GROUNDWATER RECHARGE PIT VOLUME DESIGN CALCULATIONS

1. ROOF AREA FLOWING TO PIT: 2,317 S.F.

- 2. ALL RUNOFF FROM ROOF AREAS SHALL BE DIRECTED TO PITS. 3. 3.00 INCHES OF STORMWATER DURING THE STORM PER
- SQUARE FOOT ROOF AREA. 4. (3.00) X ($\frac{1 \text{ FT.}}{12 \text{ IN.}}$) X (2,317 SQ.FT.) = 580 CU.FT.
- 5. STONE PITS HAVE A 40% VOID RATIO. GROSS VOLUME NEEDED IS VOID VOLUME/40% 580/0.40 = 1,450 CU.FT. NEEDED 20' WIDE X 38' LONG X 2.0' DEEP DRYWELL PIT (1,520 CU.FT.)

NOTES:

1. UTILIZE SECTION OF CONCRETE PIPE, CONCRETE TANK EXTENSION, OR OTHER SUITABLE PRECAST STRUCTURE 2. PLACE APPROPRIATE STEEL OR CAST IRON GRATE OVER CLEANOUT STRUCTURE. 3. MAINTAIN MINIMUM 1' COVER OVER RECHARGE PIT STONE. . TRY TO MAINTAIN MINIMUM SEPARATIONS AS FOLLOWS: A. CLEANOUT STRUCTURE FROM FOUNDATION WALL - 10' B. RECHARGE PIT FROM FOUNDATION WALL - 100' (UPSLOPE, 10' DOWNSLOPE) C. RECHARGE PIT FROM SEWAGE DRAIN FIELD - 50' 5. DO NOT CONSTRUCT THE RECHARGE PIT UPSLOPE OF DWELLING OR SEWAGE DRAIN FIELD.
6. DO NOT SMEAR OR COMPACT BOTTOM OR SIDES OF EXCAVATION.
7. THE INDIVIDUAL LOT OWNER IS RESPONSIBLE FOR THE PROPER OPERATION AND MAINTENANCE OF THE STORMWATER RECHARGE PIT(S) ON HIS OR HER LOT IN PERPETUITY. THE INDIVIDUAL LOT OWNER SHALL INSPECT, CLEAN, REMOVE SILT OR OTHER DEBRIS AND OTHERWISE MAINTAIN THE CLEANOUT STRUCTURE(S) AND RECHARGE PIT(S) IN PROPER WORKING ORDER. 8. THE SEEPAGE PIT SIZING CALCULATIONS MUST BE BASED ON 3.00" OF RAIN OVER THE ENTIRE ROOF AREA. 6x4 WYE CLEANOUT W/ GRATE AT EACH DOWNSPOUT TO ALLOW FOR DEBRIS REMOVAL, -MANIFOLD INTO MULTIPLE DISTRIBUTION PIPES AS REQUIRED BY WIDTH OF PIT - GRATE COVER SURCHARGE PIPE~ FILTER FABRIC -1/4" SCREEN DIMENSIONS PER APPROVED DRAINAGE ANALYSIS)

INFILTRATION BED DETAIL

─OPEN FLOOR

CLEANOUT

STRUCTURE

NOT TO SCALE

FILTER FABRIC

INFILTRATION BED

POST CONSTRUCTION STORMWATER MANAGEMENT BMP NOTES

AASHTO NO. 67

1. THE FOLLOWING STAGES MUST BE OBSERVED BY A LICENSED PROFESSIONAL AS DEFINED BY PADEP REGULATIONS: CONSTRUCTION OF DRYWELLS/INFILTRATION PITS.

2. IT SHALL BE THE RESPONSIBILITY OF THE LOT OWNER FOR THE OPERATION AND MAINTENANCE OF ALL BMPs (DRYWELL/INFILTRATION PIT), SHOULD THE BMP FAIL ROUTINE INSPECTIONS, IT IS THE RESPONSIBILITY OF THE LOT OWNER TO HAVE THE SYSTEM REPAIRED BY A PROFESSIONAL QUALIFIED FOR SUCH REPAIRS. ROUTINE INSPECTIONS/MAINTENANCE SHALL BE PERFORMED EVERY THREE (3) MONTHS AND CONSIST OF: EVALUATING DRAW DOWN TIME TO ENSURE A MAXIMUM OF 72 HOURS. CLEANING OF DEBRIS FROM THE COLLECTION SYSTEM AND CLEANOUT STRUCTURE, AND ENSURING THE ROOF LEADERS ARE CONNECTED TO THE COLLECTION SYSTEM.

3. INSPECT THE DRYWELL/INFILTRATION PIT AT LEAST FOUR (4) TIMES PER YEAR AS WELL AS AFTER EVERY STORM EVENT EXCEEDING 3 INCHES.

4. DISPOSE OF SEDIMENT, DEBRIS, TRASH AND OTHER WASTE MATERIAL REMOVED FROM THE COLLECTION SYSTEM AT SUITABLE DISPOSAL/RECYCLING SITES AND IN COMPLIANCE WITH LOCAL, STATE AND FEDERAL

5. EVALUATE THE DRAW DOWN TIME TO ENSURE THE MAXIMUM TIME IS 72 HOURS. IF THE DRAW DOWN TIME EXCEEDS 72 HOURS, DRAIN THE ENTIRE SYSTEM VIA PUMPING AND CLEAN OUT THE PERFORATED PIPING. IF SLOW DRAINAGE PERSISTS, THE SYSTEM MAY NEED REPLACING.

6. REGULARLY CLEAN THE GUTTERS AND THE CLEANOUT STRUCTURE AND ENSURE PROPER CONNECTIONS TO FACILITATE THE EFFECTIVENESS OF THE DRYWELL/INFILTRATION PIT.

SOILS LEGEND

THE NORTHAMPTON COUNTY SOIL SURVEY (1974) INDICATES THAT THE PROJECT LIES WITHIN CONESTOGA SOILS. THE SOIL TYPE THAT WILL BE ENCOUNTERED DURING THIS PROJECT ARE DESCRIBED BELOW: CoC - THIS SERIES IS A SILT LOAM SOIL AND HAS SLOPES RANGING FROM 8% TO 15%. THIS SOIL DOES NOT CONTAIN HYDRIC COMPONENTS. THIS SOIL IS MODERATELY SHALLOW.

EXCAVATION NOTE:

ALL SPOILS FROM THIS SITE ARE TO BE HAULED OFF TO AN APPROVED NPDES SITE BY THE CONTRACTOR.

CALL BEFORE YOU DIG! PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL Pennsylvania One Call System, Inc.

1-800-242-1776

SLANTED TEXT DENOTES EXISTING CONDITIONS VERTICAL TEXT DENOTES PROPOSED CONDITIONS

E&SPC LEGEND

SS = FILTER BAG INLET PROTECTION CWO = CONCRETE WASHOUT CFS = COMPOST FILTER SOCK JM = JUTE MATTING
RCE = ROCK CONSTRUCTION ENTRANCE TS = TOPSOIL STOCKPILE RF = ROCK FILTER OUTLET --820-- EXISTING CONTOUR

PROPOSED CONTOUR __ LC _ LC = LIMIT OF CONSTRUCTION

EQUITABLE OWNER/BUILDER

RANDALL HOFFMAN, MEMBER R & S HOFFMAN BUILDERS, LLC 6203 SADDLE ROAD NEW TRIPOLI, PA 18066 484-239-4452



LOCATION MAP SCALE: 1" = 1,500'
(SOURCE: CITY OF BETHLEHEM ZONING MAP)

SITE DATA

MIN. SIDE YARD __

MIN. REAR YARD _

MAX. BUILDING HEIGHT_

MAX. BUILDING COVERAGE___

TOTAL AREA30,828 TAX MAP DEED REFERENCE ZONING DISTRICT SEWER	_ M6SE1-2-14E _2019-1,033804 RR PUBLIC
SEWER WATER	

ZONING REQUIREMENTS <u>REQUIRED</u> ZONED: RR <u>PROVIDED</u> 15,000 S.F. MIN. LOT AREA _ 30,828 S.F. MIN. LOT WIDTH _ 87.77 FT. MIN. FRONT YARD _

33.6 FT. 21.7/36.5 FT. 151.8 FT. _40 FT <35 FT. 7.5 % MAX. IMPERVIOUS COVERAGE ______ 50 % 12.7 %

IMPERVIOUS COVERAGE ANALYSIS

PROPOSED (TO BE CONSTRUCTED) DRIVEWAY (MACADAM) - 1,384 S.F. DWELLING/PORCH - 2,317 S.F.

1. SITE IS CURRENTLY VACANT AND OPEN LAWN. NO TREES WITHIN THE CONSTRUCTION LIMITS ARE TO BE REMOVED.

2. IMPERVIOUS COVERAGE ANALYSIS:

(SEE SEPARATE CHART, THIS PAGE)

3. THE PROPOSED DRIVEWAY SHALL BE SLOPED TO PROVIDE MAXIMUM GROUNDWATER

RECHARGE. STORMWATER SHALL NOT BE DIRECTED ONTO THE EXISTING PRIVATE DRIVEWAY. . STORMWATER SHALL NOT BE DIRECTED IN CONCENTRATED FORMS OFF-SITE.

5. THERE ARE NO EXISTING PUBLIC WELLS ON THIS SITE. THERE ARE NO WELLS WITHIN 100' OF THIS SITE. 6. TOTAL DISTURBED AREA: 13,740 S.F. (0.3154 AC.)

7. EXISTING INFORMATION IS PLOTTED FROM THE SUBDIVISION PLAN "THE ESTATES AT PINE TOP RIDGE" RECORDED IN VOL. 2000-5, PG 000330.

8. ANY FILL BEING UTILIZED FOR CONSTRUCTION ON THIS SITE SHALL BE OBTAINED FROM

A SITE THAT HAS AN APPROVED E&SPC PLAN. 9. NO CONSTRUCTION IS ANTICIPATED OR PROPOSED BEYOND THE LIMITS

WITH THIS LOT GRADING PLAN. 10. THE CONTOURS SHOWN HEREON HAVE BEEN RETRIEVED FROM THE P.A.S.D.A. WEBSITE AND ARE LIDAR-BASED WITH DETAILED SURVEY WORK AND SPOT CHECKS MADE DURING THE SURVEY IN AREAS OF PROPOSED

CONSTRUCTION. ELEVATIONS ARE REFERENCED TO NAVD 88 (2011).

11. THIS SURVEY AND PLAN HAVE BEEN PREPARED WITHOUT THE BENEFIT OF A TITLE SEARCH AND TITLE REPORT AND ARE THEREFORE SUBJECT TO ANY EASEMENTS OR OTHER PERTINENT FACTS WHICH SUCH MIGHT DISCLOSE.

12. ALL EXISTING DEVELOPED ADJOINING LOTS ARE SERVICED BY PUBLIC WATER. 13. THE FOUNDATION DRAIN SHALL BE DISCHARGED AT-GRADE

14. THE BEARINGS SHOWN HEREON ARE BASED ON PA STATE PLANE COORDINATES, SOUTH ZONE 3702.

15. CONSTRUCTION IS ANTICIPATED TO COMMENCE SUMMER, 2021 AND LAST SIX (6) MONTHS.

16. AS OF THE DATE OF THE FIELD SURVEY, NONE OF THE FOLLOWING FEATURES WERE SEEN ON THIS PARCEL: WATERCOURSES, PONDS, LAKES, VERNAL PONDS, AND WETLANDS.

DENOTES EXISTING TREE 8" OR LARGER IN DIAMETER PROPOSED TO BE REMOVED (NONE)

SEE SHEET #2 FOR E&SPC DETAILS

SHEET 1 OF 2

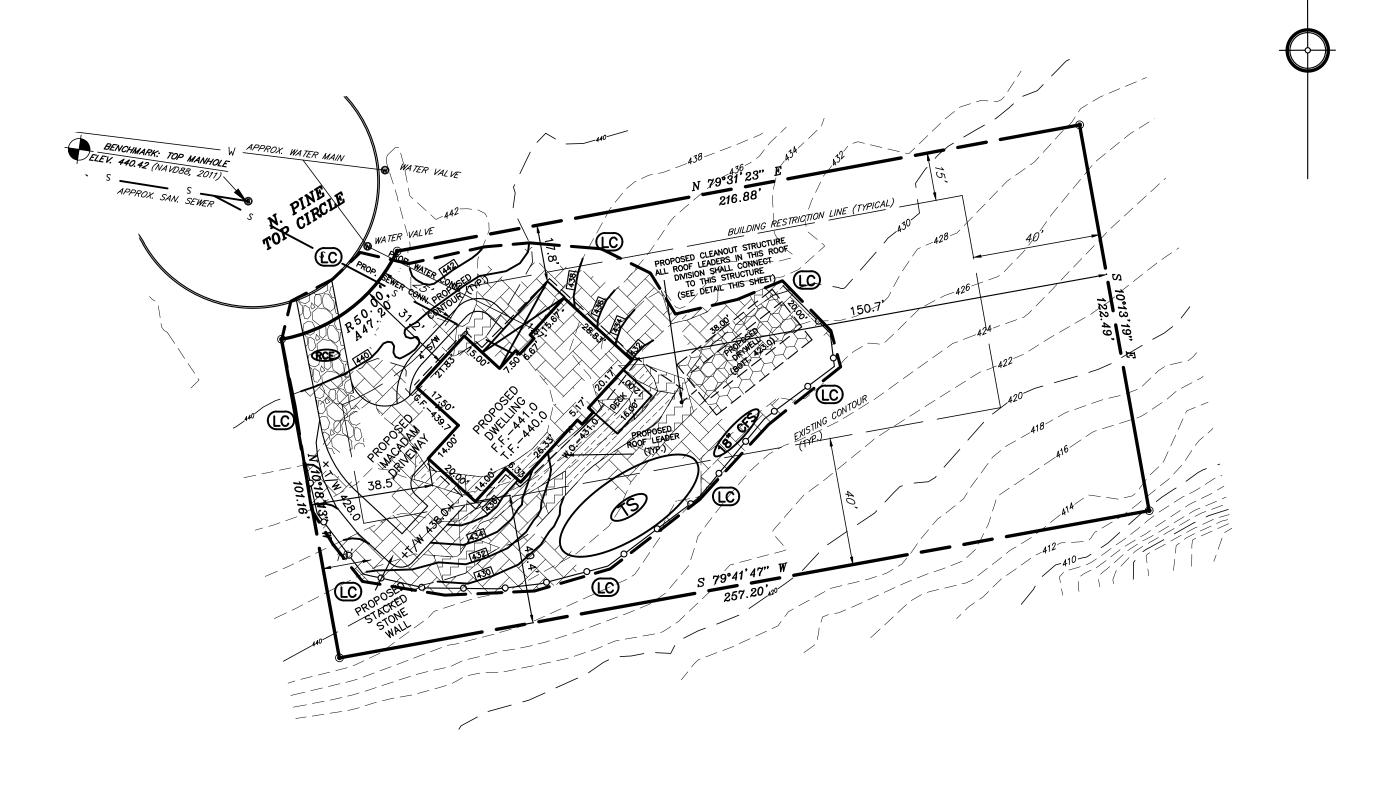
PLOT PLAN, GRADING & EROSION & SEDIMENT POLLUTION CONTROL PLAN

LOT 4, THE ESTATES AT PINE TOP RIDGE 468 N. PINE TOP CIRCLE

CITY OF BETHLEHEM NORTHAMPTON COUNTY, PENNSYLVANIA

SCALE: AS NOTED DATE: MARCH 21, 2021

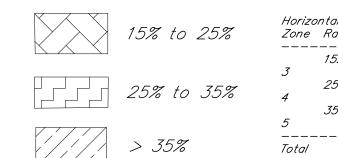
BASCOM & SIEGER, INC., LAND SURVEYORS - SINCE 1854 116 N. FIFTH ST. ALLENTOWN, PA 18102-4108 610-770-0888



SLOPE INFORMATION NOTE

IN ACCORDANCE WITH ARTICLE 1316-STEEP SLOPES OF THE CITY OF BETHLEHEM ZONING ORDINANCE, THE FOLLOWING DESIGNATIONS DENOTE THE AREA OF SLOPE WITHIN THE PROPOSED LIMITS OF DISTURBANCE. THE MAXIMUM SLOPE LIMITS ARE SHADED IN ACCORDANCE WITH THE IDENTIFICATIONS BELOW.

SLOPE LEGEND



	ntal Surface Range	Slope Area S.F.	Surface Acres	% of Area S.F.	Average Acres	Total	Slope %
3	15.00%	5,659.4	0.130	5, 753.9	0.132	41.3	18.2
4	25.00% 35.00%	695.8	0.016	725.0	0.017	5.1	29.1
5	33.00%	1,027.0	0.024	1,134.1	0.026	7.5	46.2
Total		7,382.2	0.170	7,613.0	0.175		

SCALE: 1" = 30'

PERMANENT SEEDING SPECIFICATIONS

<u>PERMANENT SEEDING</u> — IMMEDIATELY UPON FINAL GRADING OF ANY PHASE OR SECTION, TOPSOIL SHALL BE BROUGHT BACK OVER THE DISTURBED AREAS WHICH ARE NOT TO BE PAVED OR BUILT UPON. THIS TOPSOIL SHALL BE SPREAD TO A SMOOTH FINISH GRADE WITH A MINIMUM DEPTH OF FOUR (4) INCHES. THE TOPSOIL SHALL THEN BE:

LIMED AND FERTILIZED AS NECESSARY:

PLANTED WITH GRASS OR OTHER SPECIFIED SEED, AND D. MULCHED TO PROTECT THE SEED FROM DRYNESS AND EROSION. (STRAW OR HAY AT 1200 LB. PER 1000 SQ. YDS.)

PERMANENT SEEDING SHALL BE UNDERTAKEN IN ACCORDANCE WITH PENNDOT FORM 408 SPECIFICATIONS AS FOLLOWS:

A. FORMULA "B"- PRIMARILY KENTUCKY BLUEGRASS & CREEPING RED OR CHEWINGS FESCUE, SPREAD AT A SEEDING RATE OF 21 LB. PER 1000 SQ. YDS. SPREAD FORMULA "B" FROM MARCH 15 TO JUNE 1 OR FROM AUGUST 1 TO OCTOBER 15. B. FORMULA "C"— CROWNVETCH AND ANNUAL RYEGRASS (45% — 55%) SPREAD AT A RATE OF 9.0 LB. PER 1000 SQ. YDS. ON ALL SLOPES 2 HORIZONTAL TO 1 VERTICAL OR STEEPER. SPREAD FORMULA "C" RYEGRASS PORTION FROM MARCH 1 TO OCTOBER 15 AND CROWNVETCH PORTION ANYTIME EXCEPT SEPTEMBER AND OCTOBER. C. ALTERNATE SEED MIXES, BASED ON SECTION IX OF THE "PENN STATE AGRONOMY GUIDE",

MAY BE USED ONLY IF APPROVED IN WRITING IN ADVANCE OF PLACEMENT.

NOTE: SLURRY APPLICATIONS MUST INCLUDE A STRAW MULCH BINDER AT A RATE OF 3.0 TONS PER ACRE.

- LIME AND FERTILIZER SPECIFICATIONS PERMANENT SEEDING -
- -PULVERIZED AGR. LIMESTONE- 800 LBS. PER ACRE -10-20-20 ANALYSIS COMMERCIAL- 140 LBS. PER 1,000 S.Y.
- -38-0-0 UREAFORM FERTILIZER- 50 LBS. PER 1,000 S.Y. - 32-0-0 SULFER- 59 TO 50 LBS. PER 1,000 S.Y.
- COATED UREA FERTILIZER

- 31-0-0 IBDUFERTILIZER- 61 LBS. PER 1,000 S.Y.

MULCHED TO PROTECT THE SEED FROM DRYNESS AND EROSION. (STRAW OR HAY AT 200 LB. PER 1000 SQ. YDS.)

TEMPORARY STABILIZATION

THE CONTRACTOR SHALL FOLLOW THE PENN STATE AGRONOMY GUIDE -EROSION CONTROL & CONSERVATION PLANTING ON NON-CROPLAND FOR SEEDING AND MULCHING AREAS OF DISTURBANCE.

TEMPORARY COVER FOR EROSION CONTROL ON CONSTRUCTION SITES AND OTHER SEDIMENT-PRODUCING AREAS WHERE ADDITIONAL SOIL DISTURBANCE IS ANTICIPATED.

MULCHING: MULCHES ALONE HELP PROTECT AREAS FROM EROSION. MULCHES ALSO PROVIDE INITIAL PROTECTION IF AREA IS TO BE SEEDED LATER. USE HAY OR STRAW AT A RATE OF 3 TONS PER ACRE. SEE INFORMATION UNDER "MULCHING." FOR INFORMATION ON OTHER SUITABLE MULCHING MATERIALS, CONTACT THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION DISTRICT ROADSIDE SPECIALIST.

SITE PREPARATION: APPLY 1 TON OF AGRICULTURAL-GRADE LIMESTONE PER ACRE, PLUS FERTILIZER AT THE RATE OF 50-50-50 PER ACRE, AND WORK IN WHERE POSSIBLE. SECURE A SOIL TEST BEFORE MAKING A PERMANENT SEEDING. AFTER SEEDING, MULCH WITH HAY OR STRAW AT A RATE OF 3 TONS PER ACRE

<u>SPECIES</u>	<u>LB/A</u>
FOR SPRING SEEDING (UP TO JUNE 15)	
ANNUAL RYEGRASS	40
OR SPRING OATS,	96 (3 BU)
OR SPRING OATS PLUS RYEGRASS,	64 OATS (2 BU) PLUS
20 LB ANNUAL OR	
PERENNIAL RYEGRASS	
OR WINTER WHEAT,	180 (3 BU)
OR WINTER RYE	168 (3 BU)
FOR LATE SPRING AND SUMMER SEEDING	$\hat{\zeta}$

(JUNE 16 TO AUGUST 15) ANNUAL RYEGRASS, OR JAPANESE OR FOXTAIL MILLET, OR SUDANGRASS, OR SPRING OATS, 96 (3 BU) OR WINTER WHEAT 180 (3 BU)

OR WINTER RYE 168 (3 BU) FOR LATE SUMMER AND FALL SEEDING (AUGUST 16 AND LATER) ANNUAL RYEGRASS,

OR WINTER RYE. 168 (3 BU) OR WINTER WHEAT, 180 (3 BU) OR SPRING OATS (CAN BE USED BUT WINTER KILLS) 96 (3 BU)

ENVIRONMENTAL DUE DILIGENCE

ENVIRONMENTAL DUE DILIGENCE INCLUDES THE INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS.

ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL ME HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEP POLICY "MANAGEMENT OF FILL"

FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE DEP MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25Pa. CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE.

MAINTENANCE PROGRAM

PROPER IMPLEMENTATION OF THIS PLAN REQUIRES MAINTENANCE OF THE PROPOSED ESC MEASURES, AS FOLLOWS, UNLESS MORE STRINGENT REQUIREMENTS ARE DISCUSSED ON THE LAND DEVELOPMENT PLANS. ROCK CONSTRUCTION ENTRANCE — THE STRUCTURE'S THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSION BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL MUST BE MAINTAINED ON THE SITE FOR THIS PURPOSE. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PUBLIC ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE.

COMPOST FILTER SOCKS — SEDIMENT MUST BE REMOVED WHERE ACCUMULATIONS REACH ½ THE ABOVE GROUND HEIGHT OF THE STRUCTURE. REPAIR ALL UNDERCUTTING OR EROSION OF THE TOE ANCHOR IMMEDIATELY WITH COMPACTED BACKFILL MATERIALS. ANY COMPOST FILTER SOCKS WHICH HAVE BEEN UNDERMINED OR TOPPED, MUST BE REPAIRED BY THE END OF THE WORK DAY. SEDIMENT DEPOSITS MUST SPREAD ACROSS THE SITE AS FILL, WHEN SUITABLE OR TRANSPORTED OFF-SITE FOR PROPER

TEMPORARY STABILIZATION — ANY DISTURBED AREA ON WHICH ACTIVITY HAS CEASED FOR 4 DAYS SHALL BE STABILIZED. DURING NON—GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE RECOMMENDED RATES.

UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION CONTROLS MUST BE MAINTAINED. MAINTENANCE MUST INCLUDE INSPECTION OF ALL ESC MEASURES AFTER EACH RUNOFF EVENT AND ON A MINIMUM OF A WEEKLY BASIS. ALL PREVENTION AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, RE-GRADING, RESEEDING, AND RE-MULCHING, MUST BE PERFORMED WITHIN 24 HOURS OF OBSERVANCE. SHOULD ANY MEASURES CONTAINED WITHIN THIS PLAN PROVE INCAPABLE OF ADEQUATELY REMOVING SEDIMENT FROM ON-SITE FLOWS PRIOR TO DISCHARGE, OR OF STABILIZING THE SURFACES INVOLVED, ADDITIONAL MEASURES MUST BE IMPLEMENTED TO ELIMINATE ALL SUCH PROBLEMS.

SOIL LIMITATION RESOLUTIONS

EXCAVATION SHALL BE DEWATERED AS NECESSARY USING DESILTING BAGS ON STRAW BALE STRUCTURE TO MINIMIZE EROSION AND SEDIMENTATION OUTSIDE THE PROJECT THE DOWN SLOPE SIDE OF THE DEWATERING SITES WILL BE PROTECTED WITH SILTSOXX AND LOCATED AN AMPLE DISTANCE FROM DRAINAGE CHANNELS TO ALLOW FOR NATURAL FILTERING OF THE WATER BY THE EXISTING VEGETATION.

THE CAVING IN OF STEEP EXCAVATION SIDE SLOPES IS ANTICIPATED DUE TO THE PERCENTAGE OF SAND AND SILT THAT COMPRISES THE SOILS WITHIN THE PROJECT AREA. TRENCH BOXES AND SLOPING-BACK OF THE TRENCH WALLS WILL BE PERFORMED AT THE DISCRETION OF THE CONTRACTOR IN ACCORDANCE WITH OSHA REGULATIONS.

CORROSIVE SOILS MAY BE PRESENT WITHIN THE PROPOSED WORK AREA. A SOIL TEST TO DETERMINE THE RESISTIVITY SHOULD BE CONDUCTED PRIOR TO CONSTRUCTION. A CATHODIC PROTECTION SYSTEM WILL BE USED ON THE PIPELINES TO SLOW THE CORROSION PROCESS.

HE RIGHT-OF-WAY AND TEMPORARY WORKSPACE WILL BE TEMPORARILY GRADED, OR TWO-TONED, IN ORDER TO ALLOW TYPICAL TRENCHING. THIS WAS CONSIDERED WHEN DETERMINING THE SIZE AND ORIENTATION OF THE TEMPORARY WORKSPACE.

SEQUENCE OF CONSTRUCTION

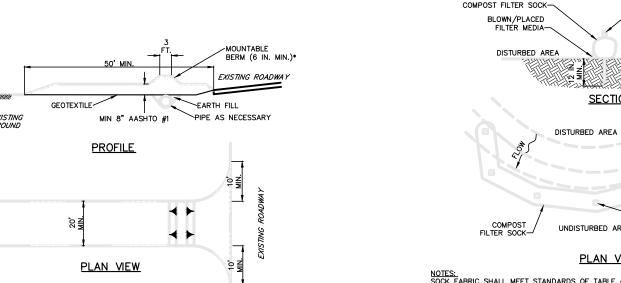
THE FOLLOWING SEQUENCE OF CONSTRUCTION WAS PREPARED TO MINIMIZE EXTENT AND DURATION OF EARTH DISTURBANCES. THE CONTRACTOR MUST ADHERE TO THE FOLLOWING SEQUENCE. CONSTRUCTION IS TO COMMENCE IN SUMMER, 2021. C.O.B. MUST BE NOTIFIED 3 DAYS PRIOR TO EARTHMOVING ACTIVITIES. AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL PROVIDE NOTICE IN WRITING TO MI THAT EARTH DISTURBANCE ACTIVITIES WILL BE COMMENCING. CALL BEFORE YOU DIG - 1-800-242-1776 (PA ONE CALL).

STAKEOUT THE LIMIT OF DISTURBANCE/LIMIT OF CONSTRUCTION AS SHOWN HEREON PRIOR TO ANY SITE DISTURBANCE. ALL EROSION AND SEDIMENTATION CONTROLS MUST BE CONSTRUCTED, STABILIZED

REMOVE TOPSOIL FROM AREA OF DRIVEWAY ENTRANCE AND INSTALL ROCK CONSTRUCTION ENTRANCE (RCE). STONES, MUD, DIRT AND/OR CONSTRUCTION DEBRIS MUST BE REMOVED FROM AL. ROADWAYS AND DRIVEWAYS IMMEDIATELY UPON OBSERVATION BY THE CONTRACTOR. UNDER NO CIRCUMSTANCES WILL STONES, MUD, DEBRIS, ETC. BE ALLOWED TO REMAIN ON ROAD SURFACES FOR ANY PERIOD OF TIME. IT IS THE CONTRACTOR'S RESPONSIBILITY TO TAKE ANY ACTIONS NECESSARY TO REMOVE ANY AND ALL OF THESE ITEMS FROM ROAD SURFACES IMMEDIATELY UPON NOTICE, OR UPON BEING DIRECTED TO DO SO, REGARDLESS OF WHETHER OR NOT CONTRACTOR BELIEVES IT IS HIS RESPONSIBILITY. FAILURE TO COMPLY WITH THIS REQUIREMENT IS A NOLATION AND COULD RESULT IN WORK
STOPPAGE, PENALTIES, VIOLATION NOTICES OR OTHER REMEDIES. INSTALL TEMPORARY EROSION AND SEDIMENT POLLUTION CONTROL FACILITIES AT DRIVEWAY ENTRANCE. NO CONSTRUCTION EQUIPMENT MAY
LEAVE THE SITE PRIOR TO THE INSTALLATION OF THE ROCK CONSTRUCTION ENTRANCE. IF REQUIRED, PARK EQUIPMENT ON EXISTING FIELD. INSTALL FILTER COMPOST FILTER SOCKS AS SHOWN & STABILIZE. 3. INSTALL EROSION & SEDIMENT CONTROL BMP'S AS SHOWN ON PLAN. BMP'S INCLUDE COMPOST FILTER SOCK (CFS), CONCRETE WASHOUT (CWO), ETC.

- THE CONTRACTOR SHALL NOT DISTURB AREAS, INCLUDING GRADING AND TREE—CLEARING, OTHER THAN WHAT IS NECESSARY FOR THE CONSTRUCTION OF THE HOUSE, DRIVEWAY AND GARAGE. THI CONTRACTOR SHALL NOT COMPACT SOILS OTHER THAN WHAT IS NECESSARY FOR THE CONSTRUCTION OF THE DRIVEWAY AND FOUNDATIONS
- 5. STRIP TOPSOIL FROM REMAINING DRIVEWAY AREA AND GRADE DRIVEWAY TO A POINT NEAR THE PROPOSED FOUNDATION. RESTORE AND/OR INSTALL E&SPC MEASURES AS WORK PROCEEDS.
- STRIP TOPSOIL FROM PROPOSED DWELLING LOCATION AND STOCKPILE AS SHOWN. PLACE TOPSOIL IN TEMPORARY STOCKPILE AS SHOWN AND APPLY TEMPORARY SEEDING/MULCHING AS NEEDED.
- 7. CONSTRUCT DWELLING. MAINTAIN E&SPC CONTROL MEASURES. STABILIZE ANY ERODED AREAS.
- INSTALL UNDERGROUND UTILITIES INCLUDING ON—LOT SEPTIC SYSTEM AND WELL. CONTRACTOR MUST BACKFILL TRENCH AS WORK PROCEEDS AND NOT LEAVE TRENCH OPEN. RESTORE E&SPC ISURES AS WORK PROCEEDS. THE LENGTH OF EXCAVATION SHOULD BE LIMITED TO THAT LENGTH WHICH CAN BE INSTALLED AND BACKFILLED IN ONE WORKING DAY, AND ALL EXCAVATED MATERIAL SHOULD BE SIDE CAST UPSLOPE OF THE TRENCH.
- 9. SPREAD TOPSOIL OVER DISTURBED AREAS AND STABILIZE WITH PERMANENT STABILIZATION MEASURES. MAINTAIN E&SPC CONTROL MEASURES DURING THIS TIME. 10. WHEN ALL AREAS ARE STABILIZED. WITH EITHER PERMANENT WEARING COURSES OR PERMANENT GROUND COVER HAVING A UNIFORM DENSITY OF 70% OR GREATER, REMOVE TEMPORARY CONTROL MEASURES. SEDIMENT AND SILT IS NOT TO BE FLUSHED INTO DRAINAGE SYSTEM OR ONTO ADJOINING LANDS.
- AFTER FINAL SITE STABILIZATION IS ACHIEVED, TEMPORARY EROSION AND SEDIMENT CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE CONTROL MUST BE IMMEDIATELY

12. THE CONTRACTOR SHALL ENSURE THAT THE FINAL SITE RESTORATION IS OBSERVED BY A PROFESSIONAL ENGINEER OR PROFESSIONAL LAND SURVEYOR.

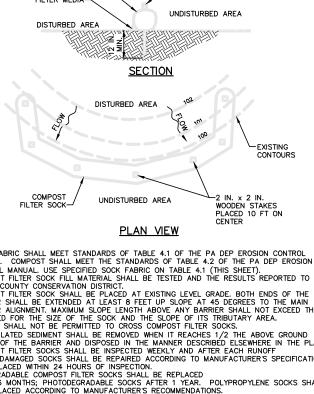


REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE. RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE. MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED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

* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEWATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

STANDARD CONSTRUCTION DETAIL #3-1 ROCK CONSTRUCTION ENTRANCE



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 USE SPECIFIED SOCK FABRIC ON TABLE 4.1 (THIS SHEET).

COMPOST FILTER SOCK FILL MATERIAL SHALL BE TESTED AND THE RESULTS REPORTED TO
LEHIGH COUNTY CONSERVATION DISTRICT. COMPOST FILTER SOCK FILL MATERIAL SHALL BE TESTED AND THE RESULTS REPORTED TO LEHIGH COUNTY CONSERVATION DISTRICT.

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 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.

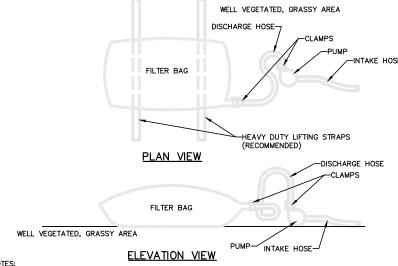
TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

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 MANUFACTURERS SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.

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

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.





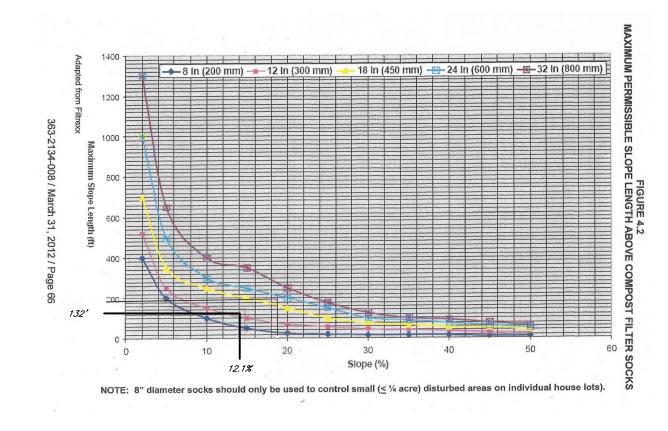
LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE 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 E 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 PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED. STANDARD CONSTRUCTION DETAIL #3-16

PUMPED WATER FILTER BAG

RECYCLING AND DISPOSAL OF MATERIALS

MATERIALS. PERATOR/PERMITTEE SHALL INSURE THAT PROPER MECHANISMS ARE IN PLACE TO CONTROL WASTE MATERIALS. CONSTRUCTION WASTES INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY. MEASURES SHOULD BE PLANNED AND IMPLEMENTED FOR HOUSEKEEPING, MATERIALS MANAGEMENT, AND LITTER CONTROL. WHEREVER POSSIBLE, RECYCLING OF EXCESS MATERIALS IS PREFERRED, RATHER THAN DISPOSAL. OFF-SITE TRANSPORT OF MATERIALS REQUIRES THAT THE RECEIVING FACILITY HAVE IT'S OWN APPROVED, ACTIVE PERMIT TO RECEIVE SUCH



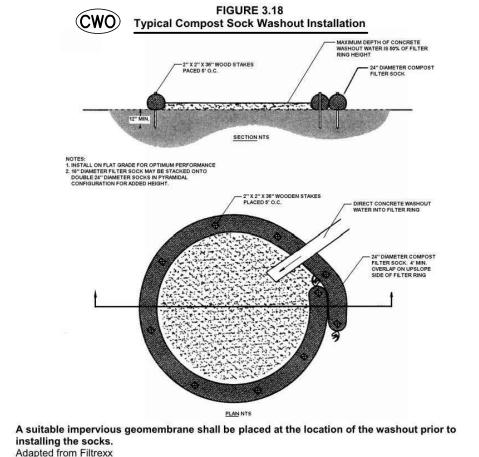


TABLE 4.2 Compost Standards			
Organic Matter Content	25% - 100% (dry weight basis)		
Organic Portion	Fibrous and elongated		
рН	5.5 - 8.5		
Moisture Content	30% - 60%		
Particle Size	30% - 50% pass through 3/8" sieve		
Soluble Salt Concentration	5.0 dS/m (mmhos/cm) Maximum		

TABLE 4.1

Compost Sock Fabric Minimum Specifications

* TYPE OF MATERIAL TO BE UTILIZED ON THIS PROJECT.

Heavy Duty 5 mil HDPE | 5 mil HDPE | Multi-Filament Multi-Filament Polypropylene | Polypropylene (MFPP) (HDMFPP) Material Photo-Photo-Bio-Photo-Photodegradable degradable degradable Characteristics degradable degradable 18' Diameters Mesh Opening 202 psi Strength 26 psi 26 psi Ultraviolet Stability % 100% at 23% at 100% at Original 23% at 1000 hr. 1000 hr. 1000 hr. 1000 hr. Strength (ASTM G-155) Minimum Functional

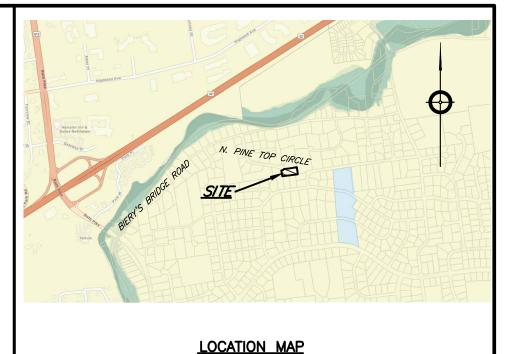
Longevity	6 months	9 months	6 months	i year	2 years			
Two-ply systems								
				HDPE biaxial net				
				Continuously wound				
Inner Containment Netting			Fusion-welded junctures					
			3/4" X 3/4" Max. aperture size					
			Composite Polypropylene Fabric					
			(Woven layer and non-woven fleece					
Outer Filtration Mesh			mechanically fused via needle punch)					
			3/16" Max. aperture size					

Sock fabrics composed of burlap may be used on projects lasting 6 months or less.

Filtrexx & JMD

N.P.D.E.S. NOTE:

ANY WORK OUTSIDE THE APPROVED LIMITS OF DISTURBANCE (L.O.D.) THAT TOTALS 1 ACRE OR MORE AND RESULTS IN A TOTAL DISTURBANCE OF MORE THAN 1 ACRE SHALL REQUIRE THE BUILDER/DEVELOPER/PROPERTY OWNER TO OBTAIN AN N.P.D.E.S.



SCALE: 1" = 1,500' (SOURCE: CITY OF BETHLEHEM ZONING MAP)

STANDARD EROSION AND SEDIMENT CONTROL PLAN NOTES

1) 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 WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION. 2) 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. 3) 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 ÁT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES

4) 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. 5) AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.

6) 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

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 THE 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. 10) 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 THIS SITE.

11) ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED. 12) THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL 13) ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS. ALL PUMPING OF SEDIMENT LÁDEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS.

14) VEHICLES AND EQUIPMENT MAY NEITHER ENTER DIRECTLY NOR EXIT DIRECTLY FROM THIS LOT ONTO COLLEEN DRIVE. VEHICLES AND EQUIPMENT MAY ONLY ENTER AND EXIT THE CONSTRUCTION SITE 15) 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. THE OPERATOR WILL MAINTAIN AND MAKE AVAILABLE TO LEHIGH COUNTY CONSERVATION DISTRICT COMPLETE, WRITTEN INSPECTION LOGS OF ALL THOSE INSPECTIONS. 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. 16) 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

17) 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. 18) ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES. 19) AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES — 6 TO 12 INCHES ON COMPACTED SOILS — PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE

VÉGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING, FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL. 20) ALL FILLS SHALL BE COMPACTED AS REQUIRED TO KEDUCE ERUSION, SLITT FOLL, SETTEMENTS OR CODES. L FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND

22) 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

- 23) FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
- 24) FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.

21) ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS

25) SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD. 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 AKEAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN. 27) IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR OTHER 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

28) 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 CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR MOTHER MOVEMENTS. 29) FROSION AND SEDIMENT RMPS MUST RE CONSTRUCTED STARIUTED AND FUNCTIONAL REFORE SITE DISTURBANCE REGINS WITHIN THE TRIRUTARY AREAS OF THOSE RMPS. F&S RMPS 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

30) UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPS. 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 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. 32) UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION

33) 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 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

34) IN THE EVENT OF SINKHOLE DISCOVERY A PROFESSIONAL GEOLOGIST OR ENGINEER WILL BE CONTACTED CONCERNING MITIGATION. ADDITIONALLY, THE LEHIGH COUNTY CONSERVATION DISTRICT WILL BE MADE AWARE OF THE SINKHOLE DISCOVERY IMMEDIATELY. 35) THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED.

36) THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF THE APPENDIX 64, EROSION CONTROL RULES AND REGULATIONS, TITLE 25, PART 1, DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUBPART C, PROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER RESOURCES, CHAPTER 102, EROSION CONTROL. 37) THE E&S CONTROL PLAN MAPPING MUST DISPLAY A PA ONE CALL SYSTEM INCORPORATED SYMBOL INCLUDING THE SITE IDENTIFICATION NUMBER. (THIS IS A NUMBERED SYMBOL NOT A NOTE.) 38) AT STREAM CROSSINGS, 50' BUFFER AREAS SHOULD BE MAINTAINED. ON BUFFERS, CLEARING, SOD DISTURBANCES, EXCAVATION, AND EQUIPMENT TRAFFIC SHOULD BE MINIMIZED. ACTIVITIES SUCH AS STACKING LOGS, BURNING CLEARED BRUSH, DISCHARGING RAINWATER FROM TRENCHES, WELDING PIPE SECTIONS, REFUELING AND MAINTAINING EQUIPMENT SHOULD BE ACCOMPLISHED OUTSIDE OF

39) ALL WETLANDS MUST BE DELINEATED AND PROTECTED WITH ORANGE SAFETY FENCE PRIOR TO ANY EARTHMOVING ACTIVITY.

40) STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN

41) SEDIMENT BASINS 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 ANY DAMAGE THAT OCCURS IN WHOLE OR IN PART AS A RESULT OF BASIN OR TRAP DISCHARGE SHALL BE IMMEDIATELY REPAIRED BY THE PERMITTEE IN A PERMANENT MANNER SATISFACTORY TO THE MUNICIPALITY, LOCAL CONSERVATION DISTRICT, AND THE OWNER OF THE DAMAGED PROPERTY.

43) UPON REQUEST, THE APPLICANT OR HIS CONTRACTOR SHALL PROVIDE AN AS—BUILT (RECORD DRAWING) FOR ANY SEDIMENT BASIN OR TRAP TO THE MUNICIPAL INSPECTOR, LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT. 44) FILL MATERIAL FOR EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN MAXIMUM 8" LAYERED LIFTS AT 95 % DENSITY.

CALL BEFORE YOU DIG! PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL Pennsylvania One Call System, Inc. 1-800-242-1776

SLANTED TEXT DENOTES EXISTING CONDITIONS VERTICAL TEXT DENOTES PROPOSED CONDITIONS

PLOT PLAN, GRADING & EROSION & SEDIMENT POLLUTION CONTROL PLAN

LOT 4, THE ESTATES AT PINE TOP RIDGE **468 N. PINE TOP CIRCLE** CITY OF BETHLEHEM

NORTHAMPTON COUNTY, PENNSYLVANIA

DATE: MARCH 21, 2021 SCALE: AS NOTED BASCOM & SIEGER, INC., LAND SURVEYORS - SINCE 1854 116 N. FIFTH ST. ALLENTOWN, PA 18102-4108 610-770-0888

REVISED 6/10/21

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SHEET 2 OF