	Sk	5/30/17	NA	NA	NA	NA		NA	NA	NA	NA	NA

1	Draft								
2	EAST GOSHEN TOWNSHIP								
3	PLANNING COMMISSION MEETING								
4	October 4, 2017								
5									
6	The East Goshen Township Planning Commission held a regularly scheduled meeting on Wednesday,								
7	October 4, 2017 at 7:00 p.m. at the East Goshen Township building. Members present were: Chairman								
8	Adam Knox, Brad Giresi, Dan Daley, Monica Close, Jim McRee, and Ernest Harkness. Also present was								
9	Mark Gordon, (Township Zoning Officer).								
10									
11	COMMON ACRONYMS:								
12	BOS – Board of Supervisors CPTF – Comprehensive Plan Task Force								
13	BC – Brandywine Conservancy CVS – Community Visioning Session								
14	CB – Conservancy Board SWM – Storm Water Management								
15	CCPC – Chester Co Planning Commission ZHB – Zoning Hearing Board								
16									
17	A. FORMAL MEETING – 7:00 pm								
18	1. Adam called the meeting to order at 7:00 pm. He led the Pledge of Allegiance and a moment								
19	of silence to remember our first responders and those in the hurricane areas.								
20	2. Adam asked if anyone would be recording the meeting and if there were any public								
21	comments about non-agenda items. Resident Joe Fenimore, 3 Treemont Drive, Malvern								
22	asked to tape the meeting. Request was granted.								
23	3. Adam reviewed the Tracking Log and commented that there is no need for a workshop.								
24	4. Adam noted that the minutes of the September 6, 2017 meeting were approved as amended								
25	and the minutes of the September 14 workshop meeting were approved.								
20	D GUDDIVISION AND I AND DEVELODMENT								
21	<b>B.</b> SUBDIVISION AND LAND DEVELORIVIEN I								
20	representatives will be at the Nevember meeting. They met with the Conservancy Board, took a walk								
30	through the wetlands and revised their plan. Comments were received from the Township Engineer								
31	regarding the sewer that is already there and possible hook up								
32	2  1003-1007  Taylor Ave = Subdivision = Noah Kahn developer reviewed the plan as per the								
33	Zoning Hearing Board decision There will be no new garage for lot 2. The subdivision line will be								
34	parallel to the old garage and come out to Taylor Ave. They will remove some asphalt. They redesigned								
35	the existing garage to look more residential. This is a simple subdivision to put each home on its own lot.								
36	Mark mentioned that they are waiting for review letters from the County and Township Engineer. Dan								
37	verified that there is room to expand the driveway for additional parking on lot 2. They will be at the								
38	November meeting.								
39									
40	C. CONDITIONAL USES AND VARIANCES								
41	1. 1301 Goshen Parkway – Synthes USA – Brendan Burke, Attorney, and David Citro, of								
42	Mainstay Engineering, were present. They are requesting an increase in impervious coverage from 55%								
43	to 60%. They met with the Conservancy Board and made some minor changes to the plan. The height of								
44	trees was discussed because they are in the landing zone for the airport. Mark mentioned that he spoke								
45	with the Township Solicitor. The zoning ordinance does not allow trees that will exceed 50 feet in height.								
46	Mark doesn't feel the trees will be that high. Regarding the front sidewalk, Brendan commented that they								
47	have elected not to request impervious for it at this time. If it comes up in the future, they are willing to								
48	do it. David reviewed the minor changes in the plan. An island in the parking area was added and some								
49	parking spaces were moved to the other side. A sidewalk was added for the west side parking area so								

parking spaces were moved to the other side. A sidewalk was added for the west side parking area so
 people can safely cross to the building. He provided aerial photos as requested. They are still working on

51 the drum storage area. Mark commented that outdoor storage is permitted in the I1 district. The

52 ordinance allows 600 gallons.

Dan moved to recommend approval of the Synthes USA Conditional Use application to increase the 1 impervious cover on their property to 60% with the following conditions: 2 3

a. All outstanding comments from the Township Engineer are addressed prior to approval.

b. The applicant will return to the Conservancy Board during the Land Development review process to present their landscape plan.

5 c. The applicant will adjust the proposed plantings on the plan in order to meet the requirements 6 7 of the Airport Zoning for landscape plantings within the airport approach zone of the property.

8 d. The applicant consider implementing a variety of best practice methods to deal with storm 9 water runoff from the increased impervious coverage.

e. Applicant will demonstrate compliance with the zoning ordinance for outdoor storage. 10 Adam seconded the motion. The motion passed unanimously. 11

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2. Malvern Institute - Variances & Special Exception- Adam commented that the Commission 14 will not be voting on this tonight. This is time for the applicant to make a revised representation. Brian 15 Nagel, attorney, represented the applicant. He commented that this is a medical facility with various 16 levels to take care of its patients.

He introduced Mr. Dennis Deal, Chief Clinical Officer, who gave his background and certifications. He 17 has been in this field for 45 years. He explained the process for admission to Malvern. Malvern screens 18 19 for levels of mental illness. Malvern first handled alcohol then added drugs. He spoke about the increase

20 in drug usage and overdoses since 1997. They showed a video of young people telling their story. Since

- addiction is a lifetime condition, Malvern provides ongoing clinics. He spoke about security. During the 21
- 22 day, 7am to 4 pm, there are 23 staff members involved with patients. They have 5 CAs who have to

account for each patient every hour. In the evening, there are 15 staff members doing clinics or seminars. 23

24 Patients are in bed by 11 pm. There are 6 security guards, former police officers, on duty at night.

25 Elopements, run aways, happen between 8 am and 5 pm. Malvern has had several meetings with the 26 community which were very good.

David Lumpkin, Executive Director of Malvern since 2011, explained the discharge process. Malvern 27

Institute or patients' families provide transportation for those being discharged. AMAs, those leaving 28

29 against medical advice, must go through the same discharge process. They have a camera monitoring

system - 24 internal and 11 outside, which operate 24/7. As part of the 15 year plan they want to add 30 31 cameras at the front gate.

32 Bob Plucienik, Chester Valley Engineers, reviewed screening for the neighbors on the Willistown side.

Stakes were put in along the property line. Some neighbors are encroaching on the Malvern property. 33

34 Malvern will meet with those neighbors. Understory will be restored in the wooded areas. He spoke 35 about fences including an 8 foot high, black estate fence along the front of the property.

- Jason Burl, architect reviewed space requirements. Malvern is in need of space to provide their 36
- services. The blue areas are patient rooms. With more rooms they can decrease the number of patients 37

per room. The green areas are clinical areas. They are proposing to create proper circulation in the 38

building. He reviewed the 15 year plan. The barn is an existing building. They are proposing to use the 39

lower level for storage, first level for admissions, and loft or second level for activity areas. An elevator 40

would be added on the outside. Proposed new square footage would be 6,200 sf for the main building, 2<sup>nd</sup> 41

floor addition and 2.300 sf for the barn. He showed renderings of the proposed changes. The planned 42

schedule would be 1<sup>st</sup> Phase all outside site improvements, 2<sup>nd</sup> Phase the barn, and final Phase would be 43

the 2<sup>nd</sup> floor addition and redistribution of everyone. 44

- Brian mentioned that the sound fencing on the site will be addressed at the next meeting. 45
- Adam asked about the smoking pavilion. Brian commented that sound fencing and smoke removal 46
- device will be added. They have moved the smoking area temporarily to the front of the building. The 47
- basement will be for maintenance. The timeline will be part of the application. 48
- Jim pointed out that some landscaping is not listed on the timeline. Also they show 12 years with work 49
- completed in 8 years leaving 4 years if needed. Need more definite descriptions on the timeline. 50
- Ernest asked about the main building renovation. Jason explained the movement of staff from the main 51
- 52 building to the barn in order to do the construction.

- 1 Brian reviewed the remaining meetings in the process of getting approval from the Zoning Hearing
- 2 Board.
- 3 Dan asked about lighting. Brian explained that lighting in the parking areas will be repositioned.
- 4 Jason mentioned that they will need some lighting at the entrance to the barn. He doesn't foresee any 5 more lighting for the main building addition.
- 6 Dan commented that they have PA state approval for 80 beds, but if they are unsuccessful in getting this
- 7 request, he assumes they will continue to operate as is. Brian believes that PA state law allows for this 8 expansion.
- 9 Brad commented that it seems this addition will be visible to the neighbors. Will this be more daytime
- 10 use rooms and not all hours patient rooms. Jason mentioned that it is closer to King Road and windows
- 11 for patient rooms will be the same as the first floor.
- 12
- 13 <u>Public Comments</u>:
- Todd Asousa, 927 W. King Rd., Malvern He is trying to understand their claim to natural expansion.
   Brian explained that under PA law they do have the right to expand. The applicant has agreed to go
   through the township approval process.
- 17
- Mark Thompson, attorney He will be representing 4 neighbors, the Relicks and the O'Neills. He
   pointed out that under a non-conforming expansion, when there has been a previous expansion, they can't
- 20 apply for more. He believes the municipal ordinances are primary over PA law.
- 21

Page Fenimore, 3 Treemont Dr., Malvern – She asked if they do criminal background checks as part of the admission process. Mr. Deal replied no. Mrs. Fenimore feels that Malvern doesn't think security is important. Mr. Deal replied that this is not a prison it is a medical facility. He explained how they account for patients. He believes that the increase in local robberies is due to the drug problem not

- 26 because of Malvern Institute. None of their patients have committed robberies.
- 27

Lisa O'Neill, 10 Brookmont Dr., Malvern – If a person is taken from a prison and brought to Malvern for
 treatment and leaves AWOL are the police contacted? Brian commented that the police are contacted
 under certain circumstances ie; if the person is a danger to anyone.

31

Joe Fenimore, 3 Treemont Dr., Malvern – When they moved the smoking area it now comes into his backyard along with the noise. He wants it moved to a more central location now. He has called the police twice about the noise since the last meeting. Brian explained that the location was selected so the staff can see the patients. Mark pointed out that the current smoking area is 386 feet from his house.

36

Re Martino, 8 Line Road – She voiced concern about night time meetings in the new addition which
could go to 10 pm. Jason pointed out the different rooms and their uses. The building height is
consistent with a 2 story house.

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Lisa O'Neill, 10 Brookmont Dr., Malvern – She wanted to emphasize that 20 years ago people were not outside. In the past 6-7 years, the outside activities have grown. They need to look at how far out on the property they have spread.

44

Diane Weltman, 5 Line Rd., Malvern – She is disappointed that there is no information about meditation
trails and sound fencing. To be a good neighbor, why can't they reduce someone's concerns about
smoking and noise now. What the neighbors are hearing is that, if they don't get their variance, then

- 48 nothing will be done. Mark pointed out that Malvern Institute did install a fence at the property line at the
- 49 request of neighbors. In the last 5 years this is the best plan they have presented. Mark agrees that the

50 noise and language is very bad. He has heard it. He feels that the staff should be required to hold the

51 patients to a higher standard.

- 1 Brian mentioned that many of these items have been addressed in staff meetings. He invited the
- neighbors to come see the plans at the institute. David explained the process for taking care of these
  problems with the patients.
- Joanne Murphy, 20 Brookmont Dr., Malvern What is the procedure if a patient is missing?
- David explained that more staff joins in the search. Many times they are in the wrong room. If not, they
  call their emergency service. The patient is not allowed back for 30 days. She asked about the walking
  trails, which is a large area. David mentioned that there are 5-6 people who track by specific areas.
- 9
  10 Ms. Pierce, 4 Line Road, Malvern She is hoping at the next meeting there will be more information
  about the meditation areas.
- Don Tyson, 12 Line Road, Malvern How many have a history of violence, i.e; muggings, physical
   assault, etc. Brian would not let his client comment.
  - Adam thanked everyone for coming. The next meeting will be November 1, 2017.
  - **D. ORDINANCE AMENDMENTS** 
    - 1. <u>Wall Signs in the BP</u> After discussion, Mark will submit this to the township solicitor.

#### E. CORRESPONDENCE

1. Chester County Planning Commission – Commercial Landscapes – Mark attended a seminar where a trends analysis was given of commercial landscapes. He will pass along the newest survey results etc. He suggested the Commission members check the links he sent. It may not be too late to send in comments. He will continue to attend these seminars. They are very interesting.

#### ADJOURNMENT

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29 30 There being no further business, Adam moved to adjourn the meeting. Jim seconded the motion. The meeting adjourned at 10:30 pm. The next regular meeting will be held on Wednesday, November 1, 2017 at 7:00 pm.

31
32 Respectfully submitted,\_\_\_
33

Ruth Kiefer, Recording Secretary

#### Draft **EAST GOSHEN TOWNSHIP** PLANNING COMMISSION WORKSHOP MEETING **October 18, 2017**

The East Goshen Township Planning Commission held a workshop meeting on Wednesday, October 18, 2017 at 7:00 p.m. at the East Goshen Township building. Members present were: Chairman Adam Knox, Brad Giresi, Dan Daley, Jim McRee, and Silvia Shin. Also present was Rick Smith (Township 9 Manager), Mark Gordon, (Township Zoning Officer), Kristin Camp Esq. (Township Solicitor), Janet Emanuel (Township Supervisor), and Mike Lynch (Township Supervisor). 10

#### **COMMON ACRONYMS:**

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CPTF – Comprehensive Plan Task Force
CVS – Community Visioning Session
SWM–Storm Water Management
ZHB – Zoning Hearing Board

#### A. FORMAL MEETING - 7:00 pm

- 1. Adam called the meeting to order at 7:00 pm. He led the Pledge of Allegiance and a moment of silence to remember our first responders and our military.
- 2. Adam asked if anyone would be recording the meeting and if there were any public comments about non-agenda items. There was no response.

#### **B. ANY OTHER MATTER**

25 1. The Legal Aspects of Non-Conforming Uses - Presented by Kristin Camp, Esq. Kristin commented that the trend has changed over time so that the Commonwealth Court is doing everything it 26 can to protect non-conforming uses. A business that was lawful when it started has the right to continue 27 28 that use in spite of ordinances unless they abandon it. However, mere non-use does not mean that it was 29 abandoned. It is hard to prove abandonment of use.

30 When there is expansion of a non-conforming building, the property owner has to prove that the non-

conforming use was started before the zoning ordinance was done. The non-conforming use has the right 31

32 to natural expansion of the use. This is where Malvern Institute fits. Municipalities may have the right to

33 limit the expansion. East Goshen's limit is 25% of the total floor area. Mark mentioned that the 1980's expansion by Malvern Institute was the 25%. Brad doesn't feel the outside area would apply to the total

34 35 floor area. Jim feels the SF of the barn should be included.

- 36 Brad commented that if a business becomes too big for its area then they usually move. Why do they 37 need more beds?
- 38 Adam commented that their argument is that they need more space to provide the industry standards for
- care in this type of facility. He also pointed out that the non-conforming use follows the land. If they 39
- 40 leave there is nothing to keep someone from using the property for the same use.
- Kristin spoke about the negative impacts of the request. She also mentioned some positives. 41
- Conditions were discussed. Kristin mentioned that if they agree to a condition of the Zoning Hearing 42
- Board and sell the property in 10 years, the new owner can protest that condition. Kristin gave an 43
- 44 example of Honey Brook Golf Club that originally asked for a snack shack for food. Now they want a 45 restaurant with alcohol and open to the public in order to grow their business.
- Kristin explained how the PC could make different recommendations and conditions. Janet commented 46
- 47 that the Zoning Hearing Board will take into consideration the conditions the Planning Commission gives.
- 48 Parking was discussed. In and Out patients were discussed.
- 49
- 50 Malvern Institute will be at the November 1, 2017 meeting.
- 51
- 52 53

#### ADJOURNMENT

There being no further business, Adam moved to adjourn the meeting. Silvia seconded the motion. The meeting adjourned at 8:30 pm. The next regular meeting will be held on Wednesday, November 1, 2017 at 7:00 pm.

Respectfully submitted,

Ruth Kiefer, Recording Secretary

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## **Memorandum**

East Goshen Township 1580 Paoli Pike West Chester, PA 19380 Voice: 610-692-7171 Fax: 610-692-8950 E-mail: mgordon@eastgoshen.org

Date: 10/26/2017
To: Planning Commission
From: Mark Gordon, Township Zoning Officer
Re: Applebrook GC / LD Application

Dear Commissioners,

The Township has received a Land Development Application from Applebrook Golf Club which proposes a +/- 1700 s.f. building within the practice area of the golf club for a Golf Learning Center.

The plans have been revised twice and the Township engineer has issued two review letters 10/14/2017 and 10/25/2017.

There are still a number of outstanding items noted in the 10/25 review. Most of the comments pertain to the sanitary sewer for the new building and staff believes that the applicant can address these comments between now and when the Board of Supervisors reviews the application on November 14th.

#### Staff Comments:

Staff has no objection to the PC taking action on this application tonight.

#### **Draft Motion:**

Mr. Chairman, I move the Planning Commission recommend approval of the land development plan for the Applebrook Golf Club, Golf Learning Center, and support the requested waivers noted on the plans dated 8/29/2017 and last revised 10/12/2017 with the following conditions:

- 1. All remaining comments from the 10/25/2017 Pennoni letter are addressed to the satisfaction of the Township Engineer prior to the releasing the plans for recording.
- 2. The applicant shall agree to restore the proposed temporary construction entrance to the preconstruction grade conditions.
- 3. The applicant shall agree to add additional replacement landscape material to the proposed area of the construction entrance in order to return the area to its pre development condition if determined necessary by the Township Zoning

Officer, prior to the issuance of the final certificate of occupancy for the Golf Learning Center.

- 4. The Conservancy is notified when the project is complete in order to inspect the plantings.
- 5. The final plans are not released for recording until the following agreements are approved by the Board of supervisors:
  - a. Land Development Agreement
  - b. Financial Security Agreement
  - c. Stormwater management Operation and Maintenance Agreement
- 6. The applicant follows all Federal, State, and local regulations and ordinances.

## Design Report for Grinder Pump Station

EME Project No. 2952-00

## Applebrook Golf Club East Goshen Township, Chester County, PA

October 2, 2017



P.O. Box 735 • 101 Fellowship Road Uwchland, PA 19480-0735 Phone (610) 458-8300 • Fax (610) 458-7168 • evansmil@eme-llc.com

### TABLE OF CONTENTS

for:

### Design Report Applebrook Golf Club – Instructional Building

**Project Narrative** 

Calculations

- Basis of Design
- Pump Curve
- Flowmaster Printouts (Operating Point & System Curve)

**Proposed Pump Station – Manufacturer's Brochure** 



#### PROJECT NARRATIVE October 2, 2017

Applebrook Golf Club plans to construct a new instructional building on the golf course. The building will be used for lessons and instruction purposes, and a single restroom will be provided for convenience of the members.

Sewage disposal will be accomplished by installing a grinder pump station to pump to an existing Township manhole located on a Township gravity sewer line that runs behind homes located along East Boot Road. The pump station will connect to an existing reportedly 2-inch diameter PVC force main that was installed in approximately 2000 to serve a building that was proposed at the time but never constructed. Prior to construction the force main will be inspected to confirm the diameter and material of the pipe, and it will be pressure tested to confirm its integrity.

The pump station will be a completely prefabricated simplex (single pump) EcoTran System manufactured by Barnes, a division of Crane Pumps & Systems, Inc. A copy of the manufacturer's brochure for the unit is enclosed. The pump will be a 2-horsepower centrifugal grinder pump, and at its projected operating point of approximately 28 gpm (gallons per minute) it will maintain a velocity in the 2-inch force main of approximately 2.9 fps (feet per second), which exceeds the generally accepted velocity of 2 fps (feet per second) required to prevent solids deposition.

The pump station will accept gravity flow from the new building and a vented trap and cleanout will be installed on the sewer lateral. A profile of the building sewer and pump station installation is shown on the attached drawing. To prevent floatation during periods of potentially high ground water, concrete ballast will be provided as specified in the manufacturer's installation manual.

The control panel for the station will include an audible and visual high level alarm, and it will be installed on the outside of the building and within 50 feet of the pump station. If it is not possible to locate the panel within 50 feet and with a direct line of sight to the pump station, a local disconnect will be provided at the pump station.

\\SV001\projects\2900\2952-00 CVE.Applebrook Golf\grinder pump\Design Report\PROJECT NARIATIVE.

22

CXEVANS MILL

ENVIRONMENTAL, LLC

#### Basis of Design

Grinder Pump Station Applebrook Golf Club Instructional Building October 2, 2017

Building First Floor Elev Fin Grade at Pump Station Lateral Inv. at Building Lateral Inv. at Pump Station Receiving Manhole rim elevation Force main inv. elev.at manhole Force Main Invert Elev at High Point Station invert (inside bottom) Pump Off Elev (13.26") Pump On Elev (21.26") Static Head, ft Top of Pump Tank Length of existing 2" force main, lineal feet Length of proposed 2" force main, lineal feet Total length of 2" force main, LF Total Equivalent Length ft Pump Onerating Point	442.00 441.50 437.50 437.25 457.00 445.46 454.50 434.38 435.48 435.48 436.15 19 441.67 699 86 785 825 28 apm @ 36.2 ft TDH
Total Equivalent Length ft	825
Pump Operating Point	28 gpm @ 36,2 ft TDH
Velocity in force main at operating point, fps	2.86

Note: Elevations taken from site plan prepared by Chester Valley Engineers

\\SV001\projects\2900\2952-00 CVE.Applebrook Golf\grinder pump\Design Basis.doc



**EVANS MILL** 

ENVIRONMENTAL, LLC

APPLEBRUOK GOLF CLUB

## **Models OGP-CE**

Performance Curve 2HP, 3450RPM, 60Hz

#### Submersible Grinder Pumps



Performance curve includes impact of integral anti-siphon and check valve. Testing is performed with water, specific gravity 1.0 @ 68° F @ (20°C), other fluids may vary performance



PUMPS & SYSTEMS

SECTION A PAGE 7 DATE 6/05

USA: (937) 778-8947 · Canada: (905) 457-6223 · International: (937) 615-3598



	Applebrook GC -	Oper F	rt 28 gpm	
Project Description				
Friction Method	Hazen-Williams Formula			
Solve For	Pressure at 1			
Input Data				
Pressure 2		0.00	feet H2O	
Elevation 1		0.00	ft	
Elevation 2		19.00	ft	
Length		825.00	ft	
Roughness Coefficient		130.000		
Diameter		2.00	in	
Discharge		28.00	gpm	
Results				
Pressure 1		36.18	feet H2O	
Headloss		17.18	ft	
Energy Grade 1		36.30	ft	
Energy Grade 2		19.13	ft	
Hydraulic Grade 1		36.18	ft	
Hydraulic Grade 2		19.00	ft	
Flow Area		0.02	ft²	
Wetted Perimeter		0.52	ft	
Velocity		2.86	ft/s	
Velocity Head		0.13	ft	
Friction Slope		0.02082	ft/ft	

9/29/2017 2:18:35 PM

·	Applebrook System C	ur	ve 2 in FM	
Project Description				
Friction Method	Hazen-Williams Formula			
Solve For	Pressure at 1			
Input Data				
Pressure 2	C	0.00	feet H2O	
Elevation 1	٥	0.00	ft	
Elevation 2	19	9.00	ft	
Length	825	5.00	ft	
Roughness Coefficient	130.	000		
Diameter	2	2.00	in	
Discharge	28	3.00	gpm	

Discharge (gpm)		Pressure at 1 (feet H2O)	
	15.00		24.41
	20.00		28,21
	25.00		32.93
	30.00		38.52





BARNES PRESSURE

YSTEMS

The Barnes EcoTRAN<sup>™</sup> **Pressure Sewer System** preserves groundwater ecology by collecting and grinding residential sewage in an underground basin and transmitting the waste under pressure to a remote private or municipal waste treatment plant.

TEN

S



#### Why Use a Pressure Sewer System?

Pressure sewer systems are an effective method to move residential wastewater through small diameter pipes to collection facilities where other methods are less economical or less feasible. The primary differences between conventional gravity sewer systems and pressure sewer systems are in the piping network and the reduction of solids size in the wastewater. Pressure sewer systems use specialized submersible grinder pumps, which are designed to reduce sewage particulate size to easily move the sewage through small diameter pipes.

Adapted from SWPA White Paper, "A Pressure Sewer Overview"

swpa

The application of grinder pumps and pressure sewer systems is a cost-effective, long life answer to allow more home sites, both existing and new, access to a public sewer system or regional private waste water treatment system.

### The Heart of the System is the Grinder Pump

The Barnes Omni Grind Plus<sup>™</sup> (OGP) provides heads up to 200' and flows to 28gpm. With the high head capabilities of a progressive cavity pump and the long life of Barnes centrifugal grinder pumps, the Omni Grind Plus is truly a universal grinder pump for single family residences.

#### **Superior Performance**

- Two stage pump design provides high head capability
- Installed with the Barnes ESPS<sup>™</sup>, (Environmentally Sealed Pressure Switch) problems with grease build up are nonexistent.
- Start and run capacitors are located in the motor housing so no expensive control panel required
- UL and CSA listed to assure quality and electrical safety

## Dependable Activation Depends on a Reliable Level Control

The Environmentally Sealed Pressure Switch, or ESPS, is a highly dependable level control designed specifically for use with standardized low pressure sewer packaged systems.

- Pressure switch parts are protected from the basin environment with a Barnes exclusive sealed design.
- Slim, rigid column with no external moving parts. Unit is unaffected by solids, grease build up, or liquid swirling in basin.
- No field adjustment required because operating levels are factory preset.
- Barnes exclusive quick connect power cord seals tight and reduces strain.
- Overflow protection with separate air bells for operating control and high-level alarm.







ENGINEERED GASKETS SEAL SYSTEM AT UPPER AND LOWER ENDS OF RISER

DISCHARGE FLANGE SLIDES INTO MOLDED GUIDE RAIL AND SEALS AUTOMATICALLY UNDER PRESSURE, THE DIAPHRAGM SEAL IS FULLY SERVICEABLE WHEN REMOVED AS PART OF THE PUMP ASSEMBLY

BALL-TYPE SHUT-OFF VALVE IS ATTACHED TO POD FOR EASY MAINTENANCE WITHOUT BASIN ENTRY. GASKETED LOWER END SLIDES INTO RECEIVER

FULLY SERVICEABLE FLAP STYLE CHECK VALVE INTEGRAL TO PUMP ASSEMBLY

VALVE HANDLE CONTROLLED FROM ADAPTER AT TOP OF RISER WITH COLOR-CODED CORDS

STAINLESS STEEL FLEXIBLE DISCHARGE COUPLING

FACTORY ASSEMBLED AND TESTED FOR RELIABILITY

FLAP-STYLE ANTI-SIPHON VALVE PROTECTS AGAINST NEGATIVE HEAD

ESPS- AUTOMATIC PRESSURE SWITCH LEVEL CONTROL INCLUDES SOLID-STATE RELAY AND OVER-TEMPERATURE SWITCH. ELIMINATES CONTROL PANEL, NO SETTING ADJUSTMENTS REQUIRED

> GUSSETS ORIENTED TO PERMIT LIFTING WITH LIFT TRUCK

15.5 Gal.
18.5 Gal.
20.0 Gal.
10.5 Gal.

Certifica	tions/Listings
t	UL 778
	UL 508
L	JL 1951
C	SA 108
NSF	-/ANSI 46

CABLE HOOKS ALLOW FOR EASY STORAGE OF POWER CORDS AND HARNESSES

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FIBERGLASS REBAR FACTORY-INSTALLED FOR SIMPLE CONCRETE ANTI-FLOTATION BALLAST



#### Engineer / Specifier

The Barnes EcoTRAN Pressure Sewer System has been designed, tested, and certified to ensure long term, trouble-free operation. The system components and basin package, as a whole, were tested and certified to UL and CSA electrical standards and NSF/ANSI 46 grinder pump and station requirements.

All non-metallic components in polypropylene, polyethylene and thermoset vinyl ester provide outstanding corrosion resistance and high strength. All metallic components in cast iron, stainless steel or bronze offer proven resistance to corrosion in sewage applications.

Two grinder pump alternatives, the Omni Grind Plus (OGP) or Omni Grind<sup>™</sup> (OGV), provide system design flexibility and "universal" residential hydraulic coverage. The OGP high-head grinder pumps can be used universally, while the medium-head OGV grinder pumps can be used as a cost-savings measure for lower system heads.

Factory pre-set Environmentally Sealed Pressure Switch, or ESPS, is immune to the effects of grease build-up and requires no field adjustment.

Both vented and "flood plain" covers are also available.

#### Simple Installation

The Barnes EcoTRAN Pressure Sewer System is easy to install and designed to eliminate time consuming callbacks.

Direct burial cable, alarm box and all needed parts and gaskets are supplied with the EcoTRAN unit. Wiring and lifting harnesses stow neatly with cable hooks at top of the riser.

To install the system, a 36" auger or backhoe can be used for excavation. Pre-installed, fiberglass rebar allows simple anti-flotation ballasting with poured concrete. Only 1/3 yard of concrete is required for any installation depth. The riser design also permits day-of-installation depth setting.

Three inlet positions provide piping location flexibility and a flexible outlet connector prevents potential misalignment due to settling. Pre-wired waterproof power connectors dramatically simplify electrical wiring and the alarm box readily attaches to a residence or post.

All components are easily installed, including the level control and pump. The level control drops into factory preset position, with no adjustments required. The pump then slides easily into position and does not need to be powered up until system start-up.

#### Homeowner Features

Barnes EcoTRAN Pressure Sewer System is dependable, safe and aesthetically pleasing to homeowners.

The EcoTRAN is equipped with a sealed pressure switch, eliminating costly maintenance frequently required of float systems where grease is present or in areas where mercury float switches are banned or restricted. Additionally, a highly dependable centrifugal grinder pump eliminates wearing components for trouble-free operation.

Equipped with a low profile, non-rusting alarm box with silence button, the system provides both light and horn notification in the event of pump malfunction. The EcoTRAN System is also equipped with lockable rockshaped cover which makes the system safe and completely childproof. This unique cover design also blends well with its surroundings, reducing visual impact, which makes the system both out of sight and out of mind.

#### Maintenance

Barnes EcoTRAN Pressure Sewer System is easy to maintain. All system maintenance is performed from topside so confined space entry is never required.

The cover is easily removed by unlocking the padlock, twisting the cover to unlock and then lifting off. The level control can be readily removed without handling the pump. The pump-mounted check valve, discharge diaphragm and anti-siphon valve are all easily serviced. A pre-attached twopoint lifting harness allows quick and easy removal of the pump with no unbolting required.

To facilitate repair, the pump motor is bolted to frame components, rather than press or shrink-fit to the housing. The shut-off valve, connected to the pod, is easily removed from above. The isolation valve is also operated from above with a color-coded actuation cord.

Quick-connect cords were designed to simplify pump and level control connection, allowing for rapid component swapping if needed. All systems are equipped with standard alarm boxes with circuit breakers, eliminating the need to decipher through complicated, customized control panels, or optional boxes with generator receptacles.



The Barnes EcoTRAN System basin cover readily adapts to virtually any landscape design, blending in with the natural environment surrounding it.





- Q. Barnes offers a choice of two different grinder pumps with an EcoTRAN System. Which pump should I choose?
- A. The Omni Grind<sup>™</sup> (OGV) is rated for low to medium heads, up to 95 feet or 41 PSIG, while the Omni Grind Plus<sup>™</sup> (OGP) is designed for higher heads, up to 180 feet or 78 PSIG at 10GPM. The project Engineer or a Barnes Pressure Sewer specialist can advise the expected head based on the system piping design, or you can simply select the OGP for any head up to 180 feet.
- Q. Are progressive cavity grinder pumps available with the EcoTRAN System?
- A. No. In order to provide the best possible grinder pump life, we have chosen to use grinder pumps with the proven centrifugal vortex design. Progressive cavity pumps continuously wear, and the wear is accelerated under certain operating conditions; centrifugal pumps by their nature are not affected by pressure extremes or high flow rates.
- Q. The Barnes EcoTRAN System is fairly compact. What do I do if additional retention capacity is required?
- A. Barnes offers an extensive line of engineered pressure sewer systems with available depths up to 20 feet and diameters up to 6 feet. Larger capacity stations are readily available for your specific needs.

- Q. Many specifications call for a minimum 24" diameter basin. Why was the riser on the EcoTRAN System selected with an 18" diameter?
- A. The size of the external cover (effective diameter) depends primarily on the riser diameter; an 18" diameter was chosen to reduce the visual impact of the cover in the homeowner's yard. The specifications calling for a 24" diameter require a worker to enter the basin to perform shutoff valve maintenance. With the removable POD design, all maintenance is performed from topside eliminating the need for confined space entry.
- Q. How are children prevented from gaining access to the basin or the alarm box?
- A. The EcoTRAN is provided with brass padlocks for both the basin cover and the alarm box.
- Q. What happens if solid materials or drain cleaners enter the system from house?
- A. The EcoTRAN has been thoroughly tested and qualified to NSF/ANSI 46, a specification that requires successful operation despite the occasional entry of a wide range of challenging materials, including cloth,

CERTIFIED TO NSE/ANSI 46



**Crane Pumps & Systems** 420 Third Street Piqua, Ohio 45356 Phone: 1-937-778-8947 Fax: 1-800-328-7573 www.cranepumps.com

Crane Pumps & Systems Canada 83 West Drive Bramalea, Ont. Canada L6T 2J6 Phone: 1-905-457-6223 Fax: 1-905-457-2650



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NOT TO SCALE



OF

10-09-2017

SHEET:







) "EXCAVATIONS AND TRENCHING OPERATIONS" (OSHA 2226) DATED POCS SERIAL NUMBER: \_\_\_\_\_

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**GENERAL NOTES** 1. TOPOGRAPHIC INFORMATION BASED ON FIELD SURVEY PERFORMED BY CHESTER VALLEY ENGINEERS, INC, IN FEBRUARY 2017. 2. BOUNDARY INFORMATION TAKEN FROM EXISTING PLANS OF RECORD. 5. DATUM: DATOM.
 UNDERGROUND UTILITIES DELINEATED BY MASTER LOCATORS AND FIELD LOCATED BY CHESTER VALLEY ENGINEERS, ON JULY 18 AND 20, 2017.
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### PROPOSED FEATURES LEGEND 202

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(15)	PROPOSED	PARKING SPACE TABULATION
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## **OPERATIONS AND MAINTENANCE NOTES**

- THE BMPS FOR THIS SITE CONSIST OF THE SUBSURFACE INFILTRATION BED AND THE COLLECTION INLETS TO THE UNDERGROUND BED.
- THE PROPERTY OWNER IS RESPONSIBLE FOR THE ONGOING INSPECTIONS, OPERATION, REPAIR, AND MAINTENANCE OF EACH OF THE PROPOSED BMPS. 3. NO BMP OR MANMADE CONVEYANCE MAY BE USED BY THE OWNER OR OTHERS FOR ANY PURPOSE OTHER THAN THE INTENDED
- STORMWATER CONTROL FUNCTION UNLESS APPROVED BY THE MUNICIPALITY. 4. THE PERSON RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF A BMP OR CONVEYANCE SHALL MAKE RECORDS OF THE INSTALLATION AND OF ALL MAINTENANCE AND REPAIRS, AND SHALL RETAIN THE RECORDS FOR AT LEAST 10 YEARS. THESE RECORDS SHALL BE SUBMITTED TO THE MUNICIPALITY, IF REQUESTED.
- THE OWNER OF EACH BMP AND CONVEYANCE SHALL KEEP ON FILE WITH THE MUNICIPALITY THE NAME, ADDRESS, AND TELEPHONE NUMBER OF THE PERSON RESPONSIBLE FOR MAINTENANCE ACTIVITIES AND IMPLEMENTATION OF THE O&M PLAN. IN THE EVENT OF A CHANGE, NEW INFORMATION SHALL BE SUBMITTED BY THE BMP OR CONVEYANCE OWNER TO THE MUNICIPALITY WITHIN 20 WORKING
- DAYS OF THE CHANGE. NO PERSON SHALL MODIFY, REMOVE, FILL, LANDSCAPE, ALTER, OR IMPAIR THE EFFECTIVENESS OF ANY STORMWATER BMPS, CONVEYANCES, FACILITIES, AREAS OR STRUCTURES UNLESS THE ACTIVITY IS PART OF AN APPROVED MAINTENANCE PROGRAM, WITHOUT
- THE WRITTEN CONSENT OF THE MUNICIPALITY. THE LANDOWNER ACKNOWLEDGES THAT, PER THE PROVISIONS OF THE MUNICIPALITY'S STORMWATER MANAGEMENT CODE IT IS UNLAWFUL TO MODIFY, REMOVE, FILL, LANDSCAPING, ALTER OR IMPAIR THE EFFECTIVENESS OF OR PLACE ANY STRUCTURE, OTHER VEGETATION, YARD WASTE, BRUSH CUTTINGS, OR OTHER WASTE OR DEBRIS INTO ANY PERMANENT STORMWATER MANAGEMENT BMP OR CONVEYANCE
- DESCRIBED IN THIS O&M PLAN OR TO ALLOW THE BMP OR CONVEYANCE TO EXIST IN A CONDITION WHICH DOES NOT CONFORM TO THIS O&M PLAN, WITHOUT THE WRITTEN APPROVAL OF THE MUNICIPALITY.
- STORMWATER BMPS WHICH CONSIST OF LAWN AREAS SHALL BE MAINTAINED BY THE PROPERTY OWNER BY REGULAR LAWN CARE, MOWING, CLEARING DEBRIS AND YARD WASTES AND REPAIRING AREAS OF EXPOSED SOIL. 9. A BLANKET STORMWATER MANAGEMENT EASEMENT IS PROVIDED OVER AND ACROSS THE PROPERTY IN FAVOR OF EAST GOSHEN TOWNSHIP TO ALLOW THE TOWNSHIP AND ITS AGENT AND DESIGNEES ACCESS TO THE PROPOSED STORMWATER MANAGEMENT FACILITIES. THE TOWNSHIP IS GRANTED THE RIGHT, BUT NOT THE DUTY, TO ACCESS AND CONDUCT PERIODIC INSPECTIONS AND TO UNDERTAKE OTHER ACTIONS THAT MAY BE NECESSARY TO ENFORCE THE REQUIREMENTS OF THE TOWNSHIP'S STORMWATER MANAGEMENT ORDINANCE OR OF ANY APPLICABLE O&M PLAN OR O&M AGREEMENT.

## PROPOSED SITE BMPs

IN ACCORDANCE WITH THE STORMWATER MANAGEMENT CODE OF EAST GOSHEN TOWNSHIP, THE FOLLOWING LONG TERM BEST MANAGEMENT PRACTICES (BMPs) ARE PROPOSED FOR THIS SITE;

- 1. SUBSURFACE INFILTRATION BED LOCATED TO THE SOUTH OF THE PROPOSED GARAGE. THIS FACILITY PROVIDES STORMWATER RATE CONTROL AND THE REQUIRED STORAGE FOR THE WATER QUALITY VOLUME. A PORTION OF THE STORED RUNOFF INFILTRATES INTO THE GROUNDWATER SYSTEM.
- 2. SURFACE BIOFILTRATION AREA LOCATED ALONG THE NEW BITUMINOUS WALK NEAR THE EXISTING DRIVING RANGE TEES. THIS FACILITY PROVIDE STORMWATER RATE CONTROL FOR STORMWATER RUNOFF FROM A PORTION OF THE NEW BITUMINOUS WALK. INLETS COLLECT STORMWATER RUNOFF FROM THE SITE AND DIRECT IT TO THE SUBSURFACE INFILTRATION BED. 4. LEAF GUARDS - THE LEAF GUARDS TO BE PLACED ON THE PROPOSED DOWNSPOUTS PROTECTING THE COLLECTION/CONVEYANCE PIPES TO THE SUBSURFACE INFILTRATION BED.

## OPERATION AND MAINTENANCE PLAN

ALL INSPECTIONS OF POST CONSTRUCTION STORMWATER MANAGEMENT FACILITIES SHALL BE PERFORMED BY THE PROPERTY OWNER. THE OPERATION AND MAINTENANCE REQUIREMENTS FOR THE POST CONSTRUCTION STORMWATER MANAGEMENT FACILITIES FOR THIS PROJECT INCLUDE THE FOLLOWING:

## SUBSURFACE INFILTRATION BED

- INSPECTION REQUIREMENTS THE INFILTRATION BED SHALL BE INSPECTED ANNUALLY, OR AFTER EACH RAINFALL EVENT IN EXCESS OF THREE (3") INCHES. ANY DISCOVERED TRASH OR DEBRIS SHALL BE REMOVED IMMEDIATELY. ADDITIONALLY, THE INFILTRATION BED SHALL BE INSPECTED 72 HOURS FOLLOWING ALL RAIN EVENTS EXCEEDING THREE (3") INCHES OF RAINFALL. IF STANDING WATER IS VISIBLE ABOVE THE INVERT OF THE LOWER PIPE IN EITHER OF THE TWO YARD DRAINS (SW101 AND SW102) AT THAT TIME, THE TOWNSHIP SHALL BE NOTIFIED WITHIN 30 DAYS OF THIS OCCURRENCE.
- GENERAL MAINTENANCE NOTES ACCESS CAN BE GAINED TO THE SUBSURFACE INFILTRATION BED THROUGH EITHER OF THE TWO YARD DRAINS (SW101 AND SW102). THE OVERLYING VEGETATION OF SUBSURFACE INFILTRATION FEATURE SHOULD BE MAINTAINED IN GOOD CONDITION, AND ANY BARE SPOTS REVEGETATED AS SOON AS POSSIBLE.
- VEHICULAR ACCESS ON SUBSURFACE INFILTRATION AREA SHOULD BE PROHIBITED, AND CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY MOWERS. IF CONTINUAL ACCESS IS NEEDED, USE OF PERMEABLE, TURF REINFORCEMENT SHOULD BE CONSIDERED. 4. CONTACT DESIGN ENGINEER IMMEDIATELY AFTER DISCOVERY OF SINKHOLE OCCURRENCE, SINKHOLE SHOULD BE PROMPTLY AND PROPERLY REPAIRED.

### INLETS AND LEAF GUARDS

CLEAN GUTTERS OF LEAVES AND OTHER DEBRIS TWICE A YEAR (LATE FALL AND LATE SPRING). INSPECT INLETS FOUR TIMES A YEAR AND CLEAN SUMPS OF ANY ACCUMULATED DEBRIS AND SEDIMENT. STORMWATER BMPS WHICH CONSIST OF LAWN AREAS SHALL BE MAINTAINED BY THE PROPERTY OWNER BY REGULAR LAWN CARE, MOWING, CLEARING DEBRIS AND YARD WASTES AND REPAIRING AREAS OF EXPOSED SOIL.

### UTILITY NOTES

- 1. ALL STORM SEWER INLETS SHALL BE BUILT IN ACCORDANCE WITH THE DETAILS SHOWN ON THESE PLANS AND THE MANUFACTURERS SPECIFICATIONS 2. ALL PVC STORM PIPE SHALL BE SDR 35 AND MEET THE REQUIREMENTS OF ASTM D3034 SPECIFICATIONS. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. 3. ALL HIGH DENSITY POLYETHYLENE (HDPE) PIPE SHALL BE CORRUGATED EXTERIOR / SMOOTH INTERIOR (DOUBLE WALLED) PIPE ONFORMING TO ASTM E-2648
- 4. TOP OF UNIT ELEVATION = TOP OF GRATE OR RIM ELEVATION. 5. ALL STORM DRAINAGE STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT PENNDOT STANDARDS, DETAILS AND SPECIFICATIONS.
- 6. WATERTIGHT PIPE CONNECTIONS ARE REQUIRED FOR ALL SOLID/NON-PERFORATED STORM DRAINAGE PIPING. SOIL TIGHT PIPE CONNECTIONS ARE REQUIRED FOR ALL PERFORATED DRAINAGE PIPING. 7. USE WATERTIGHT HDPE FITTINGS WHERE ROOF DRAINS CHANGE DIRECTION. CONNECT VERTICAL CLEANOUT RISER PIPES TO LATERAL HDPE PIPES USING INSERTA TEE BY INSERTA FITTINGS CO.
- 8. THE SITE CONTRACTOR SHALL FIELD VERIFY ALL DRAINAGE STRUCTURE INVERTS, PRIOR TO ORDERING ANY DRAINAGE STRUCTURES, OR PIPES. NOTIFY DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF DISCREPANCY BETWEEN THESE PLANS AND FIELD VERIFIED INVERT FLEVATION.
- 9. ALL PIPE SHALL BE BROUGHT INTO A STRUCTURE AT A STRUCTURE FACE, WITH OUTSIDE PIPE WALLS CLEARING INSIDE STRUCTURE WALLS. PIPE PENETRATIONS AT CORNERS OF STRUCTURES ARE PROHIBITED, UNLESS DESIGNED AND FABRICATED FOR SUCH PENETRATION(S) 10. EXTEND PENETRATING PIPE TO, AND CUT FLUSH WITH, THE INTERIOR (EXPOSED) FACE OF STRUCTURE WALL.
- 11. ALL INLETS SHALL BE FURNISHED WITH PENNDOT "STRUCTURAL STEEL GRATE, BICYCLE SAFE", PENNDOT PUBLICATION 72, RC-45. 12. WHERE '±' IS INDICATED FOR A TOP OF STRUCTURE, ADJUST TOP OF STRUCTURE FOR ACTUAL FIELD CONDITIONS. 13. ALL EXISTING UTILITIES THAT ARE IN CONFLICT WITH PROPOSED IMPROVEMENTS ARE TO BE RELOCATED. 14. PROVIDE STEPS W/ IN STORM STRUCTURES IN ACCORDANCE WITH CURRENT PENNDOT STANDARDS, DETAILS AND SPECIFICATIONS. 16. SANITARY SEWERAGE
- A. SEE PLANS BY OTHERS. 17. OTHER UTILITIES

APPROVAL OF EAST GOSHEN TOWNSHIP OR THEIR DESIGNEE.

A. ALL OTHER UTILITIES (ELECTRIC, COMMUNICATIONS, GAS, ETC.) SHALL BE INSTALLED IN ACCORDANCE WITH THE UTILITY COMPANY'S REQUIREMENTS AND SHALL BE INSTALLED SO AS TO NOT CONFLICT WITH THE WATER, SANITARY SEWER AND/OR STORM SEWER FACILITIES PROPOSED AS PART OF THESE PLANS B. BACKFILL OF ALL UTILITY TRENCHES WITHIN EXISTING AND/OR PROPOSED EAST GOSHEN TOWNSHIP RIGHTS-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS, STANDARDS AND DETAILS OF EAST GOSHEN TOWNSHIP AND SHALL BE SUBJECT TO THE





"EXCAVATIONS AND TRENCHING OPERATIONS" (OSHA 2226) DATED POCS SERIAL NUMBER:

APPLEBROOK GOLF CLUB



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SHEET 3 OF 7



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202	EXISTING 2' CONTOURS
210	EXISTING 10' CONTOURS
× 212.20	EXISTING SPOT ELEVATION
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PROPO	SED FEATURES LEGEND
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© (15) © E & S	PROPOSED SANITARY MANHOLE NO. PROPOSED PARKING SPACE TABULATION PROPOSED SIGNAGE MARKER

## 202 PROPOSED 2' CONTOURS

\_\_\_\_\_\_ PROPOSED 10' CONTOURS PROPOSED STORM PIPE W/ INLET ---- PROPOSED SANITARY LATERAL × 212.20 PROPOSED SPOT ELEVATION 

## - • • • • - LIMIT OF DISTURBANCE STABILIZED CONSTRUCTION ENTRANCE ORANGE CONSTRUCTION FENCE/ TREE PROTECTION

INLET PROTECTION







APPLEBROOK GOLF CLUB



## CONSTRUCTION SEQUENCE

- DELINEATE LIMITS OF DISTURBANCE ADDITIONAL TREE PROTECTION FENC INSTALL ALL EROSION CONTROL DE AND CONSTRUCTION LAY DOWN ARE STRIP TOPSOIL AND STOCKPILE IN A SOCKS. REMOVE EXISTING TEE PAD AS NOT ROUGH GRADING OF THE SITE AND BEGIN CONSTRUCTION OF BUILDING INSTALL UNDERGROUND UTILITIES AND STORM PIPE. BEGIN INSTALLATION OF NEW BITUM BEGIN EXCAVATION OF INFILTRATION STORMWATER FROM ENTERING THE
- INLET HAS BEEN PERMANENTLY ST 10. WHEN CONSTRUCTION PERMITS, FINI REDISTRIBUTE TOPSOIL AND STABIL AND EROSION CONTROL BLANKETS TEMPORARY CONSTRUCTION ENTRAN LANDSCAPE PLAN AND PERMANENT
- 12. ONCE VEGETATIVE COVER HAS BEEI CONTROL DEVICES AND UNCOVER I

## SEEDING AND MULCHING SPECIF

- TEMPORARY: SEEDING SHALL BE ANNUAL RYE GRASS APP LIMING TO BE APPLIED AT 1 TON/ACRE. 10-10-10 FERTILIZER TO BE APPLIED AT 50 HAY OR STRAW MULCH TO BE APPLIED AT 3 PERMANENT:
- LIMING TO BE APPLIED AT 6 TON/ACRE. 10-10-20 FERTILIZER TO BE APPLIED AT HAY OR STRAW MULCH TO BE APPLIED AT 3 NON-STEEP AREAS < 4:1, HIGHLY MAINTAINED • SEEDING SHALL BE 50% KENTUCKY BLU GRASS, AT A RATE OF 21 LBS. PER 100
- SLOPES STEEPER THAN 4:1 SEEDING SHALL BE ERNST CONSERVATION MEADOW MIX (ERNMX-123): 38.5% BIG 10% COASTAL PANICGRASS, 5% PARTRIE 2% SHOWY TICKTREFOIL, 2% OXEYE SL TICKTREFOIL, AT A RATE OF 20 LBS PE
- DRAINAGE CHANNELS (STEEPER THAN 4:1) SEEDING SHALL BE 70% TALL FESCUE
   AT A RATE OF 21 LBS PER 1000 SQUAR
- DRAINAGE CHANNELS (FLATTER THAN 4:1) SEEDING SHALL BE 55% HARD FESCUI VARIETIES W/NO ONE VARIETY EXCEEDI 35% CREEPING RED FESCUE, 100% AM SQUARE YARDS.
- <u>GENERAL:</u> 1. THE NON-GERMINATING PERIODS ARE BETV THRU APRIL 15. AREAS DISTURBED DURIN AND MULCHED WITHIN TWENTY (20) DAYS 2. ALL SEED MIXTURES SHALL HAVE A MINIM TO 95%.
- 3. TOPSOIL TAKEN FROM CONSTRUCTION ARE STOCKPILED FOR RE-USE IN FINISH GRA VEGETATIVE CLEARING IN AREAS OF STA WITHIN THESE AREAS WITHOUT THE REQUI COMMONWEALTH AND FEDERAL WETLANDS I
- 4. ANY DISTURBED AREA ON WHICH ACTIVITY BE SEEDED AND MULCHED IMMEDIATELY. AND WHICH WILL BE RE- DISTURBED WITHIN QUICK GROWING, TEMPORARY SEEDING MIXT AT FINISHED GRADE OR WILL NOT BE RE-MULCHED WITH A PERMANENT SEED MIX BASINS AND STOCKPILES MUST BE SEEDED



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ALL EARTH DISTURBANCE SEQUENCE. EACH STAGE THE FOLLOWING PHASE.	ACTIVITIES SHAL SHALL BE SUBS	L PROCEED IN AC	CORDANCI	E WITH THE FOLL DR TO THE STAR	OWING FOF
AT LEAST SEVEN (7) DAYS PRIOR TO THE START OF EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THE CONSTRUCTION ACTIVITIES INCLUDING, BUT NOT LIMITED TO, THE LANDOWNER'S REPRESENTATIVE, THE PROJECT ENGINEER, A REPRESENTATIVE OF THE PIPELINE COMPANY AND ALL APPROPRIATE MUNICIPAL OFFICIALS.					
AT LEAST 3 DAYS PRIOR CONTRACTORS INVOLVED 1-800-242-1776 FOR A CONSTRUCTION.	TO THE START SHALL NOTIFY TI MARK OUT OF .	OF EARTH DISTUR HE PENNSYLVANIA ALL UNDERGROUNI	BANCE AC ONE-CAL D UTILITIES	TIVITIES, ALL L SYSTEM, INC. / IN THE AREA O	AT F
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<ol> <li>ROUGH GRADING (</li> <li>BEGIN CONSTRUCT</li> <li>INSTALL UNDERGR</li> </ol>	OF THE SITE AND TION OF BUILDING OUND UTILITIES	PADDING OF BUI FOUNDATION. NCLUDING NEW SA	ILDING FOU ANITARY L	JNDATION. ATERAL, ROOF DF	RAINS
8. BEGIN INSTALLATIO 9. BEGIN EXCAVATION STORMWATER FRO	ON OF NEW BITU N OF INFILTRATIC M ENTERING THE	MINOUS WALK. N BED. SEAL AL UNDERGROUND E	L YARD IN BED UNTIL	ILETS TO PREVEN DRAINAGE AREA	T TO THE
INLET HAS BEEN F 10. WHEN CONSTRUCT 11. REDISTRIBUTE TOP AND FROSION CON	PERMANENTLY S' 'ION PERMITS, FII 'SOIL AND STABI NTROL BLANKETS	TABILIZED. NISH GRADE SITE. LIZE ALL DISTURBI IN AREAS AS NO	ED AREAS	WITH PERMANEN HE PLANS, REMO	T SEED VF
TEMPORARY CONS LANDSCAPE PLAN 12. ONCE VEGETATIVE	AND PERMANEN COVER HAS BEI	NCE AND INSTALL T SEE MIXTURE W EN ESTABLISHED,	PLANTING	SS AS SHOWN ON MULCH. EMAINING EROSIO	N THE
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SEEDING AND MULC	CHING SPECI	FICATIONS			
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HAY OR STRAW MULCH TO BE APPLIED AT 3 TONS/ACRE. NON-STEEP AREAS < 4:1, HIGHLY MAINTAINED AND MOWED, USE ONLY ON TOP SOIL AREAS. • SEEDING SHALL BE 50% KENTUCKY BLUEGRASS, 30% RED FESCUE, AND 20% PERENNIAL RYE					
GRASS, AT A RATE OF 21 LBS. PER 1000 SQUARE YARDS. SLOPES STEEPER THAN 4:1 • SEEDING SHALL BE ERNST CONSERVATION SEED MIX NATIVE UPLAND WILDLIFE FORAGE & COVER MEADOW MIX (ERNMX-123): 38.5% BIG BLUESTEM, 20% SWITCHGRASS, 15% VIRGINIA WILDRYE, 10% COASTAL PANICGRASS, 5% PARTRIDGE PEA, 3% BLACKEYED SUSAN, 3% FOWL BLUEGRASS.					≿ COVER WILDRYE, IEGRASS,
2% SHOWY TICKTREF TICKTREFOIL, AT A R DRAINAGE CHANNELS (STEEF	10% COASTAL PANICGRASS, 5% PARTRIDGE PEA, 3% BLACKEYED SUSAN, 3% FOWL BLUEGRASS, 2% SHOWY TICKTREFOIL, 2% OXEYE SUNFLOWER, 1% PLAINS COREOPSIS, 0.5% PANICLEDLEAF TICKTREFOIL, AT A RATE OF 20 LBS PER ACRE. DRAINAGE CHANNELS (STEEPER THAN 4:1)				
SEEDING SHALL BE 70% TALL FESCUE AND 30% CREEPING RED FESCUE OR CHEWING FESCUE, AT A RATE OF 21 LBS PER 1000 SQUARE YARDS.  DRAINAGE CHANNELS (FLATTER THAN 4.1)					
<ul> <li>DRAINAGE CHANNELS (FLATTER THAN 4:1)</li> <li>SEEDING SHALL BE 55% HARD FESCUE MIXTURE (A COMBINATION OF IMPROVED CERTIFIED VARIETIES W/NO ONE VARIETY EXCEEDING 50% OF THE TOTAL HARD FESCUE COMPONENT), 35% CREEPING RED FESCUE, 100% ANNUAL RYE GRASS, AT A RATE OF 24 LB PER 1000 SQUARE YARDS.</li> </ul>				ertified Ponent), Er 1000	
<u>GENERAL:</u> 1. THE NON-GERMINATING PERIODS ARE BETWEEN JUNE 15 THRU AUGUST 15, AND SEPTEMBER 30 THRU APRIL 15. AREAS DISTURBED DURING THESE PERIODS MUST BE LIMED, FERTILIZED, SEEDED AND MULCHED WITHIN TWENTY (20) DAYS OF THE ENDING OF THOSE PERIODS.					
<ol> <li>ALL SEED MIXTURES SHALL HAVE A MINIMUM LIVE SEED AND GERMINATION PERCENTAGE OF 85% TO 95%.</li> <li>TOPSOIL TAKEN FROM CONSTRUCTION AREAS SHALL BE SEEDED WITH VEGETATIVE COVER AND</li> </ol>				UF 85% ∕ER AND	
STOCKPILED FOR RE-USE IN FINISH GRADING. THERE IS TO BE NO EARTH DISTURBANCE OR VEGETATIVE CLEARING IN AREAS OF STAKED (OR FENCED) WETLANDS. EARTH DISTURBANCE WITHIN THESE AREAS WITHOUT THE REQUIRED PERMITS WILL RESULT IN POTENTIAL VIOLATION OF COMMONWEALTH AND FEDERAL WETLANDS REGULATIONS.			NUE UR JRBANCE TION OF		
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	Chest	er	Chester Main Off	r Valley Engineers, Inc fice: 83 Chestnut Road	PROJECT NO.
	Civil engineers	y gineers & land surveyors	P.O. B	00x 447, Paoli, PA 1930 (610) 644-462 (610) 889-3143 Fa: cve@chesterv.con ttp://www.chesterv.con	F.B.
	SCALE 1" = 20'	DATE 8/29/17	DRAWN BY	CHECKED BY	DRAWING

SHEET 4 OF 7



EXISTING	FEATURES LEGEND	
202	EXISTING 2' CONTOURS	
210	EXISTING 10' CONTOURS	
× 212.20	EXISTING SPOT ELEVATION	
<u> </u>	EXISTING FENCE LINE	
	EXISTING EDGE OF PAVING	
0 0 0	EXISTING GUIDE RAIL	
	EXISTING CURB	
	FLOOD PLAIN	
EcB2	SOUS LINE AND DESCRIPTION	
BdA	SOLS LINE AND DESCRIPTION	
¢	EXISTING LIGHT POLE	
	STREAM LINE	
	EXISTING STORM INLET AND PIPE	
0	EXISTING STORM MANHOLE AND PIPE	
$=$ $=$ $\leq$	EXISTING STORM ENDWALL AND PIPE	
000	EXISTING MULTI-POST SIGN	
	EXISTING SIGN	
<del></del>	EXISTING UTILITY POLE	
$\odot$	EXISTING POST	
w	EXISTING UNDERGROUND WATER MAIN	
—— е ——	EXISTING UNDERGROUND ELECTRIC	
т	EXISTING UNDERGROUND TELEPHONE	
G	EXISTING UNDERGROUND GAS LINE	
— он — — —	EXISTING OVERHEAD WIRES	
—— F ———	EXISTING FIRE LINE	
$\bigcirc$	EXISTING DECIDUOUS TREE	
×	EXISTING CONIFEROUS TREE	
	EXISTING TREE & SHRUB LINE	
0	EXISTING MANHOLE (SAN, STORM, GAS, WATER, WATER, ELECTRIC, TELEPHONE, ETC.)	
WL23 WL24 WL26	WETLAND POINTS	
	STEEP SLOPES 15-25%	
	STEEP SLOPES 25% AND GREATER	
	EXISTING PIPELINE	
PROPOS	ED FEATURES LEGEND	
210 P	$\frac{1}{10000000000000000000000000000000000$	
	RUPUSED TO CUNTUURS	

	210	PROPOSED 10' CONTOURS
		PROPOSED STORM PIPE W/ TYPE M INLET
J		PROPOSED STORM PIPE W/ TYPE C INLET
J		PROPOSED STORM MANHOLE AND PIPE
	╺╺╸╼╺╴╼Ҁ	PROPOSED STORM ENDWALL AND PIPE
		PROPOSED SANITARY MANHOLE AND PIPE
-	w	PROPOSED WATER MAIN
	× 212.20	PROPOSED SPOT ELEVATION
-		PROPOSED CURB
	8	PROPOSED STORM INLET NUMBER
	2	PROPOSED SANITARY MANHOLE NO.
	(15)	PROPOSED PARKING SPACE TABULATION
	   	PROPOSED SIGNAGE MARKER

## LANDSCAPING LEGEND





1-800-242-1776

KLER



# PLANTING NOTES

- purposes only.
- material.
- cost to the owner. installation.

- of curb or walk.

- Owner. 24. All planting locations subject to field conditions.

- saturated or muddy.
- NO. DATE Chester Valley civil engineers & land surveyors SCALE 1" = 20'

1. This Landscape Plan is intended to be used for landscaping

2. Landscape contractor shall inspect the site and become familiar with the planting area prior to the installation of any plant

3. Plant material quantities listed for the convenience of the Contractor. Actual numbers of symbols shall take precedence over quantities listed in cases of conflict.

4. All plant material subject to approval by the Owner or Owners representative prior to installation. Plant material shall be nursery grown locally, and shall be free of disease and pests, and shall be full and well shaped. Any material found to be unacceptable shall be replaced with acceptable material at no

5. The Contractor shall advise the Landscape Architect and/or Owner in writing of any proposed substitutions for the plant material specified and these substitutions shall be subject to the approval by the Landscape Architect and/or Owner prior to

6. Plant material and installation shall be in accordance with the American Standard for Nursery Stock of the American Association of Nurserymen and with the general planting specifications of the municipality.

7. All plant material shall be of the minimum size noted on the plans, Plant material shall be measured across the main body of the plant, not to the furthermost tips of growth. 8. All areas to be landscaped, especially next to building areas,

shall be excavated of all building material, debris and poor soils to a minimum depth of 12"-18" and backfilled with a good, medium textured planting soil. All lawn areas shall have a minimum of 4"-6" of topsoil spread prior to seeding or sodding as may be specified. Areas adjacent to curbs and walks shall be crowned a minimum of 4" higher than the top of curb or walk to allow for settling, however finished grade immediately adjacent to the curb or walk shall be sufficiently depressed to allow for the surface of any mulching to be even with the top

9. All borders between lawn areas and planting beds shall not have edging unless otherwise noted on the plans. 10. See Tree Planting Details for tree planting, staking and guying

directions. See Shrub Planting Details for shrub planting directions. Tree shall be staked immediately after planting. 11. Remove all twine and wire from tree and shrub root balls.

Remove all non-rot burlap and twine from all plant material prior to planting. Untie all twine and/or burlap from the trunk of the plant material and drape down the root ball or remove from plant. Remove all plant containers prior to planting. 12. Prune all plant material after planting in accordance with the American Association of Nurserymen standards. Fine prune all

plants to shape, but do not disfigure plant material. Prune all dead branches from plant material. 13. Limb deciduous, high canopy (shade) trees to 6' above grade.

14. Canopy trees to be placed a minimum of 30" from paved areas and walkways unless otherwise directed.

15. Trees and shrubs to be planted even with or higher (2" max.) than the grade that the plants were grown at the nursery (roughly the top of the root ball). Contractor is responsible for plat installation to the proper height.

16. Trees and shrubs shall not be planted over any underground utility, nor within any underground utility easement (minimum of 10' from the center of the pipe). Contractor shall verify location of all underground utilities prior to starting work. 17. Trees planted in lawn areas to be mulched with a ring a

minimum of 2' wide with a minimum of 3" of mulch unless otherwise noted or required for tree protection. Shrub beds to be mulched to a minimum depth of 3". 18. Mulch to be shredded hardwood bark. Prior to installation of

the mulch, spread a pre-emergient herbicide. 19. Plant material shall be installed the same day as it is delivered to the site to the extent practical. Any plant material the is not planted the same day it arrives shall be protected from drying out by the Contractor until it can be planted.

20. Upon completion of planting and mulching and at the end of each day, Contractor shall remove all extraneous material and debris, broom sweep and wash the area clean.

21. Contractor shall guarantee all plant material for a period of 2 years from the date of acceptance by the Owner. All plant material that does not survive the guarantee period shall be replaced by the Contractor. Dead plants shall be replaced no later than the next planting season.

22. Contractor shall notify the Owner upon the completion of the guarantee period and schedule a final inspection of the plant material and lawn areas. At or before the final inspection, Contractor shall remove any remaining tree stakes and prune the plant material as needed unless otherwise directed by the

23. All shrub groupings shall be planted as a single bed.

25. All areas disturbed by construction activities that are not shown to be planting beds on these plans, shall be seeded as lawn areas per the seeding specifications on these plans.

26. Contractor shall provide all topsoil, fertilizers and other additives as required unless otherwise directed by the Owner. All materials used shall be as specified or better.

27. Contractor shall final grade all planting areas and berms as necessary prior to the installation of the plant material unless final grading is to be performed by others. Regardless, planting areas shall be fine raked smooth and even after the installation of the plant material and prior to mulching. No plant material shall be installed and no raking shall occur if the soils are

28. Contractor shall be responsible for the maintenance of the plant material until such time as the project is accepted by the Owner. Maintenance shall include, but not limited to, watering fertilizing, pruning, mowing and weeding.

29. Contractor shall provide the Owner with written instructions regarding the care of the plant material and any special circumstances.

## PRELIMINARY/FINAL LANDSCAPING PLAN

1 10/5/17 ADDRESS TOWNSHIP ENGINEER'S 9/14/17 COMMENT LETTER LAND DEVELOPMENT PLAN

## FOR APPLEBROOK GOLF CLUB **GOLF LEARNING CENTER**

EAST GOSHEN TOWNSHIP - CHESTER COUNTY - PENNSYLVANIA Chester Valley Engineers, Inc. Main Office: 83 Chestnut Road 
 Main Office:
 83 Chestnut Road
 20558

 P.O. Box 447, Paoli, PA 19301
 20558
 (610) 644-4623 Engineers (610) 889-3143 Fax cve@chesterv.com http://www.chesterv.com DATE DRAWN BY CHECKED BY DRAWING 8/29/17 RW RHP

SHEET 5 OF 7









2) "EXCAVATIONS AND TRENCHING OPERATIONS" (OSHA 2226) DATED POCS SERIAL NUMBER: \_\_\_\_\_\_

APPLEBROOK GOLF CLUB















One South Church Street Second Floor West Chester, PA 19382 T: 610-429-8907 F: 610-429-8918

www.pennoni.com

October 25, 2017

EGOS 0121

Mark A. Gordon Director of Code Enforcement/Zoning Officer East Goshen Township 1580 Paoli Pike West Chester, PA 19380

#### RE: Applebrook Golf Club Golf Learning Center Preliminary/Final Land Development – 2<sup>nd</sup> Submission

Dear Mark:

As requested, we have reviewed the following information, prepared by Chester Valley Engineers, regarding the referenced submission:

- *"Land Development Plan for Applebrook Golf Club Golf Learning Center"* (seven sheets) dated August 29, 2017, last revised October 12, 2017;
- "Post-Construction Stormwater Management Report for Applebrook Golf Club New Learning Center" dated August 25, 2017, last revised October 23, 2017;
- "Design Report for Grinder Pump Station" prepared by Evans Mill Environmental dated October 2, 2017;
- Subdivision and Land Development application; and
- Response letter dated October 5, 2017.

The owner/applicant, Applebrook Associates, proposes to construct a new golf learning center (1805 SF) and paved walkway adjacent to the existing driving range on UPI No. 63-4-89. The learning center will be served by on-site water and public sanitary sewer. The parcel is located on the west side of Line Road (T-385), within the I-2 Planned Business, Research and Limited Industrial zoning district. Temporary construction access is proposed from East Boot Road.

The applicant has requested the following five (5) waivers:

- 1. From §205-01 requiring a preliminary plan approval;
- 2. From §205-39 requiring a traffic impact study;
- 3. From §205-40 requiring a water supply study;
- 4. From §205-28.10(A)(1) requiring a Historic Resource Impact Study; and
- 5. From §195-27.B(8)(q) requiring a 50-foot buffer from all wetlands.

The following comments from our September 14, 2017 review letter remain outstanding: (*new comments in italics*)

#### ZONING

R:\Projects\EGOS\0121- Applebrook - Teaching Center\Documents\Applebrook LD Rev LTR 2017-09-25.docx

 As part of a preliminary plan submission for any land development application which proposes new construction of buildings, structures, roads, driveways, parking areas, or other land disturbance within 250 feet of the exterior walls of any Class I or II historic resource an historic resource impact study is required. (§240-38.10(A)(1)) It appears there is land disturbance within 250 feet of a Class I historic resource located on East Boot Road.

The applicant has requested a waiver.

#### **STORMWATER MANAGEMENT**

2. There shall be a fifty-foot construction nondisturbance buffer to protect streams, wetlands and other water bodies during construction of the proposed regulated activity. (§195-27.B(8)(q)) The proposed temporary construction entrance is within 50 feet of the wetlands.

The applicant has requested a waiver.

- 3. Regarding the bio-filtration area:
  - a. The applicant shall indicate how the increase in 2-year runoff is being infiltrated, as the calculations indicate that the full inflow volume is discharging through the underdrain.

The applicant indicated that the underdrain was removed from the modeling calculations, however, it is still shown on the plans. As designed, the basin will not provide the permanent volume reduction listed in the calculations (page 87 of the August 25, 2017 PCSM Report). The underdrain should be capped or plugged to promote infiltration of the full storage volume. Additionally, infiltration testing results shall be provided for locations TP-3 and TP-4, as indicated on the plans.

#### SANITARY SEWER

- 4. A fresh air vent and standard building trap shall be placed as close to the building as possible, not more than 10 feet from the face of the building. (§188-31.C.(1))
- 5. The plan view shows the tie-in to the existing 2-inch force main line. It is not apparent if the existing 2-inch diameter force main line currently ends there or if it extends further into the site. If it extends beyond the proposed connection, the existing force main will need to be cut and abandoned beyond that point. (§188-33.A.(3)(d))
- 6. The plan view should show the extents of the existing 2-inch diameter force main line and the manhole in which the force main ties into. It is our understanding that the Township Public Works Department is not aware that this force main line exists. (§188-33.A.(3)(d))
- 7. A Grinder Pump Station Operation & Maintenance Agreement needs to be submitted for review and approval. (§188-33.A.(3)(e) & §188-33.F)
- 8. Duplex grinder pump units (two pumps) are required for commercial, institutional, and industrial buildings and uses and they shall have a tank capacity of 150 gallons below the influent invert of the building sewer pipe. The proposed system is a single pump unit with less than 64 gallons of capacity and is not in compliance. (§188-33.B.(1))

- 9. The plan set and profile should state the material of the proposed and existing force main pipe. Discharge piping shall be PVC SDR 21 or HDPE DR 11 (minimum 125 psi rating at 73°F). (§188-33.D.(3))
- 10. We recommend that the design calculations and manufacturers information from the grinder pump design report be added to the plan set so that the plans alone provide comprehensive documentation on the grinder pump system.
- 11. There are elevation discrepancies between the grinder pump design report and the sanitary sewer profile plan.
- 12. We recommend the inclusion of additional details or notes regarding the gravity sewer lateral from the building to the grinder pump including, at minimum, pipe material, size, trap, and vent cap in accordance with the attached East Goshen Township typical sewer lateral detail.
- 13. We recommend the inclusion of additional details or notes regarding connection of the proposed force main to the existing force main.
- 14. The design reports states that prior to the construction of the force main, the existing force main will be inspected and pressure tested. Notes requiring excavation, inspection, and pressure testing of the existing pipe should be added to the plans.
- 15. The sanitary sewer profile indicates there is an 18-foot elevation difference between the high point in the existing force main and the grinder pump outlet. An air release valve should be added the high point of the existing force main if there is not one existing.

#### GENERAL

- 16. Please additionally note the status of the following reviews/permits:
  - a. NPDES Permit (PaDEP/CCCD) (§195-15.C(2), -16.A, -17.A) Not applicable.
  - b. Planning Module (PaDEP) (§240-24.F, §205-33.B(22)(a)) Not required per June 24, 2017 correspondence from DEP.
  - c. Sanitary Sewer (Municipal Authority) Correspondence has not yet been received.
  - d. On-lot Wells (CCHD) Correspondence has not yet been received.
  - e. Highway Occupancy Permit (PennDOT) Not applicable.
  - f. Fire Planning (Fire Marshal) Not applicable.
  - g. Landscaping (Conservancy Board) Correspondence has not yet been received.

Should you have any further questions or comments, please contact the undersigned.

Sincerely,

PENNON

Nathan M. Cline, PE Township Engineer

cc: Robert H. Plucienik, PE, Chester Valley Engineers (via e-mail) Applebrook Associates, c/o Jared Viarengo (via e-mail) Rick Smith, Township Manager (via e-mail) Mark Miller, Public Works Director (via e-mail)

Attachment: Sewer Lateral/Building Sewer Detail




October 5, 2017

Chester Valley Engineers, Inc. Main Office: 83 Chestnut Road P.O. Box 447, Paoli, PA 19301 (610) 644-4623 / (610) 889-3143 Fax www.chesterv.com

Mr. Mark Gordon Director of Code Enforcement / Zoning Officer East Goshen Township 1580 Paoli Pike West Chester, PA 19380

001 9 2017

Re: Revised Preliminary / Final Land Development Plans Applebrook Golf Club – Golf Learning Center East Goshen, Chester County CVE Project No 20558-0000

Dear Mark,

In response to the review letter from Pennoni Associates, Township Engineer, dated September 14, 2017, we have revised to the Land Development Plans for the new Golf Learning Center Plans. Enclosed are the following items:

- 11 full-size copies of the Preliminary / Final Land Development Plan, last revised October 5, 2016,
- 3 copies of the "Design Report for Grinder Pump Station, Applebrook Golf Club" dated October 2, 2017 as prepared by Evans Mill (EME Project No 2952-00).

A pdf copy of these documents will be forwarded to you separately electronically (via email).

Specific responses to the comments in the referenced letter are as follows:

## Zoning

1. While a detailed table indicating compliance with the various bulk and area requirements was not provided, it is our opinion the proposed improvements are consistent with these requirements.

No plan revisions required.

2. As part of a preliminary plan submission for any land development application which proposes new construction of buildings, structures, roads, driveways, parking areas, or other land disturbance within 250 feet of the exterior walls of any Class I or II historic

Mr. Mark Gordon East Goshen Township October 5, 2017 Page 2

resource an historic resource impact study is required. ( $\S240-38.10(A)(1)$ ). It appears there is land disturbance within 250 feet of a Class I historic resource located on East Boot Road.

We have requested a waiver from the requirement to provide an historic resource impact analysis as the land disturbance is only temporary for construction access (see Sheet 1). Permanent improvements are located more than 250 feet from the historic resource. The ordinance allows the Board to grant a waiver from this requirement.

## Subdivision and Land Development

3. The applicant is proposing preliminary / final plan approval, therefore a waiver from *§205.1* should be additionally requested.

A waiver request from §205.1 has been added to the waiver request list (see Sheet 1).

- 4. Regarding preliminary and final plan requirements (§205-30 and §205-33), the following should be provided:
  - *a.* The name of all abutting or adjacent property owners in the vicinity of the project (§205-30.B(5)).

The names of the abutting property owners in the vicinity of the project have been added to Sheet 1.

b. Such private deed restrictions and / or a statement of any restrictions previously imposed in accordance with §205-33.C(2). If no deed restrictions exist or will be imposed, it is recommended a note stating the same be indicated on the plan.

There are no known restrictions on the property. This has been noted on Sheet 1 (Note #3).

## Stormwater Management

5. Please label the infiltration test locations on the plans to verify conformance with the requirements regarding infiltration volume and depth to limiting zones (§195-20.A, B, J(1)).

The test pits have been labeled as requested.

## Chester Valley Engineers

Mr. Mark Gordon East Goshen Township October 5, 2017 Page 3

6. All soil names and boundaries shall be indicated on the plans (\$195-27.B(8)(k)).

The soil type has been noted on Sheet 3 (Note #15). The soils in the project area are Neshaminy Silt Loams.

7. There shall be a fifty-foot construction non-disturbance buffer to protect streams, wetlands and other water bodies during construction of the proposed regulated activity (§195-27.B(8)(q). The proposed temporary construction entrance is within 50 feet of the wetlands.

A waiver from the requirements to provide a 50-foot buffer has been requested. See Sheet 1.

- 8. *Regarding the bio-filtration area:* 
  - *a.* Additional elevation details should be provided and the proposed grading reviewed for consistency with the detail.

Additional spot elevations have been added, revisions to proposed contours, and changes to the proposed spillway have provided to provide clarity and consistency with the plans, details, and report.

b. The proposed underdrain / outlet pipe should be indicated on the plans and additional plan detail provided.

The proposed underdrain and rip-rap apron have been provided for the plan and plan details.

c. The applicant shall indicate how the increase in the 2-year runoff is being infiltrated, as the calculations indicate that the full inflow volume is discharging through the underdrain.

The calculations have been revised to remove the 4" discharge pipe from the HydroCAD routing. No additional changes were required to the bio-filtration routing.

*d. The location of the rip rap apron is not indicated on the plan / detail.* 

The proposed underdrain and rip-rap apron have been provided for the plan and plan details.

## **Chester Valley Engineers**

Mr. Mark Gordon East Goshen Township October 5, 2017 Page 4

e. The underdrain pipe diameter is inconsistent on the various details.

The proposed 4" underdrain and rip-rap apron have been provided for the plan and plan details. The bio-filtration area details have been revised to clarify the pipe diameter and any potential inconsistencies.

f. A seed mixture and / or detailed planting plan should be provided.

The seed mixture for the bio-filtration area has been noted on the detail for the bio-filtration area on Sheet 7.

- 9. *Regarding the infiltration bed:* 
  - a. Grate elevations should be indicated on the plan and detail.

Grate elevations have been added to the plan and details.

*b. There appear to be multiple discrepancies regarding the pipe diameter between the details, notes and report.* 

Per our conversation and emails, these discrepancies have been revised accordingly.

*c.* The grading within and around the proposed bed should be reviewed for consistency with the report.

Per our conversation and emails, all contour labels have been realigned with their respective contours, the bio-filtration area contours have been revised to correspond better with the calculations, the infiltration bed detail has been revised to include proposed revised contours.

10. Please clarify where the roof drains will connect to the storm sewer system.

The roof drain collectors and the connections to the storm drain system have been shown and labeled on Sheet 3.

11. The applicant is reminded that a Stormwater management Operations and Maintenance agreement shall be completed (§195-27.F.2). This document is available on the Township website. Please sign two copies and return to the Township for authorization by the Board of Supervisors. The Township will the n return to the applicant for

Mr. Mark Gordon East Goshen Township October 5, 2017 Page 5

recording with the plan, at the County. A copy of the time stamped document and proof of recording should be returned to the Township.

A Stormwater Management Agreement is in the process of being completed by the applicant. It will be forwarded to the Township for execution under separate cover.

12. Per §195-39, the Township requests that the following be added to General Note 16 on Sheet 3 regarding the stormwater management easement:

"A blanket stormwater management easement is provided over and across the property in favor of East Goshen Township to allow the Township and its agent and designees access to the proposed stormwater management facilities. The Township is granted the right, but not the duty, to access and conduct periodic inspections and to undertake other actions that may be necessary to enforce the requirements of the Township Stormwater Management Ordinance or of any applicable O & M plan or O & M agreement.

This note has been added to Sheet 3 (Note #17).

## Sanitary Sewer

13. Limited sanitary sewer information was provided, including no details. If the proposed method is a connection to an existing force main, a new grinder pump will be required along with hydraulic analysis of the existing force main to confirm that the new grinder pump system can pump into the force main. Other grinder pump system requirements from the Sewer Ordinance will also need to be addressed. All applicable details and notes will need to be added to the plans.

A design for the proposed sewer system and grinder pump has been prepared by Evans Mill Environmental and has been included in this submission.

## <u>General</u>

- 14. *Please additionally note the status of the following reviews / permits:* 
  - *a.* NPDES Permit (PaDEP/CCCD) (§195-15.C(2), -16.A, -17.A) Not applicable.
  - b. Planning Module (PaDEP) (§240-24.F, §205-33.B(22)(a)) Not required per June 24, 2017 correspondence from DEP.
  - c. Sanitary Sewer (Municipal Authority) Correspondence has not yet been received.
  - d. On-lot Wells (CCHD) Correspondence has not yet been received.
  - e. Highway Occupancy Permit (PennDOT) Not applicable.

Mr. Mark Gordon East Goshen Township October 5, 2017 Page 6

- f. Fire Planning (Fire Marshal) Not applicable.
- g. Historic Resource (Historical Comm.) Correspondence has not yet been received.
- *h.* Landscaping (Conservancy Board) Correspondence has not yet been received.

These revisions should address the comments raised by the Township Engineer's review. Should you have any questions regarding this submittal or need additional information, please do not hesitate to contact me.

Very truly yours, Chester Valley Engineers, Inc. Tria

Brett H. MacKay, RLA, AICP, LEED-AP Senior Associate

Enclosures: as noted

cc:



One South Church Street Second Floor West Chester, PA 19382 T: 610-429-8907 F: 610-429-8918

www.pennoni.com

September 14, 2017

EGOS 0121

Mark A. Gordon Director of Code Enforcement/Zoning Officer East Goshen Township 1580 Paoli Pike West Chester, PA 19380

## RE: Applebrook Golf Club Golf Learning Center Preliminary/Final Land Development

Dear Mark:

As requested, we have reviewed the following information, prepared by Chester Valley Engineers, regarding the referenced submission:

- "Land Development Plan for Applebrook Golf Club Golf Learning Center" (seven sheets) dated August 29, 2017;
- "Post-Construction Stormwater Management Report for Applebrook Golf Club New Learning Center" dated August 25, 2017; and
- Subdivision and Land Development application.

The owner/applicant, Applebrook Associates, proposes to construct a new golf learning center (1805 SF) and paved walkway adjacent to the existing driving range on UPI No. 63-4-89. The learning center will be served by on-site water and public sanitary sewer. The parcel is located on the west side of Line Road (T-385), within the I-2 Planned Business, Research and Limited Industrial zoning district. Temporary construction access is proposed from East Boot Road.

The applicant has requested the following two (2) waivers:

- 1. From §205-39 requiring a traffic impact study; and
- 2. From §205-40 requiring a water supply study.

We offer the following comments:

#### ZONING

- 1. While a detailed table indicating compliance with the various bulk and area requirements was not provided, it is our opinion the proposed improvements are consistent with these requirements.
- 2. As part of a preliminary plan submission for any land development application which proposes new construction of buildings, structures, roads, driveways, parking areas, or other land disturbance within 250 feet of the exterior walls of any Class I or II historic resource an historic resource impact study is required. (§240-38.10(A)(1)) It appears there is land disturbance within 250 feet of a Class I historic resource located on East Boot Road.

### SUBDIVISION AND LAND DEVELOPMENT

- 3. The applicant is proposing preliminary/final plan approval, therefore a waiver from §205.1 should additionally be requested.
- 4. Regarding preliminary and final plan requirements (§205-30 and §205-33), the following should be provided:
  - a. The name of all abutting or adjacent property owners in the vicinity of the project. (§205-30.B(5))
  - b. Such private deed restrictions and/or a statement of any restrictions previously imposed in accordance with §205-33.C(2). If no such deed restrictions exist or will be imposed, it is recommended a note stating the same be indicated on the plan.

#### STORMWATER MANAGEMENT

- 5. Please label the infiltration test locations on the plans to verify conformance with the requirements regarding infiltration volume and depth to limiting zones. (§195-20.A, B, J(1))
- 6. All soil names and boundaries shall be indicated on the plans. (§195-27.B(8)(k))
- 7. There shall be a fifty-foot construction nondisturbance buffer to protect streams, wetlands and other water bodies during construction of the proposed regulated activity. (§195-27.B(8)(q)) The proposed temporary construction entrance is within 50 feet of the wetlands.
- 8. Regarding the bio-filtration area:
  - a. Additional elevation details should be provided and the proposed grading reviewed for consistency with the detail.
  - b. The proposed underdrain/outlet pipe should be indicated on the plans and additional plan detail provided.
  - c. The applicant shall indicate how the increase in 2-year runoff is being infiltrated, as the calculations indicate that the full inflow volume is discharging through the underdrain.
  - d. The location of the rip rap apron is not indicated on the plan/detail.
  - e. The underdrain pipe diameter is inconsistent on the various details.
  - f. A seed mixture and/or detailed planting plan should be provided.
- 9. Regarding the infiltration bed:
  - a. Grate elevations should be indicated on the plans and detail.
  - b. There appear to be multiple discrepancies regarding the pipe diameter between the details, notes and report.
  - c. The grading within and around the proposed bed should be reviewed for consistency with the report.
- 10. Please clarify where the roof drains will connect to the storm sewer system
- 11. The applicant is reminded that a Stormwater Management Operation and Maintenance agreement shall be completed. (§195-27.F.2) This document is available on the Township website. Please sign two copies and return to the Township for authorization by the Board of Supervisors. The Township will then return to the applicant for recording with the plan, at the County. A copy of the time stamped document and proof of recording should then be returned to the Township.

12. Per §195-39, the Township requests that the following be added to General Note 16 on Sheet 3 regarding stormwater management easement:

"A blanket stormwater management easement is provided over and across the property in favor of East Goshen Township to allow the Township and its agent and designees access to the proposed stormwater management facilities. The Township is granted the right, but not the duty, to access and conduct periodic inspections and to undertake other actions that may be necessary to enforce the requirements of the Township's Stormwater Management Ordinance or of any applicable O&M plan or O&M agreement."

#### SANITARY SEWER

13. Limited sanitary sewer information was provided, including no details. If the proposed method is a connection to an existing force main, a new grinder pump will be requried along with an hydraulic analysis of the existing force main to confirm that the new grinder pump system can pump into the force main. Other grinder pump system requirements from the Sewer Ordinance will also need to be addressed. All applicable details and notes will need to be added to the plans.

#### **GENERAL**

- 14. Please additionally note the status of the following reviews/permits:
  - a. NPDES Permit (PaDEP/CCCD) (§195-15.C(2), -16.A, -17.A) Not applicable.
  - b. Planning Module (PaDEP) (§240-24.F, §205-33.B(22)(a)) Not required per June 24, 2017 correspondence from DEP.
  - c. Sanitary Sewer (Municipal Authority) Correspondence has not yet been received.
  - d. On-lot Wells (CCHD) Correspondence has not yet been received.
  - e. Highway Occupancy Permit (PennDOT) Not applicable.
  - f. Fire Planning (Fire Marshal) Not applicable.
  - g. Historic Resource (Historical Comm.) Correspondence has not yet been received.
  - h. Landscaping (Conservancy Board) Correspondence has not yet been received.

Should you have any further questions or comments, please contact the undersigned.

Sincerely,

PENNONI

Nathan M. Cline, PE Township Engineer

cc: Robert H. Plucienik, PE, Chester Valley Engineers (via e-mail) Applebrook Associates, c/o Jared Viarengo (via e-mail) Rick Smith, Township Manager (via e-mail) Mark Miller, Public Works Director (via e-mail)

## EAST GOSHEN CONSERVANCY

October 26, 2017

East Goshen Township Planning Commission 1580 Paoli Pike West Chester, Pa. 19380

Re: Applebrook Golf Club Golf Learning Center Recommendation on Landscape Plan

Dear Commission Members:

At their meeting on October 11, 2017 the Conservancy Board voted in favor of the following motion:

Madame Chairman, I move that we recommend approval of the Applebrook Golf Club landscape plan for the Applebrook Golf Learning Center Land Development Application, dated 8/28/2017 and last revised 10/5/2017 with the following conditions.

- 1. The applicant shall agree to restore the proposed temporary construction entrance to the preconstruction grade conditions.
- 2. The applicant shall agree to add additional replacement landscape material to the proposed construction entrance in order to return the area to its pre development condition if determined necessary by the Township Zoning Officer, prior to the issuance of the final certificate of occupancy for the Golf Learning Center.
- 3. The Conservancy is notified when the project is complete in order to inspect the plantings.

The applicant was not present to agree to these conditions.

Sincerely,

Mark A. Gordon Zoning Officer



## **THE COUNTY OF CHESTER**

COMMISSIONERS Michelle Kichline Kathi Cozzone Terence Farrell

Brian N. O'Leary, AICP Executive Director PLANNING COMMISSION Government Services Center, Suite 270 601 Westtown Road P. O. Box 2747 West Chester, PA 19380-0990 (610) 344-6285 Fax (610) 344-6515



September 22, 2017

Louis F. Smith, Jr., Manager East Goshen Township 1580 Paoli Pike West Chester, PA 19380

Re: Preliminary/Final Land Development - Applebrook Golf Club, Golf Learning Center
 # LD-09-17-15080 - East Goshen Township

Dear Mr. Smith:

A Preliminary/Final Land Development Plan entitled "Applebrook Golf Club, Golf Learning Center", prepared by Chester Valley Engineers, Inc., and dated August 29, 2017, was received by this office on August 30, 2017. This plan is reviewed by the Chester County Planning Commission in accord with the provisions of Section 502 of the Pennsylvania Municipalities Planning Code. We offer the following comments on the proposed land development for your consideration.

## **PROJECT SUMMARY:**

Location:	north side of East Boot Road, west of the municipal border with
	Willistown Township
Site Acreage:	160.71
Proposed Use:	1,760 square foot Golf Learning Center
Municipal Land Use Plan Designation:	Planned Community
UPI#:	53-4-89

## PROPOSAL:

The applicant proposes the construction of a 1,760 square foot golf learning center on the existing Applebrook Golf Club site. The project site, which is served by onsite water and public sewer, is located in the I-2 Planned Business, Research and Limited Industrial zoning district.

<u>**RECOMMENDATION:</u>** The County Planning Commission recommends that the issues raised in this letter should be addressed and all East Goshen Township issues should be resolved before action is taken on this land development plan.</u>

## **COUNTY POLICY:**

## LANDSCAPES:

1. The proposed development activity is situated on the portion of the golf course site located within the **Rural Landscape** designation of *Landscapes2*, the 2009 County Comprehensive Plan, adjoining a **Suburban Landscape** designation to the south. The proposed land development is consistent with the objectives of the **Rural Landscape**.

## Page: 2

- Re: Preliminary/Final Land Development Applebrook Golf Club, Golf Learning Center
- # LD-09-17-15080 East Goshen Township



## WATERSHEDS:

2. *Watersheds*, the water resources component of *Landscapes2*, indicates the proposed development is located within the Ridley Creek watershed. *Watersheds'* highest priority land use objectives within this watershed are: reduce stormwater runoff, protect vegetated riparian corridors, and protect/enhance water-based recreation, cultural, historic resources and public access. *Watersheds* can be accessed at <u>www.chesco.org/water</u>.

## PRIMARY ISSUES:

3. The proposed land development appears to be in the proximity of hazardous liquid transmission pipelines operated by Laurel Pipeline Company/Buckeye Partners and Sunoco Pipeline L.P. Applicants should be aware that the actual location of the pipeline may not always be within the center of the easement or right-of-way. To minimize risks before and during construction, the project designer should contact the Pennsylvania One Call Center at 811 or <a href="http://www.palcall.org/pa811">http://www.palcall.org/pa811</a> consistent with the provisions of Section 4(2) of Act 287 (Underground Utility Protection Act) prior to finalizing the design. The PA One Call Center should also be contacted at least 3 business days, but not more than 10 days, prior to any excavation. More information about pipeline safety can be found at the Chester County Pipeline Information Center at <a href="http://www.landscapes2.org/pipeline/Safety.cfm">http://www.landscapes2.org/pipeline/Safety.cfm</a>.

Page: 3

- Re: Preliminary/Final Land Development Applebrook Golf Club, Golf Learning Center
- # LD-09-17-15080 East Goshen Township



Site Plan Detail-Sheet 3: Preliminary/Final Land Development - Applebrook Golf Club, Golf Learning Center

## ADMINISTRATIVE ISSUES:

- 4. The applicant is requesting two waivers from Supplementary Studies and Plan provisions of Article VIII of the Township Subdivision and Land Development Ordinance. Waiver requests should only be granted following the determination that the proposed project either meets the purpose of these requirements or does not create the impacts that these provisions are intended to manage.
- 5. A minimum of five (5) copies of the plan should be presented at the Chester County Planning Commission for endorsement to permit recording of the final plan in accord with the procedures of Act 247, the Pennsylvania Municipalities Planning Code, and to meet the requirements of the Recorder of Deeds, the Assessment Office, and the Health Department.

#### Page: 4

Re: Preliminary/Final Land Development - Applebrook Golf Club, Golf Learning Center

# LD-09-17-15080 - East Goshen Township

This report does not review the plan for compliance to all aspects of your ordinance, as this is more appropriately done by agents of East Goshen Township. However, we appreciate the opportunity to review and comment on this plan. The staff of the Chester County Planning Commission is available to you to discuss this and other matters in more detail.

Sincerely,

Youl Farher

Paul Farkas Senior Review Planner

cc: Applebrook Golf Club Applebrook Associates, L.P. Chester Valley Engineers, Inc. Chester County Health Department Chester County Conservation District

## **Memorandum**

East Goshen Township 1580 Paoli Pike West Chester, PA 19380 Voice: 610-692-7171 Fax: 610-692-8950 E-mail: mgordon@eastgoshen.org

Date: 10/26/2017
To: Planning Commission
From: Mark Gordon, Township Zoning Officer MUG
Re: 1007 Taylor Avenue / SD Plan

Dear Commissioners,

The Township has received revised plans and the Township engineer has reviewed the revised plans and has issued review comments for your consideration.

## **Staff Comments:**

This application is subject to a recent Zoning Hearing Board Decision and order. Staff has reviewed the township engineers review letter and has no issue with the planning commission taking action on the plan at this time.

#### **Draft Motion:**

Mr. Chairman, I move that the Planning Commission recommend approval of the Subdivision application, plan and waivers requested by Taylor Ave. Partners for the Subdivision of 1007 Taylor Ave. with the following conditions:

- 1. Prior to releasing the subdivision plan for recording the applicant shall revise the plan by adding the entire final Zoning Hearing Board Order to the plan, including all conditions.
- 2. The applicant shall apply for a building permit to modify the existing garage on lot 1 as proposed to the Planning Commission.
- 3. The modifications to the garage on lot 1 shall be completed prior to issuance of a use and occupancy certificate for the single family home on lot 1.
- 4. The applicant shall follow all Federal, State, and local regulations and ordinances.





One South Church Street Second Floor West Chester, PA 19382 T: 610-429-8907 F: 610-429-8918

www.pennoni.com

October 24, 2017

EGOST 00123

Mark A. Gordon Director of Code Enforcement/Zoning Officer East Goshen Township 1580 Paoli Pike West Chester, PA 19380

## RE: 1003 & 1007 Taylor Ave Subdivision – 2<sup>nd</sup> Submission

Dear Mark:

As requested, we have reviewed the following information, prepared by D.L. Howell and Associates, Inc., regarding the referenced submission:

- "Preliminary/Final 2-Lot Subdivision Plan" (one sheet) dated September 19, 2017, last revised October 20, 2017;
- Undated draft Decision from the Zoning Hearing Board;
- Subdivision application; and
- Response letter dated October 20, 2107.

The applicant, 1007 Taylor Partners, LLC, proposes to subdivide UPI No. 53-2-51 (1.312 acres – gross, 1.079 acres – net) into two (2) lots. Lot 1 (1.021 acres – gross, 0.870 acres – net) will contain an existing single-family dwelling and existing one (1) story garage (2,098 square feet). Lot 2 (0.291 acres – gross, 0.209 acres – net) will contain an existing single-family dwelling. The parcel is located within the R-2 Low Density Residential District.

Per the draft Zoning Hearing Board decision, the applicant was granted two (2) variances and denied three (3) variances. The two (2) variances granted are as follows:

- 1. From §240-9.G requiring a minimum lot area of one acre; and
- 2. From §240-9.G requiring a minimum side yard setback of 20 feet.

The applicant has requested the follow waiver:

1. From §205-28 - requiring approval from the preliminary plan process.

All comments from our October 18, 2017 review letter have been adequately addressed. However, we recommend that the prior to recording, the plan be revised to reflect the final Zoning Hearing Board decision, including relevant conditions. Further, the Township should determine how the exterior cosmetic improvements will be addressed.



Should you have any further questions or comments, please contact the undersigned.

Sincerely,

PENNONL

Nathan M. Cline, PE Township Engineer

cc: Rick Smith, Township Manager (via e-mail) Mark Miller, Director of Public Works (via e-mail) Denny Howell, PE, D.L. Howell and Associates, Inc. (via e-mail) 1007 Taylor Partners, LLC (via e-mail)



One South Church Street Second Floor West Chester, PA 19382 T: 610-429-8907 F: 610-429-8918

www.pennoni.com

October 18, 2017

EGOST 00123

Mark A. Gordon Director of Code Enforcement/Zoning Officer East Goshen Township 1580 Paoli Pike West Chester, PA 19380

#### RE: 1003 & 1007 Taylor Ave – Subdivision

Dear Mark:

As requested, we have reviewed the following information, prepared by D.L. Howell and Associates, Inc., regarding the referenced submission:

- "Preliminary/Final 2-Lot Subdivision Plan" (one sheet) dated September 19, 2017;
- Undated draft Decision from the Zoning Hearing Board; and
- Subdivision application.

The applicant, 1007 Taylor Partners, LLC, proposes to subdivide UPI No. 53-2-51 (1.312 acres – gross, 1.079 acres – net) into two (2) lots. Lot 1 (1.021 acres – gross, 0.870 acres – net) will contain an existing single-family dwelling and existing one (1) story garage (2,098 square feet). Lot 2 (0.291 acres – gross, 0.209 acres – net) will contain an existing single-family dwelling. The parcel is located within the R-2 Low Density Residential District.

Per the draft Zoning Hearing Board decision, the applicant was granted two (2) variances and denied three (3) variances. The two (2) variances granted are as follows:

- 1. From §240-9.G requiring a minimum lot area of one acre; and
- 2. From §240-9.G requiring a minimum side yard setback of 20 feet.

We offer the following comments:

- 1. We recommend all variances and any conditions be added to the plans.
- 2. A note on the plan indicates "No construction or improvements are being proposed with this application." However, the plan indicates a future patio area and removal of a paved area.
- 3. A note on the plan indicates *"The existing dwellings and garage are to have exterior cosmetic improvements."* It is unclear how this will be monitored/completed.
- 4. The plan indicates a total paved area of 1,824 square feet to be reclaimed as lawn. We recommend the area on each lot be indicated.
- 5. The plans indicate Preliminary/Final. A waiver from preliminary plan process is required. (§205-28)

Should you have any further questions or comments, please contact the undersigned.

Sincerely,

PENNONI

Nathan M. Cline, PE Township Engineer

cc: Rick Smith, Township Manager (via e-mail) Mark Miller, Director of Public Works (via e-mail) Denny Howell, PE, D.L. Howell and Associates, Inc. (via e-mail) 1007 Taylor Partners, LLC (via e-mail)



OCTOBER 20, 2017

Mr. Mark A. Gordon Director of Code Enforcement/Zoning Officer East Goshen Township 1580 Paoli Pike West Chester, PA 19380

## RE: 1003 & 1007 Taylor Ave – Subdivision

Dear Mr. Gordon:

This letter is being sent pursuant to the review of the above referenced plan by D.L. Howell and Associates, Inc. dated 09/19/2017 and last revised 10/20/2017. Listed below are our responses to the concerns identified in Pennoni's review of the plans. Also enclosed for your review are copies of the updated drawings. Where applicable, D. L. Howell & Associates, Inc. has addressed each of these comments indicating what action has been taken to resolve the issues.

- 1. We recommend all variances and any conditions be added to the plans. Response: All variances have been added to the plan.
- A note on the plan indicates "No construction or improvements are being proposed with this application." However, the plan indicates a future patio area and the removal of a paved area.
   Response: The note has been modified to acknowledge the proposed future patio and removal of existing impervious.
- 3. A note on the plan indicates "The exiting dwellings and garage are to have exterior cosmetic improvements." It is unclear how this will be monitored/completed. Response: This note has been removed from the plan.
- 4. The plan indicated a total paved area of 1,824 square feet to be reclaimed as lawn. We recommend the area on each lot be indicated.

  Response: The plan pow indicated the total paved area to be reclaimed as lawn for each

**Response:** The plan now indicated the total paved area to be reclaimed as lawn for each individual lot.

The plans indicate Preliminary/Final. A waiver from preliminary plan process is required.
 Response: A waiver has been requested for exemption from the preliminary plan process and to move forward with the final approval. This waiver request has been indicated on the plans.

I trust that all of their comments have been addressed adequately. Please do not hesitate to contact me at 610-918-9002 with any questions.

Sincerely, D.L. HOWELL & ASSOCIATES, INC.

Amanda Albano, EIT Civil Designer

-)

> Cc: Rick Smith, Township Manager Mark Miller, Director of Public Works 1007 Taylor Partners, LLC Denny Howell, PE, D.L. Howell and Associates, Inc. Nathan M. Cline, PE, Township Engineer, Pennoni



IN RE: APPLICATION OF 1007 TAYLOR PARTNERS, LLC : BEFORE THE ZONING HEARING BOARD OF
: EAST GOSHEN TOWNSHIP
: CHESTER COUNTY, PENNSYLVANIA

## **DECISION**

The Zoning Hearing Board of East Goshen Township, Chester County, Pennsylvania (the "Board"), after proper advertisement, met at approximately 7:30 P.M. on Tuesday, August 29, 2017, to hear evidence on the Application of 1007 Taylor Partners, LLC (the "Applicant") for the following variances from the Zoning Chapter of the East Goshen Township Code ("Code") in order to be able to subdivide, renovate, and further develop its property known as 1003 and 1007 Taylor Avenue, Malvern, East Goshen Township, Chester County, Pennsylvania (UPI No. 53-2-51) (the "Property"):

1. A variance from the one acre minimum lot area requirement of Section 240-9(G) of the Code so that proposed Lot No. 1 may be .87 acres and proposed Lot No. 2 may be .209 acres;

2. A variance from the 20 foot minimum side yard requirement of Section 240-9(G) of the Code so the proposed side yard for the existing garage on Lot No. 1 may be three feet;

3. A variance from the 45 foot minimum front yard requirement of Section 240-9(G) of the Code so the front yard for the proposed garage may be 19 feet;

4. A variance from the 50 foot minimum rear yard requirement of Section 240-9(G) of the Code so the rear yard for the proposed garage on Lot No. 2 may be 12 feet; and

5. A variance from Section 240-32(F) of the Code to permit the proposed garage to be located in the front yard.

Present at the hearing were Zoning Hearing Board Chairman, John D. Snyder, Esquire, Members Sigmund J. Fleck, Esquire, Lori G. Kier, Esquire and Adam Kraut, Esquire. Mr. Kraut attended as an alternate member, and did not vote on the decision. The Applicant was represented by Louis J. Colagreco, Jr., Esquire. The Township was represented by Ryan M. Jennings, Esquire. At the conclusion of the hearing on August 29, 2017, the hearing was continued until Monday, September 11, 2017, at which time this Board issued its oral decision. Prior to this Board issuing its oral decision on Monday, September 11, 2017, attorneys for both the Applicant and the Township waived the time period as set forth in the Pennsylvania Municipalities Planning Code ("MPC"), Act of 1968, P.L. 805, No. 247 as reenacted and amended, with respect to the issuance and service of this written Decision.

## I. <u>FINDINGS OF FACT</u>

1. The Property is located at 1003 and 1007 Taylor Avenue, Malvern, East Goshen Township, Chester County, Pennsylvania, which is in the R-2 Zoning District.

- 2. The following exhibits were presented and accepted into evidence at the hearing:
  - A-1 Zoning Application with cover letter dated July 10, 2017
  - A-2 East Goshen Township Zoning Ordinance, as amended *(incorporated by reference)*
  - A-3 Deed between Joan Geary Jarrett A/K/A Joan G. Jarrett Webb and 1007 Taylor Partners, LLC, dated May 1, 2017 and recorded in the Office of the Chester County Recorder of Deeds in Deed Book 9535, Page 1
  - A-4 Rendered Sketch Plan of 1003 and 1007 Taylor Ave prepared by DL Howell
  - A-5 Variance Sketch Plan prepared by DL Howell dated May 9, 2017, last revised August 28, 2017
  - A-6 Memorandum of Mark Gordon dated July 13, 2017
  - A-7 Letter in support of Application from neighbors Mr. and Mrs. Carreras

- A-8 Photographs of Property and neighboring properties
- A-9 Meeting Minutes of East Goshen Township Planning Commission meeting of July 19, 2017
- B-1 Application
- B-2 Proof of Publication
- B-3 Affidavit of Posting
- B-4 Notice to the surrounding property owners
- T-1 July 27, 2017 Letter from Mr. Gordon setting forth the position of the Planning Commission with respect to the Application
- T-2 August 3, 2017 Letter from Mr. Gordon setting forth the Board of Supervisors' position with respect to the Application

The Code and Zoning Map are incorporated herein by reference.

3. There currently exists on the Property two single-family homes and a large commercial garage.

4. Applicant proposes to subdivide the Property in order to sell each lot with a single-family home. In addition, Applicant proposes to build a garage on one of the proposed lots as more particularly depicted on the Variance Sketch Plan (Exhibit A-5).

5. In 1947, Timothy Geary, the father of the individual from whom the Applicant hopes to purchase the property, bought the Property which included 1001 Taylor Avenue (.35 acres), 1003 Taylor Avenue (.209 acres) and 1007 Taylor Avenue (.87 acres).

6. In 1948, Mr. Geary constructed the commercial garage on the Property for a potential HVAC business.

In 1954, Mr. Geary constructed nearly identical homes on both 1001 and 1003
 Taylor Avenue. His family moved into 1003 Taylor Avenue.

8. Subsequently, Mr. Geary obtained subdivision approval and sold 1001 Taylor Avenue.

9. In 1962, Mr. Geary then built a larger home on 1007 Taylor Avenue. He and his wife moved into this house, and their daughter and her family moved into 1003 Taylor Avenue.

10. The Township Zoning Officer and Solicitor made the determination that there is a nonconforming residential use because there are two single-family homes on a single lot.

11. As more particularly described herein, the current development of the Property includes a number of nonconformities with existing land use regulations having to do with the number and use of structures and minimum required setbacks and yards.

12. First, as referred to in Finding of Fact No. 10, there is more than one single-family home on a single lot. Second, is the existence of a commercial garage. Third, are the setbacks for 1003 Taylor Avenue. In particular, the rear yard is 4.5 feet, but the Code requirement is 50 feet. The front yard setback is 15.8 feet, but the Code requirement is 45 feet.

13. In order to subdivide the Property into two lots as depicted on Exhibit A-5, Applicant requires a variance from the one acre minimum lot size requirement of Section 240-9(G) of the Code so that Proposed Lot No. 1 may be .87 acres and Proposed Lot No. 2 may be .209 acres.

14. In order to construct the proposed garage on Lot No. 2, Applicant requires a variance from the following setback requirements of Section 240-9(G) of the Code:

- a. From the 45 foot minimum front yard requirement for the proposed garage to have a 19 foot front yard; and
- b. From the 50 foot minimum rear yard requirement so that the rear yard for the proposed garage will be 12 feet.

15. In addition, Applicant requires a variance from Section 240-32(F) of the Code to permit the proposed garage to be located in the front yard.

16. The location of the proposed property line between the two lots shown on Exhibit A-5, which results in a three foot side yard setback for the commercial garage on Lot No. 1, was recommended by the Township Planning Commission.

17. If the variances are granted, the only visible changes to the outside of the structures would be the addition of the proposed garage.

18. Applicant is not proposing to use the commercial garage for a commercial use.

19. Applicant is proposing to remove the shed that is currently located on the Property.

20. During the August 29, 2017 hearing, Applicant stated that if the subdivision approval is not obtained, he would have no alternative but to rent the two single-family homes.

21. During the August 29, 2017 hearing, numerous neighbors spoke in favor of granting the proposed variance relief on the basis that they believe that the properties would be better maintained if they were owned rather than rented.

22. Even though neighboring property owners spoke in favor of the variances to permit the subdivision of the Property, they did express concern about the potential use and appearance of the existing commercial garage.

23. The proposed garage will create new zoning nonconformities by adding a new structure in the front and rear yards.

24. The Township concedes that there are unique physical circumstances and conditions with the Property.

798264.1

25. The proposed variance relief to permit the subdivision of the Property will not alter the essential character of the neighborhood which is single-family residential.

26. The proposed variance relief to permit the subdivision of the Property will not be injurious to the neighborhood or otherwise detrimental to the public health, safety and welfare of the community.

27. The Township Planning Commission has indicated that it supports the requested variance because it will improve the nonconforming conditions that exist, but it will not alter the essential character of the neighborhood or the district in which the Property is located, or substantially or permanently impair the appropriate use and development of the adjacent property or be detrimental to the public welfare.

28. The Board of Supervisors is opposed to all five variance requests.

## II. **DISCUSSION**

Section 204-58 of the Code empowers the Zoning Hearing Board to grant variances from the terms of the Code. The MPC and existing case decisions provide that variances from a zoning ordinance may be granted owing to any physical circumstance or condition of the property which causes unnecessary hardship, and which hardship is not self-created. In addition, applicants for dimensional variances need not be held to the same strict standards imposed on applicants for a use variance. *Hertzberg v. Zoning Board of Adjustment of the City of Pittsburgh*, 721 A.2d 43 (Pa. 1998). In particular, to justify the grant of a dimensional variance multiple factors may be considered, including economic detriment to the Applicant if the variances were denied. <u>Id</u>. at 510.

As in the Commonwealth Court case *In re Freid-el Corp.*, 34 Pa. Cmwlth. 341 (1978), the subdivision is necessary for the Applicant to be able to sell the existing single-family homes

rather than to continue to rent them. The proposed subdivision can reasonably be considered to be a natural expansion of the Applicant's nonconforming residential use of the Property and unnecessary hardship would be imposed by refusing the two variances to permit the subdivision. Furthermore, as testified to by the Property's neighbors during the August 29, 2017 hearing, two variances to permit the subdivision will not be detrimental to the neighborhood. Rather, having the homes owned rather than rented will be beneficial to the neighborhood. As a result, both the variance from the one acre minimum lot area requirement of Section 240-9(G) of the Code to permit Lot No. 1 to be .87 acres and Lot No. 2 to be .209 acres, and also the variance from the 20 foot side yard requirement of Section 240-9(G) of the Code to permit a 3 foot side yard will be granted.

With respect to the proposed variances to permit the construction of the new garage, the Applicant has not demonstrated unnecessary hardship which is not self-created. In addition, the legal authority cited by the Applicant, and in particular *In re Yocum*, 393 Pa. 148, 141 A.2d 601 (Pa. 1958), does not permit this horizontal expansion of a nonconformity which will occur if the proposed garage were built. See also *Nettleton v. Zoning Hearing Board of Adjustment of the City of Pittsburgh*, 574 Pa. 45, 54, 828 A.2d 1033, 1039 (2003). Therefore, the three variances requested to permit the proposed garage must be denied.

The MPC and Section 240-58.C of the Code authorize this Board to impose reasonable conditions when granting variances. Accordingly, this Board imposes the conditions set forth in the following Order.

### III. <u>CONCLUSIONS OF LAW</u>

1. Applicant has established entitlement to the two dimensional variances with respect to lot size and side yard setback to permit the proposed subdivision of the Property.

2. Applicant has not established entitlement to the three dimensional variances with respect to rear yard and front yard to permit the construction of the proposed garage.

## IV. ORDER

AND NOW, this <u>736</u> day of <u>Derogal</u>, 2017, it is hereby Ordered that:

Applicant, 1007 Taylor Partners, LLC, is GRANTED a variance from the one acre minimum lot area requirement of Section 240-9(G) of the Code to permit Lot No. 1 to be .87 acres and Lot No. 2 to be .209 acres, and a variance from the 20 foot minimum side yard requirement of Section 240-9(G) of the Code to permit the side yard for the existing garage on Lot No. 1 to be 3 feet.

This variance relief is GRANTED subject to the Applicant complying with the following conditions:

A. The detached shed that is currently located on the Property shall be removed;

B. Once the detached shed is removed, the impervious surface which supported it shall be removed;

C. The commercial garage that is currently on the Property shall not be used in whole or in part for any non-residential use and shall be used as part of the residential use on Lot No. 1.

D. Applicant shall work in good faith with the Township Planning Commission and staff to modify the exterior appearance of the commercial garage to make it look less commercial and more in keeping with the residential uses and zoning in the neighborhood.

The following requested variances are DENIED:

A. A variance from the 45 foot minimum front yard requirement of Section 240-9(G) of the Code so that the front yard for the proposed garage may be 19 feet;

B. A variance from the 50 foot minimum rear yard requirement of Section 240-9(G) of the Code so that the rear yard for the proposed garage may be 12 feet; and

C. A variance from Section 240-32(F) of the Code to permit the proposed garage to be located in the front yard.

ATTEST:

ash

TWP Rowing DEFICAN

EAST GOSHEN TOWNSHIP ZONING HEARING BOARD

John-D. Snyder, Esquire

Chairman

Sigmund J. Fleck, Esquire Member

Lorí G. Kier, Esquire Member



## <u>Memorandum</u>

East Goshen Township 1580 Paoli Pike West Chester, PA 19380 Voice: 610-692-7171 Fax: 610-692-8950 E-mail: mgordon@eastgoshen.org

Date: 10/26/2017
To: Planning Commission
From: Mark Gordon, Township Zoning Officer
Re: Malvern Institute ZHB Application for Special Exception and Variances

Planning Commission Members:

This is the evening for the Malvern Institute to present their plans to the Planning Commission. The two remaining topics to discuss are the Sound Fencing and the walking trails and meditation areas proposed in the wooded area of the property on the eastern side of the creek.

As you recall, the Malvern Institute submitted revised plans and presented the 15 year plan to the Planning Commission in October. The applicant plans to present the final two items of their plan to the commission on Nov. 1; the Sound Fence, and the meditation areas. There will also be a discussion about a possible option to build a one story addition for the proposed expansion instead of a second story addition to the building.

At this time the only new information the Township has received is the specifications on the sound fencing. If we receive additional materials I'll forward them to you electronically and have copies for everyone at the meeting.



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AIL is a world leader in developing innovative engineered solutions in sound barrier wall systems, structural plate bridges and tunnels, prefabricated bridges, MSE retaining walls and corrugated steel pipe.

Choose an AIL infrastructure solution and get the value, experience, innovation, sustainability and support that will ensure your project's success.

## SOUND WALLS

# An industry leader in sound mitigation.

### RECOMMENDED FOR

- ► Commercial ► Industrial ► Institutional ► Utilities
- ▶ Roof Top Mechanical Systems ▶ Power Generation ▶ Municipal
- ► Highways ► Railways ► Bridges ► Oil & Gas ► Water/Wastewater

AIL Sound Walls is a division of AIL and the manufacturer of the Silent Protector<sup>®</sup> and Tuf-Barrier<sup>®</sup> sound barrier wall systems for absorptive or reflective applications.

## Lightweight, easy-to-install, durable and cost-effective.

Lightweight and easy-to-install, AIL Sound Walls are engineered for maximum sound reduction of environmental or ambient noise such as traffic, manufacturing, industrial or commercial noise.

Our turn-key solutions, include: engineering, manufacturing, project management and site assistance.

- Meets accelerated test requirements for durability
- Impervious to rain, snow, ice and sleet
- Will not rust, rot, or stain
- Maintenance-free
- Designed to meet applicable design codes (AASHTO, IBC, CSA)
- Wind load tested for hurricane-force winds



# AIL Sound Walls are made from long-lasting, UV-resistant PVC, with the highest percentage of recycled content available.


## Industrial, Commercial and Institutional

RECOMMENDED FOR

▶ Commercial Developments
 ▶ Hospitals
 ▶ Schools and Universities
 ▶ Loading Docks
 ▶ Distribution Facilities
 ▶ Manufacturing Plants

Noise from large commercial or industrial developments and their associated traffic is one of the most contentious environmental problems for surrounding communities.

Residents are demanding better noise abatement solutions from facilities like shopping centers, manufacturing plants, distribution hubs and utility stations.

AIL Sound Walls provide superior performance for all noise sensitive projects.



Lightweight AIL Sound Walls are perfect for roof top applications. Man-doors and gates are easily integrated.

## **Roof Top, Equipment and Machinery Enclosures**

RECOMMENDED FOR

- ► HVAC Units ► Generators ► Chillers ► Cooling Towers
- ► Oil & Gas ► Hydro ► Compressors ► Petro Chemical
- ► Sub Stations ► Water/Wastewater

The lighter weight of AIL Sound Walls make them ideal for roof top applications where sound mitigation is needed. The enclosure support system integrates easily with roof structures of both existing and new buildings to deliver effective sound mitigation.

Excessive noise is one of the most common occupational health hazards in today's heavy industrial or manufacturing environments. AIL Sound Walls are often used to mitigate unwanted noise caused by equipment in these types of applications. Transparent panels, utility ports and man-doors can also be integrated to allow access for routine maintenance or emergency repairs with reduced exposure to noise.



### **Transportation**

RECOMMENDED FOR

► Highways ► Bridges ► Rail ► LRT

► Airports ► Bus Terminals ► Residential

With their lighter weight, lower installed costs and long-term durability, AIL Sound Walls are a perfect choice to keep the peace in neighborhoods along busy transportation corridors.

In addition to their excellent sound mitigation properties, AIL Sound Walls can be installed easily on narrow road or rail jobsites and are an efficient land use solution in urban areas. They are also available in a variety of attractive colors and configurations to satisfy important aesthetic considerations.



Maintenance-free AIL Sound Walls are impervious to rain, snow and ice. Plus, they will not rust, rot or stain.

## **Structure-Mounted Solutions**

AIL Sound Walls are most often ground-mounted on concrete piers, but their light weight makes them ideal to mount to various types of structures such as concrete traffic barriers, bridge rail systems or MSE wall systems, including AIL Vist-A-Walls<sup>™</sup>. Our in-house engineering capability with multiple systems ensures project success.



**Transparent Walls: Full and Partial Panels Available** Reduce the tunnel effect and allow more natural light onto roadways or properties by incorporating ACRYLITE<sup>®</sup> Soundstop clear reflective panels into your design.



For project planning and assistance call toll-free 1-866-231-7867, or email: info@ailsoundwalls.com

# Easy to install with local crews and reduced need for lifting equipment.

AlL Sound Walls are constructed with tongue and groove PVC panels. Panels are stacked and placed within standard steel posts to the required height and capped with a top panel. A standard panel is 10 ft. (3.0 m) in length and weighs only 21 lbs. (9.5 kg).















AlL Sound Walls are available in a variety of attractive colors and textured finishes. Custom colors are also available.





#### Recent installation using Honey Maple Color reproduction in this brochure is subject to limitations of

the printing process. Please ask for actual PVC color samples.

Product Specifications	Silent Protector® (Absorptive)	Tuf Barrier® (Reflective)
Span <sup>1</sup>	8 ft -12 ft (2.44 m - 3.66 m)	8 ft -14 ft (2.44 m - 4.27 m)
Panel Width	2.70 in (68.58 mm)	2.70 in (68.58 mm)
Panel Height	5.96 in ± .10 in (151.38 mm ± 0.25 mm)	5.96 in ± .10 in (151.38 mm ± 0.25 mm)
Weight	4.30 lbs/ft² (21 kg/m²) <sup>4</sup>	Min. 4.10 lbs/ft² (20 kg/m²)
Wall Height	Greater than 30'/ 9 m	Greater than 30'/9 m
STC Rating	up to 36 <sup>2</sup>	up to 32
NRC Rating	1.0 <sup>3</sup>	n/a

For product technical specifications visit ailsoundwalls.com

1. Span is governed by wind loads and varies on code requirements. Contact AlL Sound Walls for recommended panel spans for your project.

- 2. Standard Silent Protector has an STC rating of 31. Silent Protector Plus can achieve STC of 36.
- 3. Standard Silent Protector NRC 1.0. Silent Protector Plus NRC is 0.95.
- 4. Weight of Silent Protector Plus is 7.30 lbs/ft² (36kg/m²)

#### Sound Transmission Loss ASTM E90 / E413

Octave Band Number	2	3	4	5	6	7	STC	
Center Frequency (Hz)	125	250	500	1000	2000	4000		
Silent Protector®	20	21	26	40	40	44	RATINGS UP TO	
Silent Protector® Plus	23	27	31	41	48	53	<b>STC 36</b>	
Tuf-Barrier®	16	22	31	39	41	49	ASK FOR DETAILS	

#### Sound Absorption Coefficients ASTM C423/E795

Octave Band Number	2	3	4	5	6	7	NRC
Center Frequency (Hz)	125	250	500	1000	2000	4000	-
Silent Protector®	0.41	0.84	1.19	1.06	1	0.81	1.0
Silent Protector® Plus	0.38	0.68	1.11	0.99	1.01	0.87	0.95

#### STC – Sound Transmission Class

STC is an integer rating used to measure the decibel reduction through a partition. It states the number of decibels lost through that partition in a laboratory environment.

#### NRC – Noise Reduction Coefficient

NRC is a rating between 0 and 1 to index how absorptive a material is. An NRC of 0 means no sound waves are absorbed whereas a rating of 1 means all of the sound waves are absorbed.

NRC	Qualitative
0.4 or less	Poor
0.5 to 0.6	Mediocre
0.6 to 0.7	Good
0.7 to 0.85	Very Good
> 0.85	Excellent
1.0	AIL Silent Protector®

# ailsoundwalls.com

# Save time. Save money. Choose efficient sound mitigation solutions from AIL Sound Walls.

## We support you.

- Be confident with an AIL Sound Walls solution
- > Designs based on wind loading and local soil conditions
- Detailed proposals complete with installation budget estimates
- Engineer-stamped project drawings for approvals and construction
- > Professional support in engineering, project management and site assistance

# ailsoundwalls.com



The information and suggested applications in this brochure are accurate and correct to the best of our knowledge and are intended for general information purposes only. These general guidelines are not intended to be relied upon as final specifications and we do not guarantee specific results for any particular purpose. We strongly recommend consultation with an AlL Sound Walls Technical Sales Representative before making any design and purchasing decisions.



All products contain recycled content and are 100% recyclable.





# Get AIL's innovative engineered solutions working for your better bottom line.



AlL Sound Walls is a Division of Atlantic Industries Limited and is a member of The AlL Group of Companies. The AlL Group is made up of a network of companies with technical sales teams, engineering departments, manufacturing plants and distribution centers across Canada and in the United States. AlL International and the operations of the AlL Group's licensees in Australia, Europe and Asia help extend our global reach.











# Memorandum

**East Goshen Township** 1580 Paoli Pike West Chester, PA 19380 Voice: 610-692-7171 610-692-8950 Fax: E-mail: mgordon@eastgoshen.org

Date: 10/26/2017

From: Mark Gordon, Township Zoning Officer

Re: Signs in the BP District

Dear Commissioners,

We have worked with the solicitor on the Sign Ordinance and this is what we came up with. We can discuss on Wednesday 11/1 or hold until 11/15.

#### EAST GOSHEN TOWNSHIP

#### CHESTER COUNTY, PENNSYLVANIA

#### ORDINANCE NO.

#### AN ORDINANCE AMENDING THE EAST GOSHEN TOWNSHIP ZONING ORDINANCE OF 1997, AS AMENDED, TO MODIFY CERTAIN WALL SIGN REGULATIONS IN THE INDUSTRIAL AND BUSINESS PARK DISTRICTS OF EAST GOSHEN TOWNSHIP.

BE IT ENACTED AND ORDAINED by the Board of Supervisors of East Goshen Township, that the East Goshen Township Zoning Ordinance of 1997, as amended, which is codified in Chapter 240 of the East Goshen Township Code, titled, "Zoning", shall be amended as follows:

**SECTION 1**. Article V. Supplemental Regulations, Section 240-22.N. shall be amended to remove the maximum height regulation for walls signs in the Industrial and Business Park Districts by deleting the current Maximum Height chart, and its supplemental notes, and replacing it as follows:

Maximum Height** (feet)				
Type of Sign Structure	Residential Districts	Commercial Districts	Industrial and Business Park Districts	
Freestanding	6	14	6	
Wall	10	14	-	

\*The height of off-premises signs shall be regulated by § 240-22V.

\*\*"Maximum height" shall mean the vertical distance measured from the average ground level immediately below a sign to the highest point of the sign and its supporting structure.

**<u>SECTION 2.</u>** Article V. Supplemental Regulations, Section 240-22.Q.(5) shall be removed in its entirety and replaced to read as follows:

"(5) Wall sign. One shall be permitted for each establishment. Such sign shall not exceed two square feet for each linear foot of wall area (where a sign could be located) or 100 square feet, whichever is more restrictive, and shall be permitted only on a wall of the structure that fronts on a street. If there is more than one establishment in the structure, the cumulative area permitted for all wall signs on the wall of a structure that fronts on a street 100 square feet area in total."

**SECTION 3**. **Severability**. If any sentence, clause, section or part of this Ordinance is for any reason found to be unconstitutional, illegal or invalid, such unconstitutionality, illegality or invalidity shall not affect or impair any of the remaining provisions, sentences, clauses, sections, or parts hereof. It is hereby declared as the intent of the Board of Supervisors that this Ordinance would have been adopted had such unconstitutional, illegal or invalid sentence, clause, section or part thereof not been included herein.

**<u>SECTION 4</u>**. <u>Repealer</u>. All ordinances or parts of ordinances conflicting with any provision of this Ordinance are hereby repealed insofar as the same affects this Ordinance.

**<u>SECTION 5.</u>** <u>Effective Date</u>. This Ordinance shall become effective in five (5) days from the date of adoption.

ENACTED AND ORDAINED this \_\_\_\_\_day of \_\_\_\_\_, 2017.

ATTEST:

#### EAST GOSHEN TOWNSHIP BOARD OF SUPERVISORS

Louis F. Smith, Secretary

E. Martin Shane, Chairman

Carmen Battavio, Vice-Chairman

Charles W. Proctor, III, Esquire, Member

Janet L. Emanuel, Member

Michael Lynch, Member

# <u>Memorandum</u>

East Goshen Township 1580 Paoli Pike West Chester, PA 19380 Voice: 610-692-7171 Fax: 610-692-8950 E-mail: mgordon@eastgoshen.org

Date: 10/26/2016

To: Planning Commission

From: Mark Gordon, Township Zoning Officer Mb

Re: Drones / Model Aircraft / Housing Trends

Dear Commissioners,

I have compiled some information regarding drones and emerging housing trends with the Help of the solicitor's office for your review and consideration. I have also provided you with a copy of the current Township code for "Model aircraft".

At this point staff does not see any need for changes to the Model Aircraft ordinance. Although the FAA has discontinued the need for recreational users to register their aircraft, commercial operators still must.

As you know, Janet has given the PC a warning order about the 2018 goal of developing an overlay zoning district for "Goshenville". This will be a very significant task and one that will require a planning consultant and input from the PC once the Paoli Pike Corridor Master Plan is complete. In advance of that upcoming work, I asked the solicitor what emerging land use trends they are seeing. They commented on how commercial landscapes are changing within corporate parks, traditional shopping centers and urban centers; with the incorporation of high density residential uses mixed within commercial and office uses.

Please review the Chester County Planning Series on Commercial Landscapes for more information.

http://www.chescoplanning.org/MuniCorner/ComLand/overview.cfm

To address 2017 Goals I suggest the PC forward the Board a letter noting that at this time there is no action required and that the PC will continue to monitor new legislation to insure our ordinances stay relevant.

#### **Draft Motion:**

Mr. Chairman, I move that the Planning Commission send a letter to the Board summarizing the staff finding on drones.

#### Chapter 153

#### MODEL AIRCRAFT AND AMATEUR ROCKETS

#### § 153-1. Definitions.

When used in this chapter, the following words, terms and phrases shall have the following meanings, unless expressly stated otherwise or unless the context clearly indicates otherwise:

AMATEUR ROCKET — An unmanned rocket that:

- A. Is propelled by a motor or motors having a combined total impulse of 889,600 Newton-seconds (200,000 pound-seconds) or less; and
- B. Cannot reach an altitude greater than 150 kilometers (93.2 statute miles) above the Earth's surface.

BOARD — The Board of Supervisors of the Township of East Goshen.

MODEL AIRCRAFT — Any unmanned aerial vehicle, including without limitation, model airplanes, remote controlled aircraft and drones and the equipment associated with such unmanned aerial vehicle.

OPERATOR — Any person controlling or otherwise operating a model aircraft or amateur rocket.

OWNER — Any person owning, leasing, occupying or having charge of any property within the Township.

PERSON — Any individual, association, public or private corporation for profit or not for profit, partnership, firm, trust, estate or any other legal entity whatsoever which is recognized by law as the subject of rights and duties.

PUBLIC NUISANCE — The unreasonable, unwarrantable, or unlawful use of public or private property which causes injury, damage, inconvenience, annoyance, or discomfort to any person in the legitimate enjoyment of that person's property.

TOWNSHIP — The Township of East Goshen.

#### § 153-2. Regulation of model aircraft and amateur rockets.

- A. No person shall operate a model aircraft, amateur rocket or other flying objects of a similar nature at an elevation of less than 200 feet over property not owned by the operator without the permission of the property owner.
- B. Permission from the owner shall be in writing, specifying the name of the Operator, the address of the property over which the model aircraft, amateur rocket or other flying objects of a similar nature may be operated, and the permissible dates and hours of operation.

- C. The operation of a model aircraft, as that term is defined herein, shall be in compliance with the requirements set forth in Section 336(a) of the FAA Modernization and Reform Act of 2012 ("FMRA") as such regulations may be amended from time to time, which are attached as Exhibit A.<sup>1</sup>
- D. The operation of an amateur rocket, as that term is defined herein, shall be in compliance with the requirements set forth in Title 14, Chapter 1, Subchapter F, Part 101, Subpart C of the Code of Federal Regulations, as such regulations may be amended from time to time, which are attached as Exhibit  $B^2$ .
- E. The operation of a model aircraft and an amateur rocket as those terms are defined above are prohibited on all Township Property and within Township and Penn DOT road right-of-ways, unless specifically approved by the Board of Supervisors.

#### § 153-3. Violations and penalties.

Any person who violates or permits the violation of any provision of this chapter shall, upon conviction thereof in a summary proceeding brought before a District Justice under the Pennsylvania Rules of Criminal Procedure, be guilty of a summary offense, and shall be subject to the payment of a fine of not less than \$100 and not more than \$1,000, plus the costs of prosecution. In default of payment thereof, the defendant may be sentenced to imprisonment in the county prison for a term of not more than 30 days. Each section of this chapter violated shall constitute a separate offense, and each day or portion thereof in which a violation of this chapter is found to exist shall constitute a separate offense, each of which violations shall be punishable by a separate fine imposed by the District Justice of not less than \$100 and not more than \$1,000, plus the costs of prosecution, or upon default of payment thereof, the defendant may be sentenced to imprisonment in the county prison for a term of not more than 30 days. All fines and penalties collected for the violation of this chapter shall be paid to the Township Treasurer.

<sup>1.</sup> Editor's Note: Exhibit A is on file in the Township offices.

<sup>2.</sup> Editor's Note: Exhibit B is on file in the Township offices.

AREA CODE 610 692-7171

#### EAST GOSHEN TOWNSHIP PLANNING COMMISSION

1580 PAOLI PIKE, WEST CHESTER, PA 19380-6199

September 14, 2017

East Goshen Township Board of Supervisors 1580 Paoli Pike West Chester, Pa. 19380

Re: 2017 Goals

Dear Board Members:

In response to your request, I offer the following update on the Planning Commission's progress with their 2017 Goals:

- Assist in the Paoli Pike Master Corridor Plan Comp Plan Objectives 6.2 & 8.6 and PR&O Plan Action 1.7B
  - 1. The Township Planning Commission met with the Paoli Pike Corridor Master Plan Committee on June 7<sup>th</sup> and provided feedback to the committee on the planning done to date.
  - 2. Staff has kept us informed of the current planning on the Corridor Plan throughout the process and has sought our feedback for inclusion into the plan.
  - 3. Two members of the Commission are members of the Corridor Plan Committee and update us monthly while seeking input from the Commission.
  - 4. The PC is already discussing how to move forward with a "Town Center" overlay district in anticipation of a supporting recommendation in the Paoli Pike Corridor Master Plan.
- Review Zoning Ordinance as it relates to new technologies, drones, and nodes replacing telecommunications towers and the best locations for them <u>Comp Plan Objective 6.6</u>
  - As you know, the Township amended the Township Zoning Ordinance in late 2016 to include Distributive Antenna Systems (DAS) into the body of the existing wireless communications regulations. Since that time, Crown Castle applied for conditional use approval to install 6 new DAS node locations. The PC worked with Crown Castle to site the location of those nodes during their application process. Towers still have a role in the wireless communications networks; however, DAS nodes are helping to provide more reliable coverage in highly populated areas and intense use areas. Locations of new DAS nodes are going to be driven by the demand within our residential and business communities; however, the Planning Commission will continue to stay informed on new wireless communication technologies and provide guidance to WCF applicants when seeking to locate their facilities in East Goshen Township.
  - 2. Drone technologies are quickly evolving and so are their commercial applications. The Commission has asked the staff to bring the PC up to speed on the latest FAA regulations in order to determine if amendments to our existing ordinance are warranted. The PC plans to make a recommendation to the Board on the use of Drones before the end of the year.

Sincerely,

Mark A. Gordon Township Zoning Officer

#### **Mark Gordon**

From:	Kristin Camp <kcamp@buckleyllp.com></kcamp@buckleyllp.com>
Sent:	Thursday, October 19, 2017 12:59 PM
То:	Mark Gordon
Subject:	FW: East Goshen Township Planning Commission - Drone Update and Emerging Land
-	Use Trends

Mark: I asked Kim to look into recent laws concerning drones. Please see her email below. Is there anything else you need on this? I agree with Kim that we should be keeping our eye on the changes in drone laws.



Kristin S. Camp, ESQUIRE BUCKLEY BRION McGUIRE & MORRIS LLP 118 W. Market Street, Suite 300 West Chester, PA 19382-2928 D: 484.887.7530 | M: 610.436.4400 Ext.1050 F: 610.436.8305 www.buckleyllp.com

From: Kimberly Venzie
Sent: Thursday, October 19, 2017 11:51 AM
To: Kristin Camp <kcamp@buckleyllp.com>
Cc: Ali Fidanza <afidanza@buckleyllp.com>
Subject: East Goshen Township Planning Commission - Drone Update and Emerging Land Use Trends...

Kristin:

Mark Gordon asked about proposed changes to the federal rules re drones. What he might be referring to is the recent changes regarding individuals no longer having to register noncommercial drones with the FAA. Registration is still required for commercial drone users. The article link below discusses this....

#### https://www.recode.net/2017/5/19/15663436/us-drone-registration-rules-faa

State & federal legislatures are constantly proposing to change regulations regarding drones. The government is still closely regulating the commercial use of drones; however, it appears that the government is lessening controls over drones whenever possible. It is definitely an industry that is growing and if anything, the red tape is being removed to encourage more drone use – especially for the construction industry. There are various pieces of proposed legislation but it is difficult to tell which will make it into law. We should keep an eye on the legislation to make sure our current ordinance does not come into conflict.

As far as emerging land use trends, below is an article regarding housing trends in Chester County. The explosion of multi-family, particular apartments, in Chester County is huge and will impact all of our townships and boroughs. Planning Commissions should likely consider all the implications and if they can plan on how to accommodate this influx, it will benefit individual municipalities and the County as a whole – especially with respect to transportation, trails and park use.

http://news.chescoplanning.org/exploring-housing-trends-in-chester-county/

Let me know if you want anything else for the upcoming PC meeting. (Ali-Can you print this email and the articles out for Kristin? Thx. -Kim)

-Kim

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Kimberly P. Venzie, ESQUIRE BUCKLEY BRION McGUIRE & MORRIS LLP 118 W. Market Street, Suite 300 West Chester, PA 19382-2928 D: 610.235.0238 | M: 610.436.4400 Ext.1650 F: 610.436.6179 www.buckleyllp.com

From: Kristin Camp Sent: Friday, October 13, 2017 12:40 PM To: Kimberly Venzie <<u>kvenzie@buckleyllp.com</u>> Subject: FW: Malvern Institute

Hi- I have a bunch of stuff that I am not able to get to if you gave capacity. This would be one.

×	Nya da ya katala sana "Wakata ya yan kata anana kata ku Katala katala katala katala katala katala katala katala Nya katala katala katala katala katala katala katala	]
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Kristin S. Camp, ESQUIRE BUCKLEY BRION McGUIRE & MORRIS LLP 118 W. Market Street, Suite 300 West Chester, PA 19382-2928 D: 484.887.7530 | M: 610.436.4400 Ext.1050 F: 610.436.8305 www.buckleyllp.com

From: Mark Gordon [mailto:mgordon@eastgoshen.org]
Sent: Friday, October 13, 2017 12:39 PM
To: Ali Fidanza <afidanza@buckleyllp.com</a>; Kristin Camp <kcamp@buckleyllp.com</pre>
Cc: 'Rick Smith' <rrsmith@eastgoshen.org</pre>
Subject: RE: Malvern Institute

Great I'll forward to the Commission and BOS.

If we have time and if you have anything to add, The PC would like to know if there is any recent movement on the use of Drones. We see them used a lot for different commercial applications and our ordinance is pretty strict on their use however I had heard there was some proposed changes to the federal rules.

I think we're ok with Wireless Communications since we just updated that ordinance.

If there is anything else out there we should be paying attention to as far as emerging land use trends, the PC would be interested in hearing about those.

Thank you!

Mark A. Gordon, CFM

Director of Code Enforcement / Zoning Officer East Goshen Township 1580 Paoli Pike West Chester, PA 19380 O: 610-692-7171 F: 610-692-8950 mgordon@eastgoshen.org www.eastgoshen.org

From: Ali Fidanza [mailto:afidanza@buckleyllp.com] Sent: Friday, October 13, 2017 11:27 AM To: Mark Gordon Cc: Kristin Camp Subject: Malvern Institute

Hi Mark,

Attached is a timeline and notes on the Malvern Institute and a summary of the nonconformity provisions that we prepared for next week's PC meeting.

Let us know if you have any questions.

Ali



Ali K. Fidanza, Legal Assistant BUCKLEY BRION McGUIRE & MORRIS LLP

118 W. Market Street, Suite 300 West Chester, PA 19382-2928 D: 610.235.0049 | M: 610.436.4400 Ext.1410 F: 610.436.8305 www.buckleyllp.com

# Americans no longer have to register noncommercial drones with the FAA

#### April Glaser

If you buy a new drone in the U.S. to fly non-commercially, you no longer have to register your drone with the Federal Aviation Administration, according to a decision issued today by <u>a federal court in Washington, D.C.</u>

The court ruled that the FAA's drone registration rules, which have been in place since 2015, were in violation of a law passed by Congress in 2012. That law, the FAA Modernization and Reform Act, prohibited the FAA from passing any rules on the operation of model aircraft — in other words, rules that restrict how non-commercial hobbyist drone operators fly.

Now, if a person buys a new drone to fly for fun, they no longer have to register that aircraft with the FAA. But if flying for commercial purposes, drone buyers still need to register.

The lawsuit was won by John Taylor, a model aircraft enthusiast, who brought the case against the FAA in January 2016.

Since first opening the FAA's registration system in December 2015, more than 820,000 people have registered to fly drones.

Perhaps surprisingly, the drone industry isn't thrilled with the court's order to end registration.

"The FAA's innovative approach to drone registration was very reasonable, and registration provides for accountability and education to drone pilots," DJI's head of policy Brendan Schulman said in an email to **Recode**. "I expect the legal issue that impedes this program will be addressed by cooperative work between the industry and policymakers."

There's a chance the FAA will appeal the decision, but others suspect Congress may step in and clarify the FAA's authority to pass laws about the use of model aircraft.

The law the court said the FAA violated is set to expire in September, and

Senator John Thune, R-S.D., chairman of the <u>Commerce, Science, and</u> <u>Transportation Committee</u> has said that he plans to introduce a bill in the next couple of weeks to address FAA modernization, Michael Drobac, executive director of the Small UAV Coalition, told **Recode**.

"The goal of the registration rule was to assist law enforcement and others to enforce the law against unauthorized drone flights, and to educate hobbyists that a drone is not just a toy and operators need to follow the rules," said Lisa Ellman, an attorney with the law firm Hogan Lovells and a specialist on drone regulation. "These are worthy goals, so if this ruling stands it wouldn't surprise us to see a legislative response here."

In March, FAA head Michael Huerta said <u>that one of the next set of problems</u> it plans to tackle for drone regulations will be to craft a way for unmanned aircraft to be remotely identified, which will help law enforcement know who is flying a drone, even if the pilot isn't visible.

While the FAA can continue with its research — which will presumably be used to inform future drone policy decisions — all new rules on how hobbyist drone owners are allowed to fly will have to wait for clarification about the FAA's authority to regulate.



# Exploring Housing Trends in Chester County – Chesco Planning News

by Chesco Planning



If home is where the heart is, the heart of Chester County housing these days is multifamily homes, particularly apartments.

There were nearly 3,000 multifamily units proposed in 2016, which was an increase of approximately 1,000 since 2015. In particular, there was a drastic increase in the apartment development proposals over the past year. There were 2,231 apartment units proposed in 2016 compared to 1,150 in 2015.

"We're seeing a trend in more rental units than we've seen in the past," said Carol Stauffer, director of the Chester County Planning Commission's Infrastructure and Plan Review Division.

Many of the multifamily proposals are generally located in employment centers and older towns throughout Chester County, including East Whiteland, West Whiteland, East Brandywine, Upper Uwchlan, East Vincent, Kennett and West Goshen townships. There were also several multifamily proposals in the boroughs of Phoenixville, Downingtown and Oxford, according to Paul Farkas, a senior review planner at the Planning Commission.

The 10 largest official plan submissions reviewed by the Planning Commission in 2016 proposed at least 200 multifamily residential lots/units and/or 200,000 square feet of non-residential structural square footage; six of these plan submissions proposed at least 200 apartment units, according to Farkas.

"The county has seen an extensive number of apartments in our growth areas, particularly in our employment centers and older towns," said Planning Commission Executive Director Brian O'Leary. "This trend supports the goals and vision of Landscapes2."

Since 2005, the number of proposed multifamily residential lots/units in Chester County has exceeded the number of proposed single-family lots.

To check out a graphic of Chester County development trends, click here.