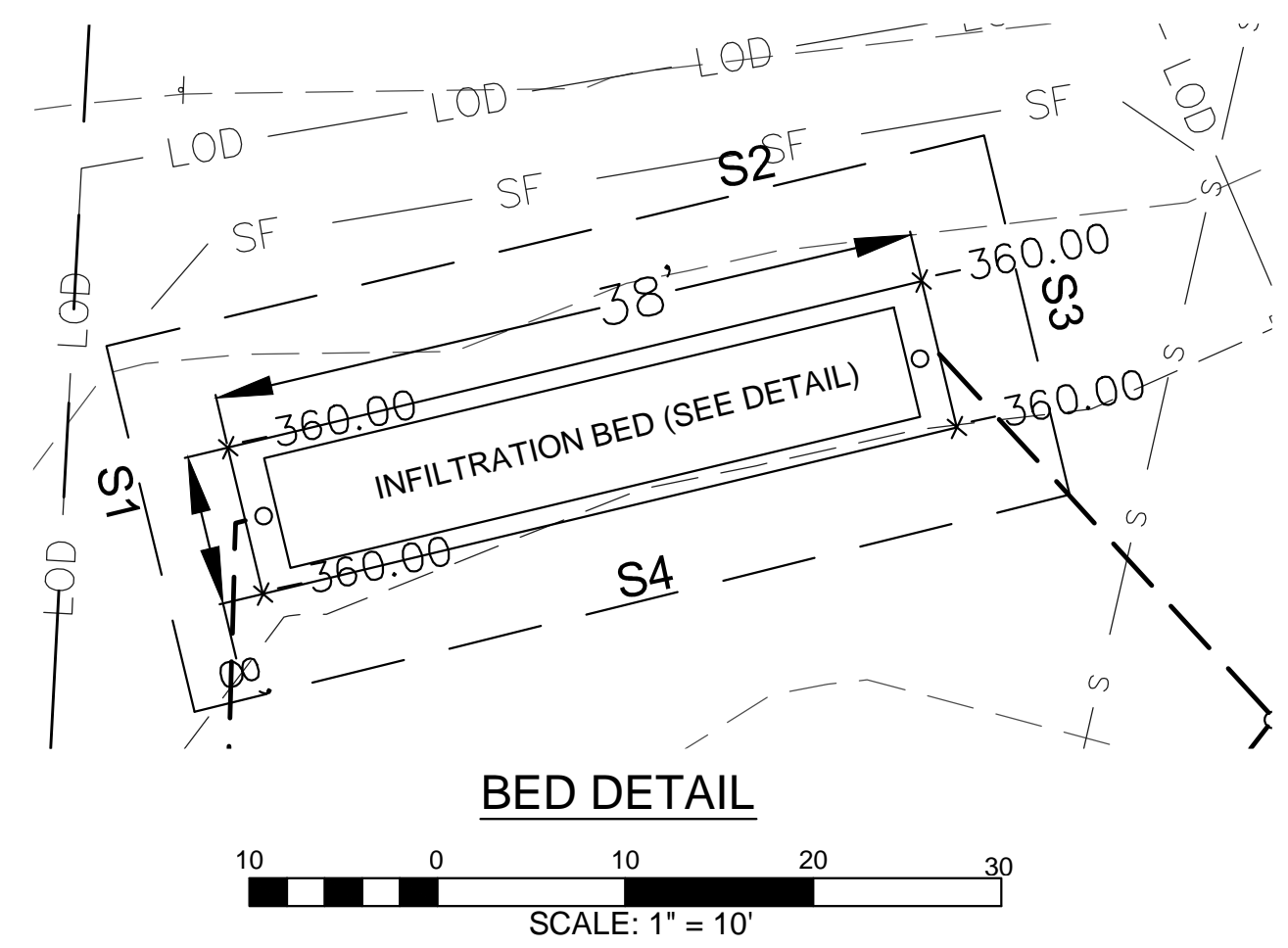


PLAN NOTES

- THE PURPOSE OF THIS PLAN IS TO CONSTRUCT ADDITIONAL PARKING LOT SPACE TOTALING 5,274 SQUARE FEET. THE PROPOSED BUILDING USE WILL BE CONVERTED FROM RESIDENTIAL TO LOW-VOLUME BUSINESS OFFICE. THE TOTAL IMPERVIOUS AREA ADDED AS PART OF THIS PROJECT WILL BE 3,391 SQUARE FEET. VOLUME CONTROL BMPs ARE REQUIRED FOR IMPERVIOUS AREAS GREATER THAN 1,000 SQUARE FEET.
- BOUNDARY INFORMATION SHOWN HEREON IS A RESULT OF A BOUNDARY SURVEY PERFORMED BY ACT ONE & ASSOCIATES ON DECEMBER 14, 2015.
- THERE ARE NO FEMA 100 YEAR FLOODPLAIN LOCATED ON THIS PARCEL. THE 500 YEAR FEMA FLOODPLAIN IS LOCATED ON OR IN THE IMMEDIATE VICINITY OF THIS PARCEL, BASED ON FEMA FLOOD INSURANCE RATE MAP NO. 42043C PANEL 0368D.
- IN REGARDS TO THE HEARING IN THE CASE OF EON DEVELOPMENT, LLC (2015-39) ON OCTOBER 21, 2015 DERRY TOWNSHIP ZONING HEARING BOARD ADOPTED BY DECISION, AND GRANTED RELIEF OF THE FOLLOWING:
 - A VARIANCE FROM SECTION 225-10.A.(6), REGARDING SIDE YARD SETBACK ENCROACHMENT
 - A VARIANCE FROM SECTION 225-52.C(2) & 225-52.C(3), REGARDING PARKING IN THE SIDE AND REAR YARD SETBACKS.
 - A VARIANCE FROM SECTION 225-132.H REGARDING, ACCESS DRIVE WIDTH
 - A VARIANCE FROM SECTION 225-135, REGARDING OFF-STREET LOADING AND UNLOADING SPACE
- CONTOURS SHOWN HEREON ARE A RESULT OF A FIELD VISIT BASED ON AN ASSUMED DATUM.
- ALL EXISTING IMPROVEMENTS AND STRUCTURES ARE SHOWN HEREON.
- ALL EXISTING UTILITIES SHALL BE CONTACTED AND THE CONTRACTOR MUST FIELD VERIFY THEIR EXACT LOCATION.
- IT SHALL BE THE OWNERS' RESPONSIBILITY TO INSPECT AND MAINTAIN THE STORMWATER MANAGEMENT FACILITIES.
- DERRY TOWNSHIP'S STANDARD OPERATION & MAINTENANCE (O&M) AGREEMENT WHICH HAS BEEN EXECUTED BY THE LANDOWNERS HEREON IS PART OF THE PLAN.
- THERE ARE NO WETLANDS LOCATED WITHIN THE LIMITS OF DISTURBANCE AS SHOWN HEREON AS DEFINED BY THE ARMY CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL, 1987.
- TOWNSHIP OFFICIALS AND THEIR AGENTS OR EMPLOYEES HAVE THE RIGHT OF ACCESS TO THE PROPERTY FROM THE PUBLIC RIGHT-OF-WAY FOR INSPECTION OF AND, IN CASES OF CONSTRUCTION DEFAULT, CONSTRUCTION OF THE STORMWATER MANAGEMENT FACILITIES.
- NOTHING SHALL BE PLACED, PLANTED, OR SET WITHIN AN EASEMENT OR RIGHT-OF-WAY WHICH WOULD ADVERSELY AFFECT THE FUNCTION OF THE EASEMENT OR RIGHT-OF-WAY, OR CONFLICT WITH ANY CONDITIONS ASSOCIATED WITH SUCH EASEMENT OR RIGHT-OF-WAY.
- NO PERSON SHALL MODIFY, REMOVE, FILL, LANDSCAPE, OR ALTER ANY EXISTING STORMWATER BMP, FACILITIES, AREAS, OR STRUCTURES UNLESS IT IS PART OF AN APPROVED MAINTENANCE PROGRAM, WITHOUT THE WRITTEN APPROVAL OF THE TOWNSHIP.
- NO PERSON SHALL PLACE ANY STRUCTURE, FILL, LANDSCAPING, OR VEGETATION INTO A STORMWATER BMP, FACILITIES, AREAS, STRUCTURES, OR WITHIN A DRAINAGE EASEMENT THAT WOULD LIMIT OR ALTER THE FUNCTIONING OF THE BMP WITHOUT THE WRITTEN APPROVAL OF THE TOWNSHIP.
- THE APPROVED SWM SITE PLAN SHALL BE ON FILE AT THE PROJECT SITE THROUGHOUT THE DURATION OF THE CONSTRUCTION ACTIVITY.
- THE STORMWATER BMPs DEPICTED ON THIS PLAN IS DESIGNED TO PERMIT AN ADDITIONAL 3,282 SQUARE FEET OF IMPERVIOUS AREA ON THE LOT (A RESERVE OF 116 CUBIC FEET OF STORAGE IS AVAILABLE IF REQUIRED), A SEPARATE APPROVAL IS REQUIRED FOR ANY IMPERVIOUS AREA PROPOSED BEYOND THE DESIGN LIMIT OR OTHERWISE NOT IN CONFORMANCE WITH THIS PLAN.
- THE TOTAL LIMIT OF DISTURBANCE (LOD) WILL BE 12,507 SQUARE FEET. ENTIRE SITE IS MAPPED IN HAGERSTOWN SILT LOAM (HaB2) 3-8% SLOPES, WELL DRAINED, DEPTH TO SEASONAL WATER TABLE GREATER THAN 80 INCHES. (HYDROLOGIC GROUP B)



PROPOSED STORMWATER EASEMENT

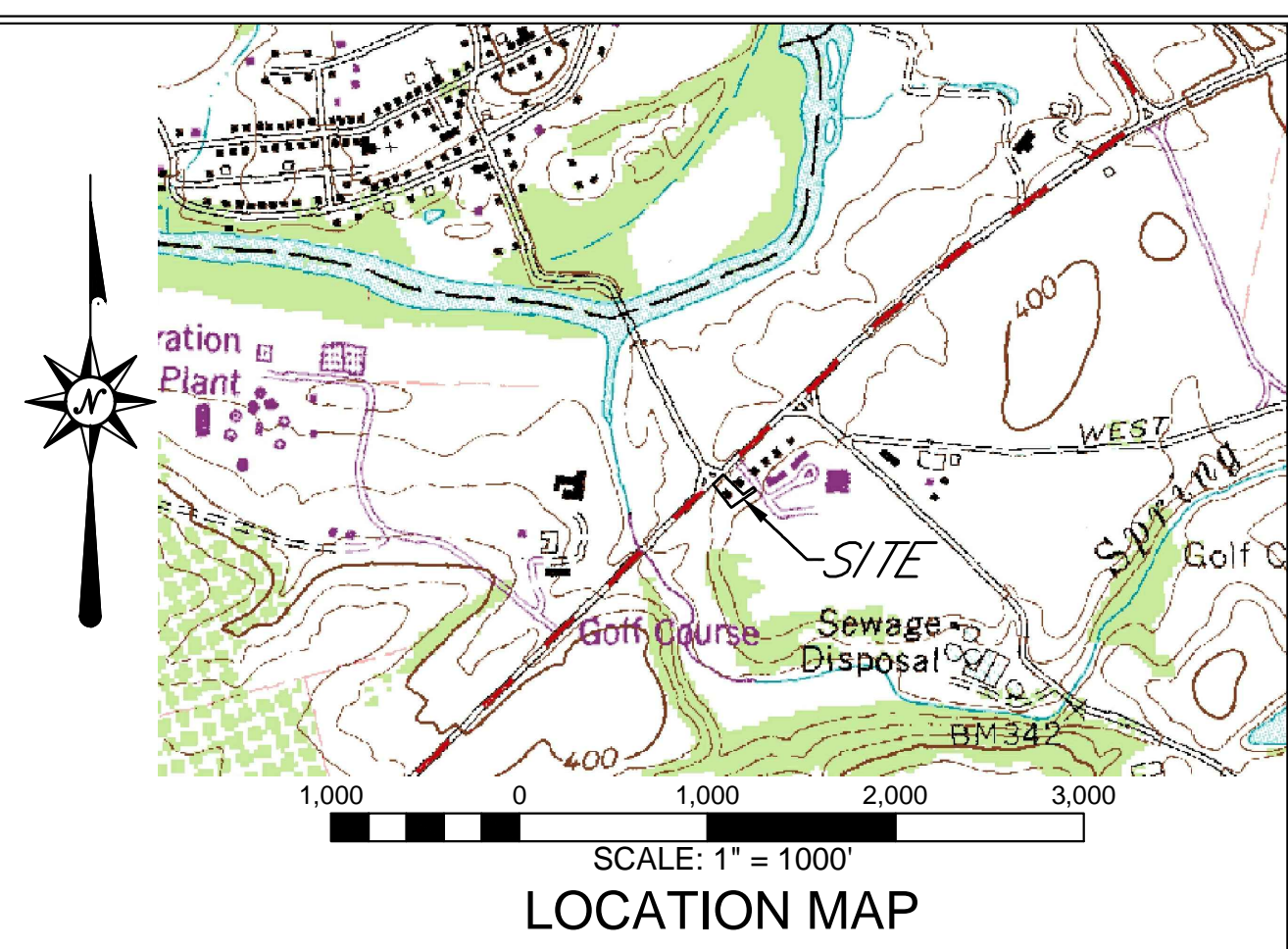
Line #	Length	Direction
S1	20'	S 54° 23' 59" E
S2	54'	S 35° 38' 54" W
S3	20'	N 54° 16' 32" W
S4	54'	N 35° 11' 51" E

Zoning Data: "BO" Business Office District

REGULATION	DESCRIPTION	REQUIRED
Width Regulations	The lot width at the minimum building setback line.	Not less than 100 feet
Depth Regulations	The lot depth at the minimum building setback line.	Not less than 150 feet
Yard Regulations	Front-yard depth	25 feet or 1/2 adjacent street R.O.W., whichever is larger
	Side-yard width (Two Required)	15 feet
	Rear-yard depth	35 feet
Coverage Regulations	Maximum Impervious Cover	60%
	Minimum Vegetative Cover	30%
Height Regulations	Principle Building	Maximum: 40 feet
	Accessory Building	20 feet
Area Regulations	The minimum permitted lot area for Nonresidential uses permitted by right or special exception	30,000 FT ²
Parking	Off-street	2 spaces per dwelling unit

Site Data

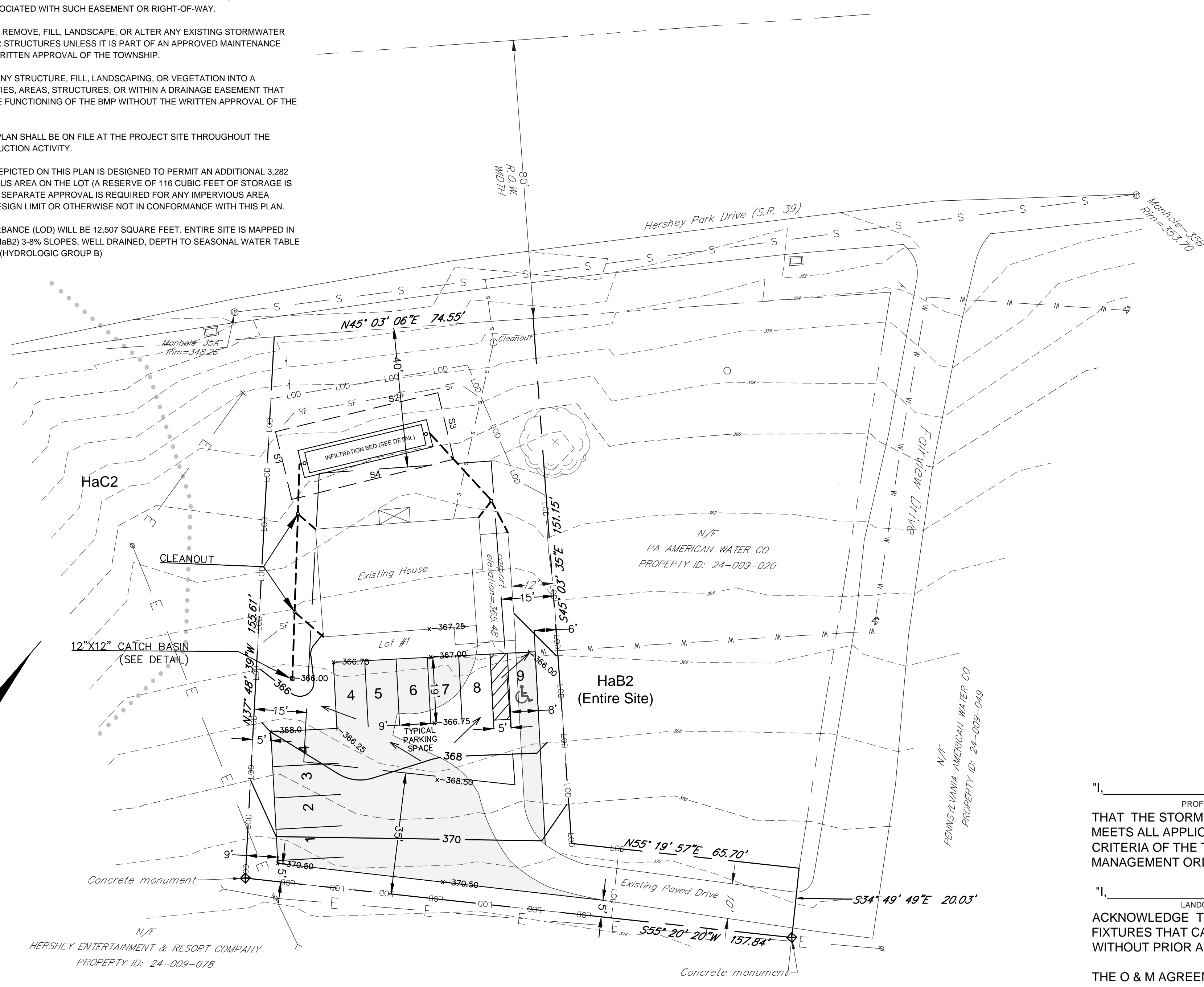
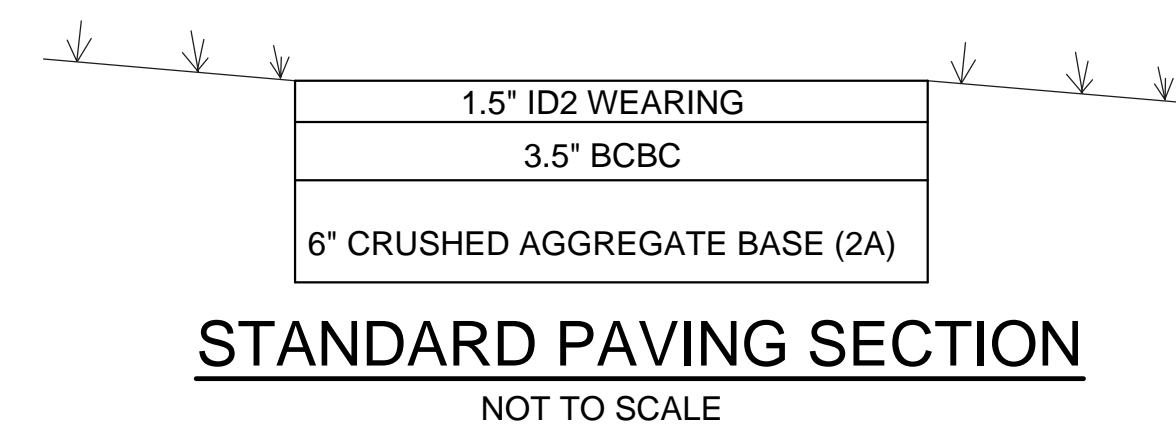
Zone	"BO" Business Office District	
	Existing	Proposed
Lot	Lot #1	Lot #1
Use	Residential	Office
Areas	15,127 FT ² 0.347 ACRES	15,127 FT ² 0.347 ACRES
Impervious Coverage	House: 1,752 FT ² Driveway/Parking: 1,883 FT ²	House: 1,752 FT ² Existing Driveway/Parking: 1,883 FT ² Proposed New Parking: 3,391 FT ²
Vegetative Cover	75%	54%
Impervious Total	3,597 FT ² or 25%	7,026 FT ² or 46%
Water Service	Public Water	No change
Sewer Service	Public Sewer	No change
Parking	4 Spaces	10 Total (1 space for each 200 FT ² of gross floor area 1,752/200 = 9 spaces)



The contractor shall verify all dimensions and existing conditions at the site before construction.

The contractor shall comply with the provisions of act 287 notification of utilities before excavation in the project area in order to determine the existence and location of all utilities. prior to any construction, the contractor will be required to contact all utilities and request them to mark their locations in the field. the one call system telephone number is (800) 242-1776

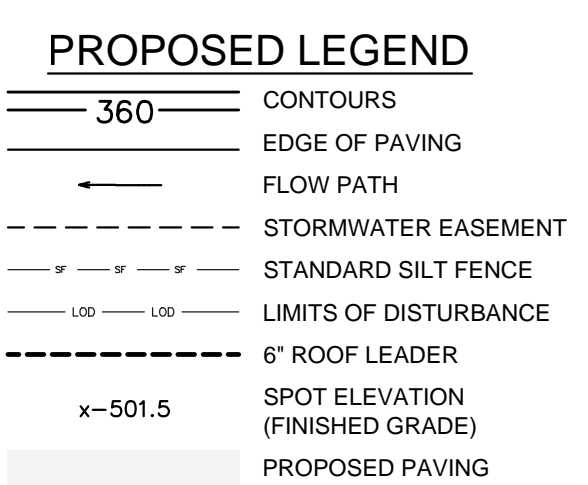
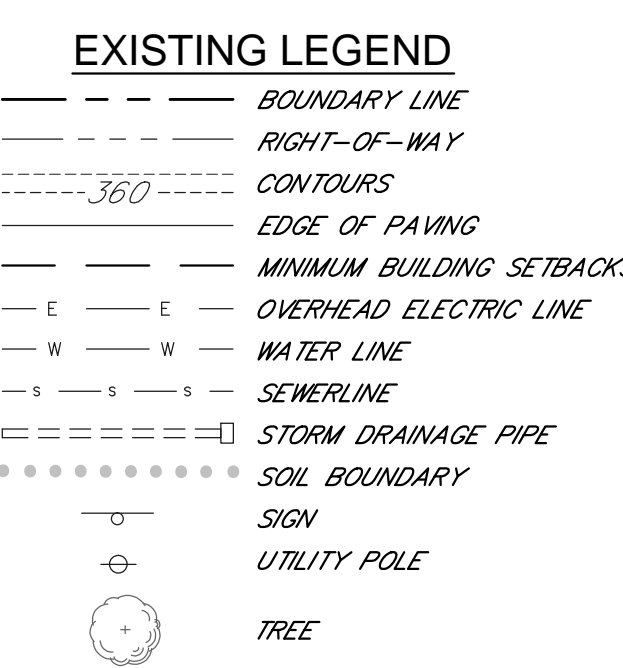
PA ONE CALL DESIGN I.D. #20153500388
DATE: December 16, 2015



"I, _____, HEREBY CERTIFY
PROFESSIONAL
THAT THE STORMWATER MANAGEMENT SITE PLAN MEETS ALL APPLICABLE DESIGN STANDARDS AND CRITERIA OF THE TOWNSHIP OF DERRY STORMWATER MANAGEMENT ORDINANCE, CHAPTER 174.

"I, _____, HEREBY
LANDOWNER
ACKNOWLEDGE THAT THE STORMWATER BMPs ARE FIXTURES THAT CANNOT BE ALTERED OR REMOVED WITHOUT PRIOR APPROVAL BY THE TOWNSHIP.

THE O & M AGREEMENT BETWEEN DERRY TOWNSHIP AND THE PROPERTY OWNER(S) HEREON, AS EXECUTED ON _____ IS PART OF THIS PLAN.



- UTILITY LISTING (DERRY TOWNSHIP)**
- COMPANY:** COMCAST CABLE COMMUNICATIONS INC
ADDRESS: C/O USIC LOCATING SERVICES INC 13085 HAMILTON CROSSING BLVD SITE 200 CARMEL, IN 46032
CONTACT: USIC OFFICE PERSONNEL
 - COMPANY:** DERRY TOWNSHIP MUNICIPAL AUTHORITY/DERRY TOWNSHIP
ADDRESS: 670 CLEARWATER ROAD HERSHEY, PA 17033
CONTACT: JEFFERY MYLET
EMAIL: jmylet@dtma.com
 - COMPANY:** AT&T ATLANTA
ADDRESS: 2315 SALEM RD F11 CONYERS, GA 30013
CONTACT: NANCY SPENCE
EMAIL: nspence@ems.att.com
 - COMPANY:** VERIZON PENNSYLVANIA LLC
ADDRESS: 15 E MONTGOMERY AVE PITTSBURGH, PA 15212
CONTACT: OFFICE PERSONNEL
 - COMPANY:** FIRSTENERGY CORP
ADDRESS: 76 S MAIN ST AKRON, OH 443081890
CONTACT: OFFICE PERSONNEL
 - COMPANY:** MILTON HERSHEY SCHOOL
ADDRESS: 1201 HOMSTEAD LN PO BOX 830 HERSHEY, PA 17033
CONTACT: MIKE KOEGLER
EMAIL: koeglerm@mhs-pa.org
 - COMPANY:** PPL ELECTRIC UTILITIES CORPORATION
ADDRESS: 827 HAUSMAN RD ALLENTOWN, PA 18104
CONTACT: CYNTHIA FOCT
EMAIL: cafocht@pplweb.com
 - COMPANY:** VERIZON NORTH LLC
ADDRESS: 2441 W GRANDVIEW BOULEVARD ERIE, PA 16506
CONTACT: MICHAEL GEARY
EMAIL: michael.geary@verizon.com
 - COMPANY:** UGI UTILITIES INC
ADDRESS: 1301 AIP DR MIDDLETOWN, PA 17057
CONTACT: TOM WITT
EMAIL: twitt@ugi.com

STORMWATER MANAGEMENT & E.S.C
SITE PLAN
FOR

EON DEVELOPMENT LLC
962 HERSHEY PARK DRIVE

DERRY TOWNSHIP
DAUPHIN COUNTY
COMMONWEALTH OF PENNSYLVANIA

Bridging Tomorrow Today
ACT ONE & Associates
Civil Engineering
Surveying

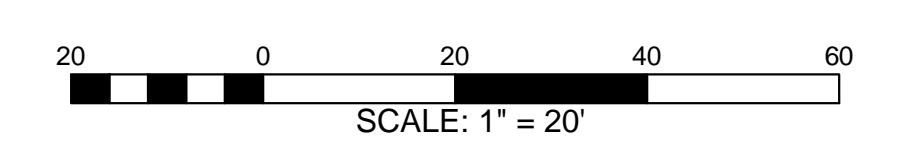
200 South 41st Street, Suite A, Harrisburg, PA 17111
(717) 236-7500, Fax (717) 236-3314
Email: actoneinc@comcast.net, Web site: actoneassociates.com

DATE: 1-21-2016	REVISIONS:	DRAWN BY: RAS
SCALE: AS SHOWN		CHECKED BY: RES
SHEET 1 OF 2		JOB NO.: 15-188

OWNER(S)
Annette Cassel Means
EON Development LLC
34 Shettland Drive
Hummelstown PA, 17036
717 805-3064
Tax Parcel Id. 24-009-019
Instrument No. 20150031316
Parcel area = 0.35 acres

This drawing is and shall remain the property of ACT ONE & Associates. Any reuse on project extensions, any other project, or alterations or additions to this project shall be at the user's sole risk, and without liability to ACT ONE & Associates.

FILE PATH: \\ACTONE\SERVER\COMPANY BACKUP\2015\15-188 962 HERSHEY PARK DR MEANS DERRY TWP DAUPHIN\DRAWINGS\15-188 962 HERSHEY PARK DR MEANS DERRY TWP.DWG
LAST SAVED: 1/21/2016 12:44 PM PLOTTED: 1/21/2016 2:14 PM PLOTTED BY: ACTONE55



SEQUENCE OF CONSTRUCTION

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED AND IMMEDIATELY STABILIZED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS ON THE PLAN DRAWINGS AND PER EACH STAGE (IF APPLICABLE).

IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.

EARTHMOVING OPERATIONS SHALL BE COMPLETED DURING A PERIOD IN WHICH NO PRECIPITATION IS FORECAST. IN THE EVENT OF A NON-FORECAST PRECIPITATION EVENT, THE DISTURBED AREAS SHALL BE GRADED TO DRAIN INTO THE WORK AREA AND ALL RUNOFF WHICH ACCUMULATES, SHOULD BE PUMPED TO A FACILITY FOR REMOVING SEDIMENT FROM PUMPED WATER. EXCESS MATERIAL RESULTING FROM EARTH MOVING OPERATIONS SHALL BE TEMPORARILY STOCKPILED UPSLOPE OF THE BASIN.

SEQUENCE

- SEVEN (7) DAYS PRIOR TO EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS, OWNERS, OPERATORS, APPROPRIATE MUNICIPAL OFFICIALS, ENGINEERS OR PLANNERS, AND REPRESENTATIVES OF THE DAUPHIN COUNTY CONSERVATION DISTRICT SHALL BE INVITED TO AN ON-SITE PRE-CONSTRUCTION MEETING.
- THREE (3) DAYS PRIOR TO EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PA ONE CALL SYSTEM INC. AT 1-800-242-1776 FOR THE LOCATION OF UNDERGROUND UTILITIES.
- FIELD-MARK THE LIMIT OF DISTURBANCE FOR THE SITE. ENVIRONMENTALLY SENSITIVE AREAS MAY NEED ORANGE CONSTRUCTION FENCING TO PROHIBIT ENTRY DURING THE CONSTRUCTION PHASES. THIS INCLUDES STEEP SLOPE AREAS (OVER 25%), STREAM SETBACK AREAS (25'), WETLANDS (25'), AND ANY OTHER SENSITIVE AREAS DEEMED AS SUCH BY THE REGULATORS.
- INSTALL SILT FENCE (SF) AS PER PLAN DRAWINGS AND DETAILS. SEED AND STABILIZE AREAS IMMEDIATELY SURROUNDING THESE BMPs THAT ARE OUTSIDE OF FURTHER DISTURBANCE.
- MARK THE LOCATION OF THE PLANNED STORMWATER INFILTRATION BED AREAS. DISTURBANCE OVER THESE FEATURES SHALL BE LIMITED TO ONLY THOSE ACTIVITIES NECESSARY FOR THEIR INSTALLATION AND MAINTENANCE, OR THE INSTALLATION OF UTILITIES.
- ONCE EXTERIOR WORK ON THE ADDITION IS COMPLETE, FINAL GRADING AND CONSTRUCTION OF THE INFILTRATION BED SHALL BE COMPLETED AS PER PLAN AND DETAIL. STABILIZE, SEED, AND MULCH DISTURBED AREAS WITH APPROPRIATE SEEDING SPECIFICATION.
- IMMEDIATELY STABILIZE ALL DISTURBED AREAS WITH APPROPRIATE SEEDING SPECIFICATION.
- UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATORS SHALL CONTACT THE DAUPHIN COUNTY CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL OF THE BMPs.

STABILIZATION SPECIFICATIONS

- PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.
- IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE OPERATOR SHALL STABILIZE THE DISTURBED AREAS DURING NON-GERMINATING PERIODS. MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISH GRADE AND WHICH WILL NOT BE RE-DISTURBED WITHIN ONE YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.
- TOPSOIL MUST BE PLACED A MINIMUM OF 6" ON ALL DISTURBED AREAS TO BE REVEGETATED.
- STRAW AND HAY MULCH SHOULD BE ANCHORED IMMEDIATELY AFTER APPLICATION TO PREVENT BEING WINDBLOWN. A TRACTOR-DRAWN IMPLEMENT MAY BE USED TO "CRIMP" THE STRAW OR HAY INTO THE SOIL. THIS METHOD IS LIMITED TO SLOPES NO STEEPER THAN 3:1. THE MACHINERY SHOULD BE OPERATED ON THE CONTOUR. (NOTE: CRIMPING OF HAY OR STRAW BY RUNNING OVER IT WITH TRACKED MACHINERY IS NOT RECOMMENDED. A WOOD CELLULOSE FIBER MAY BE SPREAD OVER THE STRAW MULCH AT A RATE OF 1,500 LB./ACRE.)
- TRACKING SLOPES IS REQUIRED BY RUNNING TRACKED MACHINERY UP AND DOWN THE SLOPE, LEAVING TREAD MARKS PARALLEL TO THE CONTOUR. (NOTE: IF A BULLDOZER IS USED, THE BLADE SHALL BE UP; CARE SHOULD BE EXERCISED ON SOILS HAVING A HIGH CLAY CONTENT TO AVOID COVER COMPACTION.)

TEMPORARY SEEDING SPECIFICATIONS

SEED TYPE, RATE, MULCH MIXTURE NUMBER 2 - TEMPORARY COVER PROPORTION BY WEIGHT MIN. PURITY GERMINATION SEEDING RATE

TALL FESCUE, OR FINE FESCUE, OR KENTUCKY BLUEGRASS, PLUS REDTOP, OR PERENNIAL RYEGRASS	64	95	80%	15
----------------------------------------------------------------------------------------	----	----	-----	----

MULCH
MATERIAL MAY BE WHEAT OR OATS STRAW. BINDER MAY BE AN ASPHALT EMULSION. BINDER MAY ALSO BE A CHEMICAL MULCH BINDER CONSISTING OF A POLYMER SYNTHETIC RESIN, POLYACRYLATE OR OTHER MATERIAL WHICH GIVES SIMILAR PROPERTIES AS ASPHALT EMULSION.

SEEDING
ALL DISTURBED AREAS SHALL BE SEEDING WITH THE SPECIFIED SEED MIX AT A RATE OF 48 LBS/ACRE OF PURE LIVE SEED (1.10 LBS/1000 S.F.).

SEEDING SHALL ONLY BE DONE DURING PERIODS DEEMED SUITABLE FOR SEEDING BY THE LANDSCAPE ARCHITECT OR BY THE PROJECT ENGINEER. (TEMPORARY SEEDING SHALL BE APPLIED FROM MARCH TO SEPTEMBER).

MULCH SEEDING AREAS AT THE RATE OF 3 TONS PER ACRE. TAKE PRECAUTIONS TO STABILIZE THE MULCH USING ASPHALT EMULSION AT A RATE OF 100 GALLONS PER ACRE OR CHEMICAL BINDER MULCH AS APPROVED. MULCH WITHIN 48 HOURS OF SEEDING (LIME RATE SHOULD BE 6 TON/ACRE).

ANY AREAS FAILING TO ESTABLISH A STAND SHALL BE RE-SEEDING AND RE-MULCHED AS DIRECTED BY THE LANDSCAPE ARCHITECT OR BY THE PROJECT ENGINEER. THE REPAIR ANY DAMAGE TO THE WORK AREAS RESULTING FROM EROSION AND/OR EQUIPMENT.

FERTILIZER
FERTILIZERS ARE NOT RECOMMENDED, HOWEVER IF USED SHALL BE A COMPOSITE COMMERCIAL TYPE AND SHALL BEAR THE MANUFACTURER'S GUARANTEED STATEMENT OF ANALYSIS. A MINIMUM OF 35% OF THE TOTAL NITROGEN CONTENT SHALL BE GUARANTEED TO BE WATER INSOLUBLE NITROGEN.

PERMANENT SEEDING SPECIFICATIONS

AMENDMENTS
LIMESTONE - RAW, GROUND AGRICULTURAL LIMESTONE CONTAINING A MINIMUM 90% CARBONATES, 240 POUNDS PER 1,000 SQUARE FEET.

COMMERCIAL FERTILIZER - 25 POUNDS 10-10-20 PER 1,000 SQUARE FEET MIXED INTO THE SEEDBED PRIOR TO SEEDING, OR MIXED WITH THE SEED IF HYDROSEEDING.

MULCH - CLEAN OATS OR WHEAT STRAW, FREE OF MATURE SEED-BEARING STALKS OR ROOTS OF PROHIBITED OR NOXIOUS WEEDS AS DEFINED BY THE PENNSYLVANIA SEED ACT OF 1947. APPLY AT A RATE OF 3.0 TONS PER ACRE. THE MULCH SHOULD BE STABILIZED UNTIL THE VEGETATIVE COVER IS ESTABLISHED.

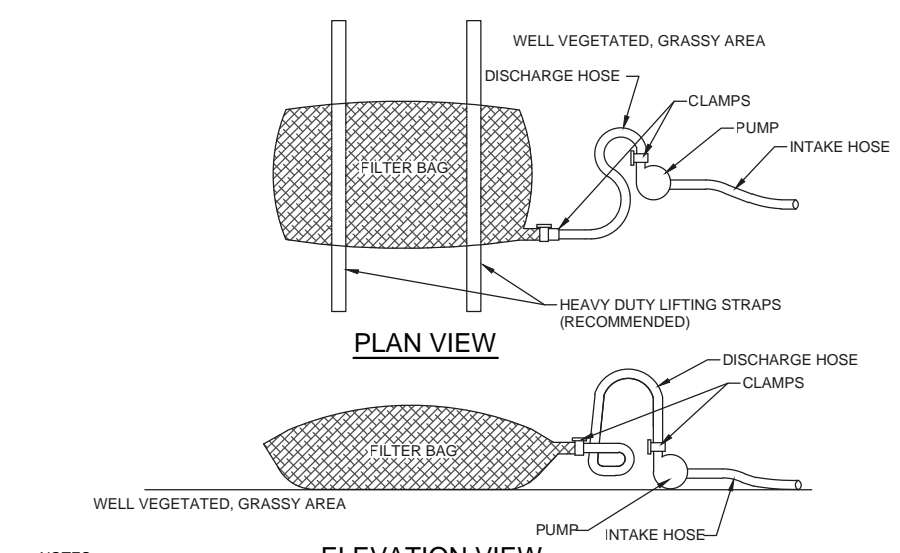
PERMANENT SEED MIXTURE	PROPORTION BY WEIGHT	MINIMUM PURITY	MINIMUM GERMINATION
TALL FESCUE PLUS FINE FESCUE OR PERENNIAL RYEGRASS	40 LB./AC. 10 LB./AC. 15 LB./AC.	95% 95% 95%	80% 80% 85%

PREPARATION OF SEED BED
GRADE AS NECESSARY TO BRING SUBGRADE TO A TRUE SMOOTH SLOPE PARALLEL TO AND SIX (6) INCHES BELOW FINISHED GRADE. PLACE TOPSOIL OVER AREA TO A DEPTH SUFFICIENT TO OBTAIN SIX (6) INCHES AFTER SETTLEMENT AND LIGHT ROLLING. THE COMPLETED WORK WILL CONFORM TO LINES, GRADES AND ELEVATIONS SHOWN OR SPECIFIED. FERTILIZER AND LIME SHALL BE THOROUGHLY INCORPORATED INTO THE SOIL BY ROTOTILLING OR OTHER METHOD TO THE MINIMUM DEPTH OF FOUR (4) INCHES. THE ENTIRE SURFACE SHALL BE SEEDING IN TWO (2) SEPARATE OPERATIONS. THE SECOND SEEDING SHALL BE DONE IMMEDIATELY AFTER THE FIRST AND AT RIGHT ANGLES TO THE FIRST SEEDING, AND LIGHTLY RAKED INTO THE SOIL. MULCH ALL AREAS IMMEDIATELY AFTER SEEDING.

*SEED MIXTURE SHALL BEAR A GUARANTEED STATEMENT OF ANALYSIS.

ALL INFORMATION TAKEN FROM THE PENNSYLVANIA AGRONOMY GUIDE.

This drawing is and shall remain the property of ACT ONE & Associates. Any reuse on project extensions, any other project, or alterations or additions to this project shall be at the user's sole risk, and without liability to ACT ONE & Associates.



NOTES
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 FOLLOWING STANDARDS:

PROPERTY	TEST METHOD	MINIMUM STANDARD
AUG. WIDE WIDTH STRENGTH	ASTM D-4884	55 LB/LIN
GRAN TENSILE	ASTM D-4832	205 LB
PUNCTURE	ASTM D-4893	110 LB
MULLEN BURST	ASTM D-3786	300 PSF
50% PERMEANCE	ASTM D-4892	70%
AGS % RETAINED	ASTM D-4751	90 SIEVE

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 10 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 STRAPS ALREADY ATTACHED.

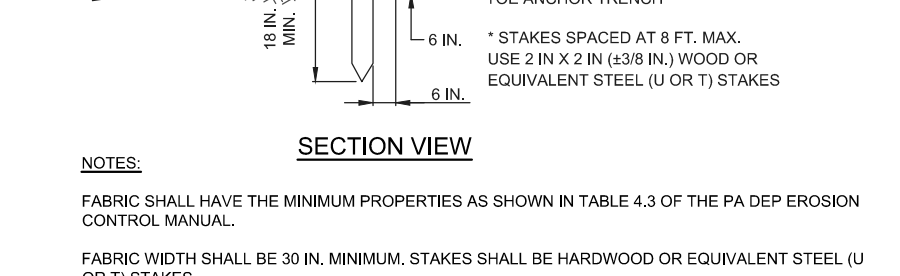
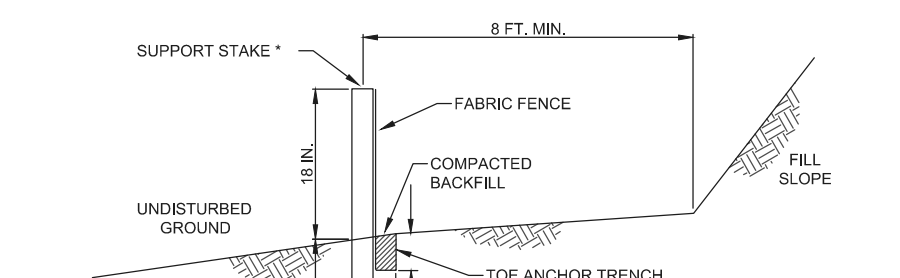
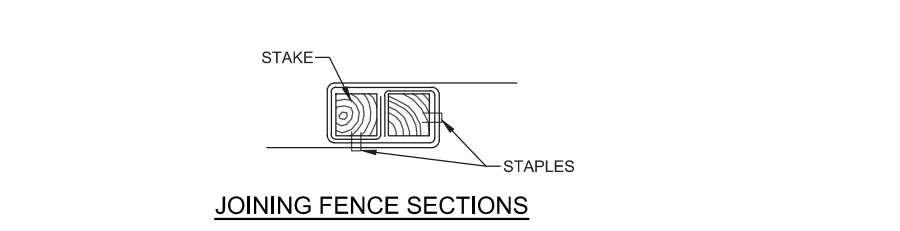
BAGS SHALL BE LOCATED IN WELL-VEGETATED GRASSY AREAS AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON SLOPES EXCEEDING 3:1, FOR SLOPES EXCEEDING 3:1, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.

NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HD OR EV WATERHEADS, WITHIN 60 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.

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 PROTECTED FROM LOGGING AND OTHER OBSTRUCTIONS.

FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.



NOTES
FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 OF THE PA DEP EROSION CONTROL MANUAL.

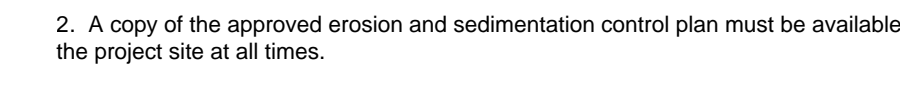
FABRIC WIDTH SHALL BE 30 IN. MINIMUM. STAKES SHALL BE HARDWOOD OR EQUIVALENT STEEL (U OR I) STAKES.

SEED FILL SHALL BE PLACED AT LEVEL EXISTING GRADE, BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 4 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.

SILT FENCE SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVE GRADE HEIGHT OF THE FENCE.

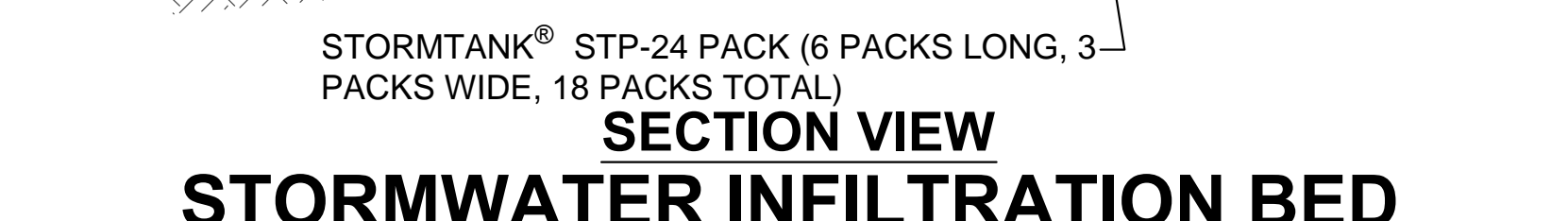
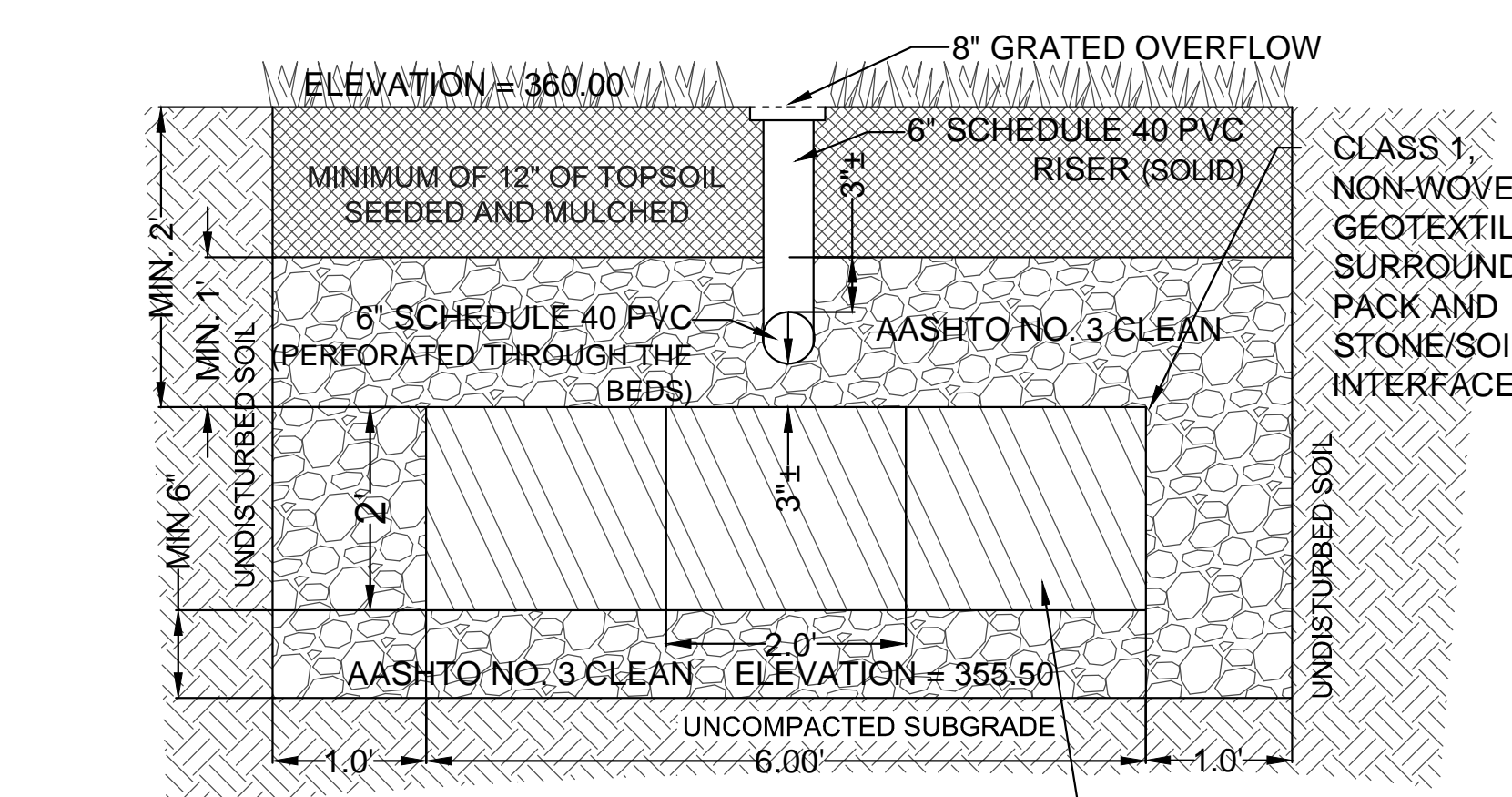
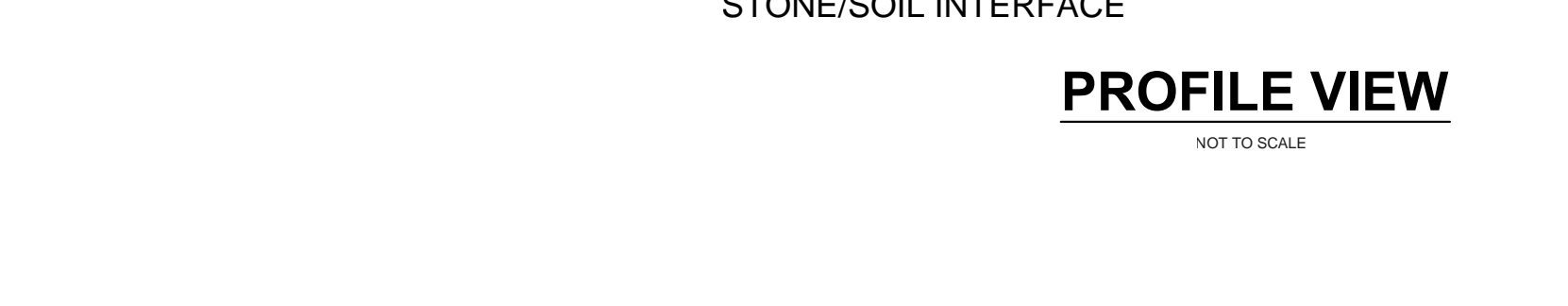
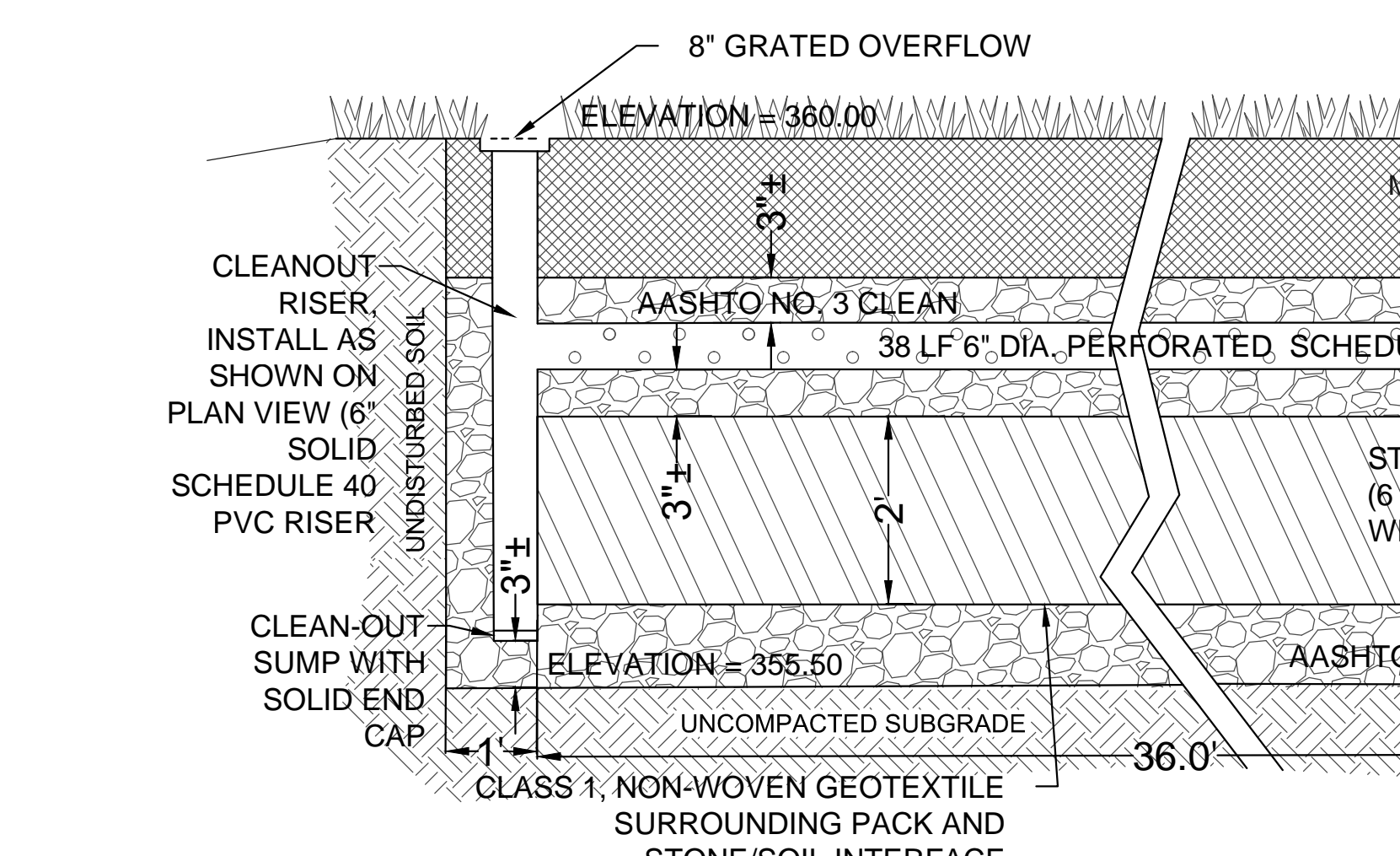
ANY SECTION OF SILT FENCE WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET (STANDARD CONSTRUCTION DETAIL #3-16).

FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.

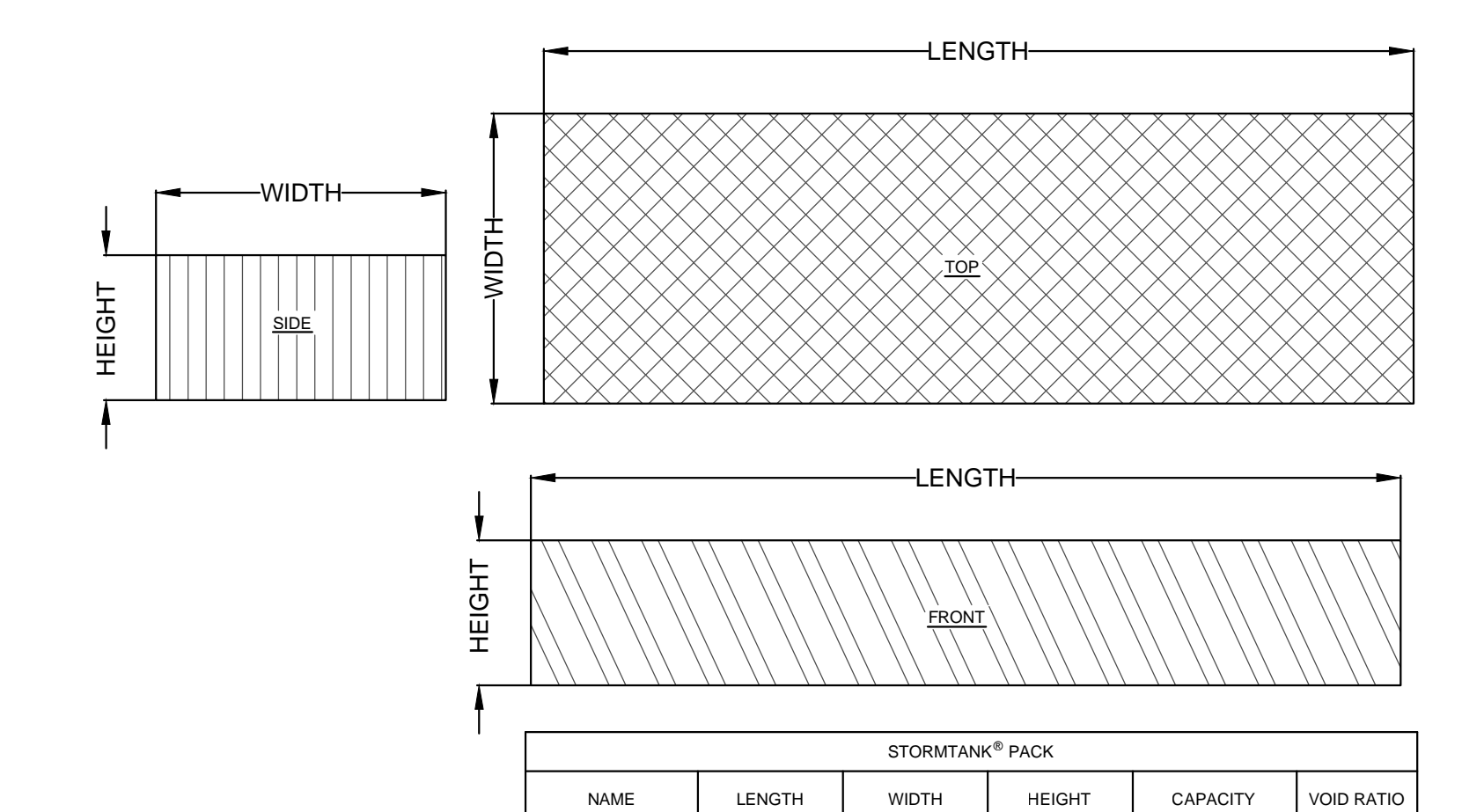


Erosion and Sedimentation Control Plan Standard Notes

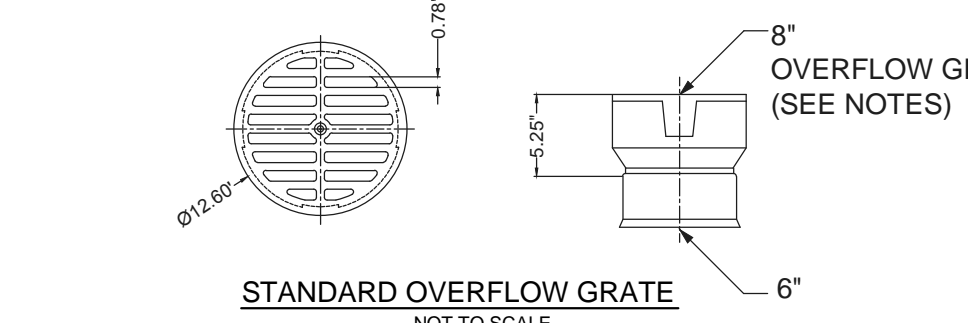
- Topsoil stockpiles must not exceed 35 feet. Stockpile side slopes must be 2:1 or flatter.
- A copy of the approved erosion and sedimentation control plan must be available at the project site at all times.
- All pumping of sediment laden water shall be through a sediment control BMP, such as a pumped water filter bag or equivalent sediment removal facility, over undisturbed vegetated areas.
- All building materials and wastes must 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 from the site.
- The contractor will be responsible for the removal of any excess material from the site and also to be sure that the site(s) has an approved erosion & sedimentation control plan that meets the conditions of Chapter 102 and other state and federal regulations.
- Clean Fill is defined as: Uncontaminated, non-water soluble, non-decomposable, inert, solid material. The term includes soil, rock, stone dredged material, used asphalt, brick, block, or concrete from construction and demolition activities that is separate from other waste and is recognizable as such. The term does not include material placed in or on Waters of the Commonwealth (or wetlands and floodways) unless otherwise authorized (the term "used asphalt" does not include milled asphalt or asphalt that has been processed for re-use).
- Any placement of clean fill that has been affected by a spill or release of a regulated substance must use form FP-001 to certify the origin of the fill material and the result of the analytical testing to qualify the material as clean fill. Form FP-001 must be retained by the owner of the property receiving the fill.
- Environmental due diligence must be performed to determine if the fill materials associated with the project qualify as clean fill. Environmental due diligence is defined as: Investigative techniques, including, but not limited to, visual property inspections, electronic database searches, review of property ownership, review of property use history, Sanborn maps, environmental questionnaires, transaction records, analytical testing, environmental assessments or audits. Analytical testing is not a required part of due diligence unless visual inspection and/or review of past land use of the property indicates that the fill may have been subjected to a spill or release of a regulated substance. If the fill has 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 Department's policy "Management of Clean Fill."



STORMWATER INFILTRATION BED

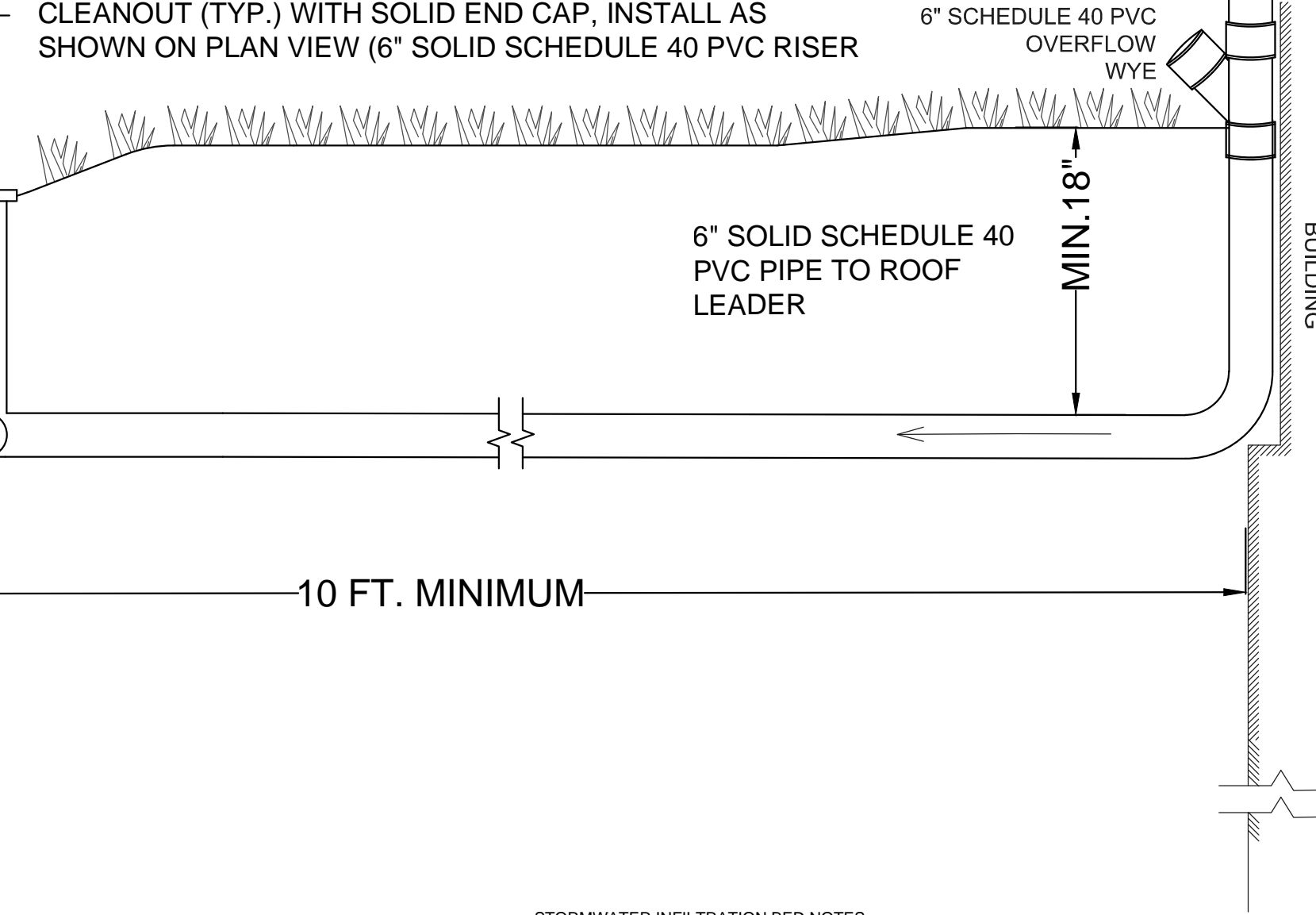
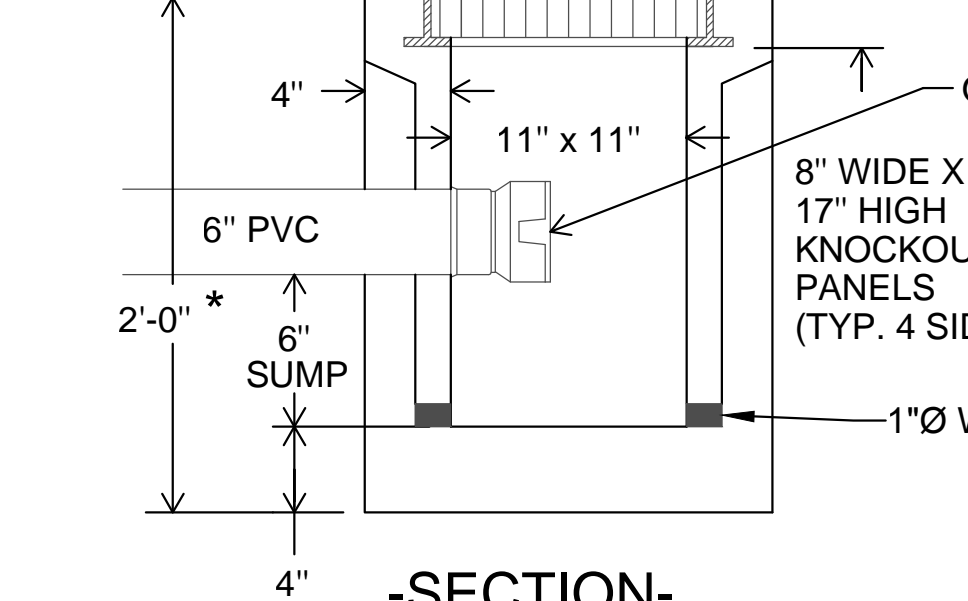
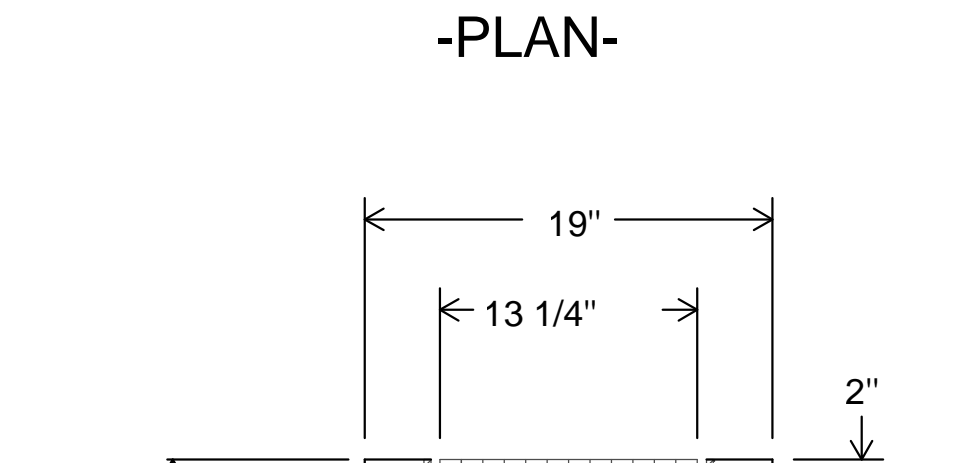
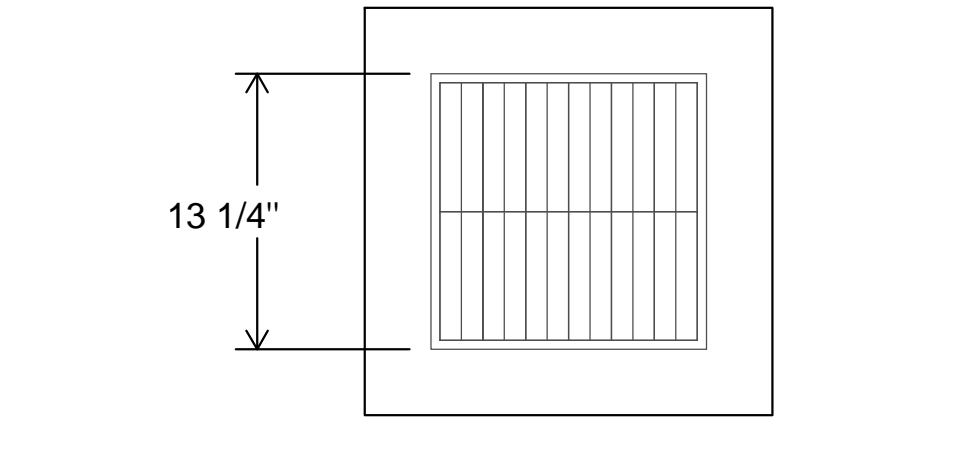


THE TOP, SIDES, & BOTTOM OF THE BED SECTION SHALL BE LINED WITH CLASS 1 NON-WOVEN GEOTEXTILE. ADJACENT STRIPS SHOULD OVERLAP A MINIMUM OF 16 INCHES.



APPROXIMATE DRAIN AREA = 16-19 SQ. IN. STANDARD GRATE WITH LIGHT DUTY RATING MATERIAL: PAINTED DUCTILE IRON, OR HDPE WITH U.V. INHIBITOR.

VARIOUS TYPES OF OUTLETS WITH WATERTIGHT ADAPTERS ARE AVAILABLE FOR: SDR-35 SEWER SCHEDULE 40 DWV



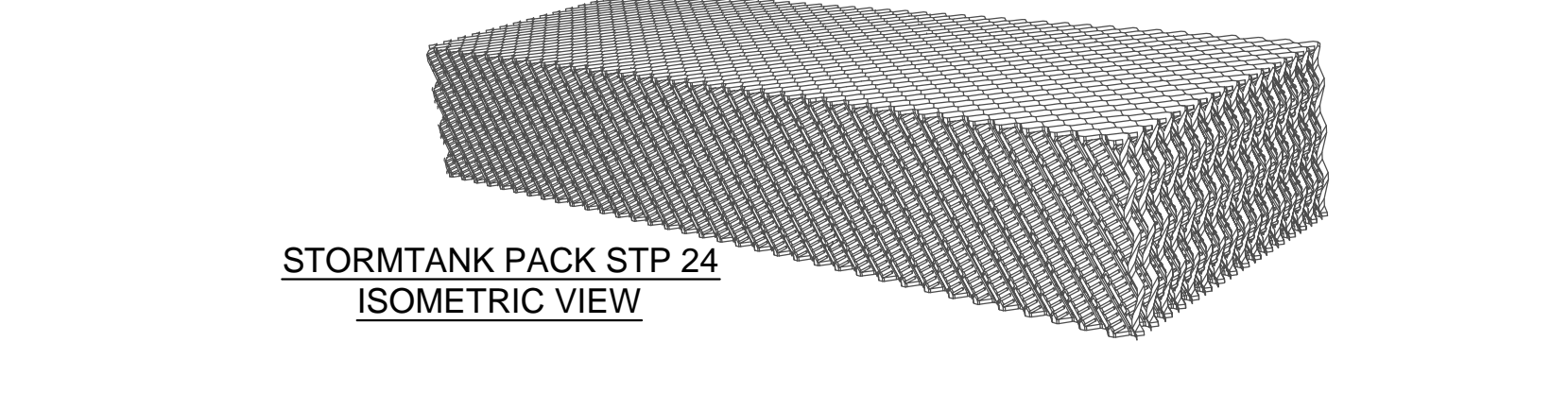
- STORMWATER INFILTRATION BED NOTES**
- THE CONTRACTOR SHALL PREVENT VEHICULAR TRAFFIC AND CONSTRUCTION EQUIPMENT FROM CROSSING THE AREA DURING CONSTRUCTION.
 - THE BED BOTTOMS SHALL BE LEVEL AND BE SIZED AS SHOWN.
 - THE CONTRACTOR SHALL NOT COMPACT THE BOTTOM OF THE BED DURING CONSTRUCTION IN ORDER TO MAINTAIN SOIL PERMEABILITY.
 - NO TREES SHALL BE PLANTED OVER THE SURFACE OF THE INFILTRATION BED AND A 5 FOOT BUFFER SHALL BE OBSERVED AROUND THE PERIMETER OF THE BED WHERE NO TREES SHALL BE PERMITTED.
 - A LEAF DIVERTER/DOWNSPOUT FILTER SHALL BE INSTALLED ON EVERY DOWNSPOUT THAT CONNECTS TO THE SUBSURFACE INFILTRATION BED.
 - THE GRATED OVERFLOWS SHALL BE CAPABLE OF PREVENTING RODENT ENTRY.

STORMWATER INFILTRATION BED CONSTRUCTION SEQUENCE NOTES

- DUE TO THE NATURE OF CONSTRUCTION SITES, SUBSURFACE INFILTRATION SHOULD BE INSTALLED TOWARD THE END OF THE CONSTRUCTION PERIOD, IF POSSIBLE.
- ELEVATIONS SHOWN HEREON MAY NEED TO BE FIELD ADJUSTED BASED ON ACTUAL FIELD CONDITIONS. ALL DIMENSIONS SHALL BE MAINTAINED AS SHOWN.
- INSTALL AND MAINTAIN ADEQUATE EROSION AND SEDIMENT CONTROL MEASURES (AS PER THE PENNSYLVANIA EROSION AND SEDIMENTATION CONTROL PROGRAM MANUAL) DURING CONSTRUCTION.
- THE EXISTING SUBGRADE UNDER THE BED AREAS SHOULD NOT BE COMPACTED OR SUBJECT TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC PRIOR TO GEOTEXTILE AND STONE BED PLACEMENT.
- WHERE EROSION OF SUBGRADE HAS CAUSED ACCUMULATION OF FINE MATERIALS AND/OR SURFACE PONDING, THIS MATERIAL SHOULD BE REMOVED WITH LIGHT EQUIPMENT AND THE UNDERLYING SOILS SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES WITH A YORK RAKE (OR EQUIVALENT) AND LIGHT TRACTOR. ALL FINE GRADING SHOULD BE DONE BY HAND. ALL BED BOTTOMS SHOULD BE AT LEVEL GRADE.
- EARTHEN BERMS (IF USED) BETWEEN INFILTRATION BEDS SHOULD BE LEFT IN PLACE DURING EXCAVATION. THESE BERMS DO NOT REQUIRE COMPACTION IF PROVEN STABLE DURING CONSTRUCTION.
- INSTALL UPSTREAM AND DOWNSTREAM CONTROL STRUCTURES, CLEANOUTS, PERFORATED PIPING, AND ALL OTHER NECESSARY STORMWATER STRUCTURES.
- GEOTEXTILE AND BED AGGREGATE SHOULD BE PLACED IMMEDIATELY AFTER APPROVAL OF SUBGRADE PREPARATION AND INSTALLATION OF STRUCTURES. GEOTEXTILE SHOULD BE PLACED IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDATIONS. ADJACENT STRIPS OF GEOTEXTILE SHOULD OVERLAP A MINIMUM OF 16 INCHES. IT SHOULD ALSO BE SECURED AT LEAST 4 FEET OUTSIDE OF BED IN ORDER TO PREVENT ANY RUNOFF OR SEDIMENT FROM ENTERING THE STORAGE BED. THIS EDGE STRIP SHOULD REMAIN IN PLACE UNTIL ALL BARE SOILS CONTIGUOUS TO BEDS ARE STABILIZED AND VEGETATED. AS THE SITE IS FULLY STABILIZED, EXCESS GEOTEXTILE ALONG BED EDGES CAN BE CUT BACK TO THE EDGE OF THE BED.
- CLEAN WASHED, UNIFORMLY GRADED AGGREGATE SHOULD BE PLACED IN THE BED IN MAXIMUM 8-INCH LIFTS. EACH LAYER SHOULD BE LIGHTLY COMPACTED. WITH CONSTRUCTION EQUIPMENT KEPT OFF THE BED BOTTOM AS MUCH AS POSSIBLE.
- APPROVED SOIL MEDIA SHOULD BE PLACED OVER INFILTRATION BED IN MAXIMUM 6-INCH LIFTS.
- SEED AND STABILIZE TOPSOIL.
- DO NOT REMOVE INLET PROTECTION OR OTHER EROSION AND SEDIMENT CONTROL MEASURES UNTIL SITE IS FULLY STABILIZED.

INFILTRATION BED MAINTENANCE

THE PROPERTY OWNER(S) SHALL BE RESPONSIBLE FOR THE SHORT TERM AND LONG TERM MAINTENANCE OF THE PROPOSED STORMWATER MANAGEMENT FACILITIES DEPICTED ON THESE PLANS. SUBSURFACE INFILTRATION IS GENERALLY LESS MAINTENANCE INTENSIVE THAN OTHER PRACTICES OF ITS TYPE. MAINTENANCE ACTIVITIES REQUIRED FOR THE SUBSURFACE BED ARE SIMILAR TO THOSE OF ANY INFILTRATION SYSTEM AND FOCUS ON REGULAR SEDIMENT AND DEBRIS REMOVAL. THIS MAINTENANCE OBJECTIVE IS TO PREVENT CLOGGING, ACCUMULATION OF SEDIMENT, STANDING WATER, AND STRUCTURAL FAILURE OF THE INFILTRATION SYSTEM. INSPECT AND MAINTAIN THE SYSTEM THROUGH THE CLEAN-OUT SUMP. THE OVERALL SYSTEM SHALL BE INSPECTED BY THE OWNER(S) AT LEAST ONCE A MONTH AND SHALL BE KEPT FREE FROM DEBRIS TO PREVENT CLOGGING. THE OWNER SHALL BE RESPONSIBLE FOR CLEANING THE LEAF DIVERTER/FILTER AS NEEDED. THE OWNER(S) SHALL ALSO BE RESPONSIBLE FOR CLEANING/LEAVING THE SIX INCH SUMPS AS NECESSARY AND KEEPING THE OVERFLOW DISCHARGE CLEAR OF OBSTRUCTIONS SO THE INFILTRATION SYSTEM FUNCTIONS AS DESIGNED.



STORMWATER & E.S.C DETAILS FOR

EON DEVELOPMENT LLC
962 HERSHEY PARK DRIVE

DERRY TOWNSHIP
DAUPHIN COUNTY
COMMONWEALTH OF PENNSYLVANIA

Bridging Tomorrow Today
ACT ONE & Associates
Civil Engineering
Surveying

200 South 41st Street, Suite A, Harrisburg, PA 17111
(717) 236-7500, Fax (717) 236-3314
Email: actoneinc@comcast.net, Web site: actoneassociates.com

DATE: 1-21-2016	REVISIONS:	DRAWN BY: RAS
SCALE: AS SHOWN		CHECKED BY: RES
SHEET 2 OF 2		JOB NO.: 15-188