Haverford Township - Planning Commission

Meeting: Thursday, June 12, 2025 Time: 7:00 p.m.

Location: Commissioners Meeting Room -1014 Darby Rd., Havertown PA, 19083

Members: Maggie Dobbs, Chairperson E. David Chanin, Vice-Chairperson Stephen Welsh, Secretary Angelo Capuzzi Louis D. Montresor Kim Jusczak Victor Cortese Others in Attendance: Charles Faulkner, Pennoni Associates, Township Engineer Jaime Jilozian, Director of Community Development

Regular Meeting Agenda

1. Opening of Meeting Roll Call

Pledge of Allegiance

2. 380 Highland Lane, SS. Colman/John Neumann (SJCN) - Preliminary/Final Land Development Plan

D.C. Folio No. 22-05-0425-01

The applicant, St. John Neumann Parish, proposes to construct a new 3,890 square foot building addition to the existing school at the referenced property. A subsurface infiltration facility is proposed for stormwater management. The property is within the INS Institutional Zoning District. The existing school is served by public water service and sanitary sewer.

Public Comment / Citizens Forum

3. Darby & Marple Road Act 537 Special Study

Adjournment



TOWNSHIP OF HAVERFORD

DELAWARE COUNTY 1014 DARBY ROAD HAVERTOWN, PA 19083-2551 (610) 446-1000

May 29, 2025

JUDY TROMBETTA, PRESIDENT KEVIN MCCLOSKEY, ESQ., VICE PRESIDENT DAVID R. BURMAN, TWP MANAGER/SECRETARY AIMEE CUTHBERTSON, CPA, ASS'T TWP MANAGER JOHN F. WALKO, SOLICITOR PENNONI ASSOCIATES INC., ENGINEER

WARD COMMISSIONERS 1ST WARD BRIAN D. GONDEK, ESQ. 2ND WARD SHERYL FORSTE-GRUPP, PHD. 3RD WARD KEVIN MCCLOSKEY, ESQ. 4TH WARD JUDY TROMBETTA 5TH WARD LAURA CAVENDER 6TH WARD LAURA CAVENDER 6TH WARD LARRY HOLMES, ESQ. 7TH WARD GERARD T. HART, MD 9TH WARD MICHAEL MCCOLLUM

HAVTT 30266

Jaime Jilozian, Director of Community Development Haverford Township 1014 Darby Road Havertown, PA 19083-2251

RE: Preliminary/Final Subdivision Plan SS. Colman/John Neumann - 380 Highland Lane

Dear Ms. Jilozian:

As requested, we have reviewed the following prepared by Linn Architects in connection with the referenced property:

- "Building Addition for SS. Colman-John Neumann School" (seven sheets) dated April 25, 2025.
- "Stormwater Management Report for SS. Colman-John Neumann School" dated April 28, 2025.
- Supporting Documentation

The applicant, St. John Neumann Parish, proposes to construct a new addition to the existing elementary school at the referenced property. A subsurface infiltration facility is proposed for stormwater management. The property is within the INS Institutional Zoning District. The existing school is served by public water service and sanitary sewer.

The applicant has requested the following waivers:

- A partial waiver from §78-36.D(3) requiring field tests for the proposed soil conditions in the footprint of the proposed BMP as required in the PA BMP Manual.
- A partial waiver from §78-37.D(1)[a] requiring all pervious surface to be counted as meadow in good condition and 20% of all existing pervious surface to be counted as meadow.
- From §160-4.A requiring a two-step preliminary/final plan approval procedure.
- From §160-4.E(5)(1) requiring a traffic impact study for land development plans involving commercial or industrial uses.
- From §160-4.E(5)[e](4) requiring all storm, sanitary and water lines within 400 feet of the site to be depicted on the plans.
- From §160-4.E(5)[g] requiring a lighting plan for internal parking areas.
- From 160-5.B(4)[a] requiring curbs for all existing streets.
- From 160-5.B(4)[c] requiring sidewalks for all existing streets.

A HOME RULE MUNICIPALITY

- From 160-5.B(4)[f] requiring streetlights for multifamily residential areas at the discretion of the Board of Commissioners.
- From §160-5.B(5)[g] requiring all pipes to have a minimum diameter of 15 inches.
- From 160-5.B(6, 7, 8)) requiring shade trees, buffer areas, and survey monuments.
- From the Haverford Township Design Standards requiring an 8-inch reveal for curbs.

We offer the following comments:

<u>ZONING</u>

- 1. A nonconforming use of a lot or land may be extended or enlarged when authorized as a special exception by the Zoning Hearing Board and consistent with the requirements set forth in (§182-802.B(1))
- 2. In the case of parking lot which is accessory to a permitted used and which has facilities for three (3) or more vehicles, any boundary or property line which abuts a residential district shall be screened from the adjacent property by a buffer planting strip not less than five (5) feet in width. (§182-707.A(3)) We recognize there is existing screening in various areas; however, it appears some portions of the existing buffer could be further improved to enhance areas that are not as robust.
- 3. A planted visual barrier or buffer planting strip 30-feet in width shall be provided between institutional districts and a contiguous residential district. (§182-718.B(1)[a], §182-718.B(2)[c])) We recognize there is existing screening in various areas; however, it appears some portions of the existing buffer could be further improved to enhance areas that are not as robust.
- 4. In institutional districts there shall be a front yard landscape strip, planted and landscaped subject to the approval of the Shade Tree Commission. (§182-718.B(1)[c]) The applicant should coordinate with the Shade Tree Commission to determine if additional plantings are required in the existing front yard landscape strip.

SUBDIVISION AND LAND DEVELOPMENT

- 5. After submitting the preliminary plan, the applicant shall be responsible for notifying all property owners within 200 feet of the boundaries of the subject lot that a preliminary plan proposed for the subject lot has been filed, no less than 10 days prior to the first Planning Commission meeting for which the plan has been scheduled for review. (§160.4.E(7)) Notice shall be made by certified mail, return receipt requested, or by other proof of notification satisfactory to the Township. Proof of such notification shall be presented to the Planning Commission at the first meeting for which the plan has been scheduled for review. (§160.4.E(8))
- 6. The location, names and widths of streets, curbs and pavement (public or private), all property lines and names of owners of tracts or parcels located within 200 feet of the site should be provided, or a waiver requested. (§160-4.E(5)[e](3))
- 7. Curb is required to be provided for all existing streets. (§160-5.B(4)[a]) The applicant has requested a waiver from this requirement.

- 8. Sidewalk is required to be provided for all existing streets. (§160-5.B(4)[c]) The applicant has requested a waiver from this requirement.
- 9. The cartway widths for Highland Lane and Radnor Road are to be indicated on the plan. (§160-4.E(5)[e](3))
- 10. For any new nonresidential development involving one acre or more, land shall be required to be set aside for open space and/or parks and recreational facilities. If the tract or parcel being considered for development represents a portion of the applicant's holdings of contiguous lands, whether acquired as a single parcel or cumulatively, the provisions for reservation of land shall apply over the applicant's entire holdings. (§160-5.C(2))
- 11. A Sewage Facilities Planning module may be required. (§160-4.E(5[d])
- 12. Signature blocks for the Township and County Planning Commission are required. (§160-4.H(1)[e])

STORMWATER MANAGEMENT

- 13. A Drainage Plan Application and Checklist are required to be provided. (§78-26.A(7))
- 14. Justification is to be provided if stormwater facilities other than green infrastructure methods and LID practices are proposed to achieve the volume, rate, and water quality requirements. (§78-26.A(6))
- 15. A tabulation of existing and proposed impervious surface should be provided on the plan. (§78-25.B(7))
- 16. Infiltration test results are required to be submitted. (§78-34.B(2)) The applicant has requested a partial waiver from this requirement to utilize prior infiltration test results. Previous test results should be included in the stormwater management report, and a note on the plan indicating that additional testing will be conducted during construction to confirm the design infiltration rate is to be provided.
- 17. A drainage area map is to be provided. (§78-26.A(3))
- 18. The invert of the proposed 8-inch outlet pipe indicated on the plan is inconsistent with the calculations.
- 19. Installation of the proposed stormwater management facility is to be included in the sequence of construction. (§78-26.A(4))
- 20. Areas proposed for infiltration are to be protected from compaction during construction. (§78-34.F(1)
- 21. Pretreatment is required prior to infiltration. The infiltration bed cross section and the detail for the Nyoplast drain basins should indicate a minimum 12-inch sump. (§78-36.A(1)[d])
- 22. The municipal signature block as set forth in §78-26.B(24) is required to be included on the plan.

A HOME RULE MUNICIPALITY

- 23. Pipe conveyance calculations should be provided. (§78-25.A(3))
- A BMP Maintenance Agreement shall be executed and a contribution of \$2,200.00 per lot to the Township Stormwater Control and BMP Operation and Maintenance Fund shall be made. (§78-49, §78-51)

<u>GENERAL</u>

- 25. The existing drive aisle on the west side is being reduced to 15-foot wide. The applicant should confirm this width is adequate for emergency vehicle access.
- 26. Appropriate signage should be added to delineate the new drive aisle is one-way.

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

Sincerely,

PENNONI

Charles Faulhur

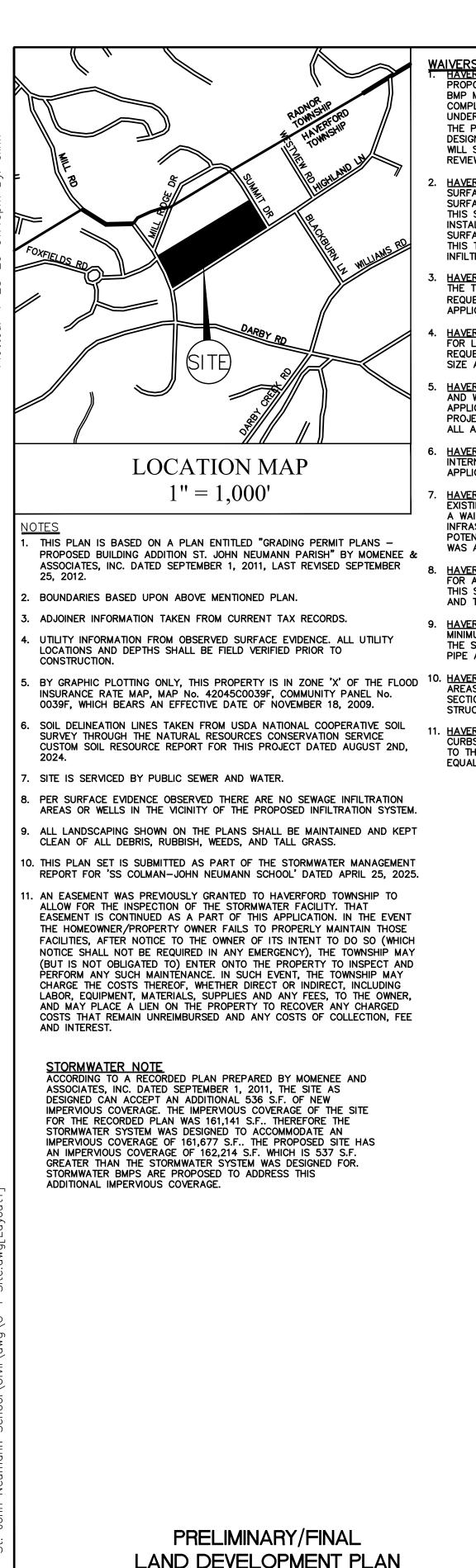
Charles Faulkner, PE Senior Engineer

CF/brg

cc: St. John Neumann Parish Jeff Gentile, PE, Linn Architects

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VAIVERS REQUESTE HAVERFORD TOWNSHIP E&S.SWM ORD. SECTION 78-36.D(3): REQUIRING FIELD TESTS FOR THE PROPOSED SOIL CONDITIONS IN THE FOOTPRINT OF THE PROPOSED BMP AS REQUIRED IN THE PA BMP MANUAL. THE APPLICANT IS REQUESTING A PARTIAL WAIVER FROM THIS SECTION TO COMPLETE THE STORMWATER DURING THE CONSTRUCTION PHASE AS THE PROPOSED BMP IS

UNDER A SECTION OF EXISTING ASPHALT. TESTING HAS BEEN COMPLETED ON THE SITE OVER THE PAST FEW YEARS FOR OTHER ADDITONS AND BMP'S, SO THE SWM FACILITY HAS BEEN DESIGNED WITH THESE RATES IN MIND ACCOUNTING FOR A FACTOR OF SAFETY. THE APPLICANT WILL SUBMIT SOIL TESTING AND IF NEEDED, A MODIFIED BED DESIGN TO THE TOWNSHIP FOR **REVIEW PRIOR TO INSTALLATION.**

- HAVERFORD TOWNSHIP E&S.SWM ORD. SECTION 78-37.D(1)(a): REQUIRING ALL PERVIOUS SURFACE TO BE COUNTED AS MEADOW IN GOOD CONDITION AND 20% OF ALL EXISTING PERVIOUS SURFACE TO BE COUNTED AS MEADOW. THE APPLICANT IS REQUESTING A PARTIAL WAIVER FROM THIS SECTION FOR A PORTION OF THE DEVELOPMENT. THE EXISTING TEMPORARY TRAILER WAS INSTALLED AND COMPUTED USING THESE CALCULATIONS TO ACCEPT 1,833 S.F. OF IMPERVIOUS SURFACE. AS THIS WAS ALREADY COMPUTED AND APPROVED THE APPLICANT IS REQUESTING THIS TO CONTINUE WITH 1,800± S.F. OF THE PROPOSED BUILDING UTILIZING THIS STORMWATER INFILTRATION SYSTEM AND CONVEYANCE.
- HAVERFORD TOWNSHIP S&LD ORD. SECTION 160-4.A: REQUIRING PRELIMINARY APPROVAL FROM THE TOWNSHIP PRIOR TO FINAL PLAN SUBMISSION AND APPROVAL. THE APPLICANT IS REQUESTING A WAIVER TO SUBMIT THE PLANS AS A PRELIMINARY/FINAL LAND DEVELOPMENT APPLICATION DUE TO THE SIZE AND SCOPE OF THE PROJECT.
- HAVERFORD TOWNSHIP S&LD ORD. SECTION 160-4.E.5(1): REQUIRING A TRAFFIC IMPACT STUDY FOR LAND DEVELOPMENT PLANS INVOLVING COMMERCIAL OR INDUSTRIAL USES. THE APPLICANT IS REQUESTING A WAIVER TO SUBMIT THE PLANS WITHOUT A TRAFFIC IMPACT STUDY, DUE TO THE SIZE AND SCOPE OF THE PROJECT.
- HAVERFORD TOWNSHIP S&LD ORD. SECTION 160-4.E.5(e)(4): REQUIRING ALL STORM, SANITARY, AND WATER LINES WITHIN 400 FEET OF THE SITE TO BE DEPICTED ON THE PLANS. THE APPLICANT IS REQUESTING A WAIVER FROM THIS SECTION DUE TO THE SIZE AND SCOPE OF THE PROJECT. AS WELL AS A LACK OF STORMWATER INFRASTRUCTURE WITHIN THE RIGHT OF WAY. ALL APPLICABLE INFRASTRUCTURE AS IT PERTAINS TO THE PROJECT ARE DEPICTED.
- HAVERFORD TOWNSHIP S&LD ORD. SECTION 160-4.E.5(g): REQUIRING A LIGHTING PLAN FOR INTERNAL PARKING AREAS. DUE TO THE MINOR MODIFICATIONS WITHIN THE PARKING AREA, THE APPLICANT IS REQUESTING A WAIVER FROM THIS SECTION.
- <u>HAVERFORD TOWNSHIP S&LD ORD. SECTION 160-5.B(4)[a] and [c]:</u> REQUIRING THAT ALL EXISTING AND PROPOSED STREETS HAVE CURBS AND SIDEWALKS. THE APPLICANT IS REQUESTING A WAIVER FROM THIS SECTION DUE TO THE LACK OF EXISTING CURB AND SIDEWALK INFRASTRUCTURE ALONG HIGHLAND LANE, AS WELL AS A LACK OF STORMWATER INLETS, POTENTIALLY CREATING STORMWATER PONDING WITHIN THE RIGHT OF WAY. IN ADDITION, THIS SITE WAS APPROVED FOR LAND DEVELOPMENT IN 2011.
- HAVERFORD TOWNSHIP S&LD ORD. SECTION 160-5.B(4)[f] and [g]: REQUIRING STREETLIGHTING FOR ALL NONRESIDENTIAL LAND DEVELOPMENTS. THE APPLICANT IS REQUESTING A WAIVER FROM THIS SECTION DUE TO THE ADDITION ONLY ADDING 0.6% OF BUILDING COVERAGE TO THE SITE AND THE NATURE OF THE BUILDING USE.
- 9. <u>HAVERFORD TOWNSHIP S&LD ORD. SECTION 160-5.B(5)[g]</u> : REQUIRING ALL PIPES TO HAVE A MINIMUM OF 15 INCHES. THE APPLICANT IS REQUESTING A WAIVER FROM THIS SECTION DUE TO THE STORMWATER BEING CONVEYED THROUGH THIS PIPE TO MEET THE PEAK DISCHARGE IN THE PIPE AT THE 100 YR STORM.
- 10. <u>HAVERFORD TOWNSHIP S&LD ORD. SECTION 160-5.B(6.7.8):</u> REQUIRING SHADE TREES, BUFFER AREAS, AND SURVEY MONUMENTS. THE APPLICANT IS REQUESTING WAIVERS FROM THESE SECTIONS DUE TO THE ADDITION BEING LOCATED ON AN EXISTING APPROVED TEMPORARY STRUCTURE WITH NO SUBDIVISION.
- . <u>HAVERFORD TOWNSHIP DESIGN STANDARDS FOR CURBS:</u> REQUIRING AN 8-INCH REVEAL FOR CURBS. THE APPLICANT IS REQUESTING A WAIVER TO ALLOW FOR A 6-INCH CURB REVEAL DUE TO THE SIZE AND SCOPE OF THE PROJECT, AND EXISTING SITE TOPOGRAPHY, AND TO EASILY EQUAL THE EXISTING CURB ON SITE.

DEMOLITION NOTE

BUILDINGS, PAVEMENT, CURBING, TREES, LIGHTS, TRANSFORMERS, POLES, CONCRETE PADS, DRAINAGE PIPING AND OTHER OBJECTS INTERFERING WITH THE SITE IMPROVEMENTS SHALL BE REMOVED AND DISPOSED OF PROPERLY. ALSO ALL UTILITIES SERVICES TO AND ON THE SITE SHALL BE PERMANENTLY TERMINATED OR TEMPORARILY SHUT OFF IN ACCORDANCE WITH UTILITY COMPANY OR AUTHORITY REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR ANY AND ALL DEMOLITION. INCLUDING HAZARDOUS MATERIAL IN ACCORDANCE WITH PADEP REQUIREMENTS. ALL MATERIALS AND WASTES SHALL BE DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET. SEQ. AND 287.1 ET. SEQ.

ENGINEER'S CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS ARE IN CONFORMANCE WITH ENGINEERIN ZONING, BUILDING, SANITATION, AND OTHER APPLICABLE ORDINANCES OF THIS TOWNSHIP, AND HAVE BEEN PREPARED IN ACCORDANCE WITH ACT 367 OF TH COMMONWEALTH OF PENNSYLVANIA, KNOWN AS THE "ENGINEER, LAND SURVEYO AND GEOLOGIST REGISTRATION LAW" (P.L. 913, No. 367), AS AMENDED.

SIGNATURE OF ENGINEER DATE

P.E. LICENSE NUMBER

ENGINEER'S CERTIFICATION

ON THIS DATE HEREBY CERTIFY THAT THE DRAINAGE PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF THE HAVERFORD TOWNSHIP STORMWATER MANAGEMENT ORDINANC

SIGNATURE OF ENGINEER

SIGNATURE

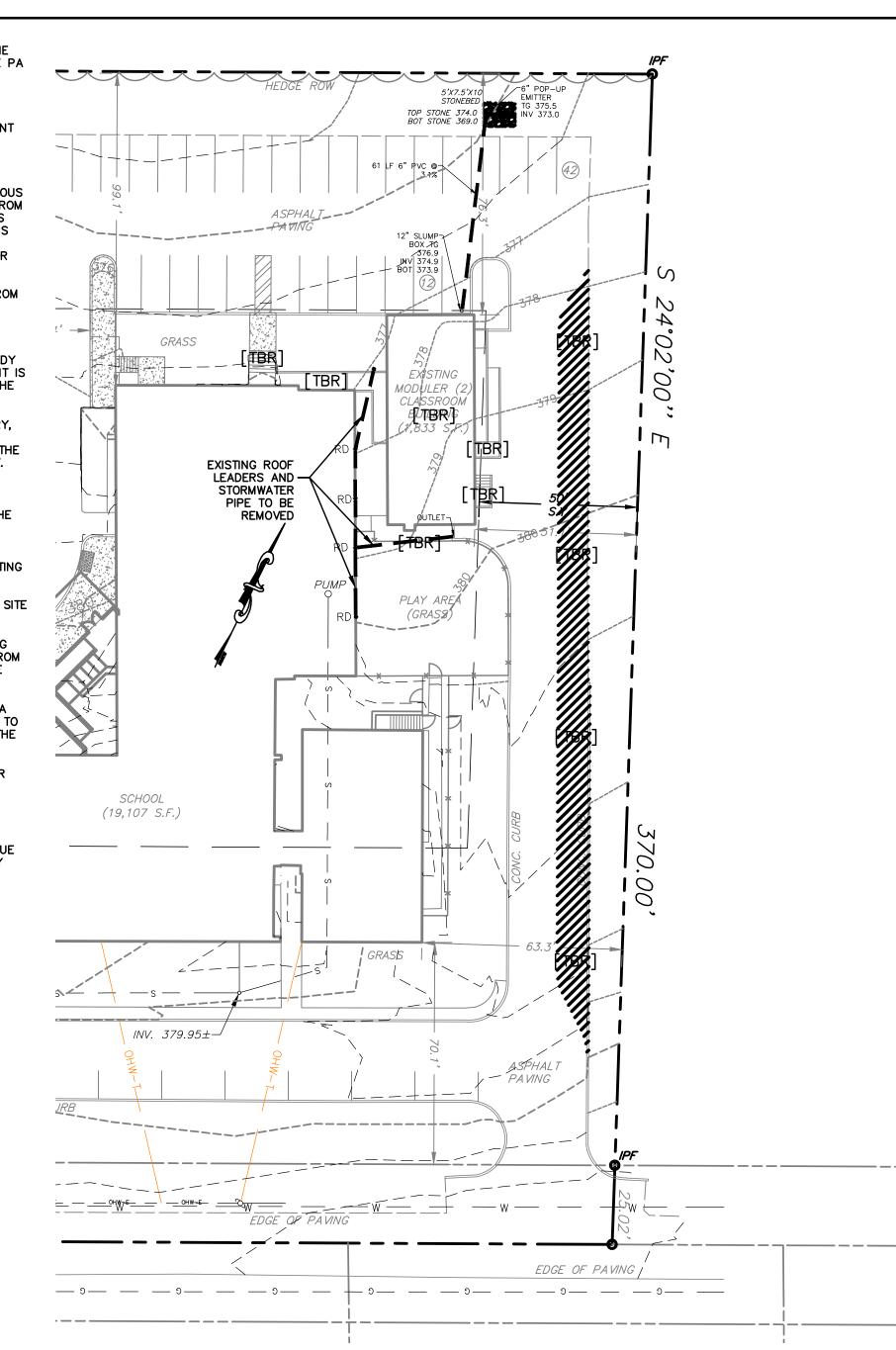
STORMWATER MANAGEMENT AGREEMENT

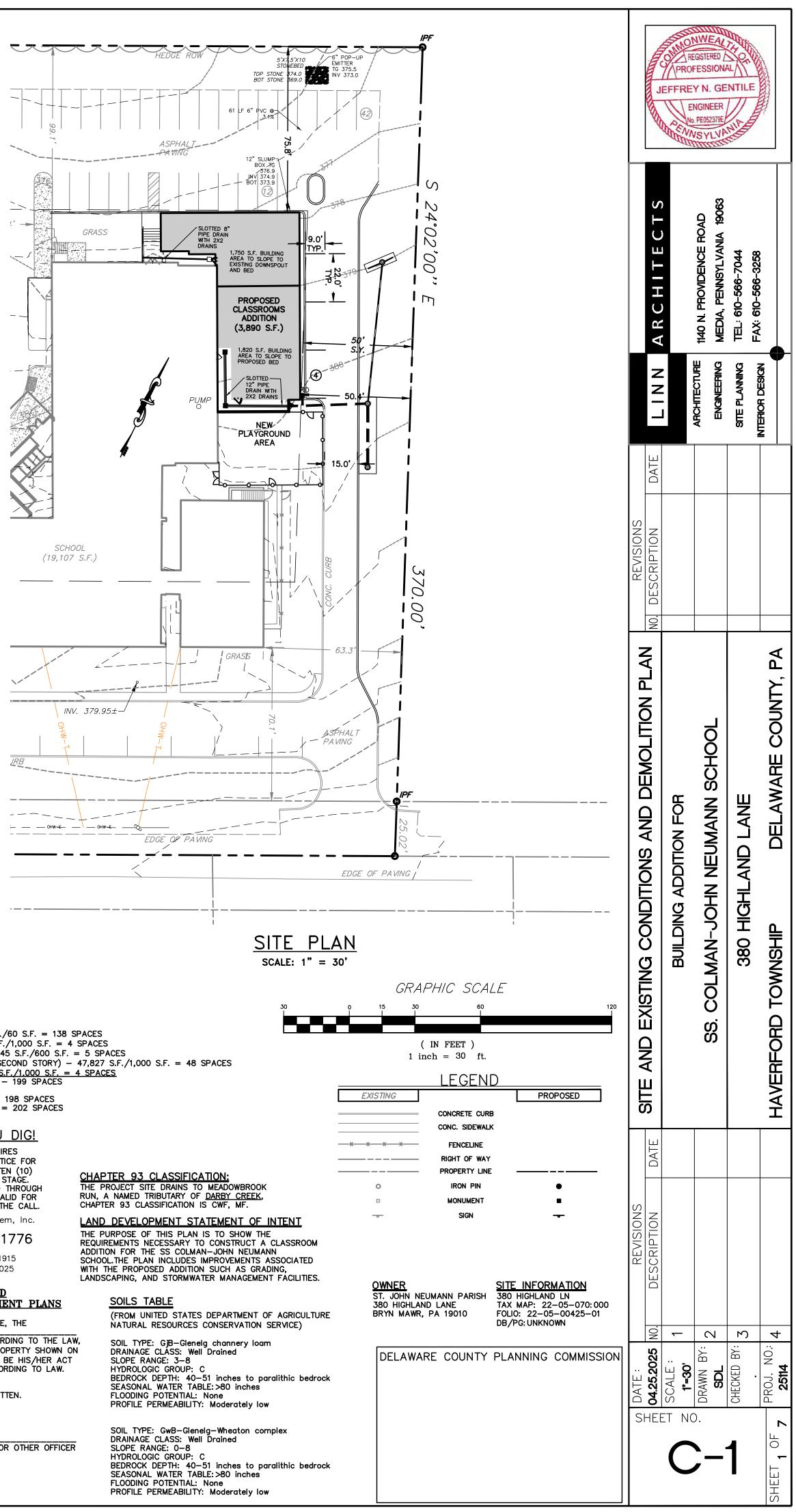
I ACKNOWLEDGE THE STORMWATER MANAGEMENT SYSTEM TO BE A PERMANENT FIXTURE THAT CAN BE ALTERED OR REMOVED ONLY AFTER APPROVAL OF A REVISED PLAN BY THE TOWNSHIP AND A REVISED EROSION CONTROL PLAN MUST BE SUBMITTED TO THE CONSERVATION DISTRICT FOR A DETERMINATION OF ADEQUACY.

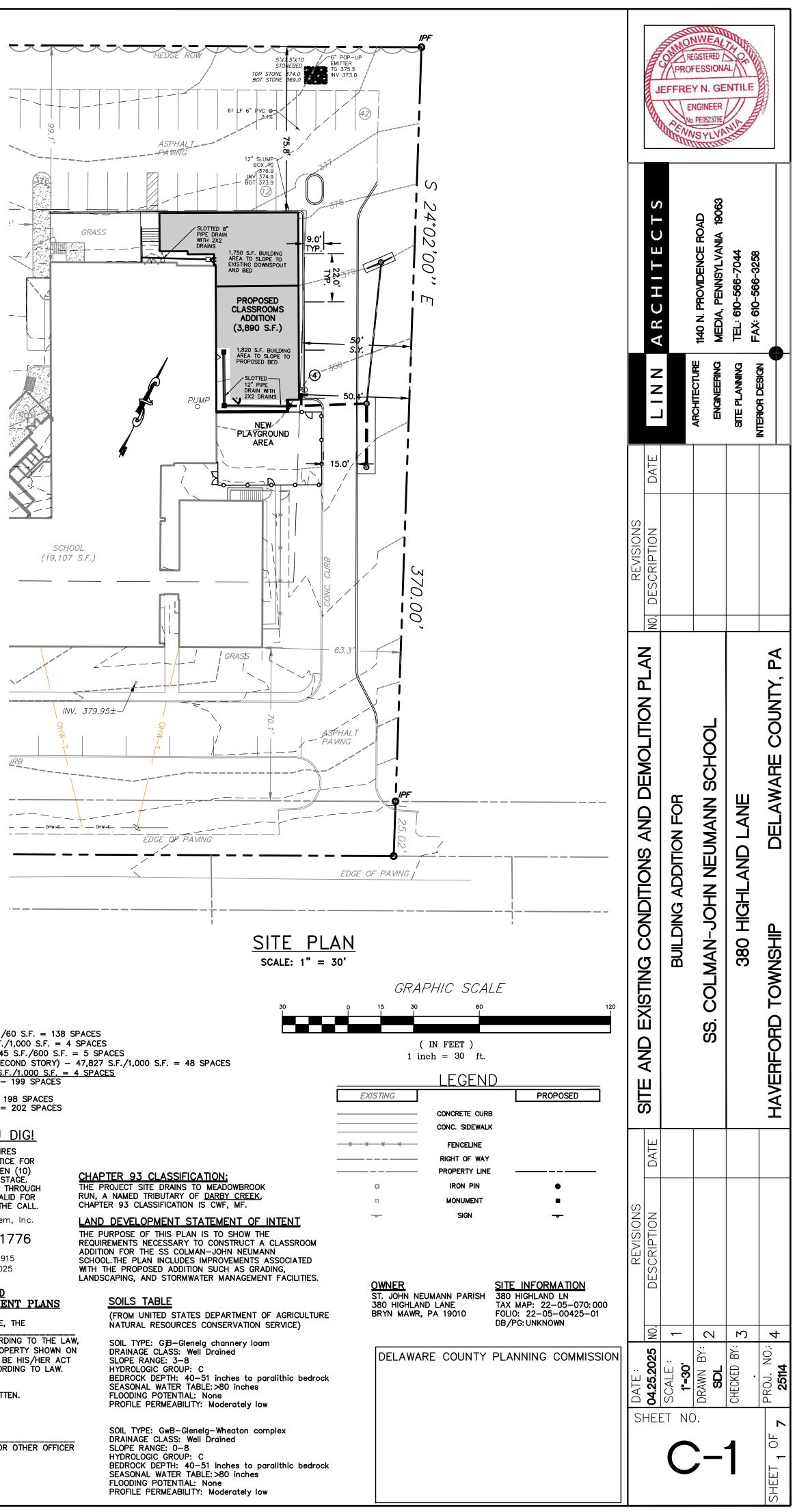
DATE

LAND DEVELOPMENT PLAN SS COLMAN-JOHN NEUMANN SCHOOL

DRAWING INDEX						
SHEET NO.	DESCRIPTION					
C-1	SITE AND EXISTING CONDITIONS AND DEMOLITIONS PLAN					
C-2	OVERALL EXISTING CONDITIONS PLAN					
C-3	GRADING AND UTILITY PLAN					
C-4	EROSION AND SEDIMENTATION CONTROL PLAN					
C-5	DETAILS					
C-6	DETAILS					
C-7	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN					







EXISTING CONDITIONS AND DEMOLITION PLAN SCALE: 1" = 30'

	AREA AND BULK REGULATIONS						
	INS INSTITUTIONAL ZONING DISTRICT						
		REQUIREMENT	REQUIREMENT EXISTING				
	USE						
	LOT AREA (GROSS)		9.16 ACRES (398,849 S.F.)	9.16 ACRES (398,849 S.F.)			
	LOT AREA (NET)	2 ACRES	8.39 ACRES (365,364 S.F.)	8.39 ACRES (365,364 S.F.)			
	IMPERVIOUS COVERAGE	40% MAX	44.6% (162,808 S.F.)*	44.4% (162,214 S.F.)**			
	BUILDING COVERAGE	20% MAX	14.1% (51,471 S.F.)	14.7% (53,527 S.F.)			
	BUILDING SETBACKS						
	FRONT YARD:	100 FT. MIN	65.1 FT. ⁽¹⁾	65.1 FT. ⁽¹⁾			
	SIDE YARD:	50 FT. MIN	51.1 FT.	50.4 FT.			
RING, S HE	REAR YARD:	75 FT. MIN	76.3 FT.	75.8 FT.			
	STREET FRONTAGE	150 FT. MIN	370.0 FT.	370.0 FT.			
YOR,	LOT WIDTH (BUILDING LINE)	75 FT.	1,061.6 FT.	1,061.6 FT.			
	BUILDING HEIGHT	35 FT. MAX, 3 STORIES	>35 FT.*	>35 FT.***			

*EXISTING LEGAL NON-CONFORMITY **REDUCTION OF EXISTING LEGAL NON-CONFORMITY

***CONTINUATION OF EXISTING LEGAL NON-CONFORMITY ⁽¹⁾VARIANCE GRANTED FROM §182-602 ON 03/17/2011 BY ZONING HEARING BOARD

CERTIFICATE OF REVIEW BY TOWNSHIP ENGINEER REVIEWED BY TOWNSHIP ENGINEER FOR HAVERFORD TOWNSHIP

CE.	ENGINEER	DATE
	SECRETARY (ATTEST)	DATE

CERTIFICATE FOR APPROVAL BY BOARD OF COMMISSIONERS APPROVED BY RESOLUTION OF THE HAVERFORD TOWNSHIP BOARD OF COMMISSIONERS _____ DAY OF _____ 20____ THIS

___ ____ DATE PRESIDEN

PARKING COUNT

EXISTING CHURCH - 8,265 S.F./60 S.F. = 138 SPACES EXISTING RECTORY - 3,335 S.F./1,000 S.F. = 4 SPACES EXISTING KINDERGARDEN - 2,645 S.F. /600 S.F. = 5 SPACES EXISTING SCHOOL (INCLUDING SECOND STORY) - 47,827 S.F. /1,000 S.F. = 48 SPACES PROPOSED ADDITION - 3.890 S.F. /1.000 S.F. = 4 SPACES PROPOSED REQUIRED PARKING - 199 SPACES

EXISTING PARKING PROVIDED = 198 SPACES PROPOSED PARKING PROVIDED = 202 SPACES

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES THREE (3) WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND TEN (10) WORKING DAYS FOR DESIGN STAGE. UTILITY INFORMATION IDENTIFIED THROUGH THE ONE-CALL PROCESS IS VALID FOR 90 DAYS FROM THE DATE OF THE CALL.

Pennsylvania One Call System, Inc. 800-242-1776

SERIAL# 20250921915 **ONE-CALL DATE:** 04/02/2025

<u>CERTIFICATION OF OWNER AND</u> <u>ACKNOWLEDGEMENT OF LAND DEVELOPMENT PLANS</u>

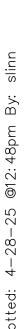
ON THIS, THE ____ DAY OF _____, 20___, BEFORE ME, THE UNDERSIGNED OFFICER, PERSONALLY APPEARED _____ , WHO BEING DULY SWORN ACCORDING TO THE LAW. DEPOSES AND SAYS THAT HE/SHE IS THE OWNER OF THE PROPERTY SHOWN ON THIS PLAN, AND THAT HE/SHE ACKNOWLEDGES THE SAME TO BE HIS/HER ACT AND PLAN AND DESIRES THE SAME RECORDED AS SUCH ACCORDING TO LAW.

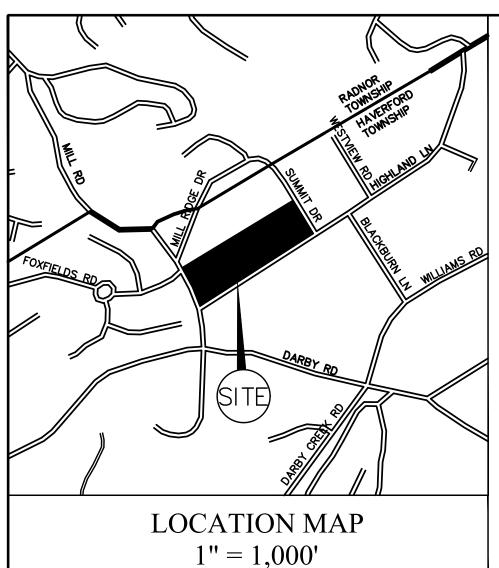
WITNESS MY HAND AND SEAL THE DAY AND DATE ABOVE WRITTEN. MY COMMISSION EXPIRES: _____

SIGNATURE OF OWNER

NOTARY PUBLIC OR OTHER OFFICER

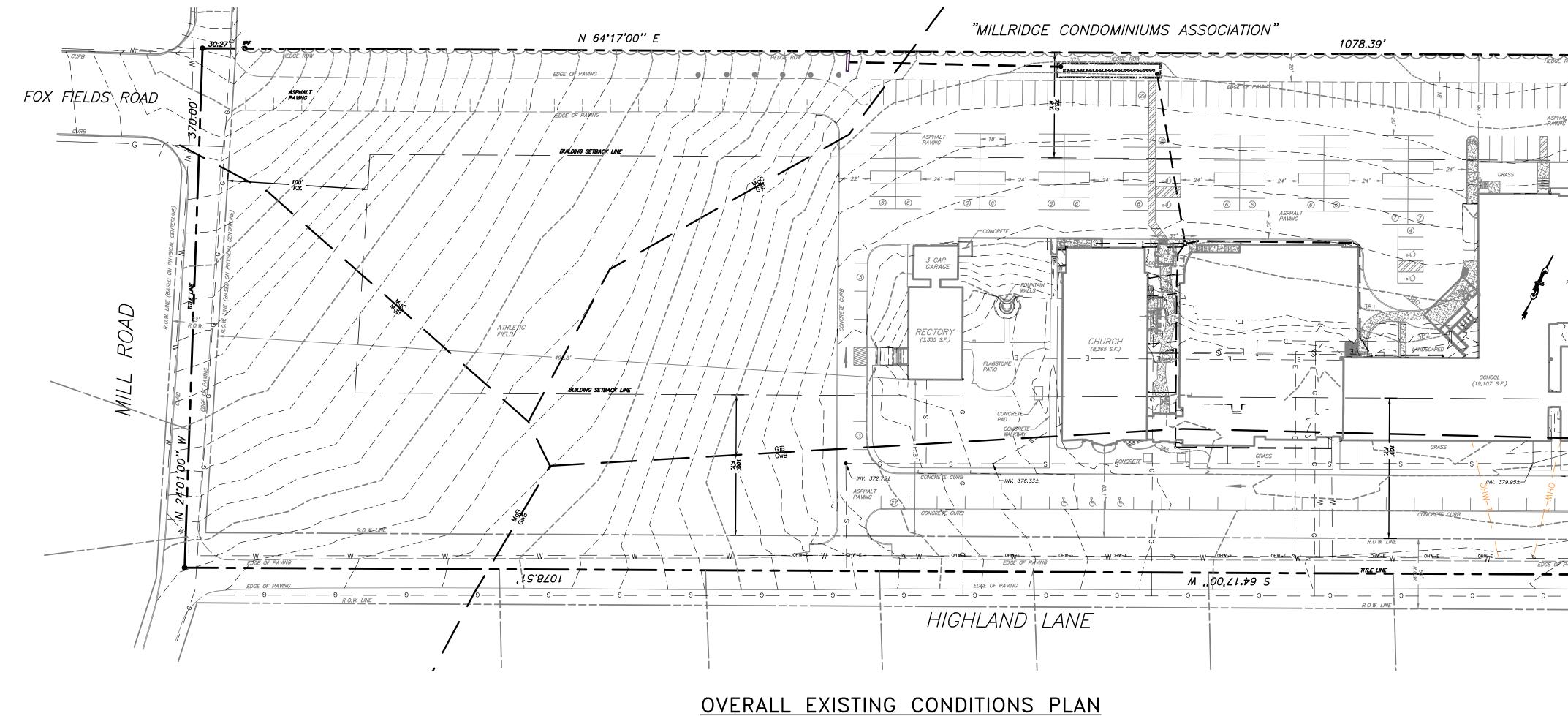
SIGNATURE OF OWNER





<u>NOTES</u>

- 1. THIS PLAN IS BASED ON A PLAN ENTITLED "GRADING PERMIT PLANS -PROPOSED BUILDING ADDITION ST. JOHN NEUMANN PARISH" BY MOMENEE & ASSOCIATES, INC. DATED SEPTEMBER 1, 2011, LAST REVISED SEPTEMBER 25, 2012.
- 2. BOUNDARIES BASED UPON ABOVE MENTIONED PLAN.
- 3. ADJOINER INFORMATION TAKEN FROM CURRENT TAX RECORDS.
- 4. UTILITY INFORMATION FROM OBSERVED SURFACE EVIDENCE. ALL UTILITY LOCATIONS AND DEPTHS SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
- 5. BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS IN ZONE 'X' OF THE FLOOD INSURANCE RATE MAP, MAP No. 42045C0039F, COMMUNITY PANEL No. 0039F, WHICH BEARS AN EFFECTIVE DATE OF NOVEMBER 18, 2009.
- 6. SOIL DELINEATION LINES TAKEN FROM USDA NATIONAL COOPERATIVE SOIL SURVEY THROUGH THE NATURAL RESOURCES CONSERVATION SERVICE CUSTOM SOIL RESOURCE REPORT FOR THIS PROJECT DATED AUGUST 2ND, 2024.
- 7. SITE IS SERVICED BY PUBLIC SEWER AND WATER.



CONCRETE CURB	
CONC. SIDEWALK	
FENCELINE	97
- RIGHT OF WAY	
- PROPERTY LINE	
SIGN	
IRON PIN	0
MONUMENT	
— SANITARY SEWER W/ M	sss
WATER LINE	— — w — —
GAS LINE	G
GAS VALVE	GV ⊗
WATER VALVE	WV ⊗
CLEAN-OUT	<i>C0</i> ⊗
FIRE HYDRANT	ж,
OVERHEAD WIRE	OHW- <u>-</u> E
UTILITY POLE	\mathcal{Q}_{j}
AREA OF DEMOLITION	
ITEM TO BE REMOVED	[TBR]

DEMOLITION NOTE BUILDINGS, PAVEMENT, CURBING, TREES, LIGHTS, TRANSFORMERS, POLES, CONCRETE PADS, DRAINAGE PIPING AND OTHER OBJECTS INTERFERING WITH THE SITE IMPROVEMENTS SHALL BE REMOVED AND DISPOSED OF PROPERLY. ALSO ALL UTILITIES SERVICES TO AND ON THE SITE SHALL BE PERMANENTLY TERMINATED OR TEMPORARILY SHUT OFF IN ACCORDANCE WITH UTILITY COMPANY OR AUTHORITY REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR ANY AND ALL DEMOLITION. INCLUDING HAZARDOUS MATERIAL IN ACCORDANCE WITH PADEP REQUIREMENTS. ALL MATERIALS AND WASTES SHALL BE DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET. SEQ. AND 287.1 ET. SEQ.

SCALE: 1" = 50'

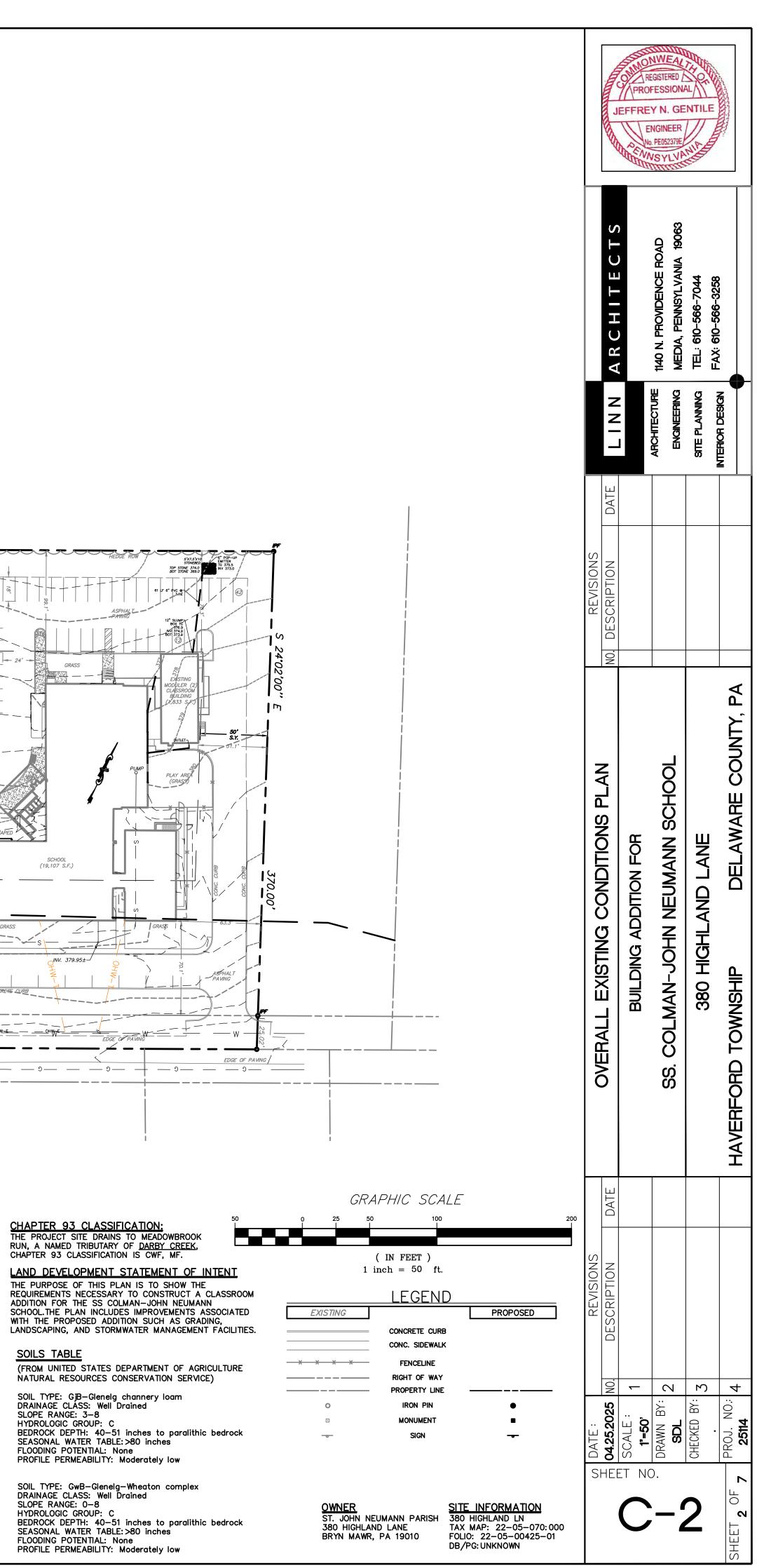
CALL BEFORE YOU DIG!

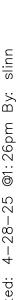
PENNSYLVANIA LAW REQUIRES THREE (3) WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND TEN (10) WORKING DAYS FOR DESIGN STAGE. UTILITY INFORMATION IDENTIFIED THROUGH THE ONE-CALL PROCESS IS VALID FOR 90 DAYS FROM THE DATE OF THE CALL

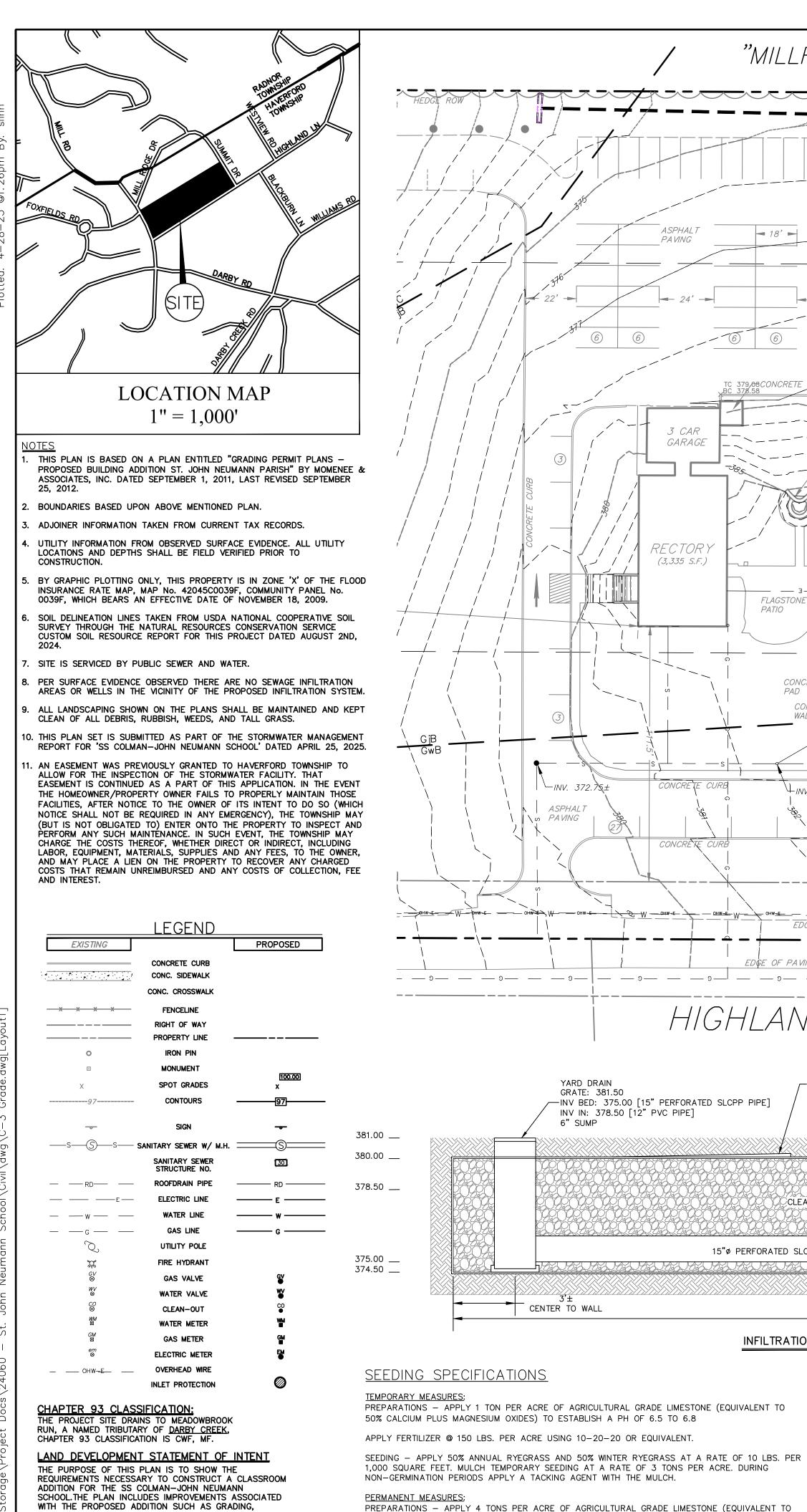
> 800-242-1776 SERIAL# 20250921915

Pennsylvania One Call System, Inc.

ONE-CALL DATE: 04/02/2025







TE INFORMATION ST. JOHN NEUMANN PARISH 380 HIGHLAND LN TAX MAP: 22-05-070:000 FOLIO: 22-05-00425-01 DB/PG: UNKNOWN

LANDSCAPING, AND STORMWATER MANAGEMENT FACILITIES.

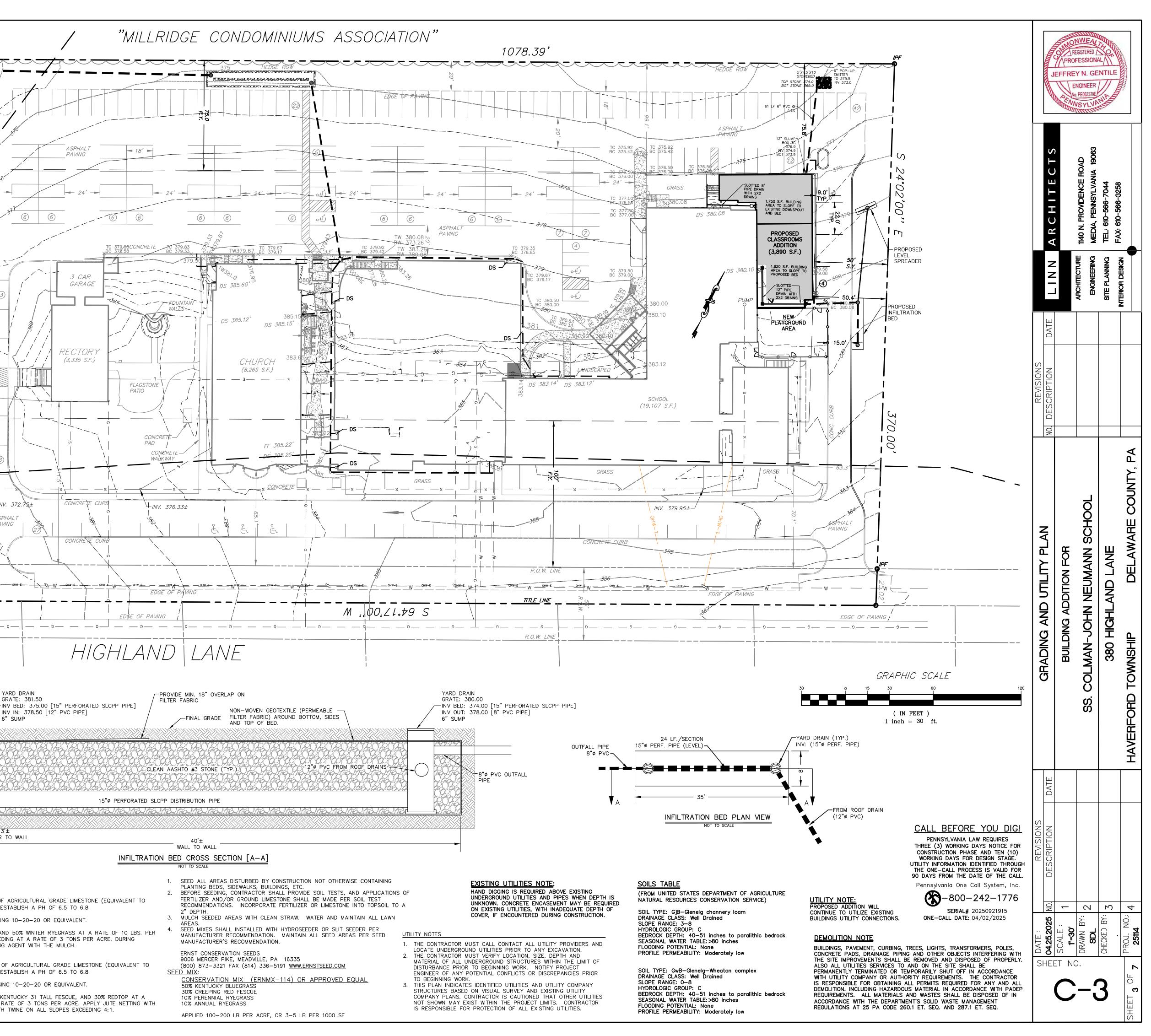
380 HIGHLAND LANE

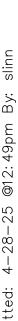
BRYN MAWR, PA 19010

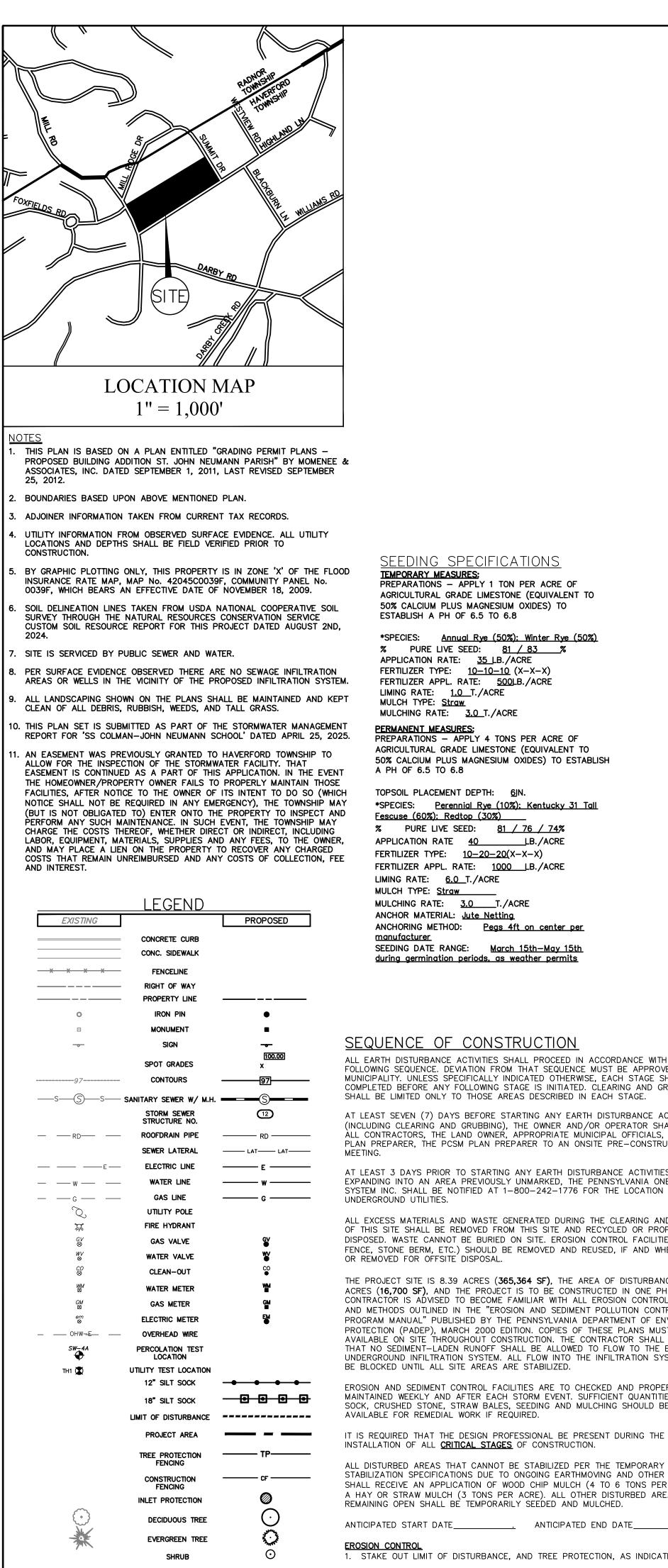
APPLY FERTILIZER @ 930 LBS. PER ACRE USING 10-20-20 OR EQUIVALENT. SEEDING - 10% PERENNIAL RYEGRASS, 60% KENTUCKY 31 TALL FESCUE, AND 30% REDTOP AT A RATE OF 220 LBS. PER ACRE. MULCH AT A RATE OF 3 TONS PER ACRE. APPLY JUTE NETTING WITH

PEGS AT 4 FOOT INTERVALS INTERLACED WITH TWINE ON ALL SLOPES EXCEEDING 4:1.

50% CALCIUM PLUS MAGNESIUM OXIDES) TO ESTABLISH A PH OF 6.5 TO 6.8







*SPECIES: <u>Annual Rye (50%): Winter Rye (50%)</u> % PURE LIVE SEED: <u>81 / 83</u> % FERTILIZER TYPE: <u>10–10–10</u> (X–X–X) FERTILIZER APPL. RATE: <u>500</u>LB./ACRE PREPARATIONS - APPLY 4 TONS PER ACRE OF AGRICULTURAL GRADE LIMESTONE (EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDES) TO ESTABLISH *SPECIES: <u>Perennial Rye (10%)</u>; Kentucky 31 Tall % PURE LIVE SEED: <u>81 / 76 / 74</u>% APPLICATION RATE <u>40</u>LB./ACRE FERTILIZER APPL. RATE: <u>1000</u>LB./ACRE

ANCHORING METHOD: Pegs 4ft on center per SEEDING DATE RANGE: March 15th-May 15th during germination periods, as weather permits

SEQUENCE OF CONSTRUCTION

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED BY THE MUNICIPALITY. UNLESS SPECIFICALLY INDICATED OTHERWISE, EACH STAGE SHALL BE 2. INSTALL SILT SOCK AS INDICATED ON THE PLANS. COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE. AT LEAST SEVEN (7) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES (INCLUDING CLEARING AND GRUBBING), THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LAND OWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE PCSM PLAN PREPARER TO AN ONSITE PRE-CONSTRUCTION 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 COMMUNICATIONS (PHONE/FIBER), TO BUILDING ENVELOPE.

ALL EXCESS MATERIALS AND WASTE GENERATED DURING THE CLEARING AND GRUBBING OF THIS SITE SHALL BE REMOVED FROM THIS SITE AND RECYCLED OR PROPERLY DISPOSED. WASTE CANNOT BE BURIED ON SITE. EROSION CONTROL FACILITIES (SILT FENCE, STONE BERM, ETC.) SHOULD BE REMOVED AND REUSED, IF AND WHEN POSSIBLE,

THE PROJECT SITE IS 8.39 ACRES (365,364 SF), THE AREA OF DISTURBANCE IS 0.38 8. INSTALL SIDEWALK AS INDICATED ON THE PLANS. INSTALL WEARING COURSE ON ACRES (16,700 SF), AND THE PROJECT IS TO BE CONSTRUCTED IN ONE PHASE. THE CONTRACTOR IS ADVISED TO BECOME FAMILIAR WITH ALL EROSION CONTROL MEANS AND METHODS OUTLINED IN THE "EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL" PUBLISHED BY THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (PADEP), MARCH 2000 EDITION. COPIES OF THESE PLANS MUST BE AVAILABLE ON SITE THROUGHOUT CONSTRUCTION. THE CONTRACTOR SHALL BE AWARE 9. THAT NO SEDIMENT-LADEN RUNOFF SHALL BE ALLOWED TO FLOW TO THE EXISTING UNDERGROUND INFILTRATION SYSTEM. ALL FLOW INTO THE INFILTRATION SYSTEM SHALL

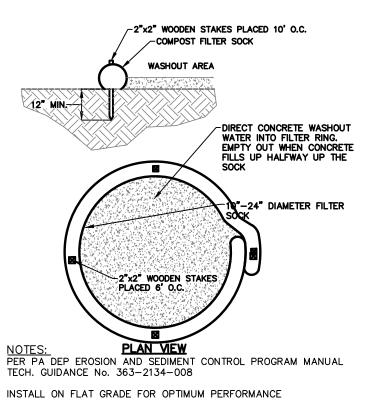
EROSION AND SEDIMENT CONTROL FACILITIES ARE TO CHECKED AND PROPERLY MAINTAINED WEEKLY AND AFTER EACH STORM EVENT. SUFFICIENT QUANTITIES OF SILT SOCK, CRUSHED STONE, STRAW BALES, SEEDING AND MULCHING SHOULD BE READILY AVAILABLE FOR REMEDIAL WORK IF REQUIRED.

IT IS REQUIRED THAT THE DESIGN PROFESSIONAL BE PRESENT DURING THE INSTALLATION OF ALL **CRITICAL STAGES** OF CONSTRUCTION.

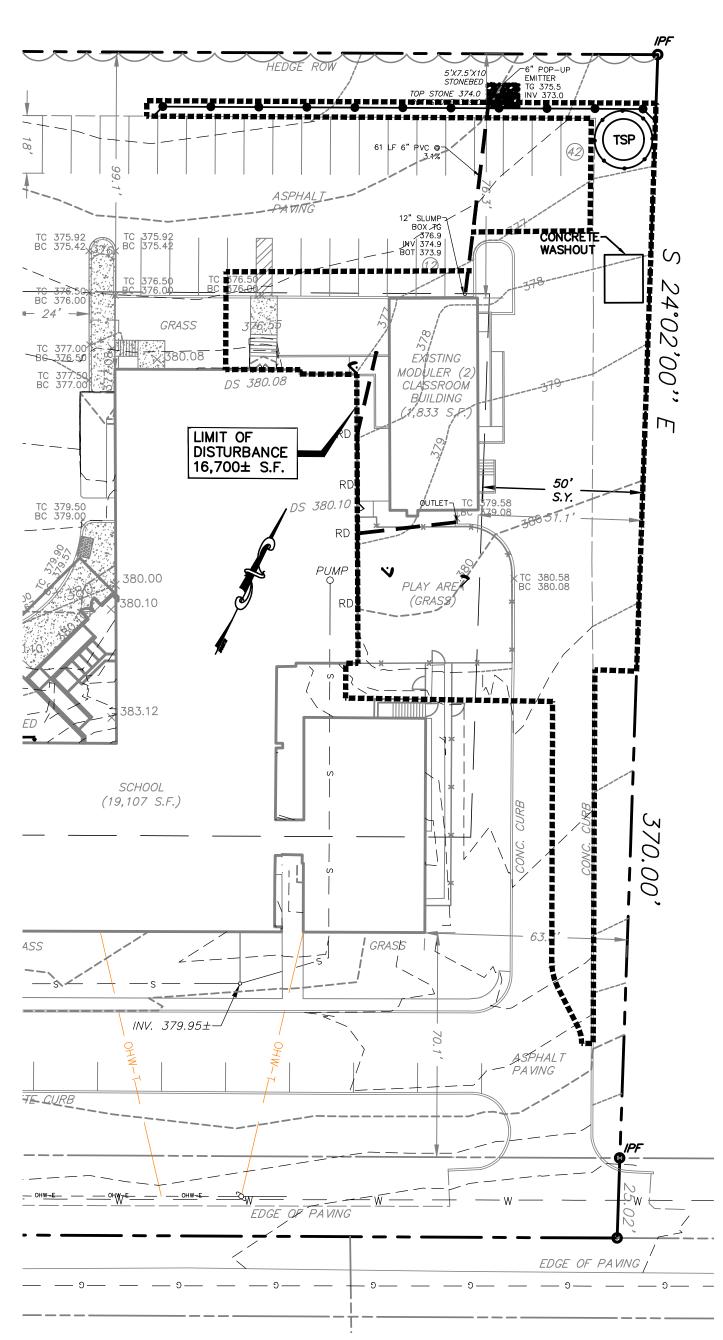
STABILIZATION SPECIFICATIONS DUE TO ONGOING EARTHMOVING AND OTHER TRAFFIC SHALL RECEIVE AN APPLICATION OF WOOD CHIP MULCH (4 TO 6 TONS PER ACRE) OR A HAY OR STRAW MULCH (3 TONS PER ACRE). ALL OTHER DISTURBED AREAS REMAINING OPEN SHALL BE TEMPORARILY SEEDED AND MULCHED.

ANTICIPATED START DATE _____ ANTICIPATED END DATE__

1. STAKE OUT LIMIT OF DISTURBANCE, AND TREE PROTECTION, AS INDICATED ON



CONCRETE WASHOUT DETAIL



PRELIMINARY EROSION CONTROLS SCALE: 1'' = 30'

EROSION AND/OR SEDIMENT POLLUTION.

- BEFORE INITIATING ANY REVISIONS 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 MUNICIPALITY AND DESIGN ENGINEER.
- 6. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS.
- THE OPERATOR 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.
- 8. EROSION AND SEDIMENT BMP'S MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMP'S.
- 9. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE OF CONSTRUCTION. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.
- 10. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE OPERATOR SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITIES. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.
- AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL 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 AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.
- 12. SEDIMENT MUST BE REMOVED FROM INLET WATER QUALITY INSERTS AFTER EACH RUNOFF EVENT
- 13. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMP'S MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGARDING, RESEEDING, REMULCHING, AND RENETTING, MUST BE PERFORMED IMMEDIATELY, IF EROSION AND SEDIMENT CONTROL BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
- 14. SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.
- 15. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTE IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET DEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE.

SOILS TABLE

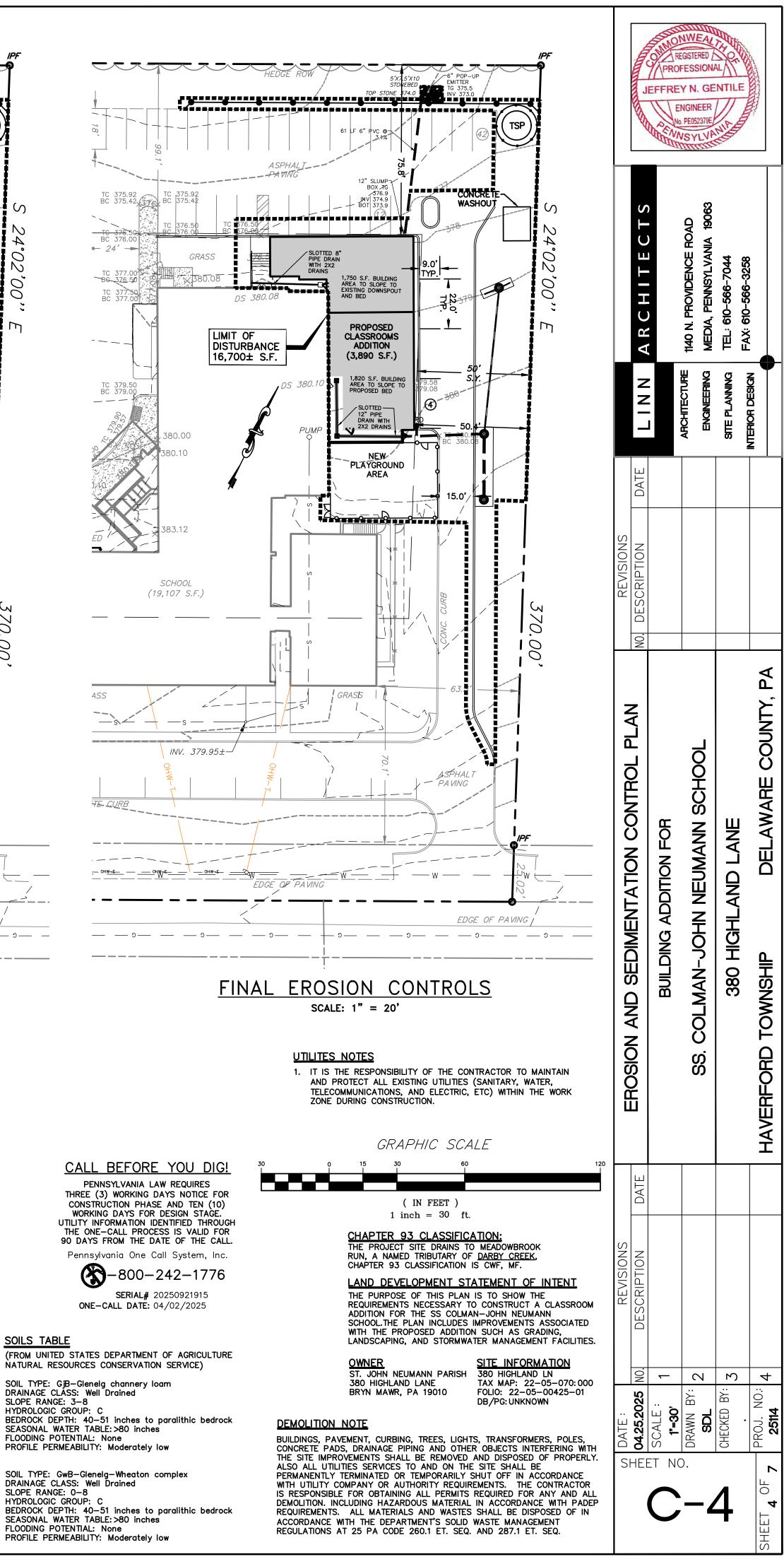
SLOPE RANGE: 3-8 HYDROLOGIC GROUP: SEASONAL WATER TABLE: >80 inches FLOODING POTENTIAL: None

DRAINAGE CLASS: Well Drained SLOPE RANGE: 0-8 HYDROLOGIC GROUP: SEASONAL WATER TABLE: >80 inches FLOODING POTENTIAL: None **PROFILE PERMEABILITY: Moderately low**

PROCEED WITH REMOVAL OF EXISTING TREES/VEGETATION TO BE REMOVED (IF NOT COMPLETED PRIOR TO START OF CONSTRUCTION), CUTTING TREES DOWN TO STUMP AT GROUND LEVEL.

PLANS.

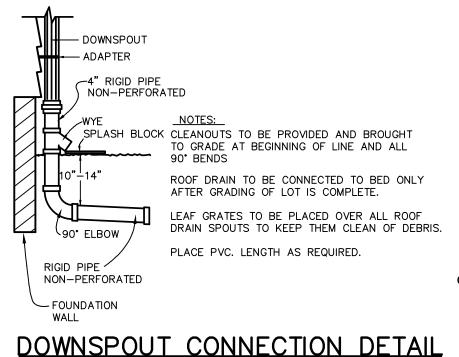
- CLEAR AND GRUB SITE. STRIP TOPSOIL AND STOCKPILE WHERE INDICATED ON THE PLAN. IMMEDIATELY STABILIZE STOCKPILE AND PLACE SILT SOCK PER THE PLANS AND SPECIFICATIONS AND BEGIN ROUGH GRADING
- 5. INSTALL UNDERGROUND UTILITY SERVICE LINES, INCLUDING ELECTRIC,
- 6. INSTALL ASPHALT BASE COURSE AS SOON AS POSSIBLE, WHICH MAY BE CONCURRENT WITH BUILDING CONSTRUCTION IF REQUIRED.
- INSTALL BUILDING FOUNDATIONS, AND CONNECT UNDERGROUND UTILITY SERVICE LINES TO BUILDING. BACKFILL AGAINST BUILDING FOUNDATION AND PROCEED WITH BUILDING CONSTRUCTION. ROOF DRAINAGE FROM BUILDING TO THE ROOF DRAINS.
- PAVEMENT AREAS. FINISH GRADE ALL DISTURBED AREAS. SPREAD TOPSOIL ON THOSE AREAS THAT ARE TO BE LANDSCAPED AS THEY REACH FINAL GRADE AND STABILIZE IMMEDIATELY ACCORDING TO THE PERMANENT STABILIZATION SPECIFICATION AND INSTALL LANDSCAPING
- ONCE ALL DISTURBED AREAS OF SITE HAVE BEEN STABILIZED IN ACCORDANCE WITH 11. THE FINAL STABILIZATION REQUIREMENTS. REMOVE ANY REMAINING EROSION CONTROL MEASURES. IMMEDIATELY STABILIZE ALL AREAS DISTURBED BY THIS OPERATION. THE TOWNSHIP ENGINEER MUST BE NOTIFIED FOR A FINAL SITE INSPECTION PRIOR TO REMOVAL OF EROSION CONTROLS
- GENERAL NOTES STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
- 2. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED.
- 3. UNTIL THE SITE ACHIEVES FINAL STABILIZATION. THE OPERATOR SHALL ASSURE THAT THE BEST MANAGEMENT PRACTICES ARE IMPLEMENTED, OPERATED, AND MAINTAINED PROPERLY AND COMPLETELY MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL BEST MANAGEMENT PRACTICE FACILITIES. THE OPERATOR SHALL MAINTAIN AND MAKE AVAILABLE TO MUNICIPALITY AND DESIGN ENGINEER, WRITTEN INSPECTION LOGS OF ALL THOSE INSPECTIONS. ALL MAINTENANCE WORK, INCLUDING CLEANING, REPAIR, REPLACEMENT, REGRADING, AND RESTABILIZATION SHALL BE PERFORMED IMMEDIATELY.
- 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

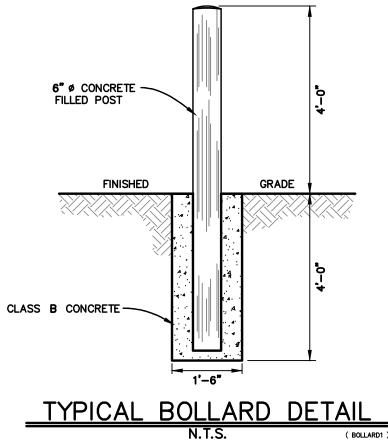


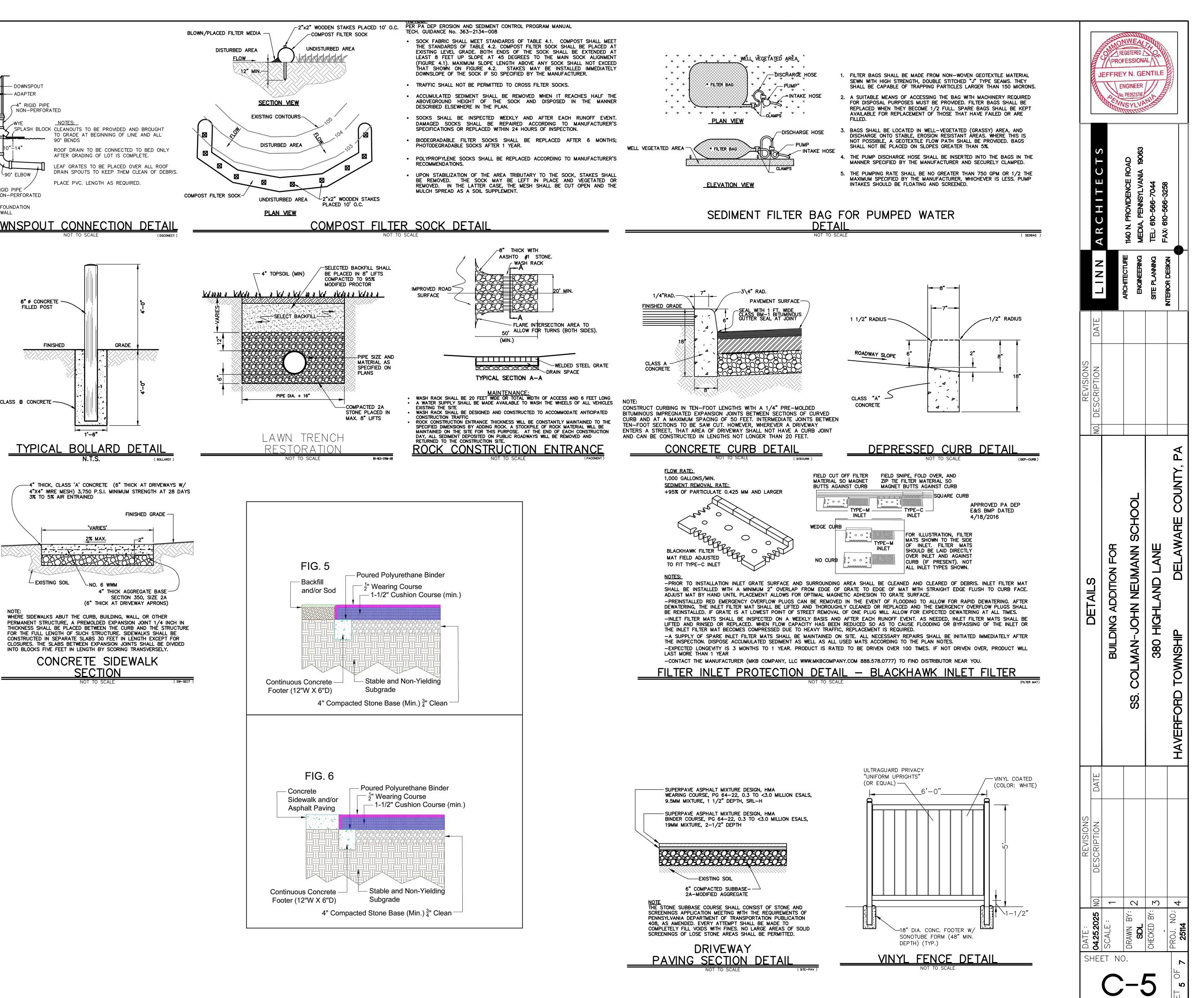
THE DEVELOPER SHALL INFORM ALL CONTRACTORS ASSOCIATED WITH THIS PROJECT TO STAY WITHIN THE DESIGNATED CONSTRUCTION AREA AND TO FOLLOW PROPER EROSION CONTROL METHODS. EACH SITE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF APPENDIX 64, EROSION CONTROL RULES AND REGULATIONS, TITLE 25, PART 1, DEPARTMENT OF ENVIRONMENTAL PROTECTION SUB-PART C, PROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER

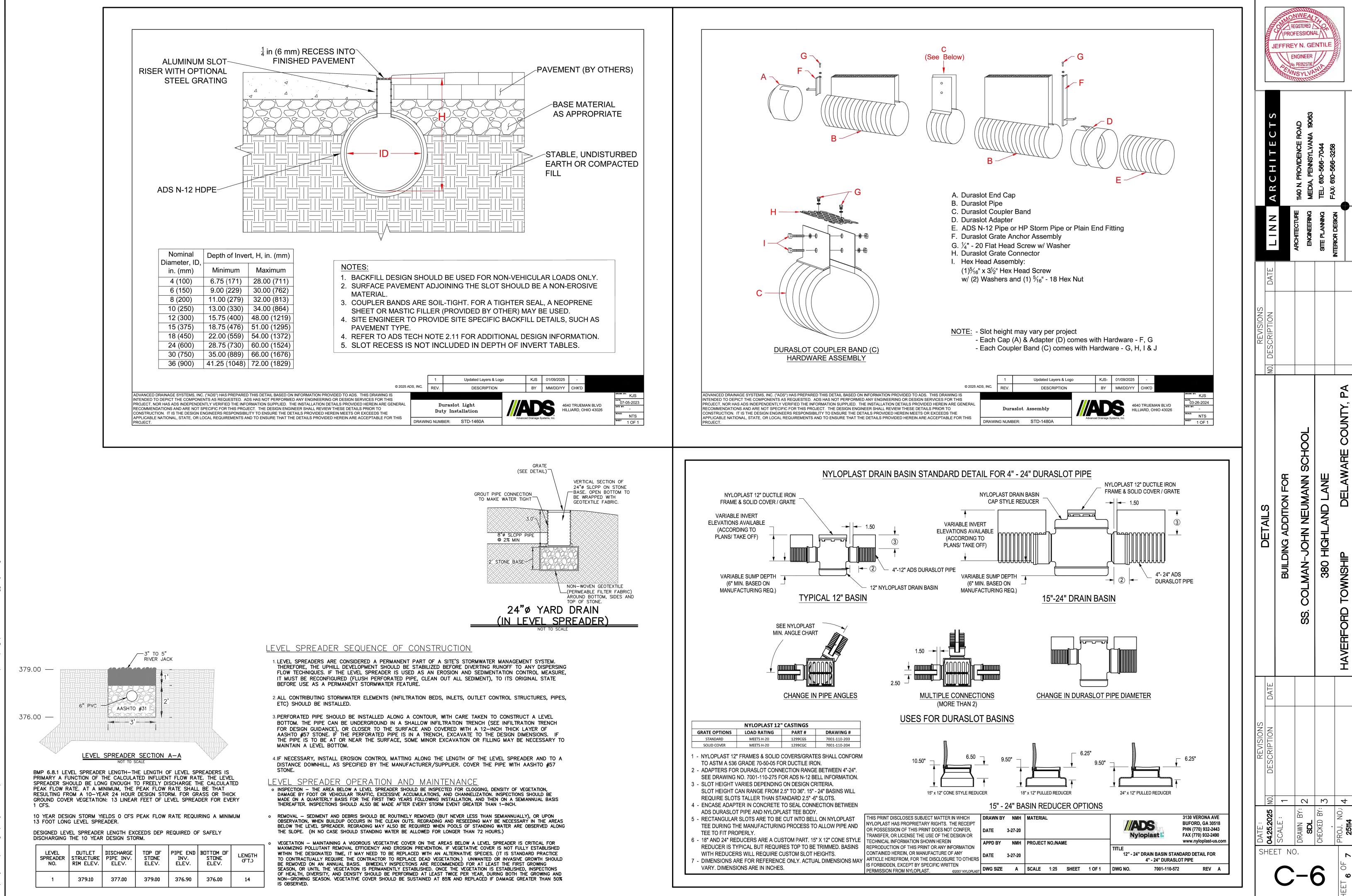
- RESOURCES, CHAPTER 102, EROSION CONTROL. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE OPERATOR SHALL ENSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED. AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATION.
- PROTECTION TO EXISTING TREES AND SHRUBS SHALL BE TAKEN BY THE CONTRACTOR TO ELIMINATE UNNECESSARY DAMAGE.
- THE SITE CONTRACTOR WILL BE RESPONSIBLE FOR THE PROPER CONSTRUCTION, STABILIZATION, AND MAINTENANCE OF ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES.
- SHOULD UNFORESEEN EROSIVE CONDITIONS DEVELOP DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ACTION TO REMEDY SUCH CONDITIONS AND TO PREVENT DAMAGE TO ADJACENT PROPERTIES AS A RESULT OF INCREASED RUNOFF AND/OR SEDIMENT DISPLACEMENT. STOCKPILES OF WOOD CHIPS, HAY BALES, CRUSHED STONE AND OTHER MULCHES SHALL BE STOCK PILED AT THE SITE PRIOR TO ANY CONSTRUCTION AND HELD IN READINESS TO DEAL IMMEDIATELY WITH EMERGENCY PROBLEMS OF EROSION THAT MAY ARISE.
- ONLY LIMITED DISTURBANCE WILL BE PERMITTED TO PROVIDE ACCESS TO CONSTRUCT BASIN(S), TRAP(S), AND OTHER EROSION CONTROLS. EROSION AND SEDIMENTATION CONTROLS MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE
- SITE DISTURBANCE WITHIN THE TRIBUTARY AREAS OF THOSE CONTROLS. TOPSOIL AND TREES, INCLUDING ROOTS, SHALL BE REMOVED FROM AREAS PROPOSED FOR GRADING. IT SHALL BE STOCKPILED AND TEMPORARILY SEEDED UNTIL AREAS HAVE BEEN GRADED. ONCE THE AREA
- HAS REACHED FINAL GRADE THE TOPSOIL CAN BE REDISTRIBUTED FOR APPLICATION OF PERMANENT SEEDING THE DEFINITIONS FOR THE FOLLOWING TERMS ARE LISTED AND ARE TAKEN FROM THE DEPARTMENT OF ENVIRONMENTAL PROTECTION PERMIT SUMMARY SHEET ON PAGE 6.
- CLEAN FILL: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT THAT HAS BEEN PROCEEDED FOR RE-USE.)
- ENVIRONMENTAL DUE DILIGENCE: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY. SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS.
- ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS.
- STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
- TRAP(S) AND BASIN(S) SHOULD BE INSPECTED WEEKLY AND AFTER EACH RAINFALL TO INSURE ITS PROPÈR FUNCTIONING.
- ANY SILT SOCK THAT HAS BEEN OVERTOPPED OR UNDERMINED SHALL BE REMOVED AND REPLACED WITH A ROCK FILTER IMMEDIATELY, AND SHALL BE INSPECTED WEEKLY AND AFTER EACH RAINFALL.
- ANY DISTURBED AREA ON WHICH ACTIVITY HAS CEASED AND WHICH WILL REMAIN EXPOSED MUST BE STABILIZED IMMEDIATELY. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE RECOMMENDED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN 1 YEAR MAY BE STABILIZED IN ACCORDANCE WITH TEMPORARY SEEDING SPECIFICATIONS. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE RE-DISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH PERMANENT SEEDING SPECIFICATIONS.
- STORMWATER INLETS MUST BE PROTECTED UNTIL THE TRIBUTARY AREAS ARE STABILIZED. SEDIMENT MUST BE REMOVED FROM INLET PROTECTION AFTER EACH STORM EVENT.
- . DIVERSIONS, CHANNELS, SEDIMENT TRAPS, AND STOCKPILES MUST BE STABILIZED IMMEDIATELY.
- ALL NECESSARY SOIL EROSION AND SEDIMENT CONTROL MEASURES INSTALLED (SILT FENCES, STONE FILTERS, SEDIMENT TRAPS, ETC.) SHALL BE ADEQUATELY MAINTAINED BY THE SITE CONTRACTOR.
- WHENEVER SEDIMENTATION IS CAUSED BY STRIPPING VEGETATION, RE-GRADING OR DEVELOPMENT IN GENERAL, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE SEDIMENT FROM ALL ADJOINING PROPERTIES, SURFACES, DRAINAGE SYSTEMS AND WATER COURSES IMMEDIATELY. 0. ALL SURROUNDING STREETS ARE TO BE KEPT CLEAN OF ALL SEDIMENT.
- ALL SEEDED AREAS WHICH HAVE BEEN WASHED AWAY WILL BE FILLED, RE-SEEDED AND MULCHED IMMEDIATELY.
- . AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL 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 AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE OPERATOR SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITIES. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH ARE AT FINISHED GRADE OR WHICH WILL NOT BE RE-DISTURBED WITHIN YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABLIZATION SPECIFICATIONS
- 3. 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. 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 WILL BE LOGGED. THE INSPECTION LOG WILL BE KEPT ON SITE AT ALL TIMES AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST. ALL PREVENTIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEANOUT, REPAIR, REPLACEMENT, RE-GRADING, RE-SEEDING, RE-MULCHING, AND RE-NETTING 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 BMP'S ARE FOUND TO FAIL TO ALLEVIATE EROSION OR SEDIMENT POLLUTION, THE PERMITTEE OR CO-PERMITTEE SHALL INCLUDE THE FOLLOWING INFORMATION:
- THE LOCATION AND SEVERITY OF THE BMP'S FAILURE AND ANY POLLUTION EVENTS 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.
- AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPs MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMPs MUST BE STABILIZED IMMEDIATELY. 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 DEBRIS SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR TO AN APPROVED DISPOSAL SITE.

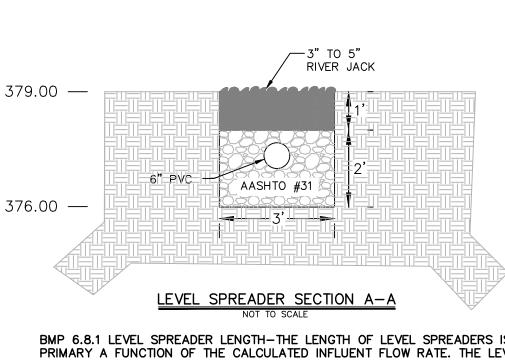
THE PROJECT'S RECEIVING WATERCOURSE IS MEADOWBROOK RUN A NAMED TRIBUTARY OF DARBY CREEK, WITH A PADEP CHAPTER 93 CLASSIFICATION OF CWF, MF



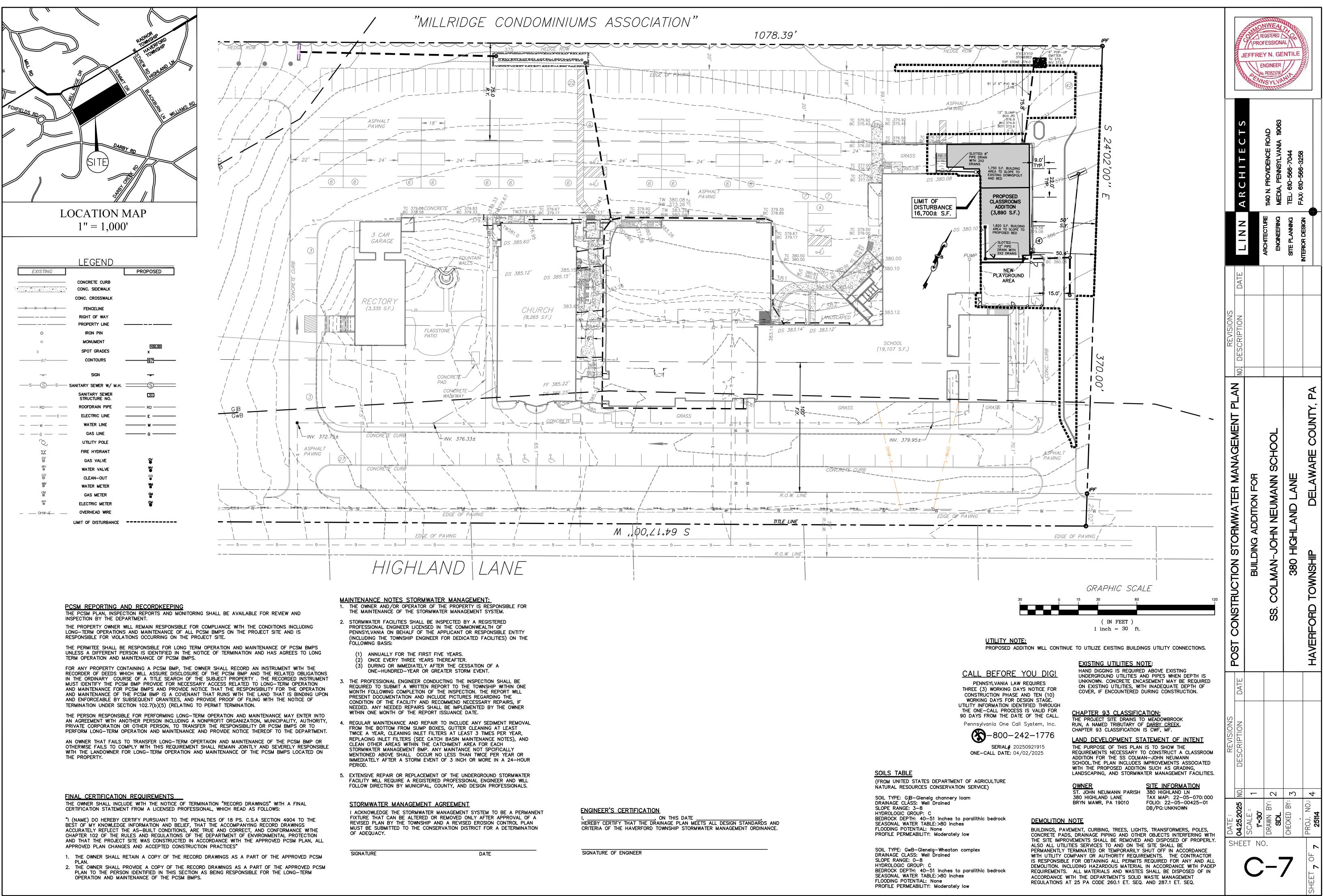








LEVEL SPREADER NO.	DUTLET STRUCTURE RIM ELEV.	DISCHARGE PIPE INV. ELEV.	TOP OF STONE ELEV.	PIPE END IN∨. ELE∨.	BOTTOM OF STONE ELE∨.	LENGTH (FT.)
1	379.10	377.00	379.00	376.90	376.00	14





DARBY AND MARPLE ROAD ACT 537 SPECIAL STUDY

Township of Haverford 1014 Darby Road Havertown, PA 19083

> Prepared by: Pennoni 1900 Market Street Philadelphia, PA 19103 HAVTT13242 June 5, 2025

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Executive Summary

The Pennsylvania Sewage Facilities Act (Act 537) enacted by the Pennsylvania Legislature in 1966 requires municipalities in the Commonwealth to develop and maintain a current sewage facilities management plan. Haverford Township owns and operates the sanitary sewage collection system and is authorized to prepare, update, and implement Act 537 planning.

This Act 537 Special Study ("Study") identifies the wastewater needs of the northwest portion of Haverford Township, specifically the areas bordering Darby Road and Marple Road, and evaluates alternatives for the long term disposal of sewage. For the most part, this portion of the Township currently utilizes various on-lot sewage disposal systems, with adjacent areas of the Township connected to public sewer. This Study considers existing wastewater facilities, topography, property owner needs, alternatives, and estimated costs associated with each evaluated alternative. Site specific inspections of existing on-lot sewage disposal systems were not performed.

The alternatives evaluated in this Study are: (1) no action alternative, and (2) construct and extend public sewer. The "no action" alternative maintains the existing on-lot disposal systems on individual properties. Property owners are responsible for the operation and maintenance of the systems and addressing necessary repairs or malfunctions. The Township would prepare a Sewage Management Plan and associated Ordinance to establish procedures for properties with on-lot sewage disposal systems in accordance with PA DEP requirements. The "construct and extend public sewer" alternative extends the existing public sewer to the study area. Both cost and physical limitations may affect the feasibility of this option.

The selected alternative to address the current and future sewage disposal needs in the northwest portion of Haverford Township is to maintain the existing on-lot sewage disposal systems within the Study area.

A. Previous Act 537 Sewage Facilities Plans

In 1971, a Sewage Facilities Plan for Delaware County was prepared by the Delaware County Planning Department. This 1971 Plan included sewage facilities planning for Haverford Township. Subsequent Special Studies were prepared in 1992 and 1997 to evaluate the feasibility and anticipated costs to extend public sewer service to unsewered properties in Darby Road and Marple Road area of the Township.

This Study reevaluates the Darby Road and Marple Road areas discussed in the 1992 and 1997 Studies.

B. Existing Facilities

Haverford Township is divided into two service areas identified as the Cobbs Creek service area and the Darby Creek service area, with a combined 149 miles of sanitary sewer piping. Wastewater flows from the Cobbs Creek sewershed are conveyed from Haverford to Upper Darby Township and ultimately to the City of Philadelphia Southwest Treatment Plant. The Darby Creek sewershed is conveyed through the Radnor-Haverford-Marple Authority's (RHM) interceptor along Darby Creek and ultimately to the DELCORA. A small area in the northern portion of the Township is conveyed to Radnor Township.

The Study area is within the Darby Creek Service area, and is further identified as follows.

The Study area boundary follows Coopertown Road from the Township border, turns west on College Avenue, follows Coopertown Road to Darby Road, then turns west again near Dartmouth Lane.

In 1988, an eight (8") inch diameter sanitary sewer was constructed by the developer to serve the Quadrangle Retirement Community. The sewer system extends to all the existing buildings, and terminates approximately 700 feet from Darby Road. The Quadrangle owns and maintains the sanitary sewer system on their property. A portion of this system also extends on to the Haverford Reserve property, and it owned and maintained by the Township.

Three (3) subdivisions in close proximity to the Study area were constructed with sanitary sewer, including The Greens of Merion (1982), Allgates (1985), and 4008 Darby Road (2023/2024). The Greens of Merion and Allgates are served by 8-inch sewers and individual pump station, owned and maintained by homeowners associations. The developer for 4008 Darby Road extended a low pressure force main to Brennan Drive to serve the two (2) new dwellings as well provide the opportunity for adjacent properties to connect to public sewer. The sewer extension is owned and maintained by the Township.

The existing sanitary sewer system has the capacity to accommodate the Township's wastewater needs. Approximately 90% of the population is served by the existing facilities and the other 10% utilize on-lot sewage disposal systems.

Modest population growth is anticipated for Haverford Township over the next 30 years. There are limited areas for land development and proposed projects are generally in-fill development and improvements to existing properties.

	1980	1990	2000	2010	2020		
Haverford	52,349	49,848	49,608	48,491	50,431		

	2020	2030	2040	2050	2060
Haverford	50,431	50,644	50,791	50,649	50,649

Table 1: Historic Population Data via 2020 census

Table 2: Population & Employment Forecast Data via Delaware Valley Regional Planning				
Commission				

C. Study Area Description

Marple Road is oriented east and west, with the South Brook tributary to Darby Creek to the north, and Merion Golf Club's West Course to the south. Darby Road is also oriented east and west, with residential properties to the north and the Haverford Reserve property to the south. Minimum lot size for the Study area per Haverford Township's Zoning Ordinance is one (1) acre, with the majority of the lots meeting this requirement.

Steep slopes are present throughout the Study area, and floodplain and wetland areas have also been identified. The Flood insurance Rate Map and U.S.G.S. Wetland inventory maps are included in Appendix A. These maps provide a preliminary indication of flood plains and wetlands, and not an official delineation as would be required by the Department of Environmental Protection should construction occur.

The Township's soil survey indicates a variety of soil types within the study area. A large portion of the Study area consists of Glenelg-Wheaton complex and Glenelg-Urban Land-Wheaton complex. A soil classification overlay map is shown in Appendix A. The Study area soils have limiting features that may impact the feasibility of on-lot sewage disposal systems.

D. Disposal System Questionnaire

The Township distributed a questionnaire to sixty-eight (68) residences with on-lot disposal systems, for the most part located in the Study area, in late 2023. Questions were included to indicate the age and condition of existing on-lot sewage disposal systems and identify properties that have required repairs or experienced malfunctions. A copy of the questionnaire and the results are included in Appendix C.

Of the sixty-seven (67) homeowners surveyed, responses were received from thirty (30).

The thirty (30) responses indicated their repairs or replacement of on-lot sewage disposal systems since owning their respective properties. Two (2) residents indicated pumping septic tank or cesspools more than once a year. Five (5) have had indicated physical evidence of possible malfunctions of system. Twelve (12) have known cesspools which are no longer permitted in Pennsylvania.

	Address	Cesspool	Septic Tank	Inground bed
	116 Marple Road		1	
	120 Marple Road	1		
	124 Marple Road			1
Marple	151 Marple Road	1		
	159 Marple Road	1		
	41 Marple Road	1		
	56 Marple Road		1	
	3600 Darby Road			1
	3624 Darby Road			1
	3632 Darby Road	1		1
Darby	3701 Darby Road	1		
	3713 Darby Road			1
	3728 Darby Road	1		
	3932 Darby Road			1
	76 Brennan Drive		1	
	84 Brennan Drive			1
Adjacent	1735 Burmont Road	1	1	
or Close	513 College Ave			1
Proximity to Existing Sewer	2 Coopertown Road		1	
	3 Coopertown Road	1		
	620 Ellis Road	1		
	329 Ellis Road	1		
	1516 Steel Road	1		
	Total	12	5	8

Table 3: Residents System Type

E. Alternatives

1. Remain On-lot Sewage Disposal

For this alternative the properties currently utilizing on-lot sewage disposal systems would continue to do so. No public improvements would be proposed. Each property owner would continue to be responsible for the operation and maintenance of their on-lot sewage disposal system. If an existing system fails, proposed methods of sewage disposal would be evaluated on case-by-case basis. The soil classifications indicated on the soils map included in Appendix A are identified as limited for on-lot sewage disposal; however, field conditions have allowed for full replacements of systems using conventional technologies.

Based on homeowner survey results, additional education would be provided to ensure homeowners are properly operating and maintaining their systems. Approximately 52% of the survey responses received indicate utilizing cesspools, which are no long permitted in Pennsylvania, and there is limited information regarding maintenance. Most of the homes were constructed prior to current design standards for on-lot sewage disposal systems.

Selection of this alternative would require the Township to implement a Sewage Management Plan approved by the PA DEP, including enactment of an Ordinance governing the management of on-lot sewage disposal facilities.

2. Construct / Extend Public Sewer

This alternative would include the extension of the sanitary sewers to serve properties located on Darby Road and Marple Road. A gravity sewer system may be feasible, however, site constraints in the Study area may require the construction of a low-pressure sewer system. If a low pressure system is required, a pump on each property would be needed to eject wastewater into the sanitary sewer main. Advantages of a low pressure system include smaller pipe size, less excavation, and more flexibility regarding layout.

If the Township selects this alternative, property owners would have the option to connect to the system immediately, or would be required to connect if the on-lot system malfunctions or in the event of transfer of ownership of the property. The Township would implement a Sewage Management Plan approved by PA DEP for properties that will not connect to public sewer at the time of installation.

F. Cost Estimates

1. Remain On-lot Sewage Disposal

Continuing to utilize on-lot sewage disposal systems in the Study area would require no construction costs. Property owners would continue to be responsible for maintenance of their on-lot sewage disposal system.

The Township would incur costs associated with establishing a Sewage Management Program. Estimated costs to prepare and establish a Sewage Management Program are \$20,000 to \$30,000.

2. Construct / Extend Public Sewer

The Township would finance and construct the sanitary sewer extensions to the Study area, their costs would be recovered through a separate Tapping Fee district. Property owners would be responsible for the costs associated with connecting their homes, including laterals and the connection to the main. Cost estimates for both gravity and low pressure systems were prepared, utilizing the conceptual design quantities included with the 1997 Marple Road special study (see Appendix B).

The Township's estimated costs to construct a low pressure sewer system on Darby Road and Marple Road are \$2,500,000 to \$3,000,000. The low pressure system would be installed within the right of way of Marple and Darby Road. The estimated Tapping Fees per property are \$55,000 to \$65,000. A low pressure system would require each property owner to install a grinder pump. The estimated cost per property for their privately owned facilities are \$40,000 to \$50,000.

The estimated costs for the Township to finance and to construct a gravity sanitary sewer system are \$5,000,000 to \$5,500,000. The gravity system would be installed within the right of way of Marple and Darby Road. For the portions of the Township owned system not within the right of way additional costs for easements will be needed. The estimated Tapping Fee per property is \$100,000 to \$125,000. The gravity system will require each property owner to install the sanitary sewer lateral and connection, which is estimated to be \$15,000 to \$20,000 per property.

Cost estimate details are attached as Appendix B.

G. Institutional Evaluation & Selected Alternative

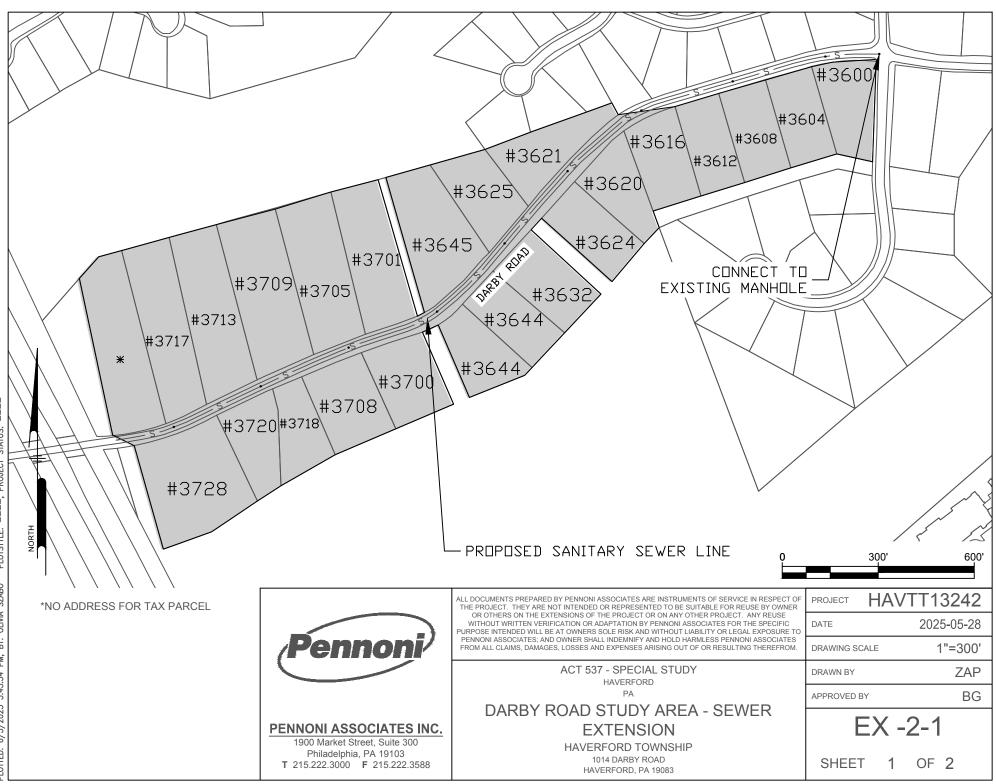
Both the construction of public sanitary sewers and maintenance of existing on-lot sewage disposal systems allow for the proper sewage disposal. Maintenance of existing on-lot systems can continue, and has a lower cost. Construction of public sanitary sewer would require additional planning, increased operation and maintenance costs to the Township, and a higher capital construction cost. The Township receives a permit application for a full on-lot sewage disposal system replacement approximately every two (2) years. Full replacements are typically both permittable and constructable using conventional systems.

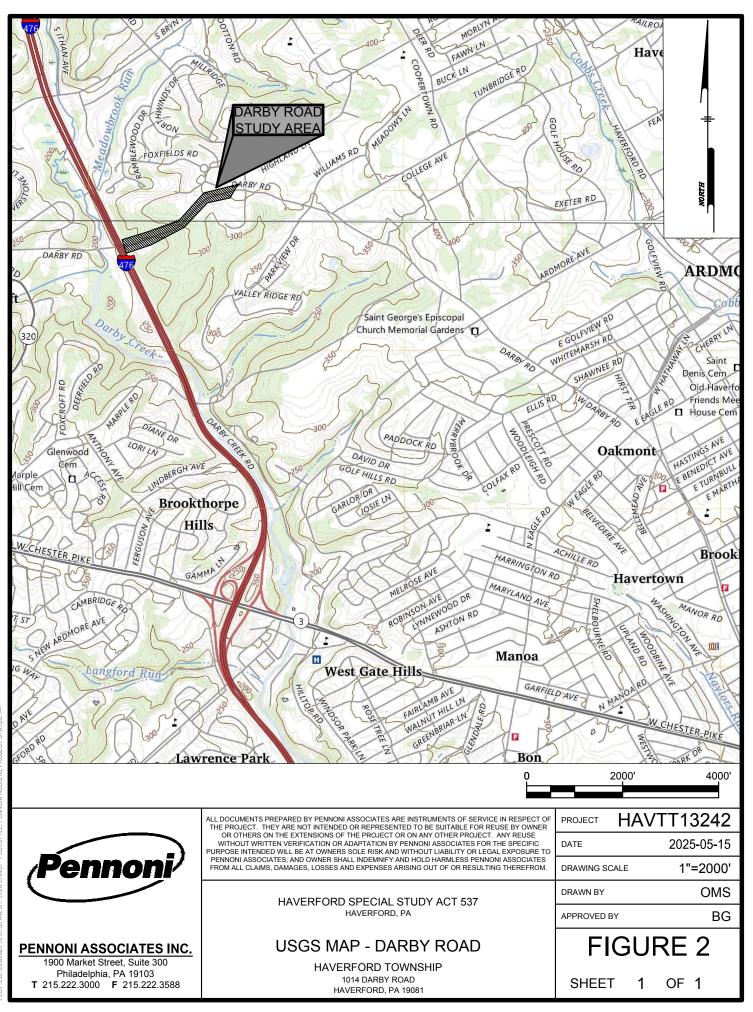
Due to challenges with construction and the high costs associated with extending the public sewer system to both the Township and property owners, the Township will continue to utilize on-lot sewage disposal systems within the Study area. In conjunction with the Delaware County Health Department, the Township will develop a Sewage Management Program to establish operation and maintenance policies and procedures for the management of on-lot sewage disposal systems within the Township.

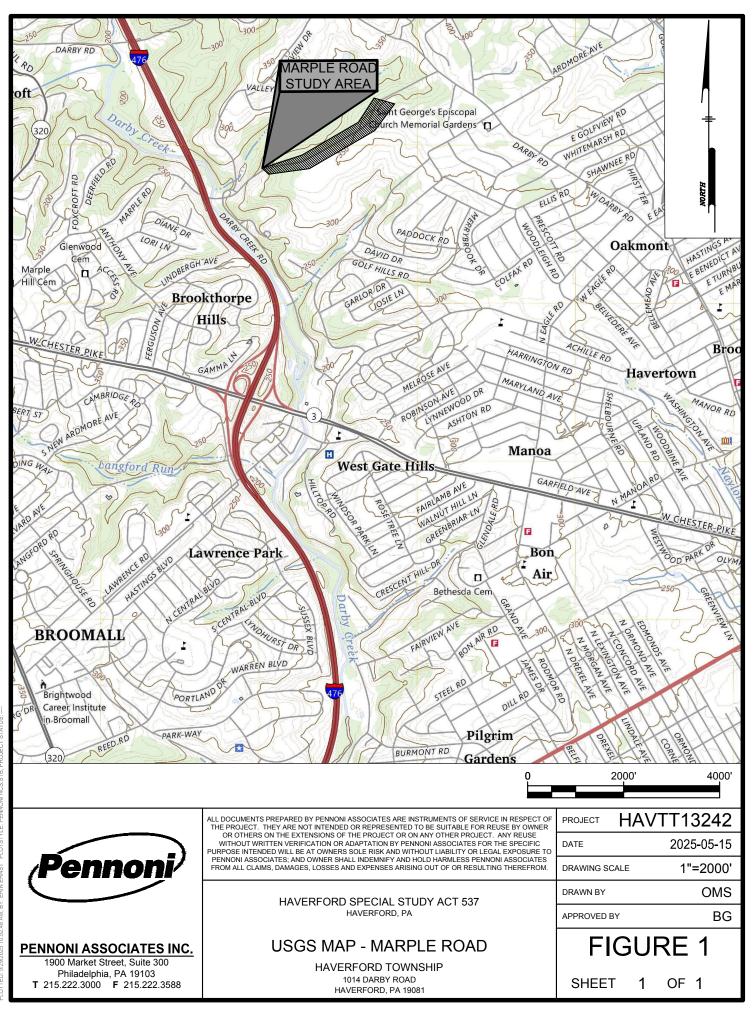
APPENDIX A:

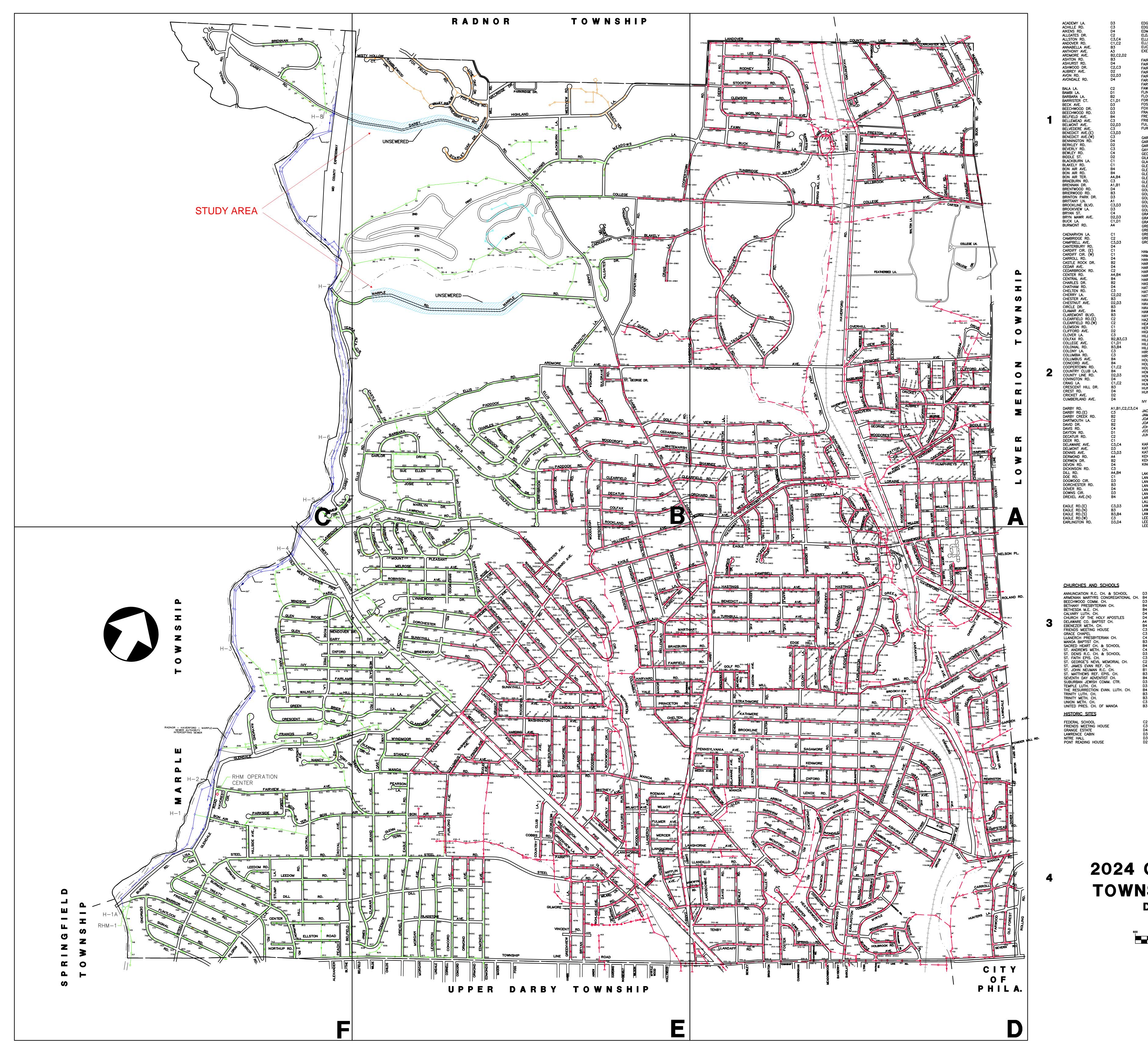
EXHIBITS & MAPS

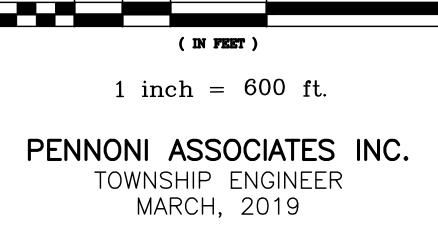
Study Area Map Haverford Township Sanitary Sewer Map USGS Location Map Soils Report Geology FEMA Maps











2024 CHAPTER 94 REPORT TOWNSHIP OF HAVERFORD DELAWARE COUNTY, PA. GRAPHIC SCALE

----- PRIVATE SEWER

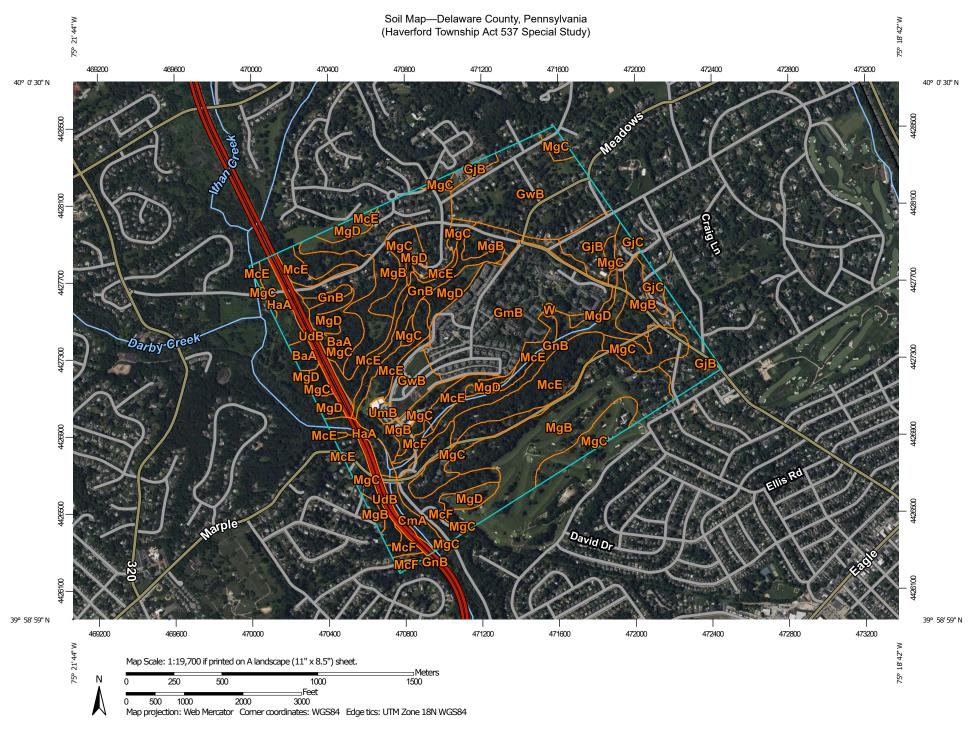
----- COBBS CREEK DRAINAGE AREA

DARBY CREEK DRAINAGE AREA
 DRAINS TO RADNOR TOWNSHIP

5 5 5 5 5 4 5 5 5	GRANGE FIELD GRASSLYN PARK HIGHLAND FARMS PARK HILLTOP PARK LAWRENCE RD. PARK LYNNEWOOD PARK MERION GOLF MANOR PARK MERWOOD PARK	D4 C3 C1 A4 B3 B3 D2 D2 D2	MAINTENANCE GARAGE MERCY HAVERFORD HOSPITAL POLICE STATION POST OFFICE – MANOA POST OFFICE – TWP. LINE RD. QUADRANGLE SKATIUM TWP. BUILDING	
2 1 1	PADDOCK FARMS PARK POLO FIELD POWDER MILL VALLEY PARK	C3 D1 D3,D4	GOLF CLUBS	
5 - - -	PRESTON PARK RICHLAND FARMS PARK THOMPSON TRACT	D1 C4 B4	LLANERCH CC. MERION GOLF CLUB EAST CRSE. MERION GOLF CLUB WEST CRSE.	E C E
5 4 3 3	VETERANS FIELD WESTGATE HILLS PARK WILLIAMSON TRACT	C3,C4 A3,B3 B4	ELEMENTARY SCHOOLS	c
3	VETERAN'S POSTS	B4	COOPERTOWN LYNNEWOOD MANOA	Č E E
2	V2 MANOA AMERICAN LEGION POST V3 NUNAN SLOOK POST	B4 C3	OAKMONT PRIVATE_SCHOOLS	ō
- 3 4 3	FIRE COMPANIES	B4	FRIEND'S SCHOOL HAVERFORD SCHOOL	0
3	F2 BROOKLINE F3 LLANERCH F4 MANOA F5 OAKMONT	C3 C4 B3 C3		
	<u>egend</u>			

PARKS AND RECREATION		MAJOR FACILITIESBRYN MAWR TERRACECHATEAUHAVERFORD COLLEGEHAVERFORD NURSING & REHABHAVERFORD TWP. JR. HIGHHAVERFORD TWP. JR. HIGHHAVERFORD TWP. SR. HIGHHAVERFORD TWP. SR. HIGHHAVERFORD TWP. SR. HIGHHAVERFORD TWP. SR. HIGHHOLCE STATIONPOST OFFICE - MANOAPOST OFFICE - TWP. LINE RD.QUADRANGLESKATIUMTWP. BUILDINGLLANERCH CC.MERION GOLF CLUB EAST CRSE.MERION GOLF CLUB WEST CRSE.CHATHAM PARKCOPERTOWNLYNNEWOODMANOAOKMONT	
BAILEY PARK	C3	BRYN MAWR TERRACE	D1
CADWALLADER TRACT	D3	CHATEAU	D1
CARROLL PARK	D4	HAVERFORD COLLEGE	D1,
CHATHAM GLEN PARK	C4	HAVERFORD NURSING & REHAB	A3
DARBY CREEK VALLEY PARK	A1-4	HAVERFORD STATE HOSPITAL	B1
ELWELL FIELD	D2	HAVERFORD TWP. JR. HIGH	C3
FAIRMOUNT PARK	D4	HAVERFORD TWP. SR. HIGH	C3
FOSTER TRACT	B3	LIBRARY – HAVERFORD TWP.	C3
GEST TRACT	D3	LIBRARY - MANOA COMM.	B4
GRANGE FIELD	D4	MAINTENANCE GARAGE	A3
GRASSLYN PARK	C3	MERCY HAVERFORD HOSPITAL	A3
HIGHLAND FARMS PARK	C1	POLICE STATION	C4
HILLTOP PARK	A4	POST OFFICE - MANOA	B3
LAWRENCE RD. PARK	B3	POST OFFICE - TWP. LINE RD.	D4
LYNNEWOOD PARK	B3	QUADRANGLE	A1
MERION GOLF MANOR PARK	D2	SKATIUM	C4
MERWOOD PARK	D2	TWP. BUILDING	C3
PADDOCK FARMS PARK	C3		
POLO FIELD	D1	<u>GOLF CLUBS</u>	
POWDER MILL VALLEY PARK	D3,D4		
PRESTON PARK	D1	LLANERCH CC.	B4
RICHLAND FARMS PARK	C4	MERION GOLF CLUB EAST CRSE.	C2
THOMPSON TRACT	B4	MERION GOLF CLUB WEST CRSE.	B2
VETERANS FIELD	C3,C4		
WESTGATE HILLS PARK	A3,B3	ELEMENTARY SCHOOLS	
WILLIAMSON TRACT	B4		
		CHATHAM PARK	C4
<u>VETERAN'S POSTS</u>		COOPERTOWN	C1
		LYNNEWOOD	B3
V1 CATHOLIC WAR VETS	84	MANOA	B4
V2 MANOA AMERICAN LEGION POST	84	OAKMONI	C3
/3 NUNAN SLOOK POST	C3	CHATHAM PARK COOPERTOWN LYNNEWOOD MANOA OAKMONT PRIVATE SCHOOLS FRIEND'S SCHOOL HAVERFORD SCHOOL	
FIRE COMPANIES		<u> </u>	
		FRIEND'S SCHOOL	D1
F1 BON AIR	B4	HAVERFORD SCHOOL	D1
F1 BON AIR F2 BROOKLINE	C3		
F3 LLANERCH	C4		

	03			IDEX			7
	D3 C3	EDGEHILL DR. EDGEWOOD DR.	C3,D3 D3,D4	LEEDOM RD. LENOX RD.	A4,B4 C4,D4	RIDGEWAY RD. RISING SUN RD.	D3 D2
	D4 C2	EDMONDS AVE. ELEANOR CIR.	B4 B3	LEWIS RD. LEXINGTON AVE.	C4 B4	RITTENHOUSE CIR. ROBINS LA.	C3 C2
	C3,C4	ELLIS RD.	B2,C2	LINCOLN AVE.	B3,C3	ROBINSON AVE.	B3
Ξ.	C1,C2 B3	ELLSTON RD. EUCLID AVE.	B4 B4	LINDEN DR. LISA CIR.	D2,D3 A4	ROCKLAND RD. ROCKWOOD DR.	C3 C3,
	A3	EXETER RD.	C2	LLANDAFF RD. LLANDILLO RD.	C4 C4	RODMAN AVE. RODMOR RD.	C4 B4
	B2,C2,D2 B3	FAIRFIELD RD.	C3	LLANERCH AVE.	C4	RODNEY CIR.	C1
	D4 C2,C3	FAIRHAVEN RD.	D4	LONE OAK DR. LORAINE ST.	B1 D2	ROLAND RD. ROOSEVELT AVE.	D3 B3,
	D2	FAIRLAMB AVE. FAIRMONT RD.	A3,B3 B3	LYNNEWOOD DR.	B3	ROSE AVE.	B3
	D2,D3 D4	FAIRVIEW AVE. FARNHAM RD.	A4,B4 C4	MALVERN RD.	D2	ROSE GLEN RD. ROSEMONT AVE.	B3 D2,
		FARWOOD RD.	D4	MANOA RD.	D4	ROSE TREE LA. ROSEWOOD LA.	B3 D3
	C2 D1	FAWN LA. FLINTLOCK RD.	C1 A4	MANOA RD.(N) MANOA RD.(S)	B4,C4 B4	ROYAL AVE.	B4
	B2	FLORENCE AVE.	D4	MANOA RD.(E)	C4	RUGBY RD.	D1
	C1,D1 D3	FOREST AVE. FOSTER AVE.	A4 C4	MANOA RD.(W) MANOR RD.	C4 C3	SAGAMORE RD.	С3,
₹.	D3	FOX FIELDS RD. FRANCIS DR.	B1 A3	MAPLE AVE. MAPLE HILL RD.	C3 D3	SAN MARINO AVE. SARAH AVE.	D1 B3
).	D3 B4	FREDERICK RD.	B2,C2	MAPLE SHADE RD.	D2	SCARLET OAK DR.	B1
•	C3 D2,D3	FRIENDSHIP RD. FULMER AVE.	A4 C4	MARILYN DR. MARPLE RD.	B2 B2,C2	SEVERN LA. SHAMROCK LA.	D4 D1
•	C3	FURLONG AVE.	B4	MARTHART AVE.	C3	SHAWNEE RD.	C2
E) W)	C3,D3 C3	GARDEN AVE.	D3	MARTHART AVE.(E) MARTIN AVE.	C3,D3 D1	SHELBOURNE RD. SIGNAL RD.	C3 A4
).	D4	GARFIELD AVE.	B3	MARYLAND AVE. MEADOWBROOK RD.	B3,C3 D4	SPRING RD. SPRING MILL LA.	C4, D1
	D2 C3	GARLOR DR. GAYNOR RD.	B2 C1	MEADOWS LN.	C1	SPROUL RD.	A1
	C4 D2	GEORGES LA.	D2	MEDIA AVE. MELROSE AVE.	C4 B3	ST. ALBANS RD. ST. DAVIDS LA.	D4 C2
	C1	GILMORE RD. GLADSTONE RD.	C4 B4	MERCER AVE.	C4	ST. DENIS AVE.	C3
	C1 B4	GLEN ARBOR RD.	C4	MERCER AVE.(W) MERION AVE.	C4 D4	ST. DENIS LA. ST. GEORGES DR.	C2, C2
	B4	GLENBROOK RD. GLENDALE RD.	D2 A3,A4,B3	MERRYBROOK DR.	B2,B3,C2	ST. MARYS RD.	D2
	A4,B4 C3	GLEN GARY RD. GLEN RIDGE RD.	A3,B3 A3,B3	MERWOOD LA. MICHAEL RD.	C2,C3 B2	STANLEY AVE. STANTON RD.	B3 B3
).	A1,B1	GLEN TER.	B4	MID COUNTY EXPY. MIFFLIN AVE.	B1 C4	STEEL RD. STOCKTON RD.	A4, C1
	D4 B3	GOLF RD. GOLF HILLS RD.	C3 B2	MILARD LA.	C4	STRATHMORE RD.	C3
DR.	D3 A1	GOLF HOUSE RD.	C1,C2	MILL RD. MILLBROOK LA.	B1,C3,D3 D1	STUMP LA. SUE ELLEN DR.	A4 B2
/D.	C3,D3	GOLF VIEW RD. GOLF VIEW RD.(E)	C2,D2 C2	MILLER ST.	D1 B1	SULGRAVE RD.	C2 D2
	D3 C4	GOLF VIEW RD.(Ŵ) GRAND AVE.	C2 B4	MILLRIDGE DR. MISTY HOLLOW CT.	B1	SUNNYBROOK LA. SUNNY HILL LA.	B3
Æ.	D2,D3	GRANT AVE.	B3	MOEWYN RD. MOORE AVE.	C4 D1	SURREY LA. SYCAMORE RD.	D3 C3
	C1,D1 A4	GRASSLYN AVE. GREEN BRIAR LA.	C2,C3 A3,B3	MORGAN AVE.	B4	STCAMORE RD.	05
	•	GREEN VALLEY RD.	D3	MORLYN AVE. MORRIS RD.	C1 D2	TAYLOR LA.	C2
•	C1 C2	GREENVIEW LA. GREENWAY RD.	B4,C4 C3	MT. PLEASANT RD.	B3	TENBY RD. TERRA ALTA CIR.	C4 B2
D.	C3,D3 D4	GROVE PL.	D4	MYRTLE AVE.	D4	TERRY CIR. THOMPSON DR.	B4 C3
E)	C1	HAMPSTEAD RD.	D4	NANCY DR.	B3,B4	TOWNSHIP LINE RD.	A4,
Ŵ)	C1 D4	HAMPTON RD.	C3 D2	NAYLORS RUN DR. NELSON PL.	C4 D3	TRACY TER. TREATY RD.	C1 A4
DR.	B2	HANNUM DR. HARDING AVE.	B3	NORMAN RD. NORMANDY RD.	A4 D2	TUNBRIDGE CIR. TURNBULL AVE.	C1 C3
RD.	D4 C2	HARRIET LA. HARRINGTON RD.	B3 B3,C3	NORTHUP RD.	A4	TURNBULL AVE.(E)	C3
	A4,B4	HARVARD RD.	C3			TWIN OAKS DR. TYSON RD.	C4 B3
	B4 B2	HARVEST LA. HASTINGS AVE.	C2 C3,C4	OAK LA.	C3		
	D4 C3	HATHAWAY LA.	D2	OAK WAY OAKFORD RD.	B3,B4 D2	UPLAND RD.	B3
	C2,D2	HATHAWAY LA.(E) HATHAWAY LA.(W)	C2,C3,D2 C2,D2	OAKLEY RD.	D1 C3	VALLEY RD.	C4
,	B3 D2,D3	HAVCREST CIR. HAVERFORD RD.	A4 D1,D2,D3	OAKMONT AVE. OAKVIEW RD.	D2	VALLEY GLEN DR.	B1 D2
	B3 B4	HAVERFORD CT.	D2	OLCOTT AVE, OLD BUCK RD.	D2,D3 D1	VALLEY VIEW RD. VERNON RD.	C4
VD.	B3	HAWTHORNE AVE. HAYDOCK LA.	D3 D1	OLD FOREST RD.	D4	VINCENT RD. VIRGINIA AVE.	C4 B3,
).(E)).(W)	C2 C2	HAZELWOOD AVE.	D2	OLD LANCASTER RD. OLD MANOA RD.	D1 D4		50,
.(")	C1	HEATHERWOOD RD. HERMOSA LA.	D4 C2	OLD POWDER MILL LA.	D3	WALES RD.	C4
	D2 C3	HIGHLAND LA.	B1,C1	OLD WEST CHESTER PI OLYMPIC AVE.	<. A3,B3 C4	WALNUT LA. WALNUT HILL LA.	D1 A3,
	B2,B3,C3	HILL RD. HILLCREST AVE.(E)	B4 C3	ORCHARD RD.	C2 B4	WALNUT PL. WARREN AVE.	D4 B3
	C1,D1 B3,B4	HILLCREST AVE.(Ŵ) HILLSIDE AVE.	C3 A4	ORMOND AVE. OVERBROOK TER.	C2	WARRIOR RD.	A4
	C3	HIRST AVE.	D4	OVERHILL RD. OXFORD RD.	D2 C4,D4	WARWICK RD. WASHINGTON AVE.(E)	D4 B3,
	C3 B4	HIRST TER. HOLBROOK RD.	C2,C3 D4	OXFORD HILL LA.	64,04 B3	WASHINGTON AVE.	C3,
RD.	B4 C1,C2	HOLLIS RD.	C3	PADDOCK RD.	B2,C2	WATERVIEW CIR. WAVERLY RD.	В3 С4
LA.	B4	HOLMES AVE. HOMESTEAD AVE.	B3 D3	PANMURE RD.	D1	WELLER AVE.	СЗ,
RD.	D2,D3 D4	HOWARD AVE. HOWELL LA.	B3 B3	PARK RD. PARK RD.(E)	C4 C4	WENDOVER DR. WENDY RD.	B3 C2
	C1,C2	HUMPHREYS ST.	D2	PARKRIDGE DR.	B1	WEST AVE. WEST CHESTER PK.	D1 B3,
. DR.	B3 D4	HUNTERS LA. HUNTINGTON LA.	D4 C2	PARKSIDE DR. PATTON DR.	A4 D2	WESTFIELD RD.	D2
VE.	D2 D4			PEACH LA.	B4	WESTGATE RD. WESTVIEW RD.	В3 С1
\♥⊑•	Т	IVY ROCK LA.	A3,B3	PEARSON LA. PELHAM AVE.	B4 D3	WESTWOOD PARK DR.(E)	C4
	A1,B1,C2,C3,C4	JACALYN DR.	B2,B3	PEMBROKE RD. PENFIELD AVE.	C3,C4 D3,D4	WESTWOOD PARK DR.(W) WEXFORD RD.	D3,
RD.	C3 B2	JAMES DR.	B4	PENN ST.	D1	WHITBY RD. WHITEMARSH RD.	C2 C2
•	C2 B2	JOANNA RD. JOANN CIR.	C4 B2	PENNSYLVANIA AVE. PENNVIEW RD.	C3,C4 C3	WHITNEY AVE.	C4
	C4	JOHNSON RD. JOSIE LA.	D3 B2	PHEASANT HILL DR.	B1	WICKHAM RD. WICKFORD RD.	D3 C4
	D1 C2	JUNIPER RD.	B2 C4,D4	PICKWICK RD. PILGRIM LA.	D4 A4	WILLIAMS RD.	B1
	C1			PINERIDGE RD.	C4 D2	WILLOW AVE. WILLOWBROOK RD.	D3 C4
	C3,C4 D3	KARAKUNG DR. KATHLEEN CT.	D3,D4 C3	PINE VALLEY LA. PINZON AVE.	B3	WILMOT AVE.	C4
	C3,D3	KATHMERE RD.	C3,D3 D3	POLO CIR. POLO RD.	D1 D1	WILMOT AVE.(W) WILSON AVE.	C4 B3
	A4 B2	KENILWORTH RD. KENMORE RD.	C4,D4	PONT READING RD.	D2	WINCHESTER RD. WINDSOR PARK LA.	D3 A3,
	D4 C3	KINGSLEY RD.	D3	POPLAR RD. POWDER MILL LA.	D3 D3,D4	WINTON AVE.	D3
	A4,B4	LAKESIDE AVE.	D3	PRESCOTT RD.	C2,C3	WOOD LA. WOODBINE RD.	C3 C3
	C1 D3	LANCASTER AVE.	D1	PRESTON AVE. PRINCETON RD.	D1 C3	WOODCREST AVE.	D2
D.	B3	LANDOVER RD. LANGHORNE AVE.	C1,D1 C4	PROSPECT AVE.	C4	WOODCROFT RD. WOODLAND RD.	C2 C4
	D4 D3	LANGHORNE AVE.(W)	C4	QUAKER LA.	C2	WOODLEIGH RD.	C2
)	B4	LANSDOWNE RD. LARCHMONT AVE.	C4 D3,D4		02	WOODMERE WAY WYNDMOOR RD.	D3 B3
	C3,D3	LAUREL RD. LAWNDALE AVE.	C3 D3	RADNOR RD.	B1 D1	WYNNE AVE.	D4
	B3	LAWRENCE RD.	B3,C3	RAILROAD AVE. RALSTON AVE.	D1 C3	WYNNEFIELD DR. WYNNEWOOD RD.(W)	D2 D3
	B3,B4 C3	LAWSON AVE. LEE AVE.	D3,D4 D1	RAMBLEWOOD DR.	B1		
) .	D3,D4	LEE CIR.	C1	RAYMOND DR. REMINGTON RD.	A3 D4	YALE RD. YORK RD.	C3 C2
		LEEDOM AVE.	C3	RICHLAND AVE.	C4		22



USDA Natural Resources Conservation Service Web Soil Survey National Cooperative Soil Survey

MAF	LEGEND	MAP INFORMATION			
Area of Interest (AOI)SoilsSoilsSoil Map Unit Polygo~Soil Map Unit LinesSoil Map Unit LinesSoil Map Unit PointsSpecial FeaturesImage: Special PolygoSole Rorow PitImage: Special PolygoSole Clay SpotImage: Special PolygoImage: S	 Spoil Area Stony Spot Very Stony Spot Vert Spot Other Special Line Features Streams and Canals Transport Rails Interstate Highways IS Routes IS Routes Local Roads Eackgrout Aerial Photography 	<section-header><section-header><text><text><text><text><text><text><text><text><text><text></text></text></text></text></text></text></text></text></text></text></section-header></section-header>			
 Severely Eroded Spot Sinkhole Slide or Slip Sodic Spot 	t				



Sewage Disposal

This table shows the degree and kind of soil limitations that affect septic tank absorption fields and sewage lagoons. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 24 and 72 inches or between a depth of 24 inches and a restrictive layer is evaluated. The ratings are based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health. Saturated hydraulic conductivity (Ksat), depth to a water table, ponding, depth to bedrock or a cemented pan, and flooding affect absorption of the effluent. Stones and boulders, ice, and bedrock or a cemented pan interfere with installation. Subsidence interferes with installation and maintenance. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth of less than 4 feet below the distribution lines. In these soils the absorption field may not adequately filter the effluent, particularly when the system is new. As a result, the ground water may become contaminated.

Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water. Considered in the ratings are slope, saturated hydraulic conductivity (Ksat), depth to a water table, ponding, depth to bedrock or a cemented pan, flooding, large stones, and content of organic matter.

Saturated hydraulic conductivity (Ksat) is a critical property affecting the suitability for sewage lagoons. Most porous soils eventually become sealed when they are used as sites for sewage lagoons. Until sealing occurs, however, the hazard of pollution is severe. Soils that have a Ksat rate of more than 14 micrometers per second are too porous for the proper functioning of sewage lagoons. In these soils, seepage of the effluent can result in contamination of the ground water. Ground-water contamination is also a hazard if fractured bedrock is within a depth of 40 inches, if the water table is high enough to raise the level of sewage in the lagoon, or if floodwater overtops the lagoon.

A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope, bedrock, and cemented pans can cause construction problems, and large stones can hinder compaction of the lagoon floor. If the lagoon is to be uniformly deep throughout, the slope must be gentle enough and the soil material must be thick enough over bedrock or a cemented pan to make land smoothing practical.

Information in this table is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this table. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Report—Sewage Disposal

[Onsite investigation may be needed to validate the interpretations in this table and to confirm the identity of the soil on a given site. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The table shows only the top five limitations for any given soil. The soil may have additional limitations]

Sewage Disposal–Delaware County, Pennsylvania							
Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons			
		Rating class and limiting features	Value	Rating class and limiting features	Value		
BaA—Baile silt loam, frequently ponded, 0 to 3 percent slopes							
Baile, frequently ponded	90	Very limited		Very limited			
		Ponding	1.00	Ponding	1.00		
		Depth to saturated zone	1.00	Depth to saturated zone	1.00		
		Slow water movement	1.00	Seepage	0.05		

USDA

Sewage Disposal–Delaware County, Pennsylvania						
Map symbol and soil name Pct. of		Septic tank absorption	fields	Sewage lagoons		
	map unit	Rating class and limiting features	Value	Rating class and limiting features	Value	
CmA—Codorus silt loam, 0 to 3 percent slopes, occasionally flooded						
Codorus	85	Very limited		Very limited		
		Flooding	1.00	Flooding	1.00	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	
		Slow water movement	1.00	Seepage	0.0	
GjB—Glenelg channery loam, 3 to 8 percent slopes						
Glenelg	85	Very limited		Somewhat limited		
		Slow water movement	1.00	Slope	0.92	
		Depth to bedrock	0.77	Depth to soft bedrock	0.42	
				Seepage	0.0	
GjC—Glenelg channery loam, 8 to 15 percent slopes						
Glenelg	85	Very limited		Very limited		
		Slow water movement	1.00	Slope	1.00	
		Depth to bedrock	0.77	Depth to soft bedrock	0.42	
		Slope	0.63	Seepage	0.0	
GmB—Glenelg-Urban land- Wheaton complex, 0 to 8 percent slopes						
Glenelg	36	Very limited		Somewhat limited		
		Slow water movement	1.00	Depth to soft bedrock	0.42	
		Depth to bedrock	0.77	Slope	0.32	
				Seepage	0.0	
Urban land	34	Not rated		Not rated		
Wheaton	30	Very limited		Somewhat limited		
		Slow water movement	1.00	Slope	0.32	
GnB—Glenville silt loam, 3 to 8 percent slopes						
Glenville	90	Very limited		Very limited		
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	
		Slow water movement	1.00	Slope	0.92	

•• • • • •		age Disposal–Delaware Count				
Map symbol and soil name	Pct. of map unit	Septic tank absorption	fields	Sewage lagoons		
		Rating class and limiting features	Value	Rating class and limiting features	Value	
GwB—Glenelg-Wheaton complex, 0 to 8 percent slopes						
Glenelg	50	Very limited		Somewhat limited		
		Slow water movement	1.00	Depth to soft bedrock	0.42	
		Depth to bedrock	0.77	Slope	0.32	
				Seepage	0.05	
Wheaton	35	Very limited		Somewhat limited		
		Slow water movement	1.00	Slope	0.32	
HaA—Hatboro silt loam, 0 to 3 percent slopes, frequently flooded						
Hatboro, frequently flooded	95	Very limited		Very limited		
		Flooding	1.00	Flooding	1.00	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	
		Slow water movement	1.00	Seepage	0.05	
McE—Manor channery loam, 25 to 35 percent slopes						
Manor	90	Very limited		Very limited		
		Slope	1.00	Slope	1.00	
		Seepage, bottom layer	1.00	Seepage	1.00	
		Slow water movement	0.95			
McF—Manor channery loam, 35 to 60 percent slopes						
Manor	90	Very limited		Very limited		
		Slope	1.00	Slope	1.00	
		Seepage, bottom layer	1.00	Seepage	1.00	
		Slow water movement	0.95			
MgB—Manor loam, 3 to 8 percent slopes						
Manor	90	Very limited		Very limited		
		Seepage, bottom layer	1.00	Seepage	1.00	
		Slow water movement	0.95	Slope	0.92	
MgC—Manor loam, 8 to 15 percent slopes						
Manor	90	Very limited		Very limited		
		Seepage, bottom layer	1.00	Slope	1.00	
		Slow water movement	0.95	Seepage	1.00	
		Slope	0.63			

Sewage Disposal–Delaware County, Pennsylvania							
Map symbol and soil name	Pct. of	Septic tank absorption fields		Sewage lagoons			
	map unit	Rating class and limiting features	Value	Rating class and limiting features	Value		
MgD—Manor loam, 15 to 25 percent slopes							
Manor	90	Very limited		Very limited			
		Slope	1.00	Slope	1.00		
		Seepage, bottom layer	1.00	Seepage	1.00		
		Slow water movement	0.95				
UdB—Urban land, schist and gneiss, 0 to 8 percent slopes							
Urban land, schist and gneiss	90	Not rated		Not rated			
UmB—Urban land-Wheaton complex, schist and gneiss, 0 to 8 percent slopes							
Urban land, schist and gneiss	60	Not rated		Not rated			
Wheaton	32	Very limited		Somewhat limited			
		Slow water movement	1.00	Slope	0.32		
W—Water							
Water	100	Not rated		Not rated			

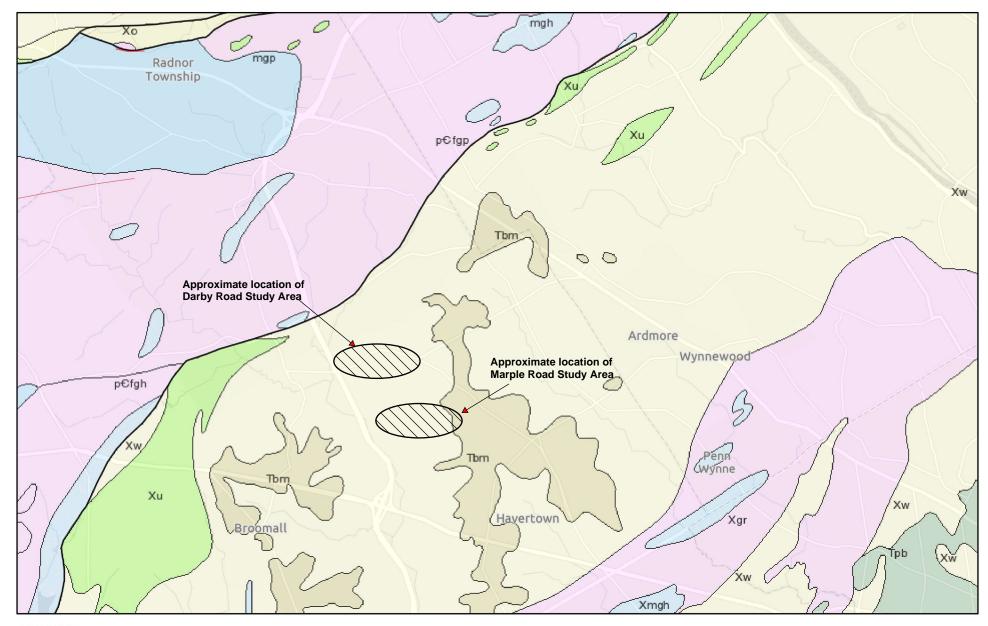
Data Source Information

Soil Survey Area: Delaware County, Pennsylvania Survey Area Data: Version 22, Sep 4, 2024

Map Unit Legend

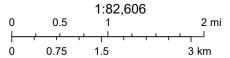
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI	
BaA	Baile silt loam, frequently ponded, 0 to 3 percent slopes	5.4	0.7%	
CmA	Codorus silt loam, 0 to 3 percent slopes, occasionally flooded	8.0	1.0%	
GjB	Glenelg channery loam, 3 to 8 percent slopes	34.0	4.5%	
GjC	Glenelg channery loam, 8 to 15 percent slopes	5.4	0.7%	
GmB	Glenelg-Urban land-Wheaton complex, 0 to 8 percent slopes	92.8	12.2%	
GnB	Glenville silt loam, 3 to 8 percent slopes	51.4	6.7%	
GwB	Glenelg-Wheaton complex, 0 to 8 percent slopes	84.4	11.0%	
HaA	Hatboro silt loam, 0 to 3 percent slopes, frequently flooded	17.8	2.3%	
McE	Manor channery loam, 25 to 35 percent slopes	81.8	10.7%	
McF	Manor channery loam, 35 to 60 percent slopes	31.1	4.1%	
MgB	Manor loam, 3 to 8 percent slopes	168.1	22.0%	
MgC	Manor loam, 8 to 15 percent slopes	121.3	15.9%	
MgD	Manor loam, 15 to 25 percent slopes			
UdB	Urban land, schist and gneiss, 0 to 8 percent slopes	21.1	2.8%	
UmB	Urban land-Wheaton complex, schist and gneiss, 0 to 8 percent slopes	4.0	0.5%	
W	Water	0.8	0.1%	
Totals for Area of Interest		763.6	100.0%	

Haverford Geology



5/22/2025

Dikes — Dashed - identity certain, location approximate Solid - identity certain, location accurate Faults Gaology Symbols Cuatemary Folds anticline Q s Sands of Presque Isle anticline Q t - Trenton Gravel Solid - identity certain, location accurate Gaology Symbols Quatemary Q s - Sands of Presque Isle Q t - Trenton Gravel	Tertiary Tet - Pensauken and Bridgeton Formations, undifferentiate Tom - Bryn Mawr Formation Kp - Patapsco(?) Formation Js - Sedimentary strata at Jacksonwald and Aspers Jurassic and Triassic JTrigo - Gettysburg conglomerate	JTrg - Gettysburg Formation JTrfg - Quartz fanglomerate JTrd - Diabase JTrb - Brunswick Formation Triassic Trf - Limestone fanglomerate Trh - Hammer Creek Formation	Trgh - Heidlersburg Member of Trl - Lockatong Formation Trhc - Hammer Creek Trn - New Oxford Formation Trs - Stockton Formation Trnc - New Oxford conglomerate Trsc - Stockton congiomerate	0 0.5
Solid - Identity Certain, location accurate				



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, \circledcirc OpenStreetMap contributors, and the GIS User Community, PA DCNR

NOTES TO USERS

p is for use in administering the National Flood Insurance Program. It does assarily identify all areas subject to flooding, particularly from local sources of small size. The community map repository should be d for possible updated or additional flood hazard information.

In more detailed information in areas where **Base Flood Elevations** more detailed information in areas where **Base Flood Elevations** of floodways have been detailed users are encouraged to consult interimed within the Flood Insurance Study (FIS) report that accompanies which coll deviations. These IFEs are intered for flood insurance rating or only and should not be used as the sole source of flood elevation on Accordingly, flood deviation data previous of construction and/or floodplain tent.

ies of the **floodways** were computed at cross sections and interpolated cross sections. The floodways were based on hydraulic considerations and to requirements of the National Flood Insurance Program. Floodway nd other pertinent floodway data are provided in the Flood Insurance port for this juriadiction.

areas not in Special Flood Hazard Areas may be protected by **flood** structures. Refer to Section 2.4 "Flood Protection Measures" of the Flood e Study report for information on flood control structures for this

jection used in the preparation of this map was Universal Transverse (UTM) Zone 18. Horizontal datum was NAD 83, GR580 spheroid. es in datum, spheroid, projection or UTM zones used in the production of xr adjacent jurisdictions may result in slight positional differences in map across juridiction boundaries. These differences do not affect the of the FIRM.

evations on this map are referenced to the North American Vertical Datum These flood elevations must be compared to structure and ground is referenced to the same vertical datum. For information regarding on between the National Geodetic Vertical Datum of 1929 and the North 1 vertical Datum of 1988, visit the National Geodetic Survey website at w ngs.noaa.govi or contact the National Geodetic Survey at the following

teference System Division Geodetic Survey, NOAA rring Metro Center st-West Highway rring, Maryland 20910 3-3191

n current elevation, description, and/or location information for **bench** hown on this map, please contact the Information Services Branch of the Geodetic Survey at (**301**) **713-3242**, or visit its website at <u>w.ngs.noaa.gov/</u>

AP SOURCE: Base map files were obtained in digital spatial data format. Delaware Valley Regional Planning Commission and Delaware County. The county boundary was downloaded from the 2005 County. The county boundary was downloaded from the 2005 Valley Regional Planning Commission Adjustments were made to asse map features to align them to 1%200° scale orthophotos.

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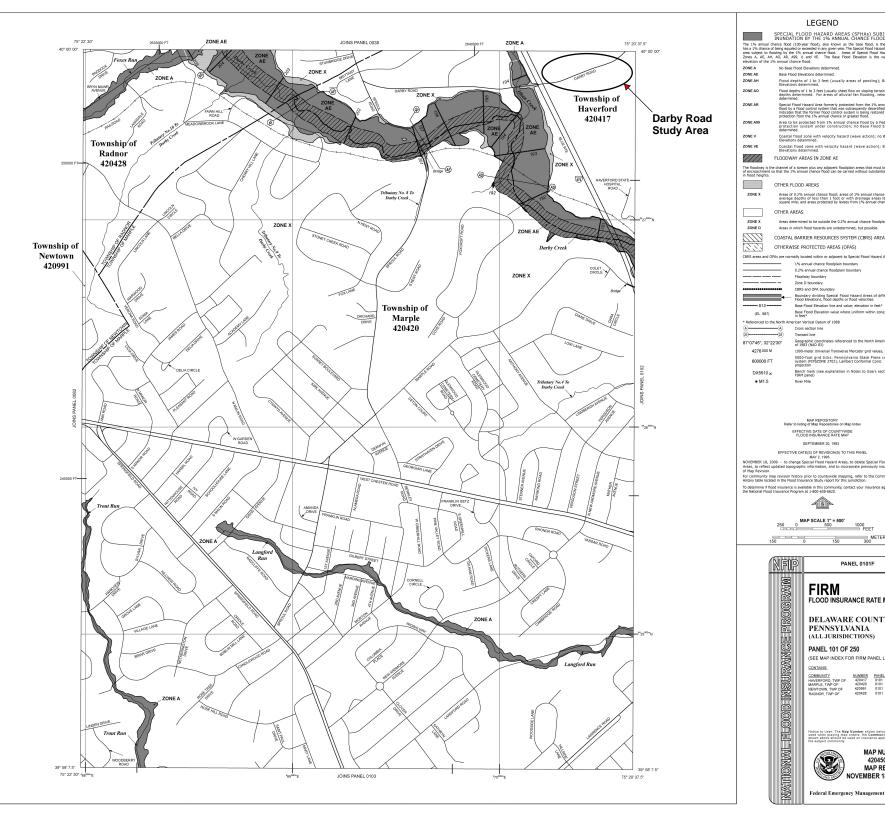
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He FEMA Map Service Center at 1-800-358-9616 for information on products associated with this FIRM. Available products may include y issued Letters of Map Change. a Flood Insurance Study report, and or raisons of this map. The FEMA Map Service Center may also be reached 1-100-358-9620 and its website at <u>http://mscfema.gov/</u>

ve questions about this map or questions concerning the National Flood e Program in general, please call **1-877-FEMA MAP** (1-877-336-2627) or FEMA website at <u>http://www.fema.gov/business/nfip</u>.

r elevations may be shown to the nearest tenth of a foot. Users should the Flood Insurance Study (FIS) for detailed flood elevation information



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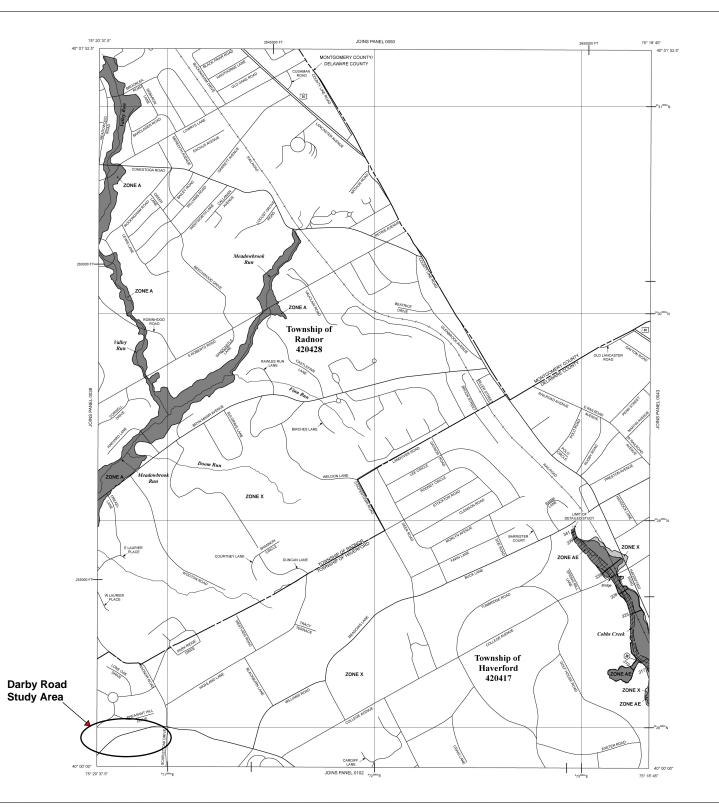
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SPECIAL	FLOOD HAZARD AREAS (SFHAs) SL	BJB
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indicates protection	Flood Hazard Area formerly protected from the 1% a flood control system that was subsequently decert that the former flood control system is being resto n from the 1% annual chance or greater flood.	red t
ZONE A99 Area to t protection	be protected from 1% annual chance flood by a lon system under construction; no Base Floo ed.	Fed d El
	eu. flood zone with velocity hazard (wave action); i is determined.	
ZONE VE Coastal	flood zone with velocity hazard (wave action ns determined.); Ba
	AY AREAS IN ZONE AE	
	a stream plus any adjacent floodplain areas that mu s annual chance flood can be carried without substa	st be
		nua
	LOOD AREAS	
ZONE X Areas of I average souare m	0.2% annual chance flood; areas of 1% annual cha depths of less than 1 foot or with drainage area nile; and areas protected by levees from 1% annual	nce is le:
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	BARRIER RESOURCES SYSTEM (CBRS) AF	EAS
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	ally located within or adjacent to Special Flood Haza 1% annual chance floodplain boundary	rd As
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LEGEND

NOTES TO USERS

b is for use in administering the National Flood Insurance Program. It does essarily identify all areas subject to flooding, particularly from local sources of small size. The community man repository should be d for possible updated or additional flood hazard information.

n more detailed information in areas where Base Flood Elevations notion floodways have been determined, users are encouraged to consult of hordes and floodway Data and/or Summery of Silhusten Elevations and the service service and the service service

ies of the **floodways** were computed at cross sections and interpolated cross sections. The floodways were based on hydraulic considerations and to requirements of the National Flood Insurance Program. Floodway and other pertinent floodway data are provided in the Flood Insurance port for this juriadiction.

areas not in Special Flood Hazard Areas may be protected by flood structures. Refer to Section 2.4 "Flood Protection Measures" of the Flood e Study report for information on flood control structures for this

jection used in the preparation of this map was Universal Transverse (UTM) Zone 18. Horizontal datum was NAD 83, GRS80 spheroid. es in datum, spheroid, projection or UTM zones used in the production of or adjacent jurisdictions may result in slight positional differences in map across jurisdiction boundaries. These differences do not affect the of this FIRM.

evations on this map are referenced to the North American Vertical Datum These flood elevations must be compared to structure and ground is referenced to the same vertical datum. For information regarding on between the National Geodetic Vertical Datum of 1929 and the North 1 vertical Datum of 1988, visit the National Geodetic Survey website w ngs.noas.govi or contact the National Geodetic Survey at the following

teference System Division Geodetic Survey, NOAA wing Metro Center st-West Highway wing, Maryland 20910 3-3191

n current elevation, description, and/or location information for **bench** hown on this map, please contact the Information Services Branch of the Geodetic Survey at (301) 713-3242, or visit its website at <u>w.ngs.neaa.gov/</u>.

P SOURCE: Base map files were obtained in digital spatial data format Delaware Valley Regional Planning Commission and Delaware County entrines, streaming and transmitpolocoultanes were provided by 6 County. The county boundary was downloaded from the 2006 V solary Regional Planning Commission Adjustments were made to pase map features to align them to 1°×20° scale orthophotos.

n updated topographic information, this map reflects more detailed and te stream channel configurations and floodplain delineations than own on the previous FIRM for this jurisdiction. As a result, the Flood and Floodway Data tables may reflect stream channel distances that m what is shown on the map. Also, the road to floodplain relationships for datemasm say differ from what is shown on previous maps.

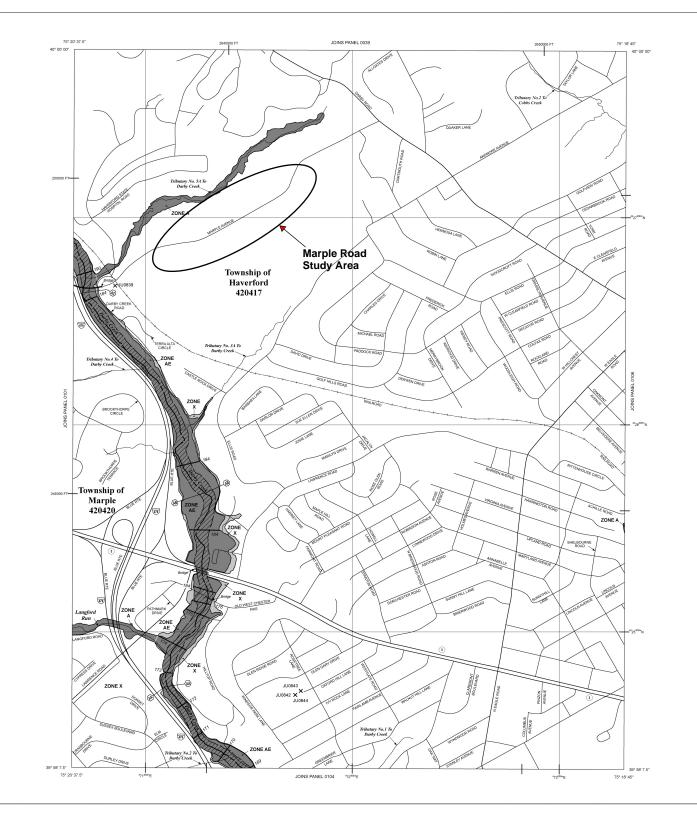
te limits shown on this map are based on the best data available at the vublication. Because changes due to annexations or de-annexations may surred after this map was published, map users should contact appropriate ity officials to verify current corporate limit locations.

efer to the separately printed **Map Index** for an overview map of the howing the layout of map panels; community map repository addresses; sting of Communities table containing National Flood Insurance Program r each community as well as a listing of the panels on which each hy is located.

the FEMA Map Service Center at 1-800-358-9616 for information on products associated with this FIRM. Available products may include lysaud Letters of Map Change, a Flood insurance Study report, and for resions of this map. The FEMA Mag Service Center may also be reached 1-800-359-9620 and fai webate at <u>http://mscTema.gov</u>.

ve questions about this map or questions concerning the National Flood e Program in general, please call **1-877-FEMA MAP** (1-877-336-2627) or FEMA website at <u>http://www.fema.gov/business/nfip</u>.

r elevations may be shown to the nearest tenth of a foot. Users should the Flood Insurance Study (FIS) for detailed flood elevation information



SPECIAL FLOOD HAZARD AREAS (SFHAS) SUBJ INUNDATION BY THE 1% ANNUAL CHANCE FLOOD The 1% annual chance flood (100-year flood), also known as the base flood, is the has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the we elevation of the 1% annual chance flood. ZONE A No Base Flood Elevations determined ZONE AE Base Flood Elevations determined. ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Ba Elevations determined. ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain depths determined. For areas of alluvial fan flooding, velor overimited. Special Flood Hazard Area formerly protected from the 1% smu. Nood by a flood control system that was subsequently decertified indicates that the former flood control system is being restored protection from the 1% smulal chance of greater flood. Area to be protected from 1% annual chance flood by a Feds protection system under construction; no Base Flood El determined. ZONE AR ZONE A9 ZONE V Coastal flood zone with velocity hazard (wave action); no B Elevations determined. ZONE VE Coastal flood zone with velocity hazard (wave action); B Elevations determined. //// FLOODWAY AREAS IN ZONE AE The floodway is the channel of a stream plus any adjacent floodplain areas that must be of encroachment so that the 1% annual chance flood can be carried without substantia in flood heights. OTHER FLOOD AREAS ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance average depths of less than 1 foot or with drainage areas le square mile; and areas protected by levees from 1% annual chan OTHER AREAS ZONE X Areas determined to be outside the 0.2% annual chance floodpla ZONE D Areas in which flood hazards are undetermined, but possible. COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREA 22 OTHERWISE PROTECTED AREAS (OPAS) CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard A 1% annual chance floodplain boundary 0.2% annual chance floodplain boundary ____ Floodway boundary Zone D boundary CBRS and OPA boundary Boundary dividing Special Flood Hazard Areas of diffe Flood Elevations, flood depths or flood velocities. Base Flood Elevation line and value; elevation in feet* ----- 513 -----Base Flood Elevation value where uniform within zone; in feet* (EL 987) Referenced to the North American Vertical Datum of 1988 Cross section line Transect line Geographic coordinates referenced to the North Americ of 1983 (NAD 83) 87°07'45", 32°22'30" 4276 000 M 1000-meter Universal Transverse Mercator grid values, : 5000-foot grid ticks: Pennsylvania State Plane co system (FIPSZONE 3702), Lambert Conformal Conic projection 600000 FT Bench mark (see explanation in Notes to Users sect FIRM panel) DX5510 x • M1.5 River Mile MAP REPOSITORY Refer to listing of Map Repositories on Map Index EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP SEPTEMBER 30, 1993 For community map revision history prior to countywide mapping, refer to the Comm History table located in the Flood Insurance Study report for this jurisdiction. To determine if flood insurance is available in this community, contact your insurance ag the National Flood Insurance Program at 1-800-638-6620. -MAP SCALE 1" = 500' 250 0 500 1000 FEET 150 METER 300 NFIP PANEL 0102F PROGRAM FIRM FLOOD INSURANCE RATE M DELAWARE COUNT PENNSYLVANIA (ALL JURISDICTIONS) NAATIONAAL FLOXOID INSURAANCE PANEL 102 OF 250 (SEE MAP INDEX FOR FIRM PANEL L CONTAINS:
 COMMUNITY
 NUMBER
 PANEL

 HAVERFORD, TWP OF
 420417
 0102

 MARPLE, TWP OF
 420420
 0102
 e to User: The Map Number shown below when placing map orders; the Communi n above should be used on insurance appli-black exercises. MAP NU Y 420450 MAP RE

NOVEMBER 1

Federal Emergency Management

LEGEND

APPENDIX B:

BASIS OF DESIGN AND COST ESTIMATE

HAVERFORD TOWNSHIP ACT 537 SPECIAL STUDY COST ESTIMATE

		2031 63				
Low Pressure System			Quanities		Total Cost	
Cost to Township	Unit Cost	Units	Darby Road	Marple Road	Darby Road	Marple Road
Traffic Control	\$25,000.00	LS	1	1	\$25,000.00	\$25,000.00
Manhole Connection into existing system	\$3,500.00	EA	1	1	\$3,500.00	\$3,500.00
Flush Station	\$8,000.00	EA	2	2	\$16,000.00	\$16,000.00
Low Pressure Sewer	\$200.00	LF	2,800	3,300	\$560,000.00	\$660,000.00
Service Connections	\$4,500.00	EA	24	32	\$108,000.00	\$144,000.00
Stone Backfill	\$25.00	CY	1,400	1,600	\$35,000.00	\$40,000.00
Allowance for rock	\$25,000.00	LS	1	1	\$25,000.00	\$25,000.00
Restoration			•		·	
Base Paving	\$65.00	SY	800	950	\$52,000.00	\$61,750.00
Overlay	\$20.00	SY	6,500	7,600	\$130,000.00	\$152,000.00
	Subtotal	\$954,500.00	\$1,127,250.00			
	10%	\$95,450.00	\$112,725.00			
	Contingency	20%	\$190,900.00	\$225,450.00		
Total					\$1,240,850.00	\$1,465,425.00

Cost to Property Owner						
Grinder Pump	\$15,000.00	EA	1	1	\$15,000.00	\$15,000.00
Lateral	\$5,000.00	EA	1	1	\$5,000.00	\$5,000.00
Building Connection	\$5,000.00	EA	1	1	\$5,000.00	\$5,000.00
Decommission Existing System	\$7,500.00	EA	1	1	\$7,500.00	\$7,500.00
			-	Subtotal	\$25,000.00	\$25,000.00
			Contingency	20%	\$5,000.00	\$5,000.00
			Total Proper	ty Owner Costs	\$30,000.00	\$30,000.00

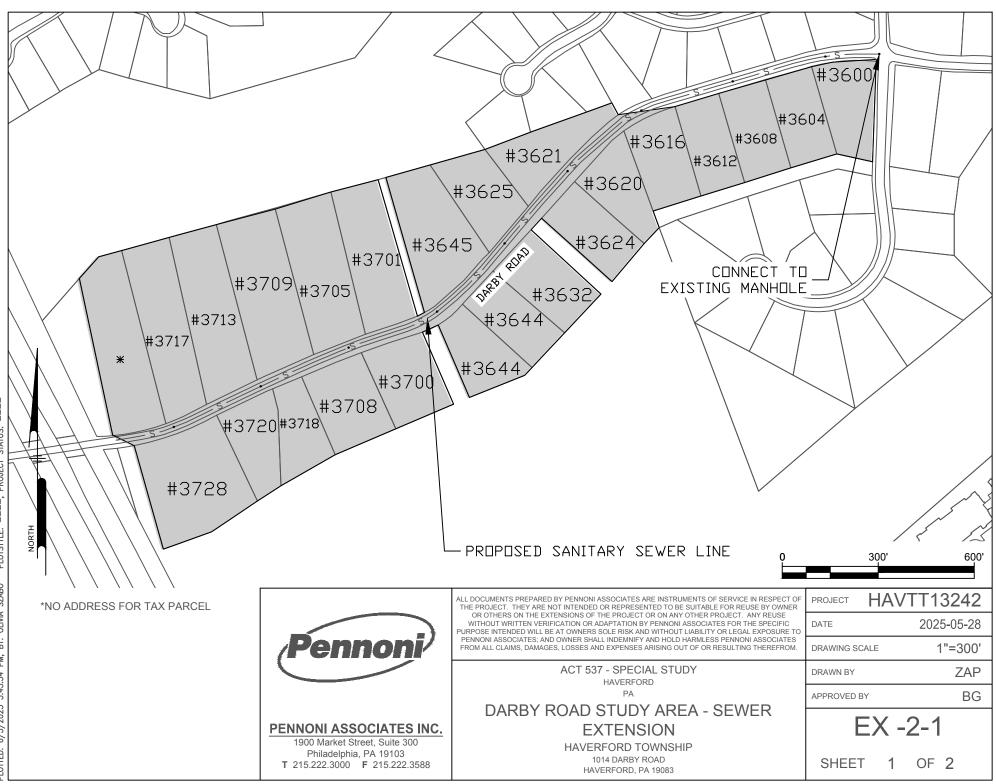
 Total Cost per Property
 \$
 81,702.08
 \$
 75,794.53

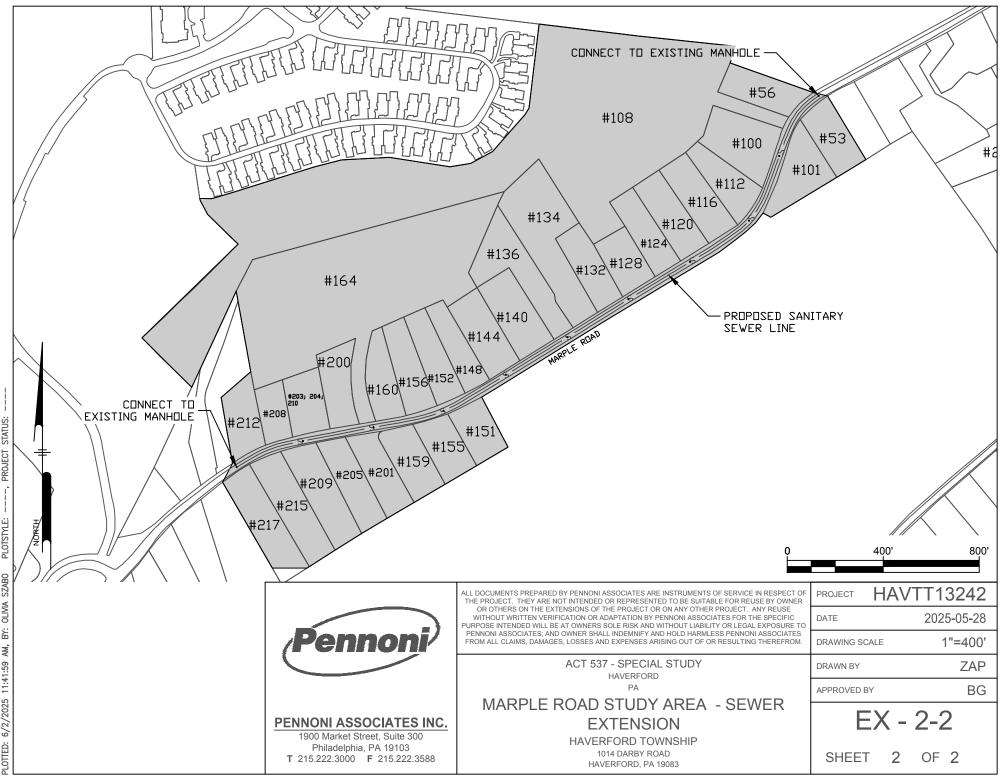
Note: Cost Estimate Utilizing Directional Drilling

HAVERFORD TOWNSHIP ACT 537 SPECIAL STUDY COST ESTIMATE

Gravity System		Quanities		Total Cost		
Cost to Township	Unit Cost	Units	Darby Road	Marple Road	Darby Road	Marple Road
Traffic Control	\$35,000.00	LS	1	1	\$35,000.00	\$35,000.00
Pipe	\$450.00	LF	2,800	3,300	\$1,260,000.00	\$1,485,000.00
Manholes	\$6,000.00	EA	8	10	\$48,000.00	\$60,000.00
Service Connection	\$7,500.00	EA	24	32	\$180,000.00	\$240,000.00
Manhole Connection into existing system	\$5,000.00	EA	1	1	\$5,000.00	\$5,000.00
Stone Backfill	\$25.00	CY	2,800	3,600	\$70,000.00	\$90,000.00
Allowance for rock	\$40,000.00	LS	1	1	\$40,000.00	\$40,000.00
Restoration			•	• •		
Base Paving	\$65.00	SY	2,500	2,800	\$162,500.00	\$182,000.00
Overlay	\$20.00	SY	6,500	7,600	\$130,000.00	\$152,000.00
			Subtotal	\$1,930,500.00	\$2,289,000.00	
		Engineering	10%	\$193,050.00	\$228,900.00	
						\$457,800.00
						\$2,975,700.00

Cost to Property Owner							
Lateral	\$7,	500.00	EA	1	1	\$7,500.00	\$7,500.00
Building Connection	\$5,	00.00	EA	1	1	\$5,000.00	\$5,000.00
	·				Subtotal	\$12,500.00	\$12,500.00
	Contingency 20%						\$2,500.00
Total Property Owner Cost						\$15,000.00	\$15,000.00
In the second							
	Total Cost per Property \$ 119,568.75 \$ 13						\$ 138,987.50





APPENDIX C:

ONLOT SEWAGE DISPOSAL SYSTEM SURVEY

Study Area	Address	t System Survey Recipients County, State	Survey Reply
nuuy Area	Address 3345 Darby Road	Haverford, PA 19041	Survey keply
	3345 Darby Road 3600 Darby Road	Bryn Mawr, PA 19041	Yes
	3604 Darby Road	Bryn Mawr, PA 19010 Bryn Mawr, PA 19010	165
	3608 Darby Road	Bryn Mawr, PA 19010	
	3612 Darby Road	Bryn Mawr, PA 19010	
	3616 Darby Road	Bryn Mawr, PA 19010	
	3620 Darby Road	Bryn Mawr, PA 19010	Yes
	3621 Darby Road	Bryn Mawr, PA 19010	
	3624 Darby Road	Bryn Mawr, PA 19010	Yes
	3625 Darby Road	Bryn Mawr, PA 19010	Yes
	3632 Darby Road	Bryn Mawr, PA 19010	Yes
Darby	3644 Darby Road	Bryn Mawr, PA 19010	Yes
Darby	3645 Darby Road	Bryn Mawr, PA 19010	
	3700 Darby Road	Bryn Mawr, PA 19010	Yes
	3701 Darby Road	Bryn Mawr, PA 19010	Yes
	3705 Darby Road	Bryn Mawr, PA 19010	
	3708 Darby Road	Bryn Mawr, PA 19010	
	3709 Darby Road	Bryn Mawr, PA 19010	
	3713 Darby Road	Bryn Mawr, PA 19010	Yes
	3717 Darby Road	Bryn Mawr, PA 19010	
	3718 Darby Road	Bryn Mawr, PA 19010	
	3720 Darby Road	Bryn Mawr, PA 19010	
	3728 Darby Road	Bryn Mawr, PA 19010	Yes
	3932 Darby Road	Haverford, PA 19041	Yes
	41 Marple Road	Haverford, PA 19041	Yes
	53 Marple Road 56 Marple Road	Haverford, PA 19041 Haverford, PA 19041	Yes
	100 Marple Road	Haverford, PA 19041	Tes
	101 Marple Road	Haverford, PA 19041	
	108 Marple Road	Haverford, PA 19041	
	112 Marple Road	Haverford, PA 19041	
	116 Marple Road	Haverford, PA 19041	Yes
	120 Marple Road	Haverford, PA 19041	Yes
	124 Marple Road	Haverford, PA 19041	Yes
	128 Marple Road	Haverford, PA 19041	
	132 Marple Road	Haverford, PA 19041	
	134 Marple Road	Haverford, PA 19041	
	136 Marple Road	Haverford, PA 19041	
	140 Marple Road	Haverford, PA 19041	
	144 Marple Road	Haverford, PA 19041	
Marple	148 Marple Road	Haverford, PA 19041	
	151 Marple Road	Haverford, PA 19041	Yes
	152 Marple Road	Haverford, PA 19041	
	155 Marple Road	Haverford, PA 19041	Yes
	156 Marple Road	Haverford, PA 19041	
	159 Marple Road	Haverford, PA 19041	Yes
	160 Marple Road	Haverford, PA 19041	
	164 Marple Road	Haverford, PA 19041	
	200 Marple Road	Haverford, PA 19041	
	201 Marple Road	Haverford, PA 19041	
	204 Marple Road	Haverford, PA 19041	
	205 Marple Road	Haverford, PA 19041	V
	208 Marple Road	Haverford, PA 19041	Yes
	209 Marple Road	Haverford, PA 19041	
	212 Marple Road	Haverford, PA 19041	
	215 Marple Road 217 Marple Road	Haverford, PA 19041 Haverford, PA 19041	
			Voc
	76 Brennan Drive	Bryn Mawr, PA 19010 Bryn Mawr, PA 19010	Yes
Unsewered	84 Brennan Drive		Yes
Properties	1735 Burmont Road	Drexel Hill, PA 19026	Yes
Adjacent or	513 College Ave	Haverford, PA 19041	Yes
Close	2 Coopertown Road	Haverford, PA 19041 Haverford, PA 19041	Yes
roximinity to	3 Coopertown Road 329 Ellis Road	Havertown, PA 19041 Havertown, PA 19083	Yes Yes
Existing	620 Ellis Road	Havertown, PA 19083 Havertown, PA 19083	Yes
Sewer	1030 Sproul Road	Bryn Mawr, PA 19085	Yes
	Lasso sprour noau	Diyil Mawi, FA 13010	103

Preliminary Information:

ADDRESS: 2 Coopertown Rd How long have you lived at this address? 6 Number of Occupants: 2 How large is your lot? 3

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: dry Sewage Odor: Wet above or near system: Raw sewage surfacing: Other areas of dampness noted in yard: Location: What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

inground tank

How old is your system?

Was it permitted? 0

When? 0

Have you ever noticed any of the following near your septic system?

0

Was your system ever pumped out? yes

How often? yearly

Last time? fall 2022

If your system was pumped, was it inspected for cracks or broken baffles in the tank? 0

Was your system ever repaired? not since they have been here

When? 0

By permit? 0

What part was repaired or replaced?

000

What kind of water system do you have? public

If well water, please complete the following:

How far from the well from the drain field? 0 ft.

Is the well uphill or downhill from the drain field? 0

COMMENTS OF PROPERTY OWNER:

ADDRESS: 159 Marple Road How long have you lived at this address? 20 Number of Occupants: 2 How large is your lot? 1

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: dry Sewage Odor: Wet above or near system: Raw sewage surfacing: Other areas of dampness noted in yard: none Location: What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

cesspool

How old is your system?

Was it permitted? yes

When? 0

Have you ever noticed any of the following near your septic system?

0

Was your system ever pumped out? yes

How often? quarterly

Last time? 45078

If your system was pumped, was it inspected for cracks or broken baffles in the tank? no

Was your system ever repaired? no

When? 0

By permit? 0

What part was repaired or replaced?

000

What kind of water system do you have? public

If well water, please complete the following:

How far from the well from the drain field? 0 ft.

Is the well uphill or downhill from the drain field? 0

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0
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ADDRESS: 155 Marple Rd How long have you lived at this address? 31 Number of Occupants: 1 How large is your lot?

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: dry Sewage Odor: no Wet above or near system: no Raw sewage surfacing: no Other areas of dampness noted in yard: Location: What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

How old is your system?

Was it permitted? 0

When? 0

Have you ever noticed any of the following near your septic system?

0

```
Was your system ever pumped out? yes
```

How often? 0

Last time? 0

If your system was pumped, was it inspected for cracks or broken baffles in the tank? 0

Was your system ever repaired? no

When? 0

By permit? 0

What part was repaired or replaced?

000

What kind of water system do you have? public

If well water, please complete the following:

How far from the well from the drain field? 0 ft.

Is the well uphill or downhill from the drain field? 0

COMMENTS OF PROPERTY OWNER:

ADDRESS: 1735 Burmont Rd How long have you lived at this address? 45 Number of Occupants: 2 How large is your lot? 0.745

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: dry Sewage Odor: no Wet above or near system: no Raw sewage surfacing: no Other areas of dampness noted in yard: Location: What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

cesspool; Brick Tank

How old is your system? 81

Was it permitted? 0

When? 0

Have you ever noticed any of the following near your septic system?

none

Was your system ever pumped out? yes

How often? 0

Last time? 44903

If your system was pumped, was it inspected for cracks or broken baffles in the tank? no, brick tank

Was your system ever repaired? no

When? 0

By permit? 0

What part was repaired or replaced?

000

What kind of water system do you have? public

If well water, please complete the following:

How far from the well from the drain field? 0 ft.

Is the well uphill or downhill from the drain field? 0

```
0
```

Preliminary Information:

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: dry Sewage Odor: no Wet above or near system: no Raw sewage surfacing: no Other areas of dampness noted in yard: none Location: What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

inground septic field; Cesspool

How old is your system? cesspool - 50+ years, inground septic field - 25 years

Was it permitted? yes

When? 0

Have you ever noticed any of the following near your septic system?

none

Was your system ever pumped out? yes

How often? 2x per year

Last time? 44986

If your system was pumped, was it inspected for cracks or broken baffles in the tank? yes

Was your system ever repaired? no

When? 0

By permit? 0

What part was repaired or replaced?

000

What kind of water system do you have? well

If well water, please complete the following:

How far from the well from the drain field? very far - 200 feet ft.

Is the well uphill or downhill from the drain field? 0

COMMENTS OF PROPERTY OWNER:

Preliminary Information:

ADDRESS: 116 Marple Rd How long have you lived at this address? 23 Number of Occupants: 2 How large is your lot? 1.080000000000000

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: dry Sewage Odor: no Wet above or near system: no Raw sewage surfacing: no Other areas of dampness noted in yard: no Location: What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

septic tank

How old is your system? 1950s - guessing

Was it permitted? they assume so

When? 0

Have you ever noticed any of the following near your septic system?

no

Was your system ever pumped out? yes

How often? annually

Last time? 45078

If your system was pumped, was it inspected for cracks or broken baffles in the tank? no

Was your system ever repaired? no - to the best of their knowledge

When? it was inspected in 2000 when they purchased the house

By permit? 0

What part was repaired or replaced?

000

What kind of water system do you have? public

If well water, please complete the following:

How far from the well from the drain field? 0 ft.

Is the well uphill or downhill from the drain field? 0

COMMENTS OF PROPERTY OWNER:

Preliminary Information:

ADDRESS: 3700 Darby Rd How long have you lived at this address? 24 Number of Occupants: 2 How large is your lot? 1

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: dry Sewage Odor: Wet above or near system: Raw sewage surfacing: Other areas of dampness noted in yard: none Location: What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

septic system

How old is your system? 60

Was it permitted? yes

When? they assume it was permitted when the house was built in the 1960's but that is just an assumption

Have you ever noticed any of the following near your septic system?

0

Was your system ever pumped out? yes

How often? about every 5 years

Last time? this year

If your system was pumped, was it inspected for cracks or broken baffles in the tank? no

Was your system ever repaired? no

When? 0

By permit? 0

What part was repaired or replaced?

000

What kind of water system do you have? well

If well water, please complete the following:

How far from the well from the drain field? about 150 feet ft.

Is the well uphill or downhill from the drain field? uphill

COMMENTS OF PROPERTY OWNER:

they believe a pump person may have said they have a cesspool. they do not know for sure. they do know there are 2 tanks and the system works well with no overflows.

Preliminary Information: ADDRESS: 3625 Darby Rd How long have you lived at this address? 36 Number of Occupants: 2 How large is your lot? 1.330000000000001 **Current Condition of On-lot Sewage Disposal System** General condition of non-septic area grounds: dry Sewage Odor: no Wet above or near system: no Raw sewage surfacing: no Other areas of dampness noted in yard: none Location: What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.) on site system with double-sized drainage field; per neighbor Ernest Dana - "system will never need service" How old is your system? 45 Was it permitted? 0 When? don't know - file requested from Township Have you ever noticed any of the following near your septic system?

no

Was your system ever pumped out? no - never needed

How often? 0

Last time? 0

If your system was pumped, was it inspected for cracks or broken baffles in the tank? 0

Was your system ever repaired? no

When? 0

By permit? 0

What part was repaired or replaced?

000

What kind of water system do you have? well

If well water, please complete the following:

How far from the well from the drain field? 150 feet - well in back of house, drainage field in front ft.

Is the well uphill or downhill from the drain field? uphill

COMMENTS OF PROPERTY OWNER:

ADDRESS: 124 Marple Rd How long have you lived at this address? 4 Number of Occupants: 3 How large is your lot? 1

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: dry Sewage Odor: no Wet above or near system: damp Raw sewage surfacing: no Other areas of dampness noted in yard: Location: What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

inground bed

How old is your system? 3

Was it permitted? yes

When? Nov. 2019

Have you ever noticed any of the following near your septic system?

green lush grass

Was your system ever pumped out? yes

How often? yearly

Last time? Oct. 2022

If your system was pumped, was it inspected for cracks or broken baffles in the tank? yes

Was your system ever repaired? replaced with new system 2019

When? 0

By permit? 0

What part was repaired or replaced?

000

What kind of water system do you have? public

If well water, please complete the following:

How far from the well from the drain field? 0 ft.

Is the well uphill or downhill from the drain field? 0

COMMENTS OF PROPERTY OWNER:

ADDRESS: 3600 Darby Rd How long have you lived at this address? 29 Number of Occupants: 2 How large is your lot? 1.2

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: dry Sewage Odor: Wet above or near system: Raw sewage surfacing: Other areas of dampness noted in yard: Location: What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

inground bed

How old is your system? 60

Was it permitted? 0

When? 0

Have you ever noticed any of the following near your septic system?

0

Was your system ever pumped out? yes

How often? 2-3 years

Last time? 45005

If your system was pumped, was it inspected for cracks or broken baffles in the tank? 0

Was your system ever repaired? no

When? 0

By permit? 0

What part was repaired or replaced?

000

What kind of water system do you have? well

If well water, please complete the following:

How far from the well from the drain field? 100 feet ft.

Is the well uphill or downhill from the drain field? uphill

COMMENTS OF PROPERTY OWNER:

Preliminary Information:

ADDRESS: 3620 Darby Rd How long have you lived at this address? 11 Number of Occupants: 0 How large is your lot? 1.25

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: Sewage Odor: Wet above or near system: Raw sewage surfacing: Other areas of dampness noted in yard: Location: What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

How old is your system?

Was it permitted? 0

When? 0

Have you ever noticed any of the following near your septic system?

0

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Was your system ever pumped out? 0
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How often? 0

Last time? 0

If your system was pumped, was it inspected for cracks or broken baffles in the tank? 0

Was your system ever repaired? 0

When? 0

By permit? 0

What part was repaired or replaced?

000

What kind of water system do you have? 0

If well water, please complete the following:

How far from the well from the drain field? 0 ft.

Is the well uphill or downhill from the drain field? 0

COMMENTS OF PROPERTY OWNER:

no structure, no water, no sewer - vacant lot

Preliminary Information:

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: dry Sewage Odor: yes Wet above or near system: Raw sewage surfacing: Other areas of dampness noted in yard: Location: What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

inground bed

How old is your system? 11

Was it permitted? yes

When? 41052

Have you ever noticed any of the following near your septic system?

odors

Was your system ever pumped out? yes

How often? 2 years

Last time? 45108

If your system was pumped, was it inspected for cracks or broken baffles in the tank? 0

Was your system ever repaired? no

When? 0

By permit? 0

What part was repaired or replaced?

000

What kind of water system do you have? well

If well water, please complete the following:

How far from the well from the drain field? 150 feet? ft.

Is the well uphill or downhill from the drain field? uphill

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0
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ADDRESS: 620 Ellis Rd How long have you lived at this address? 4.5 Number of Occupants: 4 How large is your lot?

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: dry Sewage Odor: Wet above or near system: Raw sewage surfacing: Other areas of dampness noted in yard: Location: What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

cesspool

How old is your system? 1959

Was it permitted? 0

When? 0

Have you ever noticed any of the following near your septic system?

0

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Was your system ever pumped out? yes
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How often? 0

Last time? 2018

If your system was pumped, was it inspected for cracks or broken baffles in the tank? yes

Was your system ever repaired? yes

When? 2018

By permit? 0

What part was repaired or replaced?

000

What kind of water system do you have? public

If well water, please complete the following:

How far from the well from the drain field? 0 ft.

Is the well uphill or downhill from the drain field? 0

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0
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ADDRESS: 120 Marple Rd How long have you lived at this address? 4 Number of Occupants: 6 How large is your lot? 1.04

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: dry Sewage Odor: Wet above or near system: Raw sewage surfacing: Other areas of dampness noted in yard: Location: What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

holding tank, drainfield, cesspool

How old is your system?

Was it permitted? 0

When? 0

Have you ever noticed any of the following near your septic system?

0

Was your system ever pumped out? yes

How often? annually

Last time? 45100

If your system was pumped, was it inspected for cracks or broken baffles in the tank? yes

Was your system ever repaired? 0

When? 0

By permit? 0

What part was repaired or replaced?

000

What kind of water system do you have? public

If well water, please complete the following:

How far from the well from the drain field? 0 ft.

Is the well uphill or downhill from the drain field? 0

COMMENTS OF PROPERTY OWNER:

ADDRESS: 1516 Steel Rd How long have you lived at this address? 53 Number of Occupants: 1.5 How large is your lot?

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: dry Sewage Odor: no Wet above or near system: no Raw sewage surfacing: no Other areas of dampness noted in yard: none Location: What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

cesspool septic

How old is your system?

Was it permitted? yes

When? 1952 (when house was built)

Have you ever noticed any of the following near your septic system?

0

Was your system ever pumped out? yes

How often? every 2 years

Last time? 2021 (Oct.) - due this Oct. 2023

If your system was pumped, was it inspected for cracks or broken baffles in the tank? yes

Was your system ever repaired? no

When? 0

By permit? 0

What part was repaired or replaced?

000

What kind of water system do you have? public

If well water, please complete the following:

How far from the well from the drain field? 0 ft.

Is the well uphill or downhill from the drain field? 0

COMMENTS OF PROPERTY OWNER:

"I understand the concern for the environment, but I ask you to seriously consider the need for a time period for residents to financially plan for this substantial debt. Also please consider the properties which are having no problems with their system's

ADDRESS: 76 Brennan Dr How long have you lived at this address? 22 Number of Occupants: 1 How large is your lot?

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: dry Sewage Odor: none Wet above or near system: none Raw sewage surfacing: none Other areas of dampness noted in yard: none Location: What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

inground septic tank

How old is your system? when home was built

Was it permitted? yes

When? 0

Have you ever noticed any of the following near your septic system?

none

Was your system ever pumped out? yes

How often? every 3 years

Last time? Oct. 26, 2020 and Sept. 7, 2023

If your system was pumped, was it inspected for cracks or broken baffles in the tank? yes

Was your system ever repaired? no

When? 0

By permit? 0

What part was repaired or replaced?

000

What kind of water system do you have? public

If well water, please complete the following:

How far from the well from the drain field? 0 ft.

Is the well uphill or downhill from the drain field? 0

COMMENTS OF PROPERTY OWNER:

Preliminary Information:

ADDRESS: 3701 Darby Rd How long have you lived at this address? 10 Number of Occupants: 1 How large is your lot? 2

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: dry Sewage Odor: no Wet above or near system: no Raw sewage surfacing: no Other areas of dampness noted in yard: none Location: What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

cesspool (1957) with drain field added in 1991

How old is your system? 1957 & 1991

Was it permitted? yes

When? 1957 & 1991

Have you ever noticed any of the following near your septic system?

none of the above noticed

Was your system ever pumped out? yes

How often? 3 times

Last time? July 2010 (& twice in 1991)

If your system was pumped, was it inspected for cracks or broken baffles in the tank? cesspool - no baffles as in septic tanks per se

Was your system ever repaired? yes - addition of drain field

When? Sept. 1991

By permit? 0

What part was repaired or replaced?

000

What kind of water system do you have? well

If well water, please complete the following:

How far from the well from the drain field? 125 ft. ft.

Is the well uphill or downhill from the drain field? uphill

COMMENTS OF PROPERTY OWNER:

Preliminary Information:

ADDRESS: 513 College Ave How long have you lived at this address? 12 Number of Occupants: 2 How large is your lot? 1.899999999999999999

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: Dry Sewage Odor: No Wet above or near system: No Raw sewage surfacing: No Other areas of dampness noted in yard: No Location: What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

Inground Bed

How old is your system? Unknown, but probably put in in the mid-1990s

Was it permitted? I don't know for sure, but I think yes

When? 0

Have you ever noticed any of the following near your septic system?

None of the Above

Was your system ever pumped out? Yes

How often? Every year

Last time? Fall 2022

If your system was pumped, was it inspected for cracks or broken baffles in the tank? No

Was your system ever repaired? Yes

When? 2011

By permit? 0

What part was repaired or replaced?

000

What kind of water system do you have? Public

If well water, please complete the following:

How far from the well from the drain field? 0 ft.

Is the well uphill or downhill from the drain field? 0

COMMENTS OF PROPERTY OWNER:

ADDRESS: 3713 Darby Rd How long have you lived at this address? 6.5 Number of Occupants: 2 How large is your lot? 2

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: Dry Sewage Odor: No Wet above or near system: No Raw sewage surfacing: No Other areas of dampness noted in yard: No Location: What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

Inground Bed

How old is your system? Unknown

Was it permitted? Installed prior to move in

When? 0

Have you ever noticed any of the following near your septic system?

Green Lush Grass

Was your system ever pumped out? Yes

How often? Once every 3 years

Last time? 44866

If your system was pumped, was it inspected for cracks or broken baffles in the tank? No

Was your system ever repaired? No

When? 0

By permit? 0

What part was repaired or replaced?

000

What kind of water system do you have? Well

If well water, please complete the following:

How far from the well from the drain field? 80 ft ft.

Is the well uphill or downhill from the drain field? Downhill

COMMENTS OF PROPERTY OWNER:

Preliminary Information:

ADDRESS: 3728 Darby Road How long have you lived at this address? 32 Number of Occupants: 2 How large is your lot? 2.33000000000000

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: Dry Sewage Odor: No Wet above or near system: No Raw sewage surfacing: No Other areas of dampness noted in yard: We have a functioning spring house Location: rear of property What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

Cesspool

How old is your system? prior to our ownership

Was it permitted? Unknown

When? 0

Have you ever noticed any of the following near your septic system?

None of the Above

Was your system ever pumped out? Yes

How often? every 3 years

Last time? 12-/18/2020

If your system was pumped, was it inspected for cracks or broken baffles in the tank? 0

Was your system ever repaired? No

When? 0

By permit? 0

What part was repaired or replaced?

000

What kind of water system do you have? Well

If well water, please complete the following:

How far from the well from the drain field? 138 Feet ft.

Is the well uphill or downhill from the drain field? Uphill

COMMENTS OF PROPERTY OWNER:

Preliminary Information:

ADDRESS: 3644 Darby Road How long have you lived at this address? 56 Number of Occupants: 3 How large is your lot? 2

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: Dry Sewage Odor: No Wet above or near system: No Raw sewage surfacing: No Other areas of dampness noted in yard: No Location: What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

Tile field

How old is your system? Put in 1967 and updated in 2014

Was it permitted? Yes

When? When permits were obtained to renovate the house around 2012

Have you ever noticed any of the following near your septic system?

None of the Above

Was your system ever pumped out? Yes

How often? Annually

Last time? 2023

If your system was pumped, was it inspected for cracks or broken baffles in the tank? Yes

Was your system ever repaired? Yes

When? 2012 when house was renovated

By permit? 0

What part was repaired or replaced?

000

What kind of water system do you have? Well

If well water, please complete the following:

How far from the well from the drain field? Well in front of house and drain field in back ft.

Is the well uphill or downhill from the drain field? Uphill

COMMENTS OF PROPERTY OWNER:

Preliminary Information:

ADDRESS: 84 Brennan Drive How long have you lived at this address? 18 Number of Occupants: 3 How large is your lot? 1.5

Current Condition of On-lot Sewage Disposal System General condition of non-septic area grounds: Dry Sewage Odor: No Wet above or near system: No Raw sewage surfacing: No Other areas of dampness noted in yard: Yes Location: Adjacent to and downstream from drain field, occasionally What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

Inground Bed

How old is your system? 18 years

Was it permitted? Yes

When? 2005

Have you ever noticed any of the following near your septic system?

Water Ponding or Surfacing

Was your system ever pumped out? Yes

How often? approx every 2 years

Last time? 44562

If your system was pumped, was it inspected for cracks or broken baffles in the tank? Yes

Was your system ever repaired? Yes

When? Replaced baffle in 2016.

By permit? 0

What part was repaired or replaced?

000

What kind of water system do you have? Public

If well water, please complete the following:

How far from the well from the drain field? 0 ft.

Is the well uphill or downhill from the drain field? 0

COMMENTS OF PROPERTY OWNER:

subject property borders Brennan Drive, Darby and Sproul Rds. Direct hookup to Sewer line running on either Darby or Sproul should be possible if required.

Preliminary Information:

ADDRESS: 1030 Sproul Road How long have you lived at this address? 24 Number of Occupants: 2 How large is your lot? 3

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: We are tied into the sewer system - and pay a sewer tax to Radnor Sewage Odor: We are tied into the sewer system - and pay a sewer tax to Radnor Wet above or near system: We are tied into the sewer system - and pay a sewer tax to Radnor Raw sewage surfacing: We are tied into the sewer system - and pay a sewer tax to Radnor Other areas of dampness noted in yard: We are tied into the sewer system - and pay a sewer tax to Radnor Location: We are tied into the sewer system - and pay a sewer tax to Radnor What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

We are tied into the sewer system - and pay a sewer tax to Radnor

How old is your system? We are tied into the sewer system - and pay a sewer tax to Radnor

Was it permitted? We are tied into the sewer system - and pay a sewer tax to Radnor

When? We are tied into the sewer system - and pay a sewer tax to Radnor

Have you ever noticed any of the following near your septic system?

We are tied into the sewer system - and pay a sewer tax to Radnor

Was your system ever pumped out? We are tied into the sewer system - and pay a sewer tax to Radnor

How often? We are tied into the sewer system - and pay a sewer tax to Radnor

Last time? We are tied into the sewer system - and pay a sewer tax to Radnor

If your system was pumped, was it inspected for cracks or broken baffles in the tank? We are tied into the sewer system - and pay a sewer tax to Radnor

Was your system ever repaired? We are tied into the sewer system - and pay a sewer tax to Radnor

When? We are tied into the sewer system - and pay a sewer tax to Radnor

By permit? 0

What part was repaired or replaced?

000

What kind of water system do you have? Public

If well water, please complete the following:

How far from the well from the drain field? 0 ft.

Is the well uphill or downhill from the drain field? 0

COMMENTS OF PROPERTY OWNER:

We are tied to the sewer line. We receive a tax bill from Radnor Township.

ADDRESS: 56 Marple Road How long have you lived at this address? 20 Number of Occupants: 2 How large is your lot? 1

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: Dry Sewage Odor: No Wet above or near system: No Raw sewage surfacing: No Other areas of dampness noted in yard: No Location: What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

Septic Tank 1250 gallons

How old is your system? 20 years

Was it permitted? Yes

When? 37840

Have you ever noticed any of the following near your septic system?

None of the Above

Was your system ever pumped out? Yes

How often? Every 2 years

Last time? 45108

If your system was pumped, was it inspected for cracks or broken baffles in the tank? No

Was your system ever repaired? No

When? 0

By permit? 0

What part was repaired or replaced?

000

What kind of water system do you have? Public

If well water, please complete the following:

How far from the well from the drain field? 0 ft.

Is the well uphill or downhill from the drain field? 0

COMMENTS OF PROPERTY OWNER:

Preliminary Information:

ADDRESS: 41 Marple Road How long have you lived at this address? 9 Number of Occupants: 2 How large is your lot? 1.25

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: Dry Sewage Odor: No Wet above or near system: No Raw sewage surfacing: No Other areas of dampness noted in yard: No Location: What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

Cesspool

How old is your system? At least 10 years

Was it permitted? Don't know

When? 0

Have you ever noticed any of the following near your septic system?

None of the Above

Was your system ever pumped out? Not to my knowledge

How often? 0

Last time? 0

If your system was pumped, was it inspected for cracks or broken baffles in the tank? See above

Was your system ever repaired? Not to my knowledge

When? 0

By permit? 0

What part was repaired or replaced?

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What kind of water system do you have? Public

If well water, please complete the following:

How far from the well from the drain field? 0 ft.

Is the well uphill or downhill from the drain field? 0

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0
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Preliminary Information:

ADDRESS: 151 Marple Road How long have you lived at this address? 18 Number of Occupants: 3 How large is your lot? 1

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: Wet after heavy downpours, dry when no rain Sewage Odor: No Wet above or near system: No Raw sewage surfacing: No Other areas of dampness noted in yard: No Location: What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

Cesspool

How old is your system? Don't know

Was it permitted? Don't know

When? 0

Have you ever noticed any of the following near your septic system?

None of the Above

Was your system ever pumped out? Yes

How often? Once per month

Last time? 45148

If your system was pumped, was it inspected for cracks or broken baffles in the tank? Yes

Was your system ever repaired? No

When? 0

By permit? 0

What part was repaired or replaced?

000

What kind of water system do you have? Public

If well water, please complete the following:

How far from the well from the drain field? 0 ft.

Is the well uphill or downhill from the drain field? 0

COMMENTS OF PROPERTY OWNER:

Preliminary Information:

ADDRESS: 208 Marple road How long have you lived at this address? 3 Number of Occupants: 2 How large is your lot? 0.5999999999999998

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: Dry Sewage Odor: No Wet above or near system: No Raw sewage surfacing: No Other areas of dampness noted in yard: No Location: What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

Septic system

How old is your system? Approx 5yrs

Was it permitted? Yes

When? Previous owners

Have you ever noticed any of the following near your septic system?

None of the Above

Was your system ever pumped out? Yes

How often? Every 1.5-2 yrs as recommended

Last time? 2022

If your system was pumped, was it inspected for cracks or broken baffles in the tank? Yes

Was your system ever repaired? No

When? 0

By permit? 0

What part was repaired or replaced?

000

What kind of water system do you have? Public

If well water, please complete the following:

How far from the well from the drain field? 0 ft.

Is the well uphill or downhill from the drain field? 0

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0
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Preliminary Information:

ADDRESS: 3 Coopertown Rd How long have you lived at this address? 43 Number of Occupants: 2 How large is your lot? 4.309999999999999999

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: Dry Sewage Odor: No Wet above or near system: No Raw sewage surfacing: No Other areas of dampness noted in yard: No Location: What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

Cesspool

How old is your system? ? (older than 43 years)

Was it permitted? Don't know

When? 0

Have you ever noticed any of the following near your septic system?

System Overflow

Was your system ever pumped out? Yes

How often? Every 1-2 years

Last time? 45166

If your system was pumped, was it inspected for cracks or broken baffles in the tank? No

Was your system ever repaired? Don't know

When? 0

By permit? 0

What part was repaired or replaced?

000

What kind of water system do you have? Public

If well water, please complete the following:

How far from the well from the drain field? 0 ft.

Is the well uphill or downhill from the drain field? 0

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0
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Preliminary Information:

ADDRESS: 3932 Darby Road How long have you lived at this address? 19 Number of Occupants: 3 How large is your lot? 0.6099999999999999999

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: Dry Sewage Odor: No Wet above or near system: No Raw sewage surfacing: No Other areas of dampness noted in yard: Dampness in drainage field Location: Over drainage field What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

Inground Bed

How old is your system? Installed before I got here.

Was it permitted? Not sure what year.

When? 0

Have you ever noticed any of the following near your septic system?

Wetness or Spongy Areas

Was your system ever pumped out? Yes

How often? Every few years.

Last time? 2019 before pandemic / 0ct.2023

If your system was pumped, was it inspected for cracks or broken baffles in the tank? Yes

Was your system ever repaired? No

When? 0

By permit? 0

What part was repaired or replaced?

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What kind of water system do you have? Well

If well water, please complete the following:

How far from the well from the drain field? Well is in front of house, drainage field is in the back. ft.

Is the well uphill or downhill from the drain field? Uphill

COMMENTS OF PROPERTY OWNER:

ADDRESS: 329 Ellis Rd. How long have you lived at this address? 25 Number of Occupants: 2 How large is your lot? 2.299999999999998

Current Condition of On-lot Sewage Disposal System

General condition of non-septic area grounds: Dry Sewage Odor: No Wet above or near system: No Raw sewage surfacing: No Other areas of dampness noted in yard: No Location: What kind of on-lot disposal system do you have? (inground bed, sand mound, cesspool, etc.)

Cesspool

How old is your system? Unknown

Was it permitted? Unknown

When? Unknown

Have you ever noticed any of the following near your septic system?

None of the Above

Was your system ever pumped out? Yes

How often? Once

Last time? 2017

If your system was pumped, was it inspected for cracks or broken baffles in the tank? No

Was your system ever repaired? No

When? 0

By permit? 0

What part was repaired or replaced?

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What kind of water system do you have? Public

If well water, please complete the following:

How far from the well from the drain field? 0 ft.

Is the well uphill or downhill from the drain field? 0

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0
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APPENDIX D:

RESOLUTION OF ADOPTION