EAST GOSHEN TOWNSHIP PLANNING COMMISSION Meeting Agenda Tuesday, September 24, 2024 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. August 27, 2024
- F. Acknowledge Receipt of New Applications (Initial Submission)
- G. Subdivision and Land Development Applications
 - 1. 1365/1373 Enterprise Drive/CTDI Land Development
 - 2. 1338 Morstein Road SD Act 537 Component 4A, Municipal Planning Commission Review
- H. Conditional Uses and Variances
- I. Zoning Hearing Board Variances
- J. Ordinance Amendments
- K. Old Business
 - 1. The Malvern Institute Update (No Action Required)
- L. New Business
- M. Liaison Reports
- N. Correspondence
- O. Announcements
- P. Next Meeting October 22, 2024, at 7:00 pm.

Bold Items indicate new information to review or discuss.

							East Goshe	n Township	o Planning C	ommission			
							A	Septembe	1 racking Lo e <u>r 24, 20</u> 24	g			
Application Name	Application (CU,LD,ZO, SD, SE, CA)	Type (Sk, P, F)	Date Filed	Start Date	Date to Township Engineer	Date to CCPC	Date to Abutting Prop. / ABC's	Extension	PC MUST Act Date (70-Days)	BOS Must Act Date (90-Days)	Hearing Date	Drop Dead date	Commen
Bold = New Application or PC action r	equired												
1338 Morstein Road SD	SD	Р	2/5/2024	2/27/2024				11/3/2024	5/3/2024 8 3-2024 11/3/2024	5/3/2024 11/3/2024		5/3/2024 8 3-2024 11/3/2024	3- 16 lot subdivision in West Whiteland with 3 lo on 2-27-2024 for the initial submission with r completion of the sewer module appendix
CTDI	LD	Р	5/7/2024	5/7/2024	7/9/2024			10/1/2024	9/24/2024	10/1/2024		10/1/2024	Review letters received by Township En
Malvern Institute	LD	Р	6/28/2021	7/1/2021	6/30/2021	6/29/2021	8/13/2021		2/2/2022	2/15/2022	NA	2/28/2022	ZHB condition of approval for barn re
PROJECTS COMPLETED IN 2024				1	1	1		1			1	1	
1306 West Chester Pike	CU	NA	3/15/2024	3/15/2024	NA	NA	NA	NA	4/30/2024	5/15/2024	4/16/2024	5/15/2024	Conditional use for an automotive repair busines existing use for this property. Board of Supervior 2024.
1344 Morstein Road Sketch Plan Review	SD	SK	2/16/2024	2/27/2024	NA	NA	NA	NA	NA	NA	NA	NA	Sketch Plan Review Application, Plan went to P Applicant will attend 3-26-2024 meet for discussi the Applicant is working of
Timbermill SD 301 Reservoir Road	SD	Р	1/29/2024	2/27/2024				4/11/2024	5/3/2024 7 3-2024	- 5/27/2024 7- 3-2024		5-27-2024 7- 3-2024	SD Application for a 5 lots subdivision. One lot accessory building and a sceond lot has existing F Plan went ot PC on 2-27-2024 for initial subm request. Prelimanary Plan approval was granted Prelimanary Plan Review
Millstone Meadows SD 1010 Hershey Mill Road	SD	Р	5/16/2023	5/16/2023		5/5/2023		7/15/2023 10/12/2023 1/24/2024 4-11-2024 6-28-2024	10/25/2023 1/25/2024 4/252024 7- 25-2024 9- 25-2024	10/25/2023 1/25/2024 4/25/2024 7- 25-2024 9- 25-2024		4/25/2024 1/25/2024 7- 25-2024 9-25 2024	Approved at BoS mee
Timbermill SD 301 Reservoir Road	SD	F											Approved at BoS mee
14 Reservoir Raod	SD	F	9/28/2022	9/28/2022	10/12/2022	10/19/2022		3/14/2023 5-28-2023 8-28-2023 10-12-2023 2-17-2024 5-13-2024	2/28/2024 5/28/2024 8/28/2024	2/28/2024 5/28/2024 8/28/2024		2/28/2024 5/28/2024 8/28/2024	Approved at BoS meet

ts
ts located in EGT. Plan went to PC o action. Applicant has requested blication- Component 4A
gineer (9/6) & Solicitor (8/29)
enovations expires 11/2024
s. An automotive repair business is an
approved the CO application of 4-10-
C on 2-27-2024 as initial submission. on. Sketch Plan Review is closed and n formal plans.
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DRA	<u>AFT</u>
EAST GOSHE	<u>N TOWNSHIP</u>
PLANNING COMM	IISSION MEETING
August	<u>27, 2024</u>
The East Goshen Township Planning Commission he	eld their regular monthly meeting on Tuesday,
August 27, 2024 at 7:00 pm in the Township Building	g.
Members present are highlighted:	
Chair – Ernest Harkness	
Vice Chair – John Stipe	
Dan Daley	
Michael Koza	
Michael Pagnanelli	
Fred Pioggia	
Dan Truitt	
A 1	
Also present was:	
Duane Brady, Fire Marshall	
Keny A. Krause, Zoning Unicer	
John Herizog, BUS Liaison Nathan Clina, Tawashin Engineer	
ivalian Chile, Township Engineer	
COMMON ACRONVMS.	
BOS - Board of Supervisors	CPTF - Comprehensive Plan Task Force
BC = Brandywine Conservancy	CVS – Community Visioning Session
CB = Conservancy Board	SWM – Storm Water Management
CCPC – Chester Co Planning Commission	ZHR – Zoning Hearing Roard
eere enester eer tanning commission	Lind Loning Hearing Doura
FORMAL MEETING – 7 p.m.	
1. Ernest called the meeting to order at 7:00	pm. He led the Pledge of Allegiance and asked for a
moment of silence to remember our first	responders, police, military, and all who protect us.
2. Ernest asked if anyone would be recordin	ig the meeting and if there were any public
comments about non-agenda items. Ther	e was no response.
3. The tracking log was checked and no nee	ed for a workshop meeting.
4. The minutes of the July 30, 2024 meeting	g were approved as amended.
<u>CHAIRMAN'S REPORT –</u> None	
SUBDIVISION AND LAND DEVELOPMENT A	PPLICATIONS
1. 14 Reservoir Road, Glossen – Preliminary/Final S	ubdivision Plan - Jeff Glossen, Property Owner and
Jose Grande, Yerkes Engineer were present. Jeff con	nmented that most issues on the Township
Engineer's letter are okay. They met with the Conser	rvancy Board and answered their questions about
landscaping. John made a motion to recommend app	roval of the Preliminary/Final Subdivision Plan for
14 Reservoir Road to the Board of Supervisors, subje	ect to the developer addressing all outstanding items
to the satisfaction of the Township Engineer and staff	f. Dan Truitt seconded the motion. The motion
passed unanimously.	
2. 301 Reservoir Road, Timbermill LLC – Final Subo	<u>division Plan</u> – Mike Cowen, Commonwealth
Engineers, and Mike Zappitelli, Tinbermill LLC were	e present. Mike Cowen commented that they

- received the review letter from Pennoni and are working on it. Duane's letter is clear. They are putting the HOA documents together. There will be a sewer easement on Lot 2. Landscaping was discussed. 52
- 53

1	Dan Daley made a motion to recommend approval of the Timbermill LLC Final Subdivision Plan to the
2	Board of Supervisors for the property located at 301 Reservoir Road, subject to the developer addressing
3	all outstanding items to the satisfaction of the Township Engineer and staff. Mike Koza seconded the
4	motion. The motion passed unanimously.
2	
6	
/	CONDITIONAL USES AND VARIANCES - None
8	
9	
10	ZUNING HEARING BUARD VARIANCES - None
11 12	ODDINANCE AMENDMENTS - None
12	ORDINANCE AMENDMENTS - None
13	
15	OF D RUSINESS
16	1 Environmental & Sustainability Advisory Council/Planning Commission membershin – There was no
17	representative from the ESAC Ernest mentioned that he reviewed the ordinance for the ESAC and it says
18	whenever possible someone can join. If anyone on the PC wants to attend a meeting, they can
10	whenever possible someone can join. If anyone on the re-wants to attend a meeting, they can.
20	
21	NEW BUSINESS - None
22	
23	
24	LIAISON REPORTS
25	1. Board of Supervisors – John mentioned that they are starting the budget process.
26	
27	
28	ANY OTHER MATTER – None
29	
30	
31	CORRESPONDENCE - None
32	
33	
34	<u>ADJOURNMENT</u>
35	There being no further business, Dan T. made a motion to adjourn the meeting. Fred seconded the
36	motion. The meeting was adjourned at 7:30 pm.
37	The next meeting will be held on Tuesday September 24, 2024 at 7 p.m.
38	
39	Respectfully submitted,
40	
41	
42	
43	

44 Ruth Kiefer, Recording Secretary

Memorandum



East Goshen Township 1580 Paoli Pike West Chester, PA 19380 610-692-7171 ext. 3103 kkrause@eastgoshen.org

Date:	September 18, 2024
To:	East Goshen Township Planning Commission
From:	Kelly A. Krause, Zoning Officer
Re:	1365/1373 Enterprise Drive
	Communications Test Design, Inc & Parsons 1365, LLC
	Preliminary Land Development Plan
	THE CONTRACTORY

Dear Commissioners,

A recommendation is sought by the applicant for the Preliminary Land Development Plan of 1365/1373 Enterprise Drive, owned by Communications Test Design, Inc & Parsons 1365, LLC to construct a new building to serve as a reception area to visitors of the existing business (CTDI). The project also includes an outdoor amenity space, parking and circulation improvements, stormwater management and associated site improvements. The property is located within the Business Park Zoning District (§240-21 of the East Goshen Township Code) and proposed to be completed as a Declaration of Condominium agreement.

Background information:

- > Lots 1365 and 1373 Enterprise Drive are approximately 12.5 acres.
- > The property is in the BP Business Park District.
- > The application notes a total of 5 lots and 30.60 acres to be part of the Condominium Agreement.
- The start date for the project is May 7, 2024. (Day 1).
- → The must act date for the Planning Commission is July 17, 2024 (Day 70).
- → The must act date for the Board of Supervisors is August 7, 2024 (Day 90).
- The applicant has granted a waiver of the time constraints imposed by the PA MPC for the Board of Supervisors to take action on the plans, to expire on October 1, 2024.

Zoning Information:

- > The property is in the BP Business Park District (240-21).
- The minimum lot area is 4 acres.
- Building setback line 400 feet.
- Street line 300 feet.
- > The front yard is 100 feet, the side yard is 50 feet, and the rear yard is 50 feet.
- The minimum building height is 35 feet (3 stories).
- ➢ Total impervious cover is 50%.
- ▶ Total building cover is 30%.
- > The property is outside the flood area.
- > The property has a pipeline located on it and does require a pipeline awareness study.

Memorandum

The applicant has requested that a recommendation of the Preliminary Land Development Plan be made by the Planning Commission at their meeting of September 18, 2024, to seek a final decision from the Board of Supervisors at their meeting of October 1, 2024.

Pursuant to the comments of the Township Solicitor's letter, dated August 29, 2024, the Condominium Plan and Declaration requires additional documentation prior to final plan approval. Final Land Development Plans are also subject to review by additional agencies prior to approval.

Draft Motion:

Mr. Chairman, I move that we recommend approval of the Preliminary Land Development Plan of Communications Test Design, Inc & Parsons 1365, LLC for the property located at 1365/1373 Enterprise Drive to the Board of Supervisors, upon addressing all outstanding items to the satisfaction of Township consultants and staff.

Incorporated 1817

Chester County, Pennsylvania



September 6, 2024

EGOST 00142

Attn: Kelly Krause, Dir. Of Codes & Zoning East Goshen Township 1580 Paoli Pike West Chester, PA 19380

RE: CTDI, Enterprise Drive Preliminary Land Development

Dear Kelly:

As requested, we have reviewed the following information, prepared by Chester Valley Engineers, Inc. unless otherwise specified, regarding the referenced submission:

- "Preliminary Land Development Plans for One CTDI Place" (17 sheets) dated April 29, 2024;
- "Hardscape/Landscape Plan" (2 sheets), prepared by Bernardon, dated January 1, 2024;
- "Post Construction Stormwater Management Report" dated April 29, 2024; and
- Application and supporting documents.

The applicant/equitable owner, Communications Test Design, Inc. ("CTDI"), proposes to remove an existing parking lot and develop a new entrance building, landscaping/hardscaping and courtyard/outdoor area on UPI's 53-4-161 (±10.6 acres) and 53-4-162 (±1.9 acres) with associated stormwater management and access/parking modifications. The site is located om Enterprise Drive within the Goshen Business Park and the BP *Business Park Zoning District*. Access is proposed via Enterprise Drive. The site is served by public water and sanitary sewer.

All easements and rights for the proposed non-residential condominium are outlined in the "Declaration of Condominium of One CTDI Place Condominium".

We offer the following comments:

ZONING (§240)

- 1. This appear to be an accessory use within the Business Park Zoning District for the use of "Cafeteria or recreational facilities for employees only". (§240-21.E(2))
- 2. The plans note that UPI's 53-4-162, 53-4-163, 53-4-164 & 53-4-165 are "deemed merged into one lot for all *purposes*" according to a 1986 Conditional Use approval. We recommend this approval be added to the plans and that the Township Solicitor review this issue further.
- 3. Minimum side yard setbacks shall be 50 feet. (§240-21.G) While the proposed building is located on the common property line, it appears the proposed condominium between the parcels negates the side yard setback requirement. Defer to Township Solicitor.
- 4. Minimum front yard setbacks shall be 100 feet. (§240-21.G) The proposed fountain is within the 100 yard front yard setback. Further discussion may be required regarding this feature.
- 5. Where two or more nonresidential principal buildings are proposed to be built on a lot in one ownership, each such building shall be separated from another such building by at least twice the minimum side yard requirement for each respective building in the zoning district. (§240-23.D(5)(a)) It appears the proposed condominium between the parcels negates this requirement. Defer to Township Solicitor.

- 6. The parking, loading, ingress and egress areas of any zoning district shall be provided with sufficient lighting for security purposes. (§240-27.C(7)(a) & §240-27.E(15)). A lighting plan shall be provided.
- 7. The exterior facades of all buildings shall be finished in decorative masonry, brick, stone, glass or equivalent construction. (§240-27.E(5)) Renderings of the proposed building and features shall be provided.
- Fences and walls which are erected within the required front yard shall not exceed four feet in height and shall maintain a minimum one to one ratio of open to structural areas (such as a picket-style or split-rail fence). (§240-32.E(2)) There appears to be a proposed wall within the required front yard. Further discussion may be required regarding this feature.
- 9. Except as otherwise permitted by the Board of Supervisors pursuant to § 240-33B(8), required off-street parking spaces shall be on the same lot or premises with the principal use served except where this requirement cannot be met, in which case the parking shall be provided within 200 feet walking distance of the principal use. (§240-33.B(5)(a)) We recommend the Township Solicitor confirm the referenced Declaration adequately addresses parking on multiple parcels.

SUBDIVISION AND LAND DEVELOPMENT (§205)

- 10. Signature blocks shall be provided on the right-hand side, if possible, following the format established by the Township. (§205-30.A(3)) Required signature blocks for the Township Engineer, Board of Supervisors, Planning Commission, and Chester County Recorder of Deeds.
- 11. Street curb intersections shall be rounded by a tangent arc with a minimum radius of 35 feet. (§205-48.F)
- 12. It appears the proposed improvements are over 660 feet from the nearest pipeline (Sunoco/Energy Transfer) to the east, therefore a pipeline awareness study is not required.
- 13. A minimum clear sight triangle of 75 feet (as measured from the center-line intersections of two streets) shall be provided at all intersections. (§205-49.A) Clear sight triangles should be added to the plans.

STORMWATER MANAGEMENT

- 14. NPDES permit No. PAC15093 has been issued by the Chester Conty Conservation District. (§195-17.A(1)(b))
- 15. Provide an easement a minimum of twenty-foot around all BMPs and conveyances; alternatively, a blanket easement is acceptable. (§195-27.B(18)(c))
- 16. A stormwater management operations and maintenance agreement shall be recorded; a sample agreement is available as Appendix E of Chapter 195.

LANDSCAPING

- 17. Tree species indicated mostly conform to the Township approved tree list. In place of Gleditsia, consider an alternative such as Maple, Oak, or Linden species.
- 18. Plans should indicate if built-in irrigation will be provided for plaza planting areas.
- 19. There is an existing vegetated buffer to the rear which appears to adequately screen adjacent residential properties. Plans should accurately depict this buffer and specifically indicated for this to remain and be protected. The applicant should consider supplementing it with additional trees such as evergreen; the thuja plicata indicated on the planting plan tends to be narrow in form and may be inadequate.

GENERAL

- 20. Please clarify if the proposed building will have any sanitary sewer facilities; additional review and/or permitting may be required.
- 21. Submission is subject to additional reviews, including but not limited to the Township Conservancy Board, Chester County Planning Commission, Dir. of Codes & Zoning and Emergency Management Coordinator/Fire Marshall.
- 22. We will defer to the Township Solicitor regarding the *Declaration of Condominium* of *One CTDI Place Condominium* and the exceptions per the Title Commitment (Sheet 2, Note 10).
- 23. It's unclear, due to the proposed condominium, if the application should also be considered a subdivision; the Township Solicitor should review further.

Please additionally see August 29, 2024 comments from the Township Solicitor.

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

Sincerely, PENNONI ASSOCIATES INC.

Nathan M. Cline, PE Township Engineer

cc (via e-mail): Derek Davis, Township Manager Mark Miller, Public Works Mark Thompson, Township Solicitor Duane Brady, Emergency Management Coordinator/Fire Marshall Toby Booker, CTDI Jeremy Maziarz, PE, Chester Valley Engineers

LAMBIMCERLANEPC

ATTORNEYS AT LAW

Mark P. Thompson West Chester Office Direct 610-701-4407 Voice 610-430-8000 mthompson@lambmcerlane.com

August 29, 2024

Kelly Krause Director of Codes & Zoning East Goshen Township 1580 Paoli Pike West Chester, PA 19380

> Re: East Goshen Township – Application of Communications Test Design, Inc. -Preliminary Land Development Plans for One CTDI Place, dated April 29, 2024

Dear Ms. Krause:

I have been asked to review the above referenced Plan Application. Along with the Plans, the Applicant proposes to record a Condominium Declaration against six existing tax parcels that comprise the Property. Four of the parcels (Tax Parcels 53-4-161, 53-4-162, 53-4-163 and 53-4-164) are contiguous and located on the north and west side of Enterprise Drive. Tax Parcel 53-4-174 is improved with a parking lot and is located on the east side of Enterprise Drive. The Condominium Declaration and Plan identify two condominium units. The existing commercial building identified as Condominium Unit 1 is located partially on Tax Parcel 53-4-161 and partially on Tax Parcel 53-4-162. The existing commercial building identified as Condominium Unit 2 is located Tax Parcel 53-4-163. Parking for Unit 2 is located on Tax Parcel 53-4-164. A stormwater basin and areas for additional parking are also located on Tax Parcel 53-4-164.

Recording the Condominium Plan (Sheets 4 and 5 of 17 of the Plans) and Declaration will precede the recording of the subdivision and land development plan and therefore these documents will need to be in their final form and approved as part of the Application's approval. Filing the Condominium Declaration creates a single condominium from the six parcels and eliminates the existing tax parcel numbers in favor of that form of ownership. All owners of the six parcels must sign the Declaration. A legal analysis of the Condominium Act and comments to the Declaration are set forth below.

1. Application of the Pennsylvania Uniform Condominium Act, 68 Pa.C.S. §§ 3101 et seq. (the "Condominium Act" or the "Act").

The Condominium Act sets forth the general rule that a municipality may not discriminate against the condominium form of ownership:

(a) General rule.--A zoning, subdivision, building code or other real estate use law, ordinance or regulation may not prohibit the condominium form of ownership or

Kelly Krause August 29, 2024 Page 2

impose any requirement upon a condominium which it would not impose upon a physically identical development under a different form of ownership.

68 Pa.C.S. § 3106(a).

Further the Condominium Act explicitly addresses the creation of a condominium and whether it constitutes a subdivision or land development:

(c) Status.--The creation of a condominium pursuant to section 3201 (relating to creation of condominium) out of an entire lot, parcel or tract of real estate which has previously received approval for land development or subdivision, as those terms are defined in section 107 of the act of July 31, 1968 (P.L. 805, No. 247), known as the Pennsylvania Municipalities Planning Code, or the conveyance of units in the condominium, shall not, in and of itself, constitute a subdivision or land development, for the purposes of subdivision, land development or other laws, ordinances and regulations.

68 Pa.C.S. § 3106(c). In this case, the existing improvements on the properties previously received approval by the Township. The Applicant has applied for land development approval to merge the properties into a single condominium parcel by eliminating existing lot lines and creating two condominium "Units" out of the existing two buildings on the properties. The filing of the land development Plans and the proposed Declaration would eliminate the individual parcel boundaries which are currently running through buildings and improvements. The Plans must show the elimination of the existing lot lines of the properties that will be subject to the proposed condominium. Further, the Condominium Act requires that all condominiums in Pennsylvania must comply with municipal zoning regulations as follows:

(d) Compliance with zoning regulations.--

(1) Use of the condominium shall comply with zoning regulations applicable to the parcel of land or tract of real estate on which the condominium is created.

(3) Construction of any structure or building on any unit or common facility shall be subject to the provisions of any zoning, subdivision, land development, building code or other real estate law, ordinance or regulation.

68 Pa.C.S. § 3106(d).

Based on the above provisions of the Condominium Act, specifically § 3106(a) of the Act, assuming there is a single lot containing the existing and proposed improvements, the owners of the subject properties may record a condominium declaration and plan that creates a single condominium lot containing the proposed improvements and identifying the two commercial buildings on the property as individual condominium units with common elements and limited common elements.

 24 E. Market Street
 PO Box 565
 West Chester, PA 19381
 Phone: 610.430.8000
 Fax: 610.692.0877

 One South Broad Street
 Suite 1500
 Philadelphia, PA 19107
 Phone: 215.609.3170
 Fax: 610.692.0877

 3405 West Chester Pike
 Newtown Square, PA 19073
 Phone: 610.353.0740
 Fax: 610.353.0745

www.lambmcerlane.com

Kelly Krause August 29, 2024 Page 3

The Township may not prohibit this form of ownership or impose any requirement upon a condominium, which it would not impose upon a physically identical development under a different form of ownership. Most importantly, the use of any proposed condominium shall comply with zoning regulations applicable to the property on which the condominium is created and moreover, the construction of any structure or building on any unit or common facility shall be subject to the provisions of any zoning, subdivision, land development, building code or other real estate law, ordinance or regulation.

- Review Comments to the Declaration of Condominium for One CTDI Place Condominium and the Condominium Plan (Sheets 4 and 5 of 17)
 - a. The Condominium Plan refers to the Property as Tax Parcels 53-4-161, 53-4-162, 53-4-163 and 53-4-164 and the Declaration refers to those parcels as well as Tax Parcel 53-4-174. The Property subject to the condominium should be consistently identified on Plan and Declaration. Exhibit A, which is blank, should identify the Property.
 - b. All easements, licenses and agreements identified to be part of Exhibit C should be submitted for review before approval of the Plan.
 - c. Identify and describe each individual Unit in Section 3.2 of the Declaration by number. Section 3210 of the he Condominium Act provides that the dimensions of the units must be shown on the Plan.
 - d. Provide that approval of the Township must be obtained for the relocation of boundaries and/or subdivision of units in Section 3.4 of the Declaration.
 - e. Identify the Limited Common Elements for Units 1 and 2 shown on the Plan in Section 5.2 of the Declaration.
 - f. Provide that approval of the Township must be obtained for changes to Limited Common Elements.
 - g. Section 6.1 provides for the creation of easements associated with the utilities, access, and structural support. Please provide details as to whether Section 6.1 creates these easements based on this language and whether these easements will be included in Exhibit C.
 - h. Section 7.1 must be revised to provide that approval of the Township must be obtained for an amendment to the Declaration.
 - i. The Plans refer to a 1986 Conditional Use approval that merged the properties. This approval should be provided for review and inclusion on the Plan.

Please let me know if you have any questions concerning the comment to the application set forth in this letter.

Very truly yours,

LAMB MCERLANE By

Mark P. Thompson

cc: Derek Davis Nathan M. Cline, P.E.

 24 E. Market Street
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September 18, 2024

Ms. Kelly Krause, Director of Codes & Zoning East Goshen Township 1580 Paoli Pike West Chester, PA 19380-6199

RE: PRELIMINARY LAND DEVELOPMENT PLANS (REVISED) COMMUNICATIONS TEST DESIGN, INC. (CTDI) 1373 ENTERPRISE DRIVE, WEST CHESTER, PA 19380 EAST GOSHEN TOWNSHIP, CHESTER COUNTY, PA CVE PROJECT # 22024-1000 PENNONI # EGOST 00142

Dear Ms. Krause:

We have received the Township Engineer's review letter dated 9/6/24. We plan to address the comments as follows. Please note each review comment is listed below, and CVE's response is noted in bold italics.

PENNONI – TOWNSHIP ENGINEER'S REVIEW LETTER – SEPTEMBER 6, 2024

ZONING (§240)

1. This appear to be an accessory use within the Business Park Zoning District for the use of "Cafeteria or recreational facilities for employees only". (§240-21.E(2))

CVE Response: No response required.

2. The plans note that UPI's 53-4-162, 53-4-163, 53-4-164 & 53-4-165 are "deemed merged into one lot for all purposes" according to a 1986 Conditional Use approval. We recommend this approval be added to the plans and that the Township Solicitor review this issue further.

CVE Response: The 1986 Conditional Use approval will be added to the Land Development plan set on sheet 18.

3. Minimum side yard setbacks shall be 50 feet. (§240-21.G) While the proposed building is located on the common property line, it appears the proposed condominium between the parcels negates the side yard setback requirement. Defer to Township Solicitor.

CVE Response: We agree that the proposed condominium negates the side yard setback requirement.

4. Minimum front yard setbacks shall be 100 feet. (§240-21.G) The proposed fountain is within the 100 yard front yard setback. Further discussion may be required regarding this feature.

CVE Response: The proposed fountain is essentially a relocation of the existing fountain in front of the 1373 building to a new location in front of the proposed building addition. <u>The existing fountain is currently located within the front yard setback</u> and is being replaced with a proposed parking and driveway connection to Enterprise Drive. The relocated fountain will continue the existing legal non-



Communications Test Design, Inc. 1373 Enterprise Drive CVE Project No. 22024-1000 Township Response Letter Page 2 of 4

conformity and will maintain, if not increase the existing non-conforming setback of the existing fountain within the front yard.

5. Where two or more nonresidential principal buildings are proposed to be built on a lot in one ownership, each such building shall be separated from another such building by at least twice the minimum side yard requirement for each respective building in the zoning district. (§240-23.D(5)(a)) It appears the proposed condominium between the parcels negates this requirement. Defer to Township Solicitor.

CVE Response: We agree that the proposed condominium negates this requirement.

6. The parking, loading, ingress and egress areas of any zoning district shall be provided with sufficient lighting for security purposes. (§240-27.C(7)(a) & §240-27.E(15)). A lighting plan shall be provided.

CVE Response: The lighting plan for the site parking and improvements will be provided with revised plans to comply with the township ordinance requirements.

7. The exterior facades of all buildings shall be finished in decorative masonry, brick, stone, glass or equivalent construction. (§240-27.E(5)) Renderings of the proposed building and features shall be provided.

CVE Response: Building renderings were reviewed with the Township Planning Commission. Copies of the building renderings will be provided with revised plans.

8. Fences and walls which are erected within the required front yard shall not exceed four feet in height and shall maintain a minimum one to one ratio of open to structural areas (such as a picket-style or split-rail fence). (§240-32.E(2)) There appears to be a proposed wall within the required front yard. Further discussion may be required regarding this feature.

CVE Response: The proposed wall shall not exceed four (4') feet in height and the signage shall be subject to a separate permit from the Township Codes Department.

9. Except as otherwise permitted by the Board of Supervisors pursuant to § 240-33B(8), required off-street parking spaces shall be on the same lot or premises with the principal use served except where this requirement cannot be met, in which case the parking shall be provided within 200 feet walking distance of the principal use. (§240-33.B(5)(a)) We recommend the Township Solicitor confirm the referenced Declaration adequately addresses parking on multiple parcels.

CVE Response: All parking is included in the overall Condominium.

SUBDIVISION AND LAND DEVELOPMENT (§205)

 Signature blocks shall be provided on the right-hand side, if possible, following the format established by the Township. (§205-30.A(3)) Required signature blocks for the Township Engineer, Board of Supervisors, Planning Commission, and Chester County Recorder of Deeds.

CVE Response: The signature blocks will be provided with revised plans, as required.



Communications Test Design, Inc. 1373 Enterprise Drive CVE Project No. 22024-1000 Township Response Letter Page 3 of 4

11. Street curb intersections shall be rounded by a tangent arc with a minimum radius of 35 feet. (§205-48.F)

CVE Response: The curb radii have been revised.

12. It appears the proposed improvements are over 660 feet from the nearest pipeline (Sunoco/Energy Transfer) to the east, therefore a pipeline awareness study is not required.

CVE Response: No response required.

13. A minimum clear sight triangle of 75 feet (as measured from the center-line intersections of two streets) shall be provided at all intersections. (§205-49.A) Clear sight triangles should be added to the plans.

CVE Response: Clear sight triangles have been added to the plan set.

STORMWATER MANAGEMENT

14. NPDES permit No. PAC15093 has been issued by the Chester Conty Conservation District. (§195-17.A(1)(b))

CVE Response: No response required.

15. Provide an easement a minimum of twenty-foot around all BMPs and conveyances; alternatively, a blanket easement is acceptable. (§195-27.B(18)(c))

CVE Response: The required 20' wide easements will be provided with revised plans.

16. A stormwater management operations and maintenance agreement shall be recorded; a sample agreement is available as Appendix E of Chapter 195.

CVE Response: The required SWM Operations and Maintenance Agreement will be provided for recording, in accordance with Township/NPDES requirements.

LANDSCAPING

17. Tree species indicated mostly conform to the Township approved tree list. In place of Gleditsia, consider an alternative such as Maple, Oak, or Linden species.

CVE Response: This item will be addressed by Bernardon Associates with revised plans.

18. Plans should indicate if built-in irrigation will be provided for plaza planting areas.

CVE Response: This item will be addressed by Bernardon Associates with revised plans.

19. There is an existing vegetated buffer to the rear which appears to adequately screen adjacent residential properties. Plans should accurately depict this buffer and specifically indicated for this to remain and be protected. The applicant should consider supplementing it with additional trees such as evergreen; the thuja plicata indicated on the planting plan tends to be narrow in form and may be inadequate.

CVE Response: This item will be addressed by Bernardon Associates with revised plans.



Communications Test Design, Inc. 1373 Enterprise Drive CVE Project No. 22024-1000 Township Response Letter Page 4 of 4

GENERAL

20. Please clarify if the proposed building will have any sanitary sewer facilities; additional review and/or permitting may be required.

CVE Response: The proposed building addition will include new bathrooms that will be connected to the existing sanitary sewer facilities. There is no increase in employees/staffing proposed as part of the project.

21. Submission is subject to additional reviews, including but not limited to the Township Conservancy Board, Chester County Planning Commission, Dir. of Codes & Zoning and Emergency Management Coordinator/Fire Marshall.

CVE Response: Will address all other agency reviews, as required.

22. We will defer to the Township Solicitor regarding the Declaration of Condominium of One CTDI Place Condominium and the exceptions per the Title Commitment (Sheet 2, Note 10).

CVE Response: We defer to legal counsel for the Township and the Applicant on this matter.

23. It's unclear, due to the proposed condominium, if the application should also be considered a subdivision; the Township Solicitor should review further.

CVE Response: It is our understanding that per the Township Solicitor and Applicant's Counsel that there is no subdivision due to the creation of the proposed condominium.

If you have any questions on this plan submission, please contact me at 610-308-6573, or <u>imaziarz@chesterv.com</u>. Thank you.

Regards, CHESTER VALLEY ENGINEERS, INC.

Jeremy R. Maziarz, PE President & CEO

cc: Brian L. Nagle, Esq.



MacElree Harvey, Ltd. Attorneys at Law 17 West Miner Street West Chester, PA 19382 610-436-0100 | main macelree.com

Brian L. Nagle bnagle@macelree.com d | 610-840-0224 f | 610-430-8245

August 27, 2024

Via Electronic Mail Only: kkrause@eastgoshen.org

Board of Supervisors c/o Kelly Krause East Goshen Township 1580 Paoli Pike West Chester, PA 19380

Re: Land Development Application for Communications Test Design, Inc. & Parsons 1365, LLC

Dear Members of the Board:

I am writing to grant at the request of the Township, with authorization to do so, an extension of the timeframe within which the Board of Supervisors must consider and/or act upon the above-captioned land development application. This extension is granted through October 1, 2024. The Board's review and/or action upon the application within that timeframe shall be deemed timely under all applicable timeframes set forth in the Pennsylvania Municipalities Planning Code.

This extension is unconditional. That being said, we have not received any review letters as of today and we are relying on receiving those this week so we can work through any comments with the Township and it's consultants prior to the September Planning Commission meeting so that the plan can be ready for a recommendation to move to the Board of Supervisors.

Very truly yours,

Brian L. Nagle

/cfg

cc: Mark Thompson, Esquire [*via Electronic Mail Only: mthompson@lambmcerlane.com*] Jeremy R. Maziarz, PE [*via Electronic Mail Only*] CTDI [*via Electronic Mail Only*]

5791987v1 092100.76667

ONE CTDI PLACE FOR

PRELIMINARY LAND DEVELOPMENT PLANS **COMMUNICATIONS TEST DESIGN, INC. (CTDI)**

SHEET INDEX

SHEET NO.	TITLE
1	COVER SHEET
2	EXISTING CONDITIONS PLAN
3	DEMOLITION PLAN
4, 5	CONDOMINIUM PLAN
6	SITE PLAN
7, 8	GRADING & UTILITIES PLANS
9	CONSTRUCTION DETAILS
10	PROFILES
11	EROSION & SEDIMENTATION CONTROL PLAN
12	EROSION & SEDIMENTATION CONTROL NOTES
13	EROSION & SEDIMENTATION CONTROL DETAILS
14	POST-CONSTRUCTION STORMWATER MANAGEMENT PLAN
15	POST-CONSTRUCTION STORMWATER MANAGEMENT NOTES & DETAILS
16	POST-CONSTRUCTION STORMWATER MANAGEMENT DETAILS
17	VEHICLE TRACKING PLAN

EAST GOSHEN TOWNSHIP UTILITY LIST

COMPANY: ADDRESS:	AT&T 1100	COMPANY: ADDRESS:	PECO ENERGY C/O USIC 450 S. HENDERSON RD. SUITE B
CONTACT:	PAT SUTTON		KING OF PRUSSIA, PA 19406
EMAIL:	ps4364@att.com	CONTACT:	NIKKIA SIMPKINS
PHONE:	(814) 321-6470	EMAIL:	nikkiasimpkins@usiciic.com
COMPANY:	COMCAST	PHUNE:	(404) 001-5720
ADDRESS:	190 SHOEMAKER RD	COMPANY:	LUMEN FORMERLY LEVEL 3
	POTTSTOWN, PA 19464	ADDRESS:	1025 ELDORADO BLVD
CONTACT:	MIKE KIMBERLY		BROOMFIELD, CO 80021
EMAIL:	mike_kimberly@cable.comcast.com	CONTACT:	LUMEN OPERATOR PERSONNEL
PHONE:	(215) 285-8786	EMAIL:	RELOCATIONS@LUMEN.COM
COMPANY	EAST COSHEN TOWNSHIP	PHONE:	(8//) 366-8344 EXI. 3
ADDRESS:	1580 PAOLI PIKE	COMPANY	ENERGY TRANSFER
	WEST CHESTER, PA 19380	ADDRESS:	1300 MAIN ST
CONTACT:	MARK MILLER		HOUSTON, TX 77002
EMAIL:	mmiller@eastgoshen.org	CONTACT:	KEVIN OSHEA
PHONE:	(610) 692–7171 EXT. 3402	EMAIL:	KEVIN.OSHEA@ENERGYTRANSFER.COM
		PHONE:	(713) 989–7987
	762 LANCASTER AVE		
ADDRESS.	BRYN MAWR. PA 19010		ARREE PD
CONTACT:	THOMAS WADDY	ADDILESS.	PRINCETON, NJ 08540
EMAIL:	TBWADDY@AQUAAMERICA.COM	CONTACT:	JUSTIN ADAMS
PHONE:	(610) 525–1400 EXT. 52105	EMAIL:	justin.adams@williams.com
	00110107	PHONE:	(609) 285–2425
COMPANY:			
ADDINESS.	DOWNINGTOWN PA 19335	COMPANY:	VERIZON BUSINESS FORMERLY MCI
CONTACT:	TOM RUSSO	ADDRESS.	CARY NC 27513
EMAIL:	tom_russo@cable.comcast.com	CONTACT:	VICTOR WOOD
PHONE:	(610) 842–2501	EMAIL:	victor.s.wood@verizon.com
		PHONE:	(919) 414–2782



112 Moores Road, Suite 200, Malvern, PA 19355 610-644-4623

www.chesterv.com



1" = 120'

PRELIMINARY LAND DEVELOPMENT ONE CTDI PLACE ISSUED: APRIL 29, 2024 REVISED CVE PROJECT #: 22024

ONE X FLOOD PLAIN



SOILS LIST									
	DEPTH TO SEASONALLY HIGH	DEPTH TO		CY OF:		HYDRIC SOIL			
IDORTHENTS									
% SLOPES	60"	20"-70"	NONE	NONE	с	NO			
5% SLOPES	60"	20"-70"	NONE	NONE	С	NO			
	-								

SHEET 2 OF 17



SOILS LIST									
	DEPTH TO SEASONALLY HIGH	DEPTH TO	FREQUEN	CY OF:	HYDROLOGIC	HYDRIC SOIL			
RIPTION	WATER TABLE	BEDROCK	FLOODING	PONDING	SOIL GROUP	RATING			
DORTHEN	DORTHENTS								
% SLOPES	60"	20"-70"	NONE	NONE	с	NO			
% SLOPES	60"	20"-70"	NONE	NONE	С	NO			



DEMOLITION NOTES

CONTRACTOR SHALL BE RESPONSIBLE FOR CONFIRMING THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES WITHIN THE WORK AREA BEFORE THE START OF CONSTRUCTION. IF A CONFLICT EXISTS, CONTRACTOR IS TO NOTIFY THE ENGINEER IMMEDIATELY. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL/DEMOLITION OF ALL ANCILLARY FEATURES WHICH ARE LOCATED ON THE PROPERTY AND CONFLICT WITH PROPOSED GRADING INCLUDING, BUT NOT LIMITED TO, POSTS, VEGETATION, PADS, STEPS, SIGNS, SHRUBS, CURBS, LIGHT AND LAMP POSTS, MAILBOXES, MECHANICAL, ELECTRICAL AND HVAC EQUIPMENT, WALLS, ROOF DRAIN PIPING,

IF REQUIRED, CONTRACTOR IS RESPONSIBLE FOR GRADE ADJUSTMENT OF ALL SURFACE UTILITIES, INCLUDING BUT NOT LIMITED TO VALVES, LIDS, GRATES, RIMS, CAPS, STORM AND SANITARY STRUCTURES WITHIN THE LIMITS OF WORK. GRADE ADJUSTMENTS SHALL BE MADE PRIOR TO THE INSTALLATION OF PAVEMENT WEARING COURSE OR PLACEMENT OF TOPSOIL IN UNPAVED AREAS. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE APPROPRIATE UTILITY OWNERS TO DISCONNECT AND CAP ALL EXISTING UTILITY SERVICES SCHEDULED FOR DEMOLITION IN ACCORDANCE WITH THE UTILITY COMPANIES REQUIREMENTS.

A. AQUA PA: CAP EXISTING WATER SERVICE BEYOND THE LIMITS OF THE PROPOSED DEMOLITION AND REMOVE SERVICE LINE. SITE CONTRACTOR TO COORDINATE WITH THE OWNER AND AQUA PA FOR EXACT LOCATION OF CAPPING AND REMOVAL OF EXISTING WATERLINE, IF REQUIRED. B. PECO ENERGY CO .: CAP EXISTING ELECTRIC SERVICE BEYOND THE LIMITS OF PROPOSED DEMOLITION AND REMOVE SERVICE LINE. SITE CONTRACTOR TO COORDINATE WITH THE OWNER AND PECO FOR REMOVAL OF ELECTRIC SERVICE. C. TELECOMMUNICATIONS SERVICES: CAP EXISTING TELECOMMUNICATIONS SERVICES (PHONE, CABLE, ETC.) BEYOND THE LIMITS OF PROPOSED DEMOLITION AND REMOVE SERVICE LINES.

SITE CONTRACTOR TO COORDINATE WITH THE OWNER AND UTILITY COMPANIES FOR REMOVAL OF TELECOMMUNICATION SERVICES. D. NOTE: ALL EXISTING UTILITIES THAT SERVICE THE EXISTING BUILDING ON SITE AND ARE LOCATED WITHIN THE PROPOSED BUILDING FOOTPRINT ARE TO BE RE-ROUTED BEYOND THE PROPOSED BUILDING PRIOR TO DEMOLITION. IF REQUIRED, TEMPORARY UTILITY SERVICES SHALL BE PROVIDED TO ENSURE THAT ALL UTILITY SERVICES ARE NOT

INTERRUPTED CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ALL EXISTING FEATURES WHICH ARE DAMAGED DURING CONSTRUCTION AND ARE INDICATED TO REMAIN. REMOVAL OF EXISTING PAVED SURFACES INCLUDES THE REMOVAL OF CRUSHED STONE BASE

REMOVAL OF EXISTING STRUCTURES INCLUDES THE REMOVAL OF ALL FOOTINGS, FOUNDATION WALLS AND OTHER STRUCTURAL SUPPORT ELEMENTS. REMOVAL OF ALL FENCES, POSTS AND OTHER SIMILAR FEATURES INCLUDES THE REMOVAL OF CONCRETE FOOTINGS AND BASES. ALL EXISTING SHRUBS LOCATED AROUND THE PERIMETER OF THE BUILDING SHALL BE REMOVED.

CONTRACTOR IS RESPONSIBLE FOR ALL TREE REMOVAL WITHIN THE PROPOSED LIMITS OF WORK, PER THE OWNER'S DISCRETION 10. DEMOLITION OF TREES AND OTHER VEGETATION INCLUDES REMOVAL OF ALL STUMPS AND ROOT SYSTEMS WITHIN 24" OF EXISTING GRADE.

CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL ELECTRICAL, MECHANICAL, AND HVAC EQUIPMENT AS REQUIRED PER THE MECHANICAL, ELECTRICAL AND PLUMBING PLANS. WHERE PROPOSED CURB AND SIDEWALK ARE TO MATCH EXISTING, THE CONTRACTOR IS TO PROVIDE A CLEAN TRANSITION AND REMOVE/REPLACE ANY EXISTING CURB AND/OR SIDEWALK THAT IS DAMAGED, PER THE OWNER'S DISCRETION. BITUMINOUS PAVING SHALL BE SAWCUT PRIOR TO APPLICATION OF THE NEW PAVING, INCLUDING PATCHING IN AREAS OF CURB REPLACEMENT, IF REQUIRED. CONTRACTOR IS TO VERIFY WITH OWNER AND LANDSCAPE ARCHITECT WHICH EXISTING TREES ARE TO BE REMOVED OR REQUIRE SELECTIVE PRUNING DUE TO THE CLOSE PROXIMITY TO THE PROPOSED

15. CONTRACTOR IS TO VERIFY WITH OWNER IF EXISTING LIGHT POLES/FIXTURES TO BE REMOVED ARE TO BE RE-INSTALLED OR REPLACED. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL LIGHTS, BASES, WIRING AND CONDUITS FOR ALL LIGHTS TO BE REMOVED. 16. CONTRACTOR SHALL PROVIDE SAFE PEDESTRIAN ACCESS TO BUILDING ENTRANCES DURING SITE CONSTRUCTION PER OWNER'S BUILDING ACCESS REQUIREMENTS. 17. CONTRACTOR TO VERIFY IF EXISTING PARKING LOT AND DRIVEWAY SIGNAGE TO BE REMOVED ARE TO BE RE-INSTALLED OR REPLACED WITH NEW SIGNAGE (STOP SIGNS, ADA PARKING SIGNS, DIRECTIONAL SIGNS, ETC.)

UTILITY LEGEND/NOTES

E CONTRACTOR TO VERIFY EXISTING ELECTRICAL SERVICE LIMITS TO REMAIN.

CONTRACTOR TO VERIFY EXISTING TELECOMMUNICATION SERVICE LIMITS TO REMAIN. EXISTING ELECTRIC LINE SERVICES, LIGHT STANDARDS, ETC. TO BE REMOVED (CONTRACTOR TO VERIFY REMOVAL LIMITS). EXISTING TELECOMMUNICATION SERVICES TO BE REMOVED (CONTRACTOR TO VERIFY

EXISTING WATER SERVICE LINE

TO BE REMOVED EXISTING ELECTRIC SERVICE

LINE TO BE REMOVED EXISTING TELECOMMUNICATION SERVICE LINE TO BE REMOVED



LOCATION MAP SCALE 1"=2000

LEGEND EXISTING FEATURES

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DEMOLITION FEATURES (T.B.R.)



EXISTING EXISTING EXISTING EXISTING EXISTING	PROPERTY BOUNDARY ADJOINING PROP. LINE RIGHT-OF-WAY LINE EASEMENT SETBACK BOUNDARY
EXISTING EXISTING EXISTING	BUILDING 1' CONTOURS 5' CONTOURS SPOT ELEVATION
EXISTING	SOIL TYPE
EXISTING EXISTING EXISTING EXISTING EXISTING	CURB EDGE OF PAVEMENT FENCE STORM INLET AND PIPE MANHOLE AND PIPE
EXISTING EXISTING EXISTING EXISTING	U/G FIRE LINE U/G WATER LINE U/G ELECTRIC LINE U/G TELEPHONE LINE U/G GAS LINE
EXISTING EXISTING EXISTING EXISTING	OVERHEAD WIRES LIGHT POLE SIGN UTILITY POLE
EXISTING EXISTING	CONIFEROUS TREE DECIDUOUS TREE
EXISTING	TREE & SHRUB LINE

to be removed

EXISTING FEATURE TO BE REMOVED EXISTING FEATURE TO BE REMOVED EXISTING PAVEMENT / CONCRETE / STRUCTURE TO BE REMOVED

DEMOLITION PLAN

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		-				PROJECT NO.
				Charton		
JEREMY R. MAZIARZ				Chester	valley	22024
ENGINEER 50557-E				ENGINEE	RS, INC.	
				112 Moores Road, Suite 2	00, Malvern, PA 19355	F.B.
WSYLVAN				610-644-4623		
omer & Marsan				www.cnesterv.com		
		SCALE	DATE	DRAWN BY	CHECKED BY	DRAWING
· · //		$1^{\circ} = 30^{\circ}$	4/29/2024	KKB	JKM	

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120

Scale in Feet

60





GENERAL NOTES:

PROPERTY ADDRESS: 1365 AND 1373 ENTERPRISE DRIVE, WEST CHESTER, PA 19380 2. APPLICANT: COMMUNICATIONS TEST DESIGN, INC. (CTDI) 1373 ENTERPRISE DRIVE

- WEST CHESTER, PA 19380
- 3. OWNER: (PARCEL #53-4-161) COMMUNICATIONS TEST DESIGN, INC. (CTDI) (PARCELS[®] #53-4-162, 163, 164, 165) - PARSONS 1365, LLC. 4. BOUNDARY INFORMATION SHOWN FROM EXISTING PLANS AND DEEDS OF RECORD. 5. GROSS TRACT AREAS: U.P.I. # 53-4-161 - 10.606 ACRES
- U.P.I. # 53-4-162 1.934 ACRES U.P.I. # 53-4-163 8.933 ACRES
- U.P.I. # 53-4-164 4.000 ACRES U.P.I. # 53-4-165 - 5.300 ACRES
- 6. THE TOPOGRAPHY AND IMPROVEMENTS SHOWN WAS PHOTOGRAMMETRICALLY COMPILED BY AERO-METRIC FROM PHOTOGRAPHY TAKEN DECEMBER 24, 2010 SUPPLEMENTED AND CONTROLLED BY FIELD SURVEYS PERFORMED JANUARY 4, 5, & 10, 2011 AND JULY 14, 2023 BY CHESTER VALLEY ENGINEERS, INC. ELEVATION DATUM = REFERENCE MARK #235 - PENNDOT DISK AT SOUTHWEST CONCRETE ABUTMENT OF PAOLI PIKE BRIDGE OVER EAST BRANCH OF CHESTER CREEK. ELEVATION = 380.204 NGVD 1929. BENCHMARK TAKEN FROM FLOOD
- INSURANCE RATE MAP 42029c0352 D DATED NOVEMBER 20, 1996 BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY. 6. BY GRAPHIC PLOTTING ONLY, PARCELS #53-4-163, #54-4-164 & #54-4-165 LIE WITHIN AREAS IDENTIFIED AS "ZONE A, ZONE AE & ZONE X" ON FLOOD INSURANCE RATE MAPS 42029C0210G & 42029C0215G DATED SEPTEMBER 29, 2017 FOR CHESTER COUNTY, PENNSYLVANIA BY THE FEDERAL EMERGENCY MANAGEMENT
- AGENCY. 7. SOILS INFORMATION TAKEN FROM USDA NRCS WEB SOIL SURVEY MAP.
- 8. WETLANDS LOCATIONS SHOWN ON PARCELS #53-4-163 & #53-4-165 FROM PHYSICAL FIELD SURVEY BY CHESTER VALLEY ENGINEERS, INC. OF POINTS MARKED BY DEL VAL SOIL & ENVIRONMENTAL CONSULTANTS, INC., DOYLESTOWN, PA. 9. THE LOCATION OF EXISTING EASEMENTS WAS TAKEN FROM EXISTING PLANS. THE EASEMENTS WERE NOT DESCRIBED WITH BEARINGS AND DISTANCES, THE EASEMENT LOCATIONS ARE TO BE CONSIDERED APPROXIMATE
- 10. SCHEDULE B PART 2 OF TITLE COMMITMENT NO.PAFN23-2478 KW, NOT DATED, ISSUED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY, INCLUDES THE FOLLOWING EXCEPTIONS: 9. RIGHT OF WAY GRANTED TO PHILADELPHIA ELECTRIC COMPANY AS IN MISCELLANEOUS DEED BOOK 203 PAGE 715. [LIMITED BLANKET RIGHT OF WAY - NOT PLOTTABLE]. (AS TO TRACTS I AND II)
- 10. RIGHT OF WAY GRANTED TO PHILADELPHIA ELECTRIC COMPANY AS IN MISCELLANEOUS DEED BOOK 248 PAGE 296. [LIMITED BLANKET RIGHT OF WAY - NOT PLOTTABLE]. (AS TO TRACTS I AND II)
- 11. RIGHT OF WAY GRANTED TO PHILADELPHIA ELECTRIC COMPANY AS IN MISCELLANEOUS DEED BOOK 563 PAGE 230. [LIMITED BLANKET RIGHT OF WAY - NOT PLOTTABLE]. (AS TO TRACTS I AND II)
- 12. INSTRUMENT ESTABLISHING PROTECTIVE COVENANTS FOR GOSHEN CORPORATE PARK RECORDED IN MISCELLANEOUS DEED BOOK 541 PAGE 88, [EXPIRED JANUARY 1, 2010]. FIRST AMENDMENT THERETO AS IN RECORD BOOK 4489 PAGE 1731. [EXPIRED BY EXPIRATION CLAUSE IN 541/88] (AS TO TRACTS I AND II) 13. RIGHT OF WAY GRANTED TO THE BELL TELEPHONE COMPANY AS IN MISCELLANEOUS
- DEED BOOK 586 PAGE 401. [BLANKET RIGHT OF WAY NOT PLOTTABLE]. (AS TO TRACTS I AND II) 14. RIGHT OF WAY GRANTED TO THE BELL TELEPHONE COMPANY AS IN MISCELLANEOUS
- DEED BOOK 1045 PAGE 82. [NOT PLOTTABLE FROM SCHEMATIC DIAGRAM SUPPLIED]. (AS TO TRACT I)
- 15. RIGHT OF WAY GRANTED TO THE BELL TELEPHONE COMPANY AS IN MISCELLANEOUS DEED BOOK 2612 PAGE 16. [BLANKET EASEMENT - NOT PLOTTABLE] (AS TO TRACT I) 16. RIGHT OF WAY GRANTED TO THE BELL TELEPHONE COMPANY AS IN MISCELLANEOUS DEED BOOK 3272 PAGE 259. [DOCUMENT NOT PROVIDED - NOT PLOTTABLE]. (AS TO TRACT
- 17. CONDITIONS AS SHOWN ON PLAN #3852 AS FOLLOWS: (A) TEMPORARY CUL-DE-SAC EASEMENT (LOT 7) [DOES NOT AFFECT PREMISES]; (B) REQUIREMENT OF BUILDING SETBACK LINES: [PLOTTED]. (C) 30 FEET WIDE BUFFER PLANTING STRIP THROUGH REAR OF LOT. [PLOTTED]. (AS TO TRACTS I AND II)
- 18. CONDITIONS AS SHOWN ON PLAN #4193 AS FOLLOWS: (A) REQUIREMENT OF BUILDING SETBACK LINES; [PLOTTED] (B) 20 FEET WIDE UTILITY EASEMENT FOR WATER EXTENDS THROUGH REAR OF LOTS 19 AND 19; [PLOTTED] (C) 30 FEET WIDE BUFFER PLANTING STRIP THROUGH REAR OF LOTS 18 AND 19. [PLOTTED] (AS TO TRACT II) 19. CONDITIONS AS SHOWN ON CHESTER COUNTY PLAN #3853. [30 FEET WIDE BUFFER STRIP PLOTTED] (AS TO TRACT I)
- 20. CONDITIONS AS SHOWN ON CHESTER COUNTY PLAN #11951. [ADDITIONAL 3.236 ACRES CONVEYANCE AREA INCLUDED IN U.P.I., 53-4-163] (AS TO TRACT I) 21. CONDITIONS AS SHOWN ON CHESTER COUNTY PLAN #12114. [IMPROVEMENTS FOR PARKING LOT EXPANSION FOR Q.V.C. AS SHOWN ON PLAN] (AS TO TRACT I)

PARKING SUMMARY

- REQUIRED PARKING: (PARCELS 53-4-162, 53-4-163, 53-4-164, 53-4-165, 53-4-174); 1365 ENTERPRISE DRIVE PROPERTIES
- 1365 ENTERPRISE DRIVE PROPERTIES IS 348,000 SF OF GROSS FLOOR AREA OF THE BUILDING. APPROXIMATELY 54,000 SF OF THIS BUILDING IS DEVOTED TO OFFICE USE. APPROXIMATELY 140,000 SF OF THIS BUILDING IS DESIGNATED FOR REPAIR, LAB, MANUFACTURING AND WAREHOUSE USES.
- OFFICE USE: REQUIRES 4 SPACES PER 1,000 SF OF GROSS FLOOR AREA OR 1 SPACE PER EMPLOYEE ON THE LARGEST SHIFT, WHICHEVER IS GREATER.
- $4 \times (54,000/1,000) = 216 \text{ SPACES}$
- WAREHOUSE/DISTRIBUTION: 1 SPACE PER 1,000 SF GROSS FLOOR AREA OR 1 SPACE PER EACH EMPLOYEE ON THE LARGEST SHIFT, WHICHEVER IS GREATER.
- $1 \times (140,000/1,000) = 140 \text{ SPACES}$
- VISITORS: 4 SPACES PER PRINCIPAL BUILDING = 4 SPACES ACCESSIBLE (ADA) SPACES: 9 SPACES
- TOTAL REQUIRED SPACES = 369 SPACES
- TOTAL PROVIDED SPACES = 827 SPACES
- REQUIRED PARKING: (PARCEL 53-4-161); 1373 ENTERPRISE DRIVE PROPERTY
- 1373 ENTERPRISE DRIVE PROPERTY IS APPROXIMATELY 91,000 SF OF GROSS FLOOR AREA OF THE BUILDING.
- OFFICE USE: REQUIRES 4 SPACES PER 1,000 SF OF GROSS FLOOR AREA OR 1 SPACE PER EMPLOYEE ON THE LARGEST SHIFT, WHICHEVER IS GREATER.
- $4 \times (38,220/1,000) = 153 \text{ SPACES}$ WAREHOUSE/OTHER: 1 SPACE PER 1,000 SF GROSS FLOOR AREA OR 1 SPACE
- PER EACH ÉMPLOYEE ON THE LARGEST SHIFT, WHICHEVER IS GREATER.

ONWEAL

PROFESSIONAL

JEREMY R. MAZIAR

ENGINEER 50557-E

Vereny

1 Noycarc

SCALE

1'' = 60'

- $1 \times (52,780/1,000) = 53$ SPACES
- VISITORS: 4 SPACES PER PRINCIPAL BUILDING = 4 SPACES ACCESSIBLE (ADA) SPACES: 7 SPACES
- TOTAL REQUIRED SPACES = 217 SPACES
- TOTAL PROVIDED SPACES = 403 SPACES





LOCATION MAP SCALE 1"=2000

LEGEND EXISTING FEATURES

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EXISTING EXISTING EXISTING EXISTING EXISTING EXISTING	PROPERTY BOUNDARY ADJOINING PROP. LINE RIGHT-OF-WAY LINE EASEMENT SETBACK BOUNDARY BUILDING
EXISTING EXISTING EXISTING EXISTING EXISTING EXISTING	CURB EDGE OF PAVEMENT FENCE LIGHT POLE SIGN UTILITY POLE
EXISTING FXISTING	CONIFEROUS TREE
EXISTING	TREE & SHRUB LINE

CONDOMINIUM LEGEND

UNIT

LIMITED COMMON ELEMENT LIMITED COMMON ELEMENT TO UNIT 1 LIMITED COMMON ELEMENT TO UNIT 2 COMMON ELEMENT

NOTE: AREAS AS COMMON ELEMENT OR LIMITED COMMON ELEMENT TO BE DETERMINED.

CONDOMINIUM PLAN



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PROPERTY ADDRESS: 1365 AND 1373 ENTERPRISE DRIVE, WEST CHESTER, PA 19380. 2. APPLICANT: COMMUNICATIONS TEST DESIGN, INC. (CTDI) 1373 ENTERPRISE DRIVE

WEST CHESTER, PA 19380 (PARCEL #53-4-161) - COMMUNICATIONS TEST DESIGN, INC. (CTDI)

(PARCELS #53-4-162, 163, 164, 165) - PARSONS 1365, LLC. 4. BOUNDARY INFORMATION SHOWN FROM EXISTING PLANS AND DEEDS OF RECORD.

U.P.I. # 53-4-161 - 10.606 ACRES U.P.I. # 53-4-162 - 1.934 ACRES U.P.I. # 53-4-163 - 8.933 ACRES U.P.I. # 53-4-164 - 4.000 ACRES

THE TÖPOGRAPHY AND IMPROVEMENTS SHOWN WAS PHOTOGRAMMETRICALLY COMPILED BY AERO-METRIC FROM PHOTOGRAPHY TAKEN DECEMBER 24, 2010 SUPPLEMENTED AND CONTROLLED BY FIELD SURVEYS PERFORMED JANUARY 4, 5, & 10, 2011 AND JULY 14, 2023

7. ELEVATION DATUM = REFERENCE MARK #235 - PENNDOT DISK AT SOUTHWEST CONCRETE ABUTMENT OF PAOLI PIKE BRIDGE OVER EAST BRANCH OF CHESTER CREEK. ELEVATION = 380.204 NGVD 1929. BENCHMARK TAKEN FROM FLOOD INSURANCE RATE MAP 42029c0352 D DATED NOVEMBER 20, 1996 BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY. 6. BY GRAPHIC PLOTTING ONLY, PARCELS #53-4-163, #54-4-164 & #54-4-165 LIE WITHIN AREAS IDENTIFIED AS "ZONE A, ZONE AE & ZONE X" ON FLOOD INSURANCE RATE MAPS 42029C0210G & 42029C0215G DATED SEPTEMBER 29, 2017 FOR CHESTER COUNTY, PENNSYLVANIA BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY. SOILS INFORMATION TAKEN FROM USDA NRCS WEB SOIL SURVEY MAP

WETLANDS LOCATIONS SHOWN ON PARCELS #53-4-163 & #53-4-165 FROM PHYSICAL FIELD SURVEY BY CHESTER VALLEY ENGINEERS, INC. OF POINTS MARKED BY DEL VAL SOIL & ENVIRONMENTAL CONSULTANTS, INC., DOYLESTOWN, PA. 9. THE LOCATION OF EXISTING EASEMENTS WAS TAKEN FROM EXISTING PLANS. THE EASEMENTS

WERE NOT DESCRIBED WITH BEARINGS AND DISTANCES, THE EASEMENT LOCATIONS ARE TO BE CONSIDERED APPROXIMATE. 10. SCHEDULE B - PART 2 OF TITLE COMMITMENT NO.PAFN23-2478 KW, NOT DATED, ISSUED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY, INCLUDES THE FOLLOWING EXCEPTIONS:

9. RIGHT OF WAY GRANTED TO PHILADELPHIA ELECTRIC COMPANY AS IN MISCELLANEOUS DEED BOOK 203 PAGE 715. [LIMITED BLANKET RIGHT OF WAY - NOT PLOTTABLE]. (AS TO TRACTS I AND II) 10. RIGHT OF WAY GRANTED TO PHILADELPHIA ELECTRIC COMPANY AS IN MISCELLANEOUS DEED BOOK 248 PAGE 296. [LIMITED BLANKET RIGHT OF WAY - NOT PLOTTABLE]. (AS TO TRACTS I AND II) 11. RIGHT OF WAY GRANTED TO PHILADELPHIA ELECTRIC COMPANY AS IN MISCELLANEOUS DEED BOOK 563 PAGE 230. [LIMITED BLANKET RIGHT OF WAY - NOT PLOTTABLE]. (AS TO TRACTS | AND II) 12. INSTRUMENT ESTABLISHING PROTECTIVE COVENANTS FOR GOSHEN CORPORATE PARK RECORDED IN MISCELLANEOUS DEED BOOK 541 PAGE 88, [EXPIRED JANUARY 1, 2010]. FIRST AMENDMENT THERETO AS IN RECORD BOOK 4489 PAGE 1731. [EXPIRED BY EXPIRATION CLAUSE IN 541/88] (AS TO TRACTS

13. RIGHT OF WAY GRANTED TO THE BELL TELEPHONE COMPANY AS IN MISCELLANEOUS DEED BOOK 586 PAGE 401. [BLANKET RIGHT OF WAY - NOT PLOTTABLE]. (AS TO TRACTS I AND II) 14. RIGHT OF WAY GRANTED TO THE BELL TELEPHONE COMPANY AS IN MISCELLANEOUS DEED BOOK 1045 PAGE 82. [NOT PLOTTABLE FROM SCHEMATIC DIAGRAM SUPPLIED]. (AS TO TRACT I) 15. RIGHT OF WAY GRANTED TO THE BELL TELEPHONE COMPANY AS IN MISCELLANEOUS DEED BOOK 2612 PAGE 16. [BLANKET EASEMENT - NOT PLOTTABLE] (AS TO TRACT I) 16. RIGHT OF WAY GRANTED TO THE BELL TELEPHONE COMPANY AS IN MISCELLANEOUS DEED BOOK 3272 PAGE 259. [DOCUMENT NOT PROVIDED - NOT PLOTTABLE]. (AS TO TRACT II) 17. CONDITIONS AS SHOWN ON PLAN #3852 AS FOLLOWS: (A) TEMPORARY CUL-DE-SAC EASEMENT (LOT 7) [DOES NOT AFFECT PREMISES]; (B) REQUIREMENT OF BUILDING SETBACK LINES: [PLOTTED]. (C) 30 FEET WIDE BUFFER PLANTING STRIP THROUGH REAR OF LOT. [PLOTTED]. (AS TO TRACTS I AND II) 18. CONDITIONS AS SHOWN ON PLAN #4193 AS FOLLOWS: (A) REQUIREMENT OF BUILDING SETBACK LINES; [PLOTTED] (B) 20 FEET WIDE UTILITY EASEMENT FOR WATER EXTENDS THROUGH REAR OF LOTS 19 AND 19; [PLOTTED] (C) 30 FEET WIDE BUFFER PLANTING STRIP THROUGH REAR OF LOTS 18 AND 19. [PLOTTED] (AS TO TRACT II) 19. CONDITIONS AS SHOWN ON CHESTER COUNTY PLAN #3853. [30 FEET WIDE BUFFER STRIP PLOTTED]

20. CONDITIONS AS SHOWN ON CHESTER COUNTY PLAN #11951. [ADDITIONAL 3.236 ACRES CONVEYANCE AREA INCLUDED IN U.P.I., 53-4-163] (AS TO TRACT I) 21. CONDITIONS AS SHOWN ON CHESTER COUNTY PLAN #12114. [IMPROVEMENTS FOR PARKING LOT EXPANSION FOR Q.V.C. AS SHOWN ON PLAN] (AS TO TRACT I

THIS PLAN PROPOSES TO CONSTRUCT A BUILDING (3,073 SF) WITH THE NECESSARY PARKING, AND ASSOCIATED UTILITIES AND INFRASTRUCTURE 2. THIS SITE IS SERVED BY PUBLIC SEWER AND WATER.

13. ENTERPRISE DRIVE IS A TOWNSHIP ROAD. NO WORK IS PROPOSED WITHIN PENNDOT RIGHT OF 14. SPOT ELEVATIONS ALONG THE PROPOSED CURB EDGE SIGNIFIES FINISHED PAVEMENT AT THE FACE OF CURB ALSO REFERRED TO AS BOTTOM OF CURB.

15. SPOT ELEVATIONS NOT SHOWN ALONG CURB EDGE SIGNIFIES FINISHED GRADE OR PAVEMENT 16. SPOT ELEVATIONS SHOWN AT DRAINAGE STRUCTURES REPRESENT THE TOP OF UNIT ELEVATION

17. ALL SITE PLAN DIMENSIONS ARE FROM FACE-OF-CURB TO FACE-OF-CURB AND ALL CURB RADII ARE MEASURED AT FACE OF CURB. 18. ALL DETAILS AND SPECIFICATIONS NOT SHOWN ON THESE PLANS SHALL BE IN ACCORDANCE WITH EAST GOSHEN TOWNSHIP STANDARDS AND SPECIFICATIONS AND/OR PADOT PUBL. 408.

ALL EXISTING IMPROVEMENTS WITHIN OR ADJACENT TO THE PROJECT AREA INCLUDING BUT NOT LIMITED TO SIGNAGE, BIKE RACKS, TRASH CANS, LIGHTS, GUIDE RAIL, ETC. THAT MAY BE DISTURBED DURING CONSTRUCTION ARE TO BE MAINTAINED AND/OR REMOVED/RELOCATED BY THE SITE CONTRACTOR PER THE OWNER'S DISCRETION. 20. ALL BUILDING ADDITIONS, ENTRANCES, RAMPS, STAIRS AND PATIO RAILINGS/FALL PROTECTION

DESIGN AND DETAILS ARE TO BE PER THE ARCHITECTURAL PLANS. . WHERE PROPOSED CURB AND SIDEWALK ARE TO MATCH EXISTING, THE CONTRACTOR IS TO PROVIDE A CLEAN TRANSITION AND REMOVE/REPLACE ANY EXISTING CURB AND/OR SIDEWALK THAT IS DAMAGED AT THE OWNER'S DISCRETION.

22. ALL CURB RADII SHALL BE 5-FEET UNLESS NOTED OTHERWISE. 23. ALL CURB SHALL BE 6" REVEAL UNLESS NOTED OTHERWISE.

24. THE FOLLOWING PENNDOT ROADWAY CONSTRUCTION STANDARD DETAILS SHALL BE UTILIZED FOR

INLET TOPS, GRATES, AND FRAME INLET BOXES

CURBS AND GUTTERS RC-67M CURB RAMPS AND SIDEWALKS

25. BITUMINOUS PAVING SHALL BE SAWCUT PRIOR TO APPLICATION OF NEW PAVING, INCLUDING PATCHING IN AREAS OF CURB REPLACEMENT, IF REQUIRED. S 0317'52" W 26. ALL PAVED/NON-PAVED SURFACES SHALL SLOPE AWAY FROM THE BUILDING AT A MINIMUM

> 27. SITE CONTRACTOR IS RESPONSIBLE FOR ALL TREE AND/OR SHRUB REMOVAL WITHIN THE PROPOSED LIMITS OF WORK. 28. SITE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ALL LANDSCAPING AND SITE

STABILIZATION IN ACCORDANCE WITH E&S AND LANDSCAPE PLANS. ALL STABILIZATION & LANDSCAPE INSTALLATION SHALL BE DONE DURING ACCEPTABLE PLANTING SEASONS. 29. ALL CONTRACTORS SHALL BE RESPONSIBLE FOR CONFIRMING THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES WITHIN THE WORK AREA BEFORE THE START OF CONSTRUCTION. IF A CONFLICT EXISTS, CONTRACTOR IS TO NOTIFY THE ENGINEER IMMEDIATELY, FOR RESOLUTION. 30. IF REQUIRED, THE SITE CONTRACTOR IS RESPONSIBLE FOR GRADE ADJUSTMENT OF ALL SURFACE UTILITIES, INCLUDING BUT NOT LIMITED TO VALVES, LIDS, GRATES, RIMS, CAPS, STORM AND SANITARY STRUCTURES WITHIN THE LIMITS OF WORK. GRADE ADJUSTMENTS SHALL BE MADE PRIOR TO THE INSTALLATION OF PAVEMENT WEARING COURSE OR PLACEMENT OF

31. UNLESS NOTED OTHERWISE, SITE CONTRACTOR RESPONSIBLE FOR ALL SITE UTILITY INSTALLATION UP TO 5' OUTSIDE OF BUILDING. RESPECTIVE UTILITY CONTRACTOR (ELECTRICAL, PLUMBING, ETC.) SHALL ASSUME RESPONSIBILITY AT THIS POINT. 32. ALL UTILITY TRENCHES SHALL BE MECHANICALLY BACKFILLED IN EIGHT INCH (8) LAYERS AND COMPACTED TO NINETY FIVE PERCENT (95%) OF THE MAXIMUM DRY WEIGHT DENSITY OF THE

33. SITE CONTRACTOR IS TO COORDINATE THE PROPOSED CONDUIT INSTALLATION (FOR LIGHTING AND SECURITY) WITH THE ELECTRICAL CONTRACTOR AND THE OWNER. 34. PROPOSED UTILITY SERVICE CONNECTIONS TO SERVICE THE PROPOSED BUILDING (WATER

(DOMESTIC AND FIRE), SEWER, ELECTRIC, GAS, TELECOMMUNICATIONS, ETC.) ARE TO BE PROVIDED IN ACCORDANCE WITH THE APPROPRIATE UTILITY SERVICE PROVIDER. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL REQUIRED UTILITY SERVICES TO THE BUILDING. ALL ELECTRIC, TELEPHONE, AND COMMUNICATION SERVICES SHALL BE PROVIDED BY UNDERGROUND CABLES. 35. ALL MANHOLE OR CLEANOUT COVERS SHALL BE STAMPED WITH ONE OF THE FOLLOWING UTILITY CALLOUTS WHICH MAY INCLUDE BUT IS NOT LIMITED TO, "SANITARY", "STORM", "WATER", "ELECTRIC", "GAS" OR "TELE".

36. ALL INLETS SHALL BE SET FLUSH WITH THE WEARING COURSE. 37. ALL HDPE STORM SEWER PIPE SHALL BE ADS N-12 SMOOTH-BORE PIPE OR EQUIVALENT,

38. ALL STORM DRAINAGE STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT PENNDOT STANDARDS, DETAILS AND SPECIFICATIONS.

39. WATERTIGHT PIPE CONNECTIONS ARE REQUIRED FOR ALL STORM DRAINAGE PIPING. 40. FOR ALL EXISTING STORM PIPE CONNECTIONS TO PROPOSED STRUCTURES (MANHOLES AND/OR INLETS), THE CONTRACTOR IS TO PROVIDE A CLEAN, SEALED AND WATERTIGHT CONNECTION. IF A PIPE EXTENSION OF EXISTING STORM PIPE IS REQUIRED FOR PROPER CONNECTION, THE CONTRACTOR IS TO PROVIDE AS REQUIRED.

THE TOWNSHIP SHALL HAVE THE RIGHT, BUT NOT THE DUTY, TO ACCESS EVERY BMP AND CONVEYANCE FROM A PUBLIC RIGHT-OF-WAY OR PUBLIC ROADWAY TO CONDUCT PERIODIC INSPECTIONS AND TO UNDERTAKE OTHER ACTIONS THAT MAY BE NECESSARY TO ENFORCE THE REQUIREMENTS OF THIS CHAPTER. OR OF ANY APPLICABLE O&M PLAN OR O&M AGREEMENT. WHERE ROADWAYS WILL NOT BE DEDICATED TO THE TOWNSHIP, THE TOWNSHIP SHALL BE GRANTED ACCESS TO THE PRIVATE ROADWAYS AS NECESSARY TO ACCESS EVERY BMP AND

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TO REFER TO LANDSCAPE ARCHITECT'S PLANS AND ALL PAVEMENT/PAVER/HARDSCAPE LIMITS, TYPES S.	CONNONWEAL 774 REGISTERED PROFESSIONAL
	JEREMY R. MAZIARZ
Scale in Feet	ENGINEER 50557-E

60

1'' = 30'



LOCATION MAP SCALE 1"=2000

LEGEND EXISTING FEATURES

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EXISTING EASEMENT
EXISTING SETBACK BOUNDARY
EXISTING BUILDING
EXISTING CURB
EXISTING EDGE OF PAVEMENT
EXISTING FENCE
EXISTING LIGHT POLE
EXISTING SIGN
EXISTING UTILITY POLE
EXISTING CONIFEROUS TREE
EXISTING DECIDUOUS TREE
EXISTING TREE & SHRUB LINE
PROPOSED BUILDING
PROPOSED HEAVY DUTY PAVEMENT

EXISTING PROPERTY BOUNDARY

EXISTING RIGHT-OF-WAY LINE

EXISTING ADJOINING PROP. LINE

PROPOSED CONCRETE PAD/SIDEWALK

PROPOSED PAVERS

PROPOSED RETAINING WALL

PROPOSED CONCRETE CURB

NUMBER OF PROPOSED PARKING SPACES

PROPOSED SIGN PROPOSED STORMWATER MANAGEMENT **FACILITY** 

# SITE PLAN





	SC	DILS LI	ST			
	DEPTH TO SEASONALLY HIGH	DEPTH TO	FREQUEN	CY OF:	HYDROLOGIC	HYDRIC SOIL
PTION	WATER TABLE	BEDROCK	FLOODING	PONDING	SOIL GROUP	RATING
DORTHEN	TS					
SLOPES	60"	20"-70"	NONE	NONE	с	NO
SLOPES	60"	20"-70"	NONE	NONE	с	NO



	SC	NLS LI	ST			
	DEPTH TO SEASONALLY HIGH	DEPTH TO	FREQUEN	CY OF:	HYDROLOGIC	HYDRIC SOIL
RIPTION	WATER TABLE	BEDROCK	FLOODING	PONDING	SOIL GROUP	RATING
DORTHEN	TS					
% SLOPES	60"	20"-70"	NONE	NONE	с	NO
% SLOPES	60"	20"-70"	NONE	NONE	С	NO

EXISTING FEATURES
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EXISTING RIGHT EXISTING EASEN EXISTING SETBA	–OF–WAY LINE MENT NCK BOUNDARY
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EXISTING 1' COI EXISTING 5' CO EXISTING SPOT EXISTING SOIL	NTOURS NTOURS ELEVATION TYPE
EXISTING CURB EXISTING EDGE EXISTING FENCE EXISTING STORM EXISTING U/G F EXISTING U/G F EXISTING U/G C EXISTING CONFR EXISTING CONFR EXISTING DECIDO	OF PAVEMENT M INLET AND PIPE OLE AND PIPE FIRE LINE WATER LINE FLECTRIC LINE TELEPHONE LINE GAS LINE HEAD WIRES POLE Y POLE EROUS TREE
EXISTING TREE	& SHRUB LINE
PROPOSED BUILD	& SHRUB LINE
PROPOSED HEAV	& SHRUB LINE
PROPOSED BUILD PROPOSED HEAV PROPOSED CONCI	& SHRUB LINE ING Y DUTY PAVEMENT RETE PAD/SIDEWALK
PROPOSED BUILD PROPOSED HEAV PROPOSED CONCI PROPOSED PAVER	& SHRUB LINE ING Y DUTY PAVEMENT RETE PAD/SIDEWALK
EXISTING TREE PROPOSED BUILD PROPOSED HEAV PROPOSED CONCI PROPOSED PAVEF PROPOSED RETAIL PROPOSED CONCI NUMBER OF PROF PARKING SPACES PROPOSED SIGN	& SHRUB LINE ING Y DUTY PAVEMENT RETE PAD/SIDEWALK RS NING WALL RETE CURB POSED
EXISTING TREE PROPOSED BUILD PROPOSED HEAV PROPOSED CONCI PROPOSED PAVEF PROPOSED RETAIL PROPOSED CONCI NUMBER OF PROI PARKING SPACES PROPOSED SIGN PROPOSED 1' COI	& SHRUB LINE ING Y DUTY PAVEMENT RETE PAD/SIDEWALK RS NING WALL RETE CURB POSED
EXISTING TREE PROPOSED BUILD PROPOSED HEAV PROPOSED CONCI PROPOSED PAVEF PROPOSED RETAIL PROPOSED CONCI NUMBER OF PROI PARKING SPACES PROPOSED SIGN PROPOSED 1' COI PROPOSED 5' CO	& SHRUB LINE ING Y DUTY PAVEMENT RETE PAD/SIDEWALK RS NING WALL RETE CURB POSED
EXISTING TREE PROPOSED BUILD PROPOSED HEAV PROPOSED CONCI PROPOSED PAVEF PROPOSED RETAIL PROPOSED CONCI NUMBER OF PROI PARKING SPACES PROPOSED SIGN PROPOSED 1' COI PROPOSED 5' CO PROPOSED SPOT PROPOSED STORM FACILITY	& SHRUB LINE
EXISTING TREE PROPOSED BUILD PROPOSED HEAV PROPOSED CONCI PROPOSED PAVER PROPOSED RETAIL PROPOSED CONCI NUMBER OF PROI PARKING SPACES PROPOSED SIGN PROPOSED 1' COI PROPOSED 5' CO PROPOSED SPOT PROPOSED STORM FACILITY PROPOSED STORM	& SHRUB LINE ING Y DUTY PAVEMENT RETE PAD/SIDEWALK RS NING WALL RETE CURB POSED NTOURS ELEVATION IWATER MANAGEMENT M PIPE AND INLET
EXISTING TREE PROPOSED BUILD PROPOSED BUILD PROPOSED HEAV PROPOSED CONCI PROPOSED PAVEF PROPOSED RETAIL PROPOSED CONCI NUMBER OF PROF PARKING SPACES PROPOSED SIGN PROPOSED SIGN PROPOSED SIGN PROPOSED SPOT PROPOSED STORM FACILITY PROPOSED STORM PROPOSED STORM	& SHRUB LINE ING Y DUTY PAVEMENT RETE PAD/SIDEWALK RS NING WALL RETE CURB POSED NTOURS ELEVATION WATER MANAGEMENT M PIPE AND INLET M PIPE AND MANHOLE

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EA	ST GOSH	EN TOWNSHI	P - CHESTER C	OUNTY - PENN	SYLVANIA
					PROJECT NO.
			Chester	Vallev	22024
			ENGINEE	RS, INC.	
	_		112 Moores Road, Suite 2	00, Malvern, PA 19355	F.B.
			610-644-4623 www.chesterv.com		
	SCALE	DATE	DRAWN BY	CHECKED BY	DRAWING
	1'' = 20'	4/20/2024	PPP	IRM	

![](_page_25_Figure_0.jpeg)

![](_page_25_Figure_1.jpeg)

# REQUIRED BITUMINOUS PAVEMENT SECTION

N.1.5.				
	LOCATION			
DEPTH	BITUMINOUS PAVEMENT HEAVY DUTY PAVEMENT (ENTERPRISE DRIVE)			
WEARING:	1-1/2"			
BINDER:	NONE			
BASE (AS NOTED):	5" BCBC			
SUBBASE: PA DOT 2A COARSE AGGREGATE	8"			

FOR PAVEMENT WHERE UNCURBED, EXTEND SUBBASE AND/OR BASE COURSE EIGHT INCHES BEYOND EACH REQUIRED EDGE OF THE BINDER AND SURFACE COURSES.

### BITUMINOUS PAVEMENT SPECIFICATIONS, ALL SECTIONS, AS APPLICABLE

WEARING COURSE	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA WEARING COURSE, PG 64–22, 10 TO <30 MILLION ESALS, 9.5 MM MIX, SLR-H
BINDER COURSE	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BINDER COURSE (LEVELING), PG 64–22, 10 TO <30 MILLION ESALS, 19.0 MM MIX
BITUMINOUS CONCRETE BASE COURSE:	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BASE COURSE, PG 64-22, 10 TO <30 MILLION ESALS, 25.0 MM MIX

1/2" FULL DEPTH

EXPANSION JOINT

FORM OUTSIDE EDGES AND JOINTS

- RESTORED

- 3750 PSI

NOTE 3)

28-DAY (SEE

LAWN (TYP.)

WITH A 1/4" RADIUS-EDGING TOOL

- I. PAVEMENT SHOULD BE INSTALLED LATE IN CONSTRUCTION WHEN MOST HEAVY CONSTRUCTION TRAFFIC WILL NO LONGER BE ON-SITE. PRIOR TO PAVING, THE SITE SHOULD BE PROOFROLLED AGAIN, NEW SOFT AREAS TREATED IN ACCORDANCE WITH SOIL REMEDIATION NOTES, THE BASE LEVELED AND THICKENED AS REQUIRED, AND THE SITE PAVED AT THE END OF CONSTRUCTION. 2. FOR PAVEMENT WHERE UNCURBED, EXTEND SUBBASE AND/OR BASE COURSE EIGHT INCHES BEYOND EACH
- REQUIRED EDGE OF THE BINDER AND SURFACE COURSES. 3. FLEXIBLE (AGGREGATE) BASE SHOULD BE COMPACTED TO 100% OF THE MATERIAL'S MAXIMUM DRY DENSITY AS PER MODIFIED PROCTOR (ASTM D-1557).
- 4. PAVEMENT MUST BE PLACED OVER WELL PREPARED SUBRADE COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR (ASTM D-698) DENSITY IN THE UPPER 2' BELOW SUBGRADE AND TO AT LEAST 95% OF THE STANDARD PROCTOR (ASTM D-698) MAXIMUM DRY DENSITY ELSEWHERE. SEALING MATERIAL FOR FILLING PAVEMENT JOINTS SHALL MEET THE REQUIREMENTS OF ASTM D3405 OR
- D1190. ALTERNATIVELY, LOW MODULUS MATERIALS SUCH AS SILICONE, HOT OR COLD-POURED RUBBERIZED ASPHALT OR NITRILE RUBBER MEETING THE MANUFACTURER'S SPECIFICATIONS MAY BE USED. 6. CAR TRAFFIC SHOULD SHOULD NOT BE ALLOWED ON THE NEW PAVEMENT FOR AT LEAST 3-DAYS; SIMILARLY NO TRUCK TRAFFIC FOR 7-DAYS.

### PAVEMENT MARKING NOTES:

- MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE DEPARTMENT'S SPECIFICATIONS, PUBLICATION 408. THESE PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE REGULATIONS GOVERNING THE DESIGN, LOCATION, AND OPERATION OF ALL OFFICIAL TRAFFIC SIGNS, SIGNALS, AND MARKINGS ON AND ALONG HIGHWAYS WITHIN THE COMMONWEALTH OF PENNSYLVANIA.
- ALL PAVEMENT MARKING SHALL BE REFLECTORIZED.
- 4. THE CONTRACTOR SHALL PREPARE THE PAVEMENT SURFACE FOR THE PROPER ADHESION. ANY SWEEPING OR REMOVAL OF DEBRIS, GRAVEL, DIRT, OR OTHER FOREIGN MATERIALS SHALL BE CONSIDERED INCIDENTAL O THE INSTALLATION OF THE NEW PAVEMENT MARKINGS, AND NO SEPARATE PAYMENT SHALL BE MADE THFRFFORF
- 5. THE CONTRACTOR SHALL REMOVE ALL PREVIOUS PAVEMENT MARKINGS, WHICH IN THE OPINION OF THE ENGINEER CONFLICT WITH THE NEW PAVEMENT MARKINGS. UNLESS SPECIFICALLY STATED OTHERWISE THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE INSTALLATION OF THE NEW PAVEMENT MARKINGS, AND NO SEPARATE PAYMENT WILL BE MADE THEREFORE.
- PRIOR TO THE APPLICATION, THE CONTRACTOR SHALL FIELD CHECK AND LOCATE ALL PAVEMENT MARKINGS TO THE SATISFACTION OF THE INSPECTOR. ALL MARKING IMPROPERLY APPLIED OR LOCATED SHALL BE COMPLETELY REMOVED AND CORRECTLY RE-APPLIED AT THE SOLE EXPENSE OF THE CONTRACTOR.
- 8. WHERE BITUMINOUS SEALANTS PREVENTS OR MAKES IMPRACTICAL THE EXTENDING OF LINES TO THE FACE OF CURB, THE CONTRACTOR SHALL EXTEND LINES TO EDGE OF SEALANT OR WITHIN ONE FOOT OF THE FACE OF CURB, WHICHEVER IS LESS.
- 9. ALL PROPOSED PAVEMENT MARKINGS (ARROWS, STOP BARS, CROSSWALKS, ETC.) MUST BE HOT THERMOPLASTIC ON BITUMINOUS PAVEMENT, INCLUDING LONG AND SHORT LINES AND PAVEMENT MARKING LEGENDS. ALL PROPOSED PAVEMENT MARKINGS MUST BE EPOXY ON CONCRETE PAVEMENT, INCLUDING LONG AND SHORT LINES AND PAVEMENT MARKING LEGENDS.

![](_page_25_Figure_20.jpeg)

SHEET 9 OF 17

# EXISTING DRIVEWAY ACCESS OR PARKING LOT AND SEAL WITH AC-20 -MATCH GRADE OF EXISTING BITUMINOUS PAVEMENT PAVEMENT SECTION

-* PADOT NO. 2A COARSE AGGREGATE

![](_page_26_Figure_0.jpeg)

### ASTM D2321 SOIL CLASSIFICATIONS

Soil classifications are grouped by typical soil stiffness when compacted. Class I indicates a soil that generally provides the highest soil stiffness at any given percent compaction, and provides a given soil stiffness with the least compactive effort. Each higher-number soil class provides successively less soil stiffness at a given percent compaction and requires greater compactive effort to provide a given level of soil stiffness.

Thermoplastic pipe installations develop structural stability from the strength and relative stiffness of the embedment material. It is the resulting soil-pipe interaction system that defines the ability of a flexible pipe to withstand service loads. Using the stiffer pipe embedment materials is key to minimizing pipe deflection and the need for detailed installation inspection and compaction testing. For these reasons only soil classifications I and II are presented here.

Succeeding soil classifications (III through V) may be appropriate for use but will require a more thorough analysis to determine suitability and optimum water content for compaction. Although reasonable levels of pipe support are provided when properly placed and compacted, these materials may not be suitable under the deeper fills, shallower covers, and instances where water conditions in the trench may prevent proper placement and compaction. Since these materials may represent native soils that bring an economy to the installation, the user is advised to consult ASTM D2321 directly as a guide to their appropriate use.

Class I materials provide maximum stability and pipe support for a given percent compaction. With minimum effort, these materials can be installed at relatively high stiffnesses over a wide range of moisture contents. Suitable compaction is typically achieved with a dumped placement provided material is worked into the haunch zone. Vibration or impact compaction methods will ensure the highest levels of stiffness for the deeper fills.

The high permeability of Class I materials may aid in the control of water, and these materials are often desirable for embedment in rock cuts where water is frequently encountered. However, when groundwater flow is anticipated, consideration should be given to the potential for migration of fines from adjacent materials into the open-graded Class I materials.

### ASTM D2321 Soil Class I Manufactured Aggregates Crushed rock with angular,

fractured particle faces. 100% passing the 1½" sieve 15% or less passing the #4 sieve

25% or less passing the %" sieve 12% or less passing the #200 sieve

Open graded, high permeability AASHTO No. 57 stone commonly used

**CLASS I MATERIALS ADDENDUM** 

Densely-graded manufactured/processed aggregates were included as Class I materials in former editions of ASTM D2321 due to the high stiffnesses of these materials when compacted. The stone-sand mixtures of these materials are graded to minimize migration of adjacent soils and contain little or no fines. Since these materials do not flow as readily into the haunch region and require moderate compactive effort, these materials are now relegated to Class II. It should be noted that when properly placed and compacted, this material can provide an equivalent strength to Class I materials provided soil migration into adjacent soils is not a concern or has been addressed.

Class II materials provide a relatively high level of pipe support when moderately compacted with either vibration or impact compaction methods.

Class I materials have more stiffness than Class II materials, but data indicates that the stiffness of uncompacted Class I materials can be taken equivalent to Class II materials compacted to 95%, and the stiffness of compacted Class I materials can be taken equivalent to Class II materials compacted to 100%.

The open-graded groups within this classification may allow migration, and the particle size distributions should be reviewed for compatibility with adjacent material.

Uniform fine sands (SP) with more than 50% passing the #100 sieve behave like silts and are not considered Class II materials.

### ASTM D2321 Soil Class II Clean, Coarse-Grained Soils Sands and gravels with 12% or less fines.

ASTM D2487 Soil Group GW Well-graded gravels and gravel-sand mixtures GP Poorly-graded gravels and gravel-sand mixtures SW Well-graded sands and gravelly sands

SP Poorly-graded sands and gravelly sands AASHTO M145 Soil Groups A1 and A3

![](_page_26_Picture_22.jpeg)

INITIAL -BACKFILL SPRINGLINE -

the OD plus 12 inches.

during the process.

FINAL BACKFILL

![](_page_26_Figure_31.jpeg)

![](_page_26_Figure_32.jpeg)

![](_page_26_Figure_33.jpeg)

### EXCAVATED TRENCH WIDTH

Trench width should be sufficient to allow proper placement and compaction of the backfill. Narrower trench widths normally provide better pipe support and it is generally recommended to maintain the minimum width unless more clearance is needed to accommodate compaction equipment in use on the project. If the native soils forming the trench wall are unstable but can sustain a vertical cut, the trench width should be increased to provide one-half diameter width of structural backfill on either side of the pipe; otherwise, a full diameter should be provided on either side of the pipe.

imum Trench Width (T _{MIN} )						
)	Tmin (in)	ID (in)	OD (in)	Tmin (in)		
5	24	24	28.00	47		
0	26	30	34.50	56		
00	28	36	41.00	64		
50	31	42	47.50	72		
50	34	48	54.50	81		
50	39	60	66.85	96		

Minimum trench width per ASTM D2321 for stable trench walls is taken as the greater of the OD plus 16 inches or 1.25 times

![](_page_26_Figure_38.jpeg)

Embankment installations are typically conducted in the same manner as trench installations except that the embankment is constructed to a height corresponding to one foot above the top of pipe before the trench is cut. The trench width is then managed as if cut in unstable native soils.

### TRENCH BOTTOM

The trench bottom should be firm and stable. Rock or unyielding material should be removed and replaced to provide at least a 6-inch cushion of bedding below the bottom of the pipe. An unstable foundation should be over-excavated and replaced with a suitable foundation or bedding material and compacted as necessary to ensure a firm and stable trench bottom.

### BEDDING

Bedding under the pipe for the central one-third of the OD should be left uncompacted for a depth of 3 inches to cushion the pipe and mitigate the effects of poor haunching.

### PIPE EMBEDMENT

Trenches must be free of water when placing and compacting backfill. Use of trench boxes in the backfill zone at the side of the pipe should be avoided unless measures are taken to ensure the backfill is not disrupted or left with a void when the trench box is advanced. Maximum stone size for embedment is generally limited to 11/2". Smaller maximum sizes may be required to enhance placement

around small diameter pipe and to prevent damage to the pipe wall. Haunch filling is carried out on both sides simultaneously to avoid rolling the pipe, and controlling the compaction force will prevent the pipe from lifting off grade. Filling adjacent sidefill zones will provide lateral support for the haunch material

Material cannot be properly worked into the haunch zone and compacted if the pipe is backfilled to the springline on the first lift. Smaller lift thicknesses may therefore be necessary initially depending on the diameter of the pipe.

Lift thickness and compaction must be done evenly on each side of the pipe. The maximum difference in the sidefill

surface elevations at any given time is generally limited to one lift thickness. While 6-inch lifts are commonly specified, 12-inch lifts can produce good results with coarse-grained backfills provided

placement and compaction practices are appropriate.

It may be beneficial to require a minimum number of compaction passes and to specify a minimum density. If the specified density is 95% of maximum standard Proctor density, then good pipe performance will result even if the compaction is slightly less than specified. An additional 6 inches of structural backfill over the top of the pipe provides a complete envelope that better locks underlying material together and protects the pipe from any damaging impacts from the final backfill.

Final backfill does not directly support the pipe and is more appropriately dealt with in connection with the intended use at the surface. Selection, placement and compaction of final backfill is therefore directed by the design engineer. However, when final backfill contains large fragments or cobbles, the initial backfill cover levels may need to be increased accordingly to protect the pipe from any potential impact or point loading.

### MAXIMUM COVER HEIGHTS

Maximum burial depths corresponding to the soil classification system of ASTM D2321 are shown in the table below, with the best results obtained using manufactured or processed aggregates (i.e. crushed rock).

Diameter	Clas	ss I	Cla	Class II		Class III	
(in)	Compacted	Dumped	95%	90%	95%	90%	
12	38	20	26	18	19	11	
15	45	22	30	21	21	12	
18	30	17	20	14	14	9	
24	28	17	19	13	14	9	
30	27	17	19	13	13	9	
36	38	19	25	17	17	10	
42	37	19	24	16	17	10	
48	30	17	20	13	14	9	
60	28	16	19	12	13	8	

1. Installation in accordance with ASTM D2321.

2. Class I indicates a soil that generally provides the highest soil stiffness at any given percent compaction, and provides a given soil stiffness with the least compactive effort. Each higher-number soil class provides successively less soil

stiffness at a given compaction and requires greater compactive effort to provide a given level of soil stiffness. 3. All acceptable backfill materials are not presented here. See ASTM D2321 for a complete listing of classifications

4. Results based on the AASHTO LRFD design method using zero hydrostatic pressure and a soil density of 120 pcf. Greater cover heights are attainable with appropriate modifications to the design method - Contact Lane for further details.

5. Dumped Class I material is estimated at 90% maximum standard Proctor density.

MINIMUM COVER HEIGHTS FOR LIVE LOADS	MINIMUN
Truck Loadings (H20, H25 or HL93) ¹ , 6 thru 48 inch dia 12 inches Truck Loadings (H20, H25 or HL93) ¹ , 60 inch dia	Nominal Pi Diameter (
Temporary Cover for Construction Loads ²	2.0 - 3.0
May be subject to local or state agency minimum cover requirements.	3.5 - 5.0
² Cover for construction loads depends on pipe diameter and construction eminment (see table to right)	Minimum co

NOTE: Information contained herein is meant as a discretionary guide and is not intended to supersede any governing specifications or requirements of record.

### About Lane

As a full-line manufacturer of metal and plastic drainage products, Lane Enterprises, Inc., operates multiple plants in the Mid-Atlantic and Northeastern regions of the United States, producing corrugated metal and plastic drainage pipe for the construction industry.

For more than 75 years, Lane has partnered with contractors, engineers and municipalities to supply reliable products that provide the highest service life, strength, versatility and economy. Our focus on quality products, responsive customer service and technical expertise has established a long, proven history of successful partnerships within the industries we serve.

Lane Enterprises, Inc. Corporate Headquarters 3905 Harzdale Drive, Suite 514 • Camp Hill, PA 17011 P: 717-761-8175 • F: 717-761-5055

![](_page_26_Figure_69.jpeg)

![](_page_27_Figure_0.jpeg)

SOILS LIST								
	DEPTH TO SEASONALLY HIGH	DEPTH TO	FREQUEN	CY OF:	HYDROLOGIC	HYDRIC SOIL		
IPTION	WATER TABLE	BEDROCK	FLOODING	PONDING	SOIL GROUP	RATING		
DORTHEN	TS							
SLOPES	60"	20"-70"	NONE	NONE	с	NO		
% SLOPES	60"	20"-70"	NONE	NONE	С	NO		

### GENERAL EROSION AND SEDIMENTATION CONTROL NOTES

CONTRACTOR WILL BE RESPONSIBLE FOR THE PROPER CONSTRUCTION, STABILIZATION, AND MAINTENANCE OF ALL EROSION AND SEDIMENTATION CONTROLS AND RELATED ITEMS INCLUDED WITHIN THESE PLANS.

ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS, SHALL BE DONE IN ACCORDANCE WITH APPROVED E&S PLANS. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN (STAMPED, SIGNED, AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO THE IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.

THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE COUNTY CONSERVATION DISTRICT, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATIONS.

THE CHESTER COUNTY CONSERVATION DISTRICT (CCCD) 674 UNIONVILLE ROAD, SUITE #105

- KENNETT SQUARE, PA 19348 PHONE: (610) 455–1360
- FAX: (610) 455-1361
- 2. THE RECEIVING WATER FOR THIS PROJECT IS EAST BRANCH OF CHESTER CREEK. THE CHAPTER 93 CLASSIFICATION FOR EAST BRANCH OF CHESTER CREEK IS TROUT STOCKING FISHES, MIGRATORY FISHES (TSF-MF).
- NOTIFY THE CHESTER COUNTY CONSERVATION DISTRICT AND ARRANGE A PRE-CONSTRUCTION MEETING FOR ALL INVOLVED PARTIES (INCLUDING CCCD,
- APPLICANT, ENGINEER, AND TOWNSHIP OFFICIALS). 4. NOTIFY THE TOWNSHIP ENGINEER AT LEAST 48 HOURS PRIOR TO ANY EARTH DISTURBANCE ACTIVITIES.
- 5. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN A MANNER SUCH THAT ALL EROSION AND AIR/WATER POLLUTION IS MINIMIZED. STATE AND LOCAL LAWS CONCERNING ABATEMENT SHALL BE FOLLOWED. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS, AND OTHER OBJECTIONABLE
- MATERIAL. THE LIMITS OF WORK SHOWN ON THIS PLAN ARE THE REAL EXTENT REQUIRED FOR CONSTRUCTION. THE CONTRACTOR SHALL ADHERE TO THESE LIMITS IN MINIMIZING DISTURBED LAND, AND ALL CONSTRUCTION SHALL BE CONDUCTED WITHIN THESE LIMITS. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
- TOPSOIL TAKEN FROM CONSTRUCTION AREAS SHALL BE SEEDED WITH A VEGETATIVE COVER AND STOCKPILED FOR REUSE IN FINISH GRADING. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2:1 OR FLATTER. SEDIMENT BARRIER SHALL BE INSTALLED ON THE LOW SIDE OF THE PILE. THERE SHALL BE NO EARTH DISTURBANCE WITHIN THE STOCKPILE AREA. SHOULD UNFORESEEN FROSIVE CONDITIONS DEVELOP DURING CONSTRUCTION. THE CONTRACTOR SHALL TAKE ACTION TO REMEDY SUCH CONDITIONS AND TO
- PREVENT DAMAGE TO ADJACENT PROPERTIES AND STREAMS IN ACCORDANCE WITH PADOT 408, SECTION 845. STOCKPILES OF CRUSHED STONE AND MULCHES MUST BE MAINTAINED AT THE SITE IN READINESS TO DEAL IMMEDIATELY WITH EMERGENCY PROBLEMS OF EROSION 10. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL
- NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE. CONSTRUCTION WASTES MUST BE RECYCLED TO THE EXTENT PRACTICABLE, AND DISPOSAL METHODS MUST COMPLY WITH FEDERAL, STATE AND LOCAL REQUIREMENTS. . ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
- 12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING. 13. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION BMP'S MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF
- ALL EROSION AND SEDIMENTATION BMP'S AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. 14. ALL SITE INSPECTIONS WILL BE DOCUMENTED IN AN INSPECTION LOG KEPT FOR THIS PURPOSE. THE COMPLIANCE ACTIONS AND THE DATE, TIME AND NAME OF THE PERSON CONDUCTING THE INSPECTION. THE INSPECTION LOG WILL BE KEPT ON SITE AT ALL TIMES AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST.
- 15. ALL PREVENTIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING, MUST BE PREFORMED IMMEDIATELY. IF EROSION AND SEDIMENTATION BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS OR MODIFICATIONS OF THOSE INSTALLED WILL BE NEEDED. 16. SEDIMENT TRACKED ONTO A PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY OR AS
- NEEDED THROUGHOUT THE WORKDAY, OR AS DIRECTED BY THE CONSERVATION DISTRICT OR MUNICIPALITY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER. 17. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. 18. AREAS WHICH ARE TO BE TOP-SOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES (6 TO 12 INCHES ON COMPACTED SOILS) PRIOR TO
- THE PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING, I.E. 19. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED
- TO SUPPORT BUILDINGS. STRUCTURES, CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES. 20. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 8 INCHES IN THICKNESS. 21. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE
- WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS. 22. FROZEN MATERIALS OF SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
- 23. FILLS SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES. 24. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATIONS FOR
- SUBSURFACE DRAIN OR OTHER APPROVED METHOD. 25. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THE PLAN. 26. ANY DISTURBED AREA, ON WHICH ACTIVITY HAS CEASED FOR ANY AMOUNT OF TIME, MUST BE SEEDED AND MULCHED IMMEDIATELY. DURING
- NON-GERMINATING PERIODS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. DISTURBED AREAS WHICH ARE NOT AT FINISH GRADE AND WHICH WILL BE RE-DISTURBED WITHIN ONE YEAR MAY BE SEEDED AND MULCHED WITH A QUICK GROWING TEMPORARY SEED MIXTURE AND MULCH. DISTURBED AREAS WHICH ARE EITHER AT FINISH GRADE OR WILL NOT BE RE-DISTURBED WITHIN ONE YEAR MUST BE SEEDED WITH A PERMANENT SEED MIXTURE AND MULCHED
- 27. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED PERMANENT STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS. 28. E&S BMPS SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
- 29. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPS. 30. AFTER FINAL STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS MUST BE REMOVED OR CONVERTED TO PERMANENT
- POST-CONSTRUCTION STORMWATER MANAGEMENT BMPS. AREAS DISTURBED DURING THE REMOVAL OR CONVERSION OF THE BMPS SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID VEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON. 31. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR
- SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION. 32. FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT LADEN RUNOFF FROM LEAVING THE SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAM LAW. THE CLEAN STREAM LAW PROVIDES FOR UP TO \$10,000 PER DAY CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR OR CRIMINAL PENALTIES FOR EACH VIOLATION. 33. THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF THE APPENDIX 64, EROSION CONTROL RULES AND
- REGULATIONS, TITLE 25, PART 1, DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUBPART C, PROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER RESOURCES, CHAPTER 102, EROSION CONTROL. 34. THE PERMITTEE SHALL NOTIFY THE CHESTER COUNTY CONSERVATION DISTRICT IMMEDIATELY PRIOR TO ANY CESSATION IN EARTHMOVING ACTIVITIES. 35. EROSION AND SEDIMENTATION CONTROLS MUST BE CONSTRUCTED, STABILIZED AND FUNCTIONAL BEFORE GENERAL SITE DISTURBANCE WITHIN THE
- TRIBUTARY AREA OF THOSE CONTROLS BEGINS. RUNOFF FROM DISTURBED AREAS MUST PASS THROUGH A SEDIMENT REMOVAL OR RETENTION FACILITY BEFORE LEAVING THE SITE. 36. ONLY LIMITED UP SLOPE DISTURBANCE WILL BE PERMITTED TO PROVIDE ACCESS TO SEDIMENT TRAPS AND CHANNELS OF CONVEYANCE FOR GRADING AND
- ACQUIRING BORROW TO CONSTRUCT THOSE CONTROLS. 37. WHERE BMPS ARE FOUND TO FAIL TO ALLEVIATE EROSION OR SEDIMENT POLLUTION THE PERMITTEE OR CO-PERMITTEE SHALL INCLUDE THE FOLLOWING INFORMATION:
- A. THE LOCATION AND SEVERITY OF THE BMPS FAILURE AND ANY POLLUTION EVENTS. B. ALL STEPS TAKEN TO, REDUCE, ELIMINATE AND PREVENT THE RECURRENCE OF THE NON-COMPLIANCE.
- . THE TIME FRAME TO CORRECT THE NON-COMPLIANCE, INCLUDING THE EXACT DATES WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE. 39. ACCUMULATED SILT SHALL BE REMOVED ALONG SILT FENCING OR COMPOST FILTER SOCKS, REGRADED, AND STABILIZED FLSEWHERE ON THE SITE. SILT SHALL ALSO BE REMOVED FROM THE SEDIMENT TRAPS AT THE CLEANOUT ELEVATIONS. THE SILT SHALL BE SPREAD ELSEWHERE ON THE SITE AND SEEDED. 40. SHOULD ANY MEASURES CONTAINED WITHIN THIS PLAN PROVE TO BE INCAPABLE OF ADEQUATELY REMOVING SEDIMENT FROM ON-SITE FLOWS PRIOR TO THE DISCHARGE OF OR STABILIZING OF SURFACES INVOLVED, ADDITIONAL MEASUREMENT MUST BE IMPLEMENTED IMMEDIATELY BY THE OWNER/ DEVELOPER TO FLIMINATE SUCH PROBLEMS.
- 41. CHANNELS, SEDIMENTATION BASINS, SEDIMENTATION TRAPS AND STOCKPILES MUST BE SEEDED AND MULCHED IMMEDIATELY. 42. GRADED AREAS ARE TO BE TEMPORARILY SEEDED AND MULCHED IMMEDIATELY FOLLOWING EARTHMOVING PROCEDURES. TEMPORARY SEED SHALL BE ANNUAL RYE GRASS APPLIED AT THE RATES SPECIFIED. MULCH SHALL BE HAY OR STRAW APPLIED AT THE RATE OF AT LEAST 3 TONS PER ACRE.
- 43. LIME SHALL BE APPLIED TO ALL TEMPORARILY SEEDED AREAS AT A MINIMUM RATE AS SPECIFIED.
- 44. ALL TEMPORARILY SEEDED AREAS SHALL HAVE 5-5-5 FERTILIZER APPLIED AT THE MINIMUM RATES SPECIFIED. 45. ESTABLISH PERMANENT SEEDING AS SOON AS POSSIBLE AFTER FINAL GRADING IS COMPLETED. PERMANENT SEEDING SHALL BE AT THE RATES SPECIFIED.
- FERTILIZER AND LIME SHALL BE APPLIED AT THE MINIMUM RATES SPECIFIED. 46. PERMANENTLY SEEDED AREAS SHALL HAVE HAY OR STRAW APPLIED AT THE RATE OF AT LEAST 3 TONS PER ACRE.
- 47. ANY AREAS WHERE HYDROSEED IS USED, MULCH IS NEEDED AT A MINIMUM RATE OF 3 TONS PER ACRE. 48. SILT FENCING AND COMPOST FILTER SOCKS ARE TO BE MAINTAINED, AND REPLACED IF NECESSARY, DURING THE ENTIRE CONSTRUCTION PERIOD UNTIL A PERMANENT VEGETATIVE COVER WITHIN THE TRIBUTARY AREA IS ESTABLISHED. 49. DUST CONTROL SHALL BE PROVIDED BY THE CONTRACTOR AT ALL TIMES DURING CONSTRUCTION.
- 50. CONSTRUCTION VEHICLES LEAVING THE SITE SHALL NOT DEPOSIT ANY MATERIAL OUTSIDE OF THE PROJECT SITE BOUNDARIES AND/OR A PUBLIC RIGHT-OF-WAY. ANY MATERIAL DEPOSITED SHALL BE IMMEDIATELY REMOVED.
- 51. IF ANY SIGNIFICANT CHANGES ARE TO BE MADE TO THE EROSION AND SEDIMENTATION CONTROL PLAN, THE BUILDER OR LANDOWNER WILL CONTACT THE CHESTER COUNTY CONSERVATION DISTRICT AT (610) 892-9484 FOR THE ADEQUACY OF THESE CHANGES. 52. SEDIMENT MUST BE REMOVED FROM STORMWATER INLETS NOT DRAINING TO A SEDIMENT TRAP WITH INLET PROTECTION AFTER EACH RUNOFF EVENT.
- 53. EACH SEDIMENT TRAP/BASIN MUST BE STABILIZED AND FUNCTIONING PROPERLY PRIOR TO ANY FURTHER EARTH DISTURBANCE ACTIVITY. UPON INSTALLATION OF THE TEMPORARY SEDIMENT TRAP/BASIN RISER(S), AN IMMEDIATE INSPECTION OF THE RISER(S) SHALL BE CONDUCTED BY A QUALIFIED SITE REPRESENTATIVE AND THE CHESTER COUNTY CONSERVATION DISTRICT SHALL BE NOTIFIED IN WRITING THAT THE PROPER RISER IS INSTALLED AND SEALED, PER PLAN. SEDIMENT TRAPS/BASINS MUST BE PROTECTED FROM UNAUTHORIZED ACTS OF THIRD PARTIES.
- 54. UPON REQUEST, THE PERMIT HOLDER AND/OR HIS CONTRACTOR SHALL PROVIDE AN AS-BUILT FOR ANY SEDIMENT BASIN OR TRAP TO THE MUNICIPAL INSPECTOR, LOCAL CONSERVATION DISTRICT, OR DEP. 55. BEFORE INITIATING ANY REVISION TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E & S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE CHESTER COUNTY CONSERVATION DISTRICT. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
- 56. ALL CONCRETE TRUCKS SHALL UTILIZE THE CONCRETE WASHOUT AREA PRIOR TO LEAVING THE SITE.
- 57. UTILITY LINE TRENCH EXCAVATION NOTES: A. LIMIT ADVANCED CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY. B. WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE
- FROM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS. C. ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
- D. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME
- E. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING BEFORE PIPE PLACEMENT AND/ OR BACKFILLING BEGINS. WATER REMOVED FROM THE TRENCH SHALL BE PUMPED THROUGH A FILTRATION DEVICE. F. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND IMMEDIATELY STABILIZED

### SPECIAL GEOLOGIC AND SOIL CONDITIONS SPECIAL SOIL OR GEOLOGICAL ISSUES ARE KNOWN

# CONSTRUCTION SEQUENCE

# TO THE TOWNSHIP.

### ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED BY THE TOWNSHIP PRIOR TO IMPLEMENTATION. EACH STEP OF THE SEQUENCE SHALL BE COMPLETED BEFORE PROCEEDING TO THE NEXT STEP, EXCEPT WHERE NOTED. PRIOR TO EARTH DISTURBANCE ACTIVITY DESCRIBED IN ANY STEP OF THE CONSTRUCTION SEQUENCE, CLEAR AND GRUB AND

UPON COMPLETION OR TEMPORARY CESSATION OF EARTH DISTURBANCE ACTIVITY, OR ANY STAGE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED WITH THE APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION. 1. FIELD DELINEATE LIMITS OF DISTURBANCE PRIOR TO EARTH MOVING ACTIVITIES. 2. INSTALL TREE PROTECTION FENCING AND COMPOST FILTER SOCKS. NOTIFY THE TOWNSHIP ENGINEER FOLLOWING THE

- BE SHUT DOWN.
- RFPI ACFD STABILIZATION.
- ALLOWS. 14. FINALIZE BUILDING CONSTRUCTION.

1. THE PERMITTEE SHALL BE RESPONSIBLE FOR THE PROPER CONSTRUCTION, STABILIZATION AND MAINTENANCE OF ALL EROSION AND SEDIMENTATION CONTROL MEASURES. INSPECTION/MAINTENANCE OF THESE MEASURES SHALL BE CONDUCTED ON A WEEKLY BASIS AND AFTER EVERY MEASURABLE RAINFALL. A WRITTEN REPORT DOCUMENTING THE INSPECTION AND APPLICABLE REPAIRS SHALL BE KEPT ON SITE AND AVAILABLE FOR INSPECTION UPON REQUEST. 2. THE OPERATION AND MAINTENANCE REQUIREMENTS FOR THE TEMPORARY E&S BMPs FOR THIS PROJECT INCLUDE THE FOLLOWING:

A. COMPOST FILTER SOCK SHALL BE INSPECTED/MAINTAINED TO ENSURE THAT THE WOODEN STAKES AND FABRIC CONFORM TO THE STANDARD DETAIL. FABRIC WHICH IS TORN, DISTENDED/DEFORMED OR OTHERWISE COMPROMISED SHALL BE REPLACED. ALL MATERIAL DEPOSITED BEHIND THE COMPOST FILTER SOCK SHALL BE DISTRIBUTED ON SITE AND IMMEDIATELY STABILIZED USING SEED AND MULCH. B. STABILIZED CONSTRUCTION ENTRANCE (SCE) - THE SCE SHALL BE INSPECTED/MAINTAINED TO ENSURE THAT THE STRUCTURE CONFORMS TO THE STANDARD DETAIL. ROCK SHOULD BE MAINTAINED AT FULL DEPTH AND MAY EQUIRE REPLACEMENT AND/OR REDISTRIBUTION. MATERIAL DEPOSITED ON THE SCE SHALL BE DISTRIBUTED ON SITE AND IMMEDIATELY STABILIZED USING SEED AND MULCH.

STAGING OF EARTH MOVING ACTIVITIES

CONTRACTOR MAY SELECT HIS SCHEDULE FOR THE SPECIFIC PORTIONS OF THE PROJECT, UNLESS OTHERWISE SPECIFIED. SPECIFIED EROSION CONTROL MEASURES AND FACILITIES INCLUDING BUT NOT LIMITED TO CONSTRUCTION ENTRANCES MUST E INSTALLED AND BE OPERATIONAL PRIOR TO ANY EARTH MOVING ACTIVITIES WITHIN THE UPSLOPE DRAINAGE AREAS. 3. FOR PIPELINE CONSTRUCTION WITHIN DRIVEWAYS AND PAVED AREAS, THE FOLLOWING STAGES ARE TO BE IMPLEMENTED

SEQUENTIALLY AS WORK PROCEEDS:

B. EXCAVATE TRENCHES AND DISCHARGE MATERIAL DIRECTLY INTO TRUCKS. CLEAN UP SPILLAGE WITH EACH TRUCKLOAD

UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION BMP'S MUST BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION BMP'S ON A DAILY BASIS AND AFTER EACH RUNOFF EVENT. ALL SITE INSPECTIONS SHALL BE DOCUMENTED IN AN INSPECTION LOG KEPT FOR THIS PURPOSE. THE COMPLIANCE ACTIONS AND THE DATE, TIME AND NAME OF THE PERSON CONDUCTING THE INSPECTION SHALL BE NOTED. THE INSPECTION LOG SHALL BE KEPT ON SITE AT ALL TIMES. AND MADE AVAILABLE TO THE TOWNSHIP UPON REQUEST.

### AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES (INCLUDING CLEARING AND GRUBBING), THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, TOWNSHIP ENGINEER/INSPECTOR, AND LICENSED PROFESSIONAL ENGINEER OR DESIGNEE TO AN ON-SITE PRE-CONSTRUCTION MEETING.

UPON INSTALLATION OR STABILIZATION OF ALL PERIMETER SEDIMENT CONTROL BMPS AND AT LEAST 3 DAYS PRIOR TO PROCEEDING WITH THE BULK EARTH DISTURBANCE ACTIVITIES, THE PERMITTEE OR CO-PERMITTEE SHALL PROVIDE NOTIFICATION

### AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.

STRIP TOPSOIL. STOCKPILE TOPSOIL IN THE DESIGNATED LOCATIONS.

INSTALLATION OF PROTECTIVE MEASURES AND PRIOR TO EARTH DISTURBANCE. 3. INSTALL THE ROCK CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT AREA AS DEPICTED ON THE EROSION & SEDIMENTATION CONTROL PLANS.

4. THROUGHOUT CONSTRUCTION, THE CONTRACTOR SHALL ENSURE THAT ALL SITE STORM WATER, INCLUDING THAT COMING OFF OF THE ROCK CONSTRUCTION ENTRANCE (RCE), IS DIRECTED INTO AN E&S CONTROL BMP. 5. PRIOR TO DEMOLITION, ALL EXISTING UTILITIES TO BE RELOCATED (WATER, ELECTRIC, TELECOMMUNICATIONS, ETC.) ARE TO

6. PERFORM DEMOLITION ACTIVITIES, AS INDICATED ON THE PLANS. RELOCATE EXISTING UTILITIES AS NECESSARY. CLEAR AND GRUB, STRIP TOPSOIL AND STOCKPILE IN LOCATIONS SHOWN ON EROSION & SEDIMENTATION CONTROL PLAN. TEMPORARILY STABILIZE TOPSOIL STOCKPILE.

8. PERFORM ROUGH GRADING. BEGIN CONSTRUCTION OF THE BUILDING ADDITION. 10. CONTRACTOR SHALL GUARANTEE POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS, WALLS, SIDEWALKS AND ADA RAMPS. 11. WHEN THE BUILDING ADDITION ACHIEVES SUBSTANTIAL COMPLETION, CONSTRUCTION OF SWM #100 AND SWM #200 MAY

COMMENCE. INSTALL STORMWATER MANAGEMENT FACILITIES WITH ASSOCIATED STORM STRUCTURES AND DISTRIBUTION PIPE. CRITICAL STAGE OF CONSTRUCTION: CONTACT ENGINEER PRIOR TO EXCAVATION AND FINAL GRADING OF SWM #100 & SWM #200. CONTACT ENGINEER PRIOR TO PLACEMENT OF GEOTEXTILE FABRIC <u>STONE AND DISTRIBUTION PIPE INSIDE SWM #100 & SWM #200</u>

TEMPORARILY SEAL INLETS AS INDICATED ON THE PLANS. CONTRACTOR SHOULD ENSURE THAT NO SEDIMENT OR SEDIMENT LADEN RUNOFF IS ALLOWED TO ENTER THE INFILTRATION BMPS DURING SITE CONSTRUCTION. ONLY AFTER THE TRIBUTARY DRAINAGE AREA TO THE INFILTRATION BMPS IS FULLY STABILIZED (I.E. 70% STABILIZATION), CAN RUNOFF BE INTRODUCED TO THESE FACILITIES. IF SEDIMENT ENTERS THE STONE WITHIN THESE FACILITIES, THE STONE SHALL BE REMOVED AND

12. INSTALL REMAINING STORM STRUCTURES AND ASSOCIATES PIPES. IMMEDIATELY BLOCK/SEAL INLETS AS INDICATED ON THE PLANS. THESE INLETS MUST REMAIN BLOCKED/SEALED UNTIL THE TRIBUTARY DRAINAGE AREA ACHIEVES FINAL

13. BEGIN CONSTRUCTION OF THE PARKING LOT & HARDSCAPE AREAS. STABILIZE WITH STONE BASE AS CONSTRUCTION

15. FINE GRADE ALL PREVIOUSLY DISTURBED AREAS THAT ARE READY FOR FINAL STABILIZATION. STABILZE WITH SEEDING AND HAY OR STRAW MULCH CONSISTENT WITH STABILIZATION CRITERIA. 16. INSTALL WEARING COURSE AND PAVEMENT STRIPING AS INDICATED ON THE PLANS AND DETAILS.

17. COLLECT ALL SILT AND SEDIMENT DEPOSITS IN EROSION CONTROL DEVICES AND PLACE ON SITE IN NON-ERODIBLE AREAS. PERMANENTLY STABILIZE ALL DISTURBED AREAS. TEMPORARY EROSION CONTROLS MAY NOT BE REMOVED UNTIL STABILIZATION IS ATTAINED (70% UNIFORM COVERAGE OF A PERENNIAL VEGETATIVE SPECIES).

18. UPON STABILIZATION OF ALL DISTURBED AREAS, REMOVE REMAINING SEDIMENT BARRIERS AND CONTROLS. IMMEDIATELY STABILIZE AREAS DISTURBED BY REMOVAL PROCESS IN ACCORDANCE WITH PERMANENT SEED AND MULCH SPECIFICATIONS.

### OPERATION AND MAINTENANCE PROCEDURE

### TEMPORARY EROSION AND SEDIMENT CONTROL BMPs

C. INLET PROTECTION - SHALL BE CLEARED AND CLEANED AFTER EACH RUNOFF EVENT, SEDIMENT SHALL BE DISTRIBUTED ON SITE AND IMMEDIATELY STABILIZED.

D. ROCK FILTER OUTLET - IF INSTALLED, OUTLET SHALL BE INSPECTED/MAINTAINED TO ENSURE THAT MATERIAL IS NOT DISPLACED OR DAMAGED.

THE OVERALL SCHEDULE OF THE PROJECT IS THAT CONSTRUCTION WILL START APPROXIMATELY DURING FALL, 2024, THE

A. INSTALL INLET PROTECTION AND OTHER MEASURES AS SHOWN ON THE PLANS. THESE MEASURES SHALL BE INSTALLED AT LEAST 500 FEET AHEAD OF PIPE INSTALLATION.

C. INSTALL PIPELINE AND BACKFILL. EROSION CONTROL FACILITIES MAY BE REMOVED WHEN TEMPORARY OR PERMANENT REPAVING IS INSTALLED AND THE AREA HAS BEEN CLEANED OF ALL DEBRIS.

D. PLACE TEMPORARY PAVING OR GRAVEL SURFACE OVER TRENCH AT THE END OF EACH WORK DAY.

### <u>EROSION CONTROL MAINTENANCE PROGRAM TEMPORARY</u>

ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEANOUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING. AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENTATION BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS OR MODIFICATIONS OF THOSE INSTALLED WILL BE NEEDED.

WHERE BMPS ARE FOUND TO FAIL TO ALLEVIATE EROSION AND SEDIMENTATION POLLUTION, THE CONTRACTOR SHALL INCLUDE THE FOLLOWING INFORMATION:

### A) THE LOCATION AND SEVERITY OF THE BMP'S FAILURE AND ANY POLLUTION EVENTS. B) ALL STEPS TAKEN TO REDUCE, ELIMINATE AND PREVENT THE RECURRENCE OF THE NON-COMPLIANCE.

C) THE TIME FRAME TO CORRECT THE NON-COMPLIANCE, INCLUDING THE EXACT DATES WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE.

### VEGETATIVE STABILIZATION NOTES

- 1. AS DISTURBED AREAS WITHIN A PROJECT APPROACH FINAL GRADE, PREPARATIONS SHOULD BE MADE FOR SEEDING AND MULCHING TO BEGIN (I.E. ANTICIPATE THE COMPLETION DATE AND SCHEDULE THE SEEDER). IN NO CASE SHOULD AN AREA EXCEEDING 15,000 SQUARE FEET. WHICH IS TO BE STABILIZED BY VEGETATION, REACH FINAL GRADE WITHOUT BEING SEEDED AND MULCHED, WAITING UNTIL FARTHMOVING IS COMPLETED BEFORE MAKING PREPARATIONS FOR SEEDING AND MULCHING IS NOT ACCEPTABLE. THIS REQUIREMENT SHOULD BE CLEARLY STATED IN THE SEEDING AND MULCHING SPECIFICATIONS CONTAINED ON THE PLAN DRAWINGS.
- 2. BEFORE THE SEEDING BEGINS, TOPSOIL SHOULD BE APPLIED AND ANY REQUIRED SOIL AMENDMENTS WORKED INTO THE SOIL TO A DEPTH OF 4 TO 6 INCHES. IF COMPOST IS TO BE ADDED TO THE TOPSOIL, IT SHOULD BE WORKED INTO THE SOIL WITH THE OTHER SOIL AMENDMENTS UNLESS IT IS BEING APPLIED AS AN EROSION CONTROL BMP.
- 3. UPON COMPLETION OR TEMPORARY CESSATION OF THE EARTH DISTURBANCE ACTIVITY IN A SPECIAL PROTECTION WATERSHED, THAT PORTION OF THE PROJECT SITE TRIBUTARY TO THE SPECIAL PROTECTION WATERS MUST BE IMMEDIATELY STABILIZED. IN ALL OTHER WATERSHEDS, CESSATION OF ACTIVITY FOR AT LEAST 4 DAYS REQUIRES TEMPORARY STABILIZATION.
- 4. SURFACE ROUGHENING SHOULD BE APPLIED TO SLOPES 3H:1V OR STEEPER UNLESS A STABLE ROCK FACE IS PROVIDED OR IT CAN BE SHOWN THAT THERE IS NOT A POTENTIAL FOR SEDIMENT POLLUTION TO SURFACE WATERS. FOR ROUGHENED SURFACES WITHIN 50 FEET OF A SURFACE WATER, AND WHERE BLANKETING OF SEEDED AREAS IS PROPOSED AS THE MEANS TO ACHIEVING PERMANENT STABILIZATION, SPRAY ON TYPE BLANKETS ARE RECOMMENDED.
- 5. FILL SLOPES SHOULD BE SEEDED AND MULCHED AT REGULAR VERTICAL INCREMENTS 15 TO 25 FEET MAXIMUM - AS THE FILL IS BEING CONSTRUCTED. THIS WILL ALLOW THE BOTTOM OF THE FILL TO PROGRESS TOWARD STABILIZATION WHILE WORK CONTINUES ON THE UPPER PORTION, MAKING FINAL STABILIZATION EASIER TO ACHIEVE AND PROVIDING SOME VEGETATIVE BUFFERING AT THE BOTTOM OF THE SLOPE.
- . WHEREVER SEED AND MULCH IS APPLIED BY HYDROSEEDING METHODS, THE SEED AND MULCH SHOULD BE APPLIED IN SEPARATE APPLICATIONS WITH THE SEED BEING APPLIED FIRST AND THE MULCH SPRAYED ON TOP OF THE SEED. THIS IS TO ENSURE THAT THE SEED MAKES CONTACT WITH THE UNDERLYING SOIL SOIL PREPARATION SHOULD BE COMPLETED PRIOR TO ADDING SEED TO THE HYDROSEEDING EQUIPMENT. RUNNING SEED THROUGH THE PUMPING SYSTEM CAN RESULT IN EXCESSIVE ABRASION OF THE SEED AND REDUCE THE PERCENTAGE OF PURE LIVE SEED IN THE APPLICATION. THEREFORE ALL SITE PREPARATION SHOULD BE COMPLETED PRIOR TO THE ARRIVAL OF THE HYDROSEEDER.
- 7. IN CRITICAL AREAS (E.G. ADJACENT TO OR WITHIN 50 FEET OF STREAMS, PONDS, OR WETLANDS) A PROTECTIVE BLANKET SHOULD BE PROVIDED FOR ALL SEEDED AREAS. CONSIDERATION SHOULD BE GIVEN TO USE OF MULCH WITH NETTING OR PROTECTIVE BLANKETS FOR ALL SEEDED AREAS ON SLOPES 3H:1V OR STEEPER
- 8. VEHICULAR TRAFFIC SHOULD BE RESTRICTED FROM AREAS TO BE SEEDED TO PREVENT SOIL COMPACTION. 9. AS SOON AS SLOPES, CHANNELS, DITCHES AND OTHER AREAS DISTURBED DURING CONSTRUCTION. REACH FINAL GRADE, STABILIZE IMMEDIATELY, IN ACCORDANCE WITH SEEDING, MULCHING AND STABILIZATION

SPECIFICATIONS.

- 10. NO MORE THAN 15,000 SQUARE FEET OF DISTURBED AREA REACH FINAL GRADE BEFORE INITIATING SEEDING AND MULCHING OPERATIONS.
- 11. CESSATION OF ACTIVITY FOR 4 DAYS OR LONGER REQUIRES TEMPORARY STABILIZATION.

### SOIL TYPE USE LIMITATIONS AND RESOLUTIONS

- 1. SOIL TYPES POORLY SUITED AS SOURCES OF TOPSOIL RESTRICT OR PLACE CONDITIONS ON PLANNING VEGETATIVE STABILIZATION. ACIDIC, LOW FERTILITY, EXCESSIVE DRYNESS AND EXCESSIVE WETNESS LIMIT PLANT GROWTH. RESOLUTIONS: IDENTIFYING AND RESOLVING CHARACTERISTICS, THAT RENDER THE SOIL TYPES POORLY, SUITED AS TOPSOIL.
- ACIDIC SOIL TYPES EXHIBITING PH REACTION VALUES LOWER THAN ABOUT 5.5, LIMIT VEGETATIVE STABILIZATION. SOIL TESTS MIGHT BE NECESSARY TO DETERMINE SITE SPECIFIC PH REACTION. RESOLUTIONS: APPLYING LIME CONSISTENT WITH RATES DETERMINED BY SOIL TESTING; SELECTING VEGETATIVE SPECIES TOLERANT TO ACIDIC SOIL CONDITIONS; AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.
- LOW FERTILITY SOIL TYPES LACKING IN SUFFICIENT AMOUNTS OF ESSENTIAL PLANT NUTRIENTS SUCH AS: NITROGEN. PHOSPHOROUS. POTASSIUM. SULFER, MAGNESIUM. CALCIUM, IRON, MANGANESE, BORON, CHLORINE, ZINC, COPPER AND MOLYBDENUM, LIMÍT VEGETÁTION STABILÍZATION. SOIL TESTS MIGHT BE NECESSARY TO DETERMINE SITE SPECIFIC SOIL FERTILITY RESOLUTIONS: INCORPORATING SOIL NUTRIENTS CONSISTENT WITH RATES DETERMINED BY SOIL TESTING; SELECTIVE VEGETATIVE SPECIES TOLERANT TO LOW FERTILITY SOIL CONDITIONS, AND IMPLEMENTING COMBINATIONS OF THESE AND OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE FROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.
- ERODIBLE SOIL TYPES EXHIBITING K VALUES GREATER THAN 0.36 OR PLASTICITY INDEX VALUES LOWER THAN 10, LIMIT VEGETATIVE STABILIZATION OF CHANNELS. RESOLUTIONS: PROVIDING TEMPORARY CHANNEL LINING, PROVIDING PERMANENT CHANNEL LINING, DECREASING CHANNEL GRADE, INCREASING CHANNEL WIDTH, SELECTING VEGETATIVE WITH GREATER RETARDANCE, SELECTING PERMANENT LININGS OTHER THAN GRASSES, AND IMPLEMENTING COMBINATION OF THESE AND/OR METHODS. VEGETATIVE RETARDANCE INFORMATION IS PROVIDED IN TABLES 6 AND 7 OF THE EROSION AND SEDIMENT

POLLUTION CONTROL MANUAL PUBLISHED BY PADEP.

- WET SOIL TYPES HAVE EXCESSIVE ROOT ZONE AND SOIL MOISTURES. SOME SOIL SURVEYS INDICATE WETNESS. HIGH WATER TABLE AND FLOODING. THIS INDICATOR IS AFFECTED BY SOIL DISTURBANCE. RESOLUTIONS: SELECTING VEGETATIVE SPECIES TOLERANT TO WET CONDITIONS, TILING VEGETATIVE AREAS, AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.
- DRY SOIL TYPES LACK SUFFICIENT ROOT ZONE SOIL MOISTURES. THIS INDICATOR IS AFFECTED BY SOIL DISTURBANCE. RESOLUTIONS: SELECTING VEGETATIVE SPECIES TOLERANT TO DRY CONDITIONS, IRRIGATING VEGETATED AREAS
- AND IMPLEMENTING COMBINATION OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.
- SOIL TYPES SUSCEPTIBLE TO SINKHOLE AND SOLUTION CHANNEL/CHAMBER FORMATION POSE LIMITATIONS ON LOCATING RESERVOIR AREAS OF SEDIMENT BASINS, SEDIMENT TRAPS, STORMWATER RETENTION BASINS, AND STORMWATER DETENTION BASINS. RESOLUTIONS: LOCATING THOSE FACILITIES ON OTHER SOIL TYPES, LINING RESERVOIR AREAS WITH IMPERMEABLE LININGS, LIMITING STANDING WATER DEPTHS, LIMITING RETENTION TIMES AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS.
- SOIL TYPES THAT EXHIBIT INSTABILITY IN POND EMBANKMENTS OR SUSCEPTIBILITY TO PIPING AND SEEPING POSE LIMITATIONS ON PLANNING EMBANKMENTS OF SEDIMENT BASINS, SEDIMENT TRAPS, STORMWATER RETENTION BASINS AND STORMWATER DETENTION BASINS. RESOLUTIONS: IMPORTING OTHER SOIL FOR EMBANKMENT OF THOSE FACILITIES, LOCATING THOSE FACILITIES ON OTHER SOIL TYPES, LIMITING EMBANKMENT SLOPE STEEPNESS AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS.
- SOILS THAT ARE DIFFICULT TO COMPACT, UNSUITABLE FOR WINTER GRADING, OR SUSCEPTIBLE TO FROST ACTION 9. POSE LIMITATIONS ON PLANNING EMBANKMENTS OF SEDIMENT BASINS, SEDIMENT TRAPS, STORM WATER RETENTION BASINS AND STORMWATER DETENTION BASINS. RESOLUTIONS: IMPORTING OTHER SOIL FOR EMBANKMENT OF THOSE FACILITIES, LOCATING THOSE FACILITIES ON OTHER SOILS TYPES, NOT CONSTRUCTING EMBANKMENTS DURING PERIODS PRONE TO FROST AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS.

### DISPOSAL AND RECYCLING

CONTRACTOR IS RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL DEMOLISHED OR UNUSED CONSTRUCTION MATERIALS. GARBAGE SHALL BE COLLECTED ON-SITE UNTIL RETRIEVED BY AN APPROVED DISPOSAL OR RECYCLING COMPANY, CONTRACTOR SHALL NOT INCINERATE EXCESS MATERIALS.

LIKELY WASTE TO BE GENERATED AT THIS SITE: UNUSED CONCRETE TO BE PLACED IN CONCRETE WASHOUT AREAS; • EXCESS SILT SOCK AND FENCING MATERIALS; GENERAL RUBBISH AND DEBRIS

# THERMAL IMPACTS

THE RUNOFF FROM THE PROJECT AREA THAT OUTLETS TO SURFACE WATERS OR EXISTING STORM SEWER FLOWS THROUGH COMPOST FILTER SOCKS. INTERCEPTING THE RUNOFF WITH THE ONSITE TEMPORARY BMP'S WILL TEMPORARILY STORE THE SEDIMENT LADEN WATER BEHIND THE PROPOSED E&S MEASURES AND SLOWLY ALLOW CLEAN WATER TO FILTER THROUGH

### (I.E. REDUCING FLOW RATE AND VELOCITY). THE NATURAL COOLING EFFECTS OF FILTERING SEDIMENT LADEN WATER WILL HELP TO DISSIPATE THE HEAT ENERGY ABSORBED BY THE STORMWATER.

EROSION AND SEDIMENT CONTROL PLAN OBJECTIVES 1. FIT THE LAND-DISTURBING ACTIVITY TO THE TERRAIN THROUGH MATCHING PROPOSED GRADES AS CLOSE

- TO EXISTING AS POSSIBLE. 2. MINIMIZE BARE SOIL EXPOSURE AND THE EXTENT AND DURATION OF EARTH DISTURBANCE THROUGH THE USE OF TEMPORARY STABILIZATION TECHNIQUES AND A DETAILED CONSTRUCTION SEQUENCE.
- 3. RETAIN EXISTING VEGETATION WHENEVER FEASIBLE AND APPROPRIATE BY MAXIMIZING PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION. 4. MINIMIZE SOIL COMPACTION BY DELINEATING LIMITS OF DISTURBANCE IN ONLY THOSE AREAS NECESSARY
- FOR CONSTRUCTION. 5. STABILIZE DISTURBED AREAS IMMEDIATELY AFTER GRADING WITH TEMPORARY SEEDING AND MULCHING.
- 6. DIRECT RUNOFF AWAY FROM BARE SOIL AREAS. MINIMIZE LENGTH AND STEEPNESS OF SLOPES BY IMPLEMENTING THE APPROPRIATE TEMPORARY E&S BMP.
- 8. UTILIZE OTHER MEASURES OR CONTROLS THAT PREVENT OR MINIMIZE GENERATION OF INCREASED STORMWATER RUNOFF.
- 9. PREPARE DRAINAGE WAYS AND OUTLETS TO HANDLE INCREASED RUNOFF AND CONCENTRATION FLOWS. 10. REDUCE SEDIMENTATION BY APPLYING EROSION CONTROL AND WATER QUALITY PRACTICES ON-SITE. 11. AVOID, MINIMIZE OR MITIGATE THERMAL IMPACTS.

### SEEDING AND MULCHING SPECIFICATIONS

TEMPORARY: SEEDING SHALL BE ANNUAL RYE GRASS APPLIED AT 48 LBS. PER ACRE. LIMING TO BE APPLIED AT 1 TON/ACRE. 10-10-10 FERTILIZER TO BE APPLIED AT 500 LBS. ACRE

HAY OR STRAW MULCH TO BE APPLIED AT 3 TONS/ACRE.

PERMANENT: LIMING TO BE APPLIED AT 6 TON/ACRE. 10-20-20 FERTILIZER TO BE APPLIED AT 1000 LBS./ACRE

HAY OR STRAW MULCH TO BE APPLIED AT 3 TONS/ACRE. CONTRACTOR SHALL VERIFY PERMANENT SEEDING CRITERIA WITH OWNER PRIOR TO APPLICATION.

NON-STEEP AREAS < 3:1, 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 3:1, NO-MOW AREAS • THERE ARE NO AREAS OF NO-MOW STEEP SLOPE ON THIS PROJECT.

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.

- ALL SEED MIXTURES SHALL HAVE A MINIMUM LIVE SEED AND GERMINATION PERCENTAGE OF 85% TO 95%. TOPSOIL TAKEN FROM CONSTRUCTION AREAS SHALL BE SEEDED WITH VEGETATIVE COVER 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. 4. ANY DISTURBED AREA ON WHICH ACTIVITY HAS CEASED AND WHICH WILL REMAIN EXPOSED MUST BE SEEDED AND MULCHED IMMEDIATELY. DISTURBED AREAS WHICH ARE NOT A FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN ONE (1) YEAR MAY BE SEEDED AND MULCHED WITH A QUICK GROWING, TEMPORARY SEEDING MIXTURE AND MULCH. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE RE-DISTURBED WITHIN ONE (1) YEAR MUST BE SEEDED AND MULCHED WITH A PERMANENT SEED MIXTURE AND MULCH. CHANNELS, SEDIMENTATION TRAPS, BASINS AND STOCKPILES MUST BE SEEDED AND MULCHED IMMEDIATELY.

### MULCHING NOTES

- ALL SEEDED AREAS SHOULD BE MULCHED OR BLANKETED TO MINIMIZE THE POTENTIAL FOR FAILURE TO ESTABLISH AN ADEQUATE VEGETATIVE COVER. MULCHING MAY ALSO BE USED AS A TEMPORARY STABILIZATION OF SOME DISTURBED AREAS IN NON-GERMINATING SEASONS.
- STRAW AND HAY MULCH SHOULD BE ANCHORED OR TACKIFIED IMMEDIATELY AFTER APPLICATION TO PREVENT BEING WINDBLOWN, A TRACTOR-DRAWN IMPLEMENT MAY BE USED TO "CRIMP" THE STRAW OR HAY INTO THE SOIL -ABOUT 3 INCHES. THIS METHOD SHOULD BE LIMITED TO SLOPES NO STEEPER THAN 3H: 1V. THE MACHINERY SHOULD BE OPERATED ON THE CONTOUR. NOTE: CRIMPING OF HAY OR STRAW BY RUNNING OVER IT WITH TRACKED MACHINERY IS NOT RECOMMENDED.
- 3. POLYMERIC AND GUM TACKIFIERS MIXED AND APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS MAY BE USED TO TACK MULCH. AVOID APPLICATION DURING RAIN AND ON WINDY DAYS. A 24-HOUR CURING PERIOD AND A SOIL TEMPERATURE HIGHER THAN 45 DEG. FAHRENHEIT ARE TYPICALLY REQUIRED. APPLICATION SHOULD BE GENERALLY BE HEAVIEST AT EDGES OF SEEDED AREAS AND AT CRESTS OF RIDGES AND BANKS TO PREVENT LOSS BY WIND. THE REMAINDER OF THE AREA SHOULD HAVE BINDER APPLIED UNIFORMLY. BINDERS MAY BE APPLIED AFTER MULCH IS SPREAD OR SPRAYED INTO THE MULCH AS IT IS BEING BLOWN ONTO THE SOIL. APPLYING STRAW AND BINDER TOGETHER IS GENERALLY MORE EFFECTIVE. 4. SYNTHETIC BINDERS, OR CHEMICAL BINDERS, MAY BE USED AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH PROVIDED SUFFICIENT DOCUMENTATION IS PROVIDED TO SHOW THEY ARE NON-TOXIC TO NATIVE PLANT AND
- ANIMAL SPECIES. 5. MULCH ON SLOPES OF 8% OR STEEPER SHOULD BE HELD IN PLACE WITH NETTING. LIGHTWEIGHT PLASTIC, FIBER, OR PAPER NETS MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- IT IS THE CONTRACTORS RESPONSIBILITY TO KEEP BASIN SEEDING UNIFORMLY SPREAD THROUGHOUT BASIN BOTTOM IN THE EVENT SEEDS COLLECT IN ONE AREA OR DISCHARGE FROM THE BASIN, THE CONTRACTOR SHALL RE-SEED, REMULCH AND SECURE SEED/MULCH WITH THE APPROPRIATE LIGHTWEIGHT PLASTIC, FIBER OR PAPER NETTING, IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- SHREDDED PAPER HYDROMULCH SHOULD NOT BE USED ON SLOPES STEEPER THAN 5%. WOOD FIBER HYDROMULCH MAY BE APPLIED ON STEEPER SLOPES PROVIDED A TACKIFIER IS USED. THE APPLICATION RATE FOR ANY HYDROMULCH SHOULD BE AS NOTED IN THE MULCHING CHART (SEE THIS SHEET).

### TOPSOIL APPLICATION NOTES

- GRADED AREAS SHOULD BE SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES TO PERMIT BONDING OF THE TOPSOIL TO THE SURFACE AREAS AND TO PROVIDE A ROUGHENED SURFACE TO PREVENT TOPSOIL FROM SLIDING DOWN SLOPE.
- TOPSOIL SHOULD BE UNIFORMLY DISTRIBUTED ACROSS THE DISTURBED AREA TO A DEPTH OF SIX (6) INCHES MINIMUM. SPREADING SHOULD BE DONE IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL PREPARATION OR TILLAGE. IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOIL PLACEMENT SHOULD BE CORRECTED IN ORDER TO PREVENT FORMATION OF DEPRESSIONS UNLESS SUCH DEPRESSIONS ARE PART OF THE PCSM PLAN.
- TOPSOIL SHOULD NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDED PREPARATION. COMPACTED SOILS SHOULD BE SCARIFIED 6 TO 12 INCHES ALONG CONTOUR WHEREVER POSSIBLE PRIOR TO SEEDING.

### SOIL AMENDMENT APPLICATION RATE EQUIVALENTS

	PERMANENT SE	EEDING APPLICATIO					
SOIL AMENDMENT	PER ACRE	PER 1,000 SF					
AGRICULTURAL LIME	6 TONS	240 LB.	2,480 LB.	OR AS PER SOIL TEST; MAY NOT BE REQUIRED IN AGRICULTURAL FIELDS			
10-20-20 FERTILIZER	1,000 LB	25 LB.	210 LB.	OR AS PER SOIL TEST; MAY NOT BE REQUIRED IN AGRICULTURAL FIELDS			
	N RATE (MIN.)						
AGRICULTURAL LIME	1 TON	40 LB.	410 LB.	TYPICALLY NOT REQUIRED FOR TOPSOIL STOCKPILES			
10-10-10 FERTILIZER	500 LB.	12.5 LB.	100 LB.	TYPICALLY NOT REQUIRED FOR TOPSOIL STOCKPILES			

### MULCH APPLICATION RATES

	APP	PLICATION RATE (N		
MULCH TYPE	PER ACRE	PER 1,000 SF	PER 1,000 SY	
STRAW	3 TONS	140 LB.	1,240 LB.	EITHER WHEAT OR OAT STRAW, FREE OF WEEDS, NOT CHOPPED OR FINELY BROKEN
HAY	3 TONS	140 LB.	1,240 LB.	TIMOTHY, MIXED CLOVER AND TIMOTHY OR OTHER NATIVE FORAGE GRASSES
WOOD CHIPS	4–6 TONS	185–275 LB.	1,650-2,500 LB.	MAY PREVENT GERMINATION OF GRASSES AND LEGUMES
HYDROMULCH	1 TON	47 LB.	415 LB.	SEE LIMITATIONS ABOVE

### TOPSOIL APPLICATION RATES

DEPTH (IN)	PER 1,000 SF	PER ACRE
1	3.1 CY	134 CY
2	6.2 CY	268 CY
3	9.3 CY	403 CY
4	12.4 CY	537 CY
5	15.5 CY	672 CY
6	18.6 CY	806 CY
7	21.7 CY	940 CY
8	24.8 CY	1,074 CY

ONWEAL

REGISTERED

PROFESSIONAL

ENGINEER 50557-E

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# EROSION & SEDIMENTATION CONTROL NOTES

![](_page_28_Picture_201.jpeg)

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![](_page_29_Figure_0.jpeg)

### Installation Made Easy

When under the pressure of severe conditions, even the best erosion control products can't function to their full potential without proper installation and anchoring. North American Green supplies a wide variety of fastener options for nearly every application and soil type. For use in cohesive soils, wire staples are a cost-effective

means to fasten RollMax™ System Rolled Erosion Control Products (RECPs). Available in 6 in., 8 in., 10 in. and 12 in. lengths, our U-shaped staples reach various depths to ensure adequate pull-out resistance. For installation using our handy Pin Pounder installation tool, 6 in. V-top staples or 6 in. circle top pins are available. Our biodegradable BioStakes® are available in 4 in. and 6 in.

lengths and provide an environmentally friendly alternative to metal staples. For an even more durable, deeper reaching vet all-natural anchoring option, our wood EcoStakes® are

![](_page_29_Figure_5.jpeg)

For severe applications needing the ultimate, long-lasting

hold, try our 12 in, and 18 in, rebar staples, our 12 in, plastic

oreMax[®] stakes, or our complete line of percussion earth

offer enhanced anchoring in the worst conditions. Our variety of

anchors. The earth anchors reach deep into the soil strata to

earth anchors are designed for durability and holding power

Proper staple patterns must be used to achieve optimal

results in RECP installation. We recommend the followin

general stapling patterns as guidance for use with our RECPs

as seen in (Figure 1). Site-specific staple pattern recommen-

dations based on soil type and severity of application may

be acquired through our Erosion Control Materials Design

Software (ECMDS®), www.ecmds.com.

STAPLE PATTERN

under extreme hydraulic stresses and adverse soil conditions.

Slope Installation

![](_page_29_Figure_7.jpeg)

COMPOST FILTER SOCK - EXISTING GRADE -COMPOST FILTER SOCK SECTION A-A NOTES

- PLACE STOCKPILES AT LOCATIONS AS SHOWN ON THE EROSION AND SEDIMENTATION CONTROL PLAN.
- ALL SIDE SLOPES SHALL BE 2 TO 1 OR FLATTER. STOCKPILE SHALL RECEIVE A VEGETATIVE COVER IN ACCORDANCE WITH MINIMUM STABILIZATION REQUIREMENTS.
- COMPOST FILTER SOCK SHALL BE INSTALLED AS DETAILED HEREON. LOCATION OF PROPOSED STOCKPILE WHICH AFFECT EROSION CONTROLS ARE SHOWN SCHEMATICALLY ONLY. ACTUAL STOCKPILE LOCATION MAY CHANGE DURING CONSTRUCTION.
- 6. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET.
  - STOCKPILE DETAIL

UNIFORM PARCEL IDENTIFIERS: #53-4-161, #53-4-162, #53-4-163, #53-4-164

![](_page_29_Figure_15.jpeg)

NOTES:

- . MAXIMUM DRAINAGE AREA =  $\frac{1}{2}$  ACRE. . INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS. 3. ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN
- CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY. 4. AT A MINIMUM. THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES
- NOT PASSING A NO. 40 SIEVE. 5. INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS

WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES. DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

![](_page_29_Figure_21.jpeg)

![](_page_29_Figure_23.jpeg)

- CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.
- 2. RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.
- 3. MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

COURSES IS NOT ACCEPTABLE.

ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE

ROCK CONSTRUCTION ENTRANCE DETAIL N.T.S.

![](_page_29_Figure_33.jpeg)

ORGANIC MATTER CONTENT	80% – 100% (DRY WEIGHT BASIS)
ORGANIC PORTION	FIBROUS AND ELONGATED
PH	5.5 - 8.0
MOISTURE CONTENT	35% – 55%
PARTICLE SIZE	98% PASS THROUGH 1" SCREEN
SOLUBLE SALT CONCENTRATION	5.0 dS/m (mmhos/cm) MAXIMUM

SHEET 13 OF 17

![](_page_30_Figure_0.jpeg)

1" = 30' SOILS LIST									
RIPTION	DEPTH TO SEASONALLY HIGH WATER TABLE	DEPTH TO BEDROCK	FREQUEN	CY OF: PONDING	HYDROLOGIC SOIL GROUP	HYDRIC SOIL RATING			
UDORTHEN	TS								
8% SLOPES	60"	20"-70"	NONE	NONE	с	NO			
5% SLOPES	60"	20"-70"	NONE	NONE	С	NO			

TEST       EX. GROUND       TEST       TEST       MEASURED       LIMITING ZONE       LIMITING ZONE       BMP NAME       BMP BOTTOM         ID       ELEVATION       DEPTH (FT)       ELEVATION       INF. RATE       LIMITING ZONE       LIMITING ZONE       BMP NAME       BMP BOTTOM         TP-1       406.00       6.00       400.00       0.31 IN/HR       NOT       N/A       SWM #100       399.75         DRIC SOIL       TP-2       406.00       6.00       400.00       0.22 IN/HR       NOT       N/A       SWM #100       399.75											
TP-1         406.00         6.00         400.00         0.31 IN/HR         NOT ENCOUNTERED         N/A         SWM #100         399.75           DRIC SOIL RATING         TP-2         406.00         6.00         400.00         0.22 IN/HR         NOT ENCOUNTERED         N/A         SWM #100         399.75			TEST ID	EX. GROUND ELEVATION	TEST DEPTH (FT)	TEST ELEVATION	MEASURED INF. RATE	LIMITING ZONE	LIMITING ZONE ELEVATION	BMP NAME	BMP BOTTOM ELEVATION
DRIC SOIL         TP-2         406.00         6.00         400.00         0.22 IN/HR         NOT         N/A         SWM #100         399.75			TP-1	406.00	6.00	400.00	0.31 IN/HR	NOT ENCOUNTERED	N/A	SWM #100	399.75
	DRIC SOIL RATING		TP-2	406.00	6.00	400.00	0.22 IN/HR	NOT ENCOUNTERED	N/A	SWM #100	399.75
NO TP-3 406.00 8.50 397.50 0.25 IN/HR NOT N/A SWM #200 397.50	NO		TP-3	406.00	8.50	397.50	0.25 IN/HR	NOT ENCOUNTERED	N/A	SWM #200	397.50
NO TP-4 406.00 8.00 398.00 0.25 IN/HR NOT N/A SWM #200 397.50	NO		TP-4	406.00	8.00	398.00	0.25 IN/HR	NOT ENCOUNTERED	N/A	SWM #200	397.50
		-									

### **GENERAL NOTES:**

### STORMWATER MANAGEMENT DESIGN:

- REFER TO THE "POST-CONSTRUCTION STORMWATER MANAGEMENT REPORT", PREPARED BY CHESTER VALLEY ENGINEERS.
- 2. MAINTENANCE NOTES:
  - A. THE BMP'S LISTED BELOW WILL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER. INFILTRATION BED(S) WATER QUALITY FILTER(S)
    - STORM SEWER AND ASSOCIATED STRUCTURES
- 3. DESIGN CONSIDERATIONS:
  - SUBSURFACE BED(S) DESIGNED TO STORE AND MITIGATE POST-DEVELOPMENT RUNOFF TO RATES LESS THAN THOSE REQUIRED BY TOWNSHIP CODE. SUBSURFACE BED(S) DESIGNED TO MITIGATE THE POST-DEVELOPMENT VOLUME INCREASE DUE TO DEVELOPMENT. WATER QUALITY FILTERS DESIGNED TO FILTER ALL SURFACE RUNOFF.
- 4. THE POST CONSTRUCTION STORMWATER MANAGEMENT PLAN HAS BEEN DESIGNED TO MEET THE FOLLOWING GOALS AND GUIDELINES:
  - PRESERVE THE INTEGRITY OF STREAM CHANNELS AND MAINTAIN AND PROTECT THE PHYSICAL. BIOLOGICAL AND CHEMICAL QUALITIES OF RECEIVING STREAMS.
  - PREVENT AN INCREASE IN THE RATE OF STORMWATER RUNOFF. MINIMIZE ANY INCREASE IN STORMWATER RUNOFF VOLUME.
  - MINIMIZE IMPERVIOUS AREAS. MAXIMIZE THE PROTECTION OF EXISTING DRAINAGE FEATURES AND EXISTING VEGETATION.
  - MINIMIZE LAND CLEARING AND GRADING. MINIMIZE SOIL COMPACTION.
  - H. UTILIZE OTHER STRUCTURAL OR NONSTRUCTURAL BMP'S THAT PREVENT OR MINIMIZE CHANGES IN STORMWATER RUNOFF.
- 5. THE RECEIVING WATER FOR THIS PROJECT IS EAST BRANCH OF CHESTER CREEK. THE CHAPTER 93 CLASSIFICATION FOR EAST BRANCH OF CHESTER CREEK IS TROUT STOCKING FISHES, MIGRATORY FISHES (TSF-MF).
- THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE. CONSTRUCTION WASTES MUST BE RECYCLED TO THE EXTENT PRACTICABLE, AND DISPOSAL METHODS MUST COMPLY WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS.
- THE PERMITTEE SHALL PROVIDE ENGINEERING CONSTRUCTION OVERSIGHT FOR THE PROPOSED STORMWATER BMPS. A LICENSED PROFESSIONAL ENGINEER KNOWLEDGEABLE IN THE DESIGN AND CONSTRUCTION OF STORMWATER BMPS. PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.
- AS-BUILT PLANS OF THE STORMWATER BMP'S SHALL BE PROVIDED WITHIN SIX MONTHS FOLLOWING THE COMPLETION OF EACH PHASE. THE AS-BUILT PLANS SHALL BE SIGNED AND SEALED BY A PA REGISTERED PROFESSIONAL ENGINEER.
- A NOTICE OF TERMINATION (NOT) WILL BE REQUIRED TO BE SUBMITTED FOLLOWING APPROVAL OF THE FINAL AS-BUILT PLANS. PRIOR TO ACCEPTING THE NOT, THE DEPARTMENT AND/OR CONSERVATION DISTRICT STAFF WILL PERFORM A FINAL INSPECTION TO ENSURE SITE STABILIZATION AND VERIFY ADEQUATE INSTALLATION AND FUNCTION OF STORMWATER BMP'S.
- 10. PCSM REPORTING AND RECORDKEEPING. THE PCSM PLAN, INSPECTION REPORTS AND MONITORING RECORDS SHALL BE AVAILABLE FOR REVIEW AND INSPECTION BY THE DEPARTMENT OR THE CONSERVATION DISTRICT.
- 11. FINAL CERTIFICATION. THE PERMITTEE SHALL INCLUDE WITH THE NOTICE OF TERMINATION "RECORD DRAWINGS" WITH A FINAL CERTIFICATION STATEMENT FROM A LICENSED PROFESSIONAL, WHICH READS AS FOLLOWS:

"I (NAME) DO HEREBY CERTIFY PURSUANT TO THE PENALTIES OF 18 PA.C.S.A. § 4904 TO THE BEST OF MY KNOWLEDGE, INFORMATION AND RELIEF, THAT THE ACCOMPANYING RECORD DRAWINGS ACCURATELY REFLECT THE AS-BUILT CONDITIONS, ARE TRUE AND CORRECT, AND ARE IN CONFORMANCE WITH CHAPTER 102 OF THE RULES AND REGULATIONS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THAT THE PROJECT SITE WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PCSM PLAN, ALL APPROVED PLAN CHANGES AND ACCEPTED CONSTRUCTION PRACTICES."

- (1) THE PERMITTEE SHALL RETAIN A COPY OF THE RECORD DRAWINGS AS A PART OF THE APPROVED PCSM PLAN.
- (2) THE PERMITTEE SHALL PROVIDE A COPY OF THE RECORD DRAWINGS AS A PART OF THE APPROVED PCSM PLAN TO THE PERSON IDENTIFIED IN THIS SECTION AS BEING RESPONSIBLE FOR THE LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMPS.
- 12. UPON PERMANENT STABILIZATION OF THE EARTH DISTURBANCE ACTIVITY UNDER § 102.22(A)(2) (RELATING TO PERMANENT STABILIZATION), AND INSTALLATION OF BMPS IN ACCORDANCE WITH AN APPROVED PLAN PREPARED AND IMPLEMENTED IN ACCORDANCE WITH §§ 102.4 AND 102.8 (RELATING TO EROSION AND SEDIMENT CONTROL REQUIREMENTS; AND PCSM REQUIREMENTS), THE PERMITTEE OR CO-PERMITTEE SHALL SUBMIT A NOTICE OF TERMINATION TO THE DEPARTMENT OR CONSERVATION DISTRICT.
- THE NOTICE OF TERMINATION MUST INCLUDE: (1) THE FACILITY NAME, ADDRESS AND LOCATION.
- (2) THE OPERATOR NAME AND ADDRESS.
- (3) THE PERMIT NUMBER (4) THE REASON FOR PERMIT TERMINATION.
- (5) IDENTIFICATION OF THE PERSONS WHO HAVE AGREED TO AND WILL BE RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMPS IN ACCORDANCE WITH \$102.8(M) AND PROOF OF COMPLIANCE WITH § 102.8(M)(2).

PRIOR TO ACCEPTING THE NOT, THE DEPARTMENT AND/OR CONSERVATION DISTRICT STAFF WILL PERFORM A FINAL INSPECTION AND APPROVE OR DENY THE NOTICE OF TERMINATION.

### GENERAL CONSERVATION NOTES AND SPECIFICATIONS

INTENT OF CONSERVATION PROGRAM: THE INTENT OF THIS PROGRAM IS TO PREVENT ACCELERATED EROSION OF THE EXPOSED SITE SOILS DURING THE CONSTRUCTION AND PERMANENT LIFE PERIODS OF THE DEVELOPMENT. THE PROGRAM REQUIRES RETENTION OF ALL SEDIMENTS ON THE CONSTRUCTION SITE TO MINIMIZE THE IMPACT OF DEVELOPMENT ON EXISTING STREAMS AND ADJACENT PROPERTY OWNERS. THESE OBJECTIVES WILL BE ACHIEVED BY MINIMIZING THE EXPOSURE TIME OF POTENTIALLY EROSIVE SOILS TO RUNOFF AND INSTALLATION OF THE TEMPORARY CONSTRUCTION. THE INTENT OF THIS PROGRAM SHOULD BE UNDERSTOOD AND IMPLEMENTED THROUGHOUT THE ENTIRE DEVELOPMENT. THE VARIOUS CONSTRUCTION TRADES SHOULD BE APPRAISED OF THIS PROGRAM AND DIRECTED TO PREVENT UNDUE DISTURBANCE OF PREPARED AND PROTECTED SURFACES.

SURFACE STABILIZATION CRITERIA: ALL DISTURBED SOIL SURFACES, INCLUDING SOIL STOCKPILES, ARE SUBJECT TO EROSION AND SHALL BE STABILIZED EITHER TEMPORARILY OR PERMANENTLY. IMMEDIATELY DURING NON-GERMINATION PERIODS. MULCH MUST BE APPLIED AT THE RECOMMENDED RATES. CRUSHED STONE ON PAVEMENT SUBGRADES IS CONSIDERED ADEQUATE PROTECTION. ALL DISTURBED ZONES AND VEGETATED REGIONS SHALL BE STABILIZED. PREFERABLY WITH A PERMANENT TREATMENT.

### CRITICAL VEGETATION AREAS (CVA)

CRITICAL VEGETATION AREAS ARE TO BE GRADED, HYDROSEEDED, AND MULCHED WITHIN 10 DAYS OF THE BEGINNING OF EXCAVATION. IN GENERAL, CRITICAL VEGETATION AREAS ARE DEFINED AS CUT SLOPES STEEPER THAN 3:1, ALL FILL SLOPES STEEPER THAN 4:1 AND IN ALL DRAINAGE SWALES.

### DISPOSAL AND RECYCLING

CONTRACTOR IS RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL DEMOLISHED OR UNUSED CONSTRUCTION MATERIALS. GARBAGE SHALL BE COLLECTED ON-SITE UNTIL RETRIEVED BY AN APPROVED DISPOSAL OR RECYCLING COMPANY, CONTRACTOR SHALL NOT INCINERATE EXCESS MATERIALS.

- LIKELY WASTE TO BE GENERATED AT THIS SITE: • UNUSED CONCRETE TO BE PLACED IN CONCRETE WASHOUT AREAS;
- EXCESS SILT SOCK AND FENCING MATERIALS; GENERAL RUBBISH AND DEBRIS

### THERMAL IMPACT

STORMWATER RUNOFF FROM THE DRIVEWAY AND PARKING AREAS DRAIN TO A SUBSURFACE INFILTRATION BED AND UNDERGROUND STORM DRAIN PIPES. THEREFORE, THE INITIAL RUNOFF THAT IS MOST LIKELY TO WARMER IS SENT UNDERGROUND AND NOT DISCHARGED TO THE WATERCOURSE. WATER HAS TIME TO COOL PRIOR TO LEAVING THE SITE AND DRAINING TO THE WATER COURSE.

### SPECIAL GEOLOGIC AND SOIL CONDITIONS

NO SPECIAL SOIL OR GEOLOGICAL ISSUES ARE KNOWN

### POST CONSTRUCTION STORMWATER MANAGEMENT (PCSWM) LONG-TERM OPERATIONS AND MAINTENANCE REQUIREMENTS

- 1. UNTIL THE PERMITTEE OR CO-PERMITTEE HAS RECEIVED WRITTEN APPROVAL OF A NOTICE OF TERMINATION. THE PERMITTEE OR CO-PERMITTEE WILL REMAIN RESPONSIBLE FOR COMPLIANCE WITH THE PERMIT TERMS AND CONDITIONS INCLUDING LONG-TERM OPERATION AND MAINTENANCE OF AL PCSWM BMPs ON THE PROJECT SITE AND IS RESPONSIBLE FOR VIOLATIONS OCCURRING ON THE PROJECT SITE.
- 2. THE PERMITTEE OR CO-PERMITTEE SHALL BE RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF PCSWM BMPs UNLESS A DIFFERENT PERSON IS IDENTIFIED IN THE NOTICE OF TERMINATION AND HAS AGREED TO LONG-TERM OPERATION AND MAINTENANCE OF PCSWM BMPs.
- . FOR ANY PROPERTY CONTAINING A PCSWM BMP, THE PERMITTEE OR CO-PERMITTEE SHALL RECORD AN INSTRUMENT WITH THE RECORDER OF DEEDS WHICH WILL ASSURE DISCLOSURE OF THE PCSWM BMP AND THE RELATED OBLIGATIONS IN THE ORDINARY COURSE OF A TITLE SEARCH OF THE SUBJECT PROPERTY. THE RECORDED INSTRUMENT MUST IDENTIFY THE PCSWM BMP, PROVIDE FOR NECESSARY ACCESS RELATED TO LONG-TERM OPERATION AND MAINTENANCE FOR PCSWM BMPs AND PROVIDE NOTICE THAT THE RESPONSIBILITY FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSWM BMP IS A COVENANT THAT RUNS WITH THE LAND THAT IS BINDING UPON AND ENFORCEABLE BY THE SUBSEQUENT GRANTEES. AND PROVIDE PROOF OF FILING WITH THE NOTICE OF TERMINATION UNDER § 102.7(b)(5) (RELATING TO PERMIT TERMINATION).
- THE PERSON RESPONSIBLE FOR PERFORMING LONG-TERM OPERATION AND MAINTENANCE MAY ENTER INTO AN AGREEMENT WITH ANOTHER PERSON INCLUDING A CONSERVATION DISTRICT, NONPROFIT ORGANIZATION, MUNICIPALITY, AUTHORITY, PRIVATE CORPORATION OR OTHER PERSON, TO TRANSFER THE RESPONSIBILITY FOR PCSWM BMPs OR TO PERFORM LONG-TERM OPERATION AND MAINTENANCE AND PROVIDE NOTICE THEREOF TO THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.
- 5. A PERMITTEE OR CO-PERMITTEE THAT FAILS TO TRANSFER LONG-TERM OPERATION AND MAINTENANCE OF THE PCSWM BMP OR OTHERWISE FAILS TO COMPLY WITH THIS REQUIREMENT SHALL REMAIN JOINTLY AND SEVERALLY RESPONSIBLE WITH THE LANDOWNER FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSWM BMPs LOCATED ON THE PROPERTY
- 6. IN THE EVENT THAT THE BMP IS NOT FUNCTIONING PROPERLY. THE PERSON RESPONSIBLE FOR PERFORMING LONG-TERM OPERATION AND MAINTENANCE SHALL BE REQUIRED TO REPAIR OR REPLACE THE BMP TO ENSURE FUNCTION AND OPERATION.
- 7. THE PERMITTEE SHALL BE REQUIRED TO SUBMIT A WRITTEN REPORT DOCUMENTING EACH INSPECTION AND ALL BMP REPAIR AND MAINTENANCE ACTIVITIES TO THE TOWNSHIP, CONSERVATION DISTRICT, AND THE DEPARTMENT UPON REQUEST.

### BMP FAILURE NOTES (PER PROTOCOL 2 OF THE BMP MANUAL)

- THE TERM "FAILURE" FOR THE PROPOSED SUBSURFACE BED SHALL BE DEFINED 1) THE LOSS OF FUNCTIONALITY OF THE PROPOSED OUTLET STRUCTURE
- OR DISCHARGE PIPE THE LOSS OF STRUCTURAL INTEGRITY OF THE STONE AND PIPES
- 3) THE ACCUMULATION OF SEDIMENT, TRASH OR DEBRIS IN PERIMETER DRAINAGE STRUCTURES
- 4) STANDING WATER IS OBSERVED IN THE BASIN AFTER 72 HOURS

### THE PERMITTEE SHALL MAKE THE NECESSARY REPAIRS TO THE OUTLET STRUCTURE, DISCHARGE PIPING, STONE, AND PERFORATED PIPE AS NEEDED. IF STANDING WATER IS OBSERVED AFTER 72 HOURS, CONSULT ENGINEER FOR REMEDIATION OF THE UNDERGROUND BED.

- THE TERM "FAILURE" FOR THE PROPOSED WATER QUALITY INLETS (FILTER INSERTS) SHALL BE DEFINED AS: DISCOVER EVIDENCE OF DAMAGED FILTER MEDIA 2) DISCOVER EVIDENCE OF THE FILTER MEDIA'S INABILITY TO SUPPORT
- ACCUMULATED SEDIMENT OR DEBRIS.
- THE PERMITTEE SHALL REPAIR BMP FAILURE BY REPLACING THE FILTER MEDIA IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.

### POST CONSTRUCTION STORMWATER MANAGEMENT REPORTING AND RECORD KEEPING

A WRITTEN REPORT DOCUMENTING EACH INSPECTION AND ALL BMP REPOARI AND MAINTENANCE ACTIVITIES MUST BE PROVIDED AS PART OF THE LONG-TERM OPERATION AND MAINTENANCE PROGRAM.

### THE POST CONSTRUCTION STORMWATER MANAGEMENT PLAN, INSPECTION REPORTS, AND MONITORING RECORDS SHALL BE AVAILABLE FOR REVIEW AND INSPECTION BY THE DEPARTMENT OR THE CONSERVATION DISTRICT.

### WATER QUALITY INLETS (FILTER INSERTS)

IT SHALL BE THE SOLE RESPONSIBILITY OF THE PROPERTY OWNER TO MAINTAIN ALL WATER QUALITY INLETS ON SITE.

- INSPECTION REQUIREMENTS . WATER QUALITY INLET INSERTS SHOULD BE INSPECTED THREE TIMES PER YEAR.
- A. DURING THE THREE ROUTINE INSPECTIONS, THE FILTER MEDIA SHALL BE CLEANED. B. ONE REGULAR CHANGE AND DISPOSAL OF THE FILTER MEDIA SHALL OCCUR DURING THE CALENDAR YEAR AS WELL.
- BMP FAILURE BMP FAILURE IS DEFINED AS DISCOVERING EVIDENCE OF TORN FILTER FABRIC OR FILTER MEDIA INABILITY TO SUPPORT ACCUMULATED SEDIMENT OR DEBRIS.
- 2. REPAIR BMP FAILURE BY REPLACING THE FILTER MEDIA IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.
- <u>GENERAL MAINTENANCE NOTES</u> 1. WATER QUALITY INLET INSERTS SHALL BE CHECKED TO ENSURE THEY ARE SECURELY FASTENED DURING EACH INSPECTION.
- . RECOMMENDED MAINTENANCE IS PERFORMED INCLUDING REMOVAL AND DISPOSAL OF THE FILTER MEDIA OR EXCESS MATERIAL BY PERSONNEL.
- DISPOSAL OF REMOVED MATERIAL WILL DEPEND ON THE NATURE OF THE DRAINAGE AREA AND THE INTENT AND FUNCTION OF THE WATER QUALITY INSERT.
- 2. MATERIAL REMOVED FROM WATER QUALITY INSERTS THAT SERVE "HOT SPOTS" SUCH AS FUELING STATIONS THAT RECEIVE A LARGE AMOUNT OF DEBRIS SHOULD BE HANDLING ACCORDING TO DEP REGULATIONS FOR THAT TYPE OF SOLID WASTE, SUCH AS A LANDFILL THAT IS APPROVED BY DEP TO ACCEPT SOLID WASTE. WATER QUALITY INSERTS THAT PRIMARILY CATCH SEDIMENT AND DETRITUS FROM AREAS SUCH AS LAWNS MAY REUSE THE WASTE ON SITE.
- CONSTRUCTION SEQUENCE REMOVE THE GRATE OF THE INSTALLED INLET AND SET IT TO THE SIDE.
- 2. REMOVE DEBRIS AND LITTER FROM THE INLET.
- 3. CLEAN OFF THE GRATE BEARING LEDGE.
- 4. LOWER THE FILTER ASSEMBLY INTO THE INLET UNTIL THE ASSEMBLY'S SUPPORT FLANGES REST ON THE GRATE BEARING LEDGE.
- 5. INSURE THAT THE FOUR FILTER MEDIUM CARTRIDGES ARE ATTACHED TO

THE D-RINGS IN THE BOTTOM CORNERS OF THE FILTER ASSEMBLY. CRITICAL STAGE OF CONSTRUCTION: CONTACT ENGINEER TO VERIFY INSTALLATION OF WATER QUALITY INSERTS.

6. REPLACE THE INLET GRATE.

![](_page_31_Figure_81.jpeg)

GRATE (STRUCTURAL STEEL SHOWN)

CONCRETE TOP UNI

-INLET BOX

— GRADE ADJUSTWEN1 R[NG, SEE NOTE 4

DOWEL BARS (SEE RC-45MF-

# WATER QUALITY INSERT DETAIL

SUBSURFACE INFILTRATION BEDS (SWM #100 & #200)

THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM(S)

GRAB TENSILE STRENGTH (ASTM-D4632):

FLOW RATE (ASTM-D4491):

GEOTEX 451.

MULLEN BURST STRENGTH (ASTM-D3786):

SPECIFICATIONS

SHALL BE THE SOLE RESPONSIBILITY OF THE PROPERTY OWNER TO MAINTAIN

AGGREGATE: AGGREGATE FOR BEDS SHALL BE 3/8 INCH TO 3/4 INCH

NON-WOVEN GEOTEXTILE: SHALL CONSIST OF NEEDLED NON-WOVEN

UV RESISTANCE AFTER 500 HOURS (ASTM-D4355%): 70%

HEAT-SET OR HEAT-CALENDARED FABRICS ARE NOT PERMITTED.

ACCEPTABLE TYPES INCLUDE MIRAFI 140N, AMOCO 4547, AND

POLYPROPYLENE FIBERS AND MEET THE FOLLOWING PROPERTIES:

4, AASHTO SPECIFICATIONS, PART I, 13TH ED., 1998 (P. 47).

UNIFORMLY GRADED COARSE AGGREGATE, AASHTO NUMBER 57 PER TABLE

120 LBS

225 PSI.

95 GPM/FT²

N.T.S.

![](_page_31_Figure_87.jpeg)

![](_page_32_Figure_0.jpeg)

![](_page_32_Figure_1.jpeg)

SHEET 16 OF 17

COPYRIGHTCHESTER VALLEY ENGINEERS, INC., CIVIL ENGINEERS & SURVEYORS,<br/>EXPRESSITY RESERVENT WITHOUT ENGINEERS, INC., COMMON LAW COPYRIGHT AND ALL OTHER<br/>PROPRIETARY RIGHTS IN THESE PLANS. ALL DRAWINGS, SPECIFICATIONS<br/>AND COPIES THEREOF ARE AND SHALL REMAIN THE PROPERTY OF CHESTER<br/>VALLEY ENGINEERS, INC. THEY ARE TO BE USED ON ANY OTHER PROJECT, NOT<br/>THIS PROJECT AND ARE NETTHER TO BE USED ON ANY OTHER PROJECT, NOT<br/>THIS PROJECT AND ARE NETTHER TO BE USED ON ANY OTHER PROJECT, NOT<br/>THIS PROJECT AND ARE NETTHER TO BE USED ON ANY OTHER PROJECT, NOT<br/>THIS PROJECT AND ARE NETTHER TO BE USED ON ANY OTHER PROJECT, NOT<br/>THIS PROJECT AND ARE NETTHER TO BE USED ON ANY OTHER PROJECT, NOT<br/>THIS PROJECT AND ARE NETTHER TO BE USED ON ANY OTHER PROJECT, NOT<br/>THIS PROJECT AND ARE NETTHER TO BE USED ON ANY OTHER ROJECT, NOT<br/>THIS PROJECT AND ARE NETTHER TO BE USED ON ANY OTHER ROJECT, NOT<br/>THE SPROJECT AND ARE NETTHER TO BE USED ON ANY OTHER ROJECT, NOT<br/>THIS PROJECT AND ARE NETTHER TO BE USED ON ANY OTHER ROJECT, NOT<br/>THIS PROJECT AND ARE NETTHER PROMISSION AND CONSENT OF CHESTER VALLEY<br/>ENGINEERS, INC., TOR THE DEANS ON AND CONSENT OF CHESTER VALLEY<br/>ENGINEERS, INC., TOR THE DEANS ON CONFAINED ON THIS STUDIER OFTICATION AND ADDEANS<br/>THE SPROJECT AND ARE THE THIRD PARTY WITHOUT FIRST OBTINING<br/>THE VIEW SOLUTION OR INSTALLATION OF IMPROVEMENTS SHOULD OCCUR<br/>UNTIL ALL DISCREPANCIES HAVE BEEN VERIFIED WITH CHESTER VALLEY<br/>ENGINEERS, INC., TOR THE DEANS ON VERIFICATION,<br/>REPRESENTATION FOR THE USERS FAILURE TO OBTAIN CORRENT VERIFICATION<br/>REPRESENTATION FOR THE USERS FAILURE TO OBTAIN CORRENT VERIFICATION<br/>AND VALIDATION OF THE INFORMATION CONTAINED ON THIS FILE OFTICATIONAL SAFETY AND HEALTH ADMINISTRATION<br/>PROPERTY OR FINANCIAL LOSS OR DAMAGES OF ANY KIND RESULTING FROM<br/>THE USE OFTING DAMAGES, INC., FOR ALL CUAMS, DAMAGES, SOL ANY THIRD PARTY. THE USER ASSUMES ANY RISK OF ANY AND HEAD AND SAND ON THE ALL DISCREPANCY

Construction industry standards and interpretations (osha 2207) Subpart "P", part 1926/1910 – "Excavations, trenching and shoring".

(2) "EXCAVATIONS AND TRENCHING OPERATIONS" (OSHA 2226) DATED POCS SERIAL NUMBER: <u>2023213</u>0344 1985 (REVISED).

![](_page_33_Picture_4.jpeg)

SEE SHEET <u>1</u> FOR FACILITY OWNER'S DESIGNATED OFFICE ADDRESS AND TELEPHONE NUMBER.

PENNSYLVANIA ONE CALL SYSTEM, INC. CALL 3 WORKING DAYS BEFORE YOU DIG 1-800-242-1776

UNIFORM PARCEL IDENTIFIERS: #53-4-161, #53-4-162, #53-4-163, #53-4-164

![](_page_33_Figure_8.jpeg)

1'' = 30'

![](_page_33_Picture_10.jpeg)

<u> </u>
$\times$
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
PROPOSED FEATURES

5	
	EXISTING PROPERTY BOUNDARY EXISTING ADJOINING PROP. LINE EXISTING RIGHT-OF-WAY LINE EXISTING EASEMENT EXISTING SETBACK BOUNDARY EXISTING BUILDING
	EXISTING CURB EXISTING EDGE OF PAVEMENT EXISTING FENCE EXISTING LIGHT POLE EXISTING SIGN EXISTING UTILITY POLE EXISTING CONIFEROUS TREE EXISTING DECIDUOUS TREE
ES	EXISTING TREE & SHRUB LINE
	PROPOSED BUILDING
\sim	PROPOSED HEAVY DUTY PAVEMENT
	PROPOSED STANDARD PAVEMENT
<	PROPOSED CONCRETE PAD/SIDEWALK
\sim	PROPOSED PAVERS
	PROPOSED RETAINING WALL PROPOSED CONCRETE CURB NUMBER OF PROPOSED DARKING SPACES

JRM

RRB

U

Memorandum

East Goshen Township 1580 Paoli Pike West Chester, PA 19380 610-692-7171 ext. 3103 <u>kkrause@eastgoshen.org</u>

Date: To: From: **Re:** September 18, 2024 East Goshen Township Planning Commission Kelly A. Krause, Zoning Officer **1338 Morstein Road - Schiffer Tract Subdivision** Act 537 Sewer Facilities Planning Module Application Component 4A- Municipal Planning Agency Review

The applicant has requested that the Planning Commission complete the Municipal Planning Agency Review form (Component 4A) for the submission of the Sewer Facilities Planning Module for the abovereferenced subdivision.

This plan proposes the creation of sixteen residential lots to be served by a connection to public sewer. Three of the sixteen lots associated with the project are located at 1338 Morstein Road in East Goshen Township, with the remaining thirteen lots located at 1375 Old Phoenixville Pike in West Whiteland Township.

Draft Motion:

Mr. Chairman, I move that we authorize the completion of Component 4A of the Sewer Facilities Planning Module for the project located at 1338 Morstein Road, and forward to the applicant's engineer for submission to the Department of Environmental Protection.

•••••

SEWAGE FACILITIES PLANNING MODULE DEP CODE # 1-15919-254-3

FOR

SCHIFFER TRACT WEST WHITELAND/EAST GOSHEN TOWNSHIPS CHESTER COUNTY, PENNSYLVANIA

February 2024

Prepared for:

The West Chester University Foundation 202 Carter Drive West Chester, PA 19382

Prepared by: HOWELL ENGINEERING 1250 Wrights Lane, West Chester, PA 19380

Phone: 610-918-9002 Fax: 610-918-9003

SENT VIA ELECTRONIC MAIL ONLY

December 18, 2023

Mr. Dave DiCecco Howell Engineering 1250 Wrights Lane West Chester, PA 19380

Re: Application for Planning Modules Checklist Letter – Component 3 Schiffer Tract Residential Subdivision DEP Code No. 1-15919-254-3, 1-15971-488-3 East Goshen Township, West Whiteland Township Chester County

Dear Mr. DiCecco:

In response to your application mailer, this checklist letter outlines what is required to be submitted to the municipality and the Department of Environmental Protection ("DEP") as a complete module packet for the proposed development. The project proposes a 16-lot residential subdivision that will be served by a connection to public sewer. The project is located at 1338 Morstein Road, in East Goshen Township, and 1375 Old Phoenixville Pike, in West Whiteland Township, Chester County.

Sewage Facilities Planning Module forms are available online at www.dep.pa.gov. At the top of the page, select Businesses, then Water. On the right-side of the page, select the following: Bureau of Clean Water; Wastewater Management; Act 537; and Sewage Facilities Planning. Select the appropriate forms from the center of the page.

Your project requires the following forms. Please enter the above-referenced DEP Code Number on the first page of each form.

Sewage Facilities Planning Module Transmittal Letter, Form 3850-FM-BCW0355 Sewage Facilities Planning Module Resolution, Form 3850-FM-BCW0356 Sewage Facilities Planning Module Component 3, Form 3800-FM-BPNPSM0353

- Instructions
- Form

Sewage Facilities Planning Module Component 4

- 4A-Municipal Planning Agency Review, Form 3850-FM-BCW0362A
- 4B-County Planning Agency Review, Form 3850-FM-BCW0362B
- 4C-County or Joint Health Department Review, Form 3850-FM-BCW0362C

Please submit the completed planning modules and supporting information to the municipality or municipalities in which the project is located. DEP must receive 3 copies of the completed planning

2 East Main Street | Norristown, PA 19401-4915 | 484.250.5970 | Fax 484.250.5971 | www.dep.pa.gov

module. Please answer all questions within the planning module. Do not simply answer "N/A" or "Not Applicable." If you feel a question does not apply, explain all reasons to support that answer.

On March 31, 2023, the United States Fish & Wildlife Service ("USFWS") issued a final rule to reclassify the federal listing of the Northern Long-Eared Bat as an Endangered Species under the Endangered Species Act. To ensure your project considers potential impacts to this federally listed species, all PNDI receipts and clearance letters from USFWS, if applicable, must be dated after March 31, 2023.

Please refer to the Standard Operating Procedures ("SOP") that govern Act 537 sewage facilities planning module reviews. The SOPs can be found on the DEP website. Consistent with the SOP, DEP may disapprove an administratively incomplete planning module submission. Please use the checklist provided in this letter below to guide both you and the municipality in providing an administratively complete planning module submission to DEP for review.

A copy of this letter should be attached to the planning module when submitted through the municipality to DEP. This letter is to be used by the applicant (or the applicant's authorized representative) as a checklist and guide to completing the planning modules and does not supersede the rules and regulations found in Chapter 71. The municipality must submit a complete module package. (See end of letter for applicant and municipal certification statements.)

In all cases, address the immediate and long-range sewage disposal needs of the proposal and comply with 25 Pa. Code, Chapter 71, Subchapter C relating to New Land Development Plan Revisions.

If you have any questions concerning the information required, please contact me at 484.250.5188 or at laawalke@pa.gov.

Sincerely,

Laura Walker

Laura Walker Environmental Trainee Clean Water

cc: Chester County Health Department (via email) Chester County Planning Commission (via email) Chester County Conservation District (via email) East Goshen Township (via email) West Whiteland Township (via email) West Chester University Foundation (via email) East Goshen Township Municipal Authority (via email) Downingtown Area Regional Authority (via email) Planning Section Re 30 Component 4A

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COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION **BUREAU OF CLEAN WATER**

DEP Code #: 1-15919-254-3

SEWAGE FACILITIES PLANNING MODULE **COMPONENT 4A - MUNICIPAL PLANNING AGENCY REVIEW**

Note to Project Sponsor: To expedite the review of your proposal, one copy of your completed planning module package and one copy of this Planning Agency Review Component should be sent to the local municipal planning agency for their comments.

PROJECT NAME (See Section A of instructions) SECTION A.

Project Name

Yes

Χ

X

Х

 \square

Χ

X

No

Schiffer Tract Residential Subdivision

REVIEW SCHEDULE (See Section B of instructions) SECTION B.

1. Date plan received by municipal planning agency

September 24, 2024 2. Date review completed by agency

AGENCY REVIEW (See Section C of instructions) SECTION C.

X Is there a municipal comprehensive plan adopted under the Municipalities Planning Code 1. (53 P.S. 10101, et seq.)?

	2.	Is this proposal consistent with the comprehensive plan for land use?
--	----	---

- If no, describe the inconsistencies
- Is this proposal consistent with the use, development, and protection of water resources? Π 3.

If no, describe the inconsistencies

- Is this proposal consistent with municipal land use planning relative to Prime Agricultural Land П 4. Preservation?
 - Does this project propose encroachments, obstructions, or dams that will affect wetlands? X 5. If yes, describe impacts

Will any known historical or archaeological resources be impacted by this project? Χ 6.

If yes, describe impacts

ordinanaa?

Will any known endangered or threatened species of plant or animal be impacted by this X \square 7. project?

If yes, describe impacts _____

	8.	ls there a	municipal	zoning	ordinance?	1
--	----	------------	-----------	--------	------------	---

X		9.	Is this proposal consistent with the ordinance?
			If no, describe the inconsistencies
	X	10.	Does the proposal require a change or variance to an existing comprehensive plan or zoning

	ordinance
X	11. Have all applicable zoning approvals been obtained?

3850-FM-BCW0362A 6/2016

SECTION	۱C.	AGENC	Y REVIEW (continued)
Yes	No		
		13.	Is this proposal consistent with the ordinance?
			If no, describe the inconsistencies
X		14.	Is this plan consistent with the municipal Official Sewage Facilities Plan?
			If no, describe the inconsistencies
	X	15.	Are there any wastewater disposal needs in the area adjacent to this proposal that should be considered by the municipality?
			If yes, describe
	X	16.	Has a waiver of the sewage facilities planning requirements been requested for the residual tract of this subdivision?
			If yes, is the proposed waiver consistent with applicable ordinances?
3			If no, describe the inconsistencies
		17.	Name, title and signature of planning agency staff member completing this section:
			Title: Chairman, East Goshen Planning Commission
			Signature:
			Date:September 24, 2024
			Name of Municipal Planning Agency:East Goshen Township Planning Commission
			Address 1580 Paoli Pike, West Chester, PA 19380
			Telephone Number:610-692-7171
SECTIO	ND.	ADDIT	IONAL COMMENTS (See Section D of instructions)
This con of the pr	nponer oposec	nt does r d plan to	not limit municipal planning agencies from making additional comments concerning the relevancy other plans or ordinances. If additional comments are needed, attach additional sheets.
The plar	nning a	gency m	nust complete this component within 60 days.

This component and any additional comments are to be returned to the applicant.