

GROUNDWATER RECHARGE PIT VOLUME DESIGN CALCULATIONS

- ROOF AREA FLOWING TO PIT: 2,284 S.F.
- ALL RUNOFF FROM ROOF AREAS SHALL BE DIRECTED TO PITS.
- 3.00 INCHES OF STORMWATER DURING THE STORM PER SQUARE FOOT ROOF AREA.
- $(3.00) \times (\frac{1}{12} \text{ FT.}) \times (2,284 \text{ SQ.FT.}) = 571 \text{ CU.FT.}$
- STONE PITS HAVE A 40% VOID RATIO. GROSS VOLUME NEEDED IS
 $\frac{571 \text{ CU.FT.}}{0.40} = 1,428 \text{ CU.FT. NEEDED}$
 20' WIDE X 36' LONG X 2.0' DEEP DRYWELL PIT (1,440 CU.FT.)

EXCAVATION NOTE:

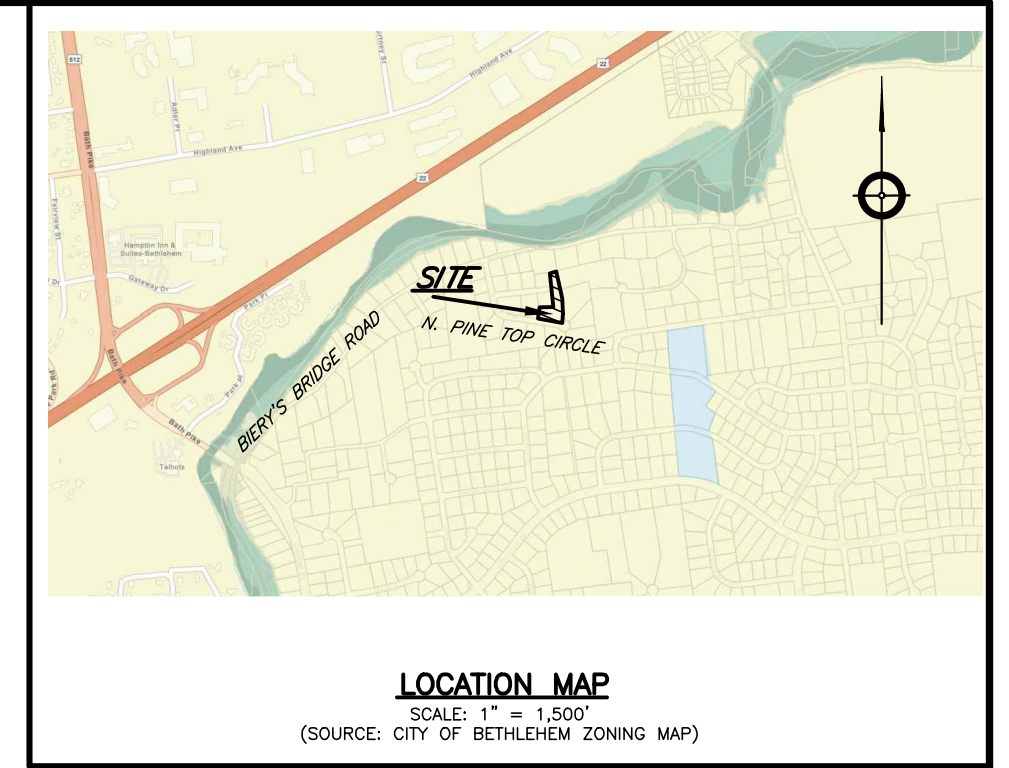
ALL SPOILS FROM THIS SITE ARE TO BE HAULLED OFF TO AN APPROVED NEARBY SITE BY THE CONTRACTOR.

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

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
- - - 820 - - - PROPOSED CONTOUR
- LC - LC = LIMIT OF CONSTRUCTION

SLANTED TEXT DENOTES EXISTING CONDITIONS
 VERTICAL TEXT DENOTES PROPOSED CONDITIONS



EQUITABLE OWNER/BUILDER

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

SITE DATA

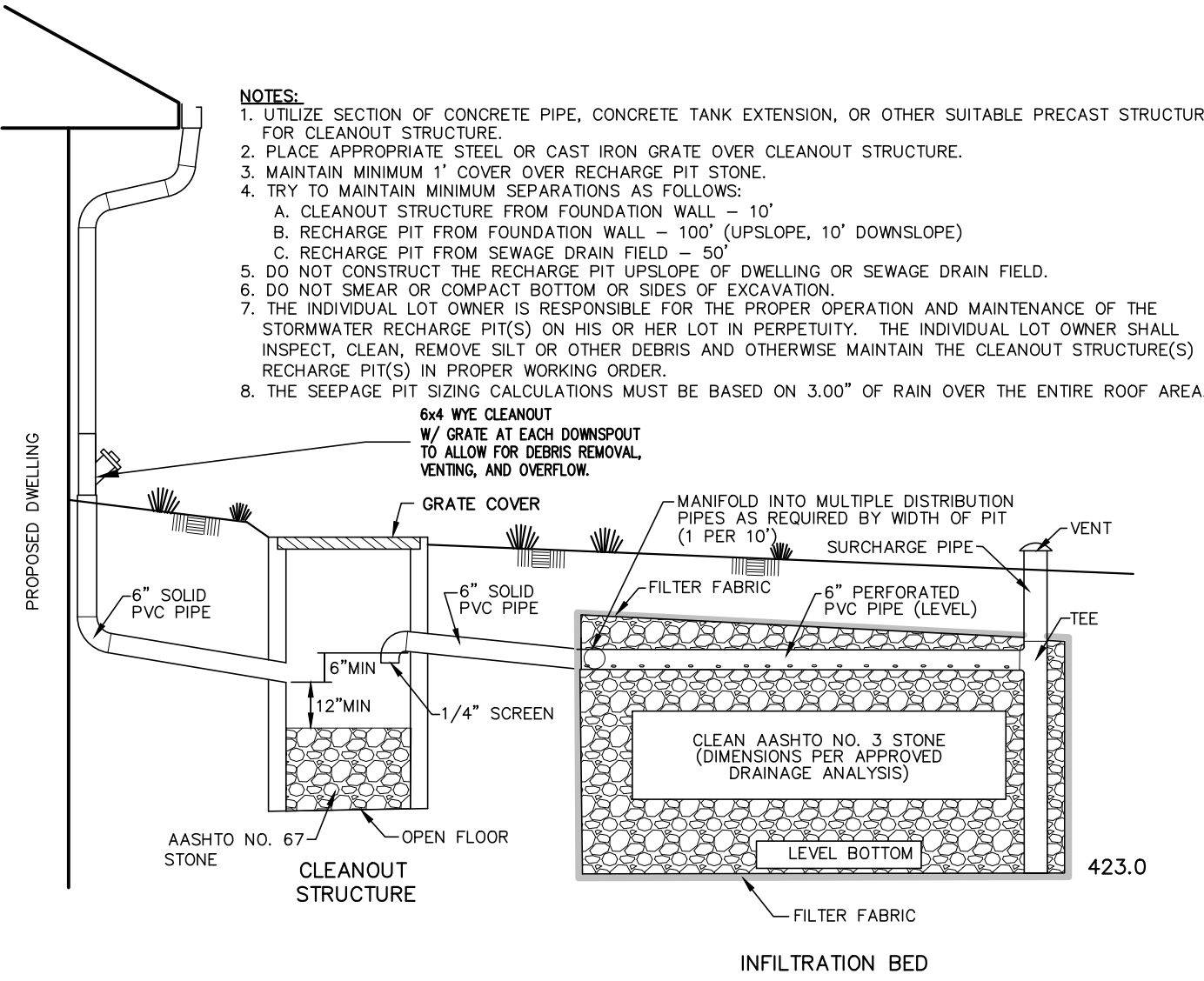
TOTAL AREA 47,511 S.F./1.0907 AC.
 TAX MAP M6SE1-2-14
 DEED REFERENCE 2000-1,046417
 ZONING DISTRICT RR
 SEWER PUBLIC
 WATER PUBLIC

ZONING REQUIREMENTS

ZONED:	REQUIRED	PROVIDED
RR	15,000 S.F.	47,511 S.F.
MIN. LOT AREA	100 FT.	218.27 FT.
MIN. FRONT YARD	25 FT.	26.0 FT.
MIN. SIDE YARD	15 FT.	58.8/86.7 FT.
MIN. REAR YARD	40 FT.	41.7 FT.
MAX. BUILDING HEIGHT	35 FT.	<35 FT.
MAX. BUILDING COVERAGE	15 %	4.8 %
MAX. IMPERVIOUS COVERAGE	50 %	7.8 %

IMPERVIOUS COVERAGE ANALYSIS

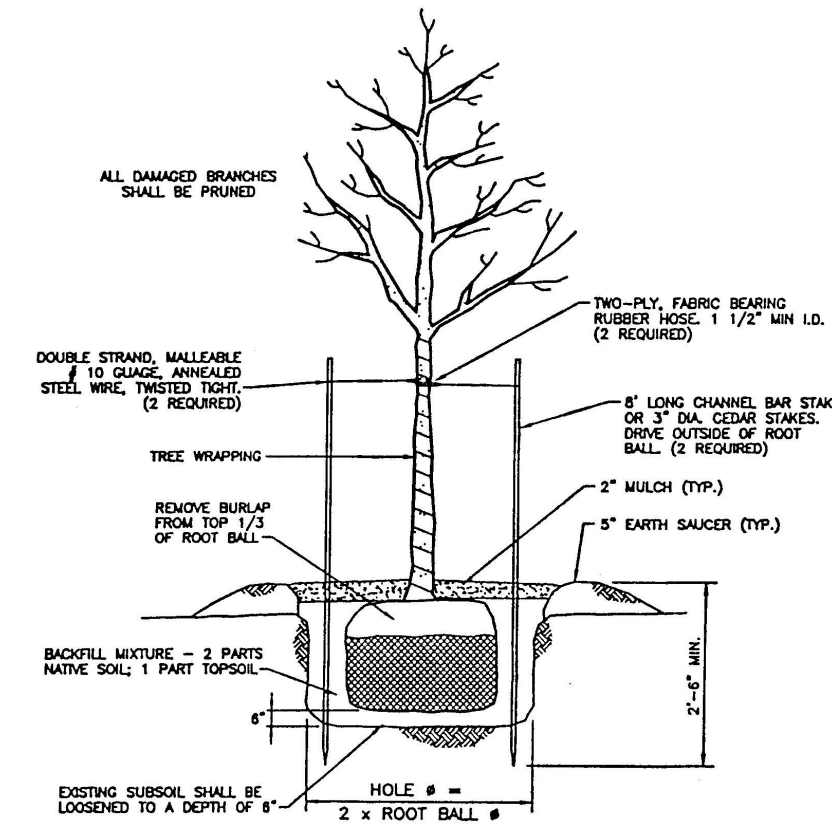
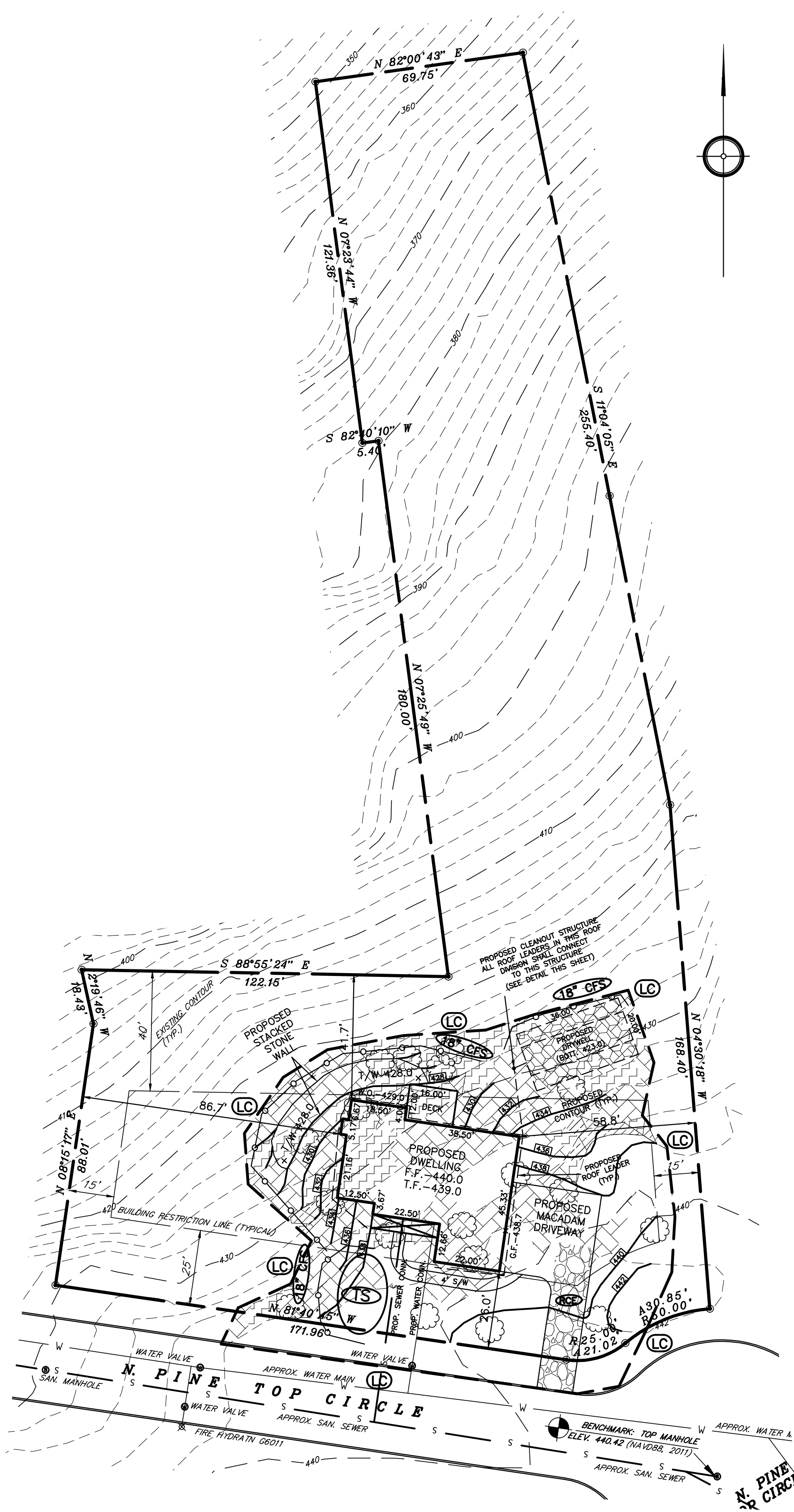
PROPOSED (TO BE CONSTRUCTED)
DRIVEWAY (MACADAM) - 1,217 S.F.
DWELLING/PORCH - 2,284 S.F.
SIDEWALK - 207 S.F.
TOTAL - 3,708 S.F.



INFILTRATION BED DETAIL
 NOT TO SCALE

POST CONSTRUCTION STORMWATER MANAGEMENT BMP NOTES

- THE FOLLOWING STAGES MUST BE OBSERVED BY A LICENSED PROFESSIONAL AS DEFINED BY PADEP REGULATIONS: CONSTRUCTION OF DRYWELLS/INFILTRATION PITS.
- 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.
- INSPECT THE DRYWELL/INFILTRATION PIT AT LEAST FOUR (4) TIMES PER YEAR AS WELL AS AFTER EVERY STORM EVENT EXCEEDING 3 INCHES.
- 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 REGULATIONS.
- 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.
- REGULARLY CLEAN THE GUTTERS AND THE CLEANOUT STRUCTURE AND ENSURE PROPER CONNECTIONS TO FACILITATE THE EFFECTIVENESS OF THE DRYWELL/INFILTRATION PIT.



TREE PLANTING AND STAKING DETAIL
 N.T.S.

PLANTING SCHEDULE

KEY	QTY.	BOTANICAL NAME	COMMON NAME	CONT.	REMARKS	HEIGHT SPREAD
A	18	ACER RUBRUM	RED MAPLE	2.5" MIN. B+B	DECIDUOUS	6'-8'
B	18	OLEIFSA TRICANTHOS 'IMPOLE'	IMPERIAL HONEY LOCUST	2.5" MIN. B+B	DECIDUOUS	6'-8'

TREE CONSERVATION REQUIREMENTS

IN ACCORDANCE WITH ARTICLE 1318.28-TREE CONSERVATION OF THE CITY OF BETHLEHEM ZONING ORDINANCE, ANY TREE MEETING THE REQUIREMENT OF 8 INCHES OR GREATER IN DIAMETER AT 4.5 FEET ABOVE GROUND THAT IS PROPOSED TO BE REMOVED SHALL BE REPLACED WITH TWO (2) TREES MEETING THE REQUIREMENTS OF THE CITY STREET TREE SPECIFICATIONS. AS SUCH, EIGHTEEN (18) TREES HAVE BEEN SURVEYED THAT MEET THE REQUIREMENT AND THIRTY-SIX (36) TREES SHALL BE PLANTED ON THIS LOT AT LOCATIONS THAT ARE APPROPRIATE TO PROMOTE HEALTHY TREES.

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

Slope Range	Horizontal Surface Zone	Area S.F.	Slope Surface Area S.F.	% of Area S.F.	Average Acres	Total Slope %
15% to 25%	3	25,000	6,007.1	0.138	6,125.4	19.8
25% to 35%	4	35,000	2,528.0	0.058	2,634.1	29.2
> 35%	5	-	412.1	0.009	454.7	44.2
	Total	-	8,947.2	0.205	9,214.2	44.2

SOILS LEGEND

THE NORTHAMPTON COUNTY SOIL SURVEY (1974) INDICATES THAT THE PROJECT LIES WITHIN CONESTOGA & HOLLINGER SOILS. THE SOIL TYPE THAT WILL BE ENCOUNTERED DURING THIS PROJECT ARE DESCRIBED BELOW:
 C/D - THIS SERIES IS AN EXTREMELY STONY SILT LOAM SOIL AND HAS SLOPES RANGING FROM 8% TO 25%. THIS SOIL DOES NOT CONTAIN HYDRIC COMPONENTS. THIS SOIL IS MODERATELY SHALLOW.

SEE SHEET #2 FOR E&SPC DETAILS

⊗ DENOTES EXISTING TREE 8" OR LARGER IN DIAMETER PROPOSED TO BE REMOVED (18 TOTAL)

PLOT PLAN, GRADING & EROSION & SEDIMENT POLLUTION CONTROL PLAN
 OF
LOT 1, THE ESTATES AT PINE TOP RIDGE
447 N. PINE TOP CIRCLE
 CITY OF BETHLEHEM
 NORTHAMPTON COUNTY, PENNSYLVANIA
 SCALE: AS NOTED DATE: MARCH 21, 2021

