

**Shade Tree Commission of
Radnor Township
Wayne, Pennsylvania**

AGENDA

**Wednesday
July 22, 2015
6:30 PM**

115 Strafford Avenue

Discussion regarding trees and shrubs compromised due to construction

(6) white pines need to be removed at the Township Arborist's request

(9) 14-16' Norway Spruce Trees need to be planted for these removals in September

Discussion: amending the Shade Tree Ordinance section 263-6 Emergency Tree Removal

220 Lansdowne Avenue GP # 15-117
Addition, walks and driveway
195 CY of dirt (take off site)

411 Louella Avenue GP # 15-119
Addition, patio, drive, deck, etc
(3) trees to be removed (2) 8" & (1) 10"
(3) trees will be planted
475 CY of dirt (take off site)

446 Boxwood Road GP # 15-120
Construct single family dwelling
1,500 CY of dirt (take off site)
14 trees to be removed (7) 6-18" (5) 19-29" (2) 30"+
34 trees required – 18 being large canopy
36 trees provided – 20 being large canopy

Ravenscliff / Roundhill GP # 15-121
Pond dredging
2,500 CY of dirt (keep on site)

***Hazardous Tree Removals
Approved for removal by Township Arborist***

743 King of Prussia Road
50" Black Oak
Signs of decline throughout canopy and does not have a healthy root flair at base
Tree is located behind house

Applicant's arborist was asked to have applicant plant 1 large canopy tree

304 Landover Road

31" Red Oak

Decay on central leader @ 30', slight crack or opening along trunk, possibly due to June wind storm

320 Louella Avenue

37" Sugar Maple

Significant rot and decay in trunk

Township Arborist requested (1) shade tree be planted

312 West Avenue

20" Hemlock

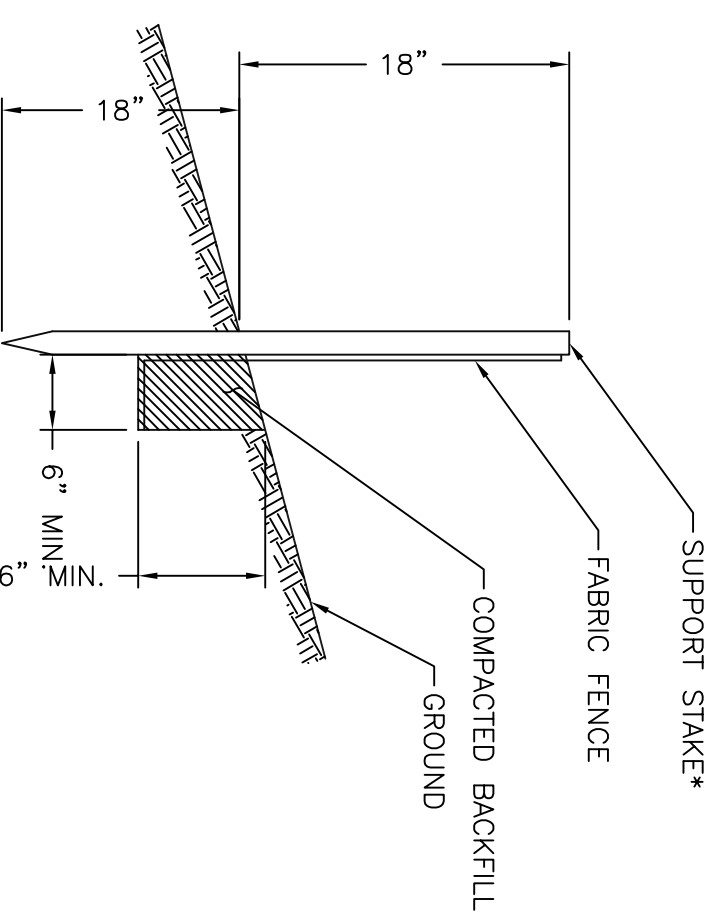
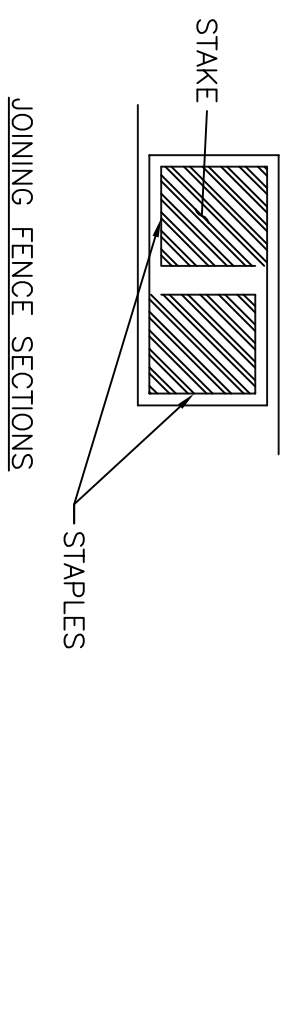
13" Cedar

26" White Pine substantial 18" x 30" rotted section 25' up on the trunk

(2) 10" Cedar

12" Cedar

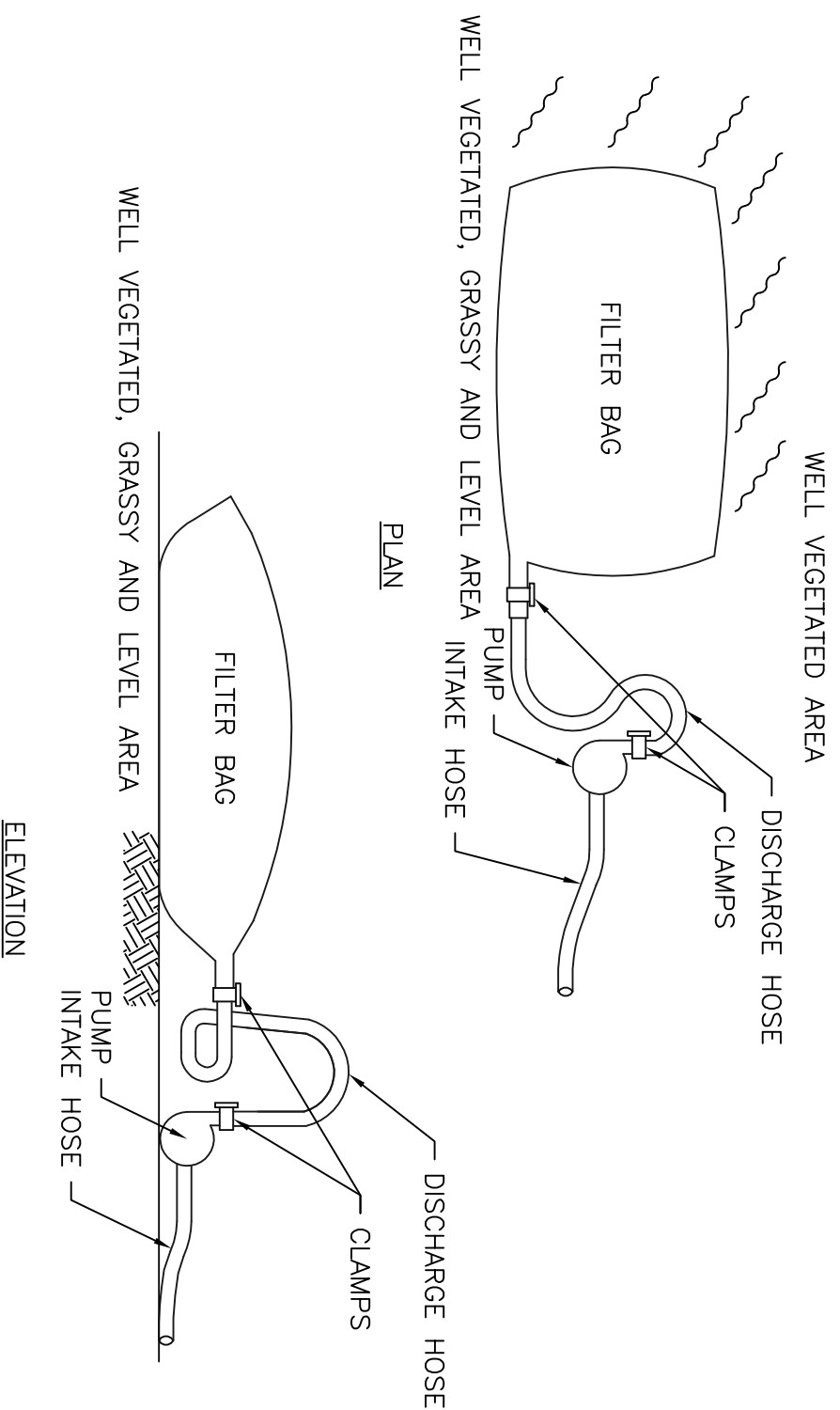
All trees are growing within 1-2' of foundation of house. Root systems are pushing against the foundation causing cracks and allowing water to penetrate into the basement. Trees are declining and unbalanced. Trimming the trees is not an option



NOTES:

1. FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3.
2. FABRIC WIDTH SHALL BE 30" MINIMUM. STAKES SHALL BE HARDWOOD OR EQUIVALENT STEEL.
3. SILT FENCE SHALL BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 6 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT (SEE FIGURE 4.1).
4. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVEGROUND HEIGHT OF THE FENCE.
5. ANY SECTION OF SILT FENCE WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET (STANDARD CONSTRUCTION DETAIL # E-4-D).
6. FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.

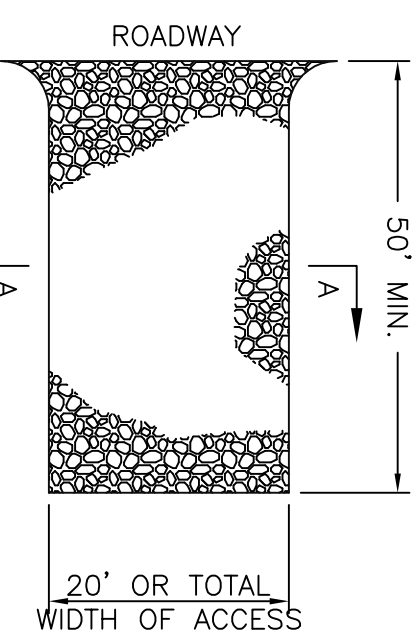
1 STANDARD FILTER FABRIC FENCE (18" HIGH)
ES-2
NTS



NOTES:

1. FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED, "I" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS.
2. A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES MUST BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED.
3. BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO GRADE. EROSION CONTROL BAGS SHALL NOT BE USED AS A GEOTEXTILE AT ANY POINT BY THE MANUFACTURER AND SECURELY CLAMPED.
4. THE PUMP DISCHARGE HOSE SHALL BE INSPECTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER, WHOEVER IS LESS. PUMP INTAKE SHOULD BE FLOATING AND SCREENED.
6. FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.
7. SHOULD ADEQUATE VEGETATION NOT EXIST, BAG SHALL BE PLACED ON A BED OF 6" OF ASHTO #57 STONE, OR AS DIRECTED BY THE COUNTY CONSERVATION DISTRICT.

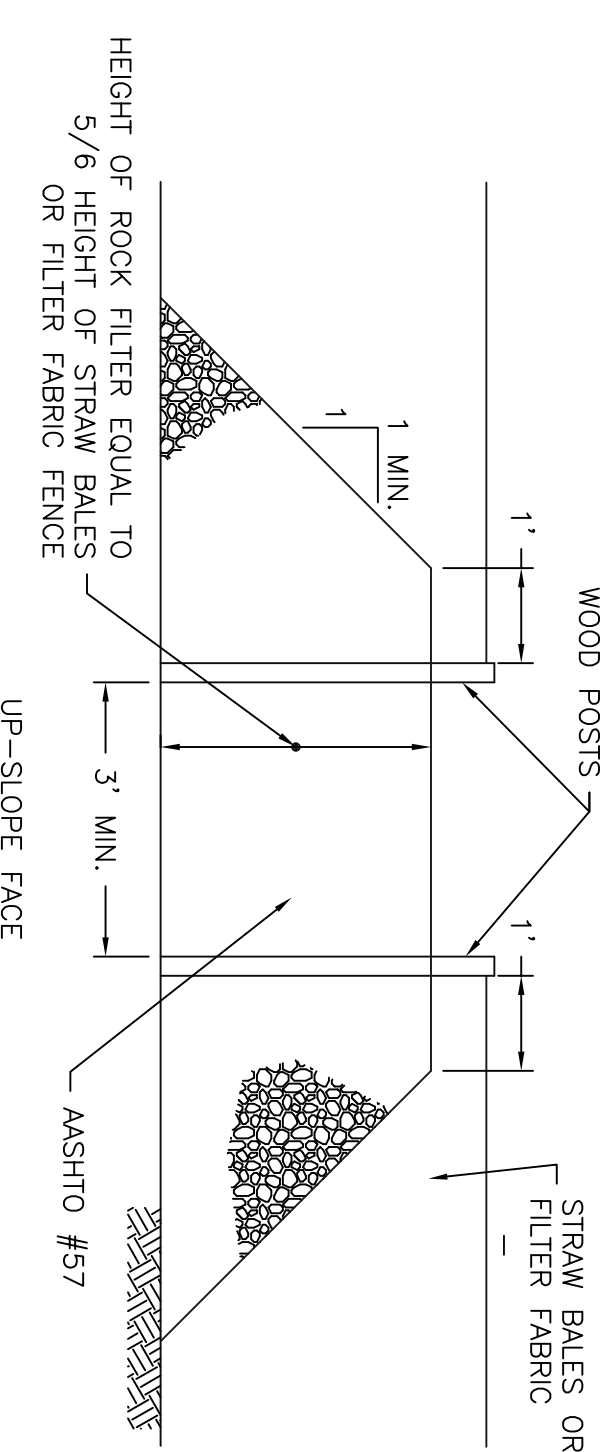
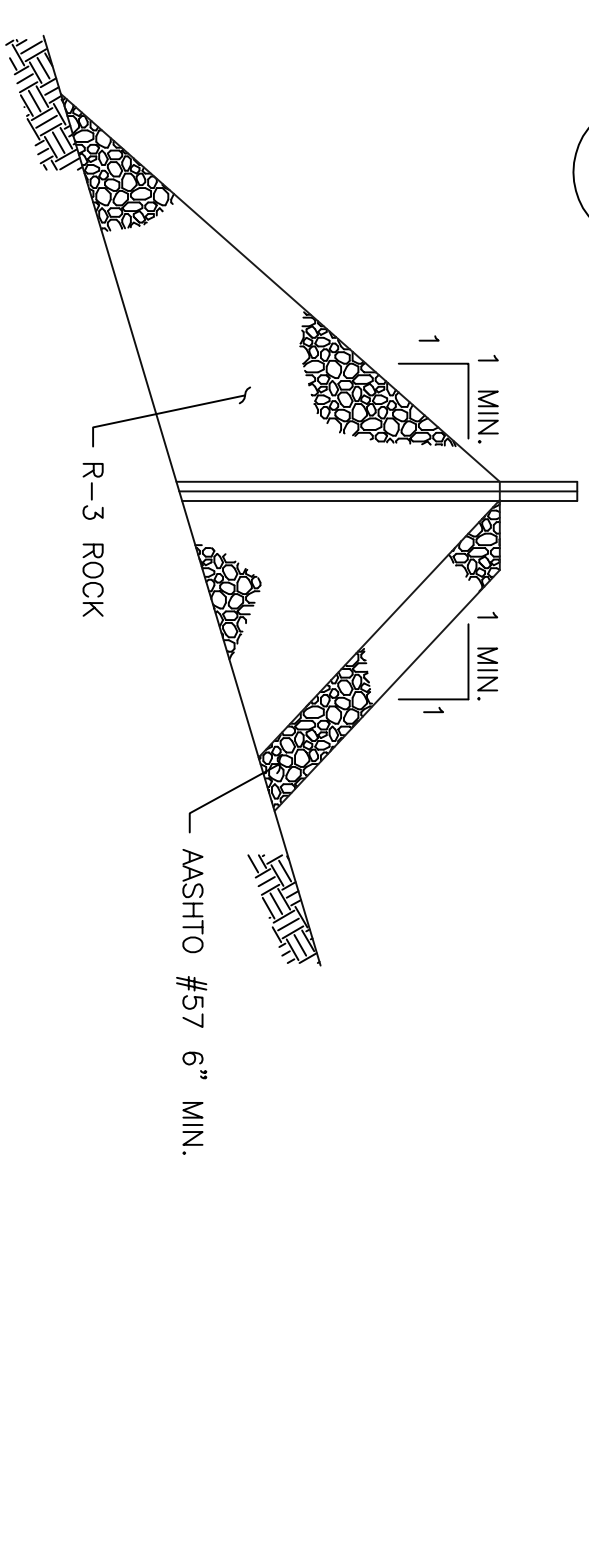
4 PUMPED WATER FILTER BAG
ES-2
NTS NO STANDARD CONSTRUCTION NUMBER



NOTES:

1. ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED ON SITE FOR THIS PURPOSE.
2. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE.
3. GEOTEXTILE FABRIC, AS SPECIFIED IN PENNDOT PUBLICATION 408, SECTION 735, TABLE A, CLASS 41, TYPE B.

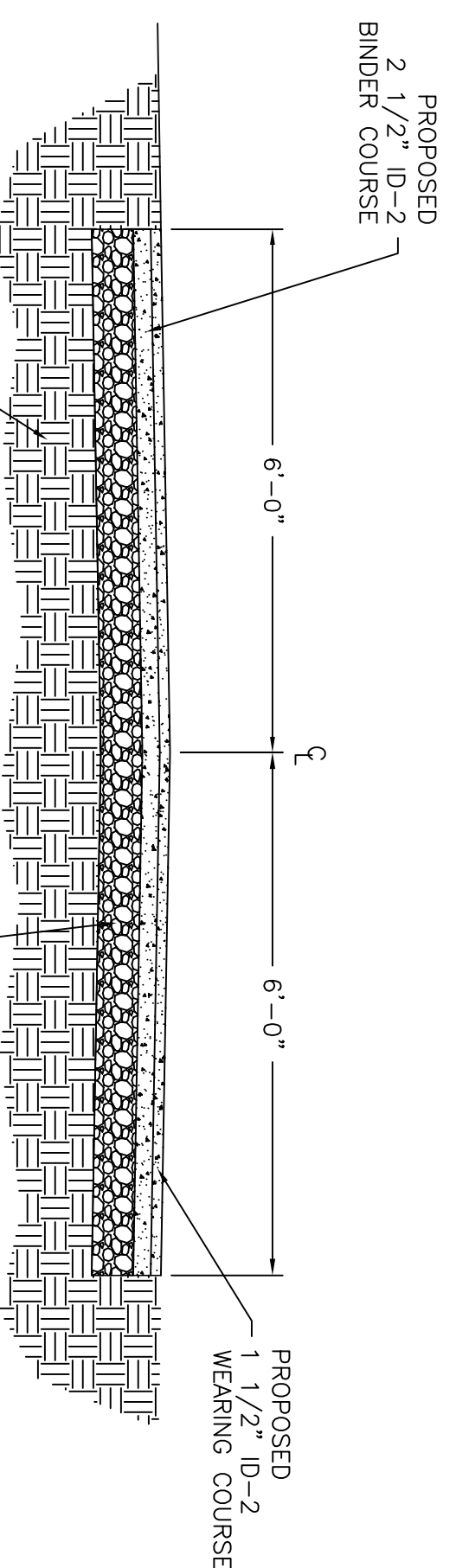
2 ROCK CONSTRUCTION ENTRANCE
ES-2
NTS NO STANDARD CONSTRUCTION NUMBER



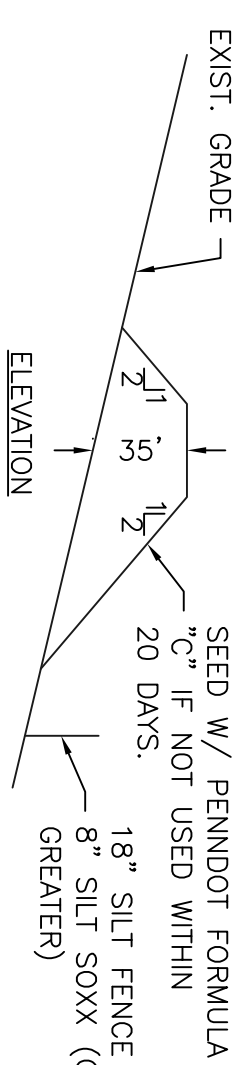
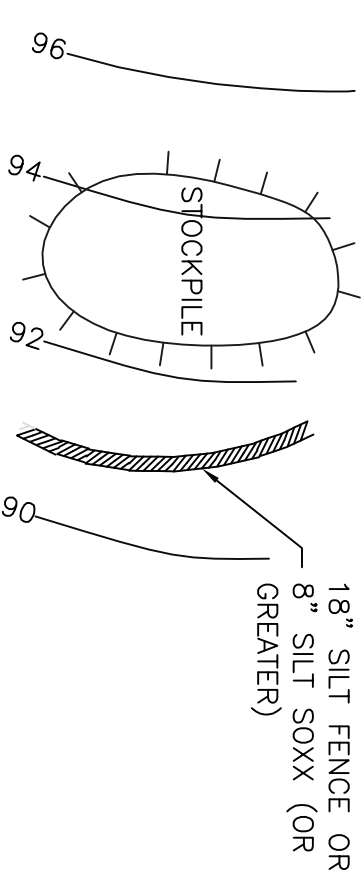
NOTES:

1. SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.

5 ROCK FILTER OUTLET
ES-2
NTS NO STANDARD CONSTRUCTION NUMBER



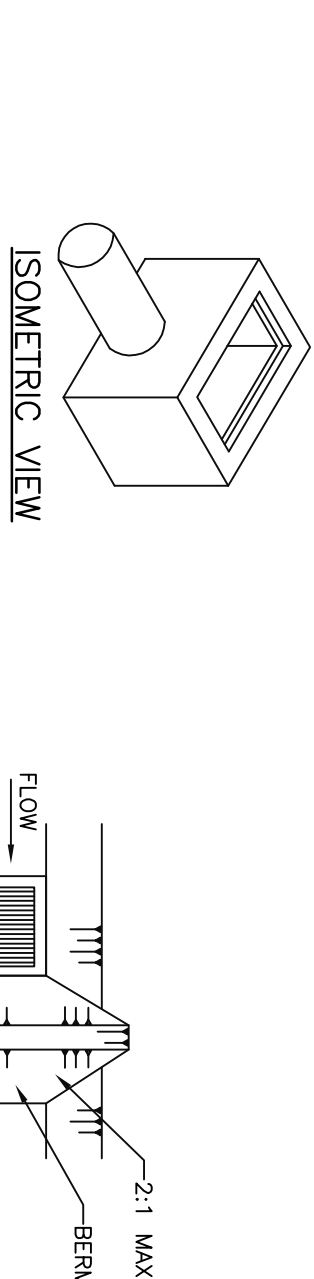
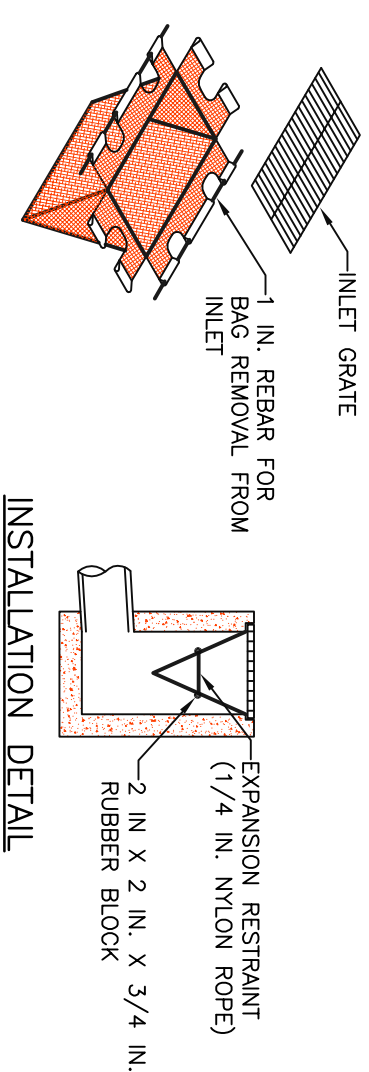
9 DRIVEWAY DETAIL
ES-2
NTS



NOTES:

1. INSTALL SILT FENCE DOWNSLOPE OF AREA OF STOCKPILE.
2. PLACE STOCKPILE IN AREAS SHOWN ON EROSION CONTROL PLAN WITHOUT BLOCKING NATURAL DRAINAGE PATTERNS.
3. STOCKPILE SHOULD BE MAINTAINED TO A MAXIMUM HEIGHT OF 10 FEET. STOCKPILES SHOULD NOT BE STEEPER THAN 2:1 (H:V).
4. SEED IMMEDIATELY WITH PENNDOT SEEDING FORMULA "C" IF MATERIAL IS NOT TO BE USED WITHIN 20 DAYS. FOLLOW SEEDING, FERTILIZATION SCHEDULE & SPECIFICATIONS.
5. LOCATION(S) AND SIZE(S) OF SOIL STOCKPILES ARE APPROXIMATE AND SHALL BE ADJUSTED PER FIELD AND CONSTRUCTION SEQUENCE CONDITIONS. CONTRACTOR SHALL VERIFY REQUIRED SIZE(S), REQUIREMENTS FROM THE STANDARDS DETAIL MUST BE FOLLOWED FOR STOCKPILES.

3 TOPSOIL STOCKPILE AND MAINTENANCE
ES-2
NTS NO STANDARD CONSTRUCTION NUMBER



NOTES:

- MAXIMUM DRAINAGE AREA = 1/2 ACRE
- INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.
- ROLLED EARTHEN BERMS IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROLL SUBBASE BERMS ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERMS IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.
- AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAIN TENSILE STRENGTH OF 120 LBS. A MINIMUM BURST STRENGTH OF 200 FSI, AND A MINIMUM TENSILE STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.
- INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RAINFALL EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SURVEY SHALL BE MAINTAINED ON SITE TO MONITOR THE PROGRESS OF THE INLET. THE INLET SHALL BE INSPECTED AND MAINTAINED DURING INSPECTION. DISPOSE ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.
- DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

6 FILTER BAG INLET PROTECTION
ES-2
NTS



PENNSYLVANIA LAW REQUIRES THREE WORKING DAYS NOTICE PRIOR TO ANY EARTH MOVING ACTIVITIES

No.	Date	Client Comments	Remarks
1.	6/30/15		

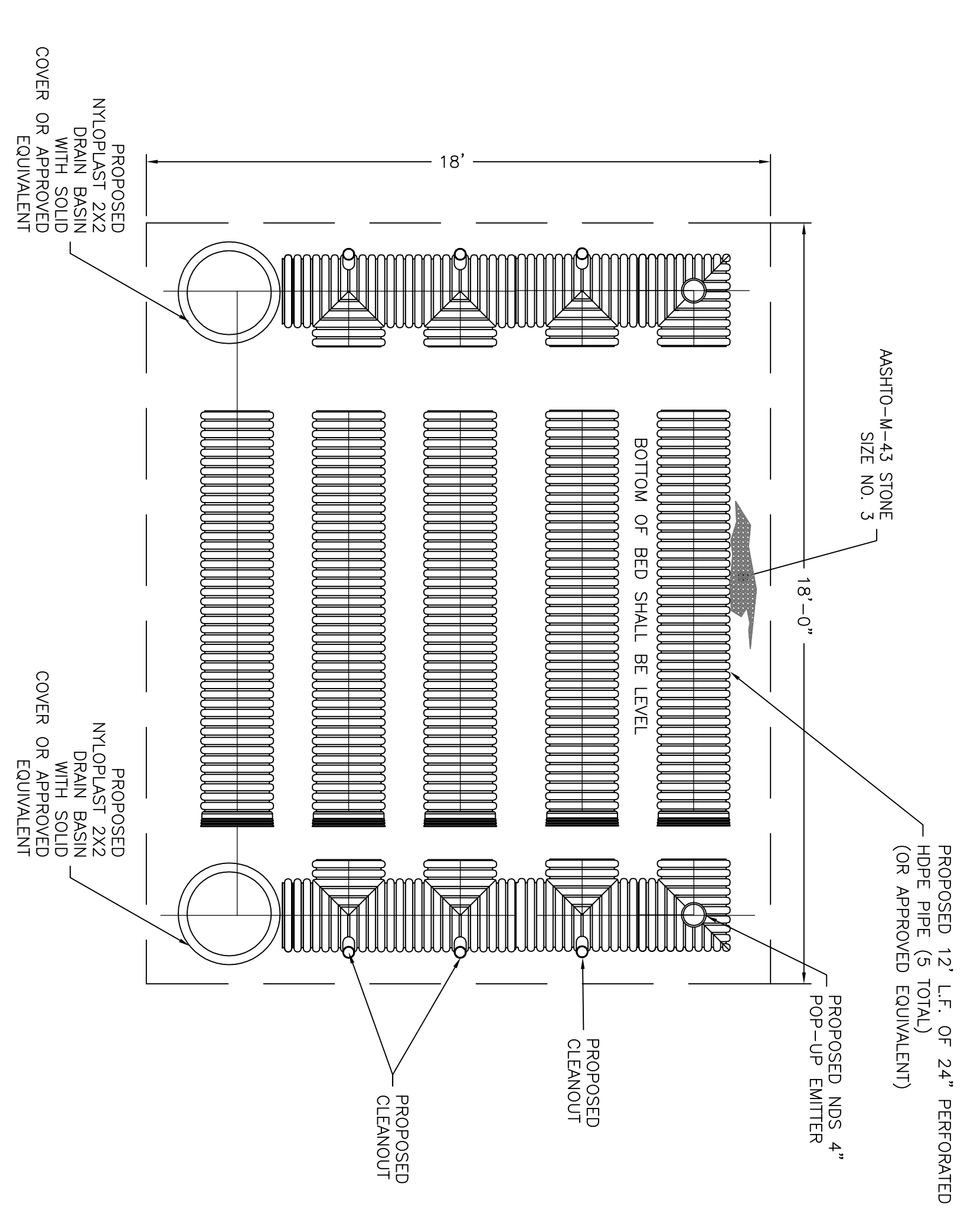
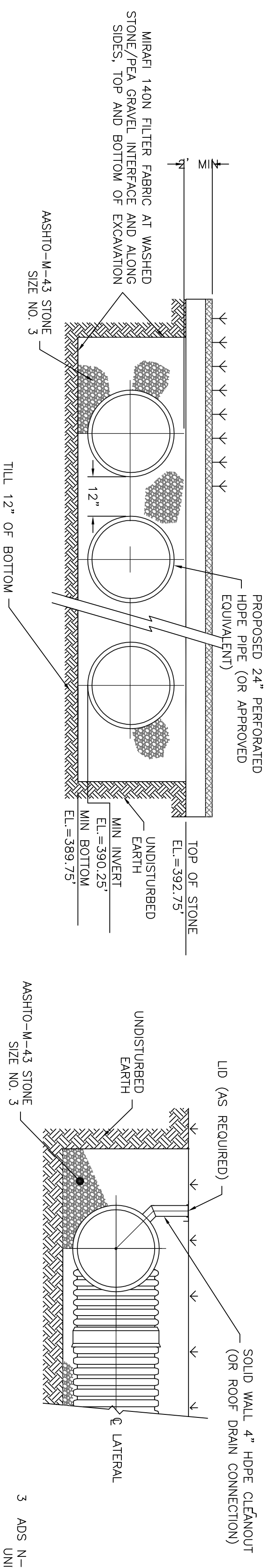


EROSION AND CONTROL DETAILS
BRADLEY PROPERTY
220 LANSDOWNE AVENUE
WAYNE, PA 19087
RANDOLPH TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA

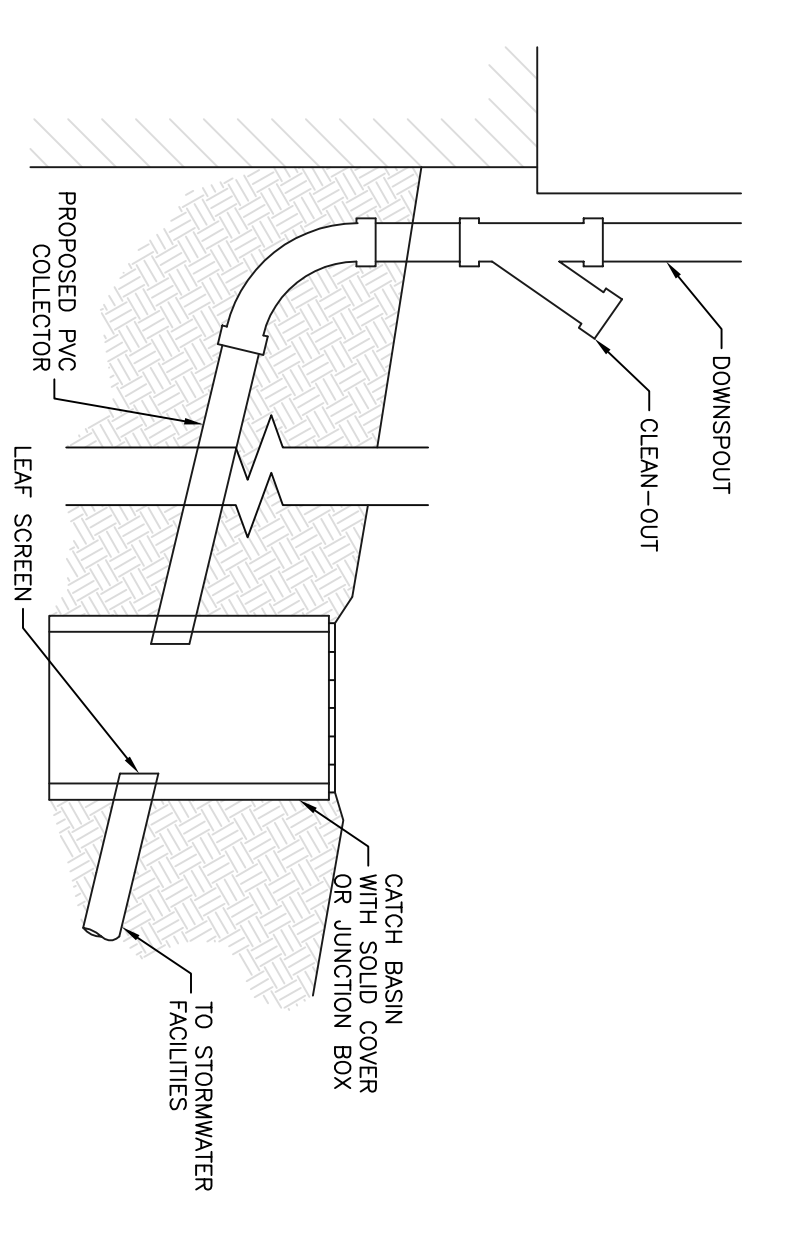
ASH ASSOCIATES, INC.
765 TENNIS AVENUE
AMBLER, PA 19002
PH: 215.367.5261
WWW.ASHASSOCIATES.NET

ASH ASSOCIATES
Heritage

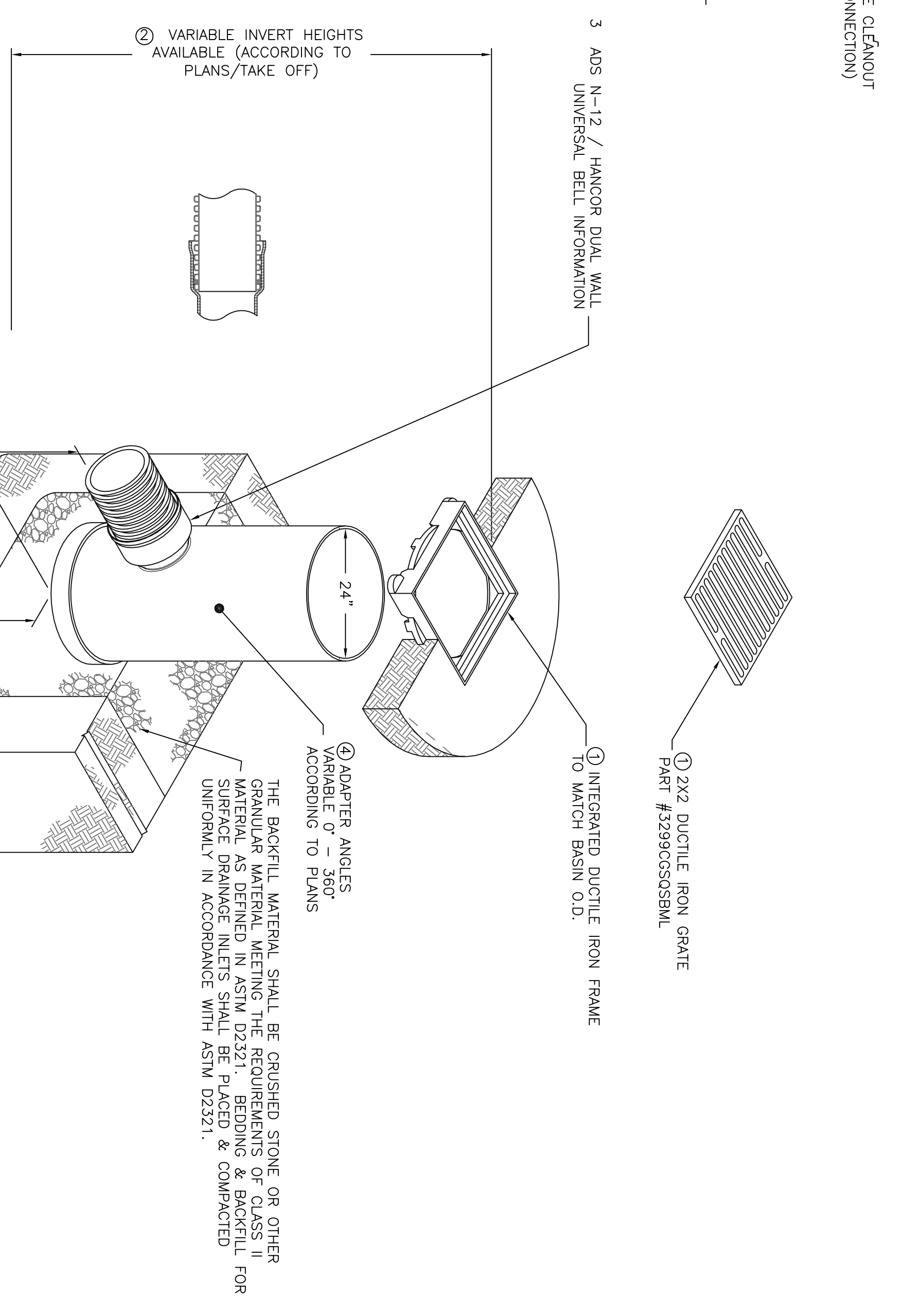
SCALE: AS NOTED
DATE: 5/27/2015
PROJECT NO. 2756
SHEET 3 OF 5



1 INFILTRATION BED DETAIL
SW-2 NTS



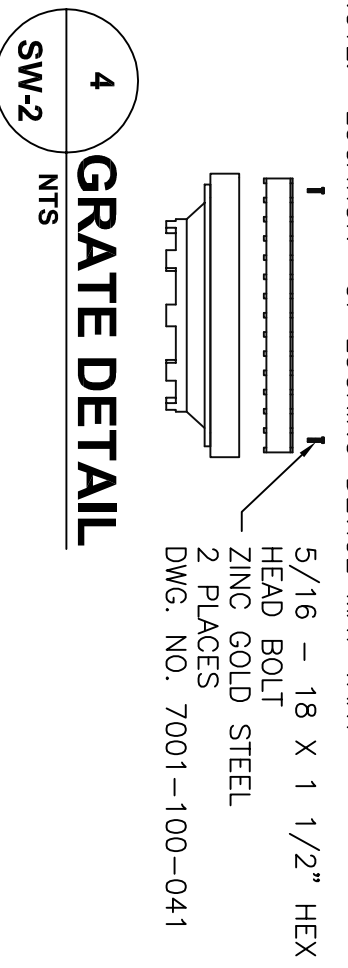
2 ROOF LEADER CONNECTION TO STORMWATER FACILITIES
SW-2 NTS



- ① FRAME & GRATE SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
- ② DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS
- ③ DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS & HANCOR DUAL WALL) & SDR 35 PVC
- ④ ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-013

3 NYLOPLAST 24\"/> SW-2 NTS

NOTE: CONTRACTOR CAN SUBSTITUTE WITH AN EQUIVALENT PRODUCT AFTER APPROVAL FROM DESIGN ENGINEER.



4 GRATE DETAIL
SW-2 NTS

No.	Date	Client Comments	Remarks
1.	6/30/15		

Revisions

Date Issued: 6/30/2015

POSWM - DETAILS
BRADLEY PROPERTY
220 LANSDDORNE AVENUE
MAYNE, PA 19087

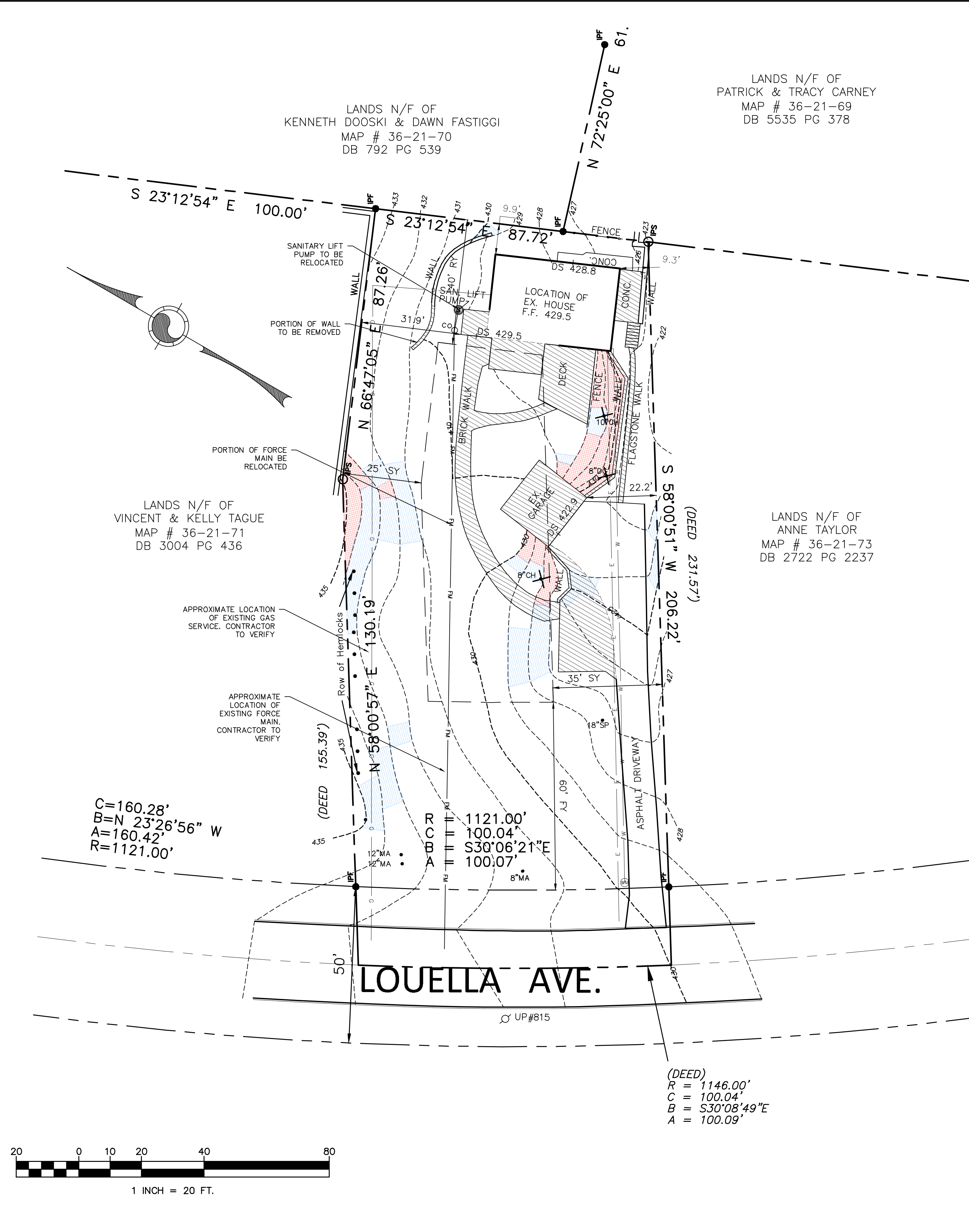
ASH ASSOCIATES, INC.
765 TENNIS AVENUE
AMBLER, PA 19002
PH: 215.367.5261
WWW.ASHASSOCIATES.NET

RAVENOR TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA

American Surveying
ASH ASSOCIATES
Heritage

SCALE: AS NOTED
DATE: 5/27/2015

PROJECT NO. 2756
SHEET 5 OF 5



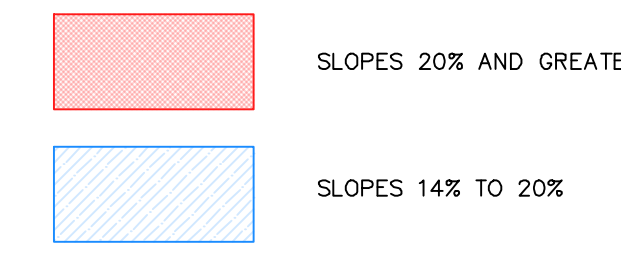
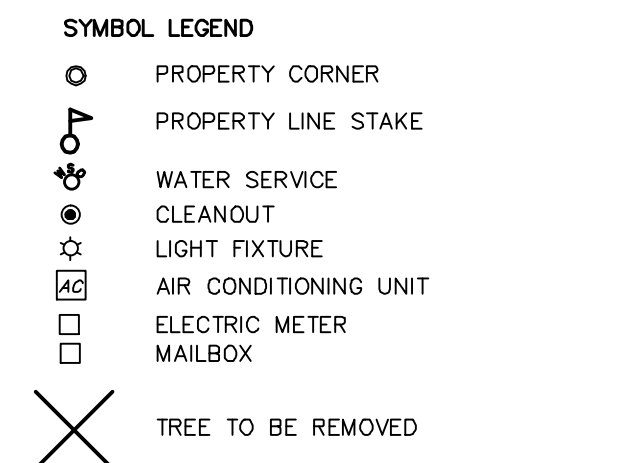
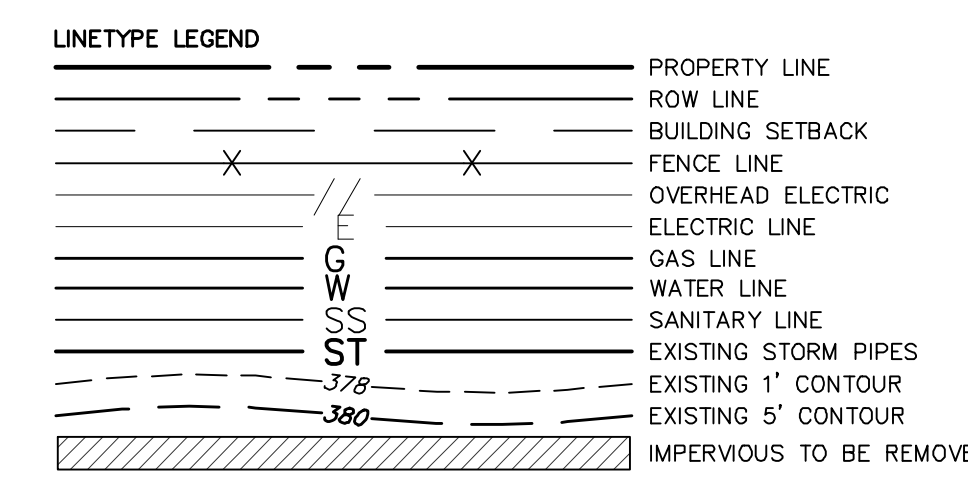
ALL LOCATIONS OF EXISTING UTILITIES, SHOWN ON THIS PLAN, HAVE BEEN DEVELOPED FROM FIELD LOCATIONS OF VISIBLE ABOVE GROUND UTILITY STRUCTURES AND INFORMATION FURNISHED BY THE UTILITY COMPANIES.

ALL LOCATIONS SHOULD BE CONSIDERED APPROXIMATE. COMPLETENESS OR ACCURACY OF THE LOCATIONS AND DEPTH OF ALL STRUCTURES CANNOT BE GUARANTEED. CONTRACTORS MUST VERIFY ALL LOCATIONS AND DEPTHS OF ALL UNDERGROUND UTILITIES AND FACILITIES BEFORE THE START OF ANY WORK.

AS PER ACT 187 HOUSE BILL 2827, BEFORE THE START OF ANY EXCAVATION WORK THE CONTRACTOR SHALL NOTIFY THE AFFECTED UTILITY COMPANIES THROUGH THE PENNSYLVANIA "ONE CALL SYSTEM" 1-800-242-1776 THREE DAYS PRIOR TO THE START OF ANY EXCAVATION. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO THE START OF ANY CONSTRUCTION.

SOILS INFORMATION																					
SYMBOL	NAME	%SLOPE	ERODIBILITY INDEX	HYDROLOGIC GROUP	AGRICULTURAL CAPABILITY CLASS	DRAINAGE	LOAD BEARING CAPACITY	DEPTH TO WATER	DEPTH TO BEDROCK	GRAVEL SOURCE	SAND SOURCE	ROADFILL SOURCE	TOPSOIL SOURCE	LOCAL ROADS AND RESERVOIR AREAS	POND EMBANKMENTS	IRRIGATION	RESIDENTIAL DEVELOPMENT	LIGHT INDUSTRIAL	SEWAGE LAGOONS	ON-SITE SEPTIC	LAWNS
Md	MADE LAND GABBRD AND DIABASE MATERIALS	NOT RATED	NOT RATED	C	6E	WELL DRAINED	NOT RATED	6.6+	6.6+	NOT RATED	NOT RATED	NOT RATED	NOT RATED	NOT RATED	NOT RATED	NOT RATED	NOT RATED	NOT RATED	NOT RATED	NOT RATED	NOT RATED

NOTES: IF THE PROPOSED EROSION AND SEDIMENTATION CONTROL MEASURES ARE INSTALLED AND MAINTAINED PROPERLY, NO UNFORESEEN SOIL LIMITATIONS OR PROBLEMS ARE LIKELY. NEVERTHELESS, IF A PROBLEM DOES DEVELOP, THE DEVELOPER MUST TEMPORARILY SEED AND MULCH THE DISTURBED AREA. SUITABLE TOPSOIL SHALL BE IMPORTED TO SITE IF INADEQUATE QUANTITIES OF SUITABLE TOPSOIL EXIST ON SITE. ADEQUACY OF SOIL TO BE DETERMINED BY SITE GEOTECHNICAL ENGINEER IN CONJUNCTION WITH THE LANDSCAPE ARCHITECT. SOIL AMENDMENTS SHALL BE ADDED AS REQUIRED. ALL UNSUITABLE MATERIAL SHALL BE DISPOSED OF PROPERLY. SITE GEOTECHNICAL ENGINEER SHALL ALSO BE CONSULTED DURING WINTER GRADING OPERATIONS.



EXISTING IMPERVIOUS COVERAGE:

RESIDENCE	1,298 S.F.
GARAGE	388 S.F.
DRIVEWAY	2,140 S.F.
DECK	343 S.F.
WALLS	163 S.F.
WALKS/STEPS	361 S.F.
TOTAL	5,293 S.F. (22.80%)

EXISTING IMPERVIOUS TO BE REMOVED:

PORTION OF RESIDENCE	234 S.F.
GARAGE	388 S.F.
DRIVEWAY	486 S.F.
DECK	343 S.F.
WALLS	86 S.F.
WALKS/STEPS	874 S.F.
TOTAL	2,411 S.F.

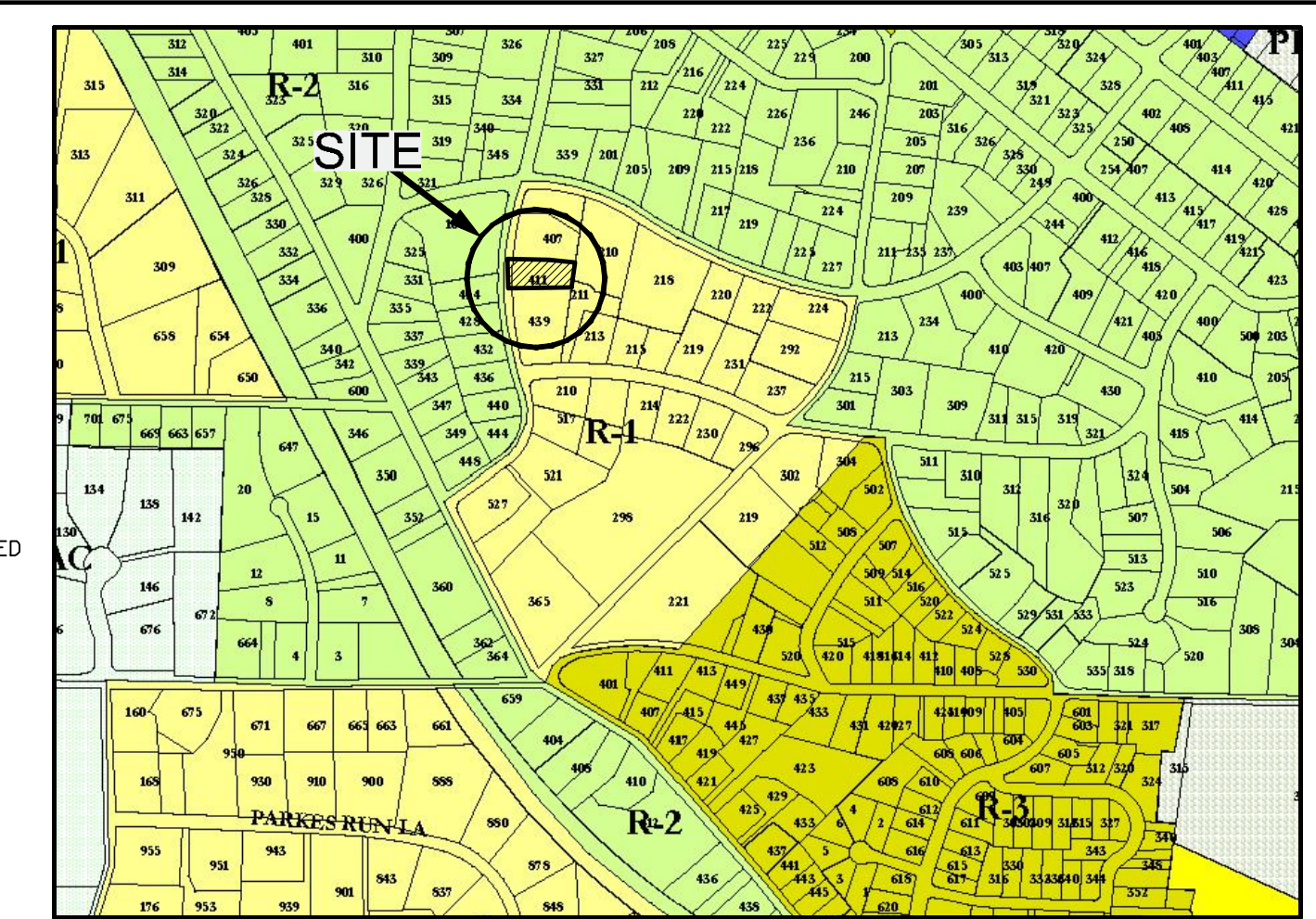
APPEAL OF KENNETH G. BARRINGER AND ELIZABETH L. WEBER, premises located at 411 Louella Avenue and zoned R-1. Appellants seek a variance from the restrictions of Zoning Code Section 280-15(D)(1) to allow aggregate side yards of 34.3 feet, a variance from the restrictions of Zoning Code Section 280-15(F) to allow impervious coverage of 28.46%, and a variance from Zoning Code Section 280-112(D) to allow expansion of a driveway backup area where there are steep slopes. In the alternative, Appellants contend that their proposed improvements are allowed by right.

DECISION OF THE ZONING HEARING BOARD
ORDER

Variances under Zoning Code Sections 280-15(D)(1), 280-15(F), and 280-112(D) are granted, the Order of the Zoning Officer is reversed, and an appropriate permit is ordered to be issued for the construction of Appellants' proposed addition and related improvements, in the precise location and manner as shown on that certain Site Improvement Plan (the "Plan") dated October 7, 2014 and last revised March 20, 2015, as prepared by R.H. Smith Surveyors, which Plan has been entered into the record as Appellants' Exhibit "A-14", and otherwise as shown on the plans, exhibits and testimony made part of the record, to the extent consistent with the Plan. Relief is granted only under Zoning Code Sections 280-15(D)(1), 280-15(F), and 280-112(D), and no relief is granted with respect to any other provision of the Zoning Code.

BY ORDER OF THE ZONING HEARING BOARD
/s/ BRADLEY DELUIZA, CHAIRMAN
/s/ WILLIAM MARTIN, VICE-CHAIRMAN
/s/ GEORGE NAGLE
/s/ JOHN RILLY
/s/ MATTHEW HOMYK

JULY 1, 2015: THIS DECISION SHALL EXPIRE IF THE APPLICANT FAILS TO OBTAIN A BUILDING PERMIT WITHIN SIX (6) MONTHS FROM THIS DATE: JULY 1, 2015



ZONING DISTRICT R-1 (RESIDENCE DISTRICT)
 LOT AREA: 1 ACRE MIN.
 BLDG. AREA: 120' FEET MIN. AT BUILDING LINE
 15% MAX.
 FRONT YARD: 60 FEET MIN.
 SIDE YARD: 60 FEET AGG. (25 FEET MIN.)
 REAR YARD: 40 FEET MIN.
 HEIGHT: 35 FEET MAX.
 IMPERVIOUS SURFACE: 22% MAX.
 RIPARIAN BUFFER: 35 FEET MIN.
 ACCESSORY USE SETBACK: 10 FEET MIN.

FOR MORE DETAILED INFORMATION YOUR ATTENTION IS CALLED TO THE ZONING CODE OF RADNOR TOWNSHIP, LATEST EDITION.

LOT DATA:
 GROSS LOT AREA = 23,216 S.F. (0.533 ACRES)

SOURCE OF TITLE:
 DEED BOOK 5560 PAGE 2391
 411 LOUELLA AVENUE
 WAYNE, PA 19087
 TMP No. 36-03-01736-00
 Block No. 21 Unit No. 72

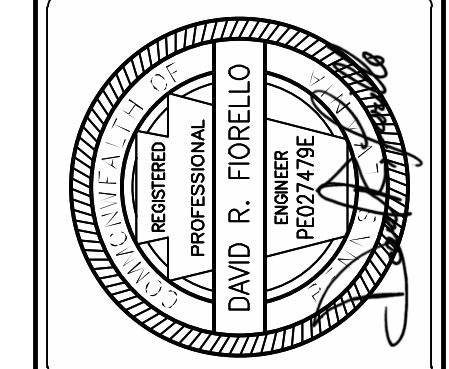
- GENERAL NOTES**
- OWNER/APPLICANT: KENNETH G. BARRINGER & ELIZABETH L. WEBER
411 LOUELLA AVENUE
WAYNE, PA 19087
 - BOUNDARY SURVEY AND EXISTING CONDITION INFORMATION TAKEN FROM A PLAN ENTITLED "SITE IMPROVEMENT PLAN" PREPARED BY R. H. SMITH SURVEYORS DATED OCTOBER 10 22, 2014, REVISED 03/20/15, PLAN No: 150301/140905
 - SOIL INFORMATION TAKEN FROM THE SOIL SURVEY FOR CHESTER AND DELAWARE COUNTIES PREPARED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE.
 - THE PROPOSED DEVELOPMENT WILL INCLUDE THE DEMOLITION OF THE EXISTING DETACHED GARAGE, A PORTION OF THE EXISTING RESIDENCE AND THE CONSTRUCTION OF AN ADDITION TO THE EXISTING RESIDENCE WITH ATTACHED GARAGE, DRIVEWAY IMPROVEMENTS, AND OTHER ASSOCIATED IMPROVEMENTS TOGETHER WITH THE REMOVAL OF PORTIONS OF EXISTING PAVED AREAS.
 - THE CONSTRUCTION WILL RESULT IN SOME NEW AND REPLACEMENT IMPERVIOUS COVER FOR WHICH STORMWATER MANAGEMENT IS REQUIRED PER THE TOWNSHIP STORMWATER MANAGEMENT ORDINANCE.
 - THIS SITE IS CURRENTLY SERVED BY PUBLIC DOMESTIC WATER SERVICE. PUBLIC WATER SERVICE IS TO BE MAINTAINED.
 - THIS SITE IS CURRENTLY SERVED BY PUBLIC SEWER WHICH IS TO BE MAINTAINED AS PART OF THIS WORK.
 - MAINTENANCE FOR THE PROPOSED STORMWATER MANAGEMENT SYSTEM IS THE RESPONSIBILITY OF THE OWNER.
 - UTILITY LINES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL HAVE ALL LINES MARKED PRIOR TO CONSTRUCTION AND ADJUST SERVICES AS NECESSARY.
 - THE EXISTENCE AND/OR LOCATION OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION
 - THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. ANY DISCREPANCIES THAT MAY AFFECT THE PUBLIC SAFETY OR PROJECT COST, MUST BE IDENTIFIED TO THE ENGINEER IN WRITING IMMEDIATELY. PROCEEDING WITH CONSTRUCTION WITH DESIGN DISCREPANCIES IS DONE SO AT THE CONTRACTOR'S OWN RISK.

I, _____, ACKNOWLEDGE THAT ANY REVISION TO THE APPROVED DRAINAGE PLAN MUST BE APPROVED BY THE MUNICIPALITY.

I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THE EXISTING CONDITIONS ARE AS SHOWN AND THAT THIS DRAINAGE PLAN COMPLIES WITH ALL THE DESIGN STANDARDS AND CRITERIA OF THE RADNOR TOWNSHIP STORMWATER MANAGEMENT ORDINANCE.

DAVID R. FIORELLO, P.E. DATE

Serial Number: 2015-189-0295
 CALL BEFORE YOU DIG:
 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

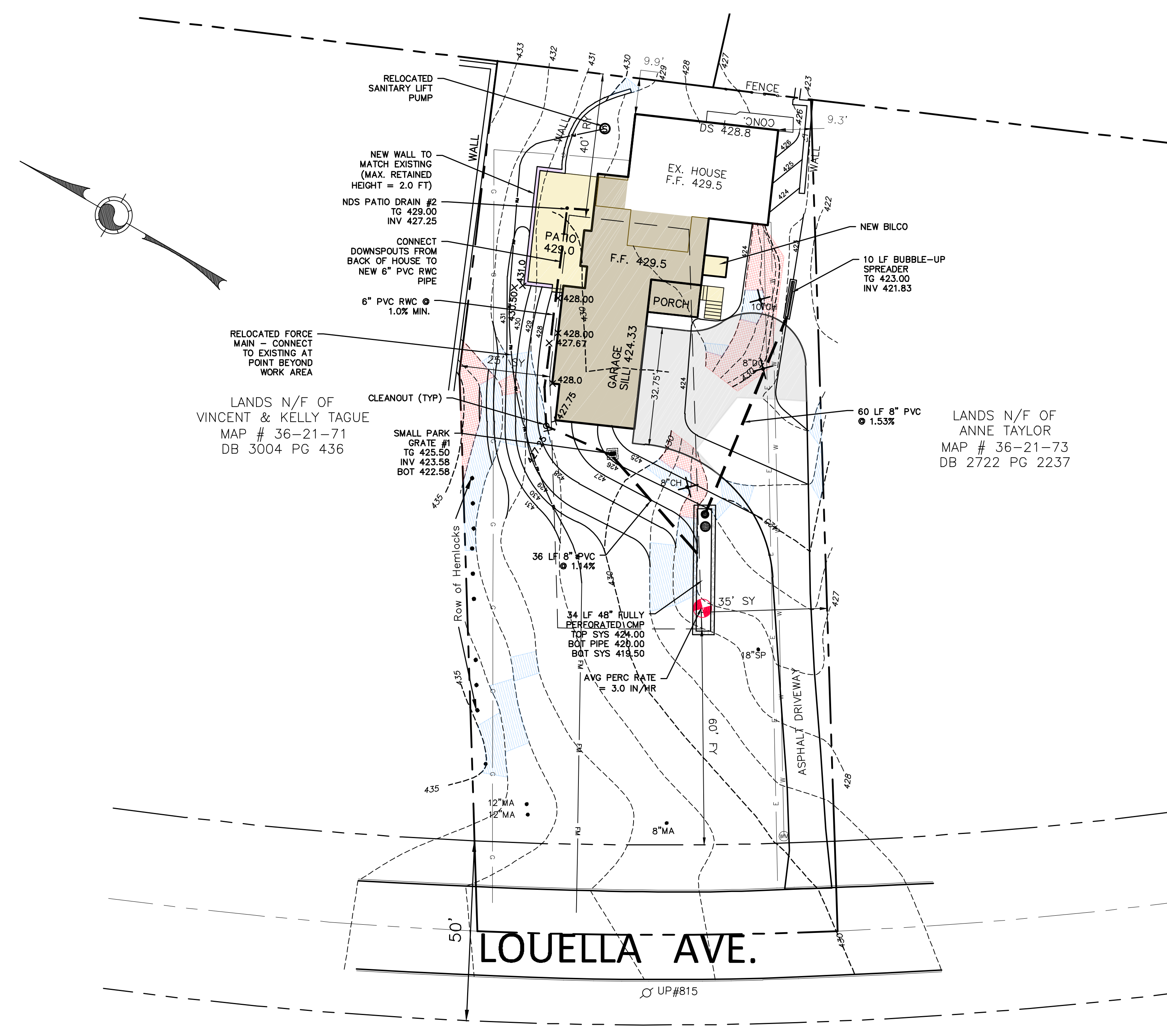


MOMENNE & ASSOCIATES, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 924 COUNTY LINE ROAD, BRN MNR, PA 19010
 PHONE: (610) 527-3030 FAX: (610) 527-9008

GRADING PERMIT PLAN
 EXISTING CONDITIONS / DEMOLITION PLAN
 411 LOUELLA AVENUE
 RADNOR TOWNSHIP • DELAWARE COUNTY • PENNSYLVANIA
 ONE-CALL: 20151890295
 DRAWN BY: DRF
 CHECKED BY: DRF
 OWNER/APPLICANT
 MR. & MRS. KENNETH BARRINGER
 411 LOUELLA AVENUE
 WAYNE, PA 19087



DATE: JULY 9, 2015
 SHEET NO. 1
 OF 4
 SCALE: 1" = 20'
 FILE NO.: 15-155



LANDS N/F OF VINCENT & KELLY TAGUE
MAP # 36-21-71
DB 3004 PG 436

LANDS N/F OF ANNE TAYLOR
MAP # 36-21-73
DB 2722 PG 2237

- SYMBOL LEGEND**
- PROPERTY CORNER
 - PROPERTY LINE STAKE
 - WATER SERVICE
 - CLEANOUT
 - LIGHT FIXTURE
 - AIR CONDITIONING UNIT
 - ELECTRIC METER
 - MAILBOX
 - ✕ TREE TO BE REMOVED

- LINE/TYPE LEGEND**
- PROPERTY LINE
 - ROW LINE
 - BUILDING SETBACK
 - FENCE LINE
 - OVERHEAD ELECTRIC
 - ELECTRIC LINE
 - GAS LINE
 - WATER LINE
 - SANITARY LINE
 - EXISTING STORM PIPES
 - EXISTING 1' CONTOUR
 - EXISTING 5' CONTOUR
 - PERC TEST LOCATION
 - PROPOSED SPOT ELEVATION
 - NEW BUILDING AREA
 - NEW PATIOS / WALKS
 - NEW RETAINING WALLS
 - NEW DRIVEWAY AREAS

- SLOPES 20% AND GREATER
- SLOPES 14% TO 20%

ALL LOCATIONS OF EXISTING UTILITIES, SHOWN ON THIS PLAN, HAVE BEEN DEVELOPED FROM FIELD LOCATIONS OF VISIBLE ABOVE GROUND UTILITY STRUCTURES AND INFORMATION FURNISHED BY THE UTILITY COMPANIES.

ALL LOCATIONS SHOULD BE CONSIDERED APPROXIMATE. COMPLETENESS OR ACCURACY OF THE LOCATIONS AND DEPTH OF ALL STRUCTURES CANNOT BE GUARANTEED. CONTRACTORS MUST VERIFY ALL LOCATIONS AND DEPTHS OF ALL UNDERGROUND UTILITIES AND FACILITIES BEFORE THE START OF ANY WORK.

AS PER ACT 187 HOUSE BILL 2627, BEFORE THE START OF ANY EXCAVATION WORK THE CONTRACTOR SHALL NOTIFY THE AFFECTED UTILITY COMPANIES THROUGH THE PENNSYLVANIA "ONE CALL SYSTEM" 1-800-242-1776 THREE DAYS PRIOR TO THE START OF ANY EXCAVATION. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO THE START OF ANY CONSTRUCTION.

STORMWATER MANAGEMENT FACILITY MAINTENANCE PLAN

THE STORMWATER MANAGEMENT SYSTEM ON THIS LOT CONSISTS OF A SUBSURFACE DETENTION/RECHARGE BASIN. THE BASIN IS COMPRISED OF FULLY PERFORATED CORRUGATED METAL PIPE WITHIN A STONE BED SURROUNDED BY FILTER FABRIC. AN INTERNAL CONTROL RISER ALLOWS CONTROLLED DISCHARGE OF FLOWS FROM THE SYSTEM. WATER RUNOFF IS DIRECTED TO THE INFILTRATION BED VIA A ROOF RAINWATER COLLECTION SYSTEM, PATIO DRAIN, SMALL PARK GRATE, AND PIPING WHICH CAPTURE AND COLLECT RUNOFF FROM PORTIONS OF THE NEW BUILDING, AND SOME OTHER AREAS ON THE PROPERTY. THE SMALL PARK GRATE IS PROVIDED WITH A ONE FOOT SUMP BELOW THE INLET AND OUTLET PIPES SO THAT DEBRIS CAN BE COLLECTED PRIOR TO FLOWING INTO THE SUBSURFACE INFILTRATION BED.

THE SYSTEM IS DESIGNED TO PROMOTE GROUNDWATER RECHARGE. A CONTROL STRUCTURE WITHIN THE SYSTEM DISCHARGES TO A PROPOSED BUBBLE-UP SPREADER. AN ACCESS MANHOLE WITH A LADDER IS PROVIDED AT THE END OF THE SUBSURFACE PIPE SYSTEM TO FACILITATE ACCESS AND MAINTENANCE OF THE SYSTEM.

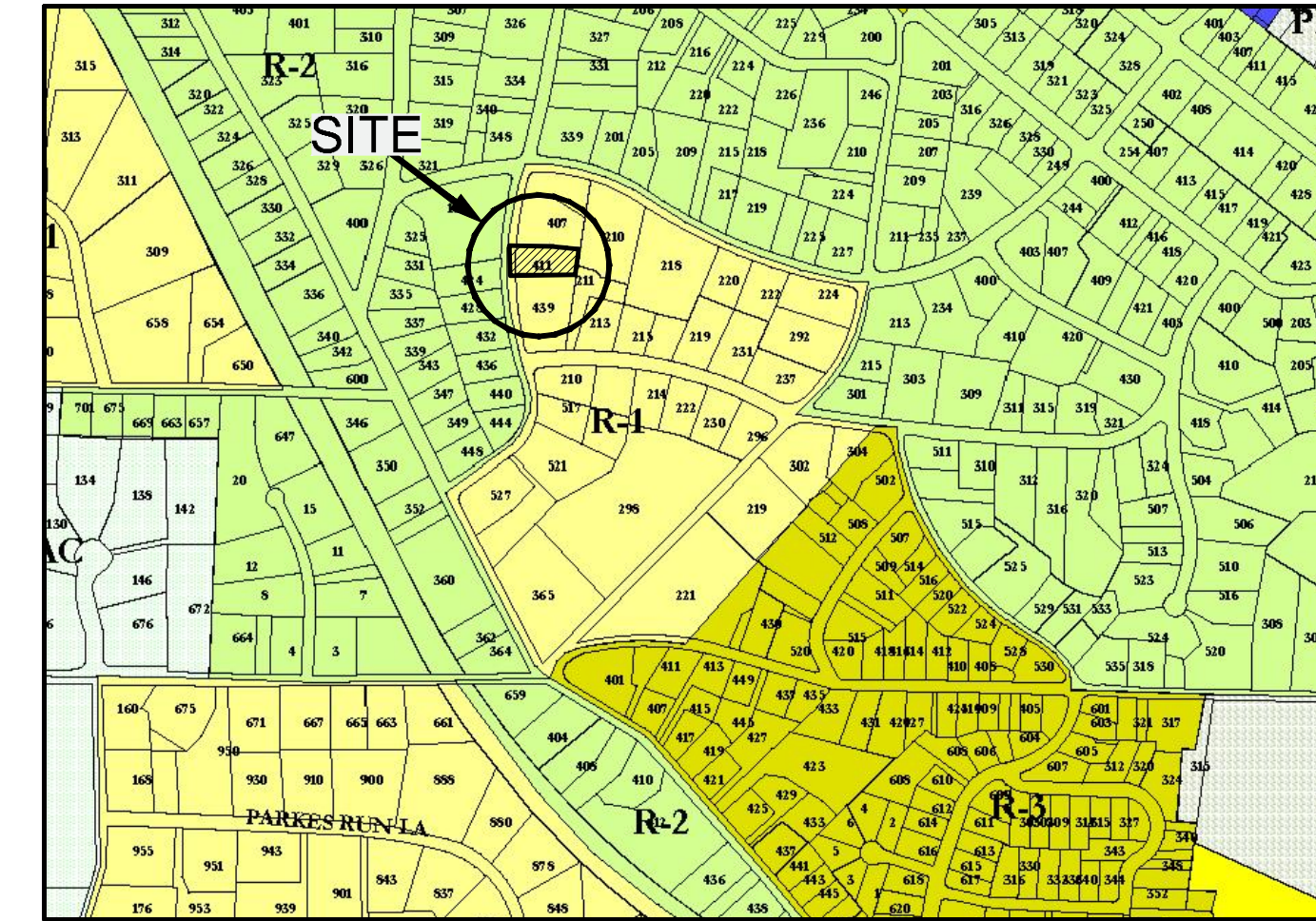
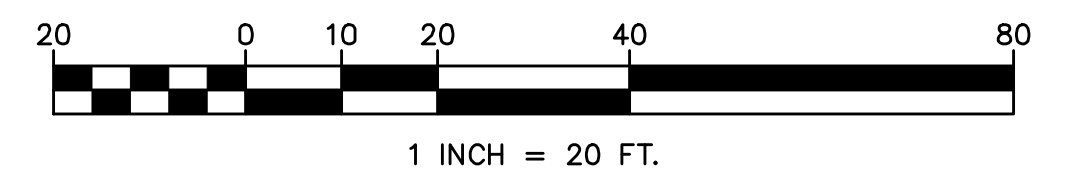
THE RESPONSIBILITY FOR THE CONTINUED OPERATION AND MAINTENANCE OF THE STORMWATER MANAGEMENT FACILITIES ON THIS LOT IS THAT OF THE PROPERTY OWNER.

MAINTENANCE OF THE FACILITIES SHALL BE IN ACCORDANCE WITH THE FOLLOWING:

1. THE OWNER, OCCUPANT, TENANT OR OTHER USER OF THE PROPERTY SHALL NOT IMPEDE THE FLOW OF WATER DRAINING TO THE STORMWATER MANAGEMENT BASIN.
2. ALL ROOF DOWNSPOUTS, INLETS, CURB OPENINGS AND OTHER WATER WAYS SHALL BE KEPT OPEN AND OPERATION TO PASS THE FLOW OF WATER TO THE BASIN AS INTENDED.
3. GRASS AND LANDSCAPING IN THE VICINITY OF ALL INLETS SHALL BE KEPT TRIM AND FREE FROM DEBRIS ACCUMULATION, AND DOWNSPOUTS AND INLETS SHALL BE KEPT FREE OF OBSTRUCTIONS THAT COULD BLOCK THE FREE FLOW OF WATER TO AND WITHIN THEM.
4. INLET SUMPS SHALL BE CLEANED OF ACCUMULATED DEBRIS BEFORE ANY DEBRIS CAN BE DISCHARGED INTO THE SYSTEMS. INLET STRUCTURES SHALL BE INSPECTED AT LEAST MONTHLY TO INSURE THAT THEY ARE CLEAN AND REMAIN OPERATIONAL.
5. SUBSURFACE PIPES SHALL BE INSPECTED ON AN ANNUAL BASIS TO INSURE THAT THEY ARE CLEAN AND OPERATIONAL. ANY ACCUMULATED DEBRIS AND SILT SHALL BE REMOVED IN A TIMELY MANNER. THE SUBSURFACE PIPES SHALL BE KEPT FREE OF OBSTRUCTIONS THAT COULD BLOCK THE FREE FLOW OF WATER WITHIN THEM.
6. PROMPT REMEDIAL MEASURES ARE TO BE TAKEN IN THE EVENT OF ANY BLOCKAGE OR MALFUNCTION OF THE SYSTEM.

THE OWNER, OCCUPANT, TENANT OR OTHER USER OF THE PROPERTY SHALL NOT TAKE ANY MEASURES TO DISRUPT OR IN ANY WAY IMPAIR THE EFFECTIVENESS OF THE BASIN OR ITS CONTROLS. THIS INCLUDES ALTERATION OF GRADES IN ANY MANNER THAT WOULD DIVERT RUNOFF AWAY FROM INLET COLLECTION POINTS.

SOILS INFORMATION																						
SYMBOL	NAME	%SLOPE	ERODIBILITY INDEX	HYDROLOGICAL GROUP	AGRICULTURAL CAPABILITY CLASS	DRAINAGE	LOAD BEARING CAPACITY	DEPTH TO SH WATER	DEPTH TO BEDROCK	GRAVEL SOURCE	SAND SOURCE	ROADFILL SOURCE	TOPSOIL SOURCE	LOCAL ROADS AND RESERVOIR STREETS	POND AREAS	EMBANKMENTS	IRRIGATION	RESIDENTIAL DEVELOPMENT	LIGHT INDUSTRIAL	SEWAGE LAAGOONS	ON-SITE SEPTIC	LAWNS
Md	MADE LAND CABBROG AND DIABASE MATERIALS	NOT RATED	NOT RATED	C	6E	WELL DRAINED	NOT RATED	6.6+	6.6+	NOT RATED	NOT RATED	NOT RATED	NOT RATED	NOT RATED	NOT RATED	NOT RATED	NOT RATED	NOT RATED	NOT RATED	NOT RATED	NOT RATED	NOT RATED



LOCATION MAP
SCALE 1" = 600'

- NOTES:**
- 1.) THE STORMWATER MANAGEMENT FACILITIES ARE DESIGNED FOR THE NEW AND/OR REPLACEMENT IMPERVIOUS COVER PROPOSED ON SITE 0.3718 SF PLUS AN ADDITIONAL 7 SF TO ALLOW FOR POSSIBLE FUTURE DEVELOPMENT. IF THIS IMPERVIOUS COVER IS INSTALLED IN THE FUTURE, IT MAY BE DIRECTED TO THE STORMWATER MANAGEMENT SYSTEM.
 - 2.) THE RESPONSIBILITY FOR THE CONTINUED MAINTENANCE AND OPERATION OF THE STORMWATER MANAGEMENT SYSTEM AND OTHER DRAINAGE FACILITIES SHALL BE THE OBLIGATION OF THE PROPERTY OWNER.
 - 3.) THE TOWNSHIP ENGINEER'S OFFICE SHALL BE NOTIFIED 48 HOURS PRIOR TO THE CONSTRUCTION OF THE SEEPAGE BED AND PRIOR TO THE START OF EARTHMOVING ACTIVITIES.
 - 4.) ON-SITE TREES ARE TO BE SAVED AND PRESERVED WHEREVER POSSIBLE.
 - 5.) ALL WOODY VEGETATION TO BE RETAINED WITHIN TWENTY-FIVE FEET OF A BUILDING SITE OR DISTURBED AREA SHALL BE PROTECTED FROM EQUIPMENT DAMAGE BY FENCING PLACED AT THE DRIPLINES.
 - 6.) GRADE CHANGES AROUND THE DRIPLINES OF TREES TO BE RETAINED SHALL BE MINIMIZED. TREATMENT OF THE TREES PRIOR TO CONSTRUCTION TO PROTECT THE ROOT SYSTEM SHALL BE PERFORMED.
 - 7.) ALL DISTURBED ROOTS MUST BE CUT AS CLEANLY AS POSSIBLE. THE TRENCH MUST BE BACKFILLED AS QUICKLY AS POSSIBLE, AVOIDING COMPACTION. TREE LIMBS MUST BE CUT BACK IN PROPORTION TO THE ROOT AREA LOSS.
 - 8.) ON-SITE TREES TO BE SAVED SHALL BE PREPARED FOR CONSTRUCTION BY APPROPRIATE CROWN AND DEEP ROOTING FERTILIZATION AND PROTECTED BY APPROPRIATE FENCING.

PERCOLATION TEST:

DELAWARE VALLEY SEPTICS INC. PERFORMED STORM WATER INFILTRATION TESTING ON SITE ON JULY 6, 2015. THE AVERAGE PERCOLATION RATE FOUND DURING TESTING WAS 3.0 IN/HR.

ZONING DISTRICT R-1 (RESIDENCE DISTRICT)

LOT AREA 1 ACRE MIN.
 LOT WIDTH 120' FEET MIN. AT BUILDING LINE
 15% MAX. AREA
 FRONT YARD 60 FEET MIN.
 SIDE YARD 60 FEET AGG. (25 FEET MIN.)
 REAR YARD 40 FEET MIN.
 HEIGHT 35 FEET MAX.
 IMPERVIOUS SURFACE 22% MAX.
 RIPARIAN BUFFER 35 FEET MIN.
 ACCESSORY USE SETBACK: 10 FEET MIN.

FOR MORE DETAILED INFORMATION YOUR ATTENTION IS CALLED TO THE ZONING CODE OF RADNOR TOWNSHIP, LATEST EDITION.

LOT DATA:

LOT AREA = 23,216 S.F. (0.533 ACRES)

SOURCE OF TITLE:

DEED BOOK 5560 PAGE 2391
 411 LOUELLA AVENUE
 WAYNE, PA 19087
 TMP No. 36-03-01736-00
 Block No. 21 Unit No. 72

EXISTING IMPERVIOUS COVERAGE:

RESIDENCE	1,298 S.F.
GARAGE	388 S.F.
DRIVEWAY	2,140 S.F.
DECK	343 S.F.
WALLS	163 S.F.
WALKS/STEPS	961 S.F.
TOTAL	5,293 S.F. (22.80%)

IMPERVIOUS TO BE REMOVED:

PORTION OF RESIDENCE	234 S.F.
GARAGE	388 S.F.
DRIVEWAY	486 S.F.
DECK	343 S.F.
WALLS	86 S.F.
WALKS/STEPS	874 S.F.
TOTAL	2,411 S.F.

IMPERVIOUS COVERAGE TO BE ADDED:

RESIDENCE	1,648 S.F.
PORCH	126 S.F.
DRIVEWAY	1,331 S.F.
BILCO	36 S.F.
DECK	48 S.F.
PATIO	483 S.F.
WALLS	46 S.F.
TOTAL	3,718 S.F.

PROPOSED IMPERVIOUS COVERAGE:

RESIDENCE	2,712 S.F.
PORCH	126 S.F.
DRIVEWAY	2,985 S.F.
BILCO	36 S.F.
DECK	48 S.F.
PATIO	123 S.F.
WALLS	87 S.F.
WALKS/STEPS	87 S.F.
TOTAL	6,600 S.F. (28.43%)

NET INCREASE 1,307 S.F.

- CARE OF EXISTING TREES:**
1. ALL WOODY VEGETATION TO BE RETAINED WITHIN TWENTY-FIVE FEET OF A BUILDING SITE OR DISTURBED AREA SHALL BE PROTECTED FROM EQUIPMENT DAMAGE BY FENCING PLACED AT THE DRIPLINES. TREE PROTECTION FENCING SHALL BE INSTALLED TO PROTECT ALL EXISTING TREES FROM DAMAGE DUE TO LANDSCAPE OPERATIONS, OPERATIONS BY OTHER CONTRACTORS AND TRADES, AND OTHERS. MAINTAIN PROTECTION FENCING FOR THE DURATION OF PROJECT.
 2. GRADE CHANGES AROUND THE DRIPLINES OF TREES TO BE RETAINED SHALL BE MINIMIZED. TREATMENT OF THE TREES PRIOR TO CONSTRUCTION TO PROTECT THE ROOT SYSTEM SHALL BE PERFORMED.
 3. SELECTIVELY PRUNE EXISTING TREES AT THE EDGE OF ALL TREE PROTECTION ZONES, AND OTHER EXISTING TREES AFFECTED BY CONSTRUCTION, UNDER LANDSCAPE ARCHITECT'S DIRECTION. REMOVE SUCKER SHOOTS, DEAD, RUBBING AND DAMAGED BRANCHES.
 4. ANY EXCAVATION NEAR ADJACENT ROOT SYSTEMS WILL REQUIRE ROOT PRUNING OF AFFECTED TREE(S). ALL DISTURBED ROOTS MUST BE CUT AS CLEANLY AS POSSIBLE. THE TRENCH MUST BE BACKFILLED AS QUICKLY AS POSSIBLE, AVOIDING COMPACTION. TREE LIMBS MUST BE CUT BACK IN PROPORTION TO THE ROOT AREA LOSS.
 5. FERTILIZE PRUNED EXISTING TREES WITH 3 TO 4 LBS. OF LIQUID FERTILIZER PER 1,000 SQUARE FEET OF DRIP AREA, OR 5 GALLONS OF LIQUID FERTILIZER PER CALIPER INCH OF TRUNK DIAMETER.
 6. FERTILIZE IN EARLY SPRING BEFORE GROWTH BEGINS.
 7. FERTILIZE BEGINNING 2' FROM TRUNK AT INTERVALS 2' TO 3' ON CENTER IN A GRID-LIKE PATTERN TO A DEPTH OF 6-18" WITHIN THE DRIPLINE AND BEYOND WHERE POSSIBLE. INJECTION FERTILIZATION METHOD SHALL BE ACCEPTABLE SUBJECT TO LANDSCAPE ARCHITECT'S APPROVAL.

OPERATION AND MAINTENANCE NOTES:

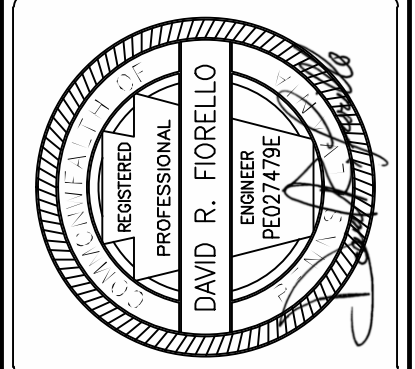
1. THE RESPONSIBILITY FOR THE CONTINUED MAINTENANCE AND OPERATION OF THE STORMWATER MANAGEMENT SYSTEM AND OTHER DRAINAGE FACILITIES SHALL BE THE OBLIGATION OF THE PROPERTY OWNER.

- INFILTRATION BMP NOTES:**
- 1) INFILTRATION BMP FILTER FABRIC AND STONE SHOULD BE KEPT CLEAN OF SOIL/SEDIMENT DURING THE INSTALLATION PROCESS. IF INSPECTION INDICATES THAT SOIL SEDIMENT HAS ENTERED ANY OF THE INFILTRATION 'SEEPAGE' BEDS APPROPRIATE MEASURES (i.e. CLEANING THE SOIL/SEDIMENT FROM FABRIC, STONE, BED ETC. AND OR REPLACEMENT OF THE FABRIC AND STONE) SHOULD BE ADDRESSED.
 - 2) ALL STONE FOR THE CONSTRUCTION OF THE INFILTRATION BMP SHOULD BE UNIFORMLY GRADED AND CLEAN WASHED AGGREGATE.
 - 3) THE BOTTOM OF ALL INFILTRATION BMPs SHALL BE UNDISTURBED OR UNCOMPACTED SUBGRADE.
 - 4) INFLOW AND OUTFLOW POINTS INTO THE INDIVIDUAL ON-LOT SYSTEM SHOULD BE KEPT CLEAR OF LEAVES AND OTHER DEBRIS. ANY LEAVES AND DEBRIS WILL NEGATIVELY IMPACT THE PERFORMANCE OF THE SYSTEM. ALL DOWNSPOUTS AND OVERFLOW PIPES SHOULD BE KEPT IN GOOD WORKING ORDER.
 - 5) AFTER THE INFILTRATION BED IS COMPLETELY INSTALLED, ALL HEAVY CONSTRUCTION EQUIPMENT SHALL BE RESTRICTED FROM THE INFILTRATION BEDS TO ELIMINATE IMPACTS WHICH MAY COMPROMISE IT. IN THE EVENT ANY IMPACTS COMPROMISE THE FUNCTIONALITY OF THE INFILTRATION BEDS, IT MUST BE IMMEDIATELY REPAIRED OR REPLACED TO DESIGN SPECIFICATIONS.

DAVID R. FIORELLO
 PROFESSIONAL ENGINEER
 LICENSE NO. PE027196

Serial Number: 2015-189-0295

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



MOMENEE & ASSOCIATES, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 924 COUNTY LINE ROAD, BROWN MARSH, PA 19010
 PHONE: (610) 527-3030 FAX: (610) 527-9008

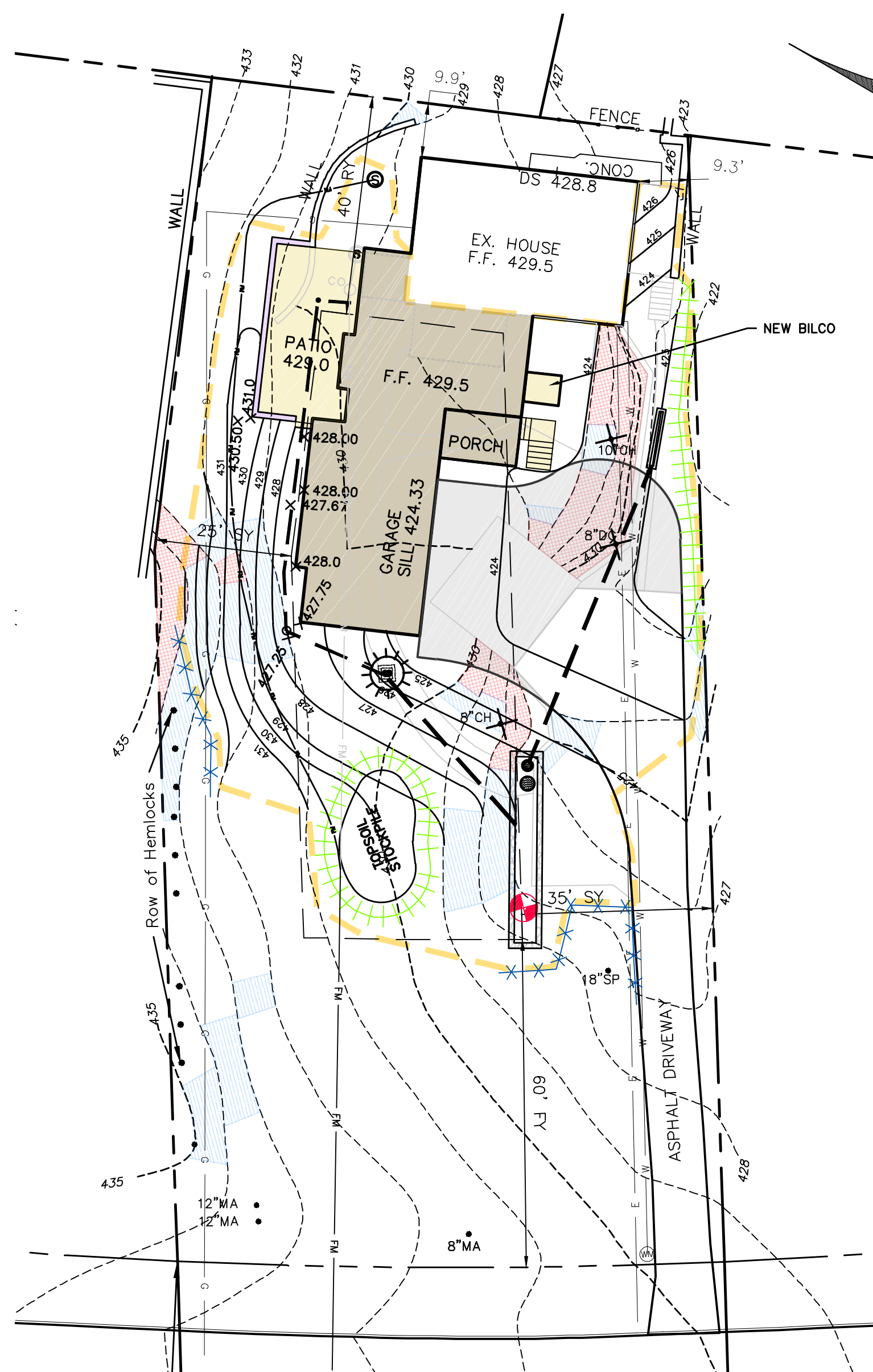
EXISTING CONDITIONS / DEMOLITION PLAN
 411 LOUELLA AVENUE
 RADNOR TOWNSHIP • DELAWARE COUNTY • PENNSYLVANIA

ONE-CALL: 20151890295
 DRAWN BY: DRF
 CHECKED BY: DRF

OWNER/APPLICANT
 MR. & MRS. KENNETH BARRINGER
 411 LOUELLA AVENUE
 WAYNE, PA 19087

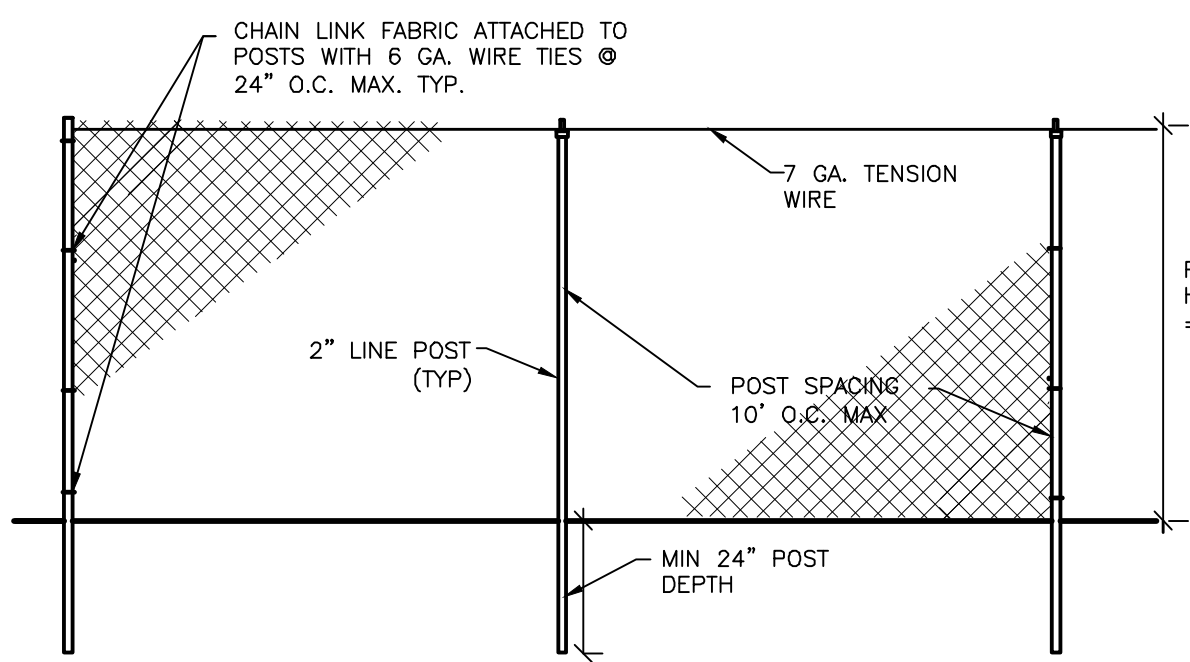


DATE: JULY 9, 2015
SHEET NO.
 2
 OF 4
SCALE: 1" = 20'
FILE NO.: 15-155



TREE PROTECTION FENCE PLACEMENT

NTS
 ALL WOODY VEGETATION TO BE RETAINED WITHIN 25 FEET OF A BUILDING SITE, PARKING AREA, DRIVEWAY OR OTHER PROPOSED IMPROVEMENT SHALL BE PROTECTED FROM EQUIPMENT DAMAGE BY FENCING OR OTHER EFFECTIVE BARRIERS APPROVED BY THE TOWNSHIP ENGINEER AND/OR ARBORIST. FENCING OR BARRIERS SHALL BE PLACED AS MUCH AS IS PRACTICAL AT THE DRILLPILE. LOCATION MAY BE ALTERED TO AVOID INTERFERENCE WITH PROPOSED GRADING AND IMPROVEMENTS AS SHOWN ON THE PLANS. BARRIER LOCATION SHALL BE SUBJECT TO APPROVAL BY THE TOWNSHIP ENGINEER AND/OR ARBORIST.



1. PROTECTION BARRIERS SHALL BE 6 FEET HIGH, CONSTRUCTED OF 2" CHAIN LINK MESH FABRIC.
2. FABRIC SHALL BE SECURED TO 2" POSTS WITH 6 GA. ALUMINUM WIRE TIES AT 24" O.C.
3. POSTS SHALL BE A MINIMUM OF 2 FEET IN THE GROUND AND SPACED 10 FEET ON CENTER MAX.
4. PLASTIC ZIP-TIES MAY NOT BE USED TO SECURE FABRIC TO POSTS.

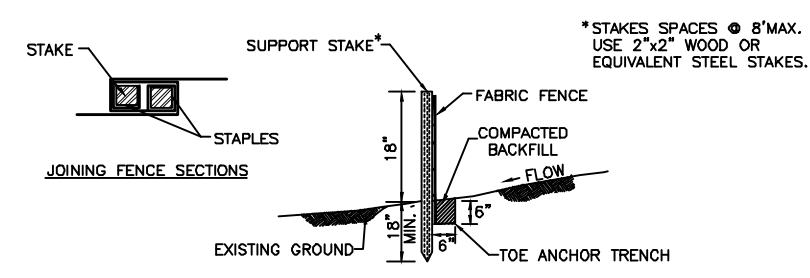
TREE PROTECTION BARRIER FENCING

NTS

STABILIZED CONSTRUCTION ENTRANCE

NTS

1. THICKNESS - NOT LESS THAN EIGHT (8) INCHES.
2. WIDTH - NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
3. WASHING - WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR INTERFLOW THROUGH USE OF SAND BAGS, GRAVEL, BOARDS OR OTHER APPROVED METHODS.
4. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.



FILTER FABRIC FENCE MUST BE PLACED AT LEVEL GRADE, BOTH ENDS OF THE BARRIER MUST BE EXTENDED AT LEAST 1/4" UP SLOPE AT 45° TO THE MAIN BARRIER ALIGNMENT. ANY SILT FENCING WHICH HAS BEEN UNDERMINED OR TOPPED MUST BE REPLACED WITH ROCK FILTER OUTLETS IMMEDIATELY. SEE ROCK FILTER OUTLET DETAIL. SEDIMENT MUST BE REMOVED WHERE ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE FENCE.

STANDARD FILTER FABRIC FENCE

NTS

- HYDROSEEDING SPECIFICATIONS**
- DEFINITION: STABILIZING SEDIMENT PRODUCING AND SEVERELY ERODED AREAS BY ESTABLISHING PERMANENT GRASS COVER.
- PURPOSE: TO PROVIDE PERMANENT VEGETATIVE COVER TO CONTROL RAPID RUN-OFF AND EROSION.
- PROCEDURE: SURFACE TO BE HYDRO-SEEDED SHALL BE CLEANED OF ALL DEBRIS AND OTHER MATTER HARMFUL TO UNIFORM GERMINATES. A WATER-SLURRY MIXTURE COMPOSED OF THE BELOW MENTIONED "MATERIALS" SHALL BE SPRAYED UNIFORMLY OVER THE AREAS TO BE HYDRO-SEEDED.
- MATERIALS:
- | PERMANENT SEEDING NAME | DESCRIPTION | APPLICATION RATE (PER ACRE) |
|--------------------------|---|-----------------------------|
| 1) SEED MIXTURE | 60% PENNSTAR KENTUCKY BLUEGRASS
30% PENNLAWN RED RESCUE
10% PENNFINE PERENNIAL RYEGRASS | 260 LBS. |
| 2) COMMERCIAL FERTILIZER | 10-20-20 | 1,000 LBS. |
| 3) LIME | GROUND AGRICULTURAL LIMESTONE (MAY BE APPLIED SEPARATELY) | 2 TONS |
| 4) MULCH | HAY OR STRAW | 3 TONS |
| 5) SOIL STABILIZER | TERRA TACK OR EQUIVANT | 20 LBS. |
| TEMPORARY 1) SEED | ANNUAL RYEGRASS (95% PURE) | 40 LBS. |
| 2) COMMERCIAL FERTILIZER | 5-5-5 | 1,000 LBS. |
| 3) LIME | GROUND AGRICULTURAL LIMESTONE (MAY BE APPLIED SEPARATELY) | 1 TON |
| 4) MULCH | HAY OR STRAW | 3 TONS |
- NOTES:
- 1) NEWLY GRADED SLOPES TWENTY FIVE PERCENT (25% OR GREATER) SHALL BE SODDED OR STABILIZED WITH EROSION CONTROL NETTING.
 - 2) GEOTEXTILE FABRIC SHALL BE CLASS 1. GEOTEXTILE FABRIC IN ACCORDANCE WITH PENNDOT SPECIFICATION FROM 408. THE TYPE AND/OR THICKNESS SHALL BE DETERMINED BY THE TOWNSHIP ENGINEER OR APPROVED EQUIVALENT OR AS OTHERWISE INDICATED ON THE PLAN.
 - 3) TO ALL AREA WHICH REMAIN DISTURBED FOR MORE THAN 4 DAYS AND WILL BE SUBJECT TO THE ACTION OF EARTHWORK AND OTHER EQUIPMENT, APPLY A MULCH (WOODCHIP-20 TONS PER ACRE; HAY OR STRAW-3 TONS PER ACRE). ALL OTHER DISTURBED AREAS REMAINING OPEN FOR MORE THAN 4 DAYS SHALL BE TEMPORARILY SEEDED AND MULCHED.
 - 4) ALL TREES AND BRUSH WITHIN THE SIGHT TRIANGLE SHALL BE TRIMMED AND/OR REMOVED AS NECESSARY TO OBTAIN CLEAR SIGHT DISTANCE WITH THE APPROVAL OF THE TOWNSHIP ARBORIST.
 - 5) SHOULD UNFORESEEN EROSION CONDITIONS DEVELOP DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ACTION TO REMEDY SUCH CONDITIONS AND TO PREVENT DAMAGE TO ADJACENT PROPERTIES AS A RESULT OF INCREASED RUNOFF AND/OR SEDIMENT DISPLACEMENT. STOCKPILES OF WOODCHIPS, HAY BALES, CRUSHED STONE AND OTHER MULCHES SHALL BE HELD IN READINESS TO DEAL IMMEDIATELY WITH EMERGENCY PROBLEMS OF EROSION.
 - 6) THE CONTRACTOR SHALL, BY SCHEDULING THE CONSTRUCTION, UTILIZE NEW PLANTINGS AND PROPERLY INSTALL EROSION CONTROL FENCING, HAY BALES AND OTHER EROSION CONTROL MEASURES TO MINIMIZE EROSION DAMAGE.
 - 7) ANY DISTURBED AREA ON WHICH ACTIVITY HAS CEASED AND WHICH WILL REMAIN EXPOSED FOR MORE THAN 4 DAYS MUST BE SEEDED AND MULCHED IMMEDIATELY. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE RECOMMENDED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN ONE YEAR MAY BE SEEDED AND MULCHED WITH A QUICK GROWING TEMPORARY SEEDING MIXTURE AND MULCH. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE REDISTURBED WITHIN ONE YEAR MUST BE SEEDED AND MULCHED WITH A PERMANENT SEED MIXTURE AND MULCH. DIVERSIONS, CHANNELS, SEDIMENTATION BASINS, SEDIMENT TRAPS, AND STOCKPILES MUST BE SEEDED AND MULCHED IMMEDIATELY.
 - 8) A ROUTINE "END-OF-DAY-CHECK" SHALL BE MADE DURING CONSTRUCTION TO MAKE SURE THAT ALL CONTROL MEASURES ARE WORKING PROPERLY. ALL PERSONS ENGAGED IN LAND DISTURBANCE ACTIVITIES SHALL DESIGN, IMPLEMENT, AND MAINTAIN CONTROL MEASURES WHICH PREVENT ACCELERATED EROSION AND SEDIMENTATION. THERE SHALL BE NO ADVERSE DISCHARGE OF THE SEDIMENT OR OTHER SOIL MATERIALS FROM THE SITE AS THE RESULT OF STORMWATER RUNOFF.
 - 9) TEMPORARY EROSION CONTROL MEASURES MAY BE REMOVED ONLY AFTER THE CONSTRUCTION AREA AND CONTAINED SILT IS STABILIZED AND THE LAWN AREA ESTABLISHED.

MAINTENANCE OF TEMPORARY SEDIMENTATION CONTROL STRUCTURES

STABILIZED CONSTRUCTION ENTRANCE: THE STABILIZED CONSTRUCTION ENTRANCES ARE TO BE CONSTRUCTED PER THE DETAIL. THE STABILIZED CONSTRUCTION ENTRANCES SHALL BE MAINTAINED SO THAT TIRE SCRUBBING ACTIVITY DOES NOT BECOME INEFFECTIVE. ANY BUILDUP OF MUD OR SOIL ON THE STREET SHALL BE CLEANED AT THE END OF EACH WORKING DAY.

INLET SILT TRAPS: INLET SILT TRAPS SHALL BE CONSTRUCTED PER THE DETAIL AND CLEANED AFTER EACH STORM EVENT OR AS DIRECTED BY THE CONSERVATION DISTRICT OR TOWNSHIP ENGINEER.

SILT FENCE: SILT FENCE SHALL BE INSTALLED PER THE DETAIL WITH ROCK FILTER OUTLETS PROVIDED EVERY 100 FEET AND AT EXISTING AND GRADED LOW POINTS. SEDIMENT SHALL BE REMOVED FROM SILT FENCES WHEN IT REACHES 1/2 THE FENCE HEIGHT OR AS DIRECTED BY THE CONSERVATION DISTRICT OR TOWNSHIP ENGINEER. SILT FENCING WHICH AS BEEN UNDERMINED OR TOPPED WILL BE REPLACED WITH ROCK FILTER OUTLETS IMMEDIATELY.

SEDIMENT DISPOSAL: SILT REMOVED FROM TEMPORARY SEDIMENT CONTROL STRUCTURES SHALL BE DISPOSED OF ON-SITE IN LANDSCAPED AREAS LOCATED OUTSIDE OF FLOOD PLAINS, WETLANDS, STEEP SLOPES AND DRAINAGE SWALES.

DUST CONTROL: DUST AND OTHER PARTICULATES SHALL BE KEPT WITHIN TOLERABLE LIMITS BY USING WATER. APPLICATION SHALL BE AS NEEDED OR AS DIRECTED BY THE TOWNSHIP ENGINEER OR THE CONSERVATION DISTRICT.

PLACING TOPSOIL OR TOPSOIL MIXTURE

PREPARATION OF AREAS TO BE TOPSOILED

GRADE THE AREAS TO BE COVERED BY TOPSOIL, USING ACCEPTABLE METHODS. LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE PLACING THE TOPSOIL. REMOVE STONES AND OTHER FOREIGN MATERIAL 2 INCHES OR LARGER IN DIMENSION. REMOVE AND SATISFACTORILY DISPOSE OF UNSUITABLE AND SURPLUS MATERIAL.

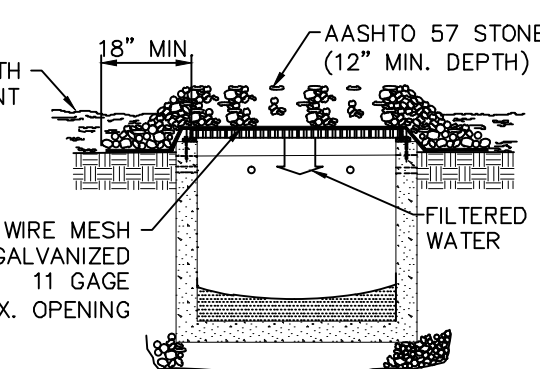
PLACING AND SPREADING TOPSOIL

PLACE TOPSOIL ON THE PREPARED AREA AND, UNLESS OTHERWISE INDICATED, SPREAD AND COMPACT TO A 4-INCH UNIFORM DEPTH ± 1/2 INCHES. COMPACT WITH A ROLLER WEIGHING NOT OVER 120 POUNDS PER FOOT WIDTH OF ROLLER OR BY OTHER ACCEPTABLE METHODS, AS DIRECTED. REMOVE OVERDEPTH TOPSOIL, UNLESS OTHERWISE AGREED UPON IN WRITING. DO NOT PLACE TOPSOIL IN A WET OR FROZEN CONDITION.

SEEDING SPECIFICATIONS:

WHERE DENUEDED AREAS ARE DESIRED TO BE LAWN:

1. PERFORM ALL CULTURAL OPERATION AT RIGHT ANGLES TO THE SLOPE.
2. APPLY LIME ACCORDING TO TEST OR AT THE RATE OF 25 LBS. OF GROUND LIMESTONE PER 1,000 SQ. FT.
3. APPLY FERTILIZER ACCORDING TO SOIL TEST OR WORK IN DEEPLY 20 LBS. OF 0-20-20 OR EQUIVALENT PER 1,000 SQ. FT. AND AT THE TIME OF SEEDING, WORK INTO THE SURFACE 10 LBS. OF 10-10-10 OR EQUIVALENT PER 1,000 SQ. FT. OR OTHER APPROVED MIXTURE.
4. SMOOTH AND FIRM SEEDED PRIOR TO SEEDING.
5. SEED USING A MIXTURE OF 60% PENNSTAR KENTUCKY BLUEGRASS, 30% PENNLAWN RED RESCUE AND 10% PENNFINE PERENNIAL RYEGRASS AT THE RATE OF FIVE (5) POUNDS PER 1,000 SQ. FT. OR OTHER APPROVED MIXTURE.
6. COVER GRASS AND LEGUME SEEDS WITH 1/4" OF SOIL WITH SOIL EQUIPMENT, MULCH, USING 2 BALES/1,000 SQ. FT.
7. MOW AS REQUIRED.
8. WHERE SLOPES EXCEED 25% JUTE NETTING OR OTHER APPROVED (EQUAL) SLOPE STABILIZATION MEASURES SHALL BE UTILIZED. IN ADDITION, THE SEEDING SPECIFICATIONS FOR STEEP SLOPES SHALL BE INCREASED TO INCLUDE 3 LBS/1,000 SQ. FT. OF ANNUAL RYEGRASS FOR RAPID VEGETAL ESTABLISHMENT.

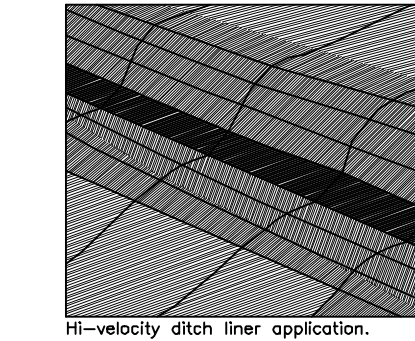


GRAVEL SEDIMENT FILTER FOR INLET

CONSTRUCTION TIMING AND SEQUENCE

- NOTE: THE TOWNSHIP ENGINEER SHALL BE NOTIFIED 48 HOURS PRIOR TO THE INSTALLATION OF THE SEEPAGE BED AND PRIOR TO THE START OF ANY EARTHMOVING ACTIVITIES.
01. NOTIFY THE TOWNSHIP THAT CONSTRUCTION IS GOING TO COMMENCE. ANTICIPATED DATE: AUGUST 2015.
 02. THE EXISTING DRIVE IS TO BE UTILIZED FOR CONSTRUCTION ACCESS. PROVIDE A HOSE TO CLEAN TIRES TO PREVENT SEDIMENT FROM BEING TRACKED OFF SITE INTO PUBLIC ROADWAYS. IN THE EVENT THAT SEDIMENT CANNOT BE KEPT OFF OF TOWNSHIP ROADWAYS A STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROVIDED. ALL CONSTRUCTION VEHICLES ENTERING/EXITING THE SITE MUST USE THIS ENTRANCE.
 03. INSTALL TREE PROTECTION AS INDICATED ON THE PLAN.
 04. INSTALL SILT FENCE AS SHOWN ON THE PLAN AND ON THE DOWNHILL SLOPE OF ANY EXCAVATION OR ANTICIPATED DISTURBANCE.
 05. PRIOR TO EARTH DISTURBANCE, NOTIFY THE TOWNSHIP ENGINEER THAT CONSTRUCTION IS GOING TO BEGIN.
 06. ONCE THE EROSION AND SEDIMENT CONTROLS ARE IN PLACE AND FUNCTIONING, BEGIN DEMOLITION OF THE PORTIONS OF THE RESIDENCE, GARAGE, AND THE OTHER IMPERVIOUS FEATURES DESIGNATED FOR REMOVAL. ALL CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN AN APPROVED MANNER.
 07. CLEAR AND GRUB THE AREAS AS NECESSARY WITHIN THE LIMITS OF DISTURBANCE OF EXISTING VEGETATION. STRIP TOPSOIL FROM AREAS OF CONSTRUCTION AND STOCKPILE SUITABLE MATERIAL FOR FUTURE USE. UNSUITABLE MATERIAL SHALL BE DISPOSED OF PROPERLY. SURROUND TOPSOIL WITH SILT FENCE AND SEED TO ESTABLISH TEMPORARY VEGETATIVE COVER.
 08. EXCAVATE FOR AND BEGIN TO CONSTRUCT THE FOUNDATIONS FOR THE NEW BUILDING ADDITION. UPON COMPLETION OF FOUNDATION WALLS, BACKFILL FOUNDATIONS AND ROUGH GRADE AROUND THE HOUSE. ANY GRADED OR DISTURBED AREA MUST BE TEMPORARILY SEEDED IF NO FURTHER EARTH MOVING IS ANTICIPATED IMMEDIATELY. USE ANY ADDITIONAL EXCAVATED MATERIAL FROM THE NEW FOUNDATION TO BACKFILL THE EXISTING BASEMENT.
 09. CONTINUE WITH BUILDING CONSTRUCTION AND ROUGH GRADE THE SITE. INSTALL UTILITIES AS NECESSARY.
 10. CONCURRENT WITH THE BUILDING CONSTRUCTION INSTALL THE ROOF RAINWATER COLLECTION SYSTEM, INLET, AND CONVEYANCE PIPING. PLACE INLET PROTECTION ON THE INLET.
 11. PLACE STONE BASE FOR NEW DRIVEWAY AREAS. BEGIN TO CONSTRUCT OTHER SITE IMPROVEMENTS.
 12. INSPECT SEDIMENT BARRIERS FREQUENTLY, ESPECIALLY AFTER HEAVY STORMS. REPLACE AND REPAIR SEDIMENT BARRIERS AS NECESSARY.
 13. UPON FINAL STABILIZATION OF THE CONTRIBUTORY AREA AND APPROVAL FROM THE TOWNSHIP ENGINEER, INSTALL PERMANENT STORMWATER MANAGEMENT SYSTEM, AND LEVEL SPREADER. CONNECT THE ROOF DRAINS AND INLET TO THE SYSTEM, AND CONNECT THE SYSTEM TO THE LEVEL SPREADER. THE TOWNSHIP ENGINEER SHALL BE NOTIFIED 48 HOURS PRIOR TO THE INFILTRATION OF THE STORMWATER MANAGEMENT SYSTEM.
 14. INSTALL FINAL TOP COURSES ON THE NEW DRIVEWAY AREAS.
 15. FINAL GRADE DENUEDED AREAS, SPREAD STOCKPILED TOPSOIL AND SEED GRADED AREAS TO REESTABLISH PERMANENT VEGETATION. STABILIZE SLOPES IN EXCESS OF 4:1 WITH SOD OR EROSION CONTROL NETTING AND MULCH.
 16. INSTALL FINAL LANDSCAPE FEATURES, AND COMPLETE CONSTRUCTION.
 17. UPON PERMANENT STABILIZATION, REMOVE THE SEDIMENT BARRIERS. IMMEDIATELY SEED ANY DENUEDED AREAS DUE TO THEIR REMOVAL.
 18. CONSTRUCTION COMPLETED. ANTICIPATED DATE: APRIL 2016.

Hi-Velocity Curlex Blankets



Designed to control erosion in areas of high-velocity water runoff, the Excelsior Hi-Velocity Curlex Blanket is a machine-produced mat of curled wood excelsior. Each blanket is 800 lbs. per roll and has a longer fiber length, with consistent thickness and fiber evenly distributed over its entire area. Each side is covered with block, extra heavy-duty extruded plastic mesh matting designed to last for years and reinforce the root system after the erodible mat has decomposed. They are smaller-resistant-no chemical additives.

INSTALLATION INSTRUCTIONS

This blanket is designed to withstand high-velocity water movements in ditches and on slopes at 2:1 green. Size and grade of staples used will vary with soil types. Use four staples across at the start of each roll and continue to staple along the length of the roll at 2 ft. intervals. When blankets are placed along slope of each other, staple so as to catch the edge of each roll, in addition to stapling the edges of the blanket at the appropriate intervals (see drawings), place staples in the center of the blanket halfway between the outer staples.

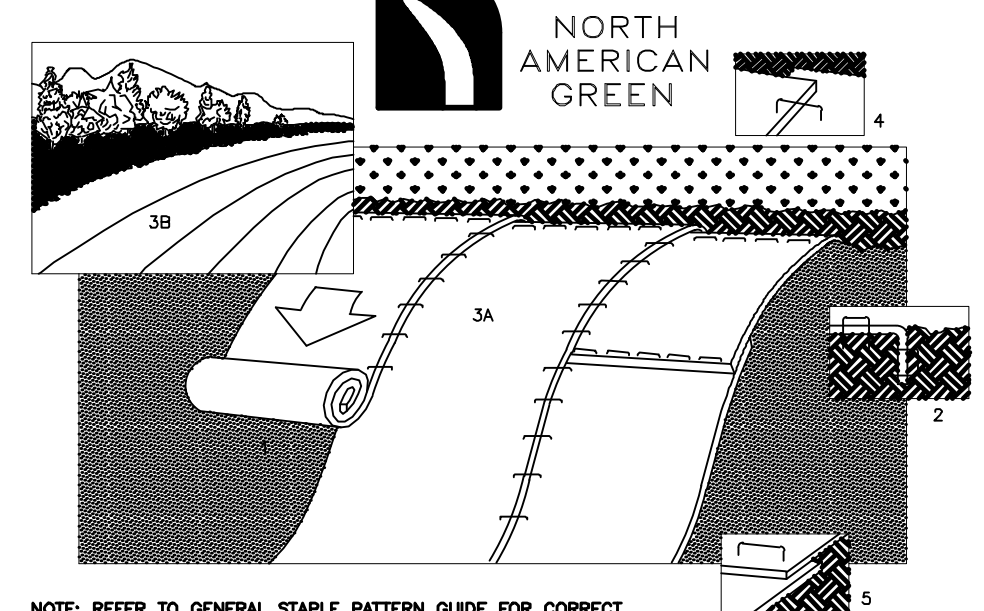
STAPLING INSTRUCTIONS FOR HIGH-VELOCITY CURLEX BLANKETS

Use wire staples, .091" in diameter or greater, 1" angled with legs 6" long or longer and use 2" green. Size and grade of staples used will vary with soil types. Use four staples across at the start of each roll and continue to staple along the length of the roll at 2 ft. intervals. When blankets are placed along slope of each other, staple so as to catch the edge of each roll, in addition to stapling the edges of the blanket at the appropriate intervals (see drawings), place staples in the center of the blanket halfway between the outer staples.

CHANNEL STABILIZATION

NTS

SLOPE INSTALLATION



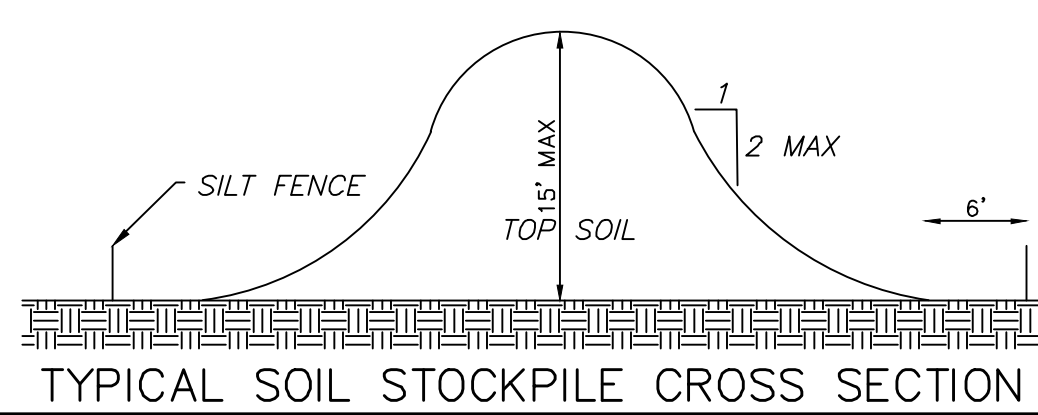
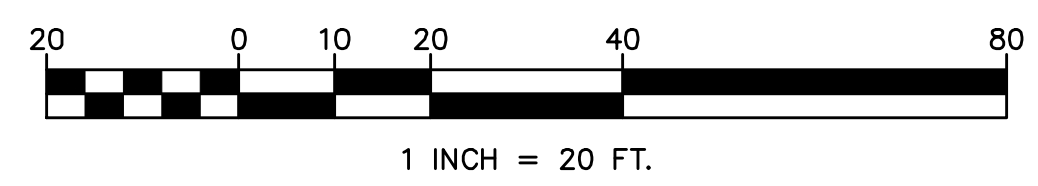
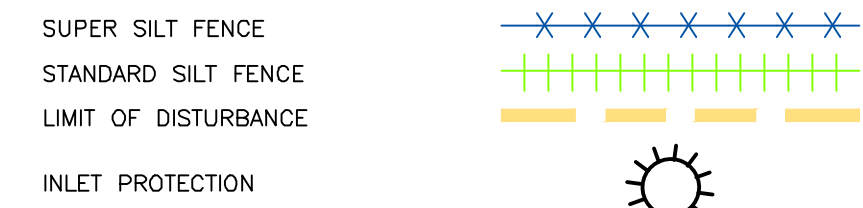
NOTE: REFER TO GENERAL STAPLE PATTERN GUIDE FOR CORRECT STAPLE PATTERN RECOMMENDATIONS FOR SLOPE INSTALLATIONS.

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.
5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 4" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART.

EROSION AND SEDIMENTATION CONTROL PLAN

DISTURBED AREA 10,250 SF± (0.24 AC)

LEGEND



NOTE: SILT FENCE MUST COMPLETELY ENCIRCLE STOCKPILES

TOP SOIL PROTECTION:
 TOPSOIL SHALL NOT BE REMOVED FROM THE DEVELOPMENT SITE OR USED AS FILL. TOPSOIL SHALL BE REMOVED FROM THE AREAS OF CONSTRUCTION AND STORED SEPARATELY. THE TOPSOIL SHALL BE STABILIZED TO MINIMIZE EROSION DURING STORAGE. UPON COMPLETION OF CONSTRUCTION, THE TOPSOIL SHALL BE UNIFORMLY REDISTRIBUTED ON THE SITE.

ALL LOCATIONS OF EXISTING UTILITIES, SHOWN ON THIS PLAN, HAVE BEEN DEVELOPED FROM FIELD LOCATIONS OF VISIBLE ABOVE GROUND UTILITY STRUCTURES AND INFORMATION FURNISHED BY THE UTILITY COMPANIES.

ALL LOCATIONS SHOULD BE CONSIDERED APPROXIMATE. COMPLETENESS OR ACCURACY OF THE LOCATIONS AND DEPTH OF ALL STRUCTURES CANNOT BE GUARANTEED. CONTRACTORS MUST VERIFY ALL LOCATIONS AND DEPTHS OF ALL UNDERGROUND UTILITIES AND FACILITIES BEFORE THE START OF ANY WORK.

AS PER ACT 187 HOUSE BILL 2627, BEFORE THE START OF ANY EXCAVATION WORK THE CONTRACTOR SHALL NOTIFY THE AFFECTED UTILITY COMPANIES THROUGH THE PENNSYLVANIA "ONE CALL SYSTEM" 1-800-242-1776 THREE DAYS PRIOR TO THE START OF ANY EXCAVATION. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO THE START OF ANY CONSTRUCTION.

SOILS INFORMATION																							
SYMBOL	NAME	%SLOPE	ERODIBILITY INDEX	HYDROLOGIC GROUP	AGRICULTURAL CAPABILITY CLASS	DRAINAGE	LOAD BEARING CAPACITY	DEPTH TO SH WATER	DEPTH TO BEDROCK	GRAVEL SOURCE	SAND SOURCE	ROADFILL SOURCE	TOPSOIL SOURCE	LOCAL ROADS AND STREETS	POND AND RESERVOIR AREAS	EMBANKMENTS	IRRIGATION	RESIDENTIAL DEVELOPMENT	INDUSTRIAL	SEWAGE LAGOONS	ON-SITE SEPTIC	LAWNS	
Md	MADE LAND GABBRO AND DIABASE MATERIALS	NOT RATED	NOT RATED	C	6E	WELL DRAINED	NOT RATED	6.6+	6.6+	NOT RATED	NOT RATED	NOT RATED	NOT RATED	NOT RATED	NOT RATED	NOT RATED	NOT RATED	NOT RATED	NOT RATED	NOT RATED	NOT RATED	NOT RATED	NOT RATED

Serial Number: 2015-185-0295

CALL BEFORE YOU DIG!
 3 WORKING DAYS NOTICE FOR ALL EXCAVATION WORK
 5 WORKING DAYS NOTICE FOR ALL CONSTRUCTION PHASE AND TO WORKING DAYS IN DESIGN STAGE-STOP CALL
 Pennsylvania One Call System, Inc.
 1-800-242-1776

DAVID R. FIORELLO
 PROFESSIONAL ENGINEER
 CIVIL ENGINEER
 LICENSE NO. PE072796

MOMENNE & ASSOCIATES, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 924 COUNTY LINE ROAD, BRN MAR, PA 19010
 PHONE: (610) 527-3030 FAX: (610) 527-9008

GRADING PERMIT PLAN

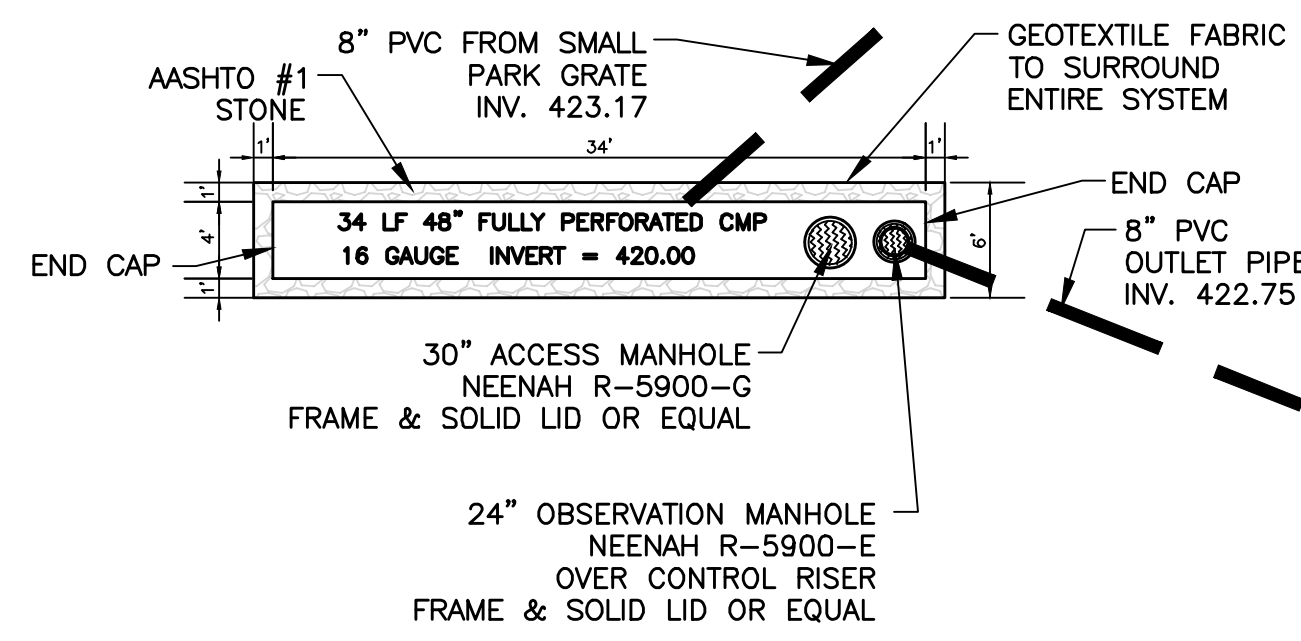
EXISTING CONDITIONS / DEMOLITION PLAN
 411 LOUELLA AVENUE
 RADNOR TOWNSHIP • DELAWARE COUNTY • PENNSYLVANIA

OWNER/APPLICANT
 MR. & MRS. KENNETH BARRINGER
 4 W. MAINE, PA 19067

ONE-CALL: 20151850295
 DRAWN BY: DRF
 CHECKED BY: DRF

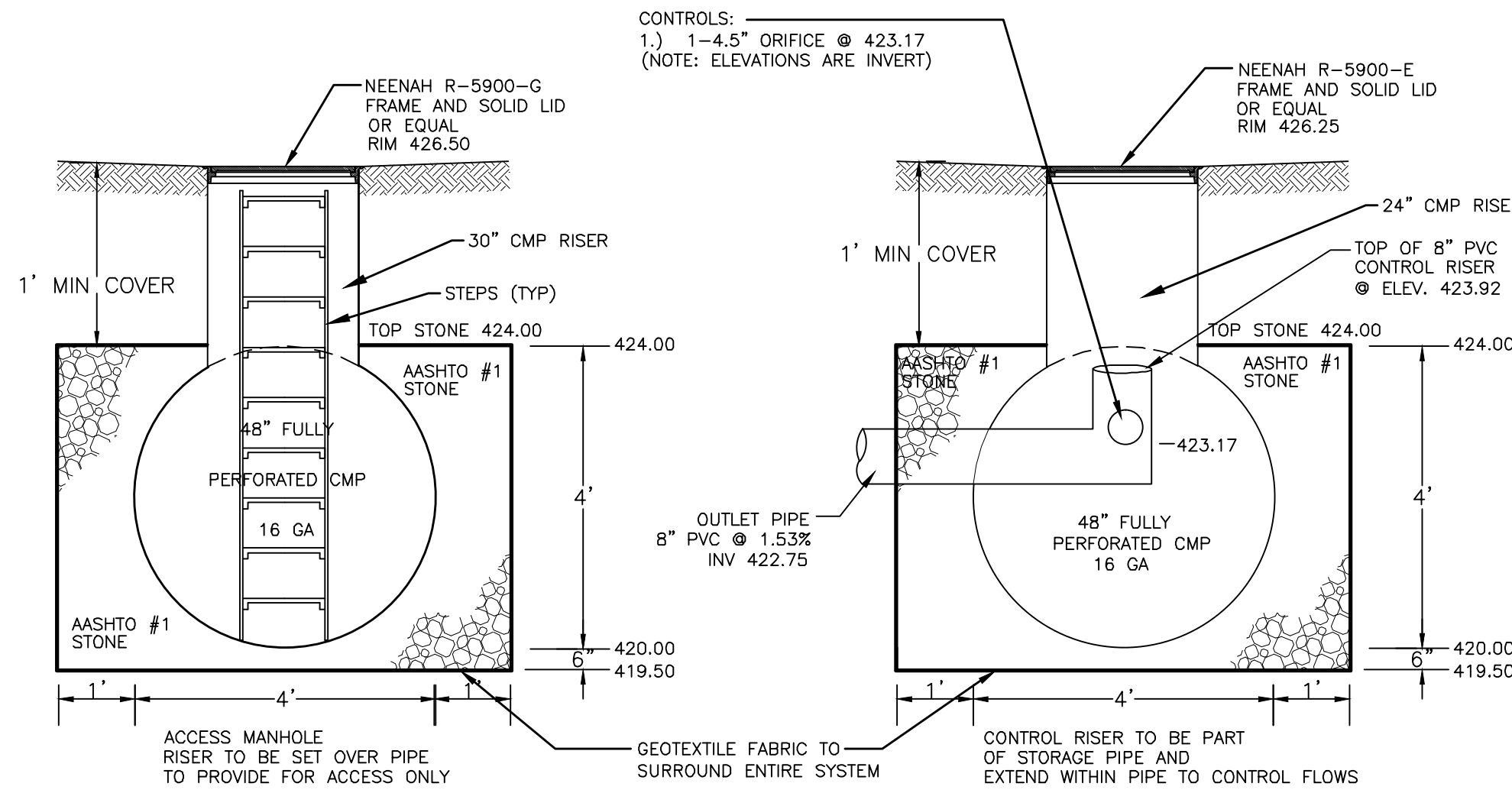
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DATE: JULY 9, 2015
 SHEET NO. 3
 OF 4
 SCALE: 1" = 20'
 FILE NO.: 15-155

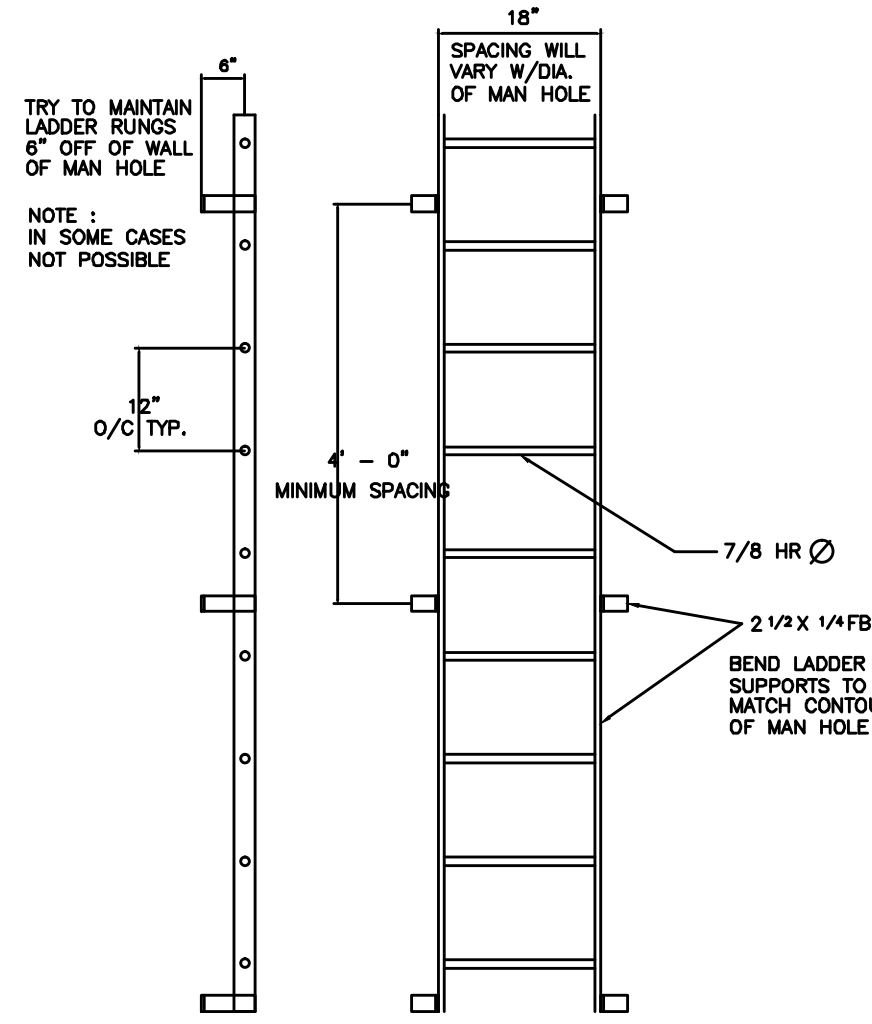


STORMWATER MANAGEMENT SYSTEM #1

34 LF 48\"/>

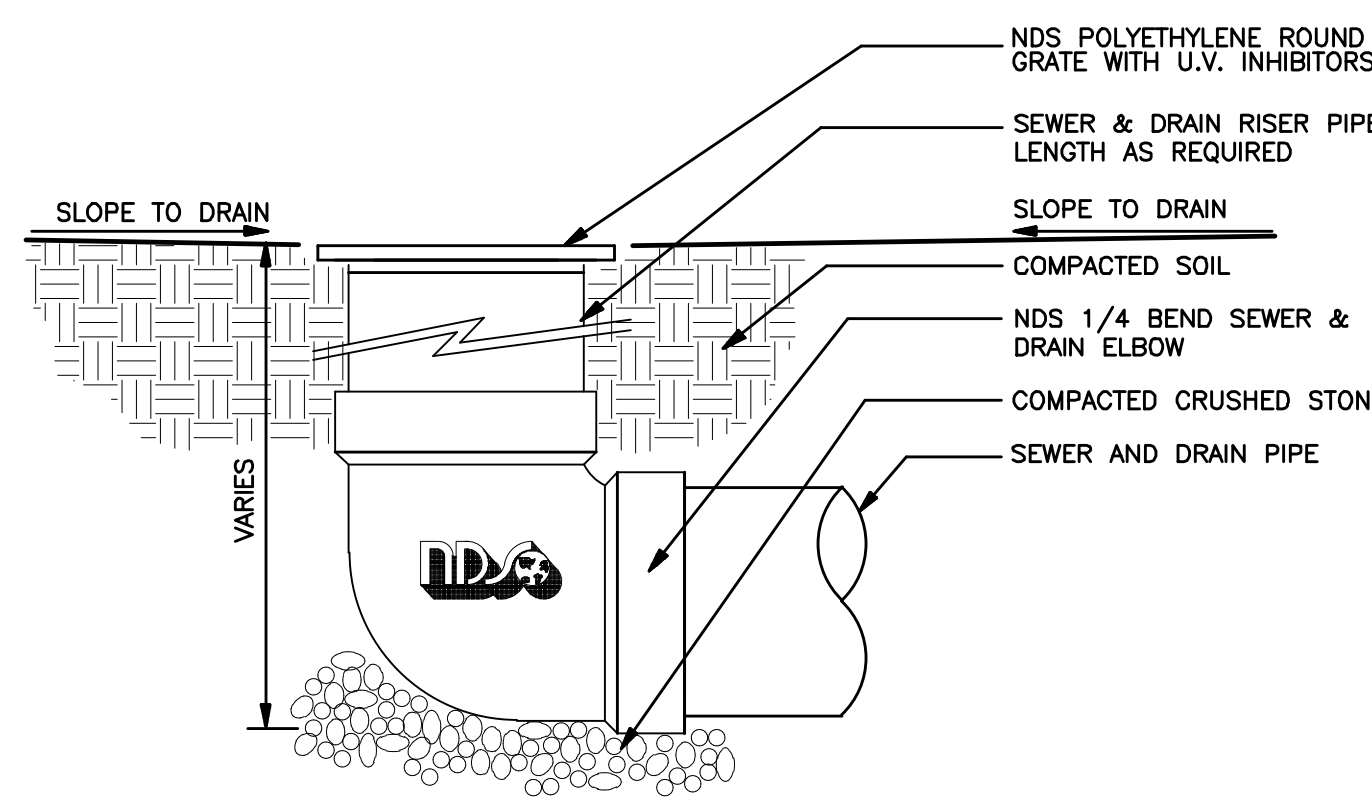


STORMWATER MANAGEMENT SYSTEM #1



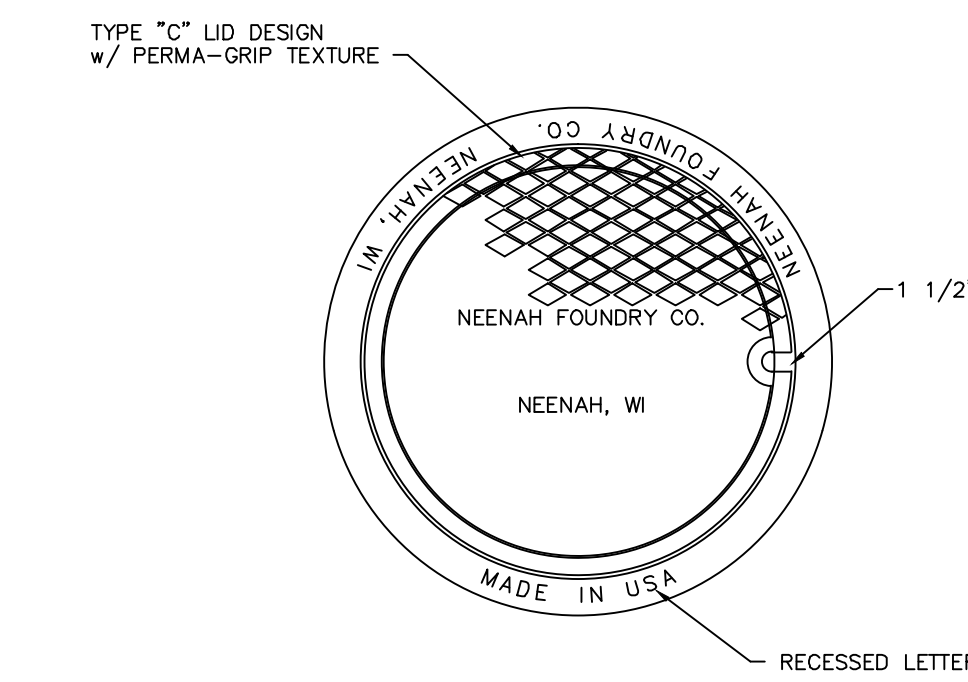
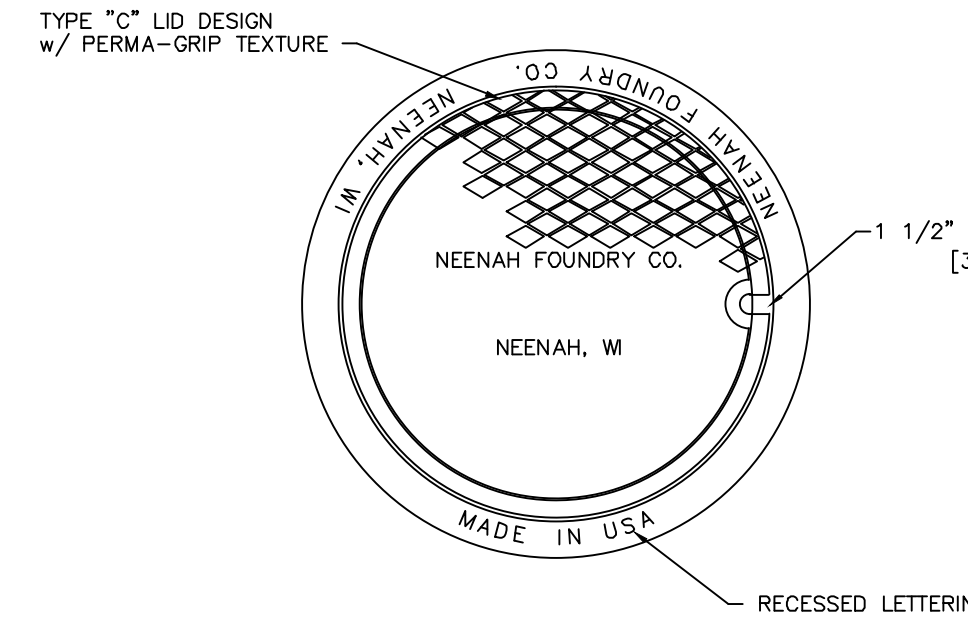
STORMWATER RISER ACCESS LADDER

N.T.S.



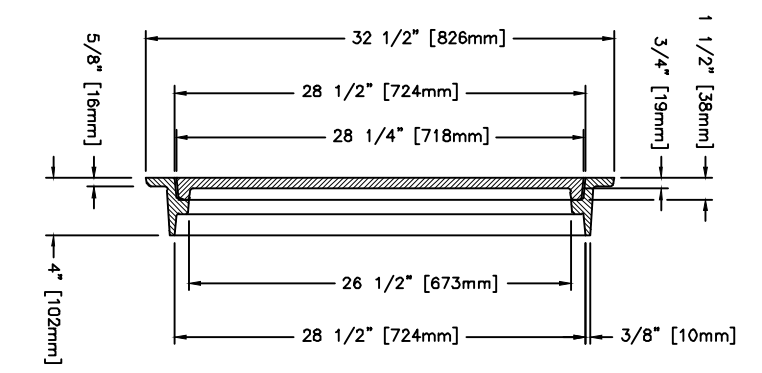
NDS ROUND GRATE WITH SEWER & DRAIN ELBOW

NOT TO SCALE



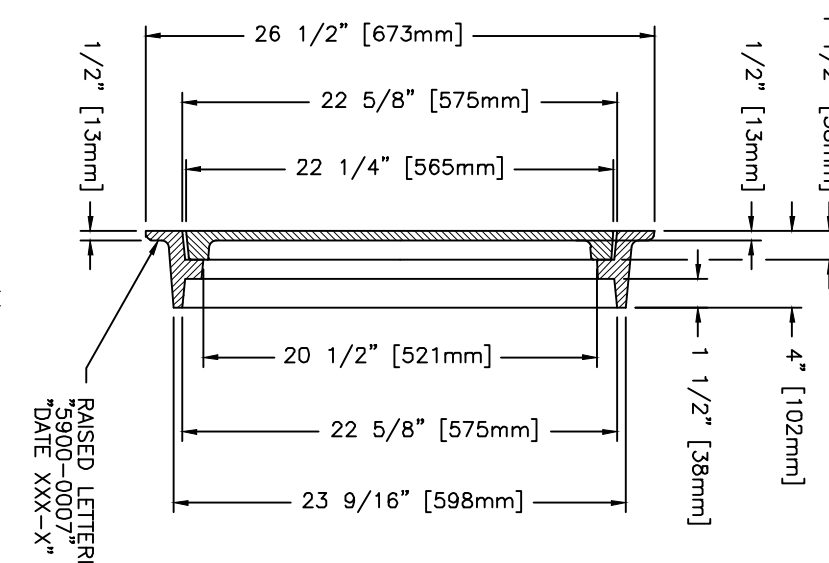
STORMWATER MANHOLE DETAILS

N.T.S.



30\"/>

R-5900-G
FRAME AND LID



24\"/>

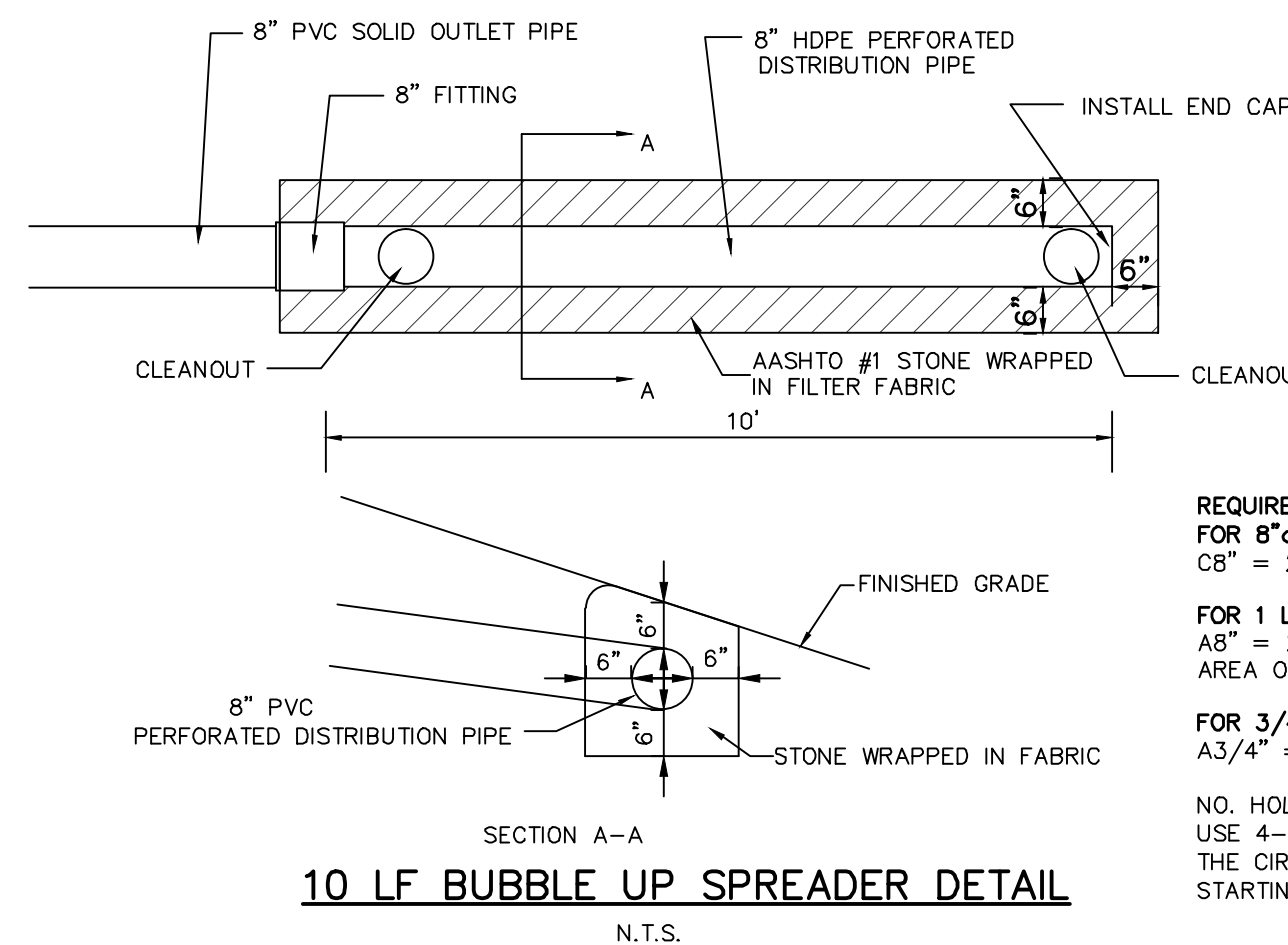
R-5900-E
FRAME AND LID

MATERIAL: CAST GRAY IRON ASTM A-48, CLASS 35B
FOR CORRUGATED METAL PIPE SIZED TO FIT SMOOTHLY INTO OPENING OF CORRUGATED PIPE.

ADDITIONAL ANCHORAGE TO METAL PIPE MAY BE ACCOMPLISHED BY DRILLING HOLES IN THE SLEEVE OR BARREL PORTION OF THE FRAME AND BOLTING THE FRAME IN PLACE. FRAMES CAN BE FURNISHED DRILLED FOR THIS PURPOSE ON SPECIAL ORDER.

- CONSTRUCTION SPECIFICATIONS FOR STORMWATER MANAGEMENT SYSTEMS**
- ALTER AND REFINE THE GRADES AS NECESSARY TO BRING SUBGRADE TO REQUIRED GRADES AND SECTIONS AS SHOWN IN THE DRAWINGS.
 - THE TYPE OF EQUIPMENT USED IN SUBGRADE PREPARATION CONSTRUCTION SHALL NOT CAUSE UNDUE SUBGRADE COMPACTION. TRAFFIC OVER SUBGRADE SHALL BE KEPT AT A MINIMUM.
 - INSTALL POLYPROPYLENE NONWOVEN GEOTEXTILE FABRIC WHICH MEETS PADOT CLASS 1 SPECIFICATIONS (I.E. DUPONT TYPAR #3401, AMOCO PROPEX #4545, OR APPROVED EQUAL) ON BOTTOM OF BED AREAS AND TACK UP SIDES OF EXCAVATION. WHERE EDGES OF ROLLS OVERLAP, THEY SHALL DO SO BY AT LEAST EIGHTEEN INCHES. ADEQUATE FABRIC SHALL BE LEFT ON THE ROLLS (NOT CUT FROM SIDE INSTALLATION) TO FACILITATE OVERTOPPING THE SYSTEM AT COMPLETION OF INSTALLATION.
 - ALL STONE FOR THE CONSTRUCTION OF THE INFILTRATION BMP SHALL BE UNIFORMLY GRADED AND CLEAN, WASHED, AGGREGATE. THE STONE SHALL MEET PENNDOT/AASHTO #1 SPECIFICATIONS. STONE TO BE CHECKED BY THE DESIGN OR SITE ENGINEER PRIOR TO INSTALLATION.
 - STONE BASE COURSE SHALL BE LAID OVER A DRY SUBGRADE TO A DEPTH SHOWN IN DRAWINGS. DO NOT ROLL OR COMPACT THE STONE BASE COURSE. KEEP THE BASE COURSE CLEAN FROM DEBRIS, CLAY AND ERODING SOIL. INSTALL TANKS AND PIPE AS SHOWN AND BACKFILL WITH STONE.
 - COVER SYSTEM WITH REMAINING FABRIC, ALLOWING OPENINGS FOR ACCESS COVERS.
 - SYSTEM TO BE TOTALLY ENCLOSED IN THE NON-WOVEN GEOTEXTILE FABRIC.
 - INFILTRATION BMP FILTER FABRIC AND STONE SHOULD BE KEPT CLEAN OF SOIL/SEDIMENT DURING THE INSTALLATION PROCESS. IF INSPECTION INDICATES THAT SOIL SEDIMENT HAS ENTERED ANY OF THE INFILTRATION SEEPAGE BEDS, APPROPRIATE MEASURES (I.E. CLEANING THE SOIL/SEDIMENT FROM FABRIC, STONE, BED ETC. AND OR REPLACEMENT OF THE FABRIC AND STONE) SHOULD BE ADDRESSED.
 - THE BOTTOM OF ALL INFILTRATION BMP'S SHALL BE UNDISTURBED OR UNCOMPACTED SUBGRADE.
 - INFLOW AND OUTFLOW POINTS INTO THE INDIVIDUAL ON-LOT SYSTEMS SHOULD BE KEPT CLEAR OF LEAVES AND OTHER DEBRIS. ANY LEAVES OR DEBRIS WILL NEGATIVELY IMPACT THE PERFORMANCE OF THESE SYSTEMS. ALL DOWNSPOUTS AND OVERFLOW PIPES SHOULD BE KEPT IN GOOD WORKING ORDER.
 - SEEPAGE BEDS SHALL NOT RECEIVE RUNOFF UNTIL THE ENTIRE DRAINAGE AREA CONTRIBUTING TO THE INFILTRATION BMP HAS ACHIEVED FINAL STABILIZATION.

- CONSTRUCTION NOTES:**
- GEOTEXTILE FABRIC SHALL BE CLEAN NON-WOVEN GEOTEXTILE (PERMEABLE FILTER FABRIC) CLASS 1 AND SHALL BE IN ACCORDANCE WITH PADOT SPECIFICATION FROM 40B. THE TYPE AND/OR THICKNESS SHALL BE DUPONT TYPAR #3401, AMOCO PROPEX #4545 OR APPROVED EQUAL OR AS OTHERWISE INDICATED ON THE PLAN.
 - ALL STONE USED FOR THE CONSTRUCTION OF THE INFILTRATION BMP SHALL BE UNIFORMLY GRADED, CLEAN, AND WASHED CRUSHED STONE AGGREGATE MEETING PENNDOT/AASHTO #1 SPECIFICATIONS.
 - ALL PERSONS ENTERING ACTIVE TANKS, MANHOLES, INLETS, ETC. MUST COMPLY WITH OSHA REQUIREMENTS FOR ENTRY INTO CONFINED SPACES.
 - RAIN WATER CONDUCTORS ARE TO COLLECT ALL ROOF RUNOFF AND CONVEY IT TO THE APPROPRIATE STORMWATER MANAGEMENT FACILITY.
 - CLEANOUTS ARE REQUIRED AT ALL CHANGES IN DIRECTION OF THE ROOF DRAINS AND SANITARY SEWER LATERALS.
 - ALL SEEPAGE BEDS SHALL BE INSTALLED WITH A MINIMUM SEPARATION DISTANCE OF 10 FEET FROM ALL BASEMENT WALLS.
 - ALL CMP AND HUMP SHALL BE ALUMINUM OR ALUMINIZED STEEL.
 - ALL HDPE PIPE SHALL BE SMOOTH INTERIOR FLOW.
 - ALL PVC PIPE SHALL BE SDR 35.
 - ALL INLETS SHALL BE INSTALLED WITH A TWELVE (12) INCH SUMP CONDITION IN ORDER TO IMPROVE THE EFFICIENCY OF THE RUNOFF COLLECTION.
 - THE RISER CONNECTIONS IN THE STORMWATER MANAGEMENT SYSTEM SHALL BE WATERTIGHT. REFER TO DETAILS.
 - WHERE DRAINAGE SWALES ARE WITHIN 20' OF A BASEMENT, WATERPROOFING SHALL BE APPLIED TO THE BASEMENT.
 - PERFORATIONS FOR 48\"/>



10 LF BUBBLE UP SPREADER DETAIL

N.T.S.

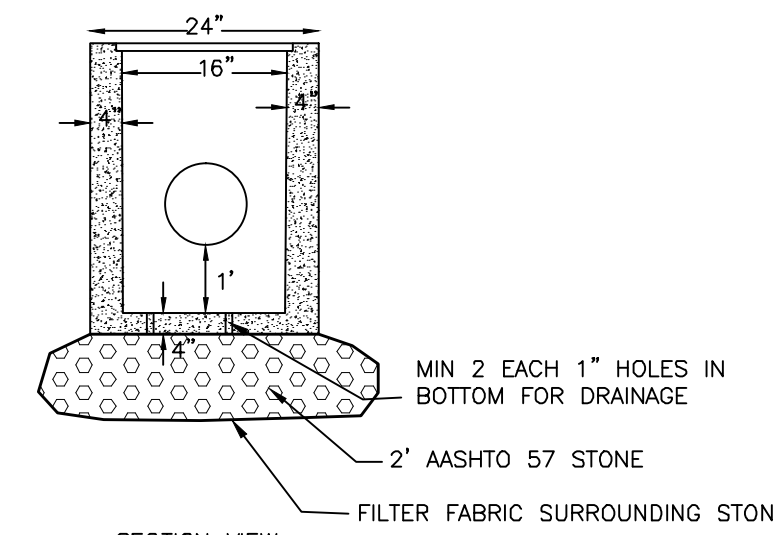
PIPE PERFORATIONS

REQUIRED 3.31 SQ. IN./SQ. FT
FOR 8\"/>

FOR 1 LF OF PIPE
A8\"/>

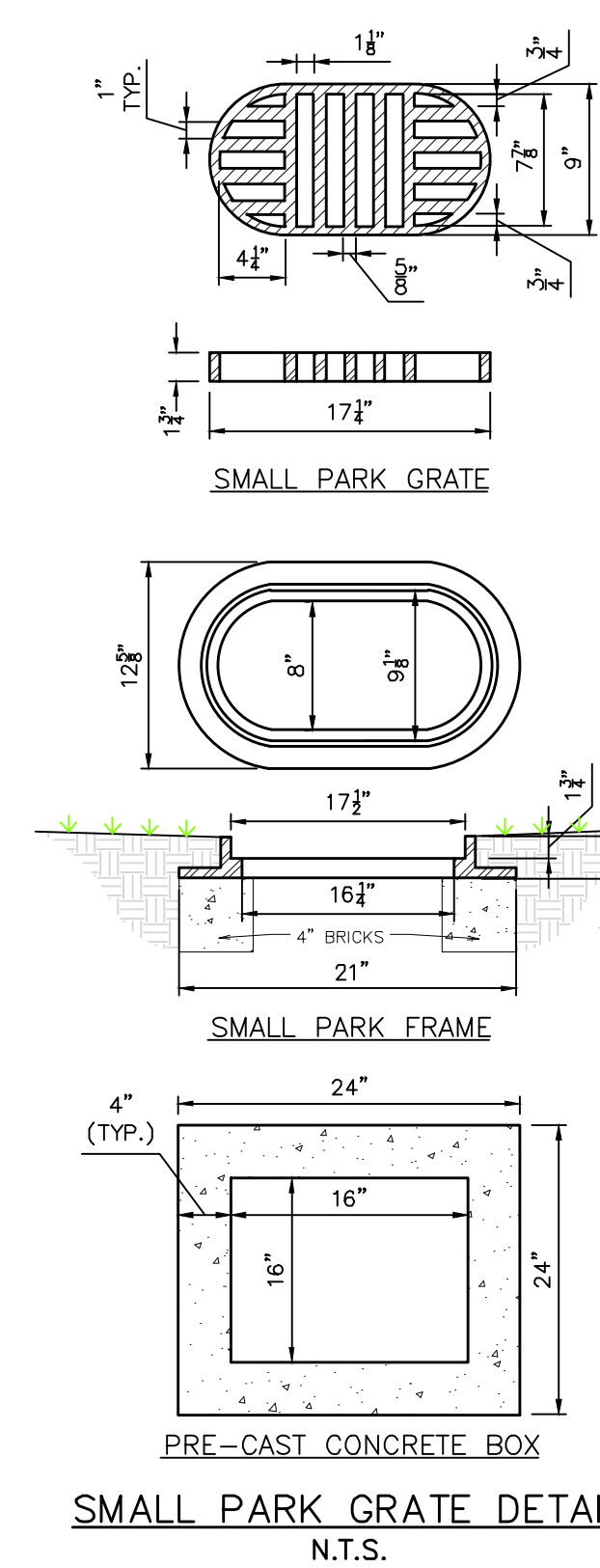
FOR 3/4\"/>

NO. HOLES NEEDED = 6.93/0.442 = 16 HOLES
USE 4-3/4\"/>



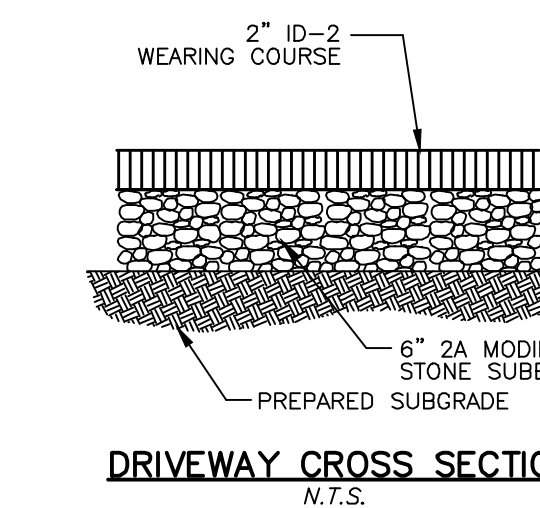
SMALL PARK GRATE BOX

(NON-TRAFFIC BEARING)
Manufactured by
MODERN CONCRETE SEPTIC TANK CO.
or other NPCA certified plant



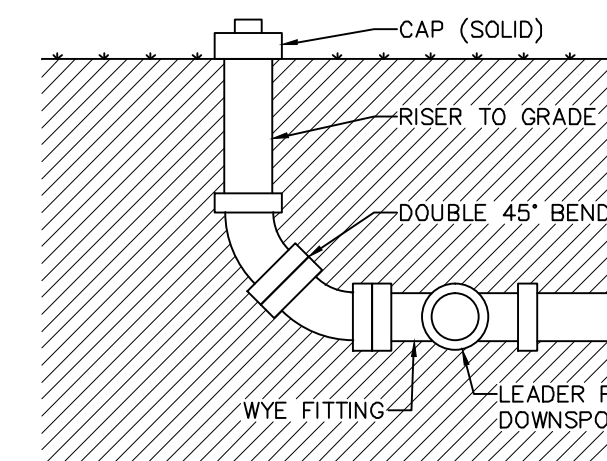
SMALL PARK GRATE DETAIL

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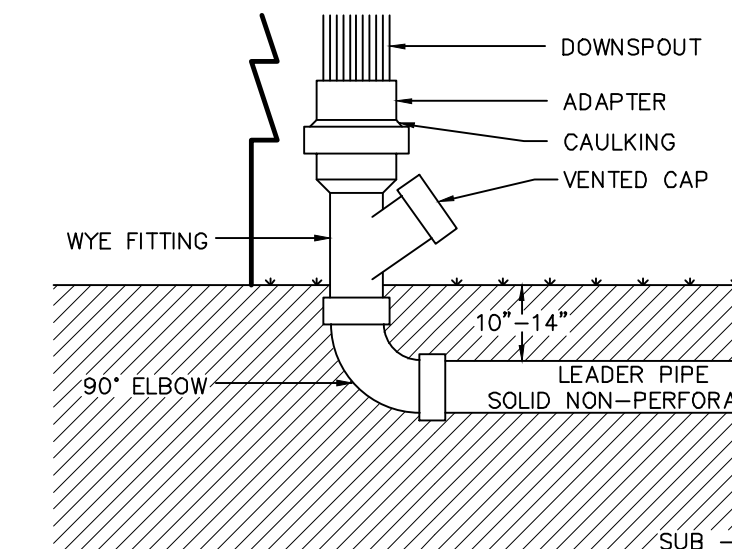
DRIVEWAY CROSS SECTION

N.T.S.



TERMINAL CLEANOUT (TYPICAL)

N.T.S.



DOWNSPOUT DETAIL

N.T.S.

Serial Number: 2015-189-0295

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

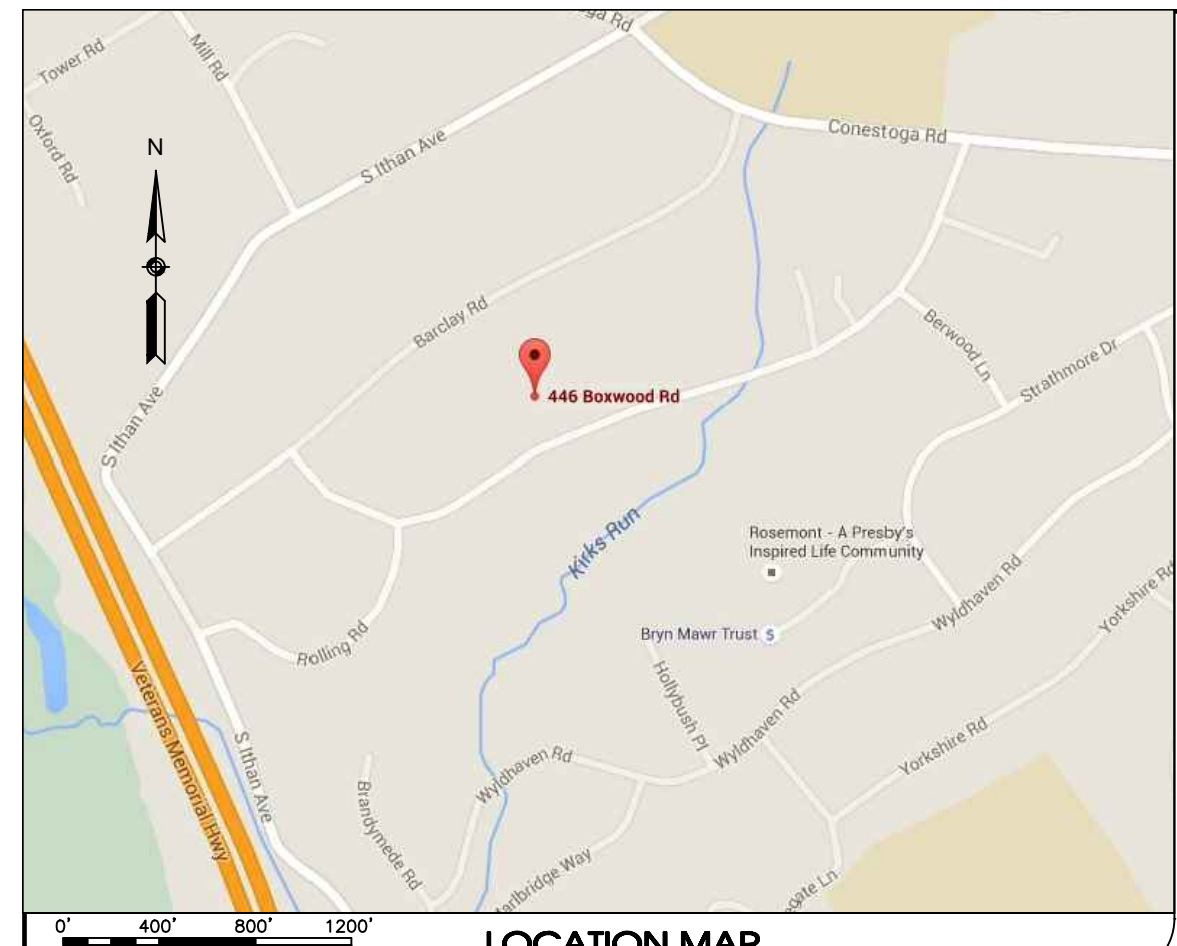
MOMENEE & ASSOCIATES, INC.
CIVIL ENGINEERS AND LAND SURVEYORS
924 COUNTY LINE ROAD, BRYN MAWR, PA 19010
PHONE: (610) 527-3030 FAX: (610) 527-9008

GRADING PERMIT PLAN
EXISTING CONDITIONS / DEMOLITION PLAN
411 LOUELLA AVENUE
RADNOR TOWNSHIP • DELAWARE COUNTY • PENNSYLVANIA
ONE-CALL: 20151890295
DRAWN BY: DRF
CHECKED BY: DRF

OWNER/APPLICANT
MR. & MRS. KENNETH BARRINGER
411 LOUELLA AVENUE
BRYN MAWR, PA 19007

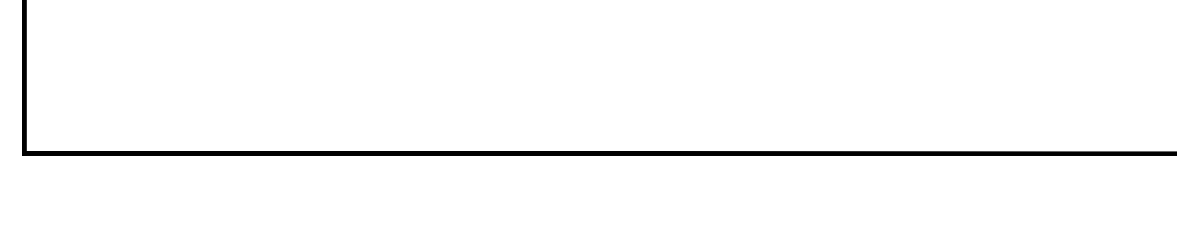
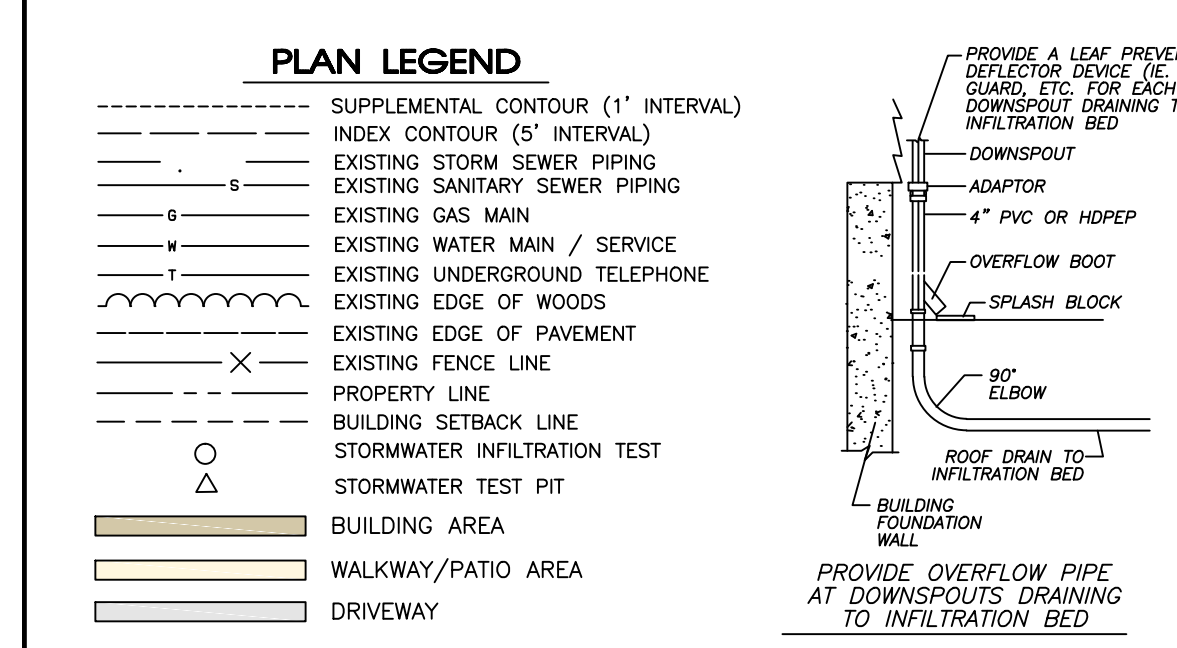
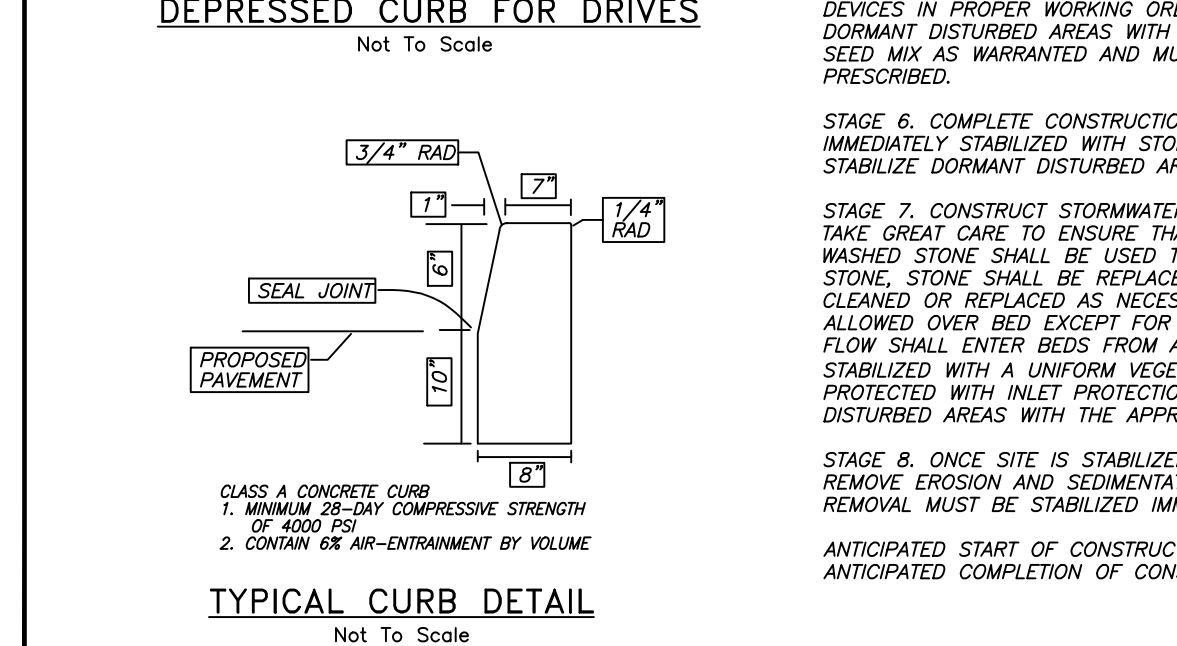
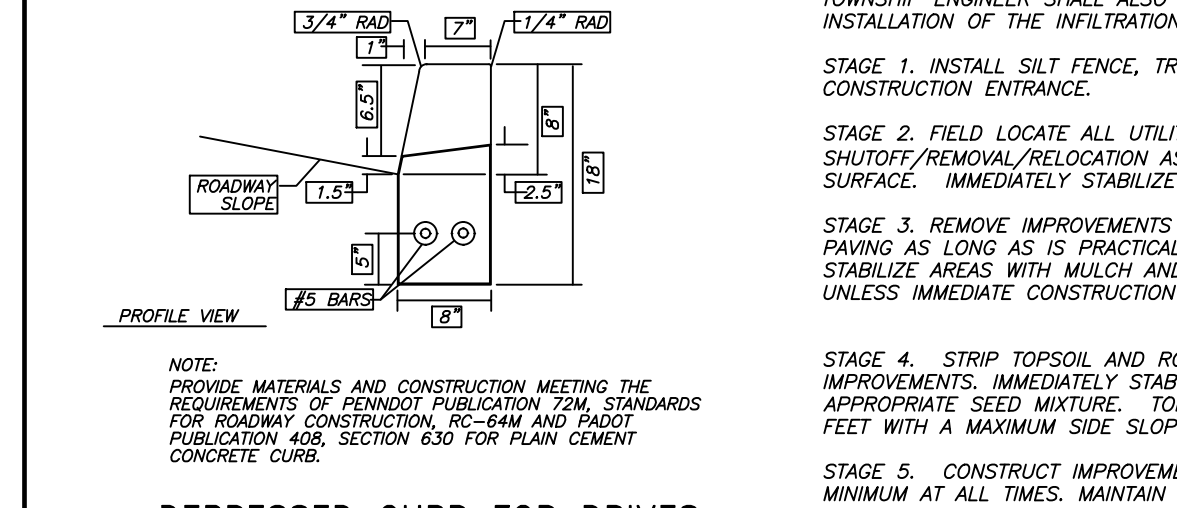
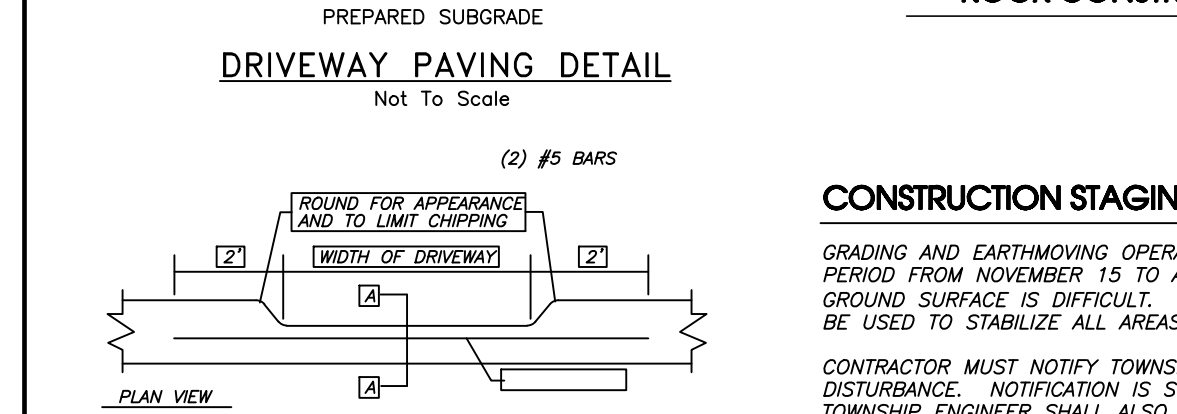
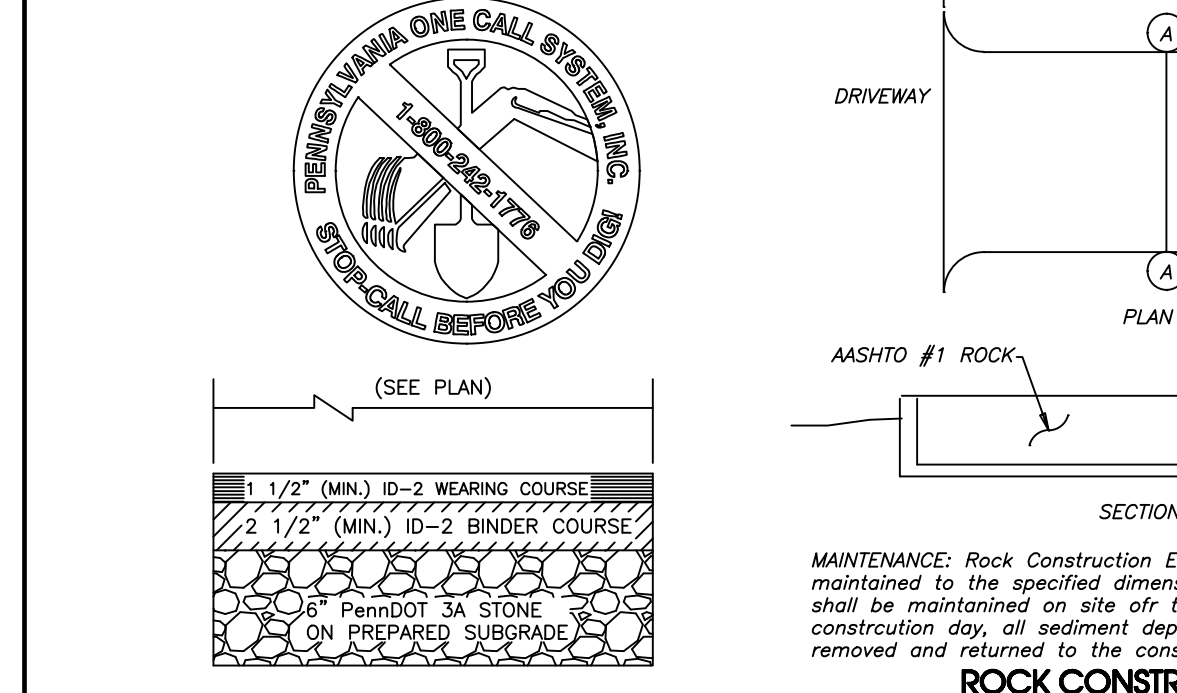
MA

DATE: JULY 9, 2015
SHEET NO. 4
SCALE: AS NOTED
FILE NO.: 15-155



LOCATION MAP
 NOTE: THE EXACT LOCATION AND DEPTH OF EXISTING UTILITIES CANNOT BE GUARANTEED. ALL UTILITIES DEPICTED ON THIS PLAN HAVE BEEN DEVELOPED FROM ABOVE GROUND OBSERVATIONS AND/OR EXISTING RECORDS. CONTRACTOR MUST VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. PENNSYLVANIA STATE LAW REQUIRES NOTIFICATION TO 1-800-242-1776 3-10 BUSINESS DAYS PRIOR TO ANY EXCAVATION.

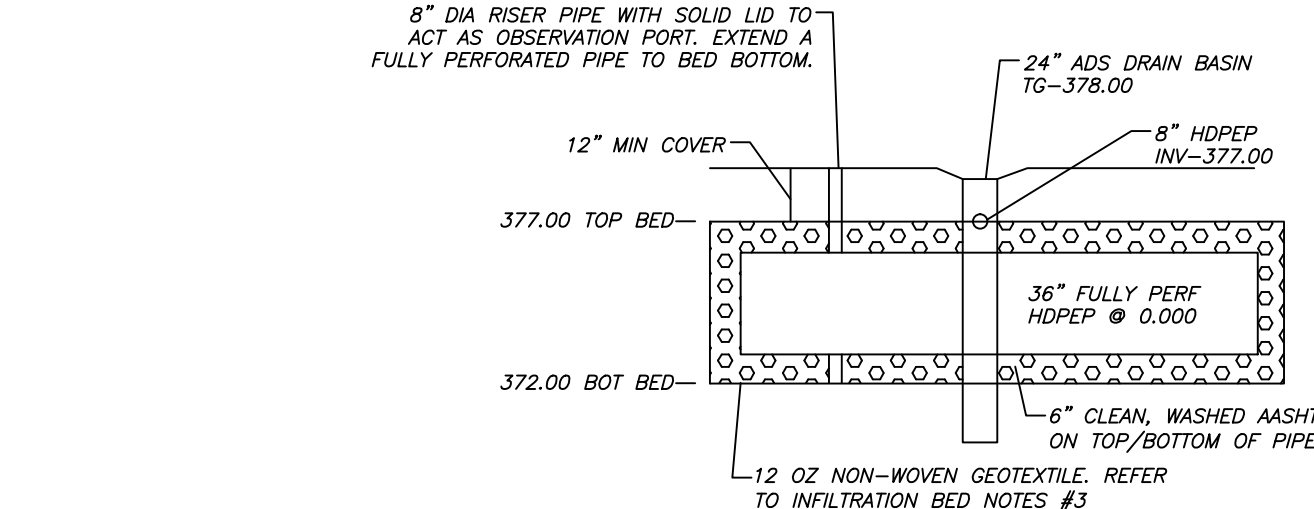
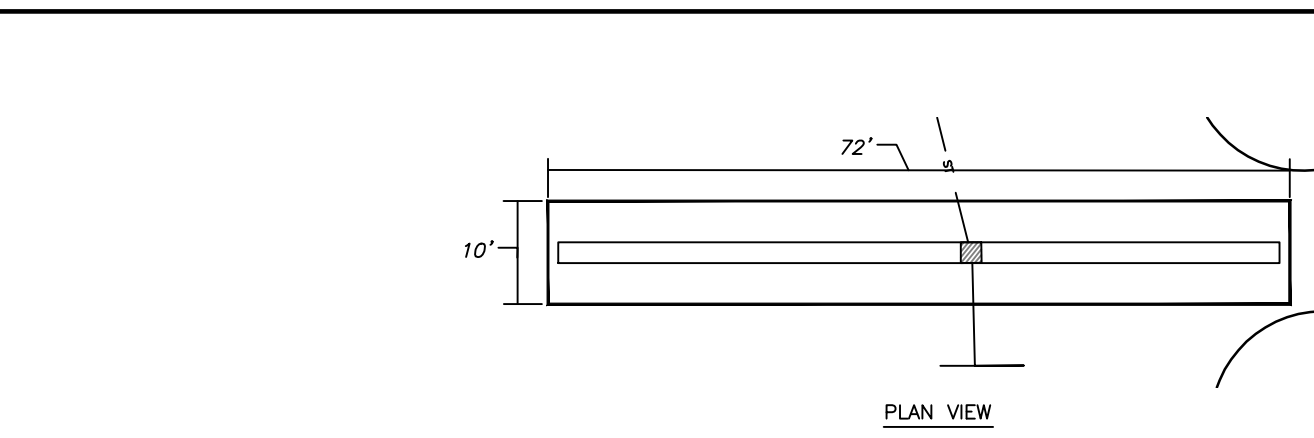
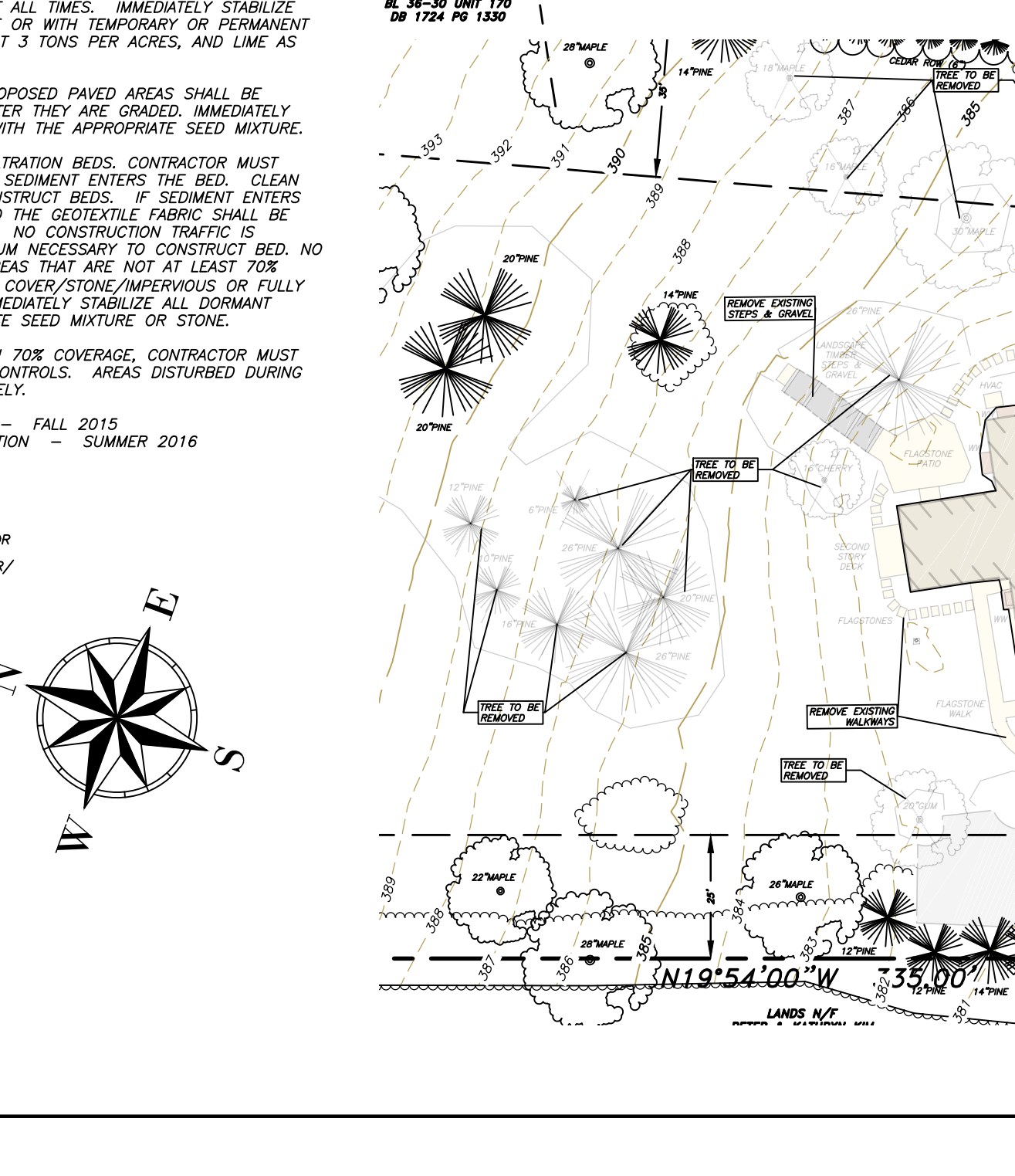
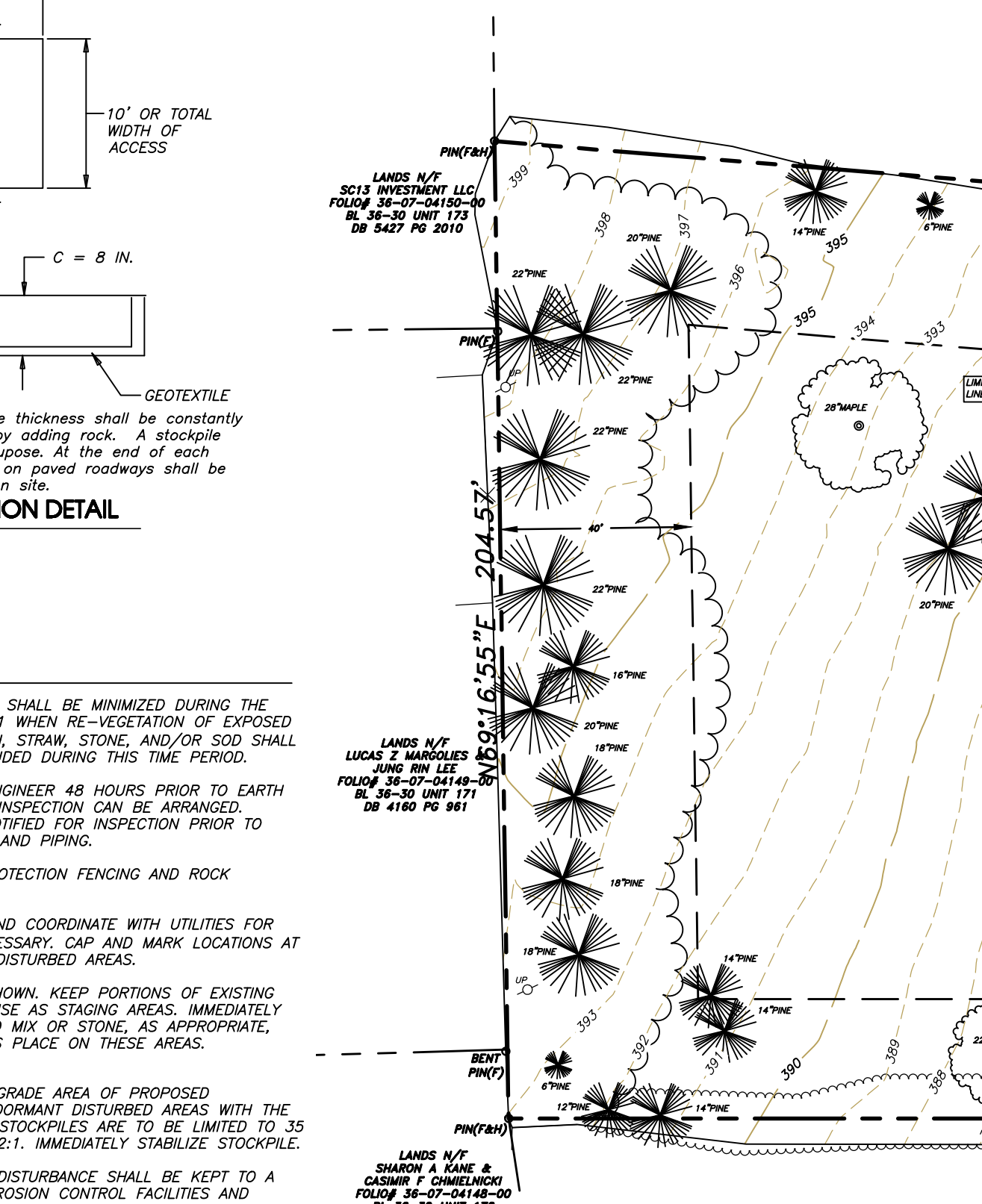
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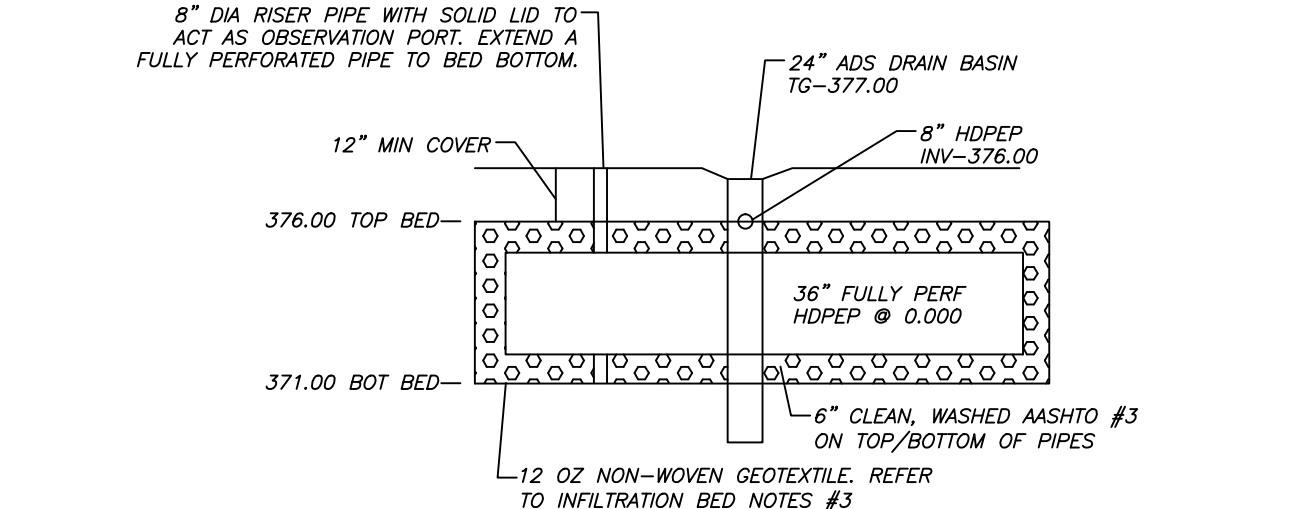
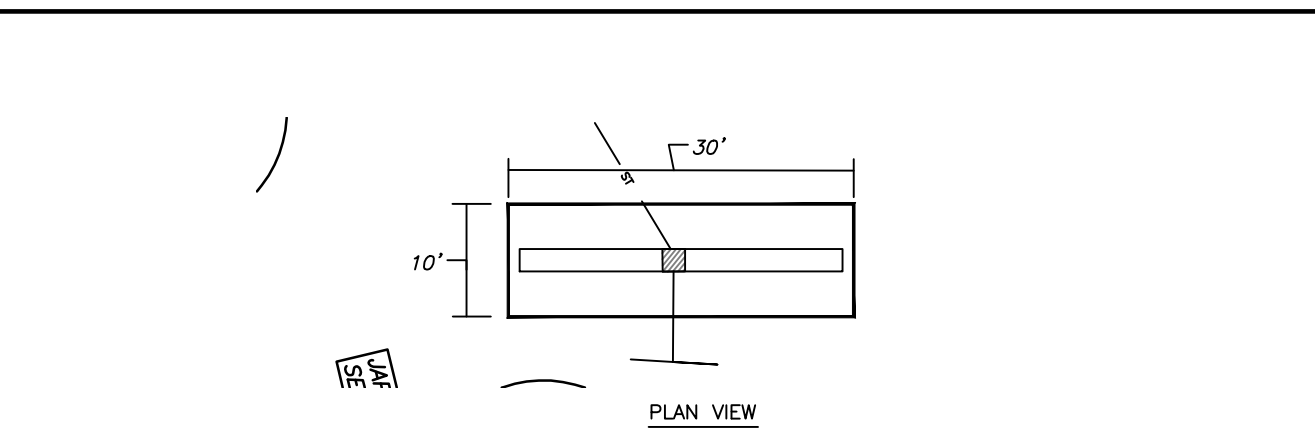
INfiltration BED NOTES
 1. SCARIFY BOTTOM AND SIDES OF BASIN, TAKING CARE NOT TO COMPACT SOIL.
 2. PERFORATED PIPE MUST HAVE PERFORATIONS NO LESS THAN 5/16\"/>

STORM WATER MANAGEMENT FACILITY OWNERSHIP AND MAINTENANCE NOTES:
 ALL STORMWATER CONVEYANCE AND MANAGEMENT FACILITIES SHOWN ON THIS PLAN ARE PERMANENT AND ARE NOT TO BE REMOVED OR FILLED. THE INDIVIDUAL LOT OWNER, HIS/HER HEIRS, ASSIGNS OR SUCCESSORS SHALL BE RESPONSIBLE FOR THE PERPETUAL MAINTENANCE OF THE SAID FACILITIES. THE TOWNSHIP MAINTAINS THE RIGHT, BUT NOT THE RESPONSIBILITY, TO ENTER SAID PREMISES TO OBSERVE OR INSPECT THE FUNCTIONING OF THESE FACILITIES. IF THE PROPERTY OWNER, HIS/HER HEIRS, ASSIGNS, OR SUCCESSORS FAILS IN ANY WAY TO MAINTAIN THE SAID FACILITIES OR CAUSES THESE FACILITIES TO BE ALTERED OR REMOVED, UPON WRITTEN NOTIFICATION BY THE TOWNSHIP, THE DEFECTS SHALL PROMPTLY BE CORRECTED BY THE PROPERTY OWNER. UPON THE OWNER'S FAILURE TO CORRECT THE DEFECTS WITHIN THE SPECIFIED BY THE TOWNSHIP, HIS/HER HEIRS, ASSIGNS, OR SUCCESSORS DO HEREBY AUTHORIZE THE TOWNSHIP AND/OR THEIR CONTRACTOR TO ENTER UPON THE SAID PROPERTY AND CAUSE THE REPAIR, MAINTENANCE, AND/OR CORRECTIONS TO BE MADE. A LIEN MAY BE FILED AGAINST THE PROPERTY FOR THE COSTS OF ALL CORRECTIONS INCLUDING APPLICABLE ENGINEERING AND/OR ATTORNEY'S FEES. THE TOWNSHIP IS UNDER NO OBLIGATION TO TAKE ANY ACTION. MAINTENANCE RESPONSIBILITIES SHALL INCLUDE THE FOLLOWING:
 - MAINTAINING THE GRASS ON AND AROUND STORM WATER FACILITIES TO PREVENT LARGE VEGETATION AND ROOT SYSTEMS FROM GROWING ON OR NEAR FACILITIES AND TO PREVENT THE FORMATION OF NON-VEGETATIVE MAT THAT COULD FLOW INTO AND CLOG THE FACILITIES. THIS INCLUDES REGULAR WEEKLY MOWING.
 - NO TREES OR SHRUBBERY SHALL BE PLACED OVER THE LOCATION OF THE INFILTRATION BED.
 - KEEPING ALL DEBRIS, INCLUDING GRASS CLIPPINGS, LEAVES, AND MOTOR OIL CLEAR OF INLET AND OUTLET STRUCTURES. THIS INCLUDES ROOF GUTTERS, INLET GRATES, AND OUTLET PIPES.
 - REMOVING ANY ACCUMULATED DEBRIS IN INLETS.
 - NO TREES OR SHRUBBERY SHALL BE PLACED WITHIN 48 HOURS AFTER THE LAST STORM EVENT. THEY SHALL BE INSPECTED AND THEN FIXED OR REPLACED AS DETERMINED.
 - INLET AND OUTLET STRUCTURES SHALL BE INSPECTED MONTHLY. THE STONE BED SHALL BE INSPECTED ANNUALLY AND AFTER EVERY STORM EXCEEDING 1\"/>

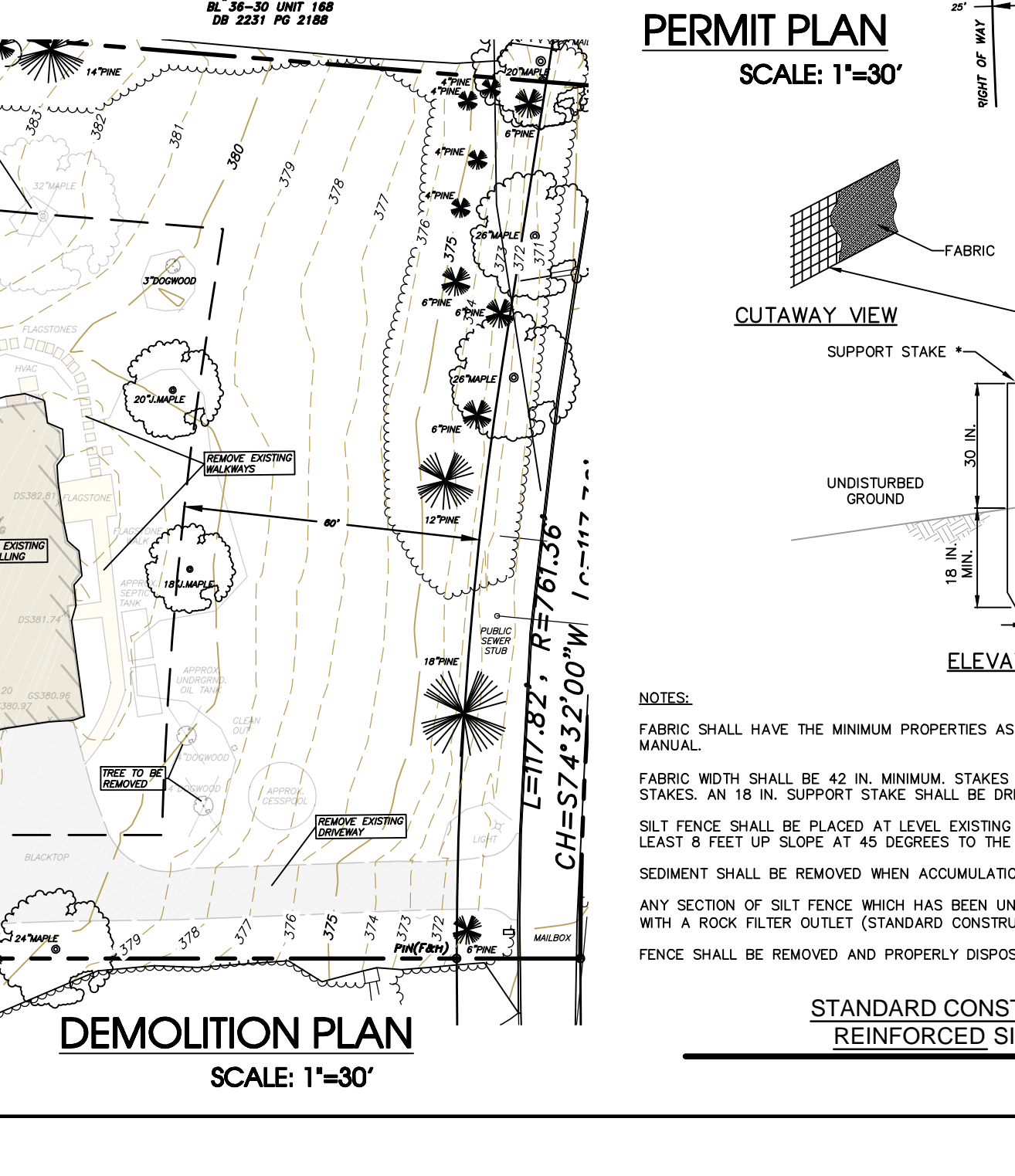
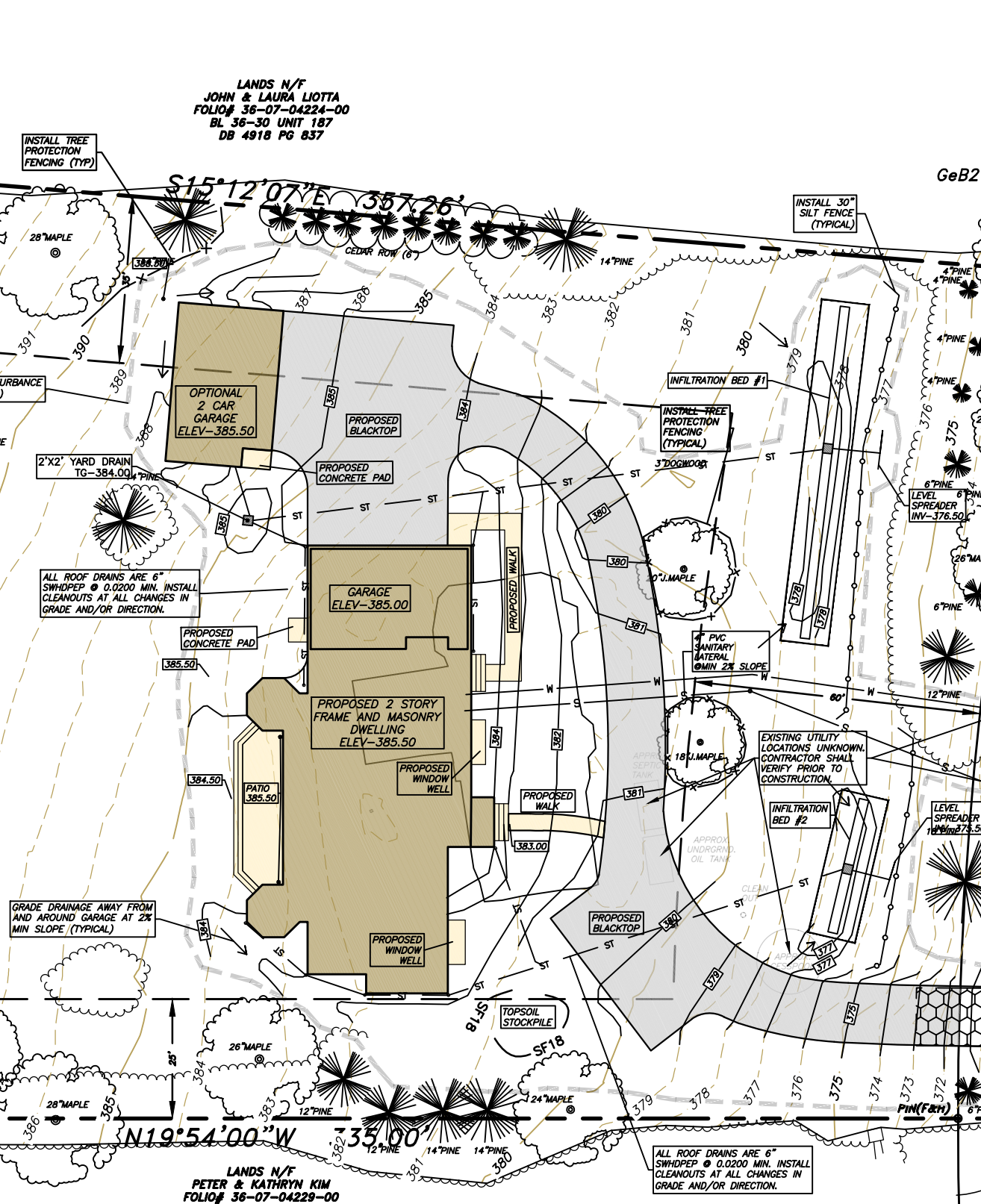
CONSTRUCTION STAGING
 GRADING AND EARTHMOVING OPERATIONS SHALL BE MINIMIZED DURING THE PERIOD FROM NOVEMBER 15 TO APRIL 1 WHEN RE-VEGETATION OF EXPOSED GROUND SURFACE IS DIFFICULT. MULCH, STRAW, STONE, AND/OR SOD SHALL BE USED TO STABILIZE ALL AREAS DEMOLISHED DURING THIS TIME PERIOD.
 CONTRACTOR MUST NOTIFY TOWNSHIP ENGINEER 48 HOURS PRIOR TO EARTH DISTURBANCE. NOTIFICATION IS SO AN INSPECTION CAN BE ARRANGED. TOWNSHIP ENGINEER SHALL ALSO BE NOTIFIED FOR INSPECTION PRIOR TO INSTALLATION OF THE INFILTRATION BED AND PIPING.
 STAGE 1. INSTALL SILT FENCE, TREE PROTECTION FENCING AND ROCK CONSTRUCTION ENTRANCE.
 STAGE 2. FIELD LOCATE ALL UTILITIES AND COORDINATE WITH UTILITIES FOR SHUTOFF/REMOVAL/RELOCATION AS NECESSARY. CAP AND MARK LOCATIONS AT SURFACE. IMMEDIATELY STABILIZE ANY DISTURBED AREAS.
 STAGE 3. REMOVE IMPROVEMENTS AS SHOWN. KEEP PORTIONS OF EXISTING PAVING AS LONG AS IS PRACTICAL TO USE AS STAGING AREAS. IMMEDIATELY STABILIZE AREAS WITH MULCH AND SEED MIX OR STONE, AS APPROPRIATE, UNLESS IMMEDIATE CONSTRUCTION TAKES PLACE ON THESE AREAS.
 STAGE 4. STRIP TOPSOIL AND ROUGH GRADE AREA OF PROPOSED IMPROVEMENTS. IMMEDIATELY STABILIZE DISTURBED AREAS WITH THE APPROPRIATE SEED MIXTURE. TOPSOIL STOCKPILES ARE TO BE LIMITED TO 15 FEET WITH A MAXIMUM SIDE SLOPE OF 2:1. IMMEDIATELY STABILIZE STOCKPILE.
 STAGE 5. CONSTRUCT IMPROVEMENTS. DISTURBANCE SHALL BE KEPT TO A MINIMUM AT ALL TIMES. MAINTAIN ALL EROSION CONTROL FACILITIES AND DEVICES IN PROPER WORKING ORDER AT ALL TIMES. IMMEDIATELY STABILIZE DISTURBED AREAS WITH STONE OR WITH TEMPORARY OR PERMANENT SEED MIX AS WARRANTED AND MULCH AT 3 TONS PER ACRE, AND LIME AS PRESCRIBED.
 STAGE 6. COMPLETE CONSTRUCTION. PROPOSED PAVED AREAS SHALL BE IMMEDIATELY STABILIZED WITH STONE AFTER THEY ARE GRADED. IMMEDIATELY STABILIZE DISTURBED AREAS WITH THE APPROPRIATE SEED MIXTURE.
 STAGE 7. CONSTRUCT STORMWATER INFILTRATION BEDS. CONTRACTOR MUST TAKE GREAT CARE TO ENSURE THAT NO SEDIMENT ENTERS THE BED. CLEAN WASHED STONE SHALL BE USED TO CONSTRUCT BEDS. IF SEDIMENT ENTERS STONE, STONE SHALL BE REPLACED AND THE GEOTEXTILE FABRIC SHALL BE CLEANED OR REPLACED AS NECESSARY. NO CONSTRUCTION TRAFFIC IS ALLOWED OVER BED EXCEPT FOR MINIMUM NECESSARY TO CONSTRUCT BED. NO FLOW SHALL ENTER BEDS FROM ANY AREAS THAT ARE NOT AT LEAST 70% STABILIZED WITH A UNIFORM VEGETATIVE COVER/STONE/IMPERVIOUS OR FULLY PROTECTED WITH INLET PROTECTION. IMMEDIATELY STABILIZE ALL DISTURBED AREAS WITH THE APPROPRIATE SEED MIXTURE OR STONE.
 STAGE 8. ONCE SITE IS STABILIZED WITH 70% COVERAGE, CONTRACTOR MUST REMOVE EROSION AND SEDIMENTATION CONTROLS. AREAS DISTURBED DURING REMOVAL MUST BE STABILIZED IMMEDIATELY.
 ANTICIPATED START OF CONSTRUCTION - FALL 2015
 ANTICIPATED COMPLETION OF CONSTRUCTION - SUMMER 2016



STORMWATER INFILTRATION BED #1 DETAIL
 PROVIDED VOLUME IN INFILTRATION BED #1: (72'x10'x5'D) - PIPE VOLUME X 40% VOIDS + 70 LF 36\"/>



STORMWATER INFILTRATION BED #2 DETAIL
 PROVIDED VOLUME IN INFILTRATION BED #2: (30'x10'x5'D) - PIPE VOLUME X 40% VOIDS + 28 LF 36\"/>



GENERAL NOTES

- PARCEL INFORMATION:
 Folio# 36-07-04231-00 Block 36-30 Unit 172
 DEED BOOK 2539 PAGE 1074
- GROSS LOT AREA: 65,288 Sq. Ft.
 LOT AREA CLEAR OF ROAD RIGHT OF WAY: 60,851 Sq. Ft.
- ELEVATION BENCHMARK IS BASED ON THE BELOW REFERENCED PLAN.
- THIS SURVEY IS NOT TO BE USED FOR TREE REMOVAL ALONG PROPERTY LINES. TREE LOCATIONS ARE APPROXIMATE. FOR TREE REMOVAL PURPOSES, PROPERTY LINES MUST BE FIELD MARKED WITH STAKES SET TO ESTABLISH EXACT TREE OWNERSHIP.
- THERE IS NO IDENTIFIABLE FLOOD PLAIN AREAS WITHIN THE PROJECT SITE AS ILLUSTRATED ON COMMUNITY PANEL NUMBER 420428-0038F OF THE FLOOD INSURANCE RATE MAP AS PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FOR THE TOWNSHIP OF RADNOR, PENNSYLVANIA.
- EXISTING SUBSURFACE UTILITY INFORMATION INDICATED IS BASED UPON VISUAL FIELD INSPECTION BY JEFFERY P. TURNER, PLS. SUCH INFORMATION CONCERNING THE SIZE, LOCATION, DEPTH, QUANTITY, ETC. OF SUBSURFACE UTILITIES IS APPROXIMATE IN NATURE AND HAS BEEN OBTAINED AS A SUPPLEMENT TO THE SITE SURVEY. THE INFORMATION PROVIDED IS REPRESENTATIVE OF SUBSURFACE CONDITIONS ONLY AT LOCATIONS AND DEPTHS WHERE SUCH INFORMATION WAS OBTAINED. THERE IS NO EXPRESSED OR IMPLIED AGREEMENT THAT UTILITY SIZE, LOCATION, DEPTH, QUANTITY, ETC. AS SHOWN EXISTS BETWEEN EXPLORED LOCATIONS. ACCORDINGLY, UTILITY INFORMATION SHOWN SHOULD NOT BE RELIED UPON FOR CONSTRUCTION PURPOSES. IT IS INCUMBENT UPON THE CONTRACTOR TO VERIFY THE SIZE, LOCATION, DEPTH, QUANTITY, ETC. OF ALL UTILITIES BEFORE EXCAVATION.
- PLANS REFERENCED:
 RECORD PLAN MINOR/FINAL SUBDIVISION/LOT LINE CHANGE 450,454,458 BOXWOOD ROAD, MADE BY MOMENUE AND ASSOCIATES, INC., CIVIL ENGINEERS AND LAND SURVEYORS, BRYN MAWR, PA., DATED AUGUST 25, 2004 AND REVISED NOVEMBER 3, 2004, AND RECORDED AS PLAN VOLUME 27 PAGE 139.
- SOILS TAKEN FROM THE FOLLOWING WEBSITE: [HTTP://WEBSOILSURVEY.SC.EGOV.USDA.GOV](http://websoilsurvey.sc.egov.usda.gov). THE SITE'S SOIL ATTRIBUTE DATA IS SERVICED FROM THE NRCS SOIL DATA MAT.
 GeB2 - GLENGLE CHANNERY SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED, WELL DRAINED, HYDROLOGIC GROUP B.
 GeD2 - GLENGLE CHANNERY SILT LOAM, 15 TO 25 PERCENT SLOPES, MODERATELY ERODED, WELL DRAINED, HYDROLOGIC GROUP B.

PROJECT NARRATIVE

THE APPLICANT PROPOSES TO REMOVE THE EXISTING DWELLING, WALKWAY, PATIO AND DRIVEWAY AND CONSTRUCT A NEW DWELLING, WALKWAY, PATIO AND DRIVEWAY.
 TWO INFILTRATION BEDS ARE PROPOSED TO PROVIDE GROUNDWATER RECHARGE AND WATER QUALITY TREATMENT AND CONTROL RATES PER THE TOWNSHIP ORDINANCE.
 DURING CONSTRUCTION EROSION AND SEDIMENT CONTROL IS ACCOMPLISHED THROUGH LIMITED DISTURBANCE, IMMEDIATE STABILIZATION, AND SILT FENCING. THE LIMIT OF DISTURBANCE IS 25,000 SF (0.57 ACRES).

ZONING SUMMARY

ORDINANCE ITEM	REQUIREMENT	EXISTING	PROPOSED
MIN LOT AREA	43,560 SF	65,288 SF	65,288 SF
MIN LOT WIDTH @ BLDG	120 FT	120 FT	120 FT
MIN SETBACKS			
FRONT	60 FT	76 FT	107 FT
SIDE (INDIVIDUAL/AGGREGATE)	25 FT / 60 FT	45 FT / 118 FT	26 FT / 93 FT
REAR	40 FT	184 FT	161 FT
MAX BUILDING HEIGHT	35 FT	35 FT	35 FT
MAX BUILDING COVERAGE	15%	3.06%	6.39%
MAX IMPERVIOUS COVERAGE	22%	8.05%	14.53%
RIPARIAN BUFFER	35 FT	35 FT	35 FT

IMPERVIOUS COVERAGE SUMMARY

	EXISTING	REMOVE	ADD	PROPOSED
BUILDINGS	1,998	1,998	4,174	4,174
ASPHALT	2,202	2,202	4,559	4,559
WALKS, WALLS & PATIO	932	932	753	753
TIMBERS & GRAVEL	125	125	0	0
TOTAL (SQ FT)	5,257	5,257	9,486	9,486
TOTAL SITE IMPERVIOUS COVERAGE	8.05%			14.53%
BUILDING COVERAGE	3.06%			6.39%

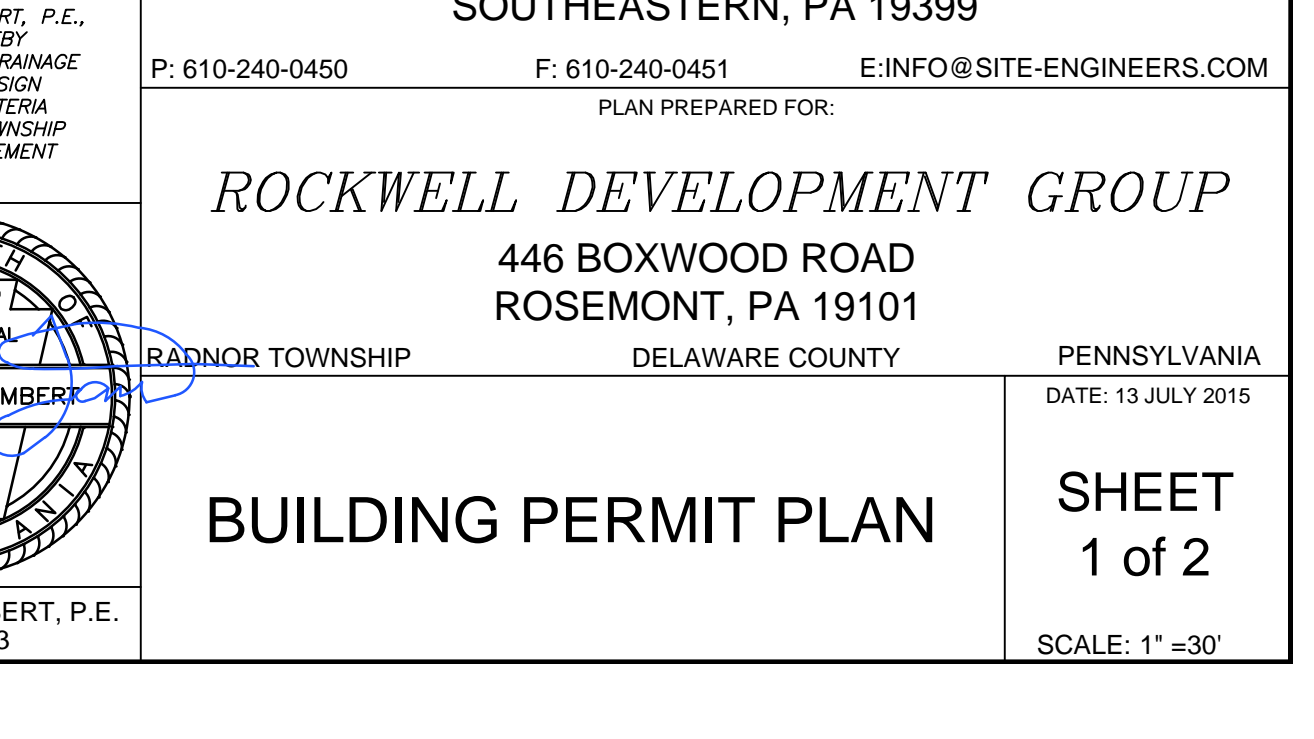
NUM.	DATE	REVISION

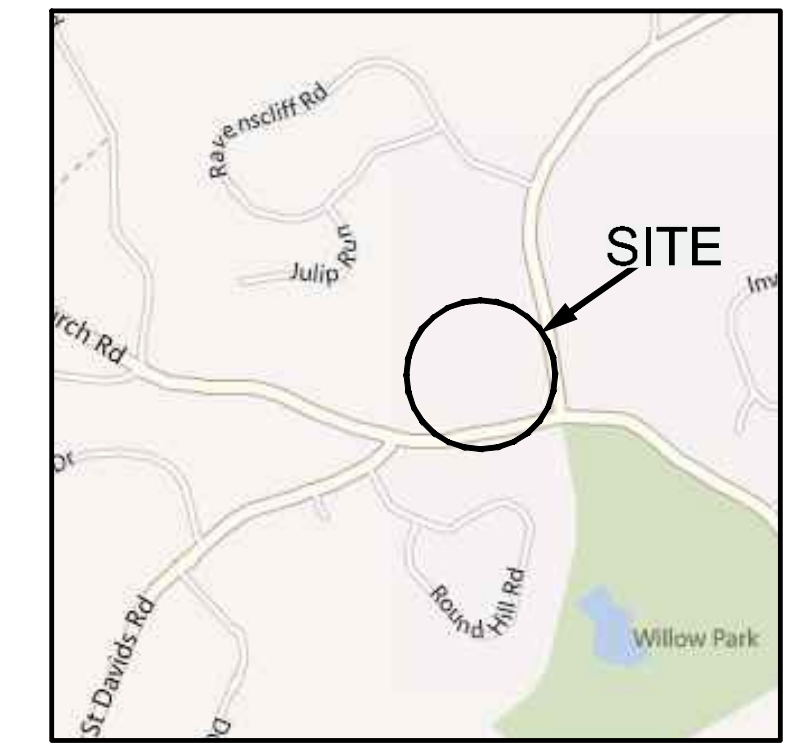
PLAN PREPARED BY:
SITE ENGINEERING CONCEPTS, LLC
 P.O. BOX 1992
 SOUTHEASTERN, PA 19399
 P: 610-240-0450 F: 610-240-0451 E: INFO@SITE-ENGINEERS.COM

PLAN PREPARED FOR:
ROCKWELL DEVELOPMENT GROUP
 446 BOXWOOD ROAD
 ROSEMONT, PA 19101
 RADNOR TOWNSHIP
 DELAWARE COUNTY
 PENNSYLVANIA

DATE: 13 JULY 2015

BUILDING PERMIT PLAN
 SHEET 1 of 2
 SCALE: 1"=30'





LOCATION MAP
SCALE: 1" = 100'

- CONSTRUCTION TIMING AND SEQUENCE:**
1. NOTIFY THE TOWNSHIP THAT CONSTRUCTION IS GOING TO COMMENCE. ANTICIPATED DATE: MAY 2014. REFER TO JULIP RUN STREAM RESTORATION PLANS FOR EROSION & SEDIMENT CONTROLS AND COMPLETE DETAILS.
 2. INSTALL TREE PROTECTION AS INDICATED ON PLAN. FENCING MUST BE IN PLACE AND APPROVED PRIOR TO ANY DISTURBANCE. ALL DISTURBANCE SHALL BE CONTAINED TO THE DELINEATED LIMIT OF CONSTRUCTION.
 3. ALL CONSTRUCTION VEHICLES LEAVING THE SITE SHALL BE WASHED DOWN PRIOR TO ACCESS THE PUBLIC ROAD. SHOULD THIS PROVE INSUFFICIENT AT KEEPING DEBRIS OFF OF PUBLIC ROADWAYS, INSTALL A STABILIZED CONSTRUCTION ENTRANCE TO BE UTILIZED BY ALL CONSTRUCTION VEHICLES ENTERING/LEAVING THE SITE.
 4. INSTALL DEWATERING FILTER BERM DOWNGRADE OF MATERIAL LEVELING AREA. ONCE THE DREDGING IS COMPLETE AND THE LEVELING AREA SHALL BE TEMPORARILY STABILIZED.
 5. GRADE DREDGE CONTAINMENT AREA TO FACILITATE DEWATERING OF DREDGE MATERIAL.
 6. DRAW DOWN POND USING APPROVED METHODS AND HAND TRANSFER FISH TO ONE OF THE UPPER PONDS (POND 3 OR 4).
 7. REMOVE MATERIAL FROM POND AND PLACE WITHIN THE CONTAINMENT AREA FOR DEWATERING. TO THE EXTENT POSSIBLE THE MATERIAL SHALL BE PLACED IN A MANNER TO CREATE A SMOOTH TRANSITION FROM TOE OF SLOPE TO THE REMAINING EXISTING GRADE.
 8. INSPECT SEDIMENT BARRIERS FREQUENTLY, ESPECIALLY AFTER HEAVY STORMS. REPLACE AND REPAIR SEDIMENT BARRIERS AS NECESSARY.
 9. UNTIL THE SITE IS STABILIZED ALL EROSION AND SEDIMENTATION CONTROLS MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION CONTROLS 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.
 10. AFTER COMPLETION OF PLACEMENT OF THE DREDGE MATERIAL IMMEDIATELY SEED AND MULCH THE CONTAINMENT AREA. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE GROOMED AND RESEDED AS NECESSARY TO RESTORE THEM BACK TO THEIR ORIGINAL CONDITION.
 11. CONSTRUCTION FINISHED. ANTICIPATED: JUNE 2014.

- EROSION AND SEDIMENT CONTROL NOTES:**
1. UNTIL THE SITE ACHIEVES FINAL STABILIZATION, THE PERMITTEE AND COOPERATIVE SHALL ASSURE THAT THE BEST MANAGEMENT PRACTICES ARE IMPLEMENTED, OPERATED, AND MAINTAINED PROPERLY AND COMPLETELY. ALL MAINTENANCE WORK, INCLUDING CLEANING, REPAIR, REPLACEMENT, REGARDING, RESEEDING, AND RESTABILIZATION SHALL BE PERFORMED IMMEDIATELY.
 2. 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 POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
 3. THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE MUNICIPALITY, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATIONS.
 4. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS.
 5. EROSION AND SEDIMENT BMP'S MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMP'S.
 6. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMP CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMP'S MUST BE STABILIZED IMMEDIATELY.
 7. AT LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT 1-800-242-1776 FOR BURIED UTILITIES LOCATIONS.
 8. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE OPERATOR SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITIES. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN ONE YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH ARE AT FINISHED GRADE OR WHICH WILL NOT BE REDISTURBED WITHIN ONE YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.
 9. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS 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.
 10. SEDIMENT MUST BE REMOVED FROM STORM WATER INLET PROTECTION AFTER EACH RUNOFF EVENT.
 11. HAY OR STRAW MULCH MUST BE APPLIED AT 3.0 TONS PER ACRE.
 12. SOD, MULCH WITH MULCH CONTROL NETTING, OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON ALL SLOPES 4:1 OR STEEPER.
 13. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.
 14. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMP'S MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL BMP'S AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGARDING, RESEEDING, REMULCHING, AND RENETTING, MUST BE DONE IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMP'S FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMP'S, OR MODIFICATIONS TO THOSE INSTALLED WILL BE REQUIRED.
 15. THE OPERATOR SHALL REMOVE FROM THIS SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THIS SITE.
 16. PROVIDE CONSTRUCTION FENCING AS NECESSARY TO SECURE THE CONSTRUCTION SITE FROM UNAUTHORIZED ACCESS.

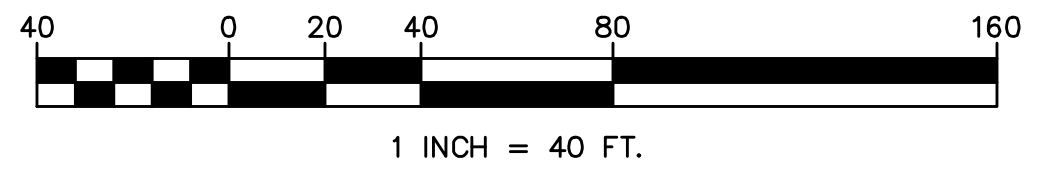
NOTE: DREDGING OF PONDS 1 & 2 LIMITED TO APPROXIMATELY 2,500-CY

EROSION CONTROL LEGEND

- +++++ SILT SOXX
- XXXXXX TREE PROTECTION FENCING
- [Grid Pattern] CONSTRUCTION ENTRANCE

LINETYPE LEGEND

- EXISTING PROPERTY LINE
- EXISTING FENCE
- EXISTING FLOODPLAIN
- EXISTING EDGE OF STREAM
- EXISTING TOWNSHIP LINE
- EXISTING WATERCOURSE
- - - -378- EXISTING 2' CONTOUR
- - - -380- EXISTING 10' CONTOUR



REV	DATE	COMMENTS
1	02-25-14	SCOPE OF WORK
2	03-05-14	CONSTRUCTION STAGING

PONDS 1 & 2 DREDGING	
MOMENEE & ASSOCIATES, INC. CIVIL ENGINEERS AND LAND SURVEYORS 924 COUNTY LINE ROAD, BRYN MAWR, PA 19010 PHONE: (610) 527-3030 FAX: (610) 527-9008	
EROSION & SEDIMENT CONTROL PLAN RAVENSCLIFF - ROUNDHILL RADNOR TOWNSHIP • DELAWARE COUNTY • PENNSYLVANIA	
ONE-CALL: 20131342261	OWNER/APPLICANT: RAVENSCLIFF - ROUNDHILL HOMEOWNERS ASSOCIATION
DRAWN BY: JRM	CHECKED BY: MJB
DATE: FEBRUARY 20, 2014	SHEET NO. 1
OF 1	SCALE: 1" = 40'
FILE NO.: 11-218	

Serial Number: 20131342261

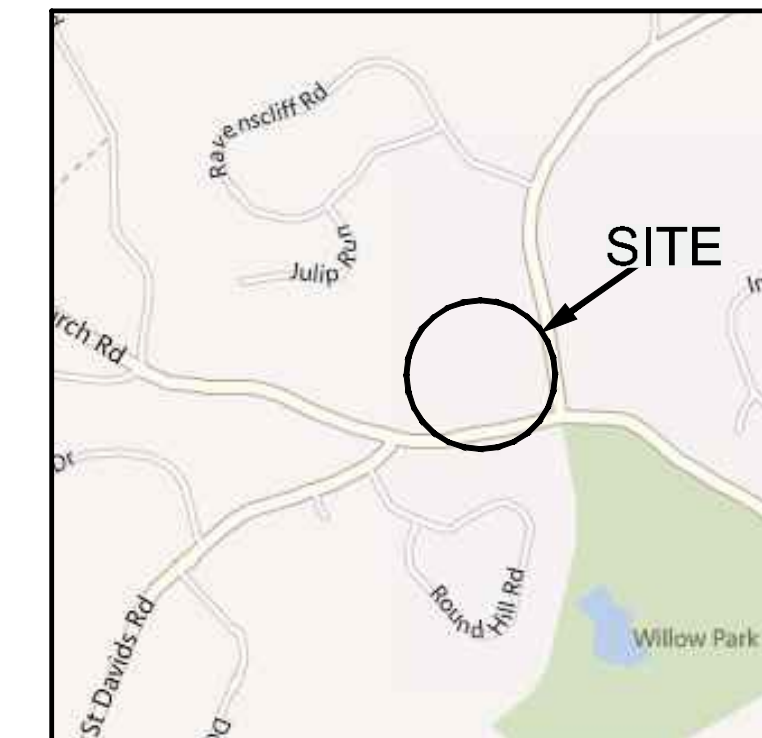
CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE-STOP CALL

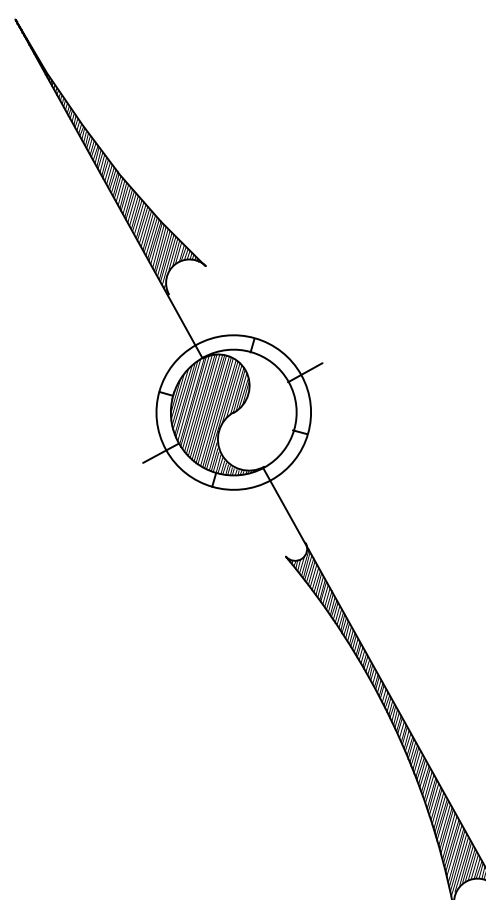
1-800-242-1776

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LOCATION MAP
SCALE: 1" = 1,000'



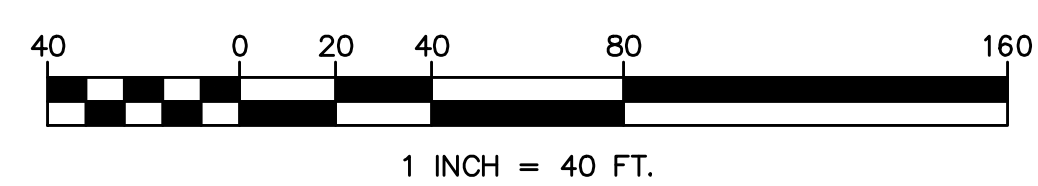
NOTE: ALL WORK RELATED TO THE DREDGING OF PONDS 3 & 4 WAS PREVIOUSLY APPLIED FOR UNDER A SEPARATE GRADING PERMIT

EROSION CONTROL LEGEND	
+++++	SILT SOXX
xxxxxx	TREE PROTECTION FENCING
[Grid Pattern]	CONSTRUCTION ENTRANCE

LINETYPE LEGEND	
---	EXISTING PROPERTY LINE
- - -	EXISTING FENCE
---	EXISTING FLOODPLAIN
---	EXISTING EDGE OF STREAM
---	EXISTING TOWNSHIP LINE
---	EXISTING WATERCOURSE
---	EXISTING 2' CONTOUR
---	EXISTING 10' CONTOUR

Serial Number: 20131342261
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

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2 103-25-19 03-09-14 CONSTRUCTION STAGING COMMENTS REV. DATE		PONDS 1 & 2 DREDGING		DATE: FEBRUARY 20, 2014 SHEET NO. <div style="font-size: 2em; font-weight: bold;">2</div> OF 3 SCALE: 1" = 40' FILE NO.: 11-218
		MOMENEE & ASSOCIATES, INC. CIVIL ENGINEERS AND LAND SURVEYORS 924 COUNTY LINE ROAD, BRYN MAWR, PA 19010 PHONE: (610) 527-3030 FAX: (610) 527-9008		
		EROSION & SEDIMENT CONTROL PLAN RAVENSCLIFF - ROUNDHILL RADNOR TOWNSHIP • DELAWARE COUNTY • PENNSYLVANIA		
		ONE-CALL: 20131342261 DRAWN BY: JRM CHECKED BY: MJB	OWNER/APPLICANT RAVENSCLIFF - ROUNDHILL HOMEOWNERS ASSOCIATION	

HYDROSEEDING SPECIFICATIONS

DEFINITION: STABILIZING SEDIMENT PRODUCING AND SEVERELY ERODED AREAS BY ESTABLISHING PERMANENT GRASS COVER.

PURPOSE: TO PROVIDE PERMANENT VEGETATIVE COVER TO CONTROL RAPID RUN-OFF AND EROSION.

PROCEDURE: SURFACE TO BE HYDRO-SEEDED SHALL BE CLEANED OF ALL DEBRIS AND OTHER MATTER HARMFUL TO UNIFORM GERMINATION. A WATER-SLURRY MIXTURE COMPOSED OF THE BELOW MENTIONED "MATERIALS" SHALL BE SPRAYED UNIFORMLY OVER THE AREAS TO BE HYDRO-SEEDED.

MATERIALS:

PERMANENT SEEDING

NAME	DESCRIPTION	APPLICATION RATE (PER ACRE)
------	-------------	-----------------------------

** SEE SPECIFICATIONS **

TEMPORARY

NAME	DESCRIPTION	APPLICATION RATE (PER ACRE)
1) SEED	ANNUAL RYEGRASS (95% PURE)	40 LBS.
2) COMMERCIAL FERTILIZER	5-5-5	1,000 LBS.
3) LIME	GROUND AGRICULTURAL LIMESTONE (MAY BE APPLIED SEPARATELY)	1 TON
4) MULCH	HAY OR STRAW	3 TONS

PLACING TOPSOIL OR TOPSOIL MIXTURE

PREPARATION OF AREAS TO BE TOPSOILED

GRADE THE AREAS TO BE COVERED BY TOPSOIL, USING ACCEPTABLE METHODS, LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE PLACING THE TOPSOIL. REMOVE STONES AND OTHER FOREIGN MATERIAL 2 INCHES OR LARGER IN DIMENSION. REMOVE AND SATISFACTORILY DISPOSE OF UNSUITABLE AND SURPLUS MATERIAL.

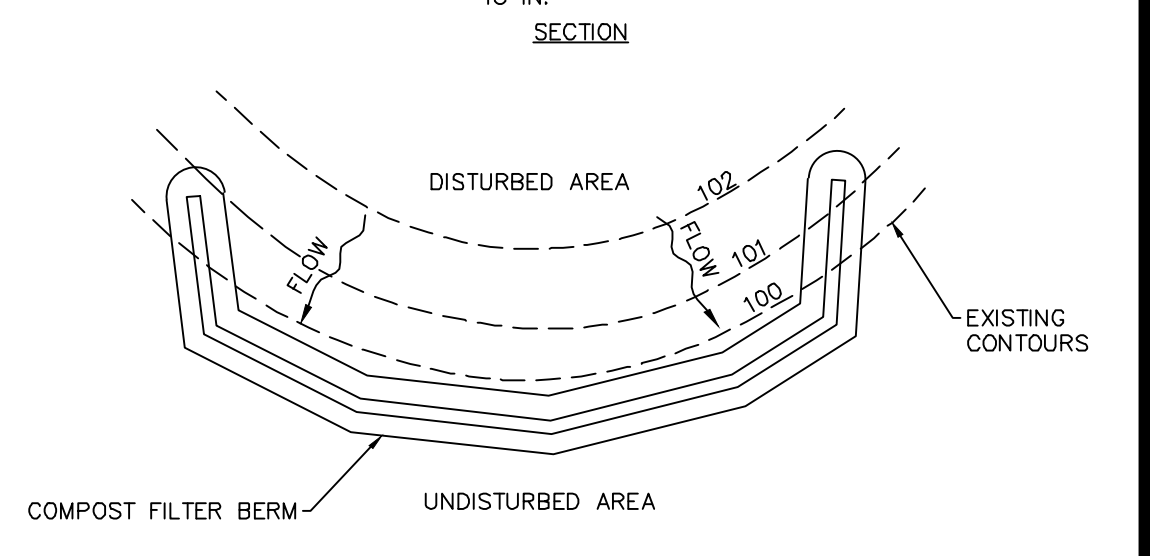
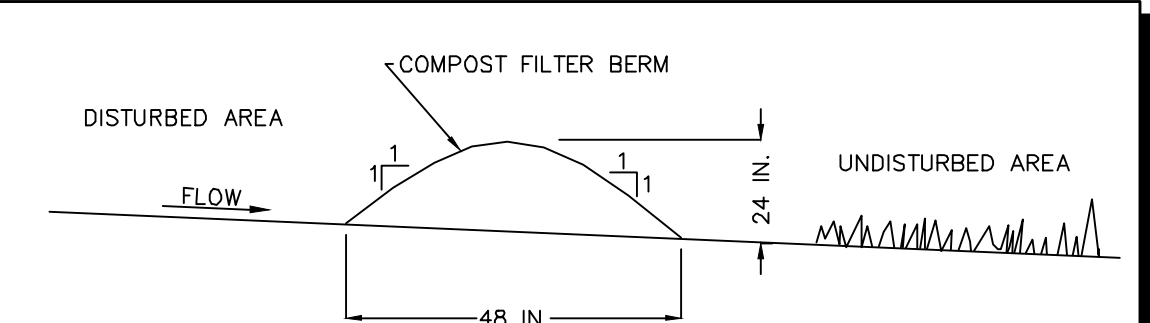
PLACING AND SPREADING TOPSOIL

PLACE TOPSOIL ON THE PREPARED AREAS AND, UNLESS OTHERWISE INDICATED, SPREAD AND COMPACT TO A 4-INCH UNIFORM DEPTH ± 1 1/2 INCHES. COMPACT WITH A ROLLER WEIGHING NOT OVER 120 POUNDS PER FOOT WIDTH OF ROLLER OR BY OTHER ACCEPTABLE METHODS, AS DIRECTED. REMOVE OVERDEPTH TOPSOIL, UNLESS OTHERWISE AGREED UPON IN WRITING. DO NOT PLACE TOPSOIL IN A WET OR FROZEN CONDITION.

SEEDING SPECIFICATIONS:

WHERE DENUDE AREAS ARE DESIRED TO BE LAWN:

- PERFORM ALL CULTURAL OPERATION AT RIGHT ANGLES TO THE SLOPE.
- APPLY LIME ACCORDING TO TEST OR AT THE RATE OF 25 LBS. OF GROUND LIMESTONE PER 1,000 SQ. FT.
- APPLY FERTILIZER ACCORDING TO SOIL TEST OR WORK IN DEEPLY 20 LBS. OF 0-20-0 OR EQUIVALENT PER 1,000 SQ. FT. AND AT THE TIME OF SEEDING, WORK INTO THE SURFACE 10 LBS. OF 10-10-10 OR EQUIVALENT PER 1,000 SQ. FT. OR OTHER APPROVED MIXTURE.
- SMOOTH AND FIRM SEEDED PRIOR TO SEEDING.
- SEED USING SPECIFIED MIXTURE AND RATE.
- STABILIZE WITH EROSION CONTROL BLANKETS AS NOTED ON PLANS.



STANDARD CONSTRUCTION DETAIL #4-2 COMPOST FILTER BERM

NOT TO SCALE

NOTES:

COMPOST SHALL MEET STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.

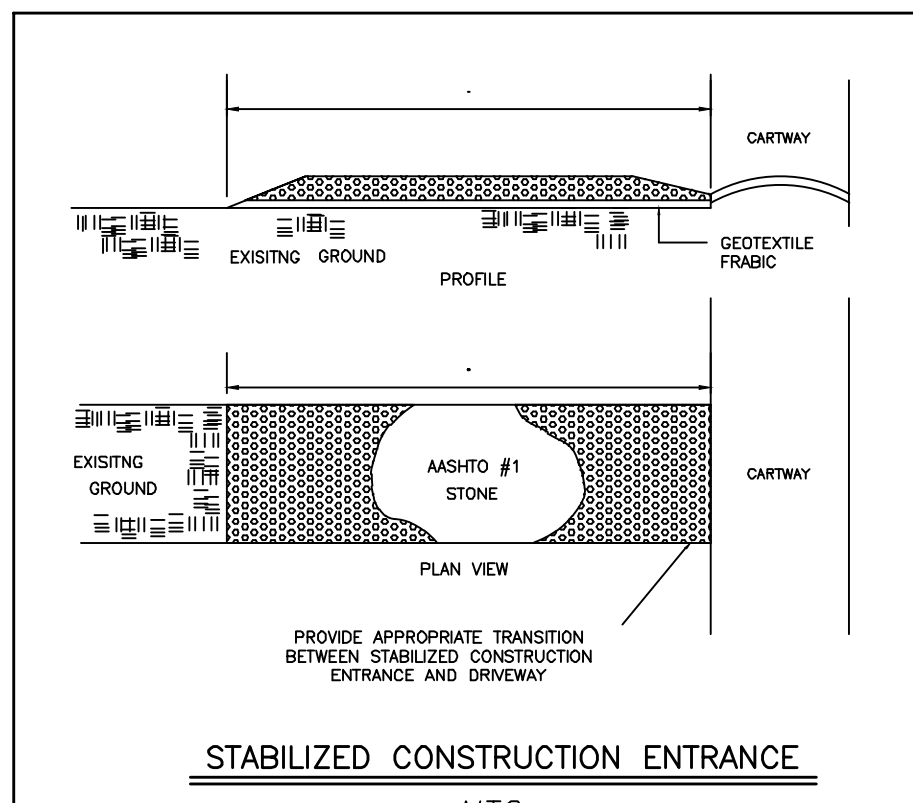
COMPOST FILTER BERMS SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BERM SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BERM ALIGNMENT.

THE MAXIMUM SLOPE LENGTH ABOVE A COMPOST FILTER BERM SHALL NOT EXCEED THAT SHOWN IN TABLE 4.4 OF THE PA DEP EROSION CONTROL MANUAL FOR THE STANDARD SILT FENCE (18 IN. HIGH FENCE).

TALL GRASS SHALL BE CUT PRIOR TO INSTALLATION TO MINIMIZE POTENTIAL FOR UNDERCUTTING. BERM SHALL BE NETTED OR OTHERWISE ANCHORED AFTER INSTALLATION.

SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE ABOVE GROUND HEIGHT OF THE BERM.

ANY SECTION COMPOST FILTER BERM WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED. CONCENTRATED FLOWS SHALL NOT BE DIRECTED TOWARD ANY COMPOST FILTER BERM.



STABILIZED CONSTRUCTION ENTRANCE

- NTS
- THICKNESS - NOT LESS THAN EIGHT (8) INCHES.
 - WIDTH - NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
 - WASHING - WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE THROUGH USE OF SAND BAGS, GRIND, BOUNDS, OR OTHER APPROVED METHODS.
 - MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SHALL BE REMOVED IMMEDIATELY. UNTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.

EROSION AND SEDIMENT CONTROL NOTES:

RECEIVING WATER: SCHUYLKILL RIVER
CHAPTER 93 CLASSIFICATION: WW, MF

- ALL SLOPES 3:1 OR STEEPER WILL BE STABILIZED WITH AN EROSION CONTROL BLANKET AS NOTED ON THE PLANS UNLESS SPECIFIED OTHERWISE.
- UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION BMP'S MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION BMP'S AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL SITE INSPECTIONS WILL BE DOCUMENTED IN AN INSPECTION LOG KEPT FOR THIS PURPOSE. THE COMPLIANCE ACTIONS AND THE DATE, TIME AND NAME OF THE PERSON CONDUCTING THE INSPECTION. THE INSPECTION LOG WILL BE KEPT ON SITE AT ALL TIMES AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST.
- ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RESETTING, MUST BE PERFORMED IMMEDIATELY, IF EROSION AND SEDIMENTATION BMP'S FAIL TO PERFORM AS EXPECTED. REPLACEMENT BMP'S OR MODIFICATIONS OF THOSE INSTALLED WILL BE NEEDED.
- WHERE BMP'S ARE FOUND TO FAIL TO ALLEVIATE EROSION ON SEDIMENT POLLUTION THE PERMITTEE OR CO-PERMITTEE SHALL INCLUDE THE FOLLOWING INFORMATION:
A. THE LOCATION AND SEVERITY OF THE BMP'S FAILURE AND ANY POLLUTION EVENTS.
B. ALL STEPS TAKEN TO, REDUCE, ELIMINATE AND PREVENT THE REOCCURENCE OF THE NON-COMPLIANCE.
C. THE TIME FRAME TO CORRECT THE NON-COMPLIANCE, INCLUDING THE EXACT DATES WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE.
- AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMP'S MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMP'S MUST BE STABILIZED IMMEDIATELY.
- AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS 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.
- BEFORE INITIATING ANY REVISION TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED EAS CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE MONTGOMERY COUNTY CONSERVATION DISTRICT. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED. 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 POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
- ALL PUMPING OF SEDIMENT LADEN WATER OR POTENTIALLY SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER NONDISTURBED AREAS. SEDIMENT REMOVED FROM BMP'S SHALL BE DISPOSED OF IN LANDSCAPE AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.
- 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.
- A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE COUNTY CONSERVATION DISTRICT, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATION.
- THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE.
- NEWLY GRADED SLOPES TWENTY FIVE PERCENT (25%) OR GREATER SHALL BE IMMEDIATELY SOODED OR STABILIZED WITH THE APPROPRIATE EROSION CONTROL BLANKET OR MATTING.
- UPON COMPLETION OR TEMPORARY CESSATION OF ANY EARTH DISTURBANCE ACTIVITY, OR ANY PHASE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED WITH THE APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION.
- SHOULD UNFORESEEN EROSION DEVELOP DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ACTION TO REMEDY SUCH CONDITIONS AND TO PREVENT DAMAGE TO ADJACENT PROPERTIES AS A RESULT OF INCREASED RUNOFF AND/OR SEDIMENT DISPLACEMENT. THE CONTRACTOR SHALL PLAN FOR AVAILABLE SOURCES OF WOODCHIPS, HAY BALES, CRUSHED STONE AND OTHER MULCHES IN ORDER TO DEAL IMMEDIATELY WITH EMERGENCY PROBLEMS OF EROSION.
- THE CONTRACTOR SHALL, BY SCHEDULING THE CONSTRUCTION, UTILIZE NEW PLANTINGS AND PROPERLY INSTALL EROSION CONTROL FENCING, HAY BALES AND OTHER EROSION CONTROL MEASURES TO MINIMIZE EROSION DAMAGE.
- ANY DISTURBED AREA ON WHICH ACTIVITY HAS CEASED MUST BE SEEDED AND MULCHED IMMEDIATELY. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE RECOMMENDED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN ONE YEAR MAY BE SEEDED AND MULCHED WITH A QUICK GROWING TEMPORARY SEEDING MIXTURE AND MULCH. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WHICH WILL NOT BE REDISTURBED WITHIN ONE YEAR MUST BE SEEDED AND MULCHED IMMEDIATELY.
- A ROUTINE "END-OF-DAY-CHECK" SHALL BE MADE DURING CONSTRUCTION TO MAKE SURE THAT ALL CONTROL MEASURES ARE WORKING PROPERLY. ALL PERSONS ENGAGED IN LAND DISTURBANCE ACTIVITIES SHALL DESIGN, IMPLEMENT, AND MAINTAIN CONTROL MEASURES WHICH PREVENT ACCELERATED EROSION AND SEDIMENTATION. THERE SHALL BE NO ADVERSE DISCHARGE OF THE SEDIMENT OR OTHER SOLID MATERIALS FROM THE SITE AS THE RESULT OF STORM WATER RUNOFF.
- TEMPORARY EROSION CONTROL MEASURES MAY BE REMOVED ONLY AFTER THE CONSTRUCTION AREA AND CONTAINED SILT IS STABILIZED AND THE LAWN AREA ESTABLISHED.
- ALL PERSONS ENTERING ACTIVE TANKS, MANHOLES, INLETS, ETC. MUST COMPLY WITH OSHA REQUIREMENTS FOR ENTRY INTO CONFINED SPACES.
- ON-SITE TREES TO BE SAVED SHALL BE PREPARED FOR CONSTRUCTION BY APPROPRIATE FERTILIZATION AND PROTECTED BY APPROPRIATE FENCING.
- THE PERMITTEE MUST DEVELOP, AND HAVE APPROVED BY THE DISTRICT, A SEPARATE EROSION AND SEDIMENTATION CONTROL PLAN FOR EACH SPILL, BORROW, OR OTHER WORK AREA NOT DETAILED IN THE PERMITTED PLAN, WHETHER LOCATED WITHIN OR OUTSIDE OF THE CONSTRUCTION LIMITS.
- GRADING EQUIPMENT SHALL NOT BE ALLOWED TO CROSS PERMANENT OR INTERMITTENT STREAMS PRIOR TO OBTAINING THE APPROPRIATE PERMITS.
- NO EXCAVATIONS OR FILLS THAT ENCRONCH ON NATURAL WATERCOURSES, FLOOD HAZARD AREAS, CONSTRUCTED CHANNELS, OR WETLANDS SHALL OCCUR WITHOUT THE NECESSARY STATE AND/OR FEDERAL PERMITS.

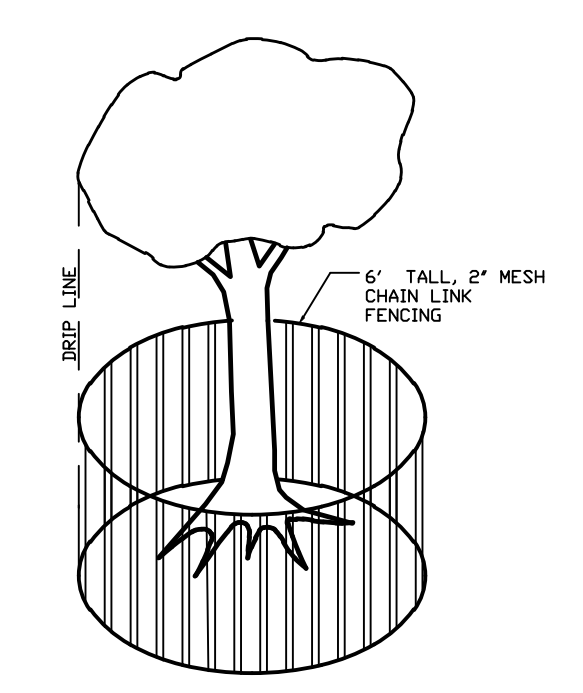


PROTECTION BARRIERS SHALL BE 6 FEET HIGH, CONSTRUCTED OF 2" CHAIN LINK MESH FABRIC.

- FABRIC SHALL BE SECURED TO 2" POSTS WITH 6 GA. ALUMINUM WIRE TIES AT 24" O.C.
- POSTS SHALL BE A MINIMUM OF 2 FEET IN THE GROUND AND SPACED 10 FEET ON CENTER MAX.
- PLASTIC ZIP-TIES MAY NOT BE USED TO SECURE FABRIC TO POSTS.

TREE PROTECTION BARRIER FENCING

NTS



EROSION AND SEDIMENT CONTROL NOTES (CONTINUED):

- STORMWATER MANAGEMENT FACILITIES SHALL BE PROTECTED FROM SEDIMENT LADEN MATERIAL DURING CONSTRUCTION.
- CARE SHOULD BE EXERCISED IN ALL DISTURBANCE ACTIVITIES TO PREVENT DEGRADATION TO THE WATERS OF THE COMMONWEALTH. UPON COMPLETION OR TEMPORARY CESSATION OF EARTH DISTURBANCE ACTIVITIES, THE PROJECT SITE MUST BE IMMEDIATELY STABILIZED WITH THE APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION.
- TO PROTECT ADJACENT PROPERTIES, ALL AREAS REQUIRING INTERM STABILIZATION MUST BE ADDRESSED IMMEDIATELY FOLLOWING COMPLETION OF DISTURBANCE.
- SHOULD ANY TREES NOT SCHEDULED OR PERMITTED TO BE REMOVED BE IRREPARABLY DAMAGED DURING CONSTRUCTION AND DIE WITHIN (18) MONTHS OF THE CONCLUSION OF CONSTRUCTION ACTIVITIES, THOSE TREES WILL BE REQUIRED TO BE REPLACED.
- TEMPORARILY SEED ALL STOCKPILE TOPSOIL. IMMEDIATELY TEMPORARILY SEED ALL TEMPORARY E & S CONTROL AREAS.
- ALL SOIL, EROSION AND SEDIMENT CONTROL PRACTICES TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
- ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MUST IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW OR EQUIVALENT MATERIAL, AT A RATE OF 3.0 TONS PER ACRE.
- PERMANENT VEGETATION TO BE SEEDED ON ALL EXPOSED AREAS IMMEDIATELY AFTER FINAL GRADING. MULCH TO BE USED AS NECESSARY FOR PROTECTION UNTIL SEEDING IS ESTABLISHED. AFTER INITIAL SITE DISTURBANCE, MULCH TO BE APPLIED AT 3.0 TONS PER ACRE. MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON ALL SLOPES 3:1 OR STEEPER. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.
- ALL WORK WILL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION, THE COUNTY, AND THE MUNICIPALITY. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED.
- IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. STEEP SLOPES, WETLANDS, FLOODPLAINS, OR DRAINAGE SWALES) SHALL BE IMMEDIATELY STABILIZED WITH THE APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION EQUIVALENT, AT A RATE OF 3.0 TONS PER ACRE. MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON ALL SLOPES 3:1 OR STEEPER. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.
- A STABILIZED CONSTRUCTION ENTRANCE PAD OF 1.5" TO 2" SIZE CLEAN STONE WILL BE PLACED AT ALL CONSTRUCTION ENTRANCES (DIMENSIONS: LENGTH - NOT LESS THAN 50 FT. EXCEPT ON SINGLE RESIDENCE LOT WHERE 30 FT. MINIMUM WOULD APPLY, WIDTH - 10 FT. MINIMUM, BUT NOT LESS THAN THE FULL WIDTH OF THE ENTRANCE OR EXIT DRIVES, DEPTH - NOT LESS THAN 6". FILTER CLOTH IS REQUIRED PRIOR TO STONE PLACEMENT EXCEPT ON SINGLE RESIDENCE LOTS.
- ANY CHANGES TO THE EROSION AND SEDIMENT CONTROL PLAN WILL REQUIRE THE SUBMISSION OF REVISED EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT CONSERVATION OFFICE FOR REVIEW. BEFORE INITIATING ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED EAS CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE COUNTY CONSERVATION DISTRICT.
- AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE OPERATOR SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITIES. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIC RATES. DISTURBED AREAS WHICH AREA NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1-YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH AREA AT FINISHED GRADE OR WHICH WILL NOT BE REDISTURBED WITHIN 1-YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.
- STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
- IN CONJUNCTION WITH EARTHMOVING ACTIVITY, INSTALL THE DESIGNED CONSERVATION MEASURES IN ACCORDANCE WITH SUBMITTED PLANS AND SPECIFICATIONS:
A) INSTALL SEDIMENT BARRIERS AS CLOSE TO CONTOURS AS POSSIBLE. BARRIERS WILL BE CHECKED PERIODICALLY. DAMAGED BARRIERS ARE TO BE REPLACED AND SEDIMENT WHICH IS COLLECTED BY THE BARRIER WILL BE REMOVED AND SPREAD AND STABILIZED WITH VEGETATION ELSEWHERE ON THE SITE.
B) SEDIMENT SHALL NOT BE ALLOWED TO ACCUMULATE HIGHER THAN ONE FOOT ABOVE EXISTING GRADE. SEE DETAILS FOR SEDIMENT BARRIER TYPE AND INSTALLATION PROCEDURES.
C) DURING CONSTRUCTION, ALL SEDIMENT TRAPPED AT BARRIERS SHALL BE CLEANED OUT AFTER EACH EROSION PRODUCING STORM.
- TOPSOIL TAKEN FROM CONSTRUCTION AREAS SHALL BE SEEDED WITH VEGETATIVE COVER AND STOCKPILED FOR RE-USE IN FINISH GRADING.
- GEOTEXTILE FABRIC SHALL BE CLASS 1. GEOTEXTILE FABRIC IN ACCORDANCE WITH PENNDOT SPECIFICATION FROM 408. THE TYPE AND/OR THICKNESS SHALL BE DUPONT TYPAR #3401, AMOCO PROPEX #4545 OR APPROVED EQUAL OR AS OTHERWISE INDICATED ON THE PLAN.

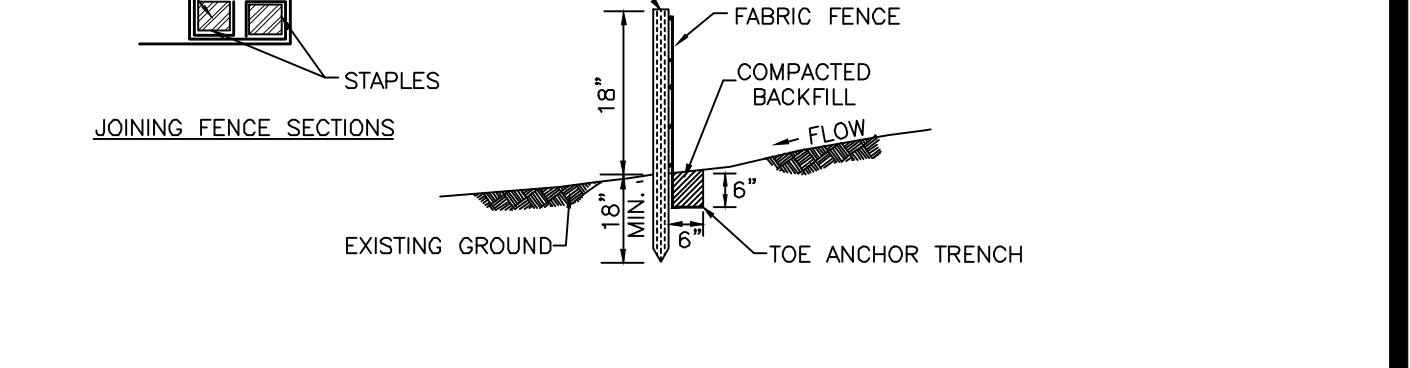
GENERAL NOTES:

A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES.

THE PERMITTEE SHALL CONTACT THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT AT LEAST SEVEN DAYS BEFORE CONSTRUCTION IS TO BEGIN TO DETERMINE IF A PRECONSTRUCTION CONFERENCE IS REQUIRED. THE PERMITTEE AND OTHERS UNDERTAKING EARTH DISTURBANCE ACTIVITIES MUST ATTEND A PRECONSTRUCTION CONFERENCE WHEN REQUESTED BY THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT. THE PERMITTEE MUST BRING A COPY OF THEIR PERMIT, A COPY OF THE STAMPED PLAN FROM THE CONSERVATION DISTRICT, AND ALL ASSOCIATED DEPARTMENT APPROVALS/PERMITS WHICH MUST BE AVAILABLE AT THE LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES. ALL CONTACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT 1-800-242-1776 FOR BURIED UTILITIES LOCATIONS.

UPON THE INSTALLATION OR 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 PROVIDE NOTIFICATION TO THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT.

PERMITTEES AND CO-PERMITTEES ARE RESPONSIBLE FOR ENSURING THAT A LICENSED PROFESSIONAL(S) HAVE OVERSIGHT RESPONSIBILITIES FOR THE DESIGN AND PROPER INSTALLATION OF ALL STREAM BANK RESTORATION IMPROVEMENTS. THE LICENSED PROFESSIONAL(S) SHALL CERTIFY THAT THESE IMPROVEMENTS HAVE BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED PLAN. THE INSTALLATION SCHEDULE AND MAINTENANCE REQUIREMENTS CONTAINED WITHIN THE APPROVED PLAN MUST BE FOLLOWED; AND FAILURE TO COMPLY WITH THE INSTALLATION SCHEDULE IS A VIOLATION OF THIS PERMIT, THE CLEAN STREAMS LAW, AND THE CLEAN WATER ACT.



STANDARD FILTER FABRIC FENCE

NTS

FILTER FABRIC FENCE MUST BE PLACED AT LEVEL GRADE. BOTH ENDS OF THE BARRIER MUST BE EXTENDED AT LEAST 8' UP SLOPE AT 45° TO THE MAIN BARRIER ALIGNMENT.

ANY SILT FENCING WHICH HAS BEEN UNDERMINED OR TOPPED MUST BE REPLACED WITH ROCK FILTER OUTLETS IMMEDIATELY. SEE ROCK FILTER OUTLET DETAIL.

SEDIMENT MUST BE REMOVED WHERE ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE FENCE.

POND 1 & 2 DREDGING

MOMENEE & ASSOCIATES, INC.
CIVIL ENGINEERS AND LAND SURVEYORS
924 COUNTY LINE ROAD, BRYN MAWR, PA 19010 PHONE: (610) 527-3030 FAX: (610) 527-9008

EROSION & SEDIMENT CONTROL PLAN
RAVENSCLIFF - ROUNDHILL
RADNOR TOWNSHIP • DELAWARE COUNTY • PENNSYLVANIA

DATE: FEBRUARY 20, 2014
SHEET NO. 3
OF 3
SCALE: AS NOTED
FILE NO.: 11-218

ONE-CALL: 20131342261
DRAWN BY: JRM
CHECKED BY: MJB

OWNER/APPLICANT
RAVENSCLIFF - ROUNDHILL
HOMEOWNERS ASSOCIATION

SCOPE OF WORK: CONSTRUCTION STAGING
REV. DATE: 02-25-19

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at Plot ①
shade
tree

RADNOR TOWNSHIP SHADE TREE COMMISSION
Hazardous Tree Report

Resident ned M. Hko

Address 743 King of Prussia Rd

Tree (Type, species, size, diameter at breast height) Black oak 50"

Certified arborist's narrative report (attach separate sheet if required)

Tree is showing signs of decline throughout canopy and does not have a healthy root flare at base. Tree is located behind house

Certified arborist's name, address and #

Robert E Besone PD-0392A
Box 567 Newtown Sq Pa 19073
610 637 1938 Arbor Way tree service@gmail.com

Pictures attached _____

Plot plan drawing attached _____

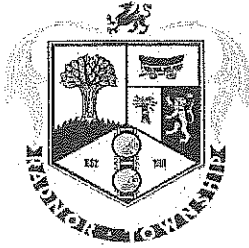
Township arborist's report (attach separate sheet if required) _____

Shade Tree Commission removal recommended yes / no

The General Powers and Duties of the Shade Tree Commission section of the Ordinance (126.5 B) stipulates: In case of immediate necessity for the protection of life or property. Any shade or street tree described in this ordinance may be removed without first obtaining a permit, after inspection by a member(s) of the Shade Tree Commission or its designee.







RADNOR TOWNSHIP SHADE TREE COMMISSION
Hazardous Tree Report

Resident Scott Evans

Address 304 Landover Road, Bryn Mawr

Tree (Type, species, size, diameter at breast height) 31" Red oak tree

Certified arborist's narrative report (attach separate sheet if required) _____
There is obvious decay on central leader at approximately 30'. Tree seems to have slight crack or
opening along trunk, possibly due to June wind storm. I would recommend this tree for removal
due to the decay area along the main trunk and the crack along the trunk.

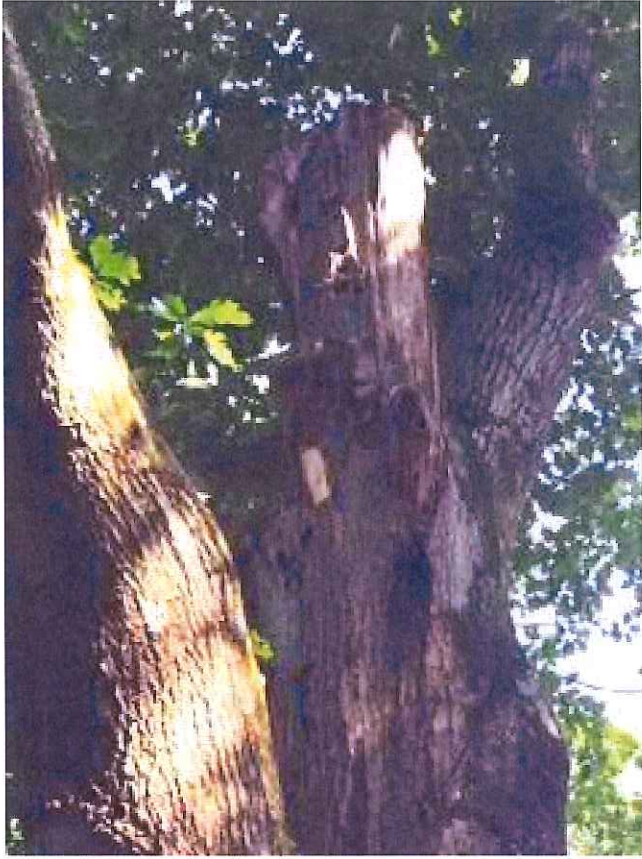
Certified arborist's name, address and # James B. Ward, PD-0053

Pictures attached X Plot plan drawing attached _____

Township arborist's report (attach separate sheet if required) _____

Shade Tree Commission removal recommended yes / no

The General Powers and Duties of the Shade Tree Commission section of the Ordinance (126.5 B) stipulates: In case of immediate necessity for the protection of life or property. Any shade or street tree described in this ordinance may be removed without first obtaining a permit, after inspection by a member(s) of the Shade Tree Commission or its designee.



Jones, Suzan

From: Jones, Suzan <sjones@radnor.org>
Sent: Wednesday, July 08, 2015 3:18 PM
To: 'GINA MAMMUCARI'
Cc: 'john@rickstreeservice.com'
Subject: RE: 320 LOUELLA AVE

The Township Arborist has given permission to remove, under the condition that the homeowner plant one (1) shade tree to compensate for the canopy loss. Please provide species once the decision is made.

Thank you if you need any further information, please do not hesitate to contact me.

Suzan Jones

Administrative Assistant
Radnor Township Engineering Department
301 Iven Ave.
Wayne, Pa 19087

P) 610.688.5600 Ext 133
F) 610.971.0450
sjones@radnor.org

To focus on something you want to achieve
no matter how small;
Is more relevant
than focusing on something you've already accomplished.

-----Original Message-----

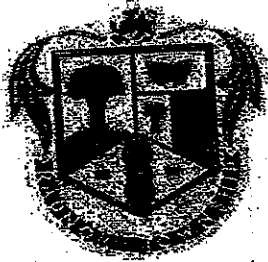
From: GINA MAMMUCARI [<mailto:GINA@RICKSTREESERVICE.COM>]
Sent: Wednesday, July 08, 2015 1:50 PM
To: 'Jones, Suzan'
Cc: john@rickstreeservice.com
Subject: 320 LOUELLA AVE

Hi Sue,

We are requesting a permit to remove a tree at 320 Louella Ave. Please see attached application and photos.

Thank you,

Gina Mammucari
Rick's Tree Service
610-358-1953



RADNOR TOWNSHIP SHADE TREE COMMISSION
Hazardous Tree Report

Resident Karen Hartman
 Address 320 Lovella Ave, Wayne
 Tree (Type, species, size, diameter at breast height) 37 DBH Sugar Maple (Acer Saccharum)

Certified arborist's narrative report (attach separate sheet if required)
Tree has codominant stems and significant rot and decay on trunk

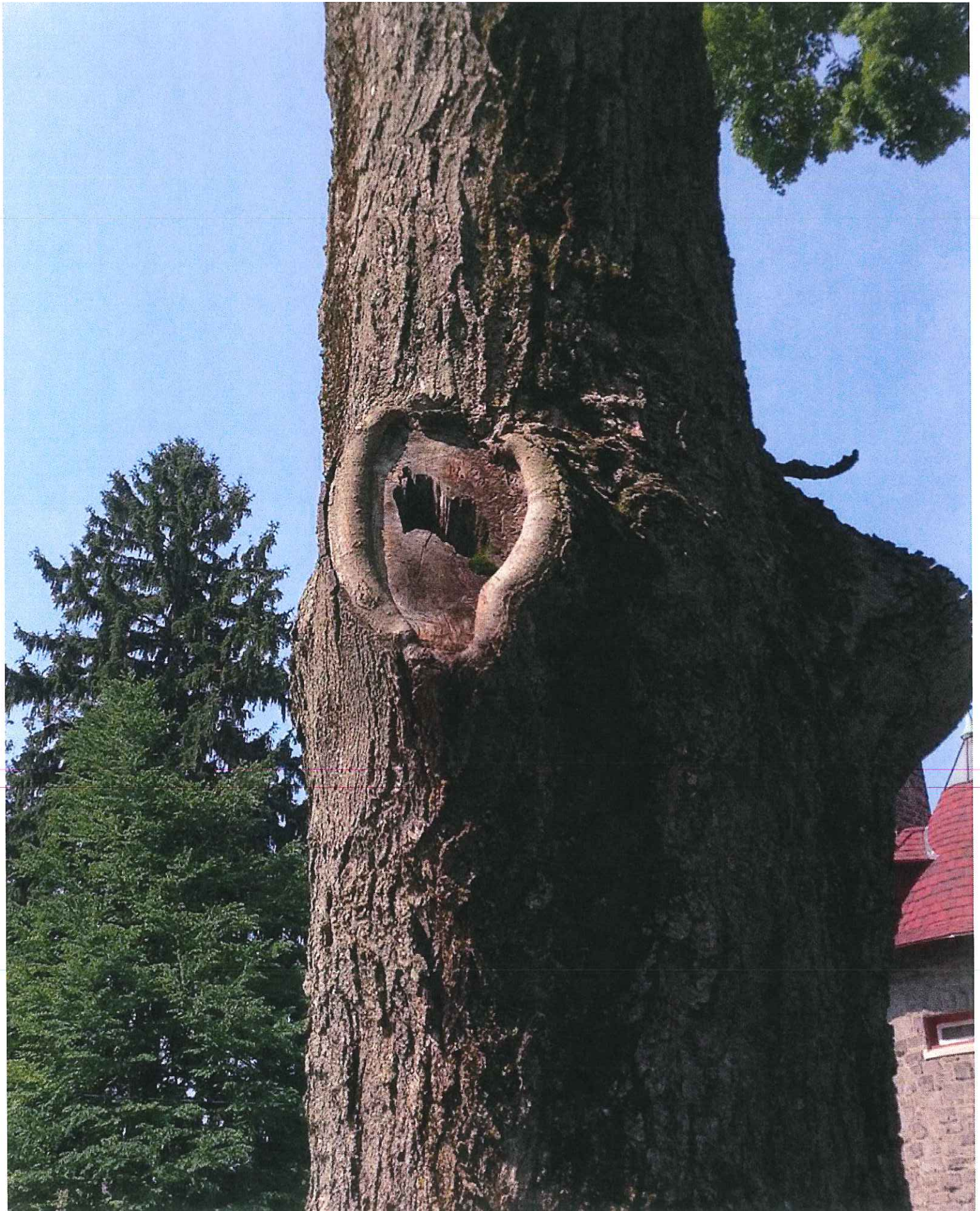
Certified arborist's name, address and # John Rozalsky
240 Madison Station Blvd, Merion PA 19113

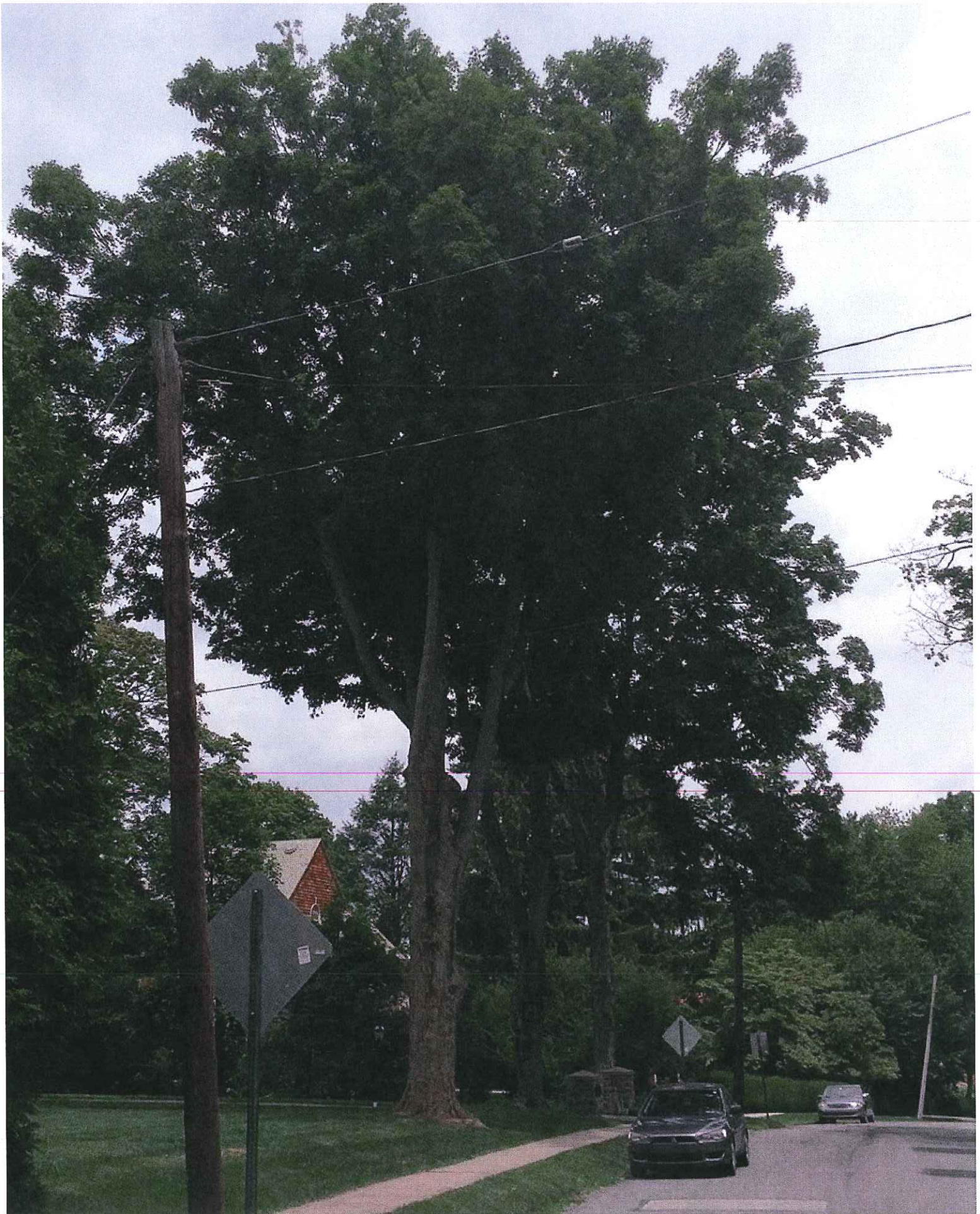
Pictures attached Plot plan drawing attached

Township arborist's report (attach separate sheet if required)

Shade Tree Commission removal recommended yes / no

The General Powers and Duties of the Shade Tree Commission section of the Ordinance (126.5 B) stipulates: In case of immediate necessity for the protection of life or property. Any shade or street tree described in this ordinance may be removed without first obtaining a permit, after inspection by a member(s) of the Shade Tree Commission or its designee.









RADNOR TOWNSHIP SHADE TREE COMMISSION
Hazardous Tree Report

Resident 1517 Ashton LLC (Vinic Sposato)

Address 312 West Ave

Tree (Type, species, size, diameter at breast height) 1) Hemlock DBA 20"
2) Cedar DBA 13" 3) White Pine DBA 26"
4) Cedar DBA 10" 5) Cedar DBA 10" 6) Cedar DBA 12"

Certified arborist's narrative report (attach separate sheet if required) _____
* SEE Attached sheet

Certified arborist's name, address and # Michael Gillan (MG Tree)
701 Parkway Blvd Broomall PA 19008
PA Certified Arborist PD-2205A

Pictures attached yes Plot plan drawing attached yes

Township arborist's report (attach separate sheet if required) _____
MGTree@verizon.net

Shade Tree Commission removal recommended yes / no

The General Powers and Duties of the Shade Tree Commission section of the Ordinance (126.5 B) stipulates: In case of immediate necessity for the protection of life or property. Any shade or street tree described in this ordinance may be removed without first obtaining a permit, after inspection by a member(s) of the Shade Tree Commission or its designee.

MG Tree



A Full Service Tree Company



PD-2205A

July 9, 2015

Attention: Radnor Township Shade Tree Commission &
Vince Sposato

Tree Structure Evaluation Report

Project Location

312 West Ave.

Radnor, Pa.

All trees listed above are growing within one to two feet to the foundation of the house. The root systems are pushing against the foundation causing cracks, allowing water to penetrate into the basement.

These trees have not been properly cared for by the previous owners, which have resulted in the trees declining and becoming unbalanced.

At this point trimming the trees would not be an option.

The largest of these trees is the White Pine . The White Pine tree has a substantial 18" x 30" rotted section approximately 25 feet up the trunk facing north towards West Avenue. This tree is in jeopardy of failing.

I would be available to meet at the property to point out all the defects of these hazardous trees.

Attached is a plot plan and pictures. All trees requesting to be removed are circled.

Michael Gillan

Michael Gillan

International Society of Arboriculture

Certified Arborist™

Michael Gillan

Having successfully completed the requirements established by the Certification Board of the International Society of Arboriculture™, the above named is hereby recognized as an ISA Certified Arborist®

D. J. Glavin

Certification Board, Chair
International Society of Arboriculture

[Signature]

Jim Skiera, Executive Director
International Society of Arboriculture

PD-2205A Oct 24, 2012 Dec 31, 2015

Certificate Number Certified Since Expiration Date

WEST AVENUE

TITLE LINE

TITLE LINE

TITLE LINE

TITLE LINE

TITLE LINE



N/F MICHAEL PERTSCHUK AND
 JANET GRAVES 1396
 DEED BOOK 36-12-184
 DEED MAP ID 36-01-00679-0C
 PARCEL NO.

N/F LAWRENCE E. HENRY
 DEED BOOK 36-12-181
 DEED MAP ID 36-01-00681-00
 PARCEL NO.

NAIL SET ON
 TOP OF FENCE

35" MAPLE

6" MULBERRY

BUILDING SETBACK

12" SPRUCE

OAK

7" HOLLY

ASPHALT

TREE CLUSTER

TREE CLUSTER

12" CEDAR

10" CEDAR

10" CEDAR

ELECTRIC METER

AC UNIT

20" HEMLOCK

3"-6" CEDAR

TWIN

26" PINE

10" GINKGO

WATER VALVE

CLEANOUT WALK

GAS METER

2 STORY STUCCO AND FRAME DWELLING

DECK

EXISTING DWELLING

RIGHT OF WAY LINE

ASPHALT

IRON PIN FOUND ON LINE TITLE LINE FROM TITLE LINE

IRON PIN SET 25' FROM TITLE LINE

S21° 27' 00" W

160.00'

59.20'

15'

15'

30'

160.00'

N21° 27' 00" E

15'

15'

15'

15'

15'

15'

15'

















