MONTGOMERY COUNTY
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MONTGOMERY COUNTY
PLANNING COMMISSION

MONTGOMERY COUNTY • PO BOX 311
NORRISTOWN, PA 19404-0311

610-278-3722
PLANNING@MONTGOMERYCOUNTYPA.GOV

SCOTT FRANCE, AICP
EXECUTIVE DIRECTOR

December 13, 2024

Mr. Rich Manfredi, Manager
Abington Township
1176 Old York Road
Abington, Pennsylvania 19001-3713

Re: MCPC #24-0243-001
Plan Name: 221 Moredon Rd.
(4 lots comprising 5.24 acres)
Situate: 221 Moredon Road Residential Subdivision
Cross Street: Hilltop Terrace
Abington Township

Dear Mr. Manfredi:

We have reviewed the above-referenced subdivision and land development in accordance with Section 502 of Act 247, "The Pennsylvania Municipalities Planning Code," as you requested on August 11, 2024. We forward this letter as a report of our review.

BACKGROUND

Peroli, LLC, the applicant, has submitted a subdivision and land development plan that would subdivide a 5.24 acre property into four lots: 1.16 acres, 1.02 acres, 1.02 acres, and 1.51 acres, respectively. The applicant would construct a cul-de-sac with four single-family homes. The site is the location of an existing, two-story masonry building, a one-story detached garage, and two other small one-story buildings. The tract is located in the R1 Residential District. The site is served by public water and sewer. The plans are dated August 13, 2024.

COMPREHENSIVE PLAN COMPLIANCE

The proposed improvements are mostly consistent with *MONTCO 2040: A Shared Vision, The Montgomery County Comprehensive Plan*; however, they would be more consistent if they had more accommodations for pedestrians. The site is located in the Open Space future land use area, but the edges of the future land use areas shown on the map are not intended to be exact, and it should be noted that it is located directly adjacent to the suburban residential future land use area. Single-family detached homes are appropriate uses in the Suburban Residential category. Trees, steep slopes, wetlands, and other sensitive land should be preserved in these areas, and appropriate landscaping, buffers, and street trees should be provided by all developments.

The proposed improvements are also consistent with the Abington Comprehensive Plan (2007). In that plan, the site is located in the "low-density residential" future land use category.

RECOMMENDATION

The Montgomery County Planning Commission (MCPC) generally supports the applicant's proposal, however, in the course of our review we have identified the following issues that the applicant and township may wish to consider prior to final plan approval. Our comments are as follows:

REVIEW COMMENTS

STORMWATER

A. Culvert – It appears as if the site will drain to a stone culvert that runs underneath the Pennypack Trail. The applicant's engineer should determine if the culvert has sufficient capacity to convey the projected flows, in part to avoid damage or other impacts to the trail. For reference, we have attached a copy of the latest inspection report for the culvert (Appendix C).

B. Basin – Proposed "Basin 3" would lie on two lots; we suggest that maintenance responsibilities be clarified. Also, it would use a retaining wall. This may be a tripping hazard.

PEDESTRIANS

A. Sidewalks – Sidewalks shall be provided along all streets except where, in the opinion of the Board of Commissioners, they are unnecessary for public safety and convenience [§146-27]. Sidewalk should be constructed along Moredon Road. People will walk along Moredon Road to access the Pennypack Trail and Lorimer Park; providing sidewalk along the frontage will make that part of the walk safer.

B. Crosswalks - Shall be provided at all intersections of streets with access drives or other curb cuts in public streets (including those for private streets and parking areas) [§2504.F.].

LANDSCAPING

A. Foundation -- Building foundation landscaping shall be provided between (a) the foundations of principal buildings' facades and (b) sidewalks, access drives, or parking areas. A minimum of 25% of the linear area (parallel to the building wall) between the building foundation and sidewalks, access drives, or parking areas shall be landscaped with ornamental or evergreen trees and shrubs [§2403.D].

B. Trees – The Existing Conditions & Natural Features Plan says that 356 trees are to be provided; however, the Landscape Plan says that 352 trees are to be provided. The applicant should clarify the number to be provided.

C. Tree Removal – We recommend that the applicant use care in cutting trees on steep slopes that are proposed for removal, in order to avoid erosion.

OTHER PLAN INFORMATION

A. Ownership – The ownership of the Pennypack Trail corridor should be listed; the land is owned by SEPTA.

B. Basins – Detention basins shall be shown on a horizontal plan [§146-11.F.(4)].

CONCLUSION

We wish to reiterate that MCPC generally supports the applicant's proposal but we believe that our suggested revisions will better achieve the township's planning objectives for residential development.

Please note that the review comments and recommendations contained in this report are advisory to the municipality and final disposition for the approval of any proposal will be made by the municipality.

Should the governing body approve a final plat of this proposal, the applicant must present the plan to our office for seal and signature prior to recording with the Recorder of Deeds office. A paper copy bearing the municipal seal and signature of approval must be supplied for our files. Please print the assigned MCPC number (*#24-0243-001*) on any plans submitted for final recording.

Sincerely,

Mike Narcowich, AICP
Community Planning Assistant Manager II
610.278.5238 – michael.narcowich@montgomerycountypa.gov

c: Gabriel Polishuk, Representative for Peroli, LLC, Applicant
Khaled R. Hassan, P.E., Pennoni, Township Engineer
Michael P. Clarke, Esq., Rudolph Clarke, LLC, Township Solicitor

Attachment A: Aerial Image of Site
Attachment B: Reduced Copy of Applicant's Proposed Site Plan
Attachment C: Inspection Report, Stone Culvert (2020)

ATTACHMENT A



221 Moredon Road Residential Subdivision
MCPC#240243001

Montgomery County Planning Commission

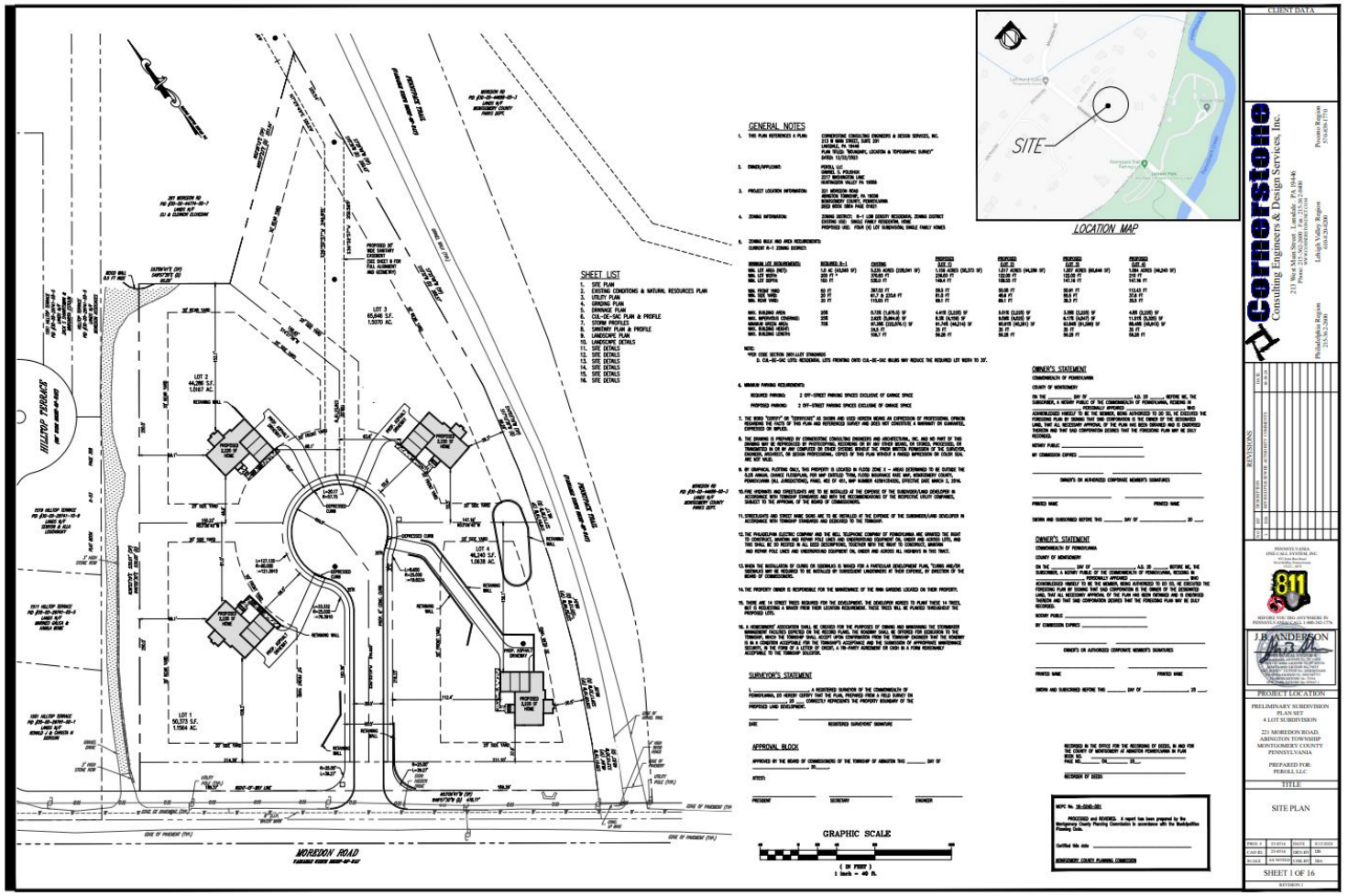
0 100 200 400 Feet

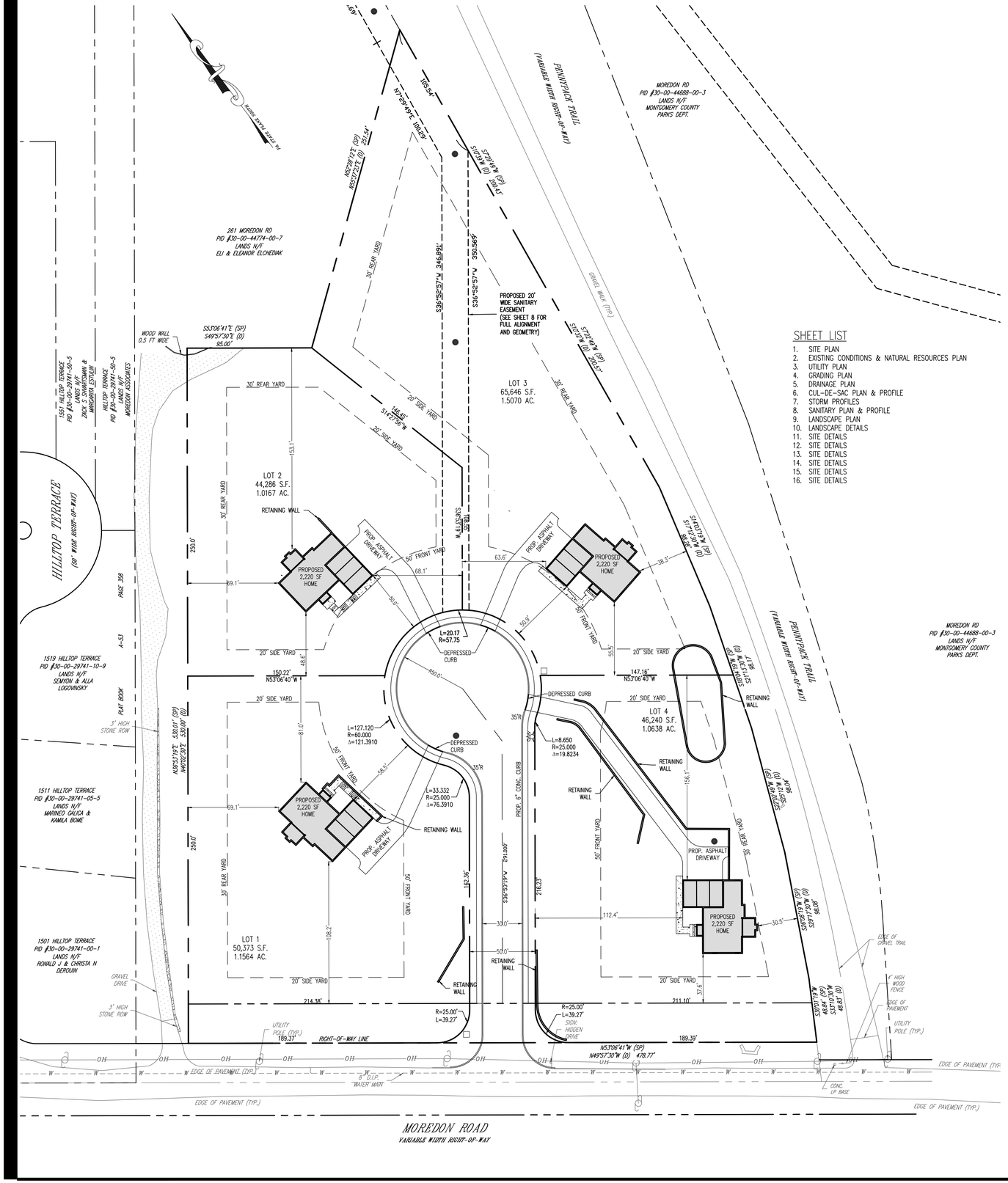
N

Montgomery County Courthouse - Planning Commission
PO Box 311 Norristown PA 19404-0311
(p) 610 278-3722 (f) 610 278-3941
www.montcopa.org/plancom

Aerial photography provided by Nearmap

ATTACHMENT B





SHEET LIST

1. SITE PLAN
2. EXISTING CONDITIONS & NATURAL RESOURCES PLAN
3. UTILITY PLAN
4. GRADING PLAN
5. DRAINAGE PLAN
6. CUL-DE-SAC PLAN & PROFILE
7. STORM PROFILES
8. SANITARY PLAN & PROFILE
9. LANDSCAPE PLAN
10. LANDSCAPE DETAILS
11. SITE DETAILS
12. SITE DETAILS
13. SITE DETAILS
14. SITE DETAILS
15. SITE DETAILS
16. SITE DETAILS

GENERAL NOTES

1. THIS PLAN REFERENCES A PLAN: CORNERSTONE CONSULTING ENGINEERS & DESIGN SERVICES, INC. 213 W MAIN STREET, SUITE 201 LANSDALE, PA 19446 PLAN TITLED: "BOUNDARY, LOCATION & TOPOGRAPHIC SURVEY" DATED: 12/22/2023
2. OWNER/APPLICANT: PEROLI, LLC GABRIEL S. POLISHUK 2217 WASHINGTON LANE HUNTINGDON VALLEY PA 19006
3. PROJECT LOCATION INFORMATION: 221 MOREDON ROAD ABINGTON TOWNSHIP, PA 19006 MONTGOMERY COUNTY, PENNSYLVANIA DEED BOOK 5804 PAGE 01621
4. ZONING INFORMATION: ZONING DISTRICT: R-1 LOW DENSITY RESIDENTIAL ZONING DISTRICT EXISTING USE: SINGLE FAMILY RESIDENTIAL HOME PROPOSED USE: FOUR (4) LOT SUBDIVISION; SINGLE FAMILY HOMES
5. ZONING BULK AND AREA REQUIREMENTS: CURRENT R-1 ZONING DISTRICT:

MINIMUM LOT REQUIREMENTS:	REQUIRED R-1	EXISTING	PROPOSED (LOT 1)	PROPOSED (LOT 2)	PROPOSED (LOT 3)	PROPOSED (LOT 4)
MIN. LOT AREA (NET):	1.0 AC (43,560 SF)	5.235 ACRES (228,041 SF)	1.156 ACRES (50,373 SF)	1.017 ACRES (44,286 SF)	1.507 ACRES (65,646 SF)	1.064 ACRES (46,240 SF)
MIN. LOT WIDTH:	200 FT *	370.83 FT	236.00 FT	122.00 FT	122.00 FT	210 FT
MIN. LOT DEPTH:	100 FT	530.0 FT	149.4 FT	108.55 FT	147.16 FT	147.16 FT
MIN. FRONT YARD	50 FT	367.52 FT	58.5 FT	50.00 FT	50.91 FT	112.43 FT
MIN. SIDE YARD:	20 FT	61.7 & 233.6 FT	81.0 FT	48.6 FT	55.5 FT	37.6 FT
MIN. REAR YARD:	30 FT	115.00 FT	69.1 FT	69.1 FT	38.3 FT	30.5 FT
MAX. BUILDING AREA:	20%	0.73% (1,675.5) SF	4.41% (2,220) SF	5.01% (2,220) SF	3.38% (2,220) SF	4.8% (2,220) SF
MAX. IMPERVIOUS COVERAGE:	25%	2.62% (5,964.9) SF	8.3% (4,159) SF	9.09% (4,025) SF	6.17% (4,047) SF	11.51% (5,325) SF
MINIMUM GREEN AREA:	75%	97.38% (222,076.1) SF	91.74% (46,214) SF	90.91% (40,261) SF	93.84% (61,599) SF	88.48% (40,915) SF
MAX. BUILDING HEIGHT:		24.5 FT	35 FT	35 FT	35 FT	35 FT
MAX. BUILDING LENGTH:		106.7 FT	56.28 FT	56.28 FT	56.28 FT	56.28 FT

NOTE:
*PER CODE SECTION 2601.1LOT STANDARDS
D. CUL-DE-SAC LOTS: RESIDENTIAL LOTS FRONTING ONTO CUL-DE-SAC BULBS MAY REDUCE THE REQUIRED LOT WIDTH TO 30'.

6. MINIMUM PARKING REQUIREMENTS:
   REQUIRED PARKING: 2 OFF-STREET PARKING SPACES EXCLUSIVE OF GARAGE SPACE
   PROPOSED PARKING: 2 OFF-STREET PARKING SPACES EXCLUSIVE OF GARAGE SPACE
7. THE WORD "CERTIFY" OR "CERTIFICATE" AS SHOWN AND USED HEREON MEANS AN EXPRESSION OF PROFESSIONAL OPINION REGARDING THE FACTS OF THIS PLAN AND REFERENCED SURVEY AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EXPRESSED OR IMPLIED.
8. THE DRAWING IS PREPARED BY CORNERSTONE CONSULTING ENGINEERS AND ARCHITECTURAL, INC. AND NO PART OF THIS DRAWING MAY BE REPRODUCED BY PHOTOCOPYING, RECORDING OR BY ANY OTHER MEANS, OR STORED, PROCESSED, OR TRANSMITTED IN OR BY ANY COMPUTER OR OTHER SYSTEMS WITHOUT THE PRIOR WRITTEN PERMISSION OF THE SURVEYOR, ENGINEER, ARCHITECT, OR DESIGN PROFESSIONAL. COPIES OF THIS PLAN WITHOUT A RAISED IMPRESSION OR COLOR SEAL ARE NOT VALID.
9. BY GRAPHICAL PLOTTING ONLY, THIS PROPERTY IS LOCATED IN FLOOD ZONE X – AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, PER MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, MONTGOMERY COUNTY, PENNSYLVANIA (ALL JURISDICTIONS), PANEL 402 OF 451, MAP NUMBER 42091C0402G, EFFECTIVE DATE MARCH 2, 2016.
10. FIRE HYDRANTS AND STREETLIGHTS ARE TO BE INSTALLED AT THE EXPENSE OF THE SUBDIVIDER/LAND DEVELOPER IN ACCORDANCE WITH TOWNSHIP STANDARDS AND WITH THE RECOMMENDATIONS OF THE RESPECTIVE UTILITY COMPANIES, SUBJECT TO THE APPROVAL OF THE BOARD OF COMMISSIONERS.
11. STREETLIGHTS AND STREET NAME SIGNS ARE TO BE INSTALLED AT THE EXPENSE OF THE SUBDIVIDER/LAND DEVELOPER IN ACCORDANCE WITH TOWNSHIP STANDARDS AND DEDICATED TO THE TOWNSHIP.
12. THE PHILADELPHIA ELECTRIC COMPANY AND THE BELL TELEPHONE COMPANY OF PENNSYLVANIA ARE GRANTED THE RIGHT TO CONSTRUCT, MAINTAIN AND REPAIR POLE LINES AND UNDERGROUND EQUIPMENT ON, UNDER AND ACROSS LOTS, AND THIS SHALL BE SO RECITED IN ALL DEED DESCRIPTIONS, TOGETHER WITH THE RIGHT TO CONSTRUCT, MAINTAIN AND REPAIR POLE LINES AND UNDERGROUND EQUIPMENT ON, UNDER AND ACROSS ALL HIGHWAYS IN THIS TRACT.
13. WHEN THE INSTALLATION OF CURBS OR SIDEWALKS IS WAIVED FOR A PARTICULAR DEVELOPMENT PLAN, "CURBS AND/OR SIDEWALKS MAY BE REQUIRED TO BE INSTALLED BY SUBSEQUENT LANDOWNERS AT THEIR EXPENSE, BY DIRECTION OF THE BOARD OF COMMISSIONERS.
14. THE PROPERTY OWNER IS RESPONSIBLE FOR THE MAINTENANCE OF THE RAIN GARDENS LOCATED ON THEIR PROPERTY.
15. THERE ARE 14 STREET TREES REQUIRED FOR THE DEVELOPMENT. THE DEVELOPER AGREES TO PLANT THESE 14 TREES, BUT IS REQUESTING A WAIVER FROM THEIR LOCATION REQUIREMENT. THESE TREES WILL BE PLANTED THROUGHOUT THE PROPOSED LOTS.
16. A HOMEOWNERS' ASSOCIATION SHALL BE CREATED FOR THE PURPOSES OF OWNING AND MAINTAINING THE STORMWATER MANAGEMENT FACILITIES DEPICTED ON THE RECORD PLANS. THE ROADWAY SHALL BE OFFERED FOR DEDICATION TO THE TOWNSHIP, WHICH THE TOWNSHIP SHALL ACCEPT UPON CONFIRMATION FROM THE TOWNSHIP ENGINEER THAT THE ROADWAY IS IN A CONDITION ACCEPTABLE FOR THE TOWNSHIP'S ACCEPTANCE AND THE SUBMISSION OF APPROPRIATE MAINTENANCE SECURITY, IN THE FORM OF A LETTER OF CREDIT, A TRI-PARTY AGREEMENT OR CASH IN A FORM REASONABLY ACCEPTABLE TO THE TOWNSHIP SOLICITOR.

SURVEYOR'S STATEMENT

I, _____, A REGISTERED SURVEYOR OF THE COMMONWEALTH OF PENNSYLVANIA, DO HEREBY CERTIFY THAT THE PLAN, PREPARED FROM A FIELD SURVEY ON _____, 20 ____ CORRECTLY REPRESENTS THE PROPERTY BOUNDARY OF THE PROPOSED LAND DEVELOPMENT.

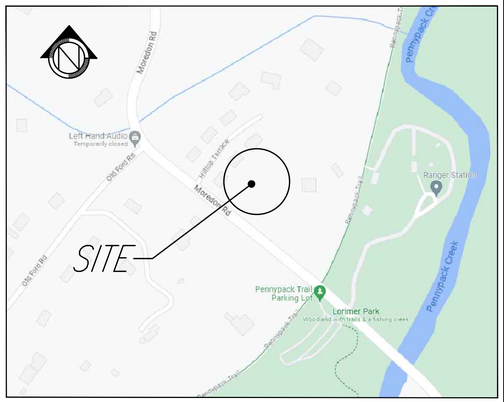
_____ _____
DATE REGISTERED SURVEYORS' SIGNATURE

APPROVAL BLOCK

APPROVED BY THE BOARD OF COMMISSIONERS OF THE TOWNSHIP OF ABINGTON THIS _____ DAY OF _____ 20_____.

ATTEST:

_____ _____ _____
PRESIDENT SECRETARY ENGINEER



LOCATION MAP

OWNER'S STATEMENT

COMMONWEALTH OF PENNSYLVANIA

COUNTY OF MONTGOMERY

ON THE _____ DAY OF _____, A.D. 20 _____, BEFORE ME, THE SUBSCRIBER, A NOTARY PUBLIC OF THE COMMONWEALTH OF PENNSYLVANIA, RESIDING IN _____, PERSONALLY APPEARED _____, WHO ACKNOWLEDGED HIMSELF TO BE THE MEMBER, BEING AUTHORIZED TO DO SO, HE EXECUTED THE FOREGOING PLAN BY SIGNING THAT SAID CORPORATION IS THE OWNER OF THE DESIGNATED LAND, THAT ALL NECESSARY APPROVAL OF THE PLAN HAS BEEN OBTAINED AND IS ENDORSED THEREON AND THAT SAID CORPORATION DESIRES THAT THE FOREGOING PLAN MAY BE DULY RECORDED.

NOTARY PUBLIC _____

MY COMMISSION EXPIRES _____

_____ _____
OWNER'S OR AUTHORIZED CORPORATE MEMBER'S SIGNATURES

_____ _____
PRINTED NAME PRINTED NAME

SWORN AND SUBSCRIBED BEFORE THIS _____ DAY OF _____, 20 ____.

OWNER'S STATEMENT

COMMONWEALTH OF PENNSYLVANIA

COUNTY OF MONTGOMERY

ON THE _____ DAY OF _____, A.D. 20 _____, BEFORE ME, THE SUBSCRIBER, A NOTARY PUBLIC OF THE COMMONWEALTH OF PENNSYLVANIA, RESIDING IN _____, PERSONALLY APPEARED _____, WHO ACKNOWLEDGED HIMSELF TO BE THE MEMBER, BEING AUTHORIZED TO DO SO, HE EXECUTED THE FOREGOING PLAN BY SIGNING THAT SAID CORPORATION IS THE OWNER OF THE DESIGNATED LAND, THAT ALL NECESSARY APPROVAL OF THE PLAN HAS BEEN OBTAINED AND IS ENDORSED THEREON AND THAT SAID CORPORATION DESIRES THAT THE FOREGOING PLAN MAY BE DULY RECORDED.

NOTARY PUBLIC _____

MY COMMISSION EXPIRES _____

_____ _____
OWNER'S OR AUTHORIZED CORPORATE MEMBER'S SIGNATURES

_____ _____
PRINTED NAME PRINTED NAME

SWORN AND SUBSCRIBED BEFORE THIS _____ DAY OF _____, 20 ____.

RECORDED IN THE OFFICE FOR THE RECORDING OF DEEDS, IN AND FOR THE COUNTY OF MONTGOMERY AT ABINGTON PENNSYLVANIA IN PLAN BOOK NO. _____
PAGE NO._____ ON_____ 20____.

_____
RECORDER OF DEEDS

MCPC No. 16-0240-001

PROCESSED and REVIEWED. A report has been prepared by the Montgomery County Planning Commission in accordance with the Municipalities Planning Code.

Certified this date _____

MONTGOMERY COUNTY PLANNING COMMISSION

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

CLIENT DATA

Cornerstone
Consulting Engineers & Design Services, Inc.
213 West Main Street, Lansdale, PA 19446
Phone: 215-362-2600 Fax: 215-362-8400
WWW.CORNERSTONENET.COM

Pocono Region
570-839-1770

Lehigh Valley Region
610-820-8200

Philadelphia Region
215-362-2600

NO	BY	DESCRIPTION	DATE
1.	DB	REVISED PER SEWER AUTHORITY COMMENTS	10-30-24

REVISIONS

PENNSYLVANIA ONE CALL SYSTEM, INC.
925 Irwin Run Road
West Mifflin, Pennsylvania 15122 - 1078
811
BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA! CALL 1-800-242-1776

J.B. ANDERSON
PROFESSIONAL ENGINEER
DELAWARE LICENSE No. PE.15438
PENNSYLVANIA LICENSE No. PE.055536
MARYLAND LICENSE No. 29313
NEW JERSEY LICENSE No. 24GE04520400
VIRGINIA LICENSE No. 0402 045725
FLORIDA LICENSE No. 75184
NEW YORK LICENSE No. 095667-1

PROJECT LOCATION

PRELIMINARY SUBDIVISION PLAN SET
4 LOT SUBDIVISION

221 MOREDON ROAD,
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

PREPARED FOR:
PEROLI, LLC

TITLE

SITE PLAN

PROJ. #	23-0516	DATE	8/13/2024
CAD ID.	23-0516	DRN BY	DB
SCALE	AS NOTED	CHK BY	JBA

SHEET 1 OF 16

REVISION 1



NOTES:

1. PROPERTY KNOWN AS PID #30-00-44776-00-5; 221 MOREDON ROAD, ABINGTON TOWNSHIP, MONTGOMERY COUNTY, COMMONWEALTH OF PENNSYLVANIA.
2. GROSS AREA OF PARCEL IS 242,350 SQUARE FEET OR 5.5635 ACRES.
   NET AREA OF PARCEL IS 228,041 SQUARE FEET OR 5.2351 ACRES.
3. PROPERTY OWNER: WILLIAM C. WOODWARD & KEVIN A. WOODWARD, TRUSTEES
   ADDRESS: 221 MOREDON ROAD, ABINGTON TOWNSHIP, PA
4. REPRESENTATION OF ALL UNDERGROUND UTILITIES ARE APPROXIMATE AND ARE NOT AS-BUILT LOCATIONS. ABOVE GROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE FIELD ARE SHOWN. ALL LOCATIONS AND SIZES ARE BASED ON UTILITY MARK-OUTS, AND THE MAPS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY. BEFORE ANY EXCAVATION IS TO BEGIN, ALL UNDERGROUND UTILITIES SHOULD BE VERIFIED AS TO THEIR LOCATION, SIZE AND TYPE BY THE PROPER UTILITY COMPANIES.
5. THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY PREPARED IN THE FIELD BY CORNERSTONE CONSULTING ENGINEERS AND DESIGN SERVICES, INC., AND OTHER REFERENCE MATERIAL AS LISTED HEREON. SURVEY & TOPOGRAPHIC INFORMATION SHOWN HEREON DERIVED FROM A FIELD SURVEY PERFORMED BY CORNERSTONE CONSULTING, LATEST DATE DECEMBER 19, 2023.
6. COPYRIGHT © 2024, CORNERSTONE CONSULTING ENGINEERS AND DESIGN SERVICES, INC. ALL RIGHTS RESERVED. NO PART OF THIS DRAWING MAY BE REPRODUCED BY PHOTOCOPYING, RECORDING OR BY ANY OTHER MEANS, OR STORED, PROCESSED, OR TRANSMITTED IN OR BY ANY COMPUTER OR OTHER SYSTEMS WITHOUT THE PRIOR WRITTEN PERMISSION OF THE SURVEYOR. COPIES OF THIS PLAN WITHOUT A RAISED OR COLORED SEAL ARE NOT VALID.
7. THIS PLAN IS VALID ONLY WHEN SIGNED AND SEALED WITH A RAISED OR COLORED SEAL AND WAS PREPARED IN ACCORDANCE WITH THE MINIMUM STANDARD OF ACCURACY OF THE STATE IN WHICH THE PROJECT IS LOCATED. THE WORD "CERTIFY" OR "CERTIFICATE" AS SHOWN AND USED HEREON MEANS AN EXPRESSION OF PROFESSIONAL OPINION REGARDING THE FACTS OF THIS PLAN AND REFERENCED SURVEY AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EXPRESSED OR IMPLIED.
8. DATUM BASED UPON PENNSYLVANIA STATE PLANE SOUTH ZONE 3702 USING HORIZONTAL VALUES FROM NAD83 AND VERTICAL VALUES FROM NAVD88.
9. SITE BENCHMARK IS THE TOP OF HEADWALL, ELEVATION = 136.64' TO ENSURE THAT THERE HAS BEEN NO ALTERATION OF THE SURVEY BENCHMARK SINCE THE TIME OF THE FIELD SURVEY, IT IS RECOMMENDED THAT THE CONTRACTOR ESTABLISH A CONSTRUCTION BENCHMARK BASED ON THE SURVEY BENCHMARK AND ELEVATIONS OF OTHER EXISTING IMPROVEMENTS.
10. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND SUBJECT THERETO.
11. SUBJECT TO ANY AND ALL EASEMENTS, RESTRICTIONS AND COVENANTS OF RECORD WHETHER SHOWN HEREON OR NOT.
12. THE RESEARCH FOR THIS PLAN IS LIMITED TO THE DEED OF RECORD FOR THE SUBJECT AND ADJOINING PARCELS, AND ANY EASEMENTS, RIGHTS OF WAY, RESTRICTIONS THAT ARE CONTAINED WITHIN THE RECORDED DEEDS.
13. IT IS RECOMMENDED THAT ARES INDICATED AS INACCESSIBLE, OR AREAS SHOWN ON THE HEREON THAT ARE NOT COMPLETE DUE TO BEING ACCESSIBLE, SHOULD BE REVIEWED BY THE CLIENT TO DETERMINE WHETHER OR NOT ADDITIONAL SURVEY WORK IS NECESSARY. REMOVAL OF THIS NOTE FROM THE SURVEY DOCUMENT WILL REQUIRE ADDITIONAL FIELD SURVEY.
14. THE PROPERTY OWNER AND/OR CLIENT SHALL PROVIDE WRITTEN COMMUNICATION TO THE UNDERSIGNED SHOULD THERE BE A DISPUTE REGARDING THE BOUNDARY AND/OR THE CONTENTS OF THIS SURVEY.
15. ANY POTENTIAL ENCROACHMENT SHOWN ON THIS PLAN ARE PROVIDED TO DEPICT THE PHYSICAL LOCATION OF ANY POTENTIALLY ENCROACHING STRUCTURE AND/OR IMPROVEMENT AND IS NOT A STATEMENT OR JUDGEMENT AS TO THE OWNERSHIP OF SAID ENCROACHMENT OR ANY PROPERTY THEREBY AFFECTED.
16. BY GRAPHICAL PLOTTING ONLY THIS PROPERTY IS LOCATED IN FEMA FLOOD MAP – OTHER AREAS/ZONE X. (SEE MAP REFERENCE #2).
17. BOUNDARY RESOLUTION BASED ON FOUND EVIDENCE AND OTHER REFERENCE MATERIALS AS LISTED HEREON AVAILABLE AT THE TIME OF SURVEY. THE COURSES DESCRIBED HEREON WERE DETERMINED BY FOUND MONUMENTS, ADJOINERS AND RESULTING CALCULATIONS.

REFERENCES:

1. TAX MAPS OF MONTGOMERY COUNTY, COMMONWEALTH OF PENNSYLVANIA.
2. MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, MONTGOMERY COUNTY, PENNSYLVANIA (ALL JURISDICTIONS)," PANEL 402 OF 451, MAP NUMBER 42091C0402G, EFFECTIVE MARCH 2, 2016.
3. PLAN ENTITLED IN PART "PLAN OF LOTS MADE FOR WILLIAM LEE & ALICE W. WOODWARD ABINGTON TOWNSHIP, MONTGOMERY COUNTY PENNA." PREPARED BY GEORGE B. MEBUS, INC. ENGINEERS ABINGTON PENNA., DATED APRIL 28, 1977, LAST REVISED JUNE 27, 1977, BEING LOT 1 ON SAID PLAN. SAID PLAN BEING FILED IN THE OFFICE OF THE RECORDER OF DEEDS FOR MONTGOMERY COUNTY IN PLAT BOOK 32 PG 86.
4. PLAN ENTITLED IN PART "CLUSTER DEVELOPMENT – 10 LOT SUBDIVISION FOR MOREDON ASSOCIATES – PROPERTY IDENTIFICATION PLAN" PREPARED BY REAL ESTATE ENGINEERING ASSOCIATES, INC., DATED SEPTEMBER 18, 1991, LAST REVISED FEBRUARY 15, 1992 AND FILED IN THE OFFICE OF THE RECORDER OF DEEDS FOR MONTGOMERY COUNTY IN PLAT BOOK A-53, PAGE 358.

SOILS LEGEND AND TABLE OF LIMITATIONS & RESOLUTIONS
BASED ON U.S.D.A. - N.R.C.S. SOILS SURVEY (WEBSOILSURVEY.NRCS.USDA.GOV) 3/8/2024
LIMITATIONS FOR SITE DEVELOPMENT

SOIL	SLOPE	DEPTH TO RESTRICTIVE LAYER	RUNOFF CLASS
Ch	0-3%	72" TO 99"	LOW
MaB	3-8%	60" TO 128"	MEDIUM
MaC	8-15%	59" TO 128"	WELL DRAINED
MaE	25-35%	60" TO 128"	MEDIUN
MnF	25-60%	72" TO 99"	HIGH

Ch – CODORUS SILT LOAM, 0-3% SLOPES
TABLE E.1 LIMITATION OF PENNSYLVANIA SOILS PERTAINING TO EARTHMOVING PROJECTS FROM THE EROSION AND SEDIMENT CONTROL MANUAL: CUTBANKS CAVE, C/S, FLOODING, DEPTH TO SATURATED ZONE/ SEASONAL HIGH WATER TABLE, HYDRIC/HYDRIC INCLUSIONS,LOW STRENGHT/LANDSLIDE PRONE, SLOW PERCOLATION, FROST ACTION AND WETNESS.

MaB, MaC, MaE, MnF – MANOR LOAM, 3-60% SLOPES
TABLE E.1 LIMITATION OF PENNSYLVANIA SOILS PERTAINING TO EARTHMOVING PROJECTS FROM THE EROSION AND SEDIMENT CONTROL MANUAL: CUTBANKS CAVE, C, EASILY ERODIBLE, LOW STRENGHT/LANDSLIDE PRONE, SLOW PERCOLATION AND FROST ACTION.

RESOLUTIONS FOR LIMITATIONS:
- CUTBANKS CAVE = APPROPRIATE PRECAUSTIONS SHALL BE TAKEN TO SAFEGUARD WORKERS DURING ALL TRENCHING AND EXCAVATION OPERATIONS. ALL APPLICABLE OSHA STANDARDS AND REGULATIONS MUST BE IMPLEMENTED AT ALL TIMES.
- CORROSIVE TO CONCRETE/STEEL = UNDERGROUND PIPES SHALL BE PROTECTED AND/OR DIFFERENT MATERIAL SPECIFIED.
- DROUGHTY = PROVIDE IRRIGATION TO SOILS.
- EASILY ERODIBLE = DESIGN AN EROSION AND SEDIMENTATION PLAN DETAILNG A SEQUENCE OF CONSTRUCTION AND EROSION CONTROL MEASURES WHICH SHALL BE IMPLEMENTED THROUGHOUT CONSTRUCTION.
- FLOODING = INSTALL FLOOD CONTROL MEASURES; IMPROVE CHANNELS; RAISE FOUDNATIONS.
- DEPTH TO SATURATED ZONE/SEASONAL HIGH WATER TABLE = OBTAIN SOIL FROM OTHER AREA OF SITE OR OFF SITE; SELECT APPROPRIATE SEED MIXTURE; PROVIDE DRAINAGE CHANNELS OR UNDERDRAINS.
- HYDRIC/HYDRIC INCLUSIONS = DESIGN SITE TO AVOID AREAS OF HYDRIC SOILS; PERFORM A WETLAND SURVEY.
- LOW STRENGTH/LANDSLIDE PRONE = PRECAUTIONS SHALL BE TAKEN TO PREVENT SLOPE FAILURES (SUCH AS AVOIDING OVER-STEEPING, OVERLOADING SLOPES, REMOVAL OF LATERAL SUPPORT, AND/OR FAILURE TO PREVENT SATURATION OF SLOPES). SETBACKS SHALL BE MAINTIANED FROM AREAS OF WEAK SOILS, AND/OR FILL MATERIAL MAY NEED TO BE IMPORTED TO INCREASE STRENGTH.
- SLOW PERCOLATION = AVOID LOCATING INFILTRATION AREAS WITHIN THESE AREAS; SOIL TESTING SHALL BE USED TO IDENTIFY AREAS OF CONCERN; AND UNDERDRAINS SHALL BE USED.
- PIPING = INSTALL A CLAY PLUG IF PIPING BEGINS TO FORM.
- POOR SOURCE OF TOPSOIL = SOIL AMENDMENTS SHALL BE USED TO PROMOTE GROWTH OF DESIRED VEGETATION. AREAS OF GOOD TOPSOIL ON SITE SHALL BE RELOCATED AND STORED FOR LATER USE ON THE SITE.
- FROST ACTION = PRECAUTIONS SHALL BE IMPLEMENTED TO PREVENT DAMAGE WHEN FROST IS ANTICIPATED.
- WETNESS = INSTALL SURFACE DRAINAGE MEASURES; DESIGN THE E&S PLAN TO AVOID ADDITIONAL PONDING IN THESE AREAS, GRADE THE SITE TO ELEVATE THESE AREAS.
- LOW DEPTH TO BEDROCK = REVISE DESIGN TO RELOCATE; EXCAVATE RIPPABLE ROCK OR BLAST

OVERALL TRACT RESOURCE PROTECTION LAND

RESOURCE	PROTECTION RATIO	LAND IN RESOURCE	REQUIRED PROTECTION	PROPOSED PROTECTED LANDS
WATERCOURSES	100%	0.00 AC.	0.00 AC.	0.00 AC. (100 %)
FLOODPLAIN	100%	0.00 AC.	0.00 AC.	0.00 AC. (100 %)
FLOODPLAIN SOILS	100%	0.00 AC.	0.00 AC.	0.00 AC. (100 %)
LAKES OR PONDS	100%	0.00 AC.	0.00 AC.	0.00 AC. (100 %)
RIPARIAN BUFFER	100%	0.00 AC.	0.00 AC.	0.00 AC. (100 %)
WETLANDS	100%	0.00 AC.	0.00 AC.	0.00 AC. (100 %)
WETLAND MARGIN	100%	0.00 AC.	0.00 AC.	0.00 AC. (100 %)
LAKE OR POND SHORELINE	80%	0.00 AC.	0.00 AC.	0.00 AC. (100 %)
STEEP SLOPES 15%-25%	75%	1.90 AC.	1.43 AC.	1.54 AC. (81 %)
STEEP SLOPES 25%+	90%	0.40 AC.	0.36 AC.	0.38 AC. (95 %)
TOTAL LAND WITH RESOURCE PROTECTION		2.30 AC.		
TOTAL LAND REQUIRED TO BE PROTECTED			1.79 AC.	
TOTAL RESOURCE PROTECTED LAND				1.92 AC.

* WHERE TWO OR MORE RESOURCES OVERLAP, ONLY THE RESOURCE WITH THE HIGHEST PROTECTION RATIO IS USED IN CALCULATIONS.

TREE REPLACEMENT

TOTAL TREES: 403 (100%)
TREES TO REMAIN: 225 (55.8%)
TREES TO REMOVE: 178 (44.2%)

TREES TO PROVIDE*: 356
178 x 2 = 356

*AS PER TOWNSHIP OF ABINGTON ZONING ORDINANCE 2017, SEC.2401.A.2.d(1)(b) TREE REPLACEMENT

LEGEND & ABBREVIATIONS

- PROPERTY BOUNDARY
- ADJOINER BOUNDARY
- RIGHT OF WAY LINE
- BUILDING SETBACK LINE
- 95 EXISTING CONTOUR
- x 95 EXISTING SPOT ELEVATION
- EXISTING TREES
- EXISTING TREELINE
- EXISTING FENCE
- (TBR) TO BE REMOVED
- (TR) TO REMAIN
- EXISTING SIGN
- EXISTING UTILITY POLE (UP)
- C – T CONDUIT – TRANSFORMER
- L – M LIGHT – METER
- OH EXISTING OVERHEAD WIRE
- G APPROXIMATE GAS LINE
- W APPROXIMATE WATER LINE
- C APPROXIMATE TELCO LINE
- E APPROXIMATE ELECTRIC LINE
- EXISTING CURB
- EXISTING DEPRESSED CURB (DC)
- 15% TO 25% STEEP SLOPES (82,858 SF)
- 25%+ STEEP SLOPES (17,336 SF)
- WOODLAND AREA

GRAPHIC SCALE

40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

CLIENT DATA

Cornerstone
Consulting Engineers & Design Services, Inc.
213 West Main Street, Lansdale, PA 19446
Phone: 215-362-2600 Fax: 215-362-8400
WWW.CORNERSTONENET.COM
Pocono Region 570-839-1770
Lehigh Valley Region 610-820-8200
Philadelphia Region 215-362-2600

REVISIONS

NO.	BY	DESCRIPTION	DATE
1.	DB	REVISED PER SEWER AUTHORITY COMMENTS	10-30-24

PENNSYLVANIA ONE CALL SYSTEM, INC.
925 Irwin Run Road
West Mifflin, Pennsylvania
15122 - 1078
811
BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA CALL 1-800-242-1776

J.B. ANDERSON
PROFESSIONAL ENGINEER
DELAWARE LICENSE No. PE.15438
COMMONWEALTH OF VIRGINIA LICENSE No. PE.055516
MARYLAND LICENSE No. 29313
NEW JERSEY LICENSE No. 24GE04570400
VIRGINIA LICENSE No. 0402 045725
FLORIDA LICENSE No. 75184
NEW YORK LICENSE No. 093667-1

PROJECT LOCATION

PRELIMINARY SUBDIVISION PLAN SET
4 LOT SUBDIVISION

221 MOREDON ROAD,
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

PREPARED FOR:
PEROLI, LLC

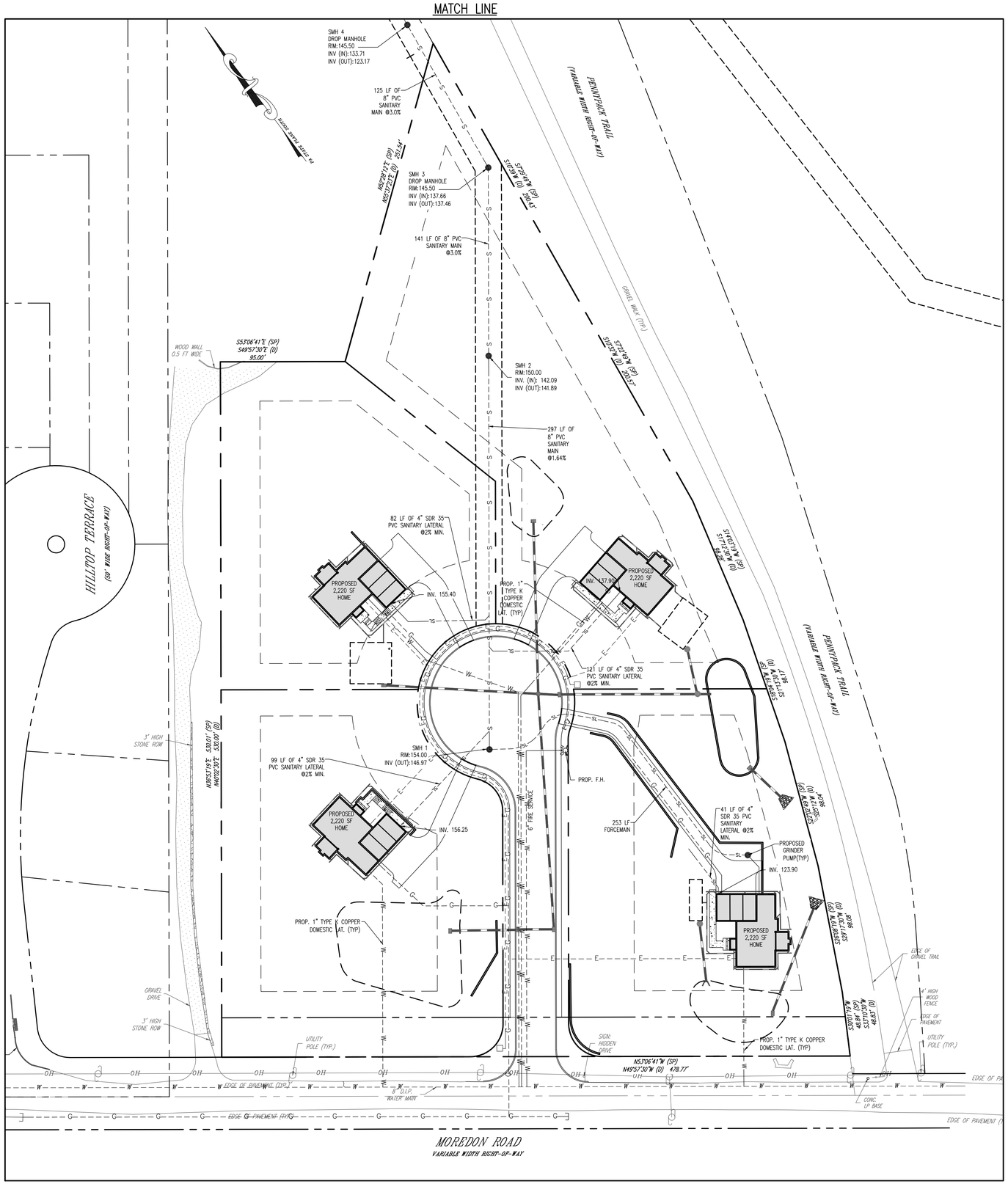
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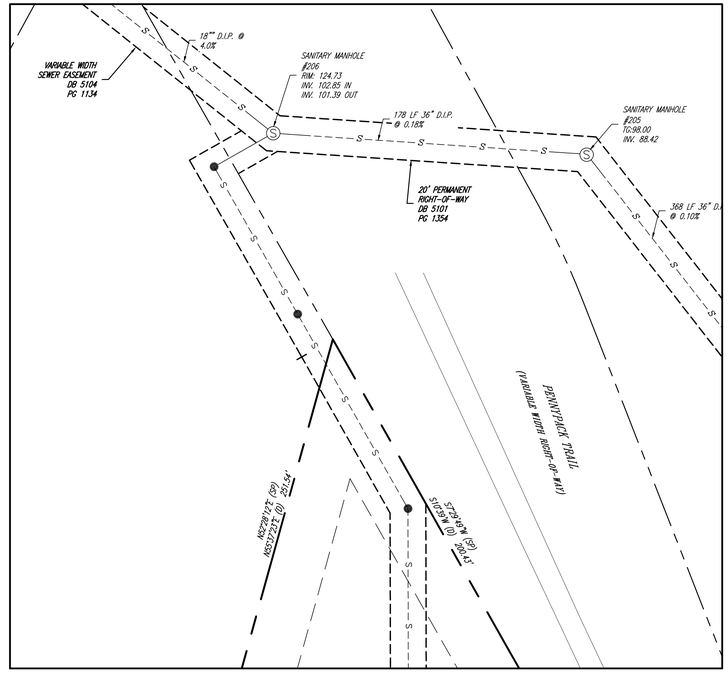
EXISTING CONDITIONS & NATURAL RESOURCES PLAN

PROJ. #	23-0516	DATE	8/13/2024
CAD ID.	23-0516	DRN BY	DB
SCALE	AS NOTED	CHK BY	JBA

SHEET 2 OF 16

REVISION 1





LEGEND

- PROPERTY BOUNDARY
- BUILDING SETBACK LINE
- EXISTING UTILITY POLE
- OH — EXISTING OVERHEAD WIRE
- EXISTING CURB
- W — W — EXISTING WATER MAIN
- OH — EXISTING ELECTRICAL LINE
- S — S — EXISTING SANITARY LINE
- G — G — EXISTING GAS LINE
- PROPOSED STORM SEWER
- FM — FM — PROPOSED FORCEMAIN
- S — S — PROPOSED SANITARY SEWER
- W — W — PROPOSED WATER LINE
- E — E — PROPOSED ELECTRICAL LINE
- T — T — PROPOSED TELEPHONE LINE
- C.O. — PROPOSED SANITARY SEWER CLEANOUT
- PROPOSED STORM DRAINAGE INLET
- PROPOSED MANHOLE
- PROPOSED HYDRANT

UTILITY NOTES

GENERAL NOTES

1. COORDINATE LOCATIONS AND TIE–IN POINTS OF PROPOSED MECHANICAL AND ELECTRICAL SYSTEMS WITH THE APPROPRIATE CONSULTANTS PLANS, AND / OR THE APPROPRIATE GOVERNMENTAL AGENCY HAVING JURISDICTION AT THE TIME OF CONSTRUCTION.
2. ALL TRENCHES SHALL BE SHORED IN ACCORDANCE WITH OSHA STANDARDS.
3. PA ONE CALL SERIAL NO. 20161682749.
4. ALL ELECTRICAL LINES TO LIGHT POLES SHALL BE INSTALLED IN 1 1/2" PVC CONDUIT WITH NECESSARY PULL/JUNCTION BOXES.
5. CLEANOUTS AND CURB BOXES WITHIN PAVED AREAS MUST HAVE TRAFFICE LOADING FRAMES AND COVERS MEETING HS–25 LIVE LOAD.
6. CONTRACTOR SHALL NOT CONNECT PIPES INTO THE CORNER OF INLET BOXES.

WATER NOTES

1. ALL WATER PIPES SHALL HAVE A MINIMUM COVER OF FOUR (4) FEET. A MINIMUM VERTICAL CLEARANCE OF EIGHTEEN (18) INCHES OR A MINIMUM HORIZONTAL SEPARATION OF TEN (10) FEET SHALL BE MAINTAINED AT ALL CROSSINGS OF WATER LINES WITH SANITARY OR STORM SEWERS. IF 18" VERTICAL CLEARANCE CANNOT BE MAINTAINED, THE SANITARY SEWER, SEWER LATERAL OR WATER LINE IF NECESSARY SHALL BE CONCRETE ENCASED, IN ACCORDANCE WITH PA. D.E.P. REQUIREMENTS.
2. ALL WATER SYSTEM MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH AQUA PENNSYLVANIA STANDARDS AND SPECIFICATIONS.

SANITARY SEWER NOTES

1. ALL SANITARY PIPE WITHIN THE TOWNSHIP R.O.W. SHALL BE CLASS 52 DUCTILE IRON PIPE.
2. ALL SANITARY SYSTEM MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LOCAL SEWER AUTHORITY STANDARDS AND SPECIFICATIONS.
3. ALL PROPOSED SANITARY SEWER SERVICES SHALL BE COORDINATED WITH THE MECHANICAL/ PLUMBING CONSTRUCTION DOCUMENTS.
4. SANITARY SEWER LINES AND STORM SEWER CROSSINGS SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF EIGHTEEN (18) INCHES OR A MINIMUM HORIZONTAL SEPARATION OF TEN (10) FEET. IF 18" VERTICAL CLEARANCE CANNOT BE MANTAINED, THE SANITARY SEWER OR SEWER LATERAL SHALL BE CONCRETE ENCASED, IN ACCORDANCE WITH PA D.E.P. REQUIREMENTS.
5. WITHIN EXISTING OR PROPOSED SEWER EASEMENTS, THERE SHALL NOT BE BUILT, INSTALLED, CONSTRUCTED, PLANTED , OR LOCATED ANY TEMPORARY OR PERMANENT BUILDINGS OR STRUCTURES, OR ANY TREES, SHRUBS, OR OTHER LANDSCAPING, EXCEPT TREES, SHRUBS, AND OTHER LANDSCAPING WHICH WILL NOT GROW MORE THAN SIX FEET (6') IN HEIGHT.
6. A MINIMUM SLOPE OF 2% SHOULD BE PROVIDED FOR SEWER LATERALS, UNLESS OTHERWISE NOTED.
7. ALL SEWER LATERAL CONNECTIONS TO THE GRAVITY MAIN SHALL UTILIZE A WYE AND A 45 DEGREE ELBOW.
8. CONTRACTOR SHALL RESTORE TO EXISTING CONDITIONS ALL SURFACE AREA WITHIN THE RIGHT–OF–WAY OVER THE PROPOSED SANITARY LATERAL. ALL PAVEMENT ENCOUNTERED SHALL BE REPLACED IN KIND.

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

CLIENT DATA

Cornerstone
Consulting Engineers & Design Services, Inc.
213 West Main Street, Lansdale, PA 19446
Phone: 215.362.2600 Fax: 215.362.8400
WWW.CORNERSTONENET.COM
Philadelphia Region 215-362-2600
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Pocono Region 570-839-1770

REVISIONS

NO	BY	DESCRIPTION	DATE
1.	DB	REVISED PER SEWER AUTHORITY COMMENTS	10-30-24

PENNSYLVANIA ONE CALL SYSTEM, INC.
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VIRGINIA LICENSE No. 0402 045725
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NEW YORK LICENSE No. 093667-1

PROJECT LOCATION

PRELIMINARY SUBDIVISION PLAN SET
4 LOT SUBDIVISION

221 MOREDON ROAD,
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

PREPARED FOR:
PEROLI, LLC

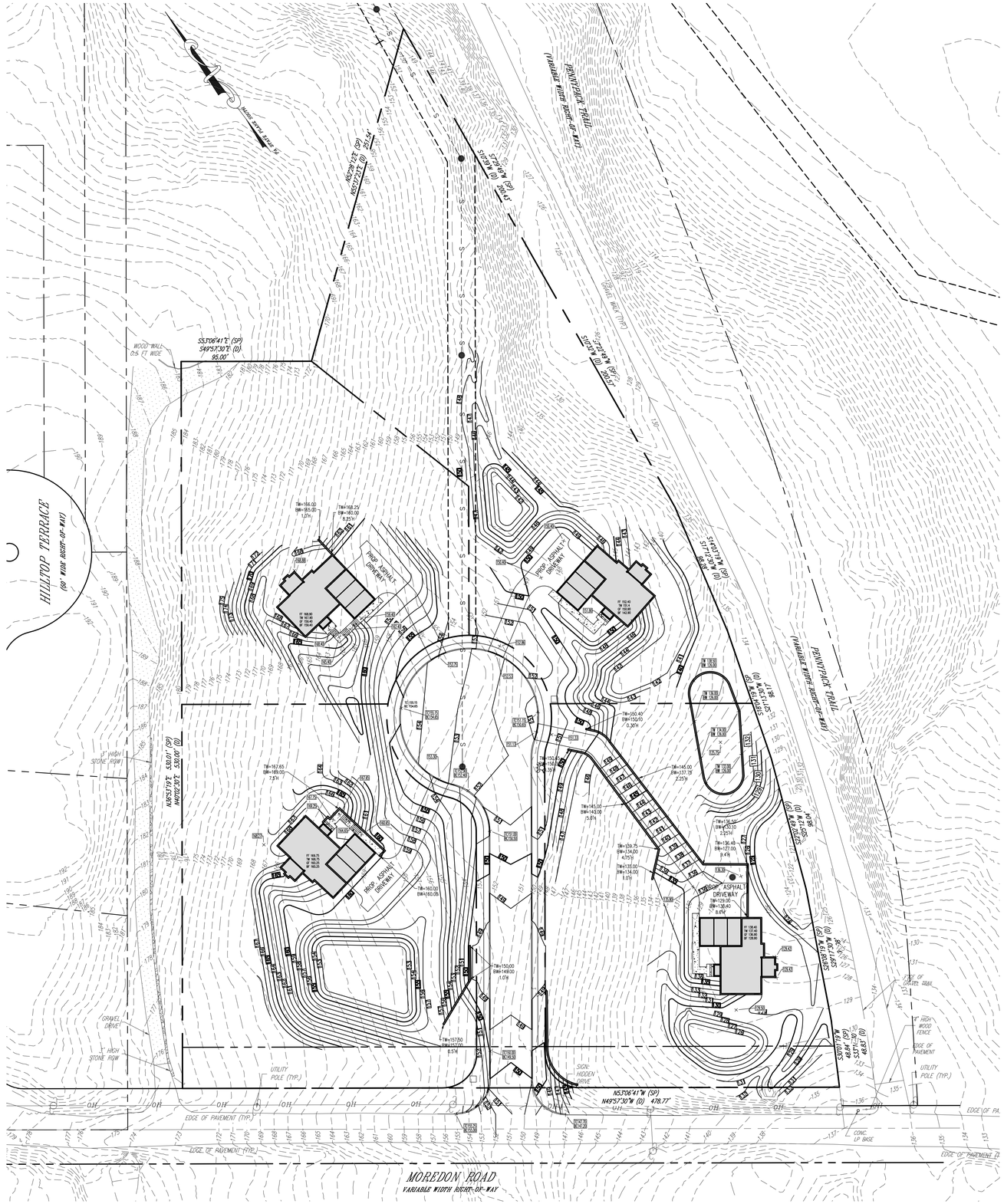
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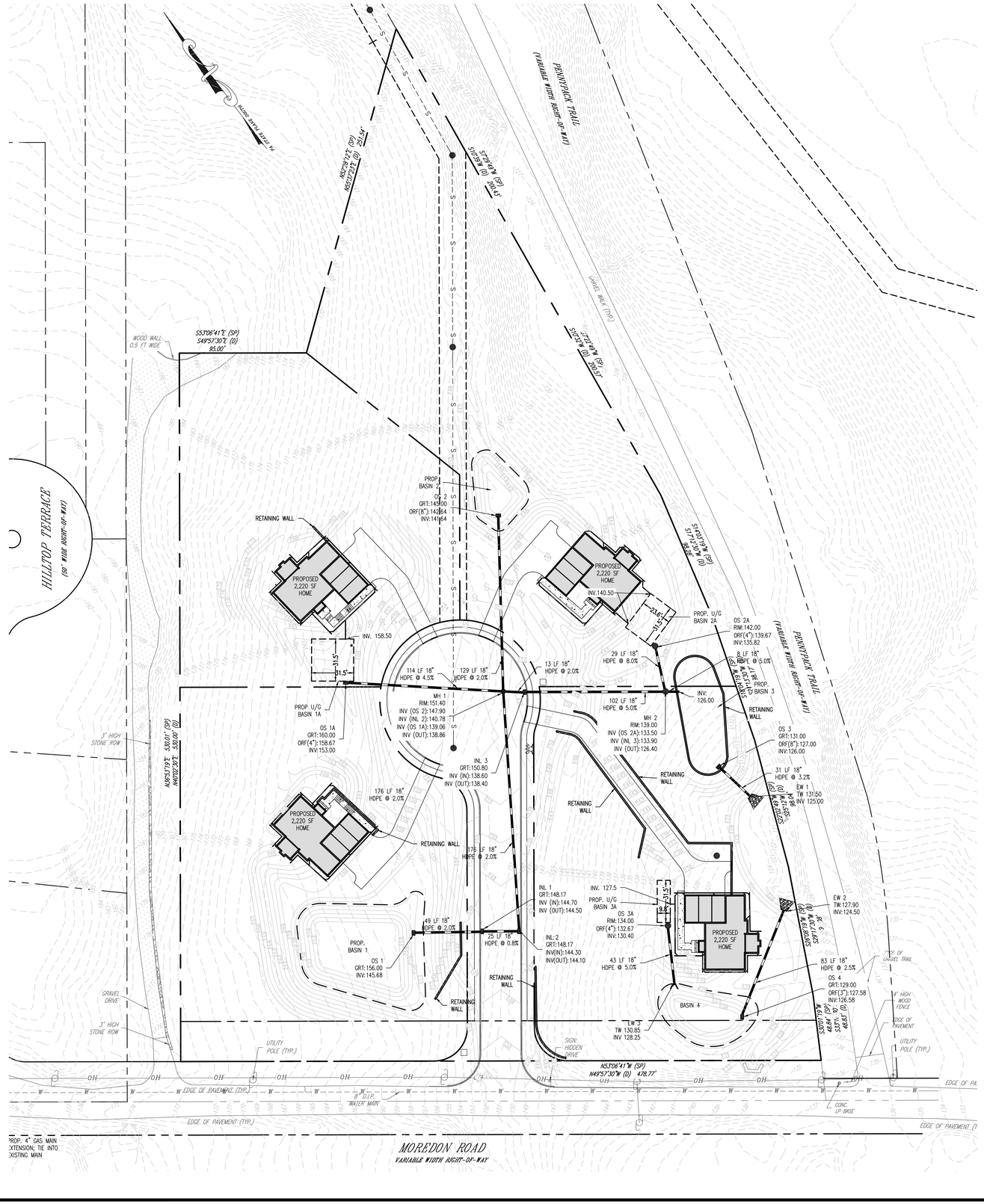
UTILITY PLAN

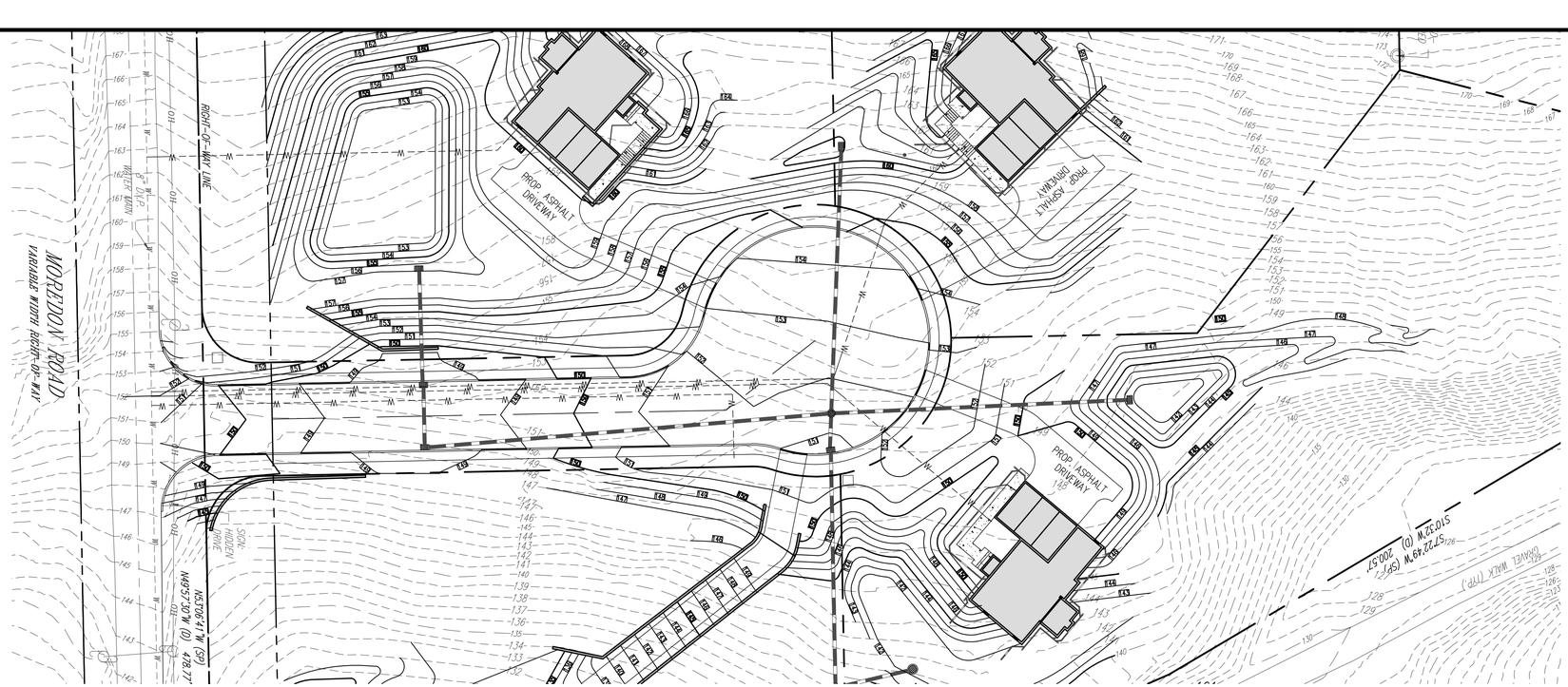
PROJ. #	23-0516	DATE	8/13/2024
CAD ID.	23-0516	DRN BY	DB
SCALE	AS NOTED	CHK BY	JBA

SHEET 3 OF 16

REVISION 1


HILLTOP TERRACE
(50' WIDE RIGHT-OF-WAY)
MOREDON ROAD
VARIABLE WIDTH RIGHT-OF-WAY
FRONTPEAK TRAIL
(VARIABLE WIDTH RIGHT-OF-WAY)
PENNYPACK TRAIL
(VARIABLE WIDTH RIGHT-OF-WAY)
PROP. ASPHALT DRIVEWAY
EXIST. ASPHALT DRIVEWAY
WOOD WALL 0.5 FT WIDE
3' HIGH STONE ROW
GRAVEL DRIVE
UTILITY POLE (TYP.)
SIGN: HIDDEN DRIVE
EDGE OF PAVEMENT (TYP.)
CONC. LP BASE
EDGE OF GRAVEL TRAIL
4' HIGH WOOD FENCE
EDGE OF PAVEMENT
S53°06'41"E (SP)
S49°57'30"E (D)
95.00'
N53°06'41"W (SP)
N49°57'30"W (D)
478.77'
N53°06'41"W (SP)
N49°57'30"W (D)
48.83'
S53°01'30"E (SP)
530.00' (D)
N39°02'30"E
N39°02'30"E (SP)
530.00' (D)
S39°02'30"W
S39°02'30"W (SP)
530.00' (D)
N39°02'30"E
N39°02'30"E (SP)
530.00' (D)
S39°02'30"W
S51°53'30"E (SP)
S49°57'30"E (D)
95.00'
N38°06'30"E (SP)
N40°02'30"E (D)
N40°02'30"E (SP)
N40°02'30"E (D)
S40°02'30"W (SP)
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S40°02'30"W (SP)
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N51°53'30"W (SP)
N49°57'30"W (D)
95.00'
N51°53'30"W (SP)
N49°57'30"W (D)
95.00'
S38°06'30"W (SP)
S40°02'30"W (D)
S40°02'30"W (SP)
S40°02'30"W (D)
N40°02'30"E (SP)
N40°02'30"E (D)
N40°02'30"E (SP)
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BW=165.00
1.21%
TW=168.25
BW=160.00
8.25%
TW=160.00
BW=160.00
TW=157.50
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TW=152.65
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TW=150.00
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0.51%
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TF 168.25
BF 160.25
SF 160.25
FF 168.90
TF 163.40
BF 154.40
SF 154.40
FF 152.40
TF 152.40
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SF 143.90
FF 152.40
TF 152.40
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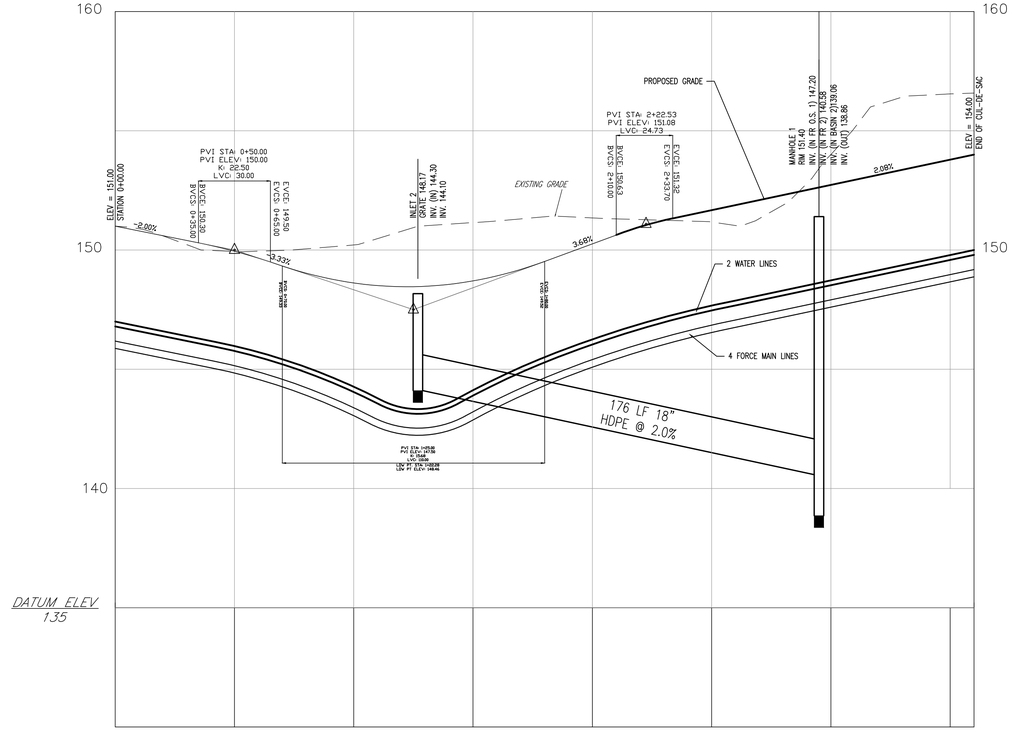

HILLTOP TERRACE
(50' WIDE RIGHT-OF-WAY)
PENNYPACK TRAIL
(VARIABLE WIDTH RIGHT-OF-WAY)
MOREDON ROAD
VARIABLE WIDTH RIGHT-OF-WAY
EDGE OF PAVEMENT (TYP.)
GRAVEL DRIVE
3' HIGH STONE ROW
WOOD WALL 0.5 FT WIDE
RETAINING WALL
PROPOSED 2,220 SF HOME
PROP. BASIN 1
PROP. BASIN 2
PROP. BASIN 3
PROP. BASIN 4
PROP. U/G BASIN 1A
PROP. U/G BASIN 2A
PROP. U/G BASIN 3A
OS 1 GRT:156.00 INV:145.68
OS 1A GRT:160.00 ORF(4"):158.67 INV:153.00
OS 2 GRT:145.00 ORF(8"):142.64 INV:141.64
OS 2A RIM:142.00 ORF(4"):139.67 INV:135.82
OS 3 GRT:131.00 ORF(8"):127.00 INV:126.00
OS 3A RIM:134.00 ORF(4"):132.67 INV:130.40
OS 4 GRT:129.00 ORF(3"):127.58 INV:126.58
INL 1 GRT:148.17 INV (IN):144.70 INV (OUT):144.50
INL 2 GRT:148.17 INV(IN):144.30 INV(OUT):144.10
INL 3 GRT:150.80 INV (IN):138.60 INV (OUT):138.40
MH 1 RIM:151.40 INV (OS 2):147.90 INV (INL 2):140.78 INV (OS 1A):139.06 INV (OUT):138.86
MH 2 RIM:139.00 INV (OS 2A):133.50 INV (INL 3):133.90 INV (OUT):126.40
INV. 158.50
INV. 140.50
INV. 127.5
INV: 126.00
EW 1 TW 131.50 INV 125.00
EW 2 TW:127.90 INV:124.50
EW 3 TW 130.85 INV 128.25
114 LF 18" HDPE @ 4.5%
129 LF 18" HDPE @ 2.0%
13 LF 18" HDPE @ 2.0%
29 LF 18" HDPE @ 8.0%
102 LF 18" HDPE @ 5.0%
31 LF 18" HDPE @ 3.2%
176 LF 18" HDPE @ 2.0%
49 LF 18" HDPE @ 2.0%
25 LF 18" HDPE @ 0.8%
43 LF 18" HDPE @ 5.0%
83 LF 18" HDPE @ 2.5%
31.5'
9.8'
S53°06'41"E (SP)
S49°57'30"E (D)
95.00'
N53°06'41"W (SP)
N49°57'30"W (D)
478.77'
S72°38'40"W (SP)
S69°29'30"W (D)
205.43'
N53°06'41"E (SP)
N55°27'23"E (D)
251.54'
S72°38'40"W (SP)
S69°29'30"W (D)
205.43'
S51°43'19"W (SP)
S47°12'20"W (D)
88.06'
N53°06'41"W (SP)
N49°57'30"W (D)
488.84'
S.L.D.
S.L.D.
S.L.D.



GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.



PROPOSED CUL-DE-SAC PROFILE

SCALE: 1"=3' VERT
1"=30' HORIZ

CLIENT DATA

Cornerstone
Consulting Engineers & Design Services, Inc.
213 West Main Street, Lansdale, PA 19446
Phone: 215-362-2600 Fax: 215-362-8400
WWW.CORNERSTONENET.COM
Philadelphia Region 215-362-2600
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Pocono Region 570-839-1770

REVISIONS

NO	BY	DESCRIPTION	DATE
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PROJECT LOCATION

PRELIMINARY SUBDIVISION PLAN SET
4 LOT SUBDIVISION

221 MOREDON ROAD,
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

PREPARED FOR:
PEROLI, LLC

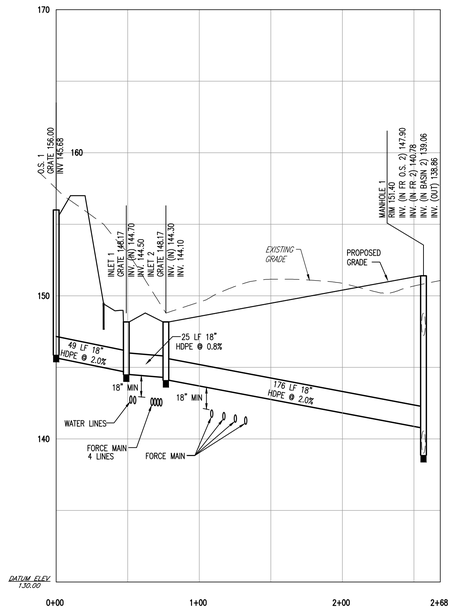
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CUL-DE-SAC
PLAN & PROFILE

PROJ. #	23-0516	DATE	8/13/2024
CAD ID.	23-0516	DRN BY	DB
SCALE	AS NOTED	CHK BY	JBA

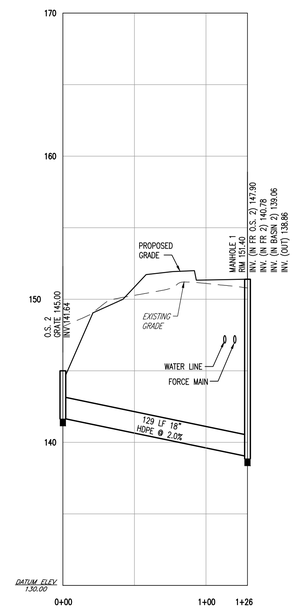
SHEET 6 OF 16

REVISION 1



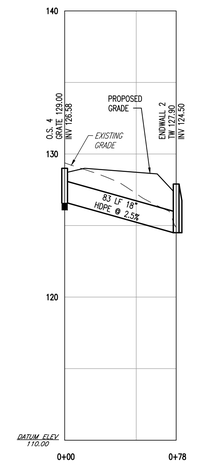
OS 1 TO MH 1

HORIZ. SCALE: 1"=50'
VERT. SCALE: 1"=5'



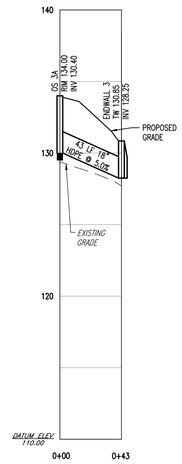
OS 2 TO MH 1

HORIZ. SCALE: 1"=50'
VERT. SCALE: 1"=5'



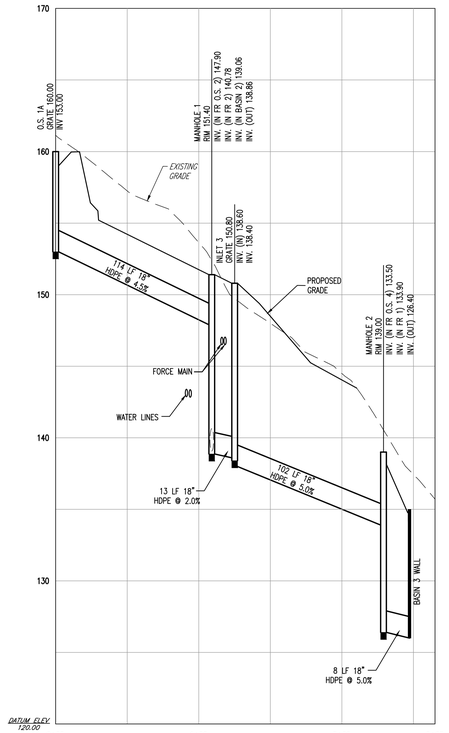
OS 4 TO EW2

HORIZ. SCALE: 1"=50'
VERT. SCALE: 1"=5'



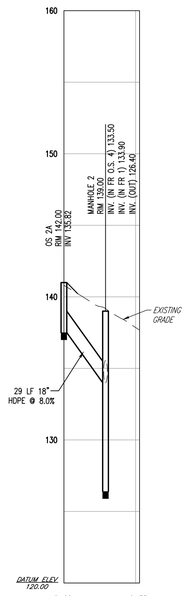
OS 3A TO EW3

HORIZ. SCALE: 1"=50'
VERT. SCALE: 1"=5'



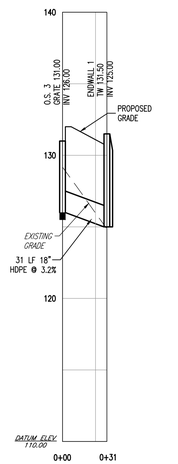
OS 1A TO BASIN 3

HORIZ. SCALE: 1"=50'
VERT. SCALE: 1"=5'



OS 2A TO MH 2

HORIZ. SCALE: 1"=50'
VERT. SCALE: 1"=5'



OS 3 TO EW1

HORIZ. SCALE: 1"=50'
VERT. SCALE: 1"=5'

CLIENT DATA

Cornerstone
Consulting Engineers & Design Services, Inc.
213 West Main Street, Lansdale, PA 19446
Phone: 215-362-2600 Fax: 215-362-8400
WWW.CORNERSTONENET.COM
Philadelphia Region 215-362-2600
Lehigh Valley Region 610-820-8200
Pocono Region 570-839-1770

REVISIONS

NO	BY	DESCRIPTION	DATE
1.	DB	REVISED PER SEWER AUTHORITY COMMENTS	10-30-24

PENNSYLVANIA ONE CALL SYSTEM, INC.
925 Irwin Run Road
West Mifflin, Pennsylvania
15122 - 1076

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PROFESSIONAL ENGINEER
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PENNSYLVANIA LICENSE No. PE 055536
MARYLAND LICENSE No. 29313
NEW JERSEY LICENSE No. 24GE04520400
VIRGINIA LICENSE No. 0402 045725
FLORIDA LICENSE No. 75184
NEW YORK LICENSE No. 093667-1

PROJECT LOCATION

PRELIMINARY SUBDIVISION PLAN SET
4 LOT SUBDIVISION

221 MOREDON ROAD,
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

PREPARED FOR:
PEROLI, LLC

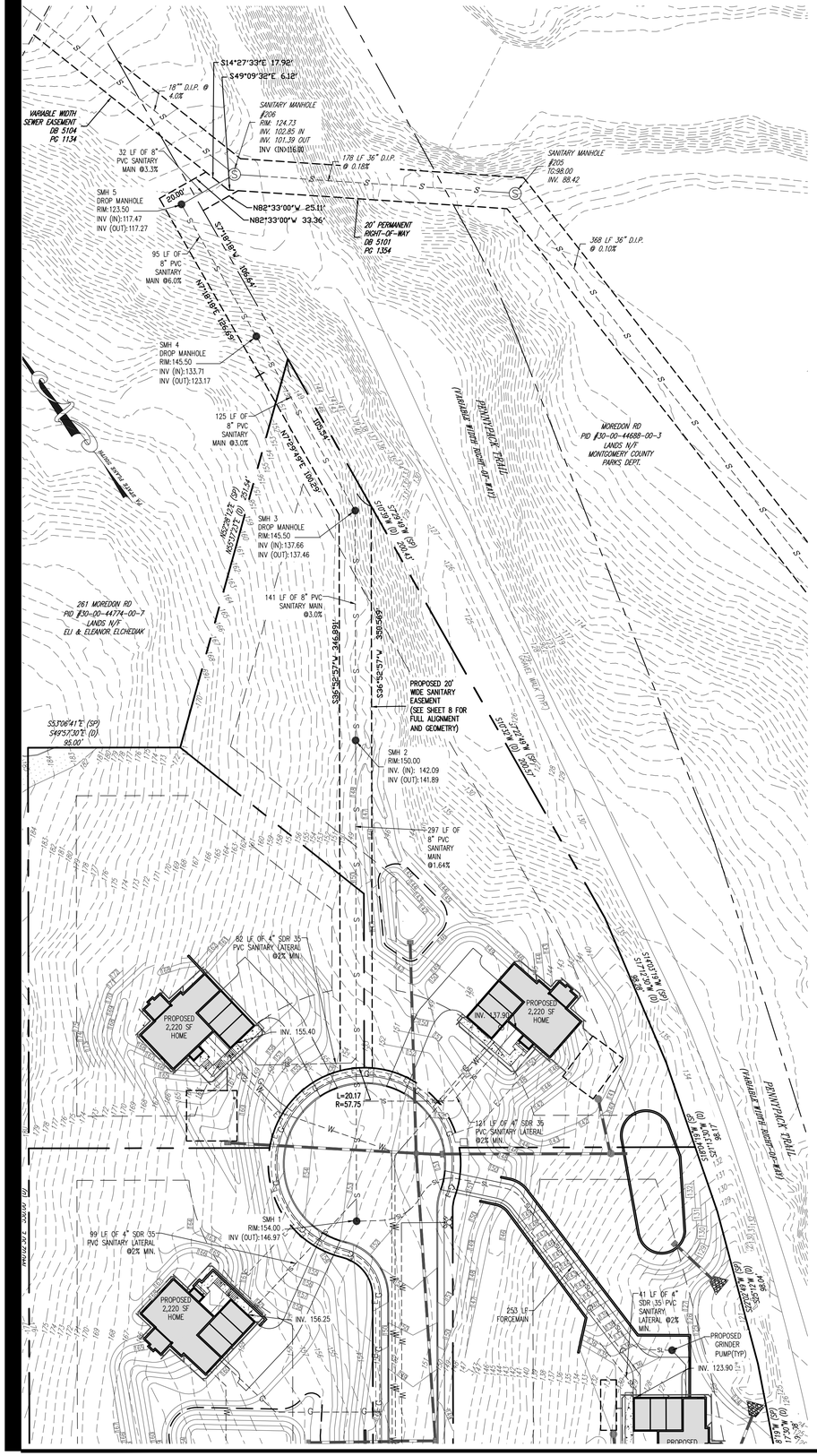
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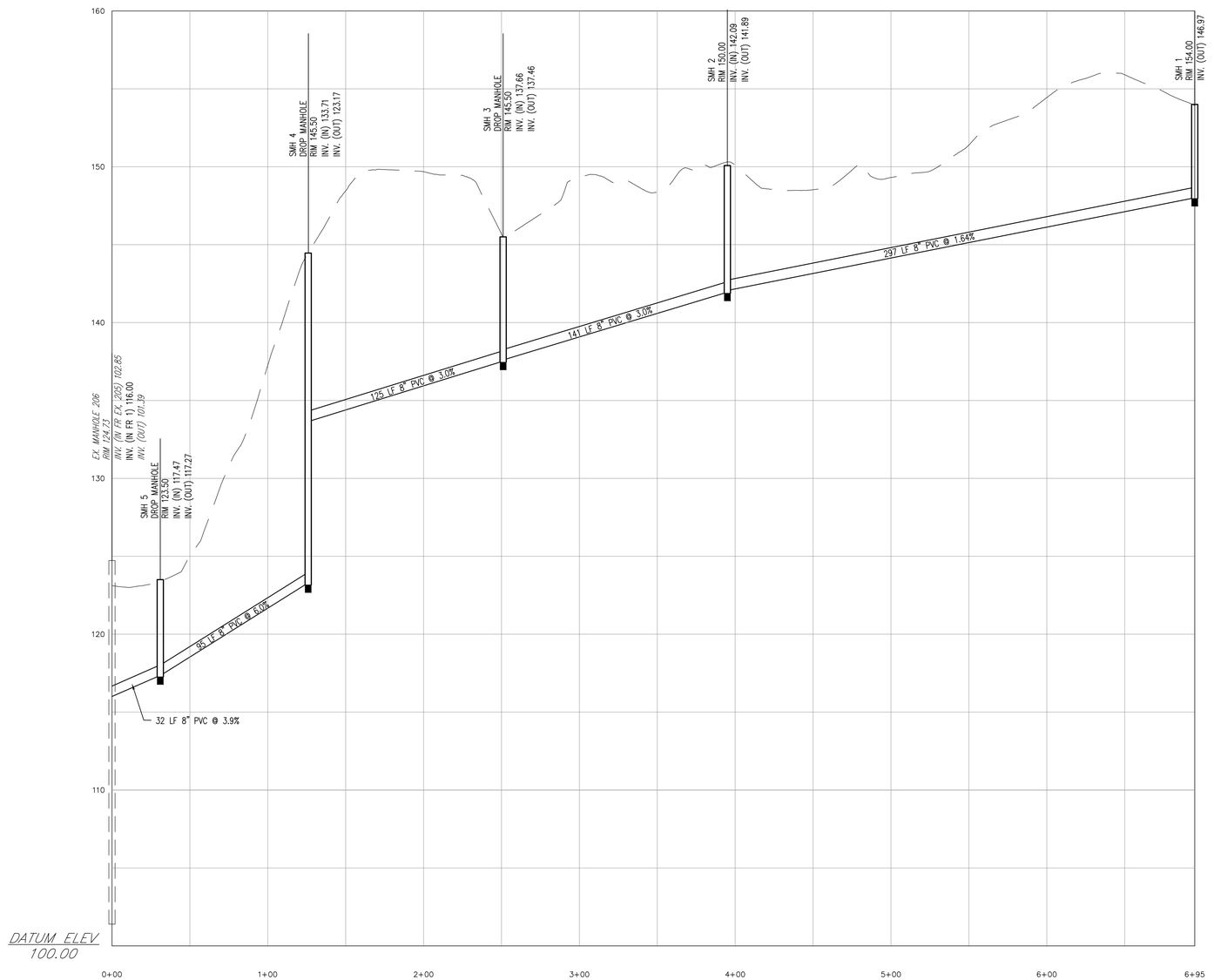
STORM PROFILES

PROJ. #	23-0516	DATE	8/13/2024
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SCALE	AS NOTED	CHK BY	JBA

SHEET 7 OF 16

REVISION 1





SANITARY MAIN

STATION 0+00.00 TO 6+94.97

LEGEND

- PROPERTY BOUNDARY
- BUILDING SETBACK LINE
- EXISTING UTILITY POLE
- EXISTING OVERHEAD WIRE
- EXISTING CURB
- EXISTING WATER MAIN
- EXISTING ELECTRICAL LINE
- EXISTING SANITARY LINE
- EXISTING GAS LINE
- PROPOSED STORM SEWER
- PROPOSED FORCEMAIN
- PROPOSED SANITARY SEWER
- PROPOSED WATER LINE
- PROPOSED ELECTRICAL LINE
- PROPOSED TELEPHONE LINE
- PROPOSED SANITARY SEWER CLEANOUT
- PROPOSED STORM DRAINAGE INLET
- PROPOSED MANHOLE
- PROPOSED HYDRANT

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

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4 LOT SUBDIVISION

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PENNSYLVANIA

PREPARED FOR:
PEROLI, LLC

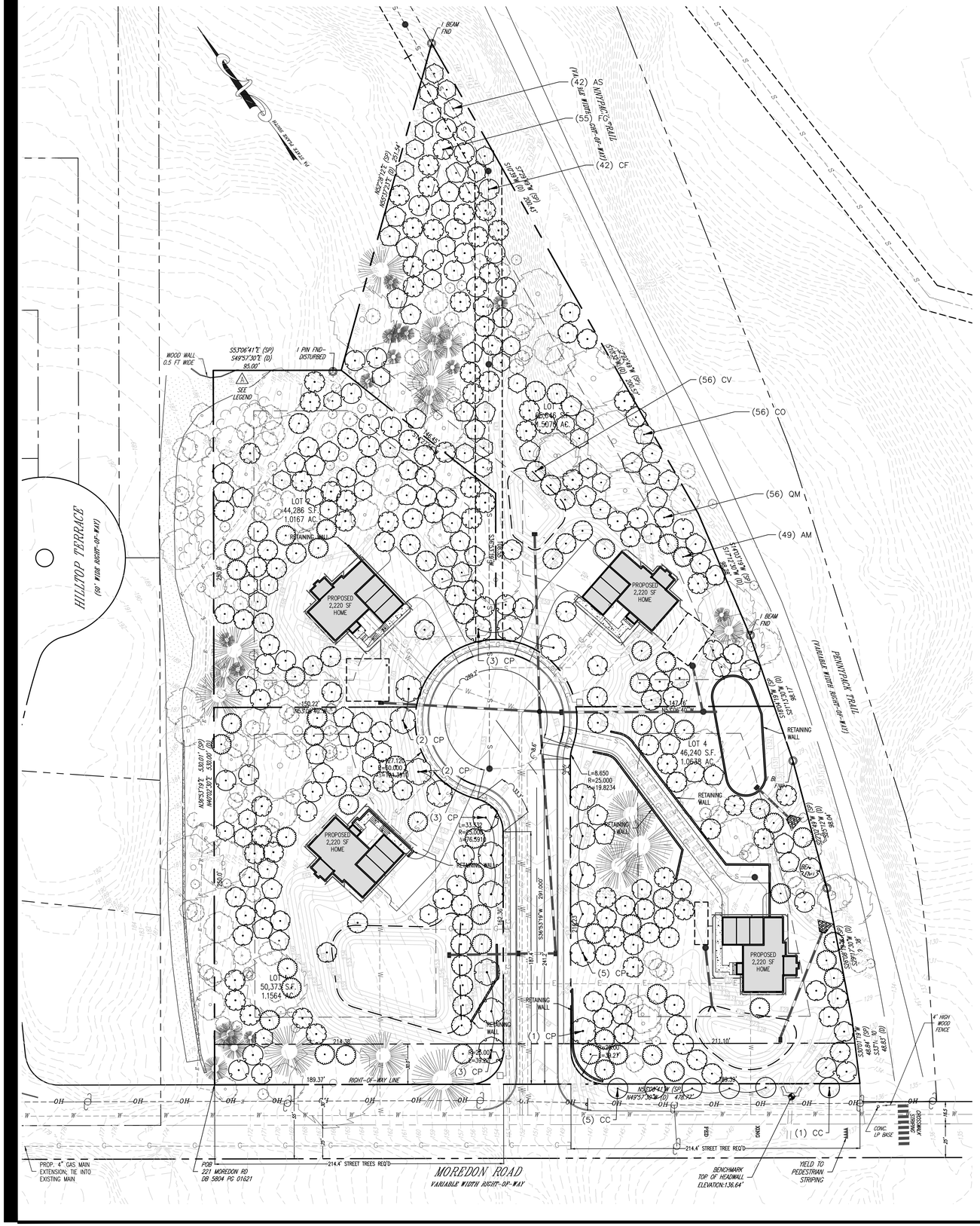
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SANITARY PLAN & PROFILE

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REVISION 1



ABINGTON TOWNSHIP – LANDSCAPE COMPLIANCE CHART	REQUIRED	PROVIDED
ZONING: R-1, LOW DENSITY RESIDENTIAL		
SEC. 2401.A.2.d(1)(b) TREE REPLACEMENT IF MORE THAN 25% OF THE TREE CANOPY IS PROPOSED TO BE REMOVED, THEN EVERY TREE 6" OR GREATER SHALL BE REPLACED WITH TWO TREES, 3-3.5" CAL. TOTAL TREES: 402 (100%) TREES TO REMAIN: 226 (56.2%) TREES TO BE REMOVED: 176 (43.8%)		
174 TREES x 2 = 352 TREES	352 TREES	352 TREES
SEC. 2402.B.2.c. STREET TREES ONE TREE SHALL BE PLANTED FOR EVERY 40 LF OF FRONTAGE OR FRACTION THEREOF MOREDON RD: 428.8 LF / 40 = 10.7	11 STREET TREES	5+ EX. & 6 PROP. STREET TREES
PROPOSED CUL-DE-SAC: 759.7 LF / 40 = 19	19 STREET TREES	19 STREET TREES

PLANT SCHEDULE

SYMBOL	CODE	BOTANICAL / COMMON NAME	SIZE	CONTAINER	QTY
TREE REPLACEMENT					
	AS	Acer saccharum / Sugar Maple	2.5" Cal.	B&B	42
	AM	Amelanchier canadensis / Canadian Serviceberry Multi-trunk	2.5" Cal.	B&B	49
	CO	Carya ovata / Shagbark Hickory	2.5" Cal.	B&B	56
	CV	Chionanthus virginicus / White Fringetree	2.5" Cal.	B&B	56
	CF	Cornus florida / Flowering Dogwood	2.5" Cal.	B&B	42
	FG	Fagus grandifolia / American Beech	2.5" Cal.	B&B	55
	QM	Quercus muehlenbergii / Chinkapin Oak	2.5" Cal.	B&B	56
STREET TREES					
	CP	Celtis occidentalis 'Prairie Pride' / Prairie Pride Hackberry	3"-3.5" Cal.	B&B	19
	CC	Cercis canadensis / Eastern Redbud	3"-3.5" Cal.	B&B	6

LEGEND & ABBREVIATIONS

- CENTERLINE OF ROAD
- PROPERTY BOUNDARY
- ADJOINER BOUNDARY
- RIGHT OF WAY LINE
- EXISTING FENCE
- PROPOSED FENCE
- BUILDING SETBACK LINE
- 95 EXISTING CONTOURS
- 295.60 EXISTING SPOT ELEVATION
- 100 PROP. CONTOURS
- 99
- 295.60 PROP. SPOT ELEVATION
- EXISTING TREELINE
- EXISTING STREAM
- OH EXISTING OVERHEAD WIRE
- W EXISTING WATER LINE
- W PROPOSED WATER LINE
- C EXISTING TELCO LINE
- E EXISTING ELECTRIC LINE
- E PROPOSED ELECTRIC LINE
- G EXISTING GAS LINE
- G PROPOSED GAS LINE
- S EXISTING SANITARY LINE
- S PROPOSED SANITARY LINE
- EXISTING STORM SEWER LINE
- PROP. STORM SEWER LINE
- EXISTING CURB
- DEPRESSED CURB
- U/G - N/C UNDER/ABOVE GROUND
- SIGN
- UTILITY POLE (UP)
- UTILITY POLE WITH ROAD LIGHT
- HYDRANT
- (D) STORM MANHOLE
- (S) SANITARY MANHOLE
- (E) ELECTRIC MANHOLE
- (W) WATER MANHOLE
- STORM INLET
- GM GAS METER
- WM WATER METER
- TBX TRAFFIC SIGNAL BOX
- ELECTRIC VAULT
- GV GAS VALVE
- WV WATER VALVE
- CO CLEAN OUT
- MW MONITORING WELL
- CONCRETE MONUMENT FOUND
- IRON PIN FOUND
- IRON PIPE FOUND
- NAIL FOUND
- EXISTING LIGHT FIXTURES
- PROPOSED LIGHT FIXTURES
- PROPOSED BUILDING
- CONCRETE
- DECIDUOUS TREE TO REMAIN
- CONIFEROUS TREE TO REMAIN
- LSA LANDSCAPE AREA
- CONSTRUCTION ENTRANCE
- TOPSOIL STOCKPILE
- EROSION CONTROL MATTING
- INLET PROTECTION
- LIMIT OF DISTURBANCE
- SF SF SF SF SF 18" SILT FENCE
- SS SS SS SS SS SILT SOXX
- CFS CFS COMPOST FILTER SOCK
- SOIL BOUNDARY
- UrmB EXISTING SOIL TYPE
- TP TP TP TREE PROTECTION FENCE
- CF CF CF CF CF CONSTRUCTION FENCE

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PROJECT LOCATION

PRELIMINARY SUBDIVISION PLAN SET
4 LOT SUBDIVISION

221 MOREDON ROAD,
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

PREPARED FOR:
PEROLI, LLC

TITLE

LANDSCAPE PLAN

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SHEET 9 OF 16

REVISION 1

LANDSCAPE MAINTENANCE PLAN

1. LANDSCAPING REQUIRED SHALL BE MAINTAINED IN A HEALTHY GROWING CONDITION AT ALL TIMES. IT SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER OF RECORD OR HIS DELEGATED REPRESENTATIVE TO PROPERLY MAINTAIN AND CARE FOR ANY LANDSCAPED AREAS.
2. THE REQUIRED PLANT MATERIAL SHALL BE MAINTAINED FOR THE LIFE OF THE DEVELOPMENT TO ACHIEVE THE REQUIRED VISUAL EFFECT OF THE BUFFER OR SCREEN. IS SHALL BE THE ULTIMATE RESPONSIBILITY OF SUCCESSIVE PROPERTY OWNERS TO ENSURE THAT THE REQUIRED PLANTINGS ARE PROPERLY MAINTAINED.
3. DEAD OR DISEASED PLANT MATERIAL SHALL BE REMOVED OR TREATED PROMPTLY BY THE PROPERTY OWNER AND REPLACED AS SOON AS SOON AS POSSIBLE, BUT NO LATER THAN THE NEXT GROWING SEASON.
4. ALL TREES SHALL BE STRUCTURALLY PRUNED, WATERED AND MULCHED ACCORDING TO ISA (INTERNATIONAL SOCIETY OF ARBORICULTURE) BEST MANAGEMENT PRACTICES UNTIL THEY ARE WELL ESTABLISHED.
5. ALL SIGHT TRIANGLES SHALL REMAIN OPEN AND CLEAR, AND ANY PLANT MATERIAL THAT COULD ENDANGER THE SAFETY, SUCH AS UNSTABLE LIMBS, SHALL BE REMOVED AND THE PLANT MATERIAL REPLACED IF NECESSARY. IT SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER TO MAINTAIN ALL PLANTINGS TO ENSURE A SAFE ENVIRONMENT.
6. MAINTENANCE GUIDELINES FOR THE PLANTINGS ARE ENCOURAGED TO BE PROVIDED ALONG WITH THE PLANTING PLAN TO THE GROUNDS MAINTENANCE PERSONNEL TO ENSURE THAT THE DESIGN INTENT IS CONTINUED.
7. ALL PLANTING BEDS ARE TO BE KEPT FREE FROM LITTER AND DEBRIS.
8. TREE LIMBS MUST BE KEPT HIGH ENOUGH TO PREVENT A HAZARD WITH PEDESTRIAN OR VEHICULAR TRAVEL.
9. ANY THORNED PLANTS MUST BE KEPT FROM BECOMING PEDESTRIAN HAZARDS.
10. LEAF LITTER, DOWNED BRANCHES, AND OTHER VEGETATION SHALL BE CLEANED UP AS NEEDED.
11. ANY ANNUAL PLANTS SHALL BE WATERED FREQUENTLY IN THE ABSENCE OF IRRIGATION.
12. ALL LANDSCAPE BEDS SHALL BE KEPT FREE OF WEEDS AND MULCHED ANNUALLY OR AS NEEDED.
13. ALL LAWN AREAS SHALL BE KEPT NEATLY MOWED.
14. CHEMICAL HERBICIDE OR INSECTICIDE IS DISCOURAGED, BUT IF USED, SHALL BE IN ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS AND APPLIED BY A LICENSED PROFESSIONAL.

LANDSCAPE NOTES:

1. LOCATION OF ALL UNDERGROUND UTILITIES SHALL BE VERIFIED AND MARKED IN THE FIELD, PRIOR TO ANY DIGGING OPERATIONS.
2. PLANT MATERIAL SHALL BE FURNISHED AND INSTALLED AS INDICATED INCLUDING ALL LABOR, MATERIALS, PLANTS, EQUIPMENT, AND CLEAN-UP WHICH ARE INCIDENTAL TO LANDSCAPE INSTALLATION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLANTING AT THE CORRECT GRADES AND ALIGNMENTS. ALL PLANTS SHALL BE SET PLUMB AND STRAIGHT. LANDSCAPING SHALL BE INSTALLED IN THE CENTER OF THE PIT.
4. ANY NYLON ROPE USED IN BALLING THE TREE MUST BE CUT AND REMOVED FROM THE ROOT BALL
5. ALL PLANTS SHALL CONFORM WITH THE MOST CURRENT VERSION OF THE "AMERICAN STANDARD FOR NURSERY STOCK" OF THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
6. ALL PLANT MATERIAL SHALL BE GUARANTEED FOR A PERIOD OF EIGHTEEN MONTHS. ANY TREES, SHRUBS, HEDGES, OR GROUND COVER THAT DIE OR ARE DESTROYED SHALL BE REPLACED WITHIN SIX MONTHS.
7. CONTRACTOR SHALL REPAIR ANY SOIL OR SUBSURFACE DRAINAGE WHICH MAY BE DETRIMENTAL TO GROWTH OF THE PLANT MATERIAL.
8. ALL TREES SHALL BE PROVIDED WITH A 3" DEEP SAUCER, CONSISTING OF SHREDDED OAK BARK MULCH.
9. ALL SHRUB BEDS SHALL BE PROVIDED WITH A 3" DEEP LAYER OF SHREDDED OAK BARK MULCH.
10. INSOFAR AS PRACTICAL, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE THE CONTRACTOR PROTECT THE LANDSCAPING NOT PLANTED AND ENSURE IT RECEIVES ADEQUATE WATERING. UNDER NO CIRCUMSTANCES SHALL LANDSCAPING REMAIN UNPLANTED FOR MORE THAN THREE (3) DAYS.
11. ALL PLANTS SHALL BE PLANTED IN TOPSOIL THAT IS THOROUGHLY WATERED AND TAMPED AS BACKFILLING PROGRESSES.
12. INSTALLATION OF PLANTS SHALL OCCUR WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE.
13. ALL PLANTS SHALL BE THOROUGHLY WATERED BY THE CONTRACTOR AT LEAST THREE (3) TIMES (IN THE ABSENCE OF NATURAL RAINFALL), PRIOR TO ACCEPTANCE OF PLANTING BY THE OWNER.
14. ALL DISTURBED AREAS ARE TO BE FINE GRADED, RAKED, MULCHED AND SEEDED.
15. STRAW MULCH SHALL BE USED FOR GRASS SEED MIX, EXCEPT THAT SLOPES STEEPER THAN 3 TO 1 SHALL USE EROSION CONTROL BLANKETS/MATS.
16. EXISTING TREES NEAR PROPOSED IMPROVEMENTS SHALL BE PROTECTED WITH TREE PROTECTION FENCE. REFER TO THE E&S PLAN FOR THE GENERAL LOCATION.

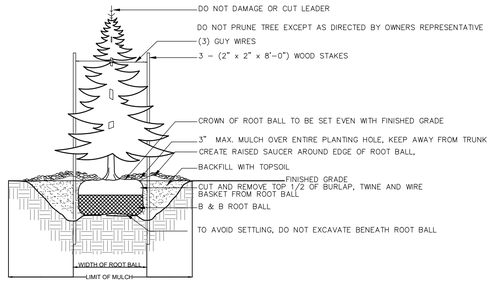
ERNMX-113 ERNST COMMERCIAL CONSERVATION LAWN MIX SPECIFICATION:

%	Common Name	Scientific Name
25.0%	Festuca rubra	Creeping Red Fescue
25.0%	Lolium multiflorum	Annual Ryegrass
25.0%	Lolium perenne	Perennial Ryegrass, 'Blackcat II'(turf type)
25.0%	Lolium perenne	Perennial Ryegrass, 'Fastball RGL'(turf type)

Total: 100%

Notes:

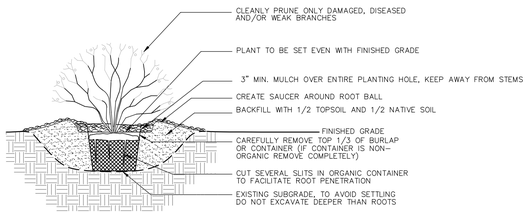
1. Recommended coverage is 15lbs per acre.
2. Seed mix can be purchased from Ernst Conservation Seeds, Meadville PA 16335, 1 (800) 873-3321
3. Hand seeding is recommended and should take place between April 1st and May 15th or between September 1st and October 15th.
4. Immediately prior to seeding the soil is to be prepared so as to be free of large clods, evenly smooth, and level. A shallow tilling to a depth of 2 inches is acceptable to break up soils in which the surface has become crusted.
5. Planting areas shall be soaked to maintain a consistent level of moisture for at least four (4) to six (6) weeks after seeding.
6. After hand seeding, each area is to be rolled to push the seeds into firm contact with the soil and firm the seedbed. A firm seedbed is critical to proper seedling growth. Do not roll the site when the soil is wet. Wait until the soil is drier to avoid compaction. Alternatively a cultipaker could be used to ensure soil to seed contact. If seeding in the fall, this step is not required as the cumulative effect of rain and snow with numerous freeze/thaw cycles will provide the necessary soil to seed contact.
7. The seeding is to be mulched with North American Green S-150 BN (biodegradable erosion blanket) and secured with Bio-stakes (biodegradable anchors).



SPECIFICATIONS:
1. DO NOT DAMAGE MAIN ROOTS OR DESTROY ROOT BALL WHEN INSTALLING TREE STAKE.
2. WATER THOROUGHLY AFTER INSTALLATION.
3. REMOVE STAKES TWO YEARS OR LESS AFTER INSTALLATION.

TYPICAL EVERGREEN TREE PLANTING DETAIL

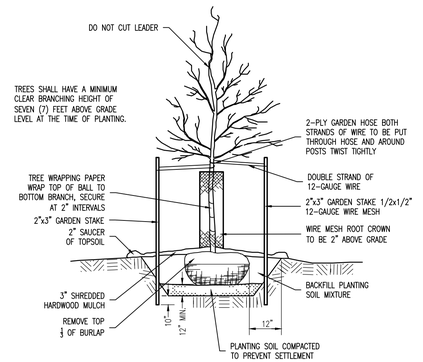
NOT TO SCALE



NOTES:
1. WATER THOROUGHLY AFTER INSTALLATION.
2. FOR PLANTING BED INSTALLATION EXCAVATE ENTIRE SHRUB BED AS SHOWN ON PROJECT DRAWINGS.

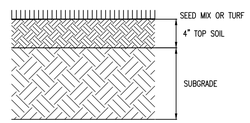
TYPICAL SHRUB PLANTING DETAIL

NOT TO SCALE



DECIDUOUS TREE PLANTING & STAKING DETAIL

NOT TO SCALE



LAWN DETAIL

NTS

CLIENT DATA

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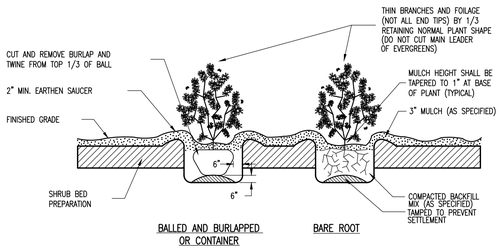
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LANDSCAPE DETAIL

PROJ. #	23-0516	DATE	8/13/2024
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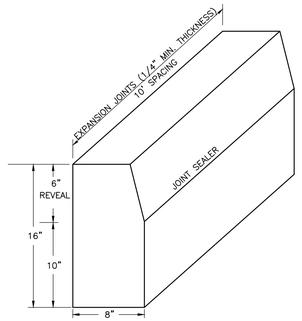
SHEET 10 OF 16

REVISION 1



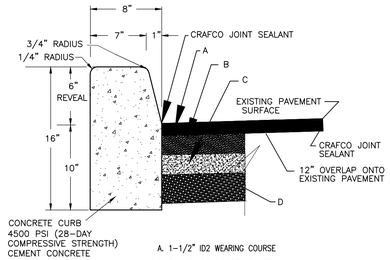
SHRUB PLANTING AND SHRUB BED PREPARATION

NOT TO SCALE



TYPICAL CONCRETE CURB DETAIL

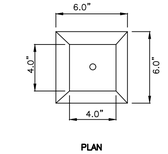
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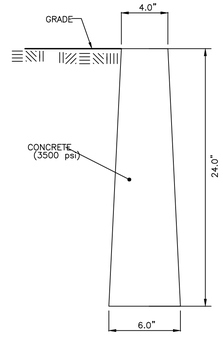
A. 1-1/2" ID2 WEARING COURSE
B. 5-1/2" ID2 BINDER COURSE
C. 6" PADOT #2A
D. EXISTING COMPACTED SUBGRADE

TYPICAL PAVEMENT DETAIL

NOT TO SCALE

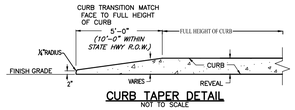


PLAN



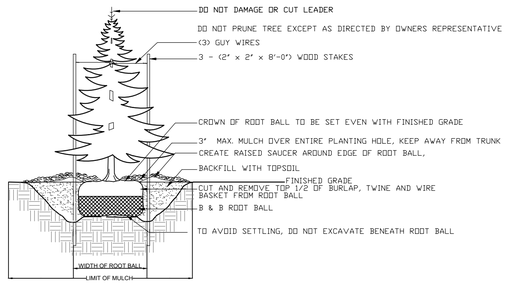
ELEVATION

CONCRETE MONUMENT (TYP.)



CURB TAPER DETAIL

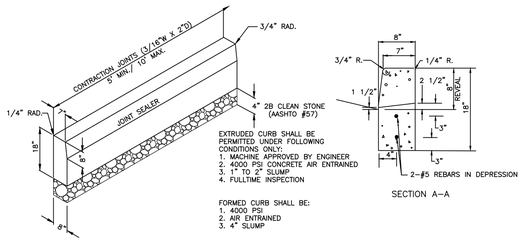
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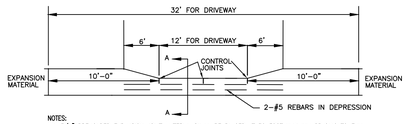
SPECIFICATIONS:
1. DO NOT DAMAGE MAIN ROOTS OR DESTROY ROOT BALL WHEN INSTALLING TREE STAKE.
2. WATER THOROUGHLY AFTER INSTALLATION.
3. REMOVE STAKES TWO YEARS OR LESS AFTER INSTALLATION.

TYPICAL EVERGREEN TREE PLANTING DETAIL

NOT TO SCALE

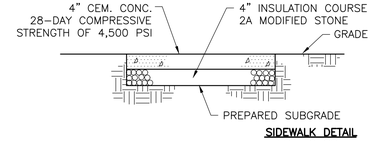


* A CONTRACTION JOINT SHALL BE PLACED EVERY 10 FEET MINIMUM



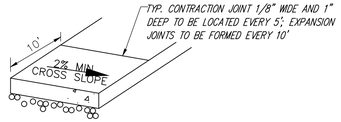
NOTES:
1. 3/4" PREMOLDED EXPANSION JOINT MATERIAL SHALL BE PLACED AT 30 FOOT MAXIMUM SPACING TO FULL DEPTH OF CURB. (40 FOOT MAXIMUM FOR EXTRUDED CURB)
2. CURB SHALL BE DOWEL PINNED INTO INLETS. 2-#8X1'-0" DOWEL BARS ON BOTH SIDES OF INLET.
3. 4" 2B CLEAN STONE UNDER CURB.
4. WEATHER PROTECTION AND CURING COMPOUNDS SHALL BE USED IN ACCORDANCE WITH PENNDOT SPECS. PUB. 408, CURRENT EDITION.
5. CURING COMPOUND AASHTO-M148, TYPE 1-D TO BE USED IN ACCORDANCE WITH PENNDOT PUB. 408 SECTION 711.2, CURRENT EDITION.

CONCRETE CURB DETAIL

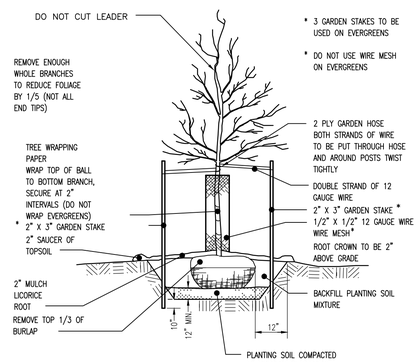


SIDEWALK DETAIL

NOT TO SCALE

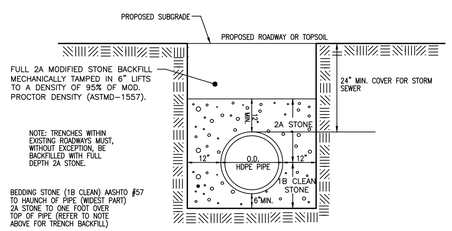


*ALL SIDEWALKS TO BE BROOMED FINISHED.



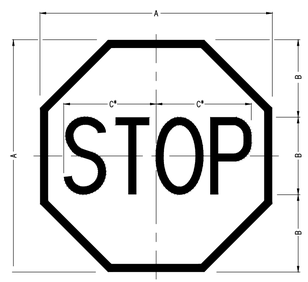
TREE PLANTING AND STAKING DETAIL

NOT TO SCALE



NOTE:
ALL UTILITY TRENCHES WITHIN EXISTING ROADWAYS, PROPOSED ROADWAYS, ALL RIGHT OF WAYS, EASEMENTS, PROPOSED DRIVEWAYS, APRONS AND SIDEWALKS MUST, WITHOUT EXCEPTION, BE BACKFILLED WITH FULL DEPTH 2A STONE AFTER TOP SCREENING. ALL UTILITY TRENCHES MUST BE COMPACTED (MECHANICALLY TAMPED) IN 6" LIFTS.

TYPICAL HDPE PIPE TRENCH DETAIL



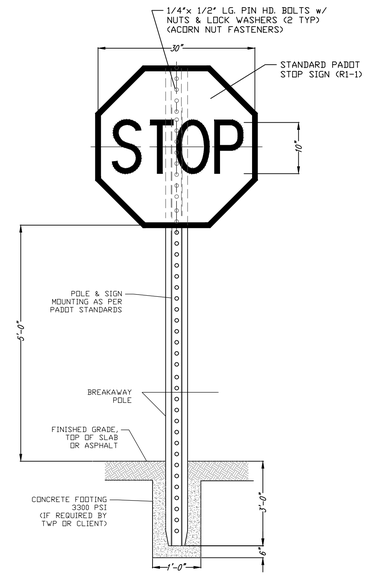
COLOR: LEGEND AND BORDER — WHITE (REFLECTORIZED)
BACKGROUND — RED (REFLECTORIZED)

SIGN SIZE	DIMENSIONS A	B	C	SERIES	BORDER	BLANK STUD
~~24 x 24~~	~~24~~	~~8~~	~~10~~	C	~~5/8~~	~~B1-24~~
* 30 x 30	30	10	12½	C	¾	B1-30
~~36 x 36~~	~~36~~	~~12~~	~~15~~	C	~~7/8~~	~~B1-36~~
~~48 x 48~~	~~48~~	~~16~~	~~20~~	C	~~1¼~~	~~B1-48~~

* REDUCE SPACING BY 40%

"STOP" (R1-1) SIGN DETAIL

NOT TO SCALE



POLE MOUNTED STANDARD PADOT STOP SIGN DETAIL

CLIENT DATA

Cornerstone
Consulting Engineers & Design Services, Inc.
213 West Main Street, Lansdale, PA 19446
Phone: 215-362-2600 Fax: 215-362-2400
WWW.CORNERSTONENET.COM
Pocono Region 570-839-1770
Lehigh Valley Region 610-820-8200
Philadelphia Region 215-362-2600

REVISIONS

NO	BY	DESCRIPTION	DATE
1.	DB	REVISED PER SEWER AUTHORITY COMMENTS	10-30-24

PENNSYLVANIA ONE CALL SYSTEM, INC.
925 Irwin Run Road
West Mifflin, Pennsylvania 15122 - 1078
811
BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA! CALL 1-800-242-1776

J.B. ANDERSON
PROFESSIONAL ENGINEER
DELAWARE: LICENSE No. PE.15438
PENNSYLVANIA: LICENSE No. PE.055516
MARYLAND: LICENSE No. 29313
NEW JERSEY: LICENSE No. 24GE04520400
VIRGINIA: LICENSE No. 0402 045725
FLORIDA: LICENSE No. 75184
NEW YORK: LICENSE No. 095667-1

PROJECT LOCATION

PRELIMINARY SUBDIVISION PLAN SET
4 LOT SUBDIVISION

221 MOREDON ROAD,
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

PREPARED FOR:
PEROLI, LLC

TITLE

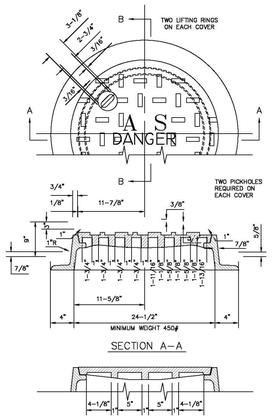
SITE DETAILS

PROJ. #	23-0516	DATE	8/13/2024
CAD ID.	23-0516	DRN BY	DB
SCALE	AS NOTED	CHK BY	JBA

SHEET 11 OF 16

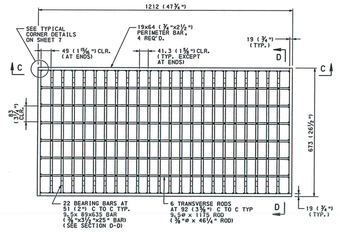
REVISION 1

ABINGTON TOWNSHIP STANDARD

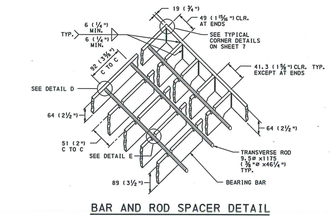


CAST IRON MACHINE FRAME & COVER
NOT TO SCALE

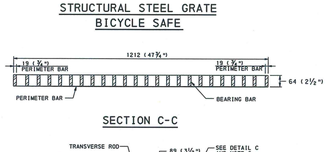
*FOR ADDITIONAL DETAILS AND NOTES REFER TO PENNDOT PUB. 72M, DETAILS RC-45M AND RC-46M SERIES, LATEST EDITION.



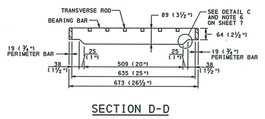
STRUCTURAL STEEL GRATE
BICYCLE SAFE



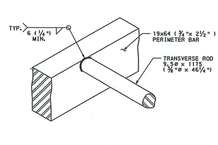
BAR AND ROD SPACER DETAIL



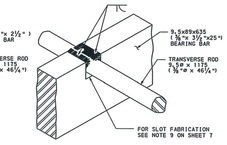
SECTION C-C



SECTION D-D



DETAIL D



DETAIL E

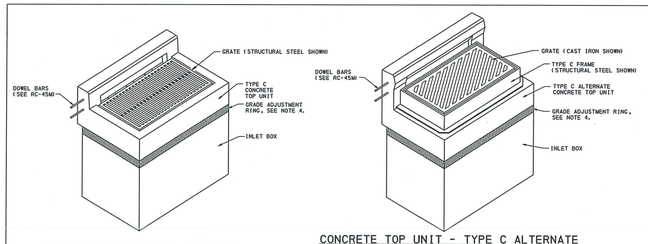
NOTES
1. FOR ADDITIONAL NOTES, SEE SHEET 1.
2. FOR STRUCTURAL STEEL GRATE NOTES, SEE SHEET 7.

NOTE: EITHER ALL METRIC OR ALL ENGLISH VALUES MUST BE USED ON PLANS. METRIC AND ENGLISH VALUES SHOWN MAY NOT BE MIXED.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF DESIGN

INLET TOPS, GRATES, AND FRAMES
STRUCTURAL STEEL GRATE
BICYCLE SAFE

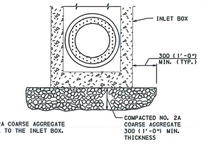
RECOMMENDED JUN. 1, 2010 CHIEF, HWY. SA DIVISION	RECOMMENDED JUN. 1, 2010 DIRECTOR, BUREAU OF DESIGN	SHT 5 OF 20
		RC-45M



CONCRETE TOP UNIT - TYPE C

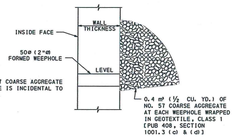
CONCRETE TOP UNIT - TYPE C ALTERNATE WITH TYPE C FRAME

NOTES:
1. FOR ADDITIONAL NOTES, SEE SHEETS 1 - 3.
2. STANDARD INLET BOXES SHOWN, PROVIDE TOP SLABS FOR OTHER INLET BOX TYPES.
3. SEE RC-45M FOR DETAILS FOR THE CONCRETE TOP UNITS, FRAMES, AND GRATES.
4. PROVIDE GRADE ADJUSTMENT RINGS WHEN REQUIRED. SEE RC-45M FOR DETAILS.



NOTE: COST OF NO. 2A COARSE AGGREGATE IS INCIDENTAL TO THE INLET BOX.

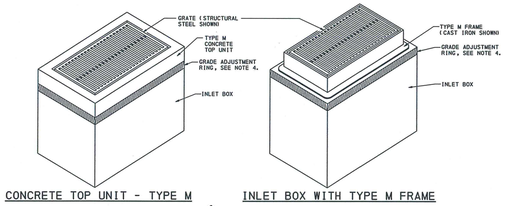
INLET BOX SUBBASE PREPARATION DETAIL
(SEE FIELD CONSTRUCTION NOTES ON SHEET 1)



NOTE: COST OF NO. 57 COARSE AGGREGATE AND GEOTEXTILE IS INCIDENTAL TO THE INLET BOX.

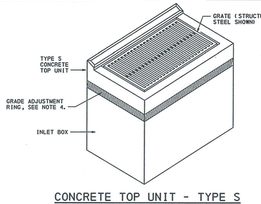
0.4 m³ (½ CU. YD.) OF NO. 57 COARSE AGGREGATE AT EACH WEEPHOLE WRAPPED IN GEOTEXTILE, CLASS 1 (PUB 408, SECTION 1001.3 (a) & (d))

WEEPHOLE DETAIL
(SEE GENERAL NOTE 15 ON SHEET 1)



CONCRETE TOP UNIT - TYPE M

INLET BOX WITH TYPE M FRAME



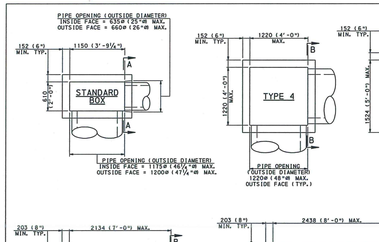
CONCRETE TOP UNIT - TYPE S

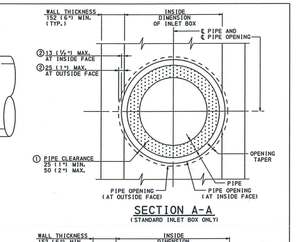
NOTE: EITHER ALL METRIC OR ALL ENGLISH VALUES MUST BE USED ON PLANS. METRIC AND ENGLISH VALUES SHOWN MAY NOT BE MIXED.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF DESIGN

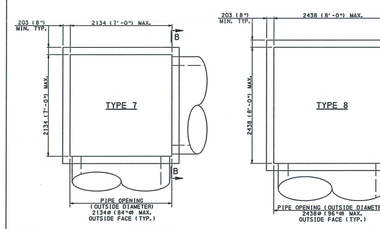
INLET BOXES
INLET ASSEMBLIES - 1

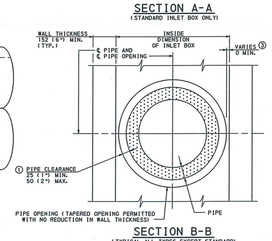
RECOMMENDED JUN. 1, 2010 CHIEF, HWY. SA DIVISION	RECOMMENDED JUN. 1, 2010 DIRECTOR, BUREAU OF DESIGN	SHT 4 OF 45
		RC-46M



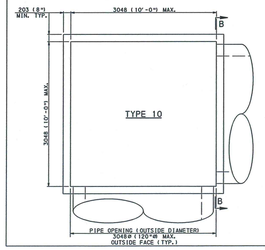


SECTION A-A
(STANDARD INLET BOX ONLY)

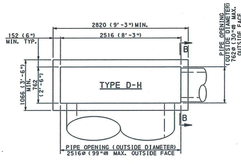




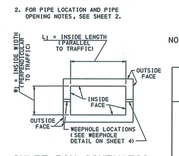
SECTION B-B
(TYPICAL ALL TYPES EXCEPT STANDARD)



PLAN - INLET BOXES



NOTES
1. FOR ADDITIONAL NOTES, SEE SHEETS 1 - 3.
2. FOR PIPE LOCATION AND PIPE OPENING NOTES, SEE SHEET 2.



INLET BOX SCHEMATIC

LEGEND
OUTSIDE FACE = OUTSIDE FACE OF INLET BOX WALL
INSIDE FACE = INSIDE FACE OF INLET BOX WALL

LEGEND
① OUTSIDE DIAMETER OF PIPE TO PIPE OPENING
② REDUCTION IN WALL THICKNESS DIMENSION
③ INSIDE FACE OF BOX WALL TO OUTSIDE DIAMETER OF PIPE OPENING

NOTE: EITHER ALL METRIC OR ALL ENGLISH VALUES MUST BE USED ON PLANS. METRIC AND ENGLISH VALUES SHOWN MAY NOT BE MIXED.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF DESIGN

INLET BOXES
INLET BOX TYPES

RECOMMENDED JUN. 1, 2010 CHIEF, HWY. SA DIVISION	RECOMMENDED JUN. 1, 2010 DIRECTOR, BUREAU OF DESIGN	SHT 6 OF 45
		RC-46M

CLIENT DATA

Cornerstone
Consulting Engineers & Design Services, Inc.
213 West Main Street, Lansdale, PA 19446
Phone: 215-362-2600, Fax: 215-362-8400
WWW.CORNERSTONENET.COM
Pocono Region 570-839-1770
Lehigh Valley Region 610-820-8200
Philadelphia Region 215-362-2600

REVISIONS

NO	BY	DESCRIPTION	DATE
1.	DB	REVISED PER SEWER AUTHORITY COMMENTS	10-30-24

PENNSYLVANIA ONE CALL SYSTEM, INC.
925 Irwin Run Road
West Mifflin, Pennsylvania 15122 - 1078

811

BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA! CALL 1-800-242-1776

J.B. ANDERSON
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE 15438
PENNSYLVANIA LICENSE No. PE055536
MARYLAND LICENSE No. 29313
NEW JERSEY LICENSE No. 24GE04520400
VIRGINIA LICENSE No. 0402 045725
FLORIDA LICENSE No. 75144
NEW YORK LICENSE No. 093667-1

PROJECT LOCATION

PRELIMINARY SUBDIVISION PLAN SET
4 LOT SUBDIVISION

221 MOREDON ROAD,
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

PREPARED FOR:
PEROLI, LLC

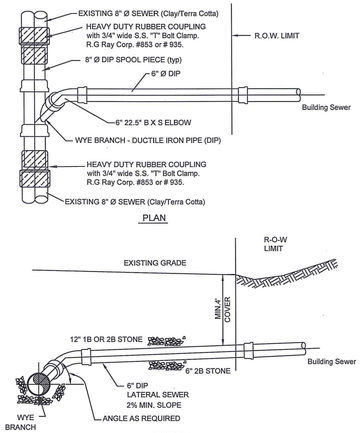
TITLE

SITE DETAILS

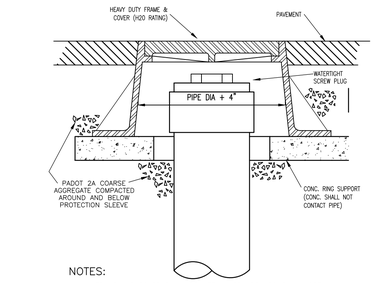
PROJ. #	23-0516	DATE	8/13/2024
CAD ID.	23-0516	DRN BY	DB
SCALE	AS NOTED	CHK BY	JBA

SHEET 12 OF 16

REVISION 1



Township of Abington STANDARD DETAIL - SANITARY SEWER	
LATERAL CONNECTION TO EXISTING CLAY OR TERRA COTTA SEWER MAIN	DATE: OCTOBER 2015 DETAIL: 25



NOTES:

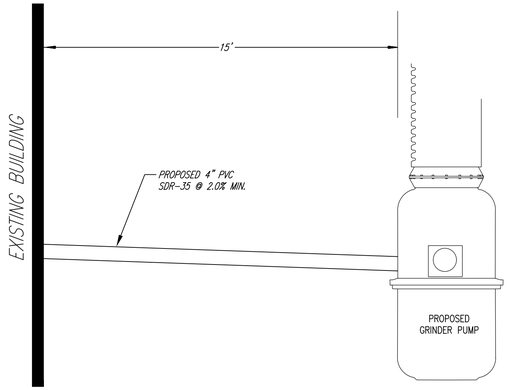
FRAME AND COVER SHALL BE NEENAH FOUNDRY COMPANY MODEL R-1976 OR APPROVED EQUAL

CLEAN-OUT PROTECTION SLEEVES ARE TO BE INSTALLED FOR CLEAN-OUTS LOCATED IN PAVED AREAS, OR LESS THAN 3 FEET FROM A PAVED AREA.

CLEAN-OUT PROTECTION SLEEVE

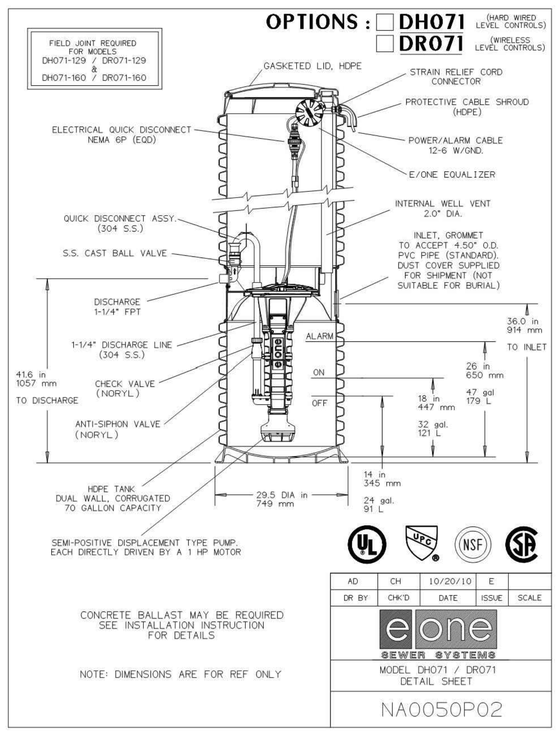
(FOR USE IN OR NEAR PAVED AREAS)

N.T.S.



DROP CONNECTION FOR GRINDER PUMP

NOT TO SCALE



CONCRETE BALLAST MAY BE REQUIRED SEE INSTALLATION INSTRUCTION FOR DETAILS

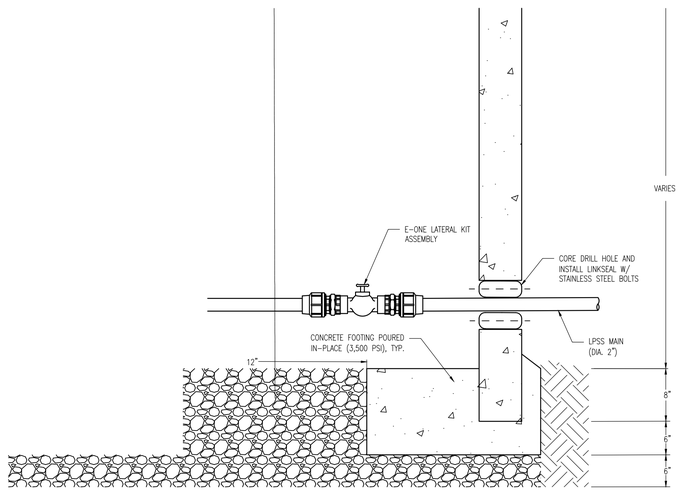
NOTE: DIMENSIONS ARE FOR REF ONLY

AD	CH	10/20/10	E.	
DR BY:	CHK'D	DATE	ISSUE	SCALE

e/one SEWER SYSTEMS

MODEL DH071 / DR071 DETAIL SHEET

NA0050P02

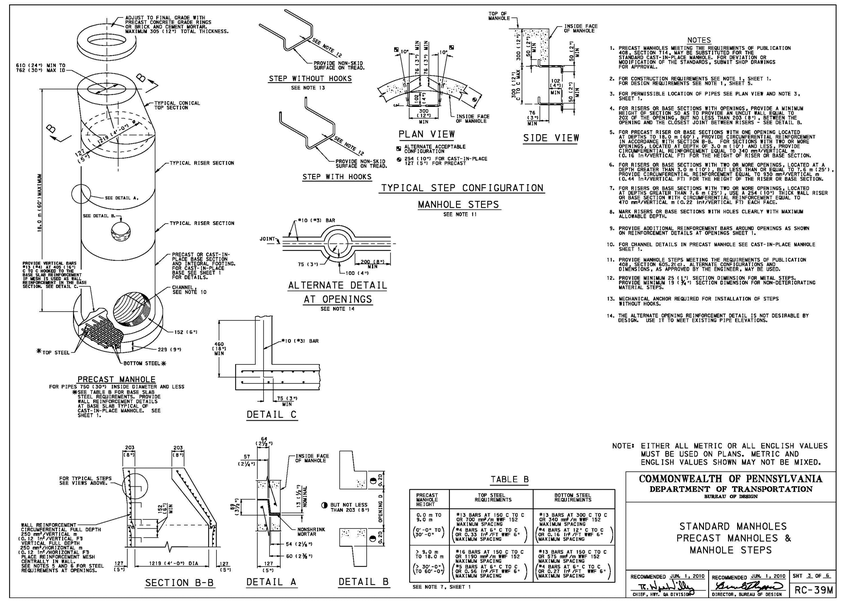


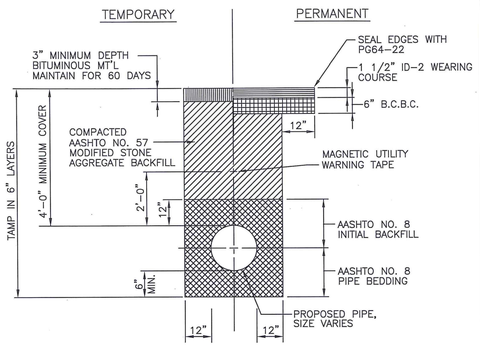
TYPICAL FLUSHING CONNECTION WITH CURB STOP IN STANDARD MANHOLE TYPE 'B'

NOT TO SCALE

1. THE DEPTH OF THE INVERT CHANNEL SHALL BE EQUAL TO 1/2 OF THE DIAMETER OF THE SEWER.
2. THE SHELF SHALL SLOPE TOWARD THE INVERT CHANNEL AT A RATE OF 1" PER FOOT.
3. TYPE "B" MANHOLES (SHALLOW TYPE) TO BE PROVIDED WHERE REQUIRED BY DEPTH CONDITIONS. ALL OTHER MANHOLES TO BE TYPE "A".
4. FOR MANHOLES HAVING 5' DIAMETER BASE, REDUCTION IN DIAMETER TO 4' SHALL START AT THE FIRST JOINT ABOVE THE UPPERMOST PIPE CONNECTION TO WALL WHERE DEPTH IS SUFFICIENT.
5. ALL MANHOLE FRAMES SHALL BE BOLTED TO THE CONE SECTION OR CONCRETE SLAB WITH 4 – 3/4" DIAMETER BOLTS WITH WASHERS AND NUTS. BOLTS TO BE AT 90° ON A 36" DIA. BOLT CIRCLE.
6. ALL CONCRETE SHALL BE 4000 P.S.I. MINIMUM.
7. ENTIRE OUTSIDE SURFACE OF MANHOLE SHALL RECEIVE TWO COATS OF BITUMINOUS COATING. KOPPERS 300M OR APPROVED EQUAL.
8. INSTALL DOUBLE RING OF PLASTIC PREFORMED JOINT SEALANT BETWEEN ALL SECTIONS AND UNDER FRAME.
9. MANHOLE CONSTRUCTION SHALL BE IN ACCORDANCE WITH ASTM C-478.
10. SEE SECTION 03411 PRECAST CONCRETE, STEEL REINFORCED POLYPROPYLENE IS OPTIONAL.
11. 4' DIAMETER MANHOLE – 8" TO 15" PIPES
    5' DIAMETER MANHOLE – 18" TO 27" PIPES

*FOR ADDITIONAL DETAILS AND NOTES REFER TO PENNDOT PUB. 72M, DETAILS RC-39M SERIES, LATEST EDITION.


ADJUST TO FINAL GRADE WITH PRECAST CONCRETE RINGS OR BRICK AND CEMENT MORTAR. MAXIMUM 305 (12") TOTAL THICKNESS.
610 (24") MIN TO 762 (30") MAX I.D.
TYPICAL CONICAL TOP SECTION
TYPICAL RISER SECTION
SEE DETAIL A.
SEE DETAIL B.
1829 (72") MAXIMUM
PROVIDE MORTAR AND EXTERNAL SEALING BAND AT ALL JOINTS
PRECAST OR CAST-IN-PLACE BASE SECTION. SEE NOTE 10 FOR DETAILS.
CHANNEL SEE NOTE 10
152 (6")
229 (9")
*TOP STEEL
BOTTOM STEEL*
PRECAST MANHOLE
FOR PIPES TSD (30") INSIDE DIAMETER AND LESS WITH TSD (30") INSIDE DIAMETER AND LESS WITH TSD (30") INSIDE DIAMETER AND LESS WITH

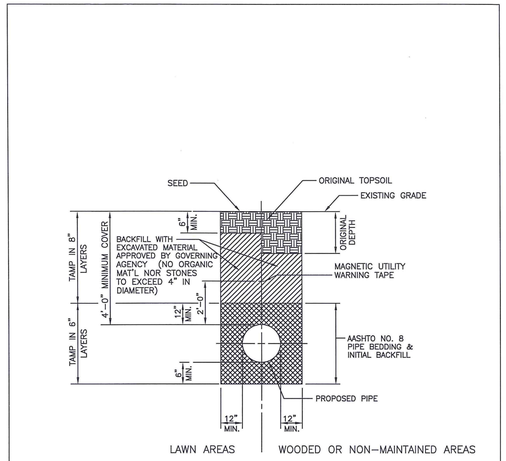


ALL WORK TO BE DONE IN ACCORDANCE WITH PADOT PUBLICATION 408

Township of Abington
STANDARD DETAIL - SANITARY SEWER

BACKFILL AND PAVEMENT RESTORATION DETAIL FOR STATE / TWP. ROADS

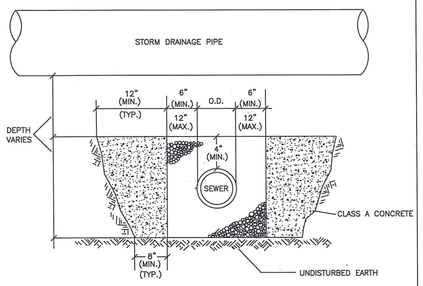
DATE: OCTOBER 2015
DETAIL: 1



Township of Abington
STANDARD DETAIL - SEWER SYSTEM

TRENCH RESTORATION LAWN / WOODED AREAS

DATE: NOVEMBER 2015
DETAIL: 2



NOTES:

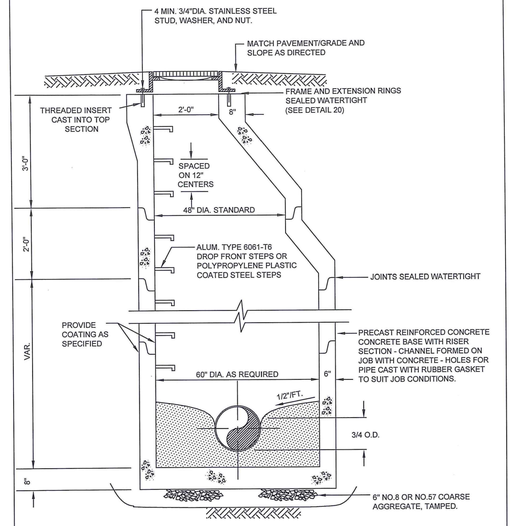
1. PIERS TO BE 5 FT. LONG CENTERED ON STORM DRAIN.
2. USE 3000 PSI CLASS A CONCRETE.
3. FORM PIERS AGAINST SOLID TRENCH WALLS.
4. PIERS REQUIRED WHEN CLEARANCE BETWEEN PIPES IS LESS THAN 18".
5. MAINTAIN SLOPE OF EACH UTILITY AT CROSSING.

Township of Abington
STANDARD DETAIL - SEWER SYSTEM

GRAVITY SEWER CROSSING DETAIL USING PIER SUPPORTS

DATE: NOVEMBER 2015
DETAIL: 7

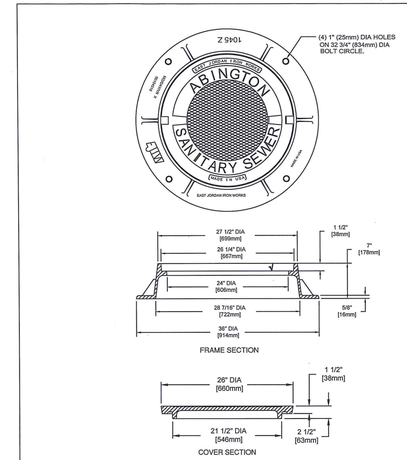
NOTE: 1. BOLTING OF MANHOLE FRAME AND COVER NOT REQUIRED FOR MANHOLES INSTALLED IN PAVED SURFACES.
2. ALL STONE GRADATIONS ARE AASHTO CLASSIFICATION.
3. PIPES SHALL PROTRUDE 2" INSIDE MANHOLE WALL



Township of Abington
STANDARD DETAIL - SANITARY SEWER

PRECAST CONCRETE MANHOLE W./ PRECAST CONCRETE BASE

DATE: NOVEMBER 2015
DETAIL: 10



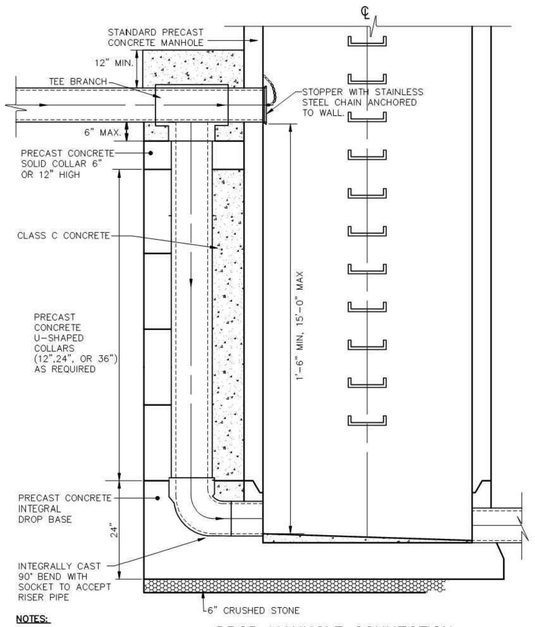
Castings to be treated by the manufacturer with water-based, black asphaltic, environmentally safe coating, free of surface rust, before leaving the foundry.

√ MACHINED SURFACE

Township of Abington
STANDARD DETAIL - SEWER SYSTEM

STANDARD MANHOLE FRAME & COVER DETAIL

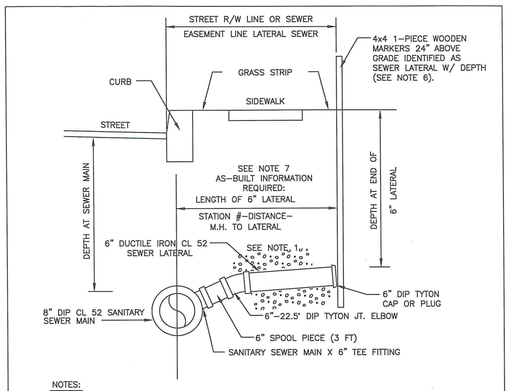
DATE: NOVEMBER 2015
DETAIL: 11



NOTES:

1. CONSTRUCTION TO BE SAME AS TYPE "A" STANDARD MANHOLE EXCEPT AS NOTED.

DROP MANHOLE CONNECTION
NTS



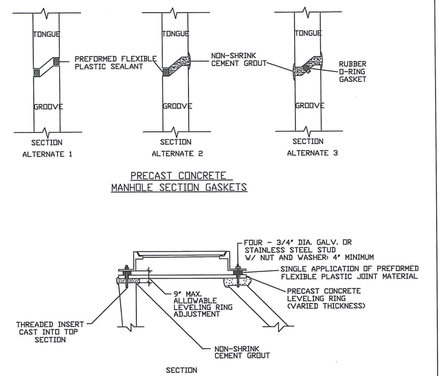
NOTES:

1) PROVIDE 6" OF AASHTO NO. 8 (1B) OR 2B STONE BELOW PIPE AND 12" ABOVE PIPE (TYPICAL ENTIRE LENGTH OF LATERAL).
2) MINIMUM SLOPE = 1% (1/8" PER FT.)
3) MINIMUM DEPTH OF COVER = 4 FT
4) PIPE MATERIALS:
ALL PIPES TO BE DUCTILE IRON PIPE CLASS 52 WALL THICKNESS
5) DEVELOPER SHALL TEST AGAINST 6" TYTON CAP OR PLUG.
6) DEVELOPER SHALL INSTALL THE LATERAL SEWER TO THE EDGE OF THE SEWER EASEMENT FOR SEWERS LOCATED IN AN EASEMENT OR TO THE STREET RIGHT-OF-WAY AS A MINIMUM, OR TO SUCH POINT, AS REQUIRED, TO CLEAR STREET SIDEWALKS AND UNDERGROUND UTILITIES.
7) INFORMATION THAT IS REQUIRED FOR RECORD PLANS

Township of Abington
STANDARD DETAIL - SEWER SYSTEM

SEWER LATERAL INSTALLATION DETAIL

DATE: JANUARY 2106
DETAIL: 18



NOTES:

1) ALL NON-SHRINK CEMENT GROUT SHALL BE TROWLED SMOOTH.
2) EXCESS PREFORMED FLEXIBLE PLASTIC JOINT SEALANT SHALL BE NEATLY TRIMMED FOR ALL JOINTS.

Township of Abington
STANDARD DETAIL - SANITARY SEWER

MANHOLE GASKETS, LEVELING RINGS, AND BOLTED FRAME DETAIL

DATE: NOVEMBER 2015
DETAIL: 20

CLIENT DATA

Cornerstone
Consulting Engineers & Design Services, Inc.
213 West Main Street, Lansdale, PA 19446
Phone: 215-362-2600 Fax: 215-362-8400
WWW.CORNERSTONENET.COM
Pocono Region 570-839-1770
Lehigh Valley Region 610-820-8200
Philadelphia Region 215-362-2600

REVISIONS

NO	BY	DESCRIPTION	DATE
1	DB	REVISED PER SEWER AUTHORITY COMMENTS	10-30-24

PENNSYLVANIA ONE CALL SYSTEM, INC.
925 Irwin Run Road
West Mifflin, Pennsylvania 15122 - 1078
811
BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA CALL 1-800-242-1776

J.B. ANDERSON
PROFESSIONAL ENGINEER
DELAWARE LICENSE No. PE-15418
PENNSYLVANIA LICENSE No. PE055536
MARYLAND LICENSE No. 29353
NEW JERSEY LICENSE No. 24GE04520400
VIRGINIA LICENSE No. 0402 045725
FLORIDA LICENSE No. 75184
NEW YORK LICENSE No. 095667-1

PROJECT LOCATION

PRELIMINARY SUBDIVISION PLAN SET
4 LOT SUBDIVISION

221 MOREDON ROAD,
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

PREPARED FOR:
PEROLI, LLC

TITLE

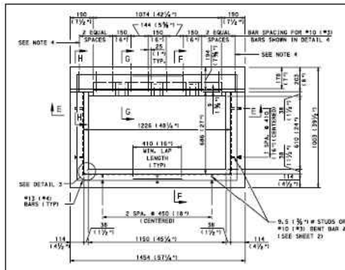
SITE DETAILS

PROJ. #	23-0516	DATE	8/13/2024
CAD ID.	23-0516	DRN BY	DB
SCALE	AS NOTED	CHK BY	JBA

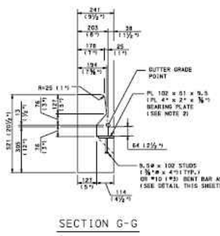
SHEET 14 OF 16

REVISION 1

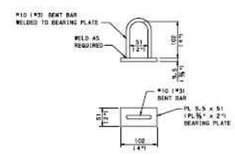
*FOR ADDITIONAL DETAILS AND NOTES REFER TO PENNDOT PUB. 72M, DETAILS RC-45M AND RC-46M SERIES, LATEST EDITION.



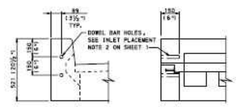
PLAN VIEW - TYPE C



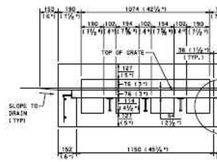
SECTION G-G



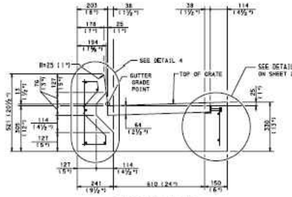
#10 (#3) BENT BAR ANCHOR DETAIL ATTACHED TO BEARING PLATE
ALTERNATE DETAIL IN PLACE OF PROVIDING 9.5 (3/8") # STUD



SECTION H-H FRONT ELEVATION



SECTION E-E



SECTION F-F

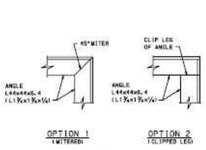
NOTES
1. FOR ADDITIONAL NOTES, SEE SHEET 1.
2. A MAXIMUM OF TWO HOLES ARE PERMITTED IN THE PLATE TO POSITION AND HOLD THE PLATE IN PLACE DURING FABRICATION, HOLES ARE NOT PERMITTED TO BE GREATER THAN 6 mm (1/4") DIAMETER.
3. FABRICATOR TO DETERMINE NUMBER OF BARS REQUIRED TO MATCH SHAPE INDICATED. PROVIDE ONE, TWO, OR THREE BARS AS REQUIRED.
4. BEND OUTSIDE STIRRUP TO ACCOMMODATE DOWEL BARS AND STILL MAINTAIN CLEARANCE REQUIREMENTS.

NOTE: EITHER ALL METRIC OR ALL ENGLISH VALUES MUST BE USED ON PLANS. METRIC AND ENGLISH VALUES SHOWN MAY NOT BE MIXED.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF DESIGN

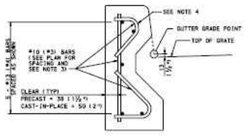
INLET TOPS, GRATES, AND FRAMES
CONCRETE TOP UNITS
TYPE C

RECOMMENDED JUN. 1, 2010	RECOMMENDED JUN. 1, 2010	SHT 1 OF 26
CHIEF, HWY. & BRIDGES DIVISION	DIRECTOR, BUREAU OF DESIGN	RC-45M

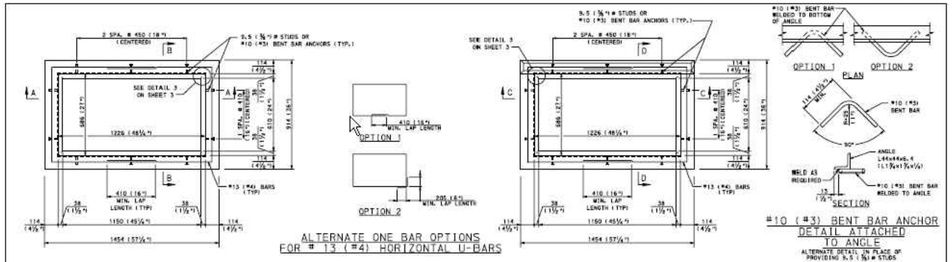


OPTION 1 (MITERED) OPTION 2 (CLIPPED LEG)

DETAIL 3

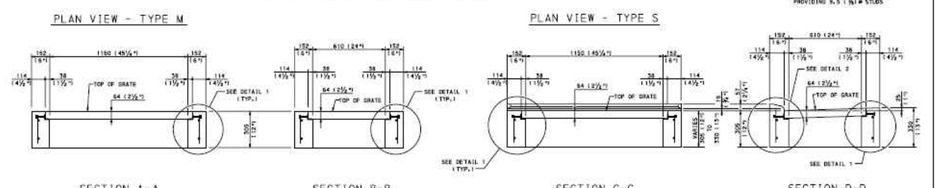


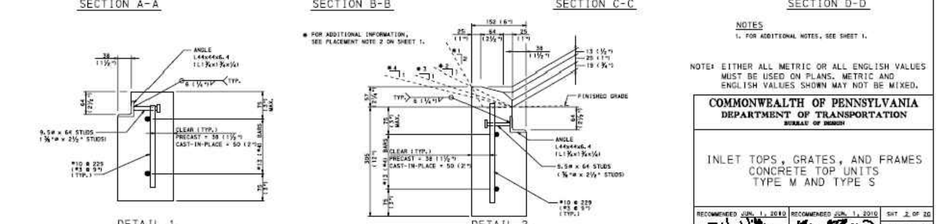
DETAIL 4



PLAN VIEW - TYPE M

PLAN VIEW - TYPE S





DETAIL 1 DETAIL 2

NOTES
1. FOR ADDITIONAL NOTES, SEE SHEET 1.

NOTE: EITHER ALL METRIC OR ALL ENGLISH VALUES MUST BE USED ON PLANS. METRIC AND ENGLISH VALUES SHOWN MAY NOT BE MIXED.

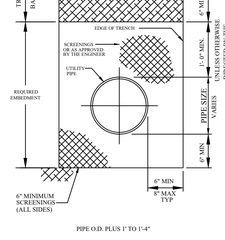
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF DESIGN

INLET TOPS, GRATES, AND FRAMES
CONCRETE TOP UNITS
TYPE M AND TYPE S

RECOMMENDED JUN. 1, 2010	RECOMMENDED JUN. 1, 2010	SHT 2 OF 26
CHIEF, HWY. & BRIDGES DIVISION	DIRECTOR, BUREAU OF DESIGN	RC-45M

WATER GENERAL NOTES:

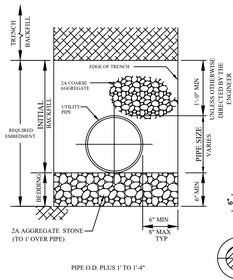
1. ALL WATER FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH AQUA PA WATER FACILITIES LINE EXTENSION AGREEMENT SPECIFICATIONS.
2. LOCATION OF EXISTING WATER FACILITIES SHOWN ARE APPROXIMATE. ANY UTILITIES NOT SHOWN, OR NOT LOCATED AS SHOWN, SHALL NOT BE THE CAUSE OF THE CONTRACTOR TO DENY RESPONSIBILITY FOR PROTECTION AND/OR REPAIR DURING CONSTRUCTION. EXACT LOCATION SHALL BE VERIFIED IN THE FIELD.
3. ALL WATER MAINS REQUIRE A MINIMUM OF FOUR (4) FEET COVER UNLESS OTHERWISE APPROVED BY PAWC.
4. WATER AND SANITARY SEWER LINES SHALL HAVE A MINIMUM OF TEN (10) FEET HORIZONTAL SEPARATION.
5. WATER AND STORM SEWER LINES SHALL HAVE A MINIMUM OF FOUR (4) FEET HORIZONTAL SEPARATION.
6. SANITARY AND STORM SEWER LINES SHALL HAVE A MINIMUM OF EIGHTEEN (18) INCH VERTICAL SEPARATION FROM THE WATER LINE UNLESS OTHERWISE APPROVED BY PAWC.
7. HYDRANT LOCATION IS SUBJECT TO THE APPROVAL OF THE FIRE OFFICIALS CLAIMING JURISDICTION OVER THE PROJECT LOCATION.
8. ONLY AQUA PA PERSONNEL SHALL OPERATE MAIN LINE VALVES FOR THE CONTRACTOR.
9. EASEMENTS, IN A FORM SATISFACTORY TO AQUA PA SHALL BE REQUIRED FOR ALL WATER FACILITIES LOCATED OUTSIDE THE PUBLIC RIGHT OF WAY.
10. ALL FIRE HYDRANTS SHALL INCLUDE A 6" GATE VALVE ON THE HYDRANT LATERAL.
11. THE USE OF FITTINGS SHALL BE MINIMIZED, AND MUST BE APPROVED BY AQUA PA. INSTEAD, CONTRACTOR SHALL DEFLECT PIPE SEGMENTS AS NECESSARY.
12. METER BOXES SHALL BE INSTALLED IN AN AREA BEHIND THE CURB (IF APPLICABLE) FOR DWELLINGS THAT ARE GREATER THAN 100 FEET FROM THE CURB. METER BOX LOCATIONS ARE SUBJECT TO FINAL APPROVAL BY AQUA PA. METER BOXES MUST MEET THE SPECIFICATIONS OF AQUA PA.
13. DEVELOPER SHALL OBTAIN ALL NECESSARY ROAD OPENING PERMITS REQUIRED FOR THE INSTALLATION OF THE WATER FACILITIES, AND SHALL BE RESPONSIBLE FOR THE PAYMENT OF ALL APPLICATION FEES AND INSPECTION COSTS ASSOCIATED WITH THESE PERMITS.



PIPE O.D. PLUS 1' TO 1'-4"

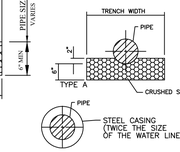
COPPER PIPE

PIPE EMBEDMENT
NOT TO SCALE

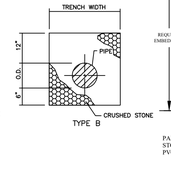


PIPE O.D. PLUS 1' TO 1'-4"

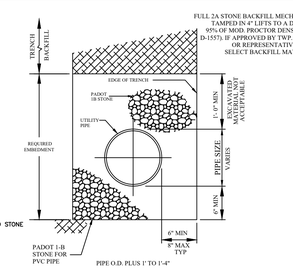
DUCTILE IRON PIPE



STEEL CASING

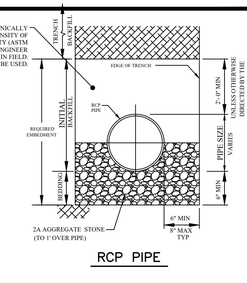


TYPES OF CRUSHED STONE PIPE CRADLES AND STEEL CASING



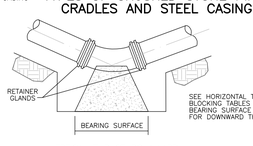
PIPE O.D. PLUS 1' TO 1'-4"

P.V.C. PIPE

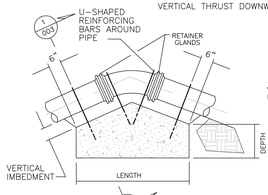


RCP PIPE

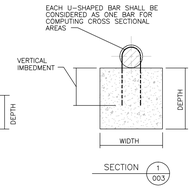
TYPES OF CRUSHED STONE PIPE CRADLES AND STEEL CASING



VERTICAL THRUST DOWNWARD

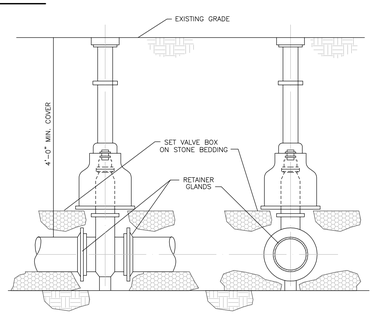


VERTICAL THRUST UPWARD



NOTES:
1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2500 P.S.I. AT THE END OF 28 DAYS.
2. PAINT ALL EXPOSED STEEL WITH TWO COATS OF ASPHALT PAINT.
3. NO COUPLING OR JOINTS SHALL BE CONVEYED WITH CONCRETE.
4. ALL THREADS WITH PIPE STRAPS MAY BE USED IN PLACE OF REINFORCING BARS.
5. ALL THRUST BLOCKS SHOWN ARE INTENDED AS A GUIDE AND SHALL WITHSTAND THE REQUIRED PRESSURE.
6. RETAINER GLANDS REQUIRED ON ALL MECHANICAL JOINT FITTINGS.
7. CERTAIN SITUATIONS MAY WARRENT THE USE OF TIE RODS, AUTHORIZED BY THE WATER COMPANY ONLY.

VERTICAL THRUST BLOCKING



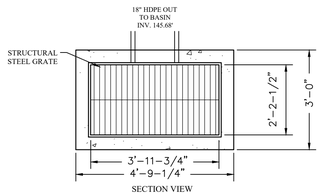
NOTES:
1. RETAINER GLANDS REQUIRED ON ALL MECHANICAL JOINT FITTINGS.
2. VALVE BOX SHALL BE 2 PIECE SCREW TYPE.

GATE VALVE INSTALLATION

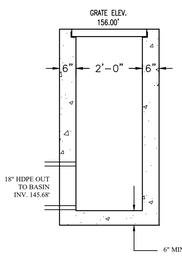
VERTICAL THRUST BLOCKING – UPWARD THRUSTS SCHEDULE OF DIMENSIONS 150 P.S.I. WORKING PRESSURE

PIPE SIZE	6" AND 8"			10" AND 12"			14" AND 16"		
DEGREE BEND OR DEFLECTION	11 1/4°	22 1/2°	45°	11 1/4°	22 1/2°	45°	11 1/4°	22 1/2°	45°
LENGTH	3.00	4.00	6.00	4.50	6.00	8.00	6.00	8.00	11.00
WIDTH	3.00	3.00	3.00	3.00	3.00	4.00	3.50	3.50	5.00
DEPTH	2.00	3.00	4.00	3.00	4.50	5.00	3.50	5.00	5.00
SQ. IN. REINFORCING	0.17	0.33	0.65	0.37	0.74	1.46	0.66	1.32	2.60

BAR NO.	5	6	7	8	9	10	11
CROSS-SECTION IN.² PER BAR	0.31	0.44	0.60	0.79	1.00	1.27	1.56
VERTICAL IMBEDMENT	15"	19"	26"	35"	44"	56"	68"



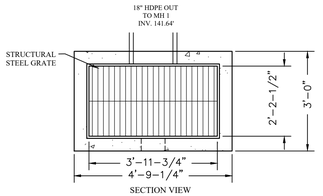
SECTION VIEW



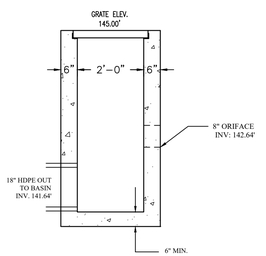
SECTION VIEW

OUTLET STRUCTURE NO. 1

NOT TO SCALE



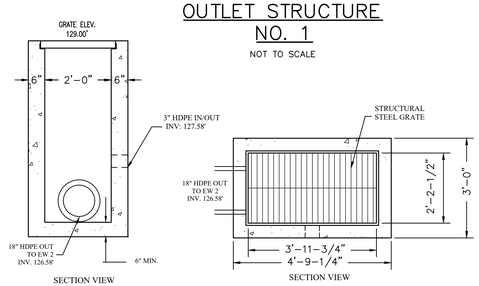
SECTION VIEW



SECTION VIEW

OUTLET STRUCTURE NO. 2

NOT TO SCALE

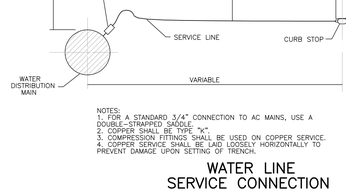


SECTION VIEW

SECTION VIEW

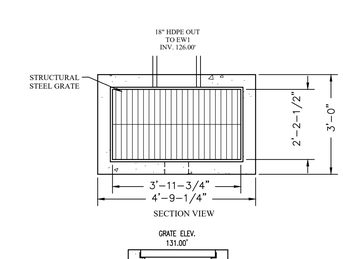
OUTLET STRUCTURE NO. 4

NOT TO SCALE

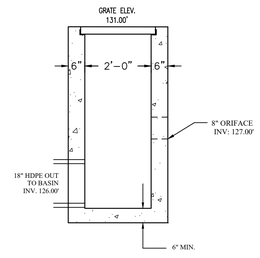


NOTES:
1. FOR A STANDARD 3/4" CONNECTION TO AC MAINS, USE A DOUBLE-STRAPPED SADDLE.
2. COPPER SHALL BE TYPE "K".
3. COMPRESSION FITTINGS SHALL BE USED ON COPPER SERVICE.
4. COPPER SERVICE SHALL BE LAID LOOSELY HORIZONTALLY TO PREVENT DAMAGE UPON SETTING OF TRENCH.

WATER LINE SERVICE CONNECTION



SECTION VIEW



SECTION VIEW

OUTLET STRUCTURE NO. 3

NOT TO SCALE

CLIENT DATA

Cornerstone
Consulting Engineers & Design Services, Inc.
213 West Main Street, Lansdale, PA 19446
Phone: 215-362-2600 Fax: 215-362-8400
WWW.CORNERSTONENET.COM

Pocono Region 570-839-1770
Lehigh Valley Region 610-820-8200
Philadelphia Region 215-362-2600

NO	BY	DESCRIPTION	DATE
1.	DB	REVISED PER SEWER AUTHORITY COMMENTS	10-30-24

REVISIONS

PENNSYLVANIA ONE CALL SYSTEM, INC.
925 Irwin Run Road
West Mifflin, Pennsylvania 15122 - 1078
811
BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA, CALL 1-800-242-1776

J.B. ANDERSON
PROFESSIONAL ENGINEER
DELAWARE LICENSE No. PE 15438
PENNSYLVANIA LICENSE No. PE 055536
MARYLAND LICENSE No. 29513
NEW JERSEY LICENSE No. 24GE04520400
VIRGINIA LICENSE No. 0402 045725
FLORIDA LICENSE No. 75184
NEW YORK LICENSE No. 095667-1

PROJECT LOCATION

PRELIMINARY SUBDIVISION PLAN SET
4 LOT SUBDIVISION

221 MOREDON ROAD,
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

PREPARED FOR:
PEROLI, LLC

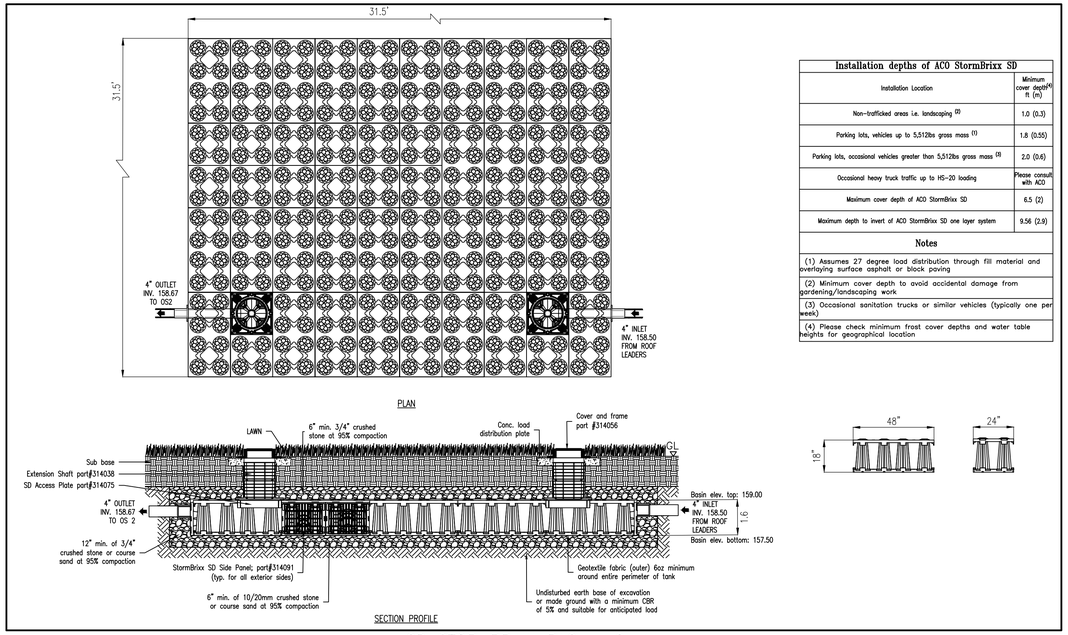
TITLE

SITE DETAILS

PROJ. #	23-0516	DATE	8/13/2024
CAD ID.	23-0516	DRN BY	DB
SCALE	AS NOTED	CHK BY	JBA

SHEET 15 OF 16

REVISION 1



Installation depths of ACO StormBrixx SD	
Installation Location	Minimum cover depth[4] ft (m)
Non-trafficked areas i.e. landscaping [2]	1.0 (0.3)
Parking lots, vehicles up to 5,512lbs gross mass [1]	1.8 (0.55)
Parking lots, occasional vehicles greater than 5,512lbs gross mass [3]	2.0 (0.6)
Occasional heavy truck traffic up to HS-20 loading	Please consult with ACO
Maximum cover depth of ACO StormBrixx SD	6.5 (2)
Maximum depth to invert of ACO StormBrixx SD one layer system	9.56 (2.9)

Notes

(1) Assumes 27 degree load distribution through fill material and overlaying surface asphalt or block paving

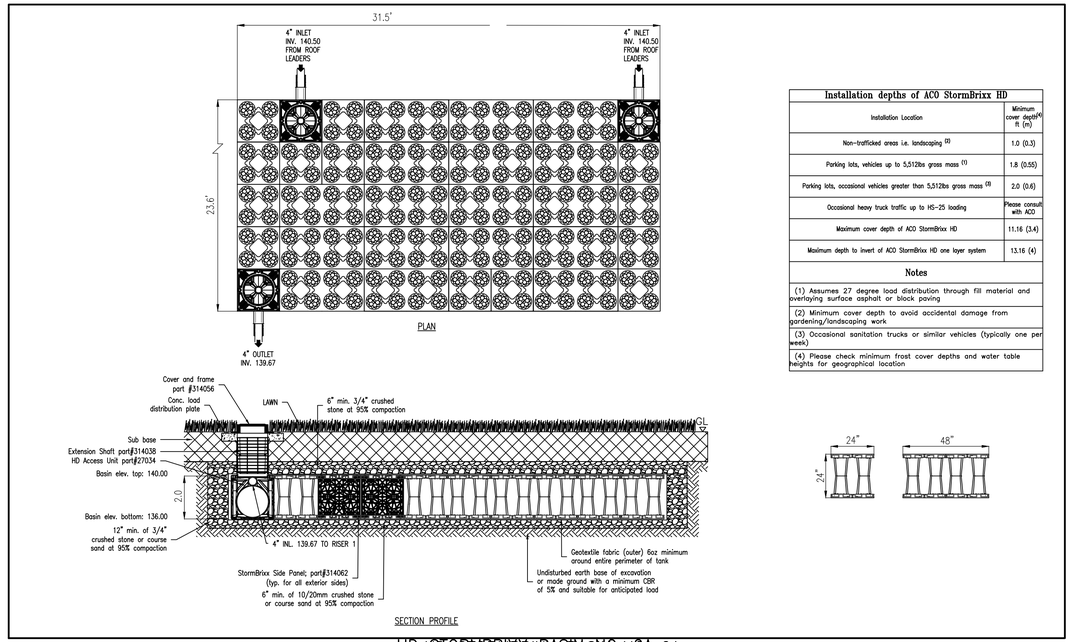
(2) Minimum cover depth to avoid accidental damage from gardening/landscaping work

(3) Occasional sanitation trucks or similar vehicles (typically one per week)

(4) Please check minimum frost cover depths and water table heights for geographical location

SD STORMBRIXX BASIN NO. 1A

NOT TO SCALE



Installation depths of ACO StormBrixx HD	
Installation Location	Minimum cover depth[4] ft (m)
Non-trafficked areas i.e. landscaping [2]	1.0 (0.3)
Parking lots, vehicles up to 5,512lbs gross mass [1]	1.8 (0.55)
Parking lots, occasional vehicles greater than 5,512lbs gross mass [3]	2.0 (0.6)
Occasional heavy truck traffic up to HS-25 loading	Please consult with ACO
Maximum cover depth of ACO StormBrixx HD	11.16 (3.4)
Maximum depth to invert of ACO StormBrixx HD one layer system	13.16 (4)

Notes

(1) Assumes 27 degree load distribution through fill material and overlaying surface asphalt or block paving

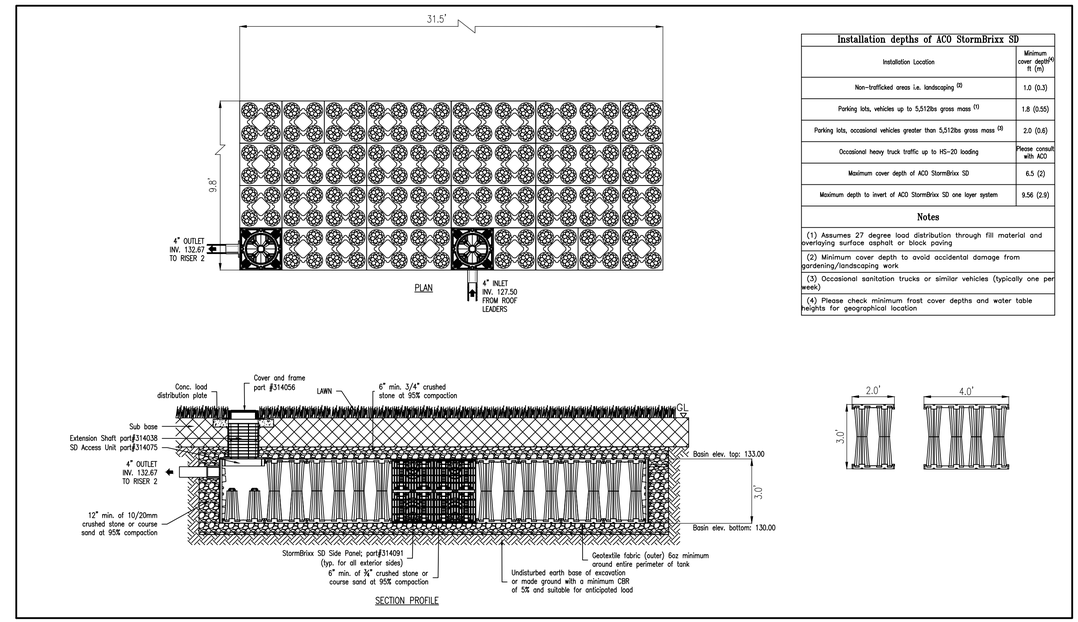
(2) Minimum cover depth to avoid accidental damage from gardening/landscaping work

(3) Occasional sanitation trucks or similar vehicles (typically one per week)

(4) Please check minimum frost cover depths and water table heights for geographical location

HD STORMBRIXX BASIN NO. 2A

NOT TO SCALE



Installation depths of ACO StormBrixx SD	
Installation Location	Minimum cover depth[4] ft (m)
Non-trafficked areas i.e. landscaping [2]	1.0 (0.3)
Parking lots, vehicles up to 5,512lbs gross mass [1]	1.8 (0.55)
Parking lots, occasional vehicles greater than 5,512lbs gross mass [3]	2.0 (0.6)
Occasional heavy truck traffic up to HS-20 loading	Please consult with ACO
Maximum cover depth of ACO StormBrixx SD	6.5 (2)
Maximum depth to invert of ACO StormBrixx SD one layer system	9.56 (2.9)

Notes

(1) Assumes 27 degree load distribution through fill material and overlaying surface asphalt or block paving

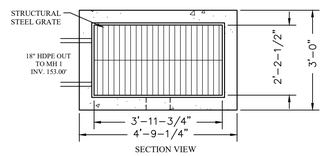
(2) Minimum cover depth to avoid accidental damage from gardening/landscaping work

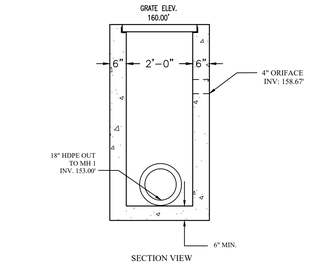
(3) Occasional sanitation trucks or similar vehicles (typically one per week)

(4) Please check minimum frost cover depths and water table heights for geographical location

SD STORMBRIXX BASIN NO. 3A

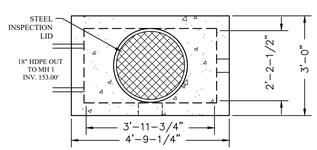
NOT TO SCALE

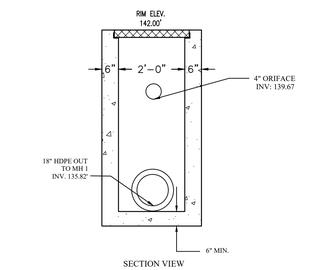




OUTLET STRUCTURE NO. 1A

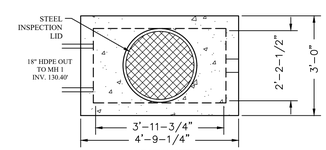
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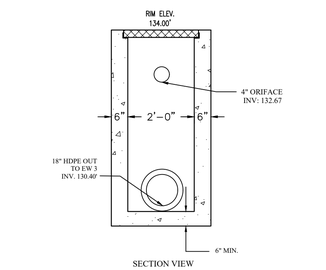




OUTLET STRUCTURE NO. 2A

NOT TO SCALE





OUTLET STRUCTURE NO. 3A

NOT TO SCALE

CLIENT DATA

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Consulting Engineers & Design Services, Inc.
213 West Main Street. Lansdale. PA 19446
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Philadelphia Region 215-362-2600
Lehigh Valley Region 610-820-8200
Pocono Region 570-839-1770

REVISIONS

NO	BY	DESCRIPTION	DATE
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925 Irwin Run Road
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811

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PROJECT LOCATION

PRELIMINARY SUBDIVISION PLAN SET
4 LOT SUBDIVISION

221 MOREDON ROAD,
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

PREPARED FOR:
PEROLI, LLC

TITLE

SITE DETAILS

PROJ. #	23-0516	DATE	8/13/2024
CAD ID.	23-0516	DRN BY	DB
SCALE	AS NOTED	CHK BY	JBA

SHEET 16 OF 16

REVISION 1