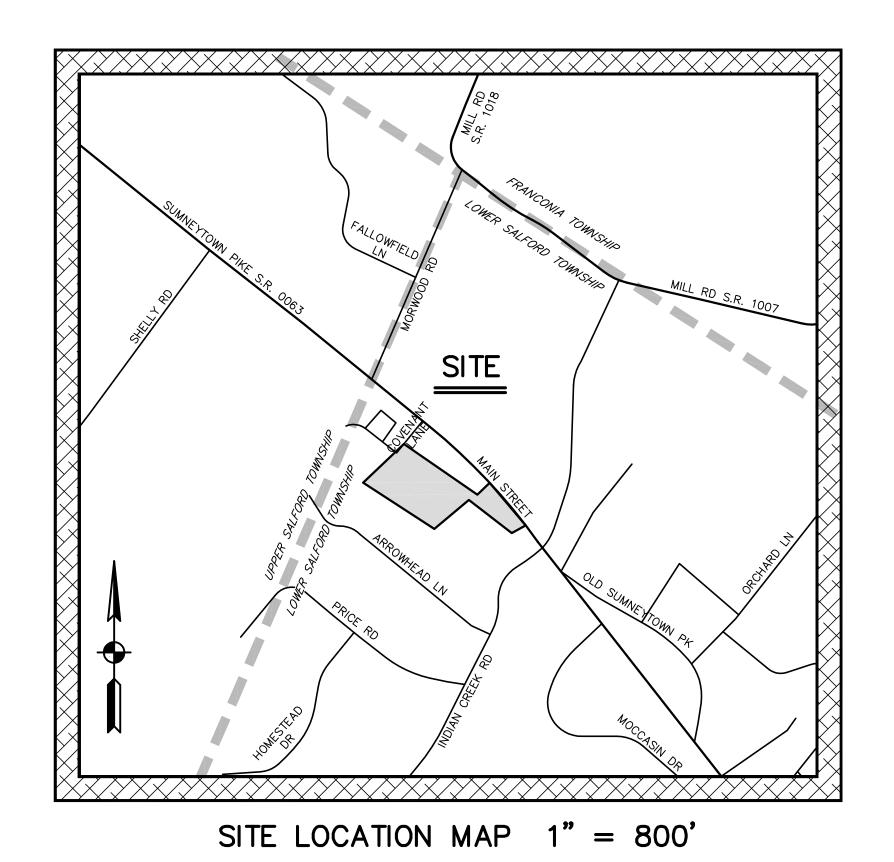
LAND DEVELOPMENT PLANS

FOR THE

PROPOSED BUILDING & PARKING LOT EXPANSION

PLAN SHEET INDEX

	SHEET NO.	<u>PLAN_TITLE</u>	<u>ISSUE DATE</u>	<u>LAST REV'D</u>
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	6 OF 12 7 OF 12 8 OF 12 9 OF 12 10 OF 12 11 OF 12 12 OF 12	E&S DETAIL SHEET E&S DETAIL SHEET PCSM PLAN PCSM NOTES & DETAIL SHEET PCSM NOTES & DETAIL SHEET LANDSCAPE AND LIGHTING PLAN CONSTRUCTION DETAIL SHEET	JUNE 3, 2024 JUNE 3, 2024 JUNE 3, 2024 JUNE 3, 2024 JUNE 3, 2024 JUNE 3, 2024 JUNE 3, 2024	- - - - - -
		ADDITIONAL SUPPORTING DOCUMENTS		
1		CTION STORMWATER MANAGEMENT AND EROSION CONTROL PLAN NARRATIVE	JUNE 3, 2024	-
2		FILTRATION REPORT PREPARED BY VW	JUNE 16, 2023	-



PREPARED FOR

SITE STATISTICS

1. SUBJECT TRACT MAY BE IDENTIFIED BY MONTGOMERY COUNTY TAX ASSESSMENT INFORMATION AS FOLLOWS:

LOWER SALFORD TOWNSHIP

A. TaxMapID 50002 059; Parid: 50-00-02900-00-2

B. TaxMapID 50002 008; Parid: 50-00-02200-00-9

2. RECORDED DEED DATA IS AS FOLLOWS:

AS RECORDED IN THE OFFICE FOR THE RECORDING OF DEEDS, ETC., IN AND FOR THE COUNTY OF MONTGOMERY AT NORRISTOWN, PENNSYLVANIA AS FOLLOWS:

A. DEED BOOK 5128, PAGE 1991 B. DEED BOOK 5678, PAGE 00939

3. NAME AND ADDRESS OF THE OWNER OF THE SUBJECT TRACT:

- A. COVENANT PRESBYTERIAN CHURCH OF HARLEYSVILLE 310 COVENANT LANE HARLEYSVILLE, PA 19438
- B. COVENANT PRESBYTERIAN CHURCH OF HARLEYSVILLE 310 COVENANT LANE HARLEYSVILLE, PA 19438

4. AREA STATISTICS:

A. TRACT AREA = 10.27 AC. (TO TITLE LINES)
B. TRACT AREA = 1.00 AC. (TO TITLE LINES)

ACT 50 UTILITY NOTE



ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE—GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDER—GROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 121 AS PER THE AMENDMENT OF PA ACT 287 OF 1974, EFFECTIVE OCTOBER 30, 2017 CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.

COMCAST

190 SHOEMAKER RD
POTTSTOWN, PA. 19464
MIKE KIMBERLY
mike_kimberly@cable.comcast.com

PECO AN EXELON COMPANY C/O USIC
450 S HENDERSON ROAD SUITE B
KING OF PRUSSIA, PA. 19406
NIKKIA SIMPKINS
NIKKIASIMPKINS@USICLLC.COM

114 RIDGE RD
SELLERSVILLE, PA. 18960
JOHN GOEPHART

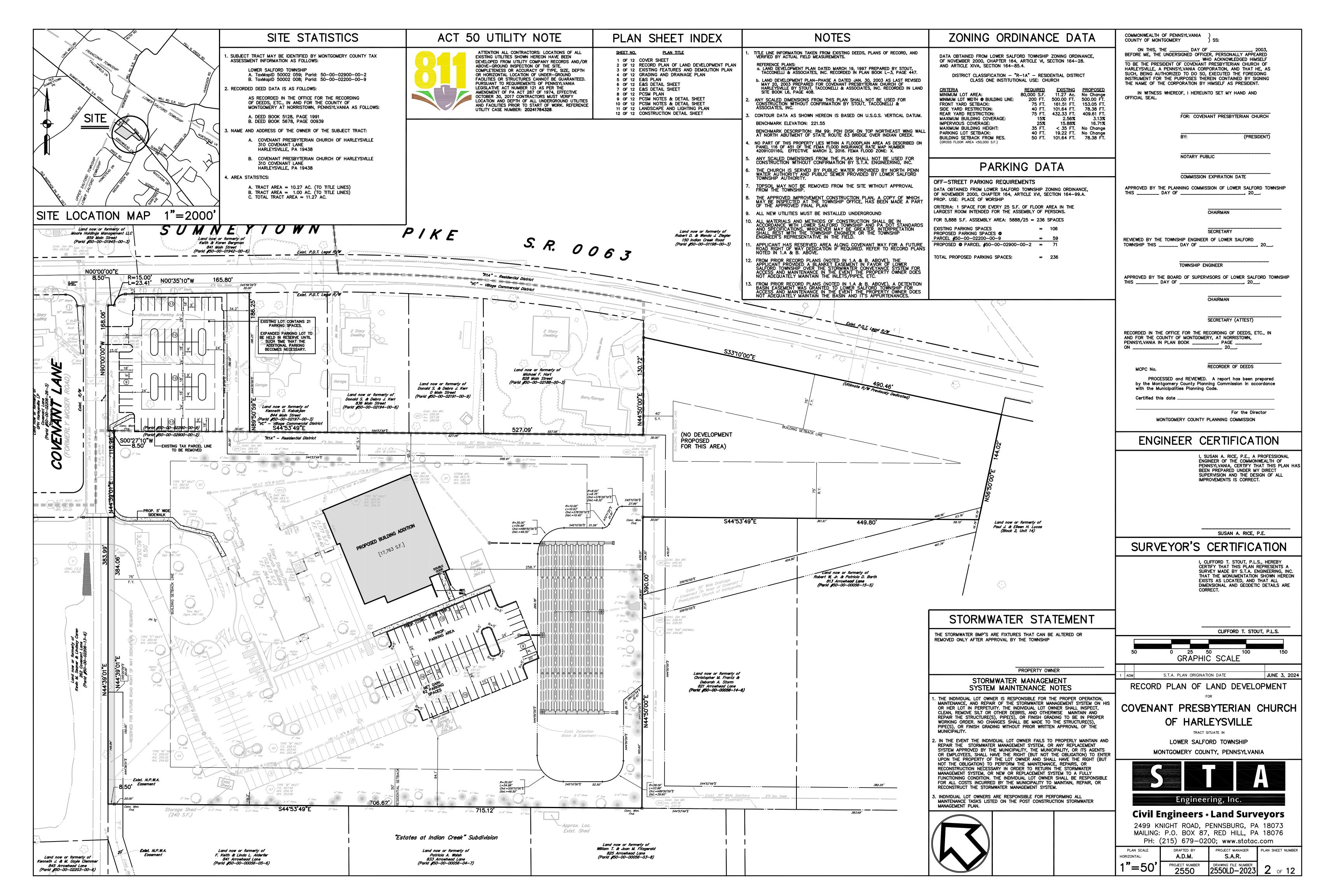
LOWER SALFORD TOWNSHIP AUTHORITY
P.O. BOX 243
HARLEYSVILLE, PA 19438
PHONE 215-256-8676
CONNIE WEIMER

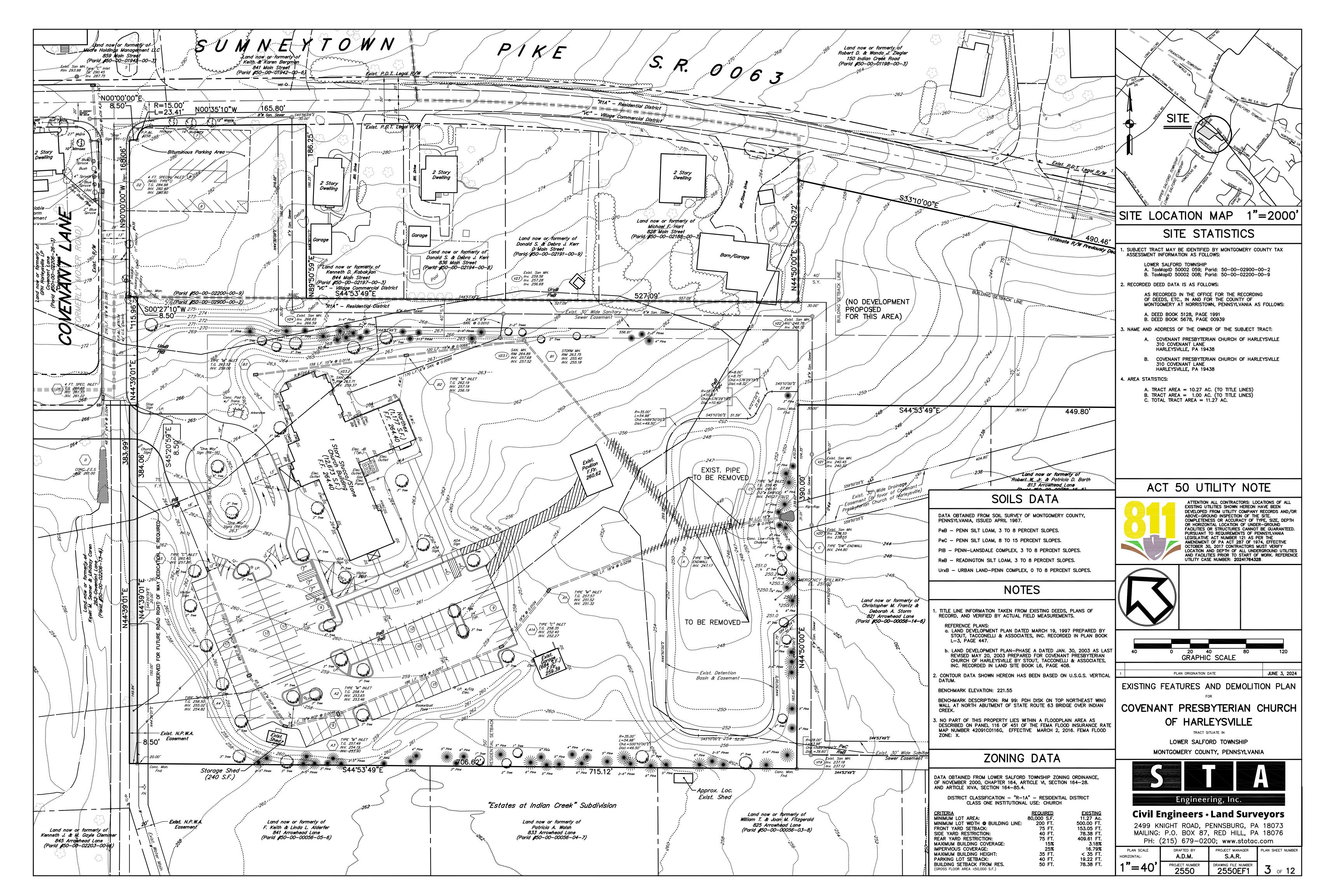
LOWER SALFORD TOWNSHIP
379 MAIN ST
HARLEYSVILLE, PA. 19438
DOUG JONES
djones@lowersalfordtownship.org
GILMORE ASSOCIATES
184 W MAIN ST SUITE 300
TRAPPE, PA. 19426
THOMAS DUFFY
tduffy@gilmore—assoc.com
NORTH PENN WATER AUTHORITY
300 FORTY FOOT ROAD
LANSDALE, PA. 19446
STEVE FRETZ

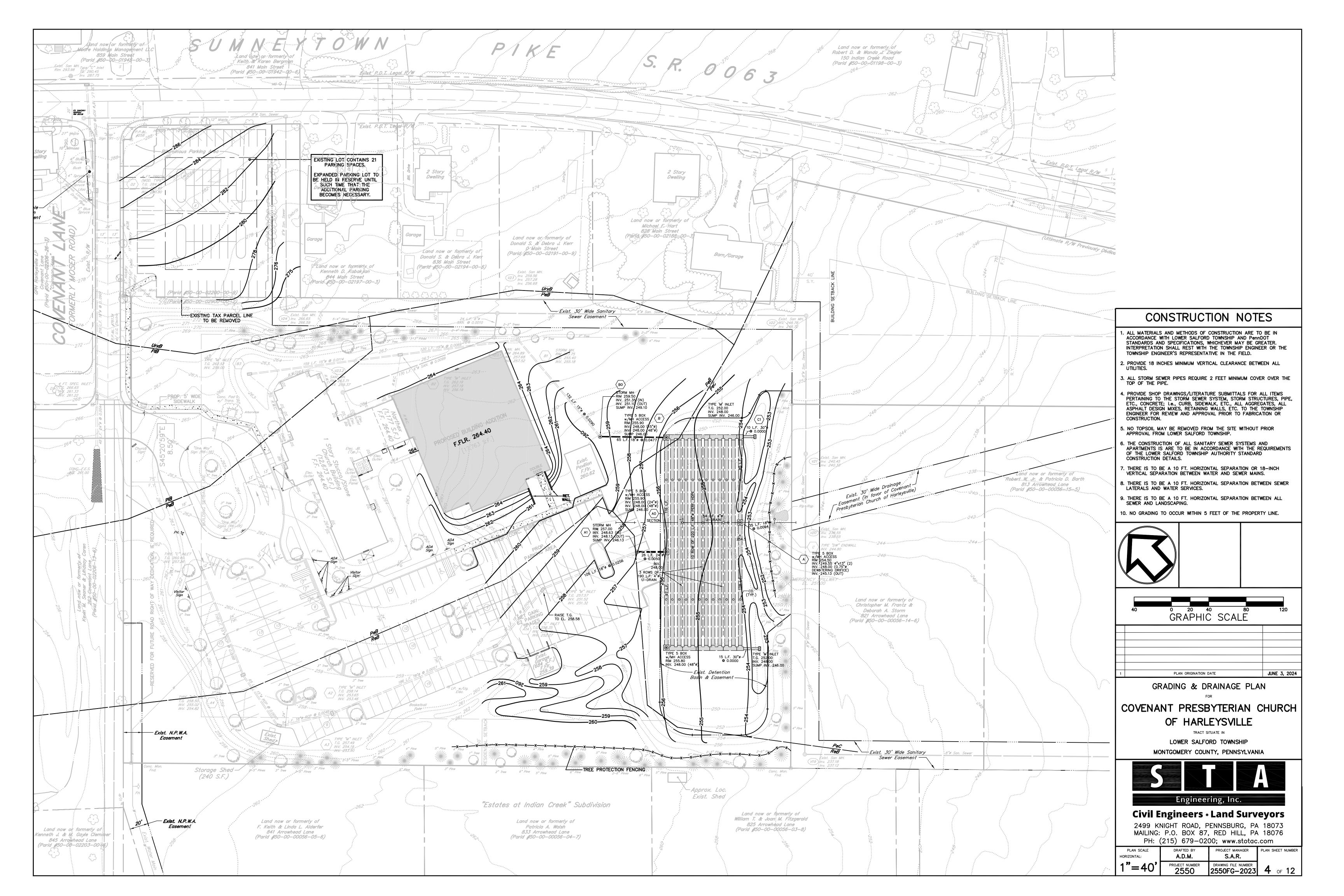
COVENANT PRESBYTERIAN CHURCH OF HARLEYSVILLE

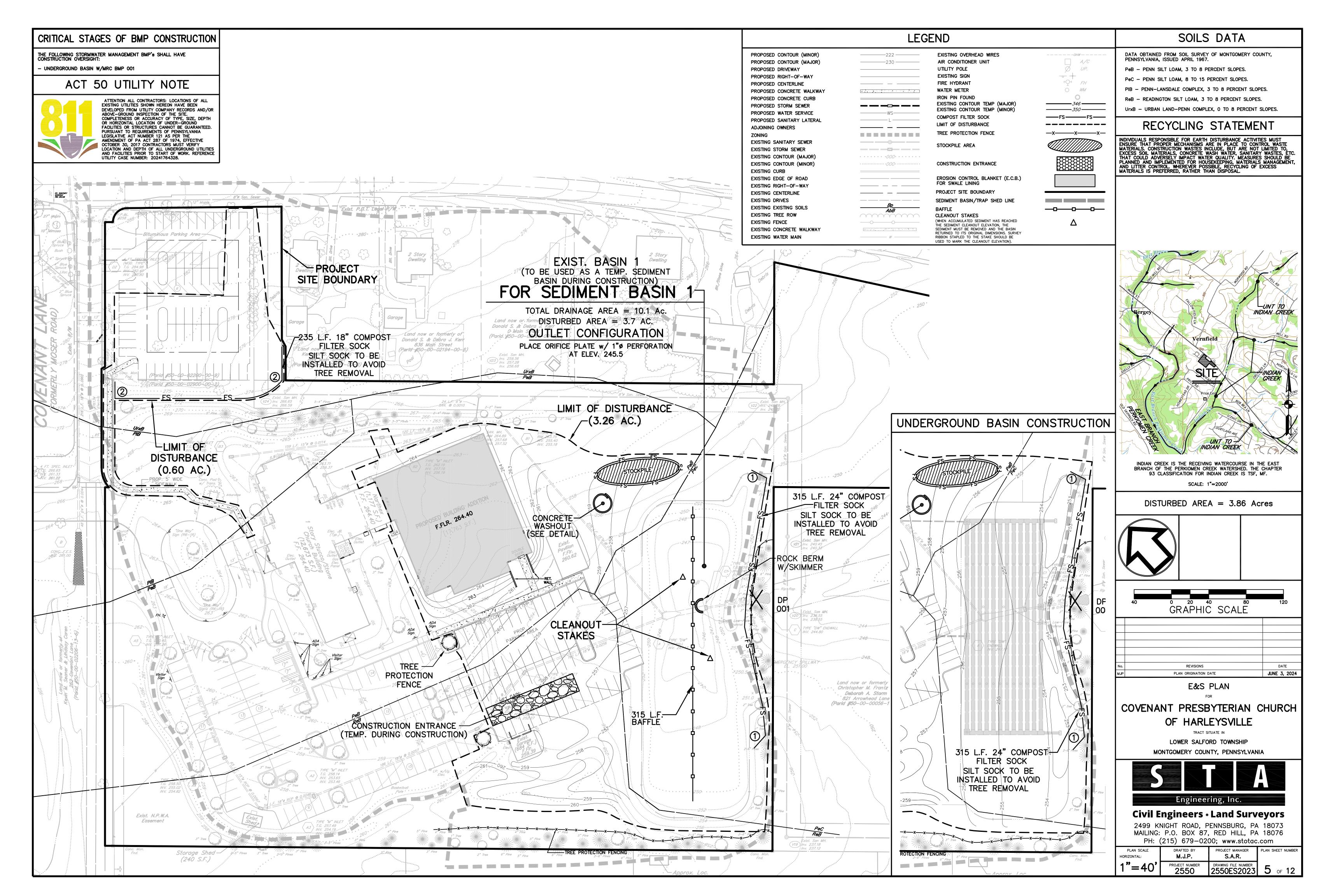
310 COVENANT LANE HARLEYSVILLE, PA 19438











E & S NOTES

- ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WEITTEN SUBMITTAL OF THOSE CHANGES FOR PENNEW AND APPROVAL AT ITS TTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS
- AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE PCSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING. ON-SITE PRECONSTRUCTION MEETING.
- AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
- ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION.
- AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
- CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPS SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E &S DI AN
- 7. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
- TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAP(S) IN AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.
- IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONAL OFFICE OF THE DEPARTMENT.
- D. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE
- BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE. ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING. 3. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OR UNDISTURBED VEGETATED AREAS.
- 14. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPS SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
- 5. A LOG SHOWING DATES THAT E&S BMPS WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME
- 16. SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER. 7. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
- 3. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM OF 3 TO 5 INCHES PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM OF 6 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING.
- 19. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
- O. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
- 1. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- 22. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
- 23. FILLS SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES. 4. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR
- 5. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHER SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO
- 16. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREA. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
- PERMANENT STABILIZATION SPECIFICATIONS. 7. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE
- 18. E&S BMPS SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
- 9. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO
- 30. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPS. AREAS DISTURBED DURING THE REMOVAL OR CONVERSION OF THE BMPS SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
- 1. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION.
- 32. FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT—LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER DAY IN CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.
- 3. CONCRETE WASH WATER SHALL BE HANDLED IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. IN NO CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATERS OR GROUNDWATER SYSTEMS.
- 4. SEDIMENT BASINS SHALL AND/OR TRAPS SHALL BE KEPT FREE OF ALL
 CONSTRUCTION WASTE, WASH WATER, AND OTHER DEBRIS HAVING POTENTIAL TO CLOG
 THE BASIN/TRAP OUTLET STRUCTURES AND/OR POLLUTE THE SURFACE WATERS.
- 35. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH OSHA GUIDELINES AND THE HEALTH AND SAFETY REQUIREMENT OF THE OWNER. THE CONTRACTORS SHALL BE RESPONSIBLE FOR MAINTAINING EXCAVATIONS DURING THE PERIOD OF CONSTRUCTION. CONTROL OF GROUNDWATER SEEPAGE AND STORMWATER RUNOFF INTO EXCAVATIONS SHALL BE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
- 6. APPLICATIONS AND/OR OPERATORS MUST IMPLEMENT ENVIRONMENTAL DUE DILIGENCE TO ENSURE THAT ALL FILL MATERIAL QUALIFIES AS CLEAN FILL. IF BROUGHT FROM OFF-SITE, FILL MUST BE CERTIFIED CLEAN FILL.
- 77. TO THE BEST OF OUR KNOWLEDGE, NO SPECIAL GEOLOGIC FORMATIONS OR SOIL CONDITIONS HAVING THE POTENTIAL TO CAUSE POLLUTION TO SURFACE WATERS EXIST AT THE SITE.
- B. THERMAL IMPACT: DURING CONSTRUCTION STORMWATER RUNOFF IS FILTERED THROUGH ON—SITE BMP'S TO THE MAXIMUM EXTENT POSSIBLE TO AVOID THERMAL IMPACTS. RUNOFF IS FILTERED THROUGH SEDIMENT BASIN, COMPOST FILTER SOCKS AND UNDISTURBED VEGETATED SURFACES PROVIDING AN OPPORTUNITY FOR WATER TO COOL BEFORE REACHING THE EXISTING STREAM CHANNEL.

CONSTRUCTION SEQUENCE

CONSTRUCTION SEQUENCE NOTES: At least 7 days prior to starting any earth disturbance activities (including clearing and grubbing) the owner and/or operator shall invite all contractors, the landowner, appropriate municipal officials, the E&S plan preparer, the PCSM plan preparer, the designated licensed professional and a representative from the Montgomery County Conservation District to an on—site pre—construction meeting.

Critical stages as noted throughout the construction sequence are defined as sequence steps that require the permittee to provide engineering construction oversight. A licensed professional engineer knowledgeable in the design and construction of stormwater BMP's, preferably the design engineer, shall conduct the oversight. • At least 3 days prior to starting any earth disturbance activities, or expanding into an area previously unmarked, the Pennsylvania One Call System, Inc. shall be notified at 1—800—242—1776 for the location of existing underground utilities.

All earth disturbance activities shall proceed in accordance with the construction sequence. Each step of the sequence shall be completed before proceeding to the next step, except where noted. Deviation from the sequence must be approved by the Montgomery County Conservation District or by the department prior to implementation. Any cessation of activity for 4 days or longer requires temporary stabilization.

Perimeter compost filter sock to be installed by clearing area for sock and installing sock immediately or by clearing and installing sock as you go. No disturbed area should be left without perimeter controls. Sock shall be installed to minimize existing tree removal to the greatest extent possible.

As soon as slopes, channels, ditches and other disturbed areas reach final grade,

. Field—mark the limits of disturbance prior to disturbance activities (i.e. survey stakes, posts & rope, construction fence, etc.) in accordance with the erosion and sediment

2. Clear, grub and strip topsoil in the area proposed for the construction entrance. Install the temporary stone construction entrance/tire cleaner in accordance with the

5. Install tree protection fence and compost filter sock as shown on the erosion and 4. Critical Stage — Convert existing stormwater management basin into Sediment Basin 1. Ensure that storm sewer structures and piping have watertight seals and that the permanent orifice is plugged during the E&S stage. Install baffles and sediment clean out stakes as indicated. Install skimmer and rock berm. Drainage shall be directed to

he sediment basin throughout construction and before the on—site storm sewer is

5. Upon installation and stabilization of all perimeter sediment control BMP's and at least 3 days prior to proceeding with the bulk earth disturbance activities, the permittee or co-permittee shall provide notification to the department or authorized conservation

NOTE: SEDIMENT BASIN MUST BE COMPLETELY STABILIZED PRIOR TO ANY EARTH DISTURBANCE OF THE RESPECTIVE TRIBUTARY DRAINAGE AREA.

5. Strip any remainina topsoil within the work area and stockpile. Stabilize stockpile and protect with compost filter sock. Clear and grub any remaining areas left to be disturbed.

Rough grade the site and pad out the building area.

3. Install utilities (water, electric, gas, cable, etc.) in accordance with the following

a. Trenches shall be backfilled above the original ground level to allow for settlement and to prevent runoff from following the trench line when backfill b. Apply soil supplements, seed and mulch as required.

c. The total length of excavated trench open at any one time should not be greater than the total length of utility line that can be placed in the trench and backfilled in one working day.

d. No more than 50 lineal feet of open trench should exist when utility line installation ceases at the end of the workday.). Install curbing, sidewalk, stone base course and bituminous base course. Stabilize listurbed areas immediately with seed and mulch.

10. Replace topsoil equal to pre-development depths or to a minimum depth of 6-in., whichever is greater. And finish grade, wherever and whenever possible. Seed and mulch each area of disturbance immediately after construction is completed. No more than 15,000 s.f. of disturbed area shall reach final grade before initiating seeding and mulching operations. Graded areas should be scarified or otherwise loosened to a depth of 3- to 5-inches prior to topsoil placement.

1. Install trees and shrubs wherever and whenever possible in accordance with the

12. Perform final landscaping operations. In such cases, permanently seed and mulch disturbed areas. Seeding shall follow fertilization and seeding rates specified in seeding specification chart. If finish grading is not practical, temporarily seed all disturbed areas. NOTE: THE MONTGOMERY COUNTY CONSERVATION DISTRICT MUST BE NOTIFIED PRIOR TO THE CONVERSION OF BMP 001 OR REMOVAL OF PRIMARY EROSION AND SEDIMENT CONTROL BMP'S.

13. Critical Stage — upon establishing a minimum uniform 70 % perennial vegetative cover or other permanent non—vegetative cover with a density sufficient to resist accelerated surface erosion and subsurface characteristics sufficient to resist sliding and other movements in areas upstream of Sediment Basin 1, the sediment basin can be converted to the permanent stormwater management facility BMP 001. Convert the facility in accordance with the following sequence and the construction details:

a. Notify Lower Salford Township and the Conservation District prior to construction.

 b. A licensed professional engineer (or authorized representative) knowledgeable
 in the design and construction of stormwater BMP's, preferably the design engineer,
 shall conduct the oversight of installation of the MRC BMP. c. Excavate underground basin area and grade basin bottom to a uniform, level uncompacted subgrade free from rocks and debris. Do not compact subgrade. To the greatest extent possible, excavation should be performed with the lightest practical equipment. Excavation equipment should be placed outside the limits of the

d. If unfavorable conditions are encountered during the installation of the underground basin (i.e. groundwater and/or bedrock, etc.), the owner/engineer should be notified, and the proposed underground basin should be adjusted as

e. Place non—woven geotextile over prepared soils and up excavation walls.

Geotextile rolls should overlap by a minimum of 24 inches within the trench.

Fold back and secure excess geotextile during stone placement and installation of storm

f. Install u-drain and cap with dewatering orifice in accordance with the detail. Ensure that all pipes and seals are watertight. Seal any temporary openings in the

g. Place clean—washed aggregate foundation to achieve a flat surface.

h. Install pipes, manifolds and structures in accordance with manufacturer recommendations. i. Evenly backfill with uniformly graded, clean—washed aggregate. No equipment shall be operated on the bed at this stage of the installation. Excavators must be located off the bed. Dump trucks shall not dump stone directly on to the bed. Dozers or loaders are not allowed on the bed at this time.

j. Fold and secure nonwoven geotextile over underground basin, with minimum overlap of 24—inches. Place approved topsoil over underground facility, as indicated on

k. Seed and stabilize topsoil. I. Do not remove other erosion and sediment control measures until site is fully

14. Simultaneously with underground basin installation, construct all storm sewer

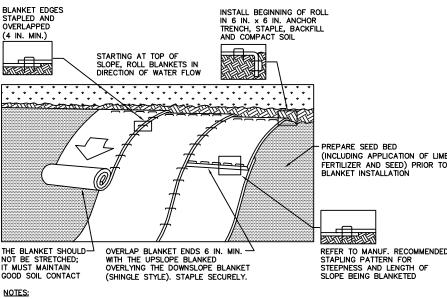
connections with structures and piping. 15. After all construction work is completed, install final paving, permanent striping and 16. Upon final stabilization, remove all other temporary sediment controls. An area shall be considered to have achieved final stabilization when it has minimum uniform 70 % perennial vegetative cover or other permanent non—vegetative cover with a density sufficient to resist accelerated surface erosion and subsurface characteristics sufficient

17. Critical Stage — The site engineer shall inspect all PCSM BMP's to ensure that the BMP's have not been impacted by construction activities.

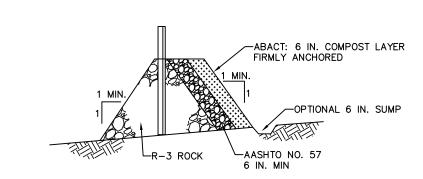
18. Within 30 days after the completion of earth disturbance activities authorized by this permit, including the permanent stabilization of the site and proper installation of PCSM BMP's in accordance with the approved PCSM plan, or upon submission of the not if sooner, the permittee shall file with the department or authorized conservation district a statement signed by a licensed professional and by the permittee certifying that work has been performed in accordance with the terms and conditions of this permit and the approved E&S and PCSM plans. Completion certificates are needed to ensure that all work is performed in accordance with the terms and conditions of the permit and approved E&S and PCSM plans.

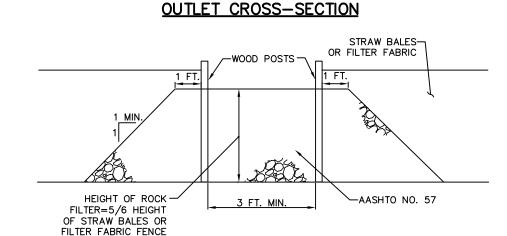
ANY SEDIMENT CONTROL, SUCH AS COMPOST FILTER SOCK, ROCK FILTER, OR INLET FILTER MUST NOT BE REMOVED UNTIL ALL VEGETATION (UPSTREAM OF THAT PARTICULAR CONTROL) HAS BEEN RE-ESTABLISHED.

ANY AREA (S) DISTURBED DURING THE REMOVAL OF SEDIMENT CONTROLS SHALL BE IMMEDIATELY RE—STABILIZED



SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET. PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS. BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET. THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. STANDARD CONSTRUCTION DETAIL #11-1 **EROSION CONTROL BLANKET INSTALLATION** NOT TO SCALE



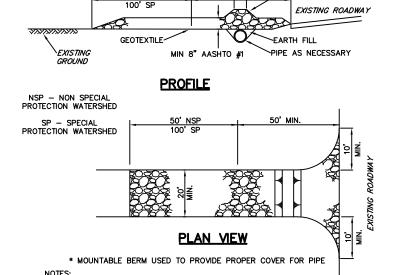


A ROCK FILTER OUTLET SHALL BE INSTALLED WHERE FAILURE OF A SILT FENCE OR STRAW BALE BARRIER HAS OCCURRED DUE TO CONCENTRATED FLOW. ANCHORED COMPOST LAYER SHALL BE USED ON UPSLOPE FACE IN HQ AND EV WATERSHEDS. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET. ABACT IS REQUIRED: A 6 INCH LAYER OF COMPOST SHOULD BE ADDED AND ANCHORED ON TOP OF THE UPSLOPE SIDE OF THE AASHTO #57 STONE. A 6-INCH DEEP SUMP MAY BE INSTALLED IMMEDIATELY UPSLOPE OF THE ROCK FILTER OUTLET TO PROVIDE ADDITIONAL SEDIMENT REMOVAL CAPACITY.

STANDARD CONSTRUCTION DETAIL #4-6 ROCK FILTER OUTLET

50' MIN.

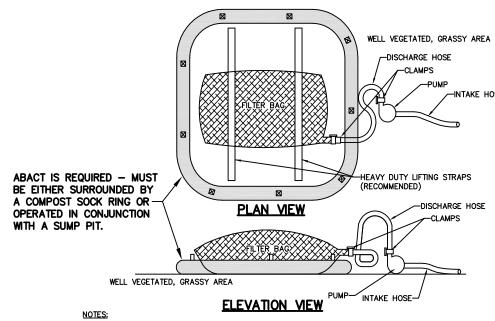
NOT TO SCALE



REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE. RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED. MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINE MAINTENANCE: ROCK CONSTRUCTION ENTRANCE IHICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

CONSTRUCTION ENTRANCE SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. PERFORM DAILY AND AS NEEDED STREET SWEEPING TO ENSURE SEDIMENT IS REMOVED FROM ABACT IS REQUIRED — MUST PROVIDE ADDITIONAL 50' OF 2RC IN NON SPECIAL PROTECTION WATERSHEDS. STANDARD CONSTRUCTION DETAIL #3-1 **ROCK CONSTRUCTION ENTRANCE** NOT TO SCALE



LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THIS

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL B

PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED. BAGS SHALL BE LOCATED IN WELL—VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE. THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED. FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED. ABACT IS REQUIRED — MUST BE EITHER SURROUNDED BY A COMPOST SOCK RING OR OPERATED IN CONJUNCTION WITH A SUMP PIT.

STANDARD CONSTRUCTION DETAIL #3-16 PUMPED WATER FILTER BAG

UNDISTURBED ARE

<u>SECTION</u>

PLAN VIEW

NOTES:
SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL.
COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.
COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL
BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM
SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND
THE SLOPE OF ITS TRIBUTARY AREA.
TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.
ACCUMUL ATED SPOIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS

SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS O

NSPECTION.
BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURERS

NECOMMENDATIONS.

UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY

BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN

AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

STANDARD CONSTRUCTION DETAIL #4-1

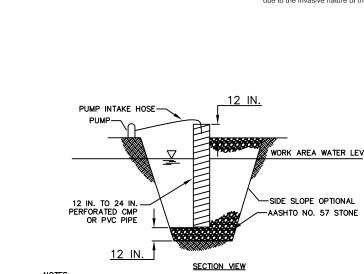
COMPOST FILTER SOCK NOT TO SCALE

DISTURBED AREA

COMPOST FILTER SOCK-

COMPOST FILTER SOCK—

BLOWN/PLACED FILTER MEDIA-



LOCATE SUMP AT LOW POINT IN WORK AREA AND OUTSIDE OF CONSTRUCTION ACTIVITY. WHEREVER RUNOFF FROM A WORK AREA FLOWS DIRECTLY TO THE SUMP AREA, A FILTER BAG SHALL BE ATTACHED AT THE DISCHARGE POINT UNLESS PUMPING TO A SEDIMENT BASIN OR SEDIMENT TRAP. MINIMUM DIAMETER OF PIT BOTTOM SHALL BE 24" LARGER THAN PIPE DIAMETER. MINIMUM DEPTH OF PIT SHALL BE 24" BELOW WATER LEVEL IN WORK AREA (INCLUDING THE AASHTO #57 STONE). 12" TO 24" PERFORATED CMP OR PVC PIPE SHALL BE SET ON 12" OF CLEAN AASHTO # 57 STONE.

VOID SPACE AROUND PIPE SHALL BE FILLED WITH AASHTO # 57 STONE. PIPE TO EXTEND 12" MIN. ABOVE TOP OF STONE AND/OR WATER BEING PUMPED FROM WORK AREA. DISCHARGE FROM PUMP SHALL BE TO A STABLE AREA BELOW DISTURBANCES FROM THE WORK ZONE. SUMP MAY BE USED IN CONJUNCTION WITH FILTER BAG WHERE ADDITIONAL FILTERING IS NEEDED.

STANDARD CONSTRUCTION DETAIL #3-17 SUMP PIT NOT TO SCALE

LIMITATIONS OF PENNSYLVANIA SOILS PERTAINING TO EARTHMOVING PROJECTS (Absence of an X does not mean "No Potential Limitation") NOTÈ: THIS IS NOT NECESSARILY AN ALL-INCLUSIVE LIST.

SOIL NAME	SOIL SYMBOL	DEPTH TO SEASONAL HIGH WATER TABLE	DEPTH TO BEDROCK	REACTION (pH)	CUTBANKS CAVE	CORROSIVE TO CONCRETE/STEEL	ркоиснту	EASILY ERODIBLE	FLOODING	DEPTH TO SATURATED ZONE/SEASONAL HIGH WATER TABLE	HYDRIC/ HYDRIC INCLUSIONS	LOW STRENGTH/ LANDSLIDE PRONE	SLOW PERCOLATION	PIPING	POOR SOURCE OF TOPSOIL	FROST ACTION	SHRINK – SWELL	POTENTIAL SINKHOLE	PONDING	WETNESS
Penn Silt Loam	PeB	6.7+	1 1/2-3	6.0 - 7.0 5.0 - 6.5 4.5 - 5.5	X	O	X				X	X		X	X	X				
Penn Silt Loam	PeC	6.7+	1 1/2-3	6.0 - 7.0 5.0 - 6.5 4.5 - 5.5	X	С	X				X	X		X	Х	X				
Penn-Lansdale	PIB	> 6.6	2.3	4.2 - 6.6 3.6 - 6.0 5.1 - 6.5																
Readington Silt Loam	ReB	1.5 - 3.0	3.3 - 5.0	5.4 - 6.9 3.6 - 6.5 5.1 - 6.5	X	C/S		X		X	X	X	X	X	X	X				Χ
Urban Land Penn	UrxB	> 6.6	6.0	4.2-6.6 3.6-6.0 5.1-6.5	X	C/S		Х		Х	X	Х	X	X	Х	X	Х	X		X

RESOLUTION OF SOIL TYPE LIMITATIONS

- APPROPRIATE PRECAUTIONS SHOULD BE TAKEN TO SAFEGUARD WORKERS DURING ALL TRENCHING AND EXCAVATION OPERATIONS. ALL APPLICABLE OSHA STANDARDS AND REGULATIONS MUST BE IMPLEMENTED AT ALL 2. SUITABLE PRECAUTIONS, SUCH AS COATING WITH NON-CORROSIVE MATERIALS, SHOULD BE TAKEN TO PROTECT UNDERGROUND PIPES, CONDUITS AND STORAGE TANKS FROM SOILS WITH THE POTENTIAL TO CAUSE CORROSION.
- 3. SEASONAL HIGH WATER TABLES WILL BE MANAGED BY EFFECTIVE SITE GRADING, DRAINAGE FACILITIES WITHIN ROADWAYS, AND BASEMENT DRAINS COUPLED WITH INDIVIDUAL UNIT SUMP PUMPS, IF REQUIRED.
 4. WHERE SHALLOW DEPTH TO DEPONCE IS PRESENT, LIMIT EXCAVATION DEPTHS. IF THIS IS NOT POSSIBLE, BEDROCK MAY REQUIRE BLASTING IN AREAS WHERE RIPPER TEETH ON EXCAVATING EQUIPMENT CANNOT REMOVE NO GRADING SHALL BE PERFORMED IN FROZEN SOILS FOR SOIL TYPES DETERMINED TO HAVE LIMITATIONS DUE TO FROST AND/OR LISTED AS POOR UNDER WINTER GRADING. DISTURBANCE IS LIMITED WITHIN AREAS PRONE TO FLOODING.
- WHEN UNSUITABLE MATERIAL IS ENCOUNTERED IN EMBANKMENT AND WATERWAY AREAS, SUITABLE MATERIAL THAT COMPLIES WITH COMPACTION DETAIL SPECIFICATIONS MUST BE IMPORTED. MATERIAL MUST BE SUITABLE FOR STABILIZATION AND THE MINIMIZATION OF EROSION. SETBACKS SHOULD COMPLY WITH THE STANDARDS CONTAINED IN CHAPTER 16 OF THE E&S MANUAL UNLESS IT CAN BE SHOWN THAT CUTS AND FILLS DO NOT POSE A HAZARD TO PUBLIC SAFETY OR TO SURFACE WATERS. ROAD FILL MATERIAL MAY NEED TO BE IMPORTED IF SOILS HAVE LOW STRENGTH.
- 3. INFILTRATION TESTS SHOULD BE PERFORMED ON SITE TO DETERMINE SUITABLE AREAS FOR INFILTRATION FACILITIES.

 9. FOR SOILS HAVING LIMITATIONS DUE TO PIPING, SPECIAL CARE SHOULD BE TAKEN WHEN USING THESE SOILS FOR BACKFILL AROUND BASIN OUTFALL PIPES. THE USE OF A FILTER DIAPHRAGM, ANTI-DEEP COLLAR OR 10. POOR TOPSOIL SHALL BE AMENDED BEFORE RE-SPREADING OVER LAWN AREAS. SOIL TESTING MAY BE REQUIRED TO DETERMINE THE PROPER APPLICATION OF SOIL AMENDMENTS TO PROMOTE GROWTH OF DESIRED
- 11. EASILY ERODIBLE SOILS SHALL DISCHARGE TO AN EROSION AND SEDIMENT CONTROL BMP DURING CONSTRUCTION AND STABILIZED WITH APPROPRIATE EROSION CONTROL MATTING AND VEGETATION FOR THE PERMANENT CONDITION. SEDIMENT THAT ACCUMULATES WITHIN THESE BMP'S CAN BE DISPOSED OF WITHIN LANDSCAPED AREAS ON-SITE. DISTURBED AREAS THAT DO NOT DRAIN TO A BMP MUST BE STABILIZED IMMEDIATELY.

 12. USE A SEDIMENT FILTER BAG TO DEWATER THE WORK ZONE IN AREAS WITH SHALLOW DEPTHS TO SATURATED ZONE AND SEASONAL HIGH-WATER TABLE.

Seeding Rate - Pure Live Seed Number Spring oats (spring), or Annual ryegrass (spring or fall), or Winter rye (fall) Fine fescue, or Kentucky bluegrass, plus Perennial ryegrass Birdsfoot trefoil, plus Birdsfoot trefoil, plu Reed canarygras Tall fescue, or Annual ryegrass Crownvetch, plus Tall fescue Flatpea, plus Tall fescue, or Perennial rvegra Tall fescue, plus Fine fescue Switchgrass, o Big Bluestem, plus Birdsfoot trefoil Orchardgrass, or 13 Birdsfoot trefoil enn State, "Erosion Control and Conservation Plantings on Noncropland"

TABLE 11.4

- Penn State, Erosion Control and Conservation Plannings on Noncropland

 1. PLS is the product of the percentage of pure seed times percentage germination divided by 100. For example, to secure the actual planting rate for switchgrass, divide 12 pounds PLS shown on the seed tag. Thus, if the PLS content of a given seed lot is 35%, divide 12 PLS by C.35 to obtain 34.3 pounds of seed required to plant one acre. All mixtures in this table are shown in terms of PLS.

 2. If high-quality seed is used, for most sites seed spring oats at a rate of 2 bushels per acre, winter wheat at 11.5 bushels per acre, and winter rye at 1 bushel per acre. If germination is below 90%, increase these surgested speding rates by 0.5 bushels per acre.
- his mixture is suitable for frequent mowing. Do not cut shorter than 4 inches. 4. Keep seeding rate to that recommended in table. These species have many seeds per pound and are ver
- competitive. To seed small quantities of small seeds such as weeping lovegrass and redtop, dilute with dry sawdust, sand, rice hulls, buckwheat hulls, etc.

 Use for highway slopes and similar sites where the desired species after establishment is crownvetch. 6. Use only in extreme southeastern or extreme southwestern Pennsylvania. Serecia lespedeza is not well

TABLE Recommended Seed Mixtures fo		ing Disturbed Ar
Site Condition	Nurse Crop	Seed Mi (Select one
Slopes and Banks (not mowed)		,
Well-drained	1 plus	3, 5, 8, or 12 ¹
Variable drainage	1 plus	3 or 7
Slopes and Banks (mowed)		
Well-drained	1 plus	2 or 10
Slopes and Banks (grazed/hay)		
Well-drained	1 plus	2, 3, or 13
Gullies and Eroded Areas	1 plus	3, 5, 7, or 12 ¹
Erosion Control Facilities (BMPs)	· ·	
Sod waterways, spillways, frequent water flow areas	1 plus	2, 3, or 4
Drainage ditches		
Shallow, less than 3 feet deep	1 plus	2, 3, or 4
Deep, not mowed	1 plus	5 or 7
Pond banks, dikes, levees, dams, diversion channels,		
And occasional water flow areas		
Mowed areas	1 plus	2 or 3
Non-mowed areas	1 plus	5 or 7
For hay or silage on diversion channels and		
occasional water flow areas	1 plus	3 or 13
Highways ²		
Non-mowed areas		
Pure crownvetch ³	1 plus	5 or 6
Well-drained	1 plus	5, 7, 8, 9, or 10
Variable drained	1 plus	3 or 7
Poorly drained	1 plus	3 or 4
Areas mowed several times per year	1 plus	2, 3, or 10
Utility Right-of-way		
Well-drained	1 plus	5, 8, or 12 ¹
Variable drained	1 plus	3 or 7
Well-drained areas for grazing/hay	1 plus	2, 3, or 13
Effluent Disposal Areas	1 plus	3 or 4
Sanitary Landfills	1 plus	3, 5, 7, 11 ¹ , or 12 ¹
Surface mines		
Spoils, mine wastes, fly ash, slag, settling basin		
Residues and other severely disturbed areas	1 plus	3, 4, 5, 7, 8, 9, 11 ¹ ,
(lime to soil test)		
Severely disturbed areas for grazing/hay Penn State, "Erosion Control and Conservation Plantings of	1 plus	3 or 13

SUITABLE FOR FREQUENT MOWING DO NOT CUT SHORTER THAN 4 INCHES TABLE 11.2 SOIL AMENDMENT APPLICATION RATE EQUIVALENT PERMANENT SEEDING APPLICATION RATE 240 lb. 10-20-20 FERTILIZER 25 lb. 1,000 lb. 40 lb. 10-10-10 FERTILIZER 500 lb. 12.5 lb.

SPRING OATS (SPRING)
ANNUAL RYEGRASS (SPRING OR FALL)

APPROVED WINTER WHEAT (FALL)

WINTER RYE (FALL)

EQUAL) PLUS REDTOP
PERENNIAL RYEGRASS

Adapted from Penn State, "Erosion Control and Conservation Plantings on Noncroplan NOTES: A COMPOST BLANKET WHICH MEETS THE STANDARDS OF THIS CHAPTER MAY BE SUBSTITUTED FOR THE SOIL AMENDMENTS SHOWN IN THIS TABLE. SOIL TESTING IS RECOMMENDED IN ORDER TO DETERMINE APPROPRIATE LIME AND FERTILIZATION RATES.

SEEDING SPECIFICATIONS

TEMPORARY SEEDING (DURING CONSTRUCTION)

PERMANENT SEEDING FOR LAWN AREAS OUTSIDE OF BMP AREAS

BY WEIGHT APPLICATION RATE PURE LIVE SEED (PLS)

% BY WEIGHT APPLICATION RATE PURE LIVE SEED (PLS)

OR AS PER SOIL TEST; MAY NOT BE REQUIRED IN AGRICULTURAL FIELDS

100% 6-8 LBS PER 1000 S.F. 60 100% 4-5 LBS PER 1000 S.F. 35 80-90% 3-4 LBS PER 1000 S.F. 25

10-20% 2-5 LBS PER 1000 S.F.

2,480 lb.

210 lb.

410 lb.

100 lb.

100% 4-5 LBS PER 1000 S.F. 100% 4-5 LBS PER 1000 S.F. 100% 4-5 LBS PER 1000 S.F. 100% 4-5 LBS PER 1000 S.F.

TABLE 11.6 MULCH APPLICATION RATES MULCH TYPE PER ACRE PER 1,000 S.F. PER 1,000 S.Y. NOTES 1,240 lb. EITHER WHEAT OR OAT STRAW, FREE OF WEEDS, NOT CHOPPED OR FINELY BROKEN STRAW 140 lb. 140 lb. 1,240 lb. WOOD CHIPS 4-6 TONS 185-275 Ib. 1,650-2,500 Ib. OF GRASSES AND LEGUMES

2. POLYMERIC AND GUM TACKIFIERS MIXED AND APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS MAY BE USED TO TACK MULCH. AVOID APPLICATION DURING RAIN AND ON MINDY DAYS. A 24-HOUR CURING PERIOD AND A SOIL TEMPERATURE HIGHER THAN 45 DEGREE ARE TYPICALLY REQUIRED. APPLICATION SHOULD GENERALLY BE HEAVIEST AT EDGES OF SEEDER AREAS AND AT CRESTS OF RIDGES AND BANKS TO PREVENT LOSS BY WIND. THE REMAINDER OF THE AREA SHOULD HAVE BINDER APPLIED UNIFORMLY. BINDERS MAY BE APPLIED AFTER MULCH AS IT IS BEING BLOWN ONTO THE SOIL. APPLYING STRAW AND BINDER TOGETHER IS GENERALLY MORE EFFECTIVE.

4. MULCH ON SLOPES OF 8% OR STEEPER SHOULD BE HELD IN PLACE WITH NETTING. LIGHTWEIGHT PLASTIC, FIBER, OR PAPER NETS MAY BE STAPLED OVER THE MULCH ACCORDING TO MANIFECTURER'S RECOMMENDATIONS. S. Shredded Paper Hydromulch Should not be used on Slopes Steeper Than 5% Wood Fiber Hydromulch May be applied on Steeper Slopes Provided a Tackfier is used. The Application Rate for any Hydromulch Should be 2,000 Lb/Acre at a minimum.

TRENCH EXCAVATION NOTES:

. Trenches shall be backfilled above the original ground level to allow for settlement and to prevent runoff from following the trench line when backfill settles.

2. Apply soil supplements, seed and mulch as required.

UTILITY LINES WITH JOINTS:

. The total length of excavated trench open at any one time should not be greater than the total length of utility line that can be placed in the trench and backfilled 2. No more than 50 lineal feet of open trench should exist when utility line installation

ceases at the end of the work day. UTILITY LINES WITH WELDED JOINTS:

. Open trench operations should not exceed 30 calandar days. Longer time periods may be approved on a case—by—case basis where sufficient justification is provided. 2. The length of time should be the minimum necessary to efficiently excavate the trench, install the pipe, backfill the trench and begin stabilization of the disturbed

DATE

E&S DETAIL SHEET

JUNE 3, 2024

PLAN ORIGINATION DATE

COVENANT PRESBYTERIAN CHURCH OF HARLEYSVILLE

> LOWER SALFORD TOWNSHIP MONTGOMERY COUNTY, PENNSYLVANIA



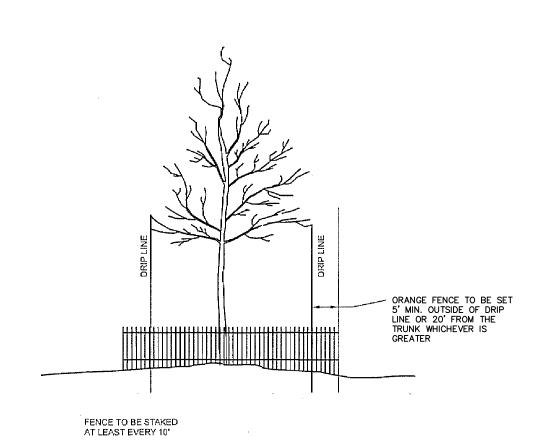
Engineering, Inc.

Civil Engineers • Land Surveyors

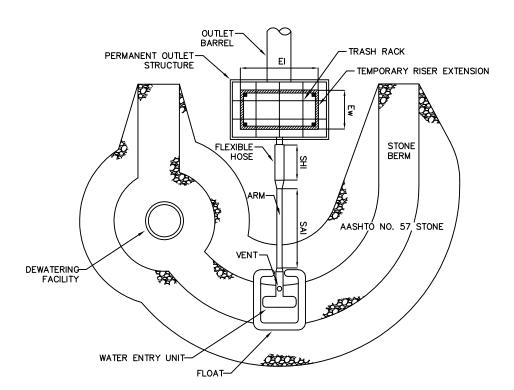
2499 KNIGHT ROAD, PENNSBURG, PA 18073 MAILING: P.O. BOX 87, RED HILL, PA 18076 PH: (215) 679-0200; www.stotac.com

PLAN SHEET NUMBER PROJECT MANAGER S.A.R. 6 of 12

PLAN SCALE ORIZONTAL: N.T.S. 2550 2550ES2023



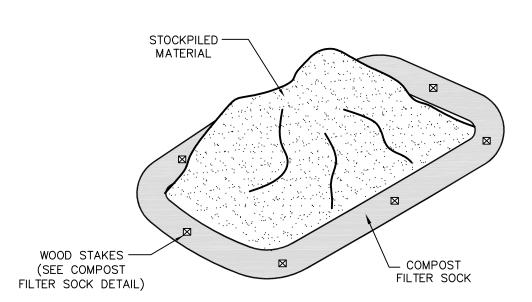
TREE PROTECTION DETAIL



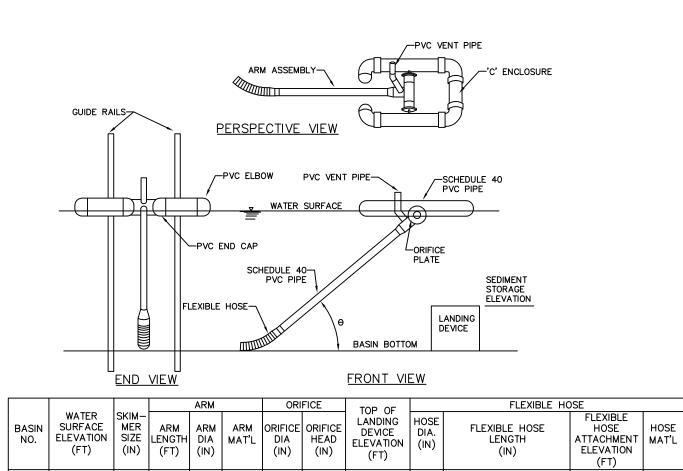
PLAN VIEW

NO GUIDE RAILS SHALL BE REQUIRED FOR THIS INSTALLATION. THIS DETAIL SHALL BE USED IN CONJUNCTION WITH STANDARD CONSTRUCTION DETAILS #7-2 AND #7-4.

> STANDARD CONSTRUCTION DETAIL #7-3 SKIMMER WITH STONE LANDING BERM NOT TO SCALE



STOCKPILE CONTROL



NOTES: ORIFICE DIAMETER MUST BE EQUAL TO OR LESS THAN ARM DIAMETER A ROPE SHALL BE ATTACHED TO THE SKIMMER ARM TO FACILITATE ACCESS TO THE SKIMMER ONCE INSTALLED.

250.45

SKIMMER SHALL BE MANUFACTURED BY: J.W. FAIRCLOTH & SON HILLS BOROUGH, NC 27278-0757 PH: (919) 732-1244

8 IN. OR AS SPECIFIED

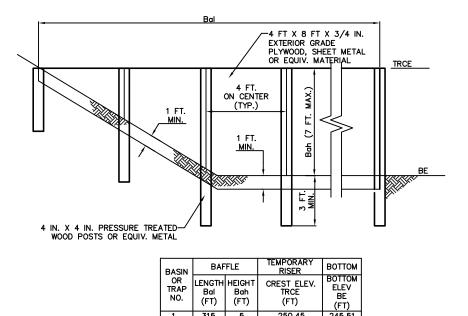
245.51

SKIMMER SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT.
ANY MALFUNCTIONING SKIMMER SHALL BE REPAIRED OR REPLACED WITHIN 24 HOURS OF INSPECTION. ICE OR SEDIMENT BUILDUP AROUND THE PRINCIPAL SPILLWAY SHALL BE REMOVED SO AS TO ALLOW THE SKIMMER TO RESPOND TO FLUCTUATING WATER ELEVATIONS. SEDIMENT SHALL BE REMOVED FROM THE BASIN WHEN IT REACHES THE LEVEL MARKED ON THE SEDIMENT CLEAN—OUT STAKE OR THE TOP OF THE LANDING DEVICE.

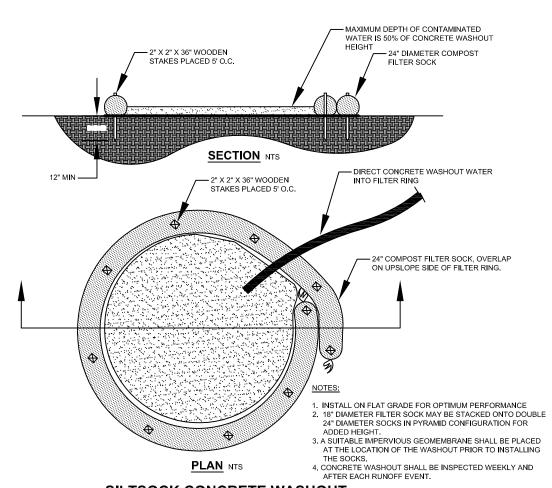
SKIMMER

247.00

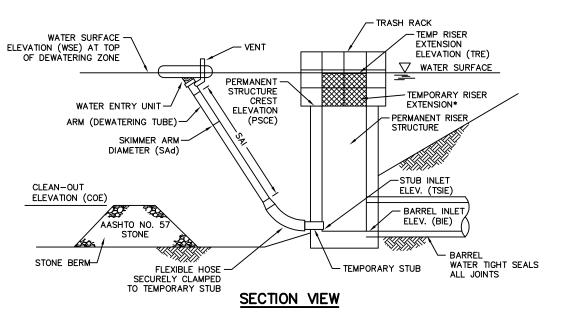
A SEMI-CIRCULAR LANDING ZONE MAY BE SUBSTITUTED FOR THE GUIDE RAILS (STANDARD CONSTRUCTION DETAIL # 7-3). STANDARD CONSTRUCTION DETAIL #7-1



NOTES: SEE APPROPRIATE BASIN DETAIL FOR PROPER LOCATION AND ORIENTATION. AN ACCEPTABLE ALTERNATIVE IS TO INSTALL A SUPER SILT FENCE AT THE BAFFLE LOCATION IN POOLS WITH DEPTHS EXCEEDING 7', THE TOP OF THE PLYWOOD BAFFLE DOES NOT NEED TO EXTEND TO THE TEMPORARY RISER CREST. SUPER SILT FENCE BAFFLES NEED NOT EXTEND TO TRCE ELEVATION. BAFFLES SHALL BE TIED INTO ONE SIDE OF THE BASIN UNLESS OTHERWISE SHOWN ON THE PLAN DRAWINGS. SUBSTITUTION OF MATERIALS NOT SPECIFIED IN THIS DETAIL SHALL BE APPROVED BY THE DEPARTMENT OR THE LOCAL CONSERVATION DISTRICT BEFORE INSTALLATION. DAMAGED OR WARPED BAFFLES SHALL BE REPLACED WITHIN 7 DAYS OF INSPECTION. BAFFLES REQUIRING SUPPORT POSTS SHALL NOT BE INSTALLED IN BASINS REQUIRING IMPERVIOUS LINERS. STANDARD CONSTRUCTION DETAIL #7-14 BAFFLE NOT TO SCALE



SILTSOCK CONCRETE WASHOUT

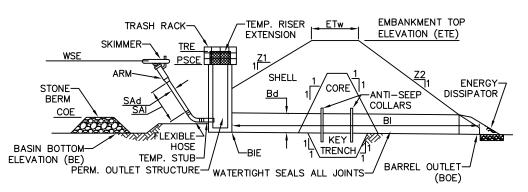


	WATER			SKIMMER							
	SURFACE	<u> </u>	ORIFICE	Ξ		ARM		FLE	EXIBLE H	OSE	
BASIN NO.	ELEV. WSE (FT)	DIA. (IN)	HEAD (FT)	MAT'L	DIA. SAd (IN)	LENGTH SAL (FT)	MAT'L	DIA. (IN)	LENGTH (IN)	MAT'L	
001 250.45 SEE STANDARD CONSTRUCTION DETAIL #7-1											
TFMI	PORARY	STUB		PFRI	JANFNT	RISER	RIS	ER EXT	NSION	BARRE	
	Luggiz aprimual Luggiz aprimual										
INSIDE DIA (IN)	ELEV TSIE (FT)	MAT'L	BASIN NO.	ELEV PSCE (FT)	LENGTI EI (IN)		- UNES			FIFV	

ALL POST-CONSTRUCTION ORIFICES ON PERMANENT RISER BELOW TEMPORARY RISER EXTENSION SHALL HAVE WATER-TICHT TEMPORARY SEALS PROVIDED. THE USE OF A STEEL PLATE AND WATERTICHT SEAL IS PREFERRED BUT MARINE GRADE PLYWOOD IS ALSO ACCEPTABLE. TEMPORARY STUB INVERT ELEVATION SHALL BE SET AT OR BELOW SEDIMENT CLEAN-OUT ELEVATION. A ROPE SHALL BE ATTACHED TO THE SKIMMER ARM TO FACILITATE ACCESS TO THE SKIMMER ONCE INSTALLED. SKIMMER SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT.
ANY MALFUNCTIONING SKIMMER SHALL BE REPAIRED OR REPLACED WITHIN 24 HOURS OF INSPECTION. ICE OR SEDIMENT BUILDUP AROUND THE PRINCIPAL SPILLWAY SHALL BE REMOVED SO AS TO ALLOW THE SKIMMER TO RESPOND TO FLUCTUATING WATER ELEVATIONS. SEDIMENT SHALL BE REMOVED FROM THE BASIN WHEN IT REACHES THE LEVEL MARKED ON THE SEDIMENT CLEAN—OUT STAKE OR THE TOP OF THE STONE BERM. SEE STANDARD CONSTRUCTION DETAIL #7-3 FOR CONFIGURATION OF STONE BERM.

3 245.51 PVC 001 250.45 48 24 N/A N/A N/A 245.27

STANDARD CONSTRUCTION DETAIL #7-2 SKIMMER ATTACHED TO PERMANENT RISER NOT TO SCALE



			TEMP RISER		EMBAN	KMENT		CLEAN OUT	воттом
BASIN NO.	Z1 (FT)	Z2 (FT)	EXT. ELEV TRE (FT)	TOP ELEV ETE (FT)	ELEV WIDTH TRENCH TRENCH ETE ETW DEPTH WIDTH		ELEV COE (FT)	ELEV BE (FT)	
001	3.0	3.0	N/A	252.25	10.0	3.0	8.0	247.00	245.51

		SKIMME	₹		OUTLET BARREL						
BASIN NO.	DIA SAd (IN)	LENGTH SAi (FT)	MAT'L	DIA Bd (IN)	INLET ELEV BIE (FT)	MAT'L	LENGTH BI (FT)	OUTLET ELEV BOE (FT)			
001	CC	SEE STANDARD CONSTRUCTION DETAIL #7-1		18	245.27	RCP	50	0.0094			

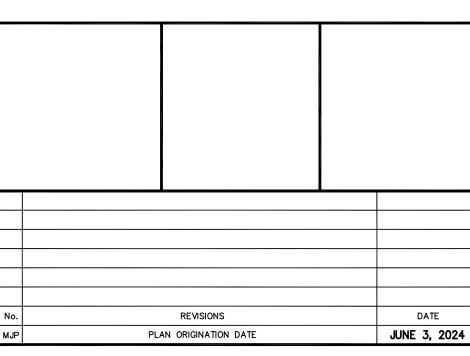
SEDIMENT BASINS, INCLUDING ALL APPURTENANT WORKS, SHALL BE CONSTRUCTED TO THE DETAIL AND AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO A DEPTH OF TWO FEET PRIOR TO ANY PLACEMENT AND COMPACTION OF EARTHEN FILL. IN ORDER TO FACILITATE MAINTENANCE AND RESTORATION, THE POOL AREA SHALL BE CLEARED OF ALL BRUSH, TREES, AND OBJECTIONABLE MATERIAL. FILL MATERIAL FOR THE EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN LAYERED LIFTS OF NOT MORE THAN 6 TO 9 IN. THE MAXIMUM ROCK SIZE SHALL BE NO

GREATER THAN 2/3 THE LIFT THICKNESS. UPON COMPLETION, THE EMBANKMENT SHALL BE SEEDED, MULCHED, BLANKETED OR OTHERWISE STABILIZED ACCORDING TO THE SPECIFICATIONS OF THE E&S PLAN DRAWINGS. TREES SHALL NOT BE PLANTED ON THE INSPECT ALL SEDIMENT BASINS ON AT LEAST A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. PROVIDE ACCESS FOR SEDIMENT REMOVAL AND OTHER REQUIRED MAINTENANCE ACTIVITIES. A CLEAN OUT STAKE SHALL BE PLACED NEAR THE CENTER OF EACH BASIN. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED THE CLEAN OUT ELEVATION ON THE STAKE AND THE BASIN RESTORED TO ITS ORIGINAL DIMENSIONS. DISPOSE OF MATERIALS REMOVED FROM THE BASIN IN THE MANNER DESCRIBED IN THE E&S PLAN. BASIN EMBANKMENTS, SPILLWAYS, AND OUTLETS SHALL BE INSPECTED FOR EROSION, PIPING AND SETTLEMENT. NECESSARY REPAIRS SHALL BE IMMEDIATELY. DISPLACED RIPRAP WITHIN THE OUTLET ENERGY DISSIPATER SHALL BE REPLACED IMMEDIATELY.

ANY ACCUMULATED SEDIMENT REMOVED FROM THE SEDIMENT BASIN DURING SOIL REMEDIATION PROCEDURES SHALL BE TESTED TO ENSURE THE SEDIMENT IS FREE OF POLLUTANTS. IF POLLUTANTS ARE FOUND, THE SEDIMENT SHALL BE TRANSPORTED OFF—SITE TO AN APPROVED FACILITY.

ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISTURBED AREAS SHALL BE STABILIZED INSIDE THE BASIN BEFORE CONVERSION TO A STORMWATER MANAGEMENT FACILITY. THE DEVICE SHOWN IN STANDARD CONSTRUCTION DETAIL #7-16 MAY BE USED TO DEWATER SATURATED SEDIMENT PRIOR TO ITS REMOVAL. ROCK FILTERS SHALL BE ADDED AS NECESSARY.

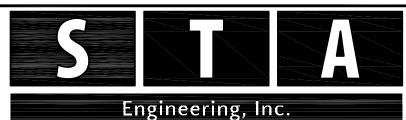
STANDARD CONSTRUCTION DETAIL #7-4 SEDIMENT BASIN EMBANKMENT AND SPILLWAY DETAILS - SKIMMER NOT TO SCALE



E&S DETAIL SHEET

COVENANT PRESBYTERIAN CHURCH OF HARLEYSVILLE

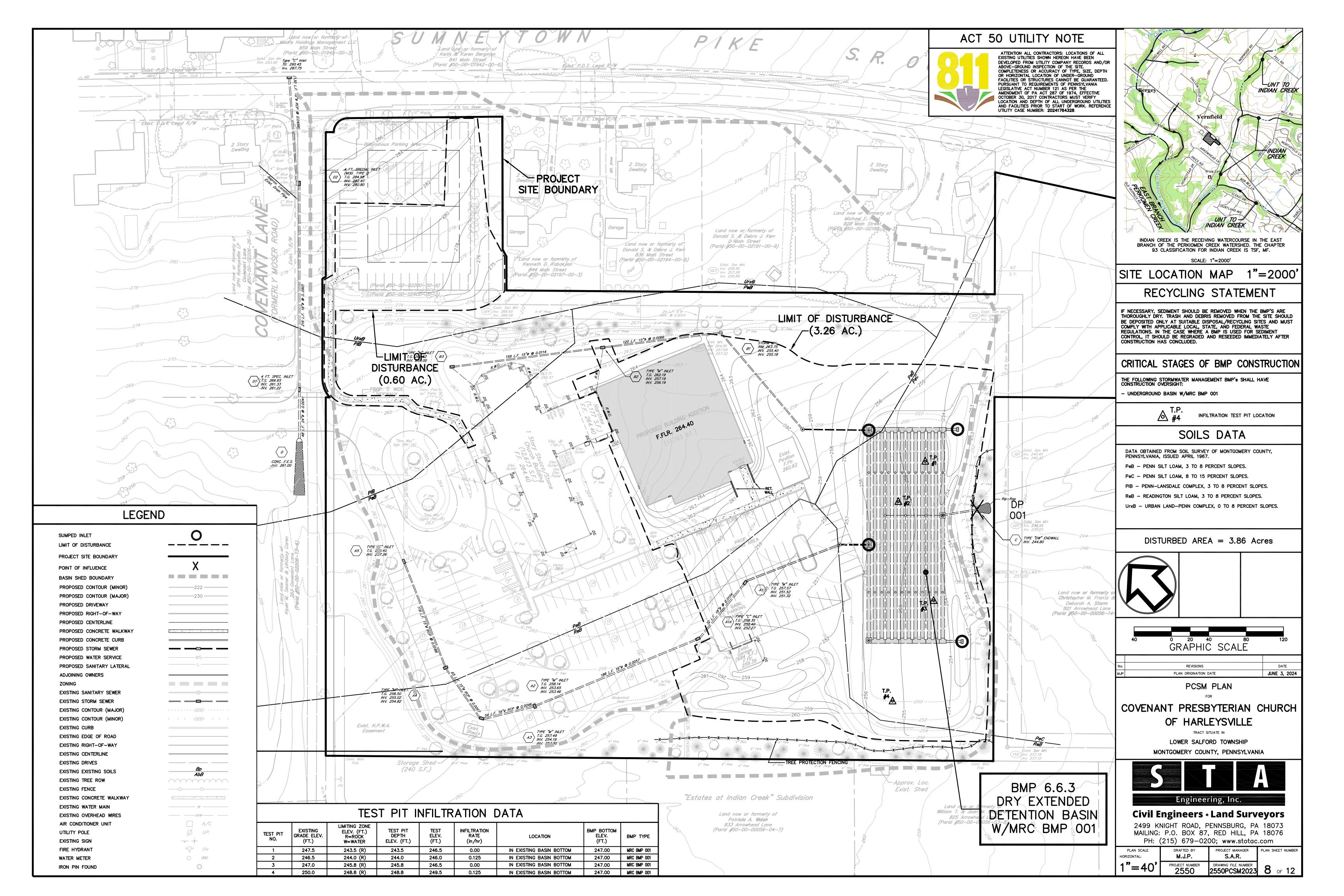
> TRACT SITUATE IN LOWER SALFORD TOWNSHIP MONTGOMERY COUNTY, PENNSYLVANIA



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management facility before leaving the site in order to minimize the potential for thermal

impacts upon the receiving watercourses. Stormwater runoff will be filtered in the facility before being discharged into an existing 30 feet wide drainage easement with vegetated channel, which

allows the runoff to have additional time to cool before reaching the existing surface waters.

conditions of this permit and the approved E&S and PCSM plans. Completion certificates are needed to ensure that all work is performed in accordance with the terms and conditions of the permit and approved E&S and PCSM plans.

ANY SEDIMENT CONTROL, SUCH AS COMPOST FILTER SOCK, ROCK FILTER, OR INLET FILTER MUST NOT BE REMOVED UNTIL ALL VEGETATION (UPSTREAM OF THAT PARTICULAR CONTROL) HAS BEEN RE-ESTABLISHED.

ANY AREA (S) DISTURBED DURING THE REMOVAL OF SEDIMENT CONTROLS SHALL BE IMMEDIATELY RE—STABILIZED

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M.J.P.

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HORIZONTAL:

PROJECT MANAGER

S.A.R.

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