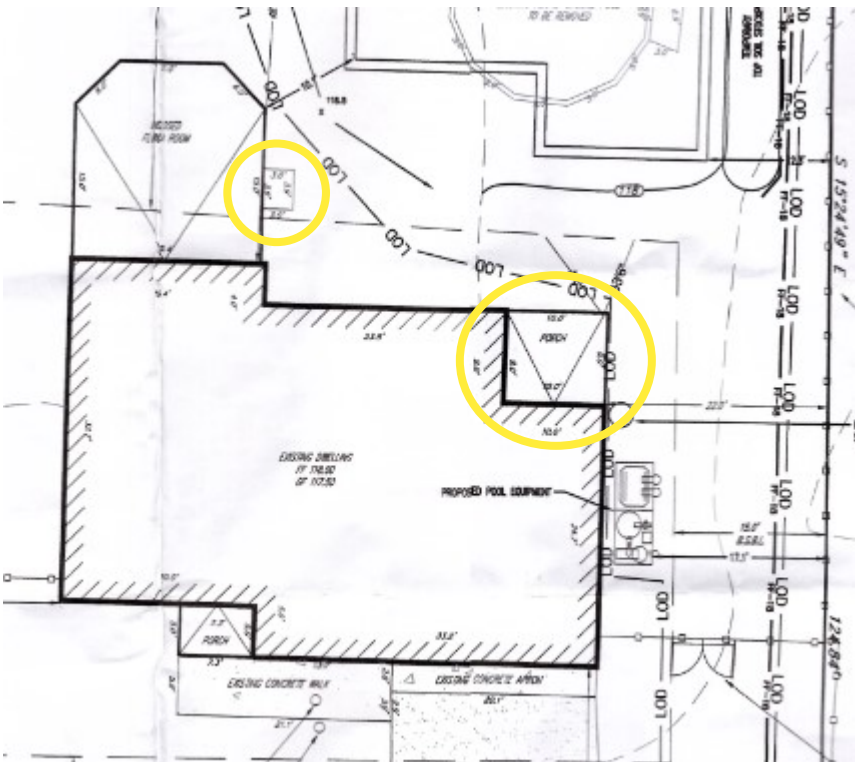


**Existing Concrete Patio = 90 Square Feet**

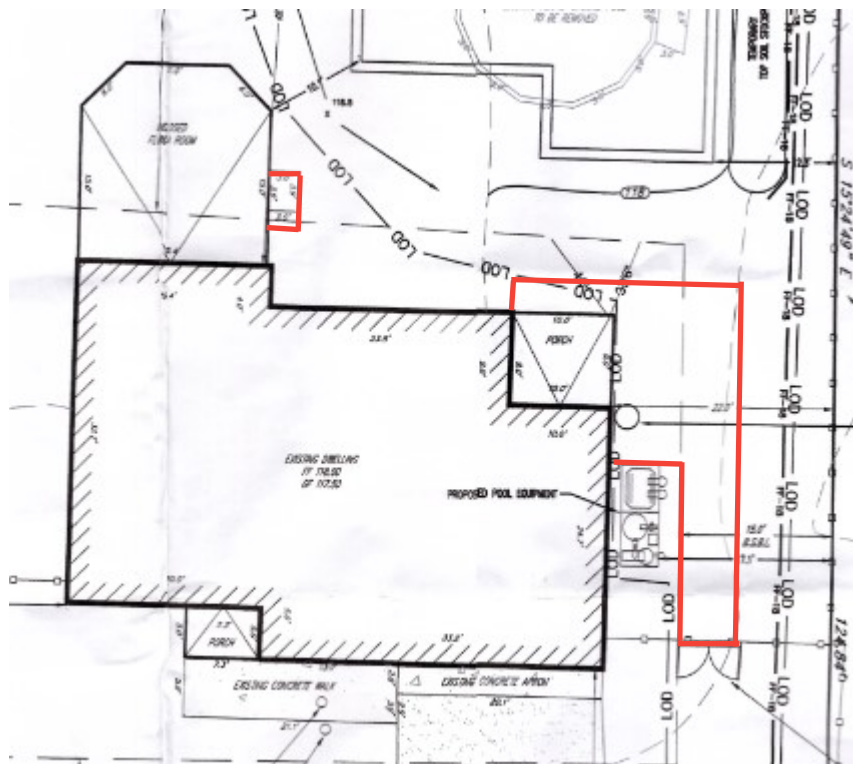
**Existing Concrete Step = 16 Square Feet**



KerriLynne Paullin  
20 Highland Drive  
Yardley, PA 19067

**Proposed Concrete Patio = 494 Square Feet**

**Proposed Concrete Step = 24 Square Feet**

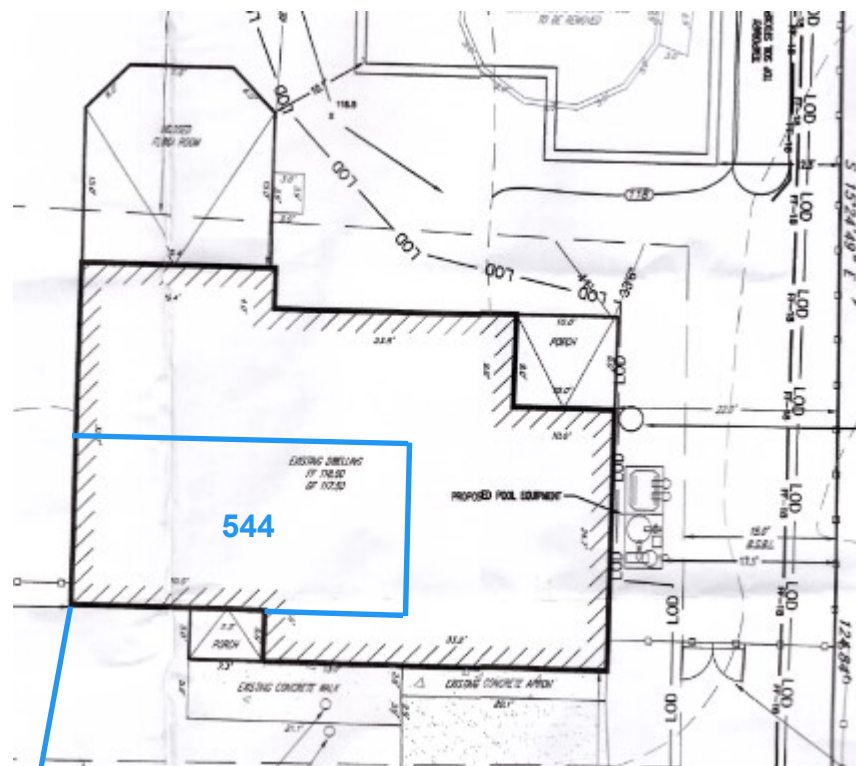


KerriLynne Paullin  
20 Highland Drive  
Yardley, PA 19067

Required Impervious Surface to Mitigate from Calculations = 426 Square Feet  
Proposed Impervious Surface to Mitigate from Roof into Rain Garden = 544 Square Feet

Required Size of Rain Garden from Calculations = 182 Square Feet  
Proposed Size of Rain Garden = 192 Square Feet

Lot Size = 12,730 Square Feet



192

KerriLynne Paullin  
20 Highland Drive  
Yardley, PA 19067

# HACIENDA DESIGN INCORPORATED

Architect  
Hacienda Design, Inc  
401 Washington Street  
Morrisville, PA 19067  
Phone: 215.736.8255  
Fax: 215.736.8589

Owner  
Thomas and Suzanne Farrell  
208 West Ferry Road  
Yardley, PA 19067

Project Data  
Lower Makefield Township Zoning Code  
Residential District R-2  
Commonwealth of Pennsylvania Uniform Construction Code  
2018 International Residential Code

Lot Area:  
12,750 square feet  
Existing Dwelling Area:  
1156 square feet  
Existing Shed area:  
96 square feet  
Proposed Addition area:  
1431 square feet  
Proposed Front Porch area:  
174 square feet  
Proposed Rear Porch area:  
151 square feet  
Proposed Detached Garage area:  
672 square feet  
Building Cover:  
Existing: 1252 square feet  
9.8 percent  
Proposed: 3680 square feet  
28.9 percent

Existing Driveway Area:  
1709 square feet  
Existing Walkway Area:  
78 square feet  
Existing Patio Area:  
384 square feet to be demolished  
Proposed Driveway Area:  
885 square feet

Total Impervious Cover:  
Existing: 3423 square feet  
26.8 percent  
Proposed: 6352 square feet  
49.8 percent  
26 percent impervious surface permitted  
Variance requested for impervious surface

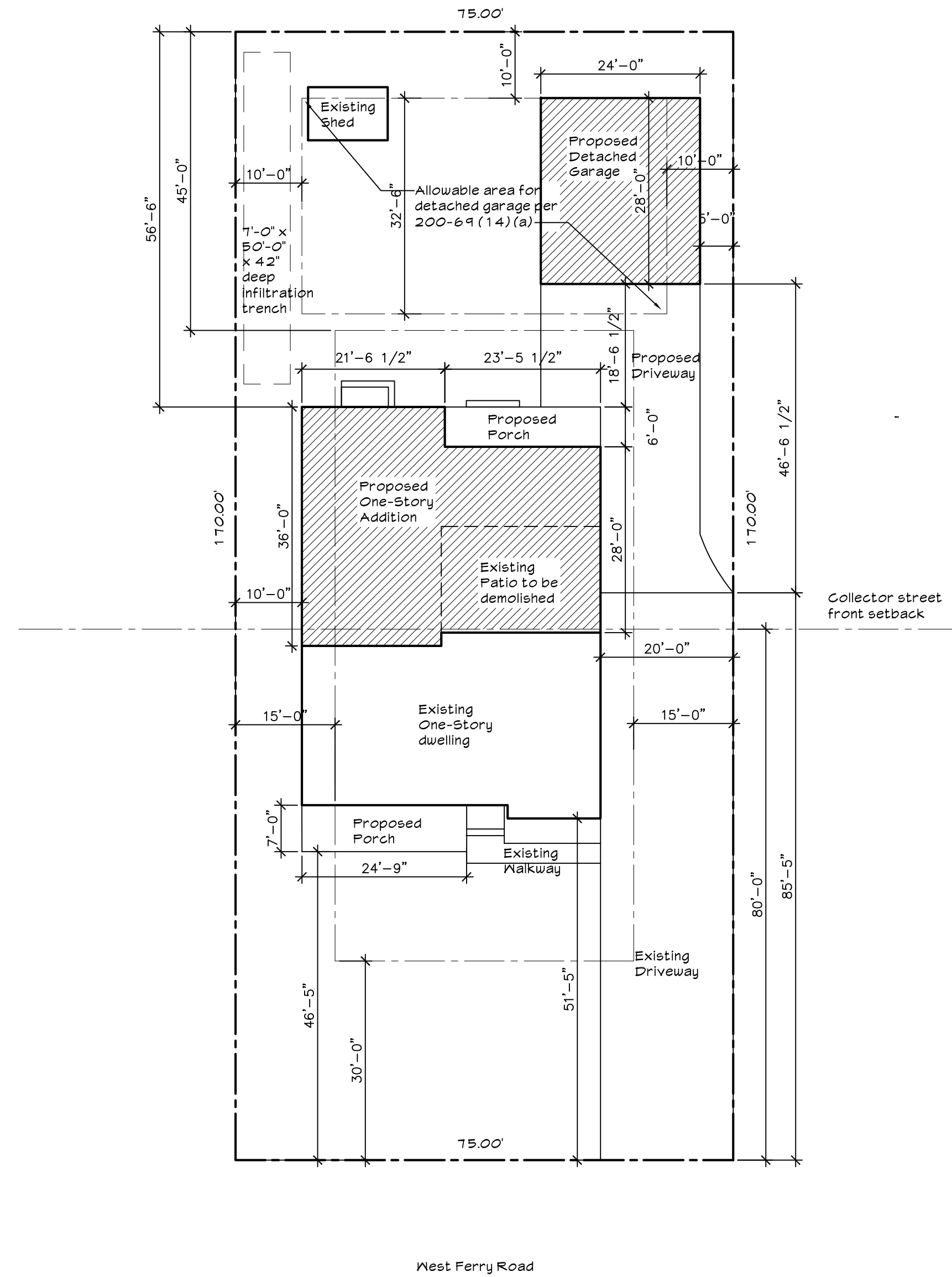
Minimum Yard Setbacks:  
Front:  
Required: 30'-0"  
Provided: 46'-5"

Side:  
Required: 15'-0"  
Provided: 10'-0" on left -  
existing non-conformance

Variance requested to extend existing non-conforming side setback 36'-0" on right at house

Variance requested for 5'-0" side setback at detached garage and for garage height in excess of 15'-0"

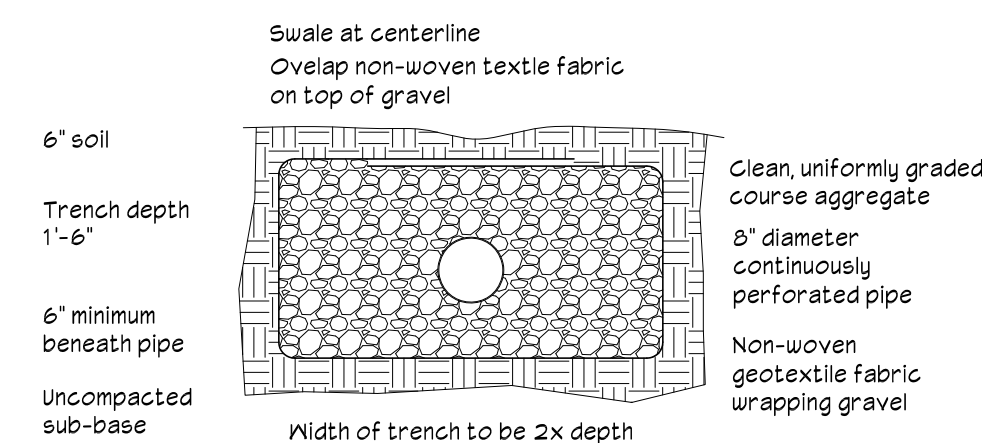
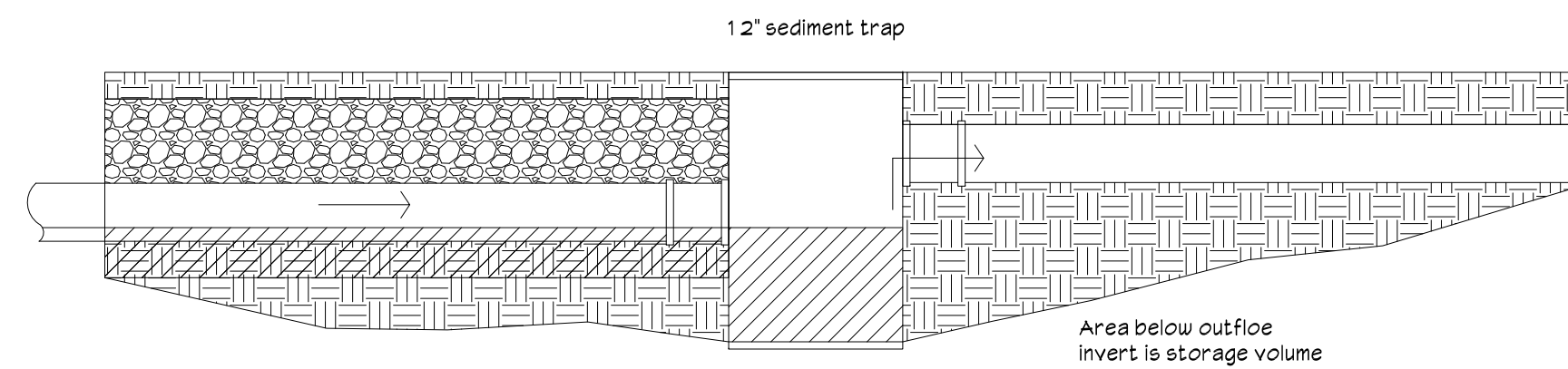
Rear:  
Required: 45'-0"  
Provided: 56'-6"



1 PLOT PLAN  
ST-1 SCALE: 1/16" = 1'-0"

## Stormwater Management Small Project Volume Control < 5,000 S.F. of New Impervious Surfaces

<b>Step 1</b>	Appendix I 2,929 S.F. Impervious Surface Area to be controlled to mitigate
<b>Step 2</b>	488 C.F. Required Control Volume: (ISA in S.F. x 2 inches runoff)/12 inches
<b>Step 3</b>	For Step 3, you need to select a Best Management Practice technique from Appendix I and provide a calculation that demonstrates this requirement is met. This can consist of structural measures such as an infiltration trench, dry well or rain garden, or non-structural measures such as tree planting, preservation or minimization of soil compaction.
Stone infiltration trench facility (Volume of Facility = Depth x Width x Length):	
3.5 Feet	Set Depth of trench and determine required surface area of trench.
7 Feet	Width of the trench should be greater than 2 times its depth (2 x D)
50 Feet	Set Trench Length
490 C.F.	Trench Volume = Depth x Length x Width x 40% voids in stone
Determine the number of tree plantings:	
Trees	A newly planted deciduous tree can reduce runoff volume by 6 cu. ft.
Trees	A newly planted evergreen tree can reduce runoff volume by 10 cu. ft.
0 C.F.	Runoff Volume for trees planted
Calculate the volume reduction credit by preserving existing trees:	
S.F.	Approximate Area of Trees within 20 feet of impervious cover:
0 C.F.	Volume Reduction = (Existing Tree Canopy sq. ft. x 1 inch)/12
S.F.	Approximate Area of Trees > 20 feet and within 100 feet of impervious cover:
0 C.F.	Volume Reduction = (Existing Tree Canopy sq. ft. x 0.5 inch)/12
490 C.F.	Total Runoff Volume Controlled
Redo if Total Runoff Volume Controlled < Required Control Volume	



2 INFILTRATION TRENCH DETAIL  
ST-1 SCALE: 1/2" = 1'-0"

Seal:  
Tracy L. Miller  
PA. R.A. 016689

HACIENDA DESIGN INCORPORATED

401 Washington Street  
Morrisville, PA 19067  
Phone: 215.736.8255  
Fax: 215.736.8589

Project:  
Farrell residence  
208 West Ferry Road  
Yardley, PA 19067

Drawing Title:  
Cover Sheet

Date:

Revisions:  
Change:

Date: 24 April 2024  
Scale: As Noted  
CAD file: C: Farrell residence

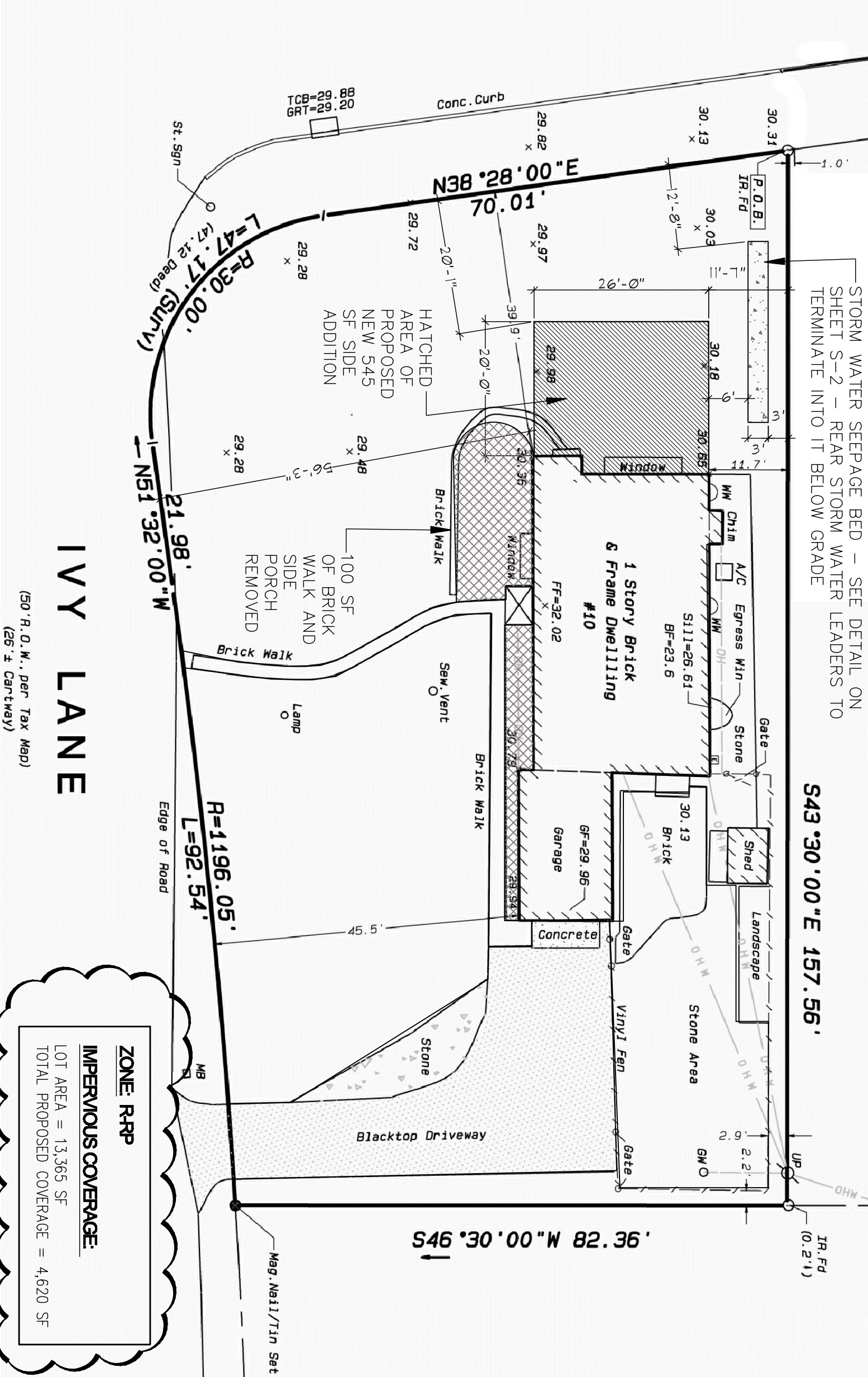
Drawn by: TLM  
Reviewed by: TLM

ST-1  
Drawing Number:

1 of 1  
Sheet Number:

# BEDFORD PLACE

(FORMERLY TERRACE DRIVE)  
(50' R.O.W., per Tax Map)  
(25' ± Cartway)



STORM WATER SEEPAGE BED - SEE DETAIL ON SHEET S-2 - REAR STORM WATER LEADERS TO TERMINATE INTO IT BELOW GRADE

**S43°30'00"E 157.56'**

**IVY LANE**  
(50' R.O.W., per Tax Map)  
(25' ± Cartway)

**ZONE: RRP**  
**IMPERVIOUS COVERAGE:**  
LOT AREA = 13,365 SF  
TOTAL PROPOSED COVERAGE = 4,620 SF

SITE PLAN (existing survey by others)  
SCALE: 1/16" = 1'-0"

Call Before You Dig!

Careless digging can damage underground utilities, causing disruption of vital services, property damage and even possible injury. Taking the proper steps to avoid damage can prevent expensive repairs, project delays and costly fines.

At least three business days, prior to outdoor construction or digging, contractors and property owners who ever is excavating just call New Jersey One Call at 811 or 800-272-1000 and take the following steps:

Wait for the site to be marked with point, flags or stakes. Yellow indicates the presence of underground natural gas lines. Respect the marks and dig with care. Hand dig within two feet of buried piping and facilities. Be mindful that inclement weather may wash away the painted markings.

Know what's below and call before you dig # 811 or 800-272-1000.

It's FREE and it's the LAW.



**Joseph Como, AIA**  
20 Hendrickson Road, Lawrenceville, N.J. 08648  
● Mobile 609. 610. 6158 ● JVCNJ1616@Yahoo.Com

*Joseph Como*  
Date: 4/13/24

<b>DRAWING TITLE</b> PROPOSED SITE PLAN AND NOTES
<b>PROJECT NO.</b> 20 (2024)
<b>DATE</b> 4/13/2021
<b>DRAWN BY</b> JVC
<b>PROJECT:</b> PROPOSED SIDE ADDITION at 10 Ivy Lane, Montreville, PA 18067

**S-1**



4 2 9 WHARTON STREET  
 PHILADELPHIA PA 19147  
 FAMAOKTO@GMAIL.COM  
 TELE 215 870 8416

© 2024

DATE: 28 MAY 2024

PROJECT NO. FOS . 2024 067

**WHALEN HOME**

ADDRESS: 423 RAMSEY ROAD  
 YARDLEY PENNSYLVANIA 19067

OWNERS:  
 WHALEN, COLLEEN + MATTHEW

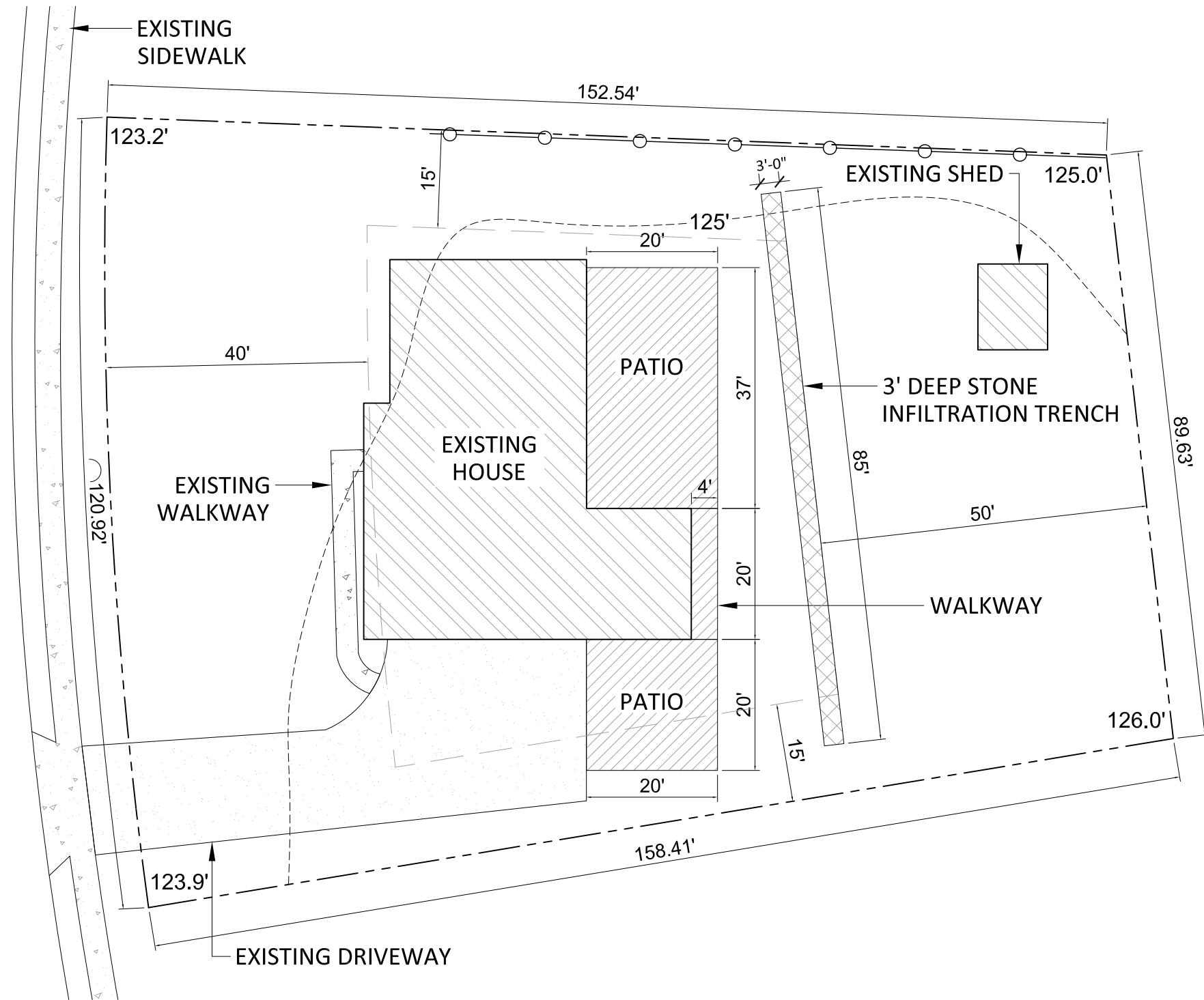
LATITUDE: 40°12'53.11"N

LONGITUDE: 74°49'59.63"W

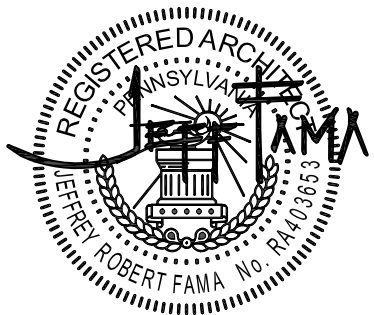
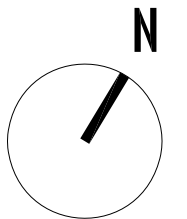
PARCEL ID: 20-055-142

LOT AREA: 0.378 ACRES

RAMSEY ROAD



IMPERVIOUS AREA CALCULATIONS:		
EXISTING HOUSE	2,186 SQ.FT.	
EXISTING SHED	139 SQ.FT.	
EXISTING DRIVEWAY + SIDEWALK	1,098 SQ.FT.	
PROPOSED PATIO + SIDEWALK	1,215 SQ.FT.	
<b>TOTAL IMPERVIOUS AREA</b>	<b>4,638 SQ.FT.</b>	
<b>TOTAL LOT AREA</b>	<b>16,468 SQ.FT.</b>	<b>28.2%</b>



SCALE: 1" = 20'-0"

**SITE PLAN A 1.0**

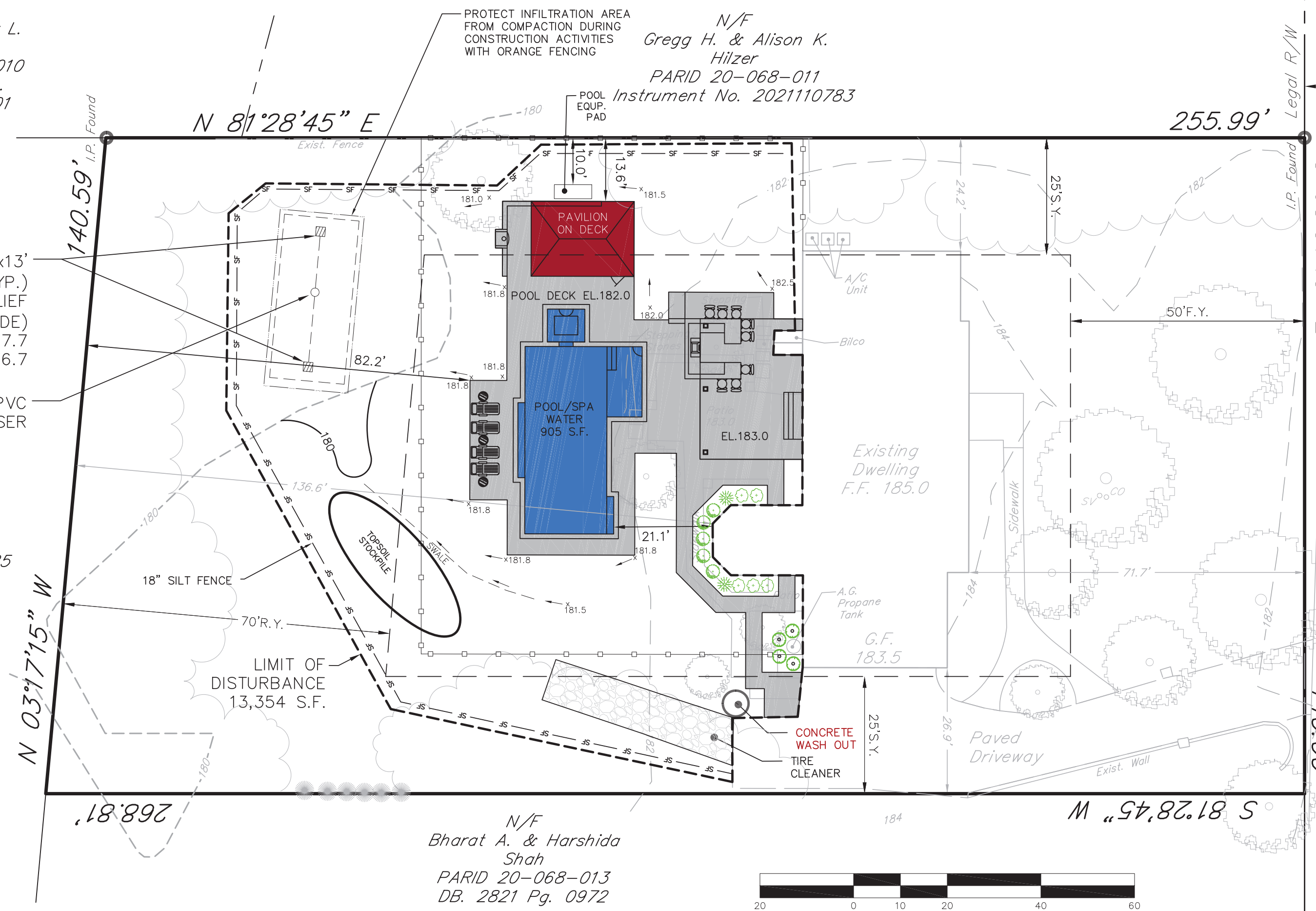
DRAWN BY: JF

N/F  
Mark A. & Holly L.  
Tomkovicz  
PARID 20-068-010  
Instrument No.  
20100018490001

N/F  
Gregg H. & Alison K.  
Hilzer  
PARID 20-068-011  
Instrument No. 2021110783

N/F  
Christopher & Kristina  
Medeiros  
PARID 20-068-01  
Instrument No. 2019024925

N/F  
Bharat A. & Harshida  
Shah  
PARID 20-068-013  
DB. 2821 Pg. 0972



EROSION/SEDIMENT CONTROL PLAN  
STANDARD NOTES

- STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET; STOCKPILE SLOPES MUST NOT EXCEED 2:1.
- THE OPERATOR/RESPONSIBLE PERSON (O/RP) ON SITE 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 O/RP SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES (BMPs) TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
- THE O/RP SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED AND APPROVED BY THE BUCKS COUNTY CONSERVATION DISTRICT AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOILS AND/OR ROCK SPOIL AND BORROW AREAS REGARDLESS OF THEIR LOCATIONS.
- ALL PUMPING OF SEDIMENT-LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER AN UNDISTURBED AREA.
- A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE ON THE PROJECT SITE AT ALL TIMES.
- EROSION AND SEDIMENT BMPs MUST BE CONSTRUCTED, STABILIZED AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMPs.
- AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMP CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING THE REMOVAL OF THE BMPs MUST BE STABILIZED IMMEDIATELY.
- AT LEAST SEVEN (7) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITY, THE O/RP SHALL NOTIFY ALL CONTRACTORS INVOLVED IN THAT ACTIVITY, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENT CONTROL PLAN DESIGNER AND THE BUCKS COUNTY CONSERVATION DISTRICT TO A PRE-CONSTRUCTION MEETING. ALSO, AT LEAST THREE (3) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITY, ALL CONTRACTORS INVOLVED IN THAT ACTIVITY SHALL NOTIFY THE PENNSYLVANIA ONE-CALL SYSTEM INC. AT 1-800-242-1776 TO DETERMINE ANY UNDERGROUND UTILITIES LOCATIONS.

POST CONSTRUCTION MAINTENANCE PROGRAM:

The applicant/owner, its assigns shall be responsible for the ownership and maintenance of the proposed BMP's shown on this plan in perpetuity. All BMP's shall be maintained in accordance with all applicable Township Standards and Specifications as designated in the Ownership and Maintenance agreement as entered into between the Owner and the Township.

MAINTENANCE OF THE SEEPAGE BED:

- The applicant/owner, shall ensure that all catch basins within the system are inspected and cleaned after each runoff event. Remove any debris such as lawn clippings, leaves or accumulated trash that may prohibit runoff from entering the catch basins.
- The applicant/owner, shall ensure that the overlying vegetation of the seepage bed should be maintained in good vegetated conditions, and any bare spots revegetated immediately.
- The applicant/owner, shall ensure that no vehicular traffic is permitted over or on the seepage bed and care should be taken to avoid excessive compaction by lawn equipment.
- The applicant/owner, shall ensure all roof leaders that lead to the seepage bed are free and clear of any debris that may cause clogging of the seepage bed inflow pipe. Quarterly flushing of the catch basins and inflow pipe are required.

OWNER ACKNOWLEDGEMENT:

I/WE ALAN & EILEEN BRACKUP, ACKNOWLEDGE THAT THE STORMWATER MANAGEMENT FACILITIES SHOWN ON THESE PLANS CAN ONLY BE ALTERED OR REMOVED AFTER APPROVAL OF A REVISED PLAN BY THE APPLICABLE MUNICIPALITY. OWNER ALSO AGREES TO ALL ABOVE LISTED BMP MAINTENANCE PROGRAM REQUIREMENTS.

SEEDING PROCEDURES

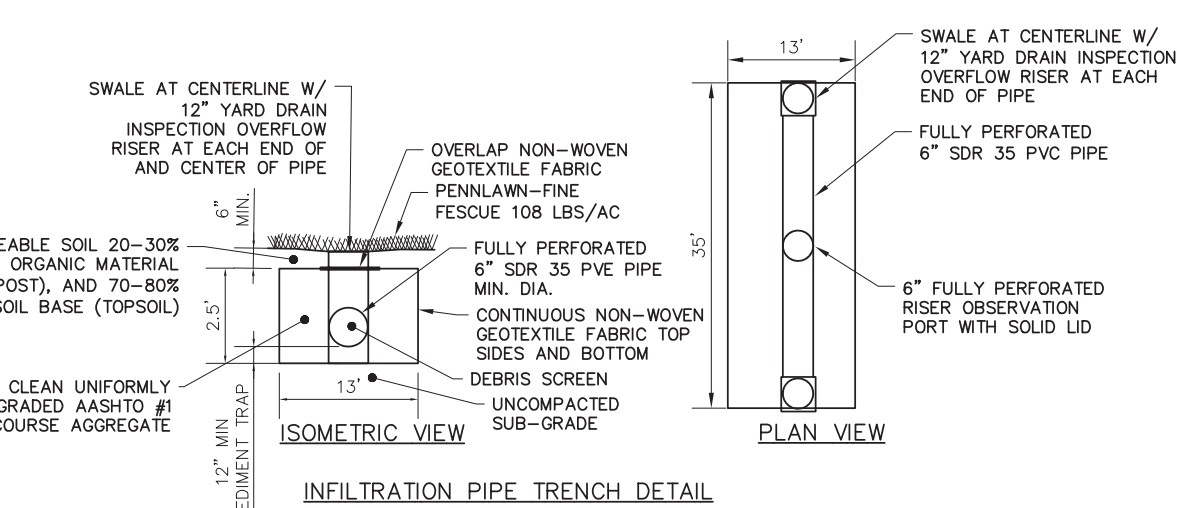
SOIL AMENDMENTS FOR PERMANENT SEEDING  
MINIMUM STANDARD FOR LIMESTONE AND FERTILIZER (IF A SOIL TEST IS NOT PERFORMED) LIMESTONE SHALL BE APPLIED AT THE RATE OF 6 TONS PER ACRE. FERTILIZER SHALL BE APPLIED AT THE RATE OF 1000 LBS. OF

Table with 4 columns: PROPORTION BY WEIGHT, NAME OF GRASS, PURITY, GERMINATION. Lists grass types like Kentucky Blue Grass, Red Top, and Perennial Rye Grass.

APPLICATION RATE = 4 LBS. / 1000 SQ. FEET  
ALL AREAS WHICH ARE UNPAVED AND UNPLANTED SHALL BE CONSIDERED GRASS AREAS AND BE SEEDED WITH SPECIFIC MIXTURE, EXCEPT THOSE AREAS SPECIFIED FOR SOIL PLACEMENT.

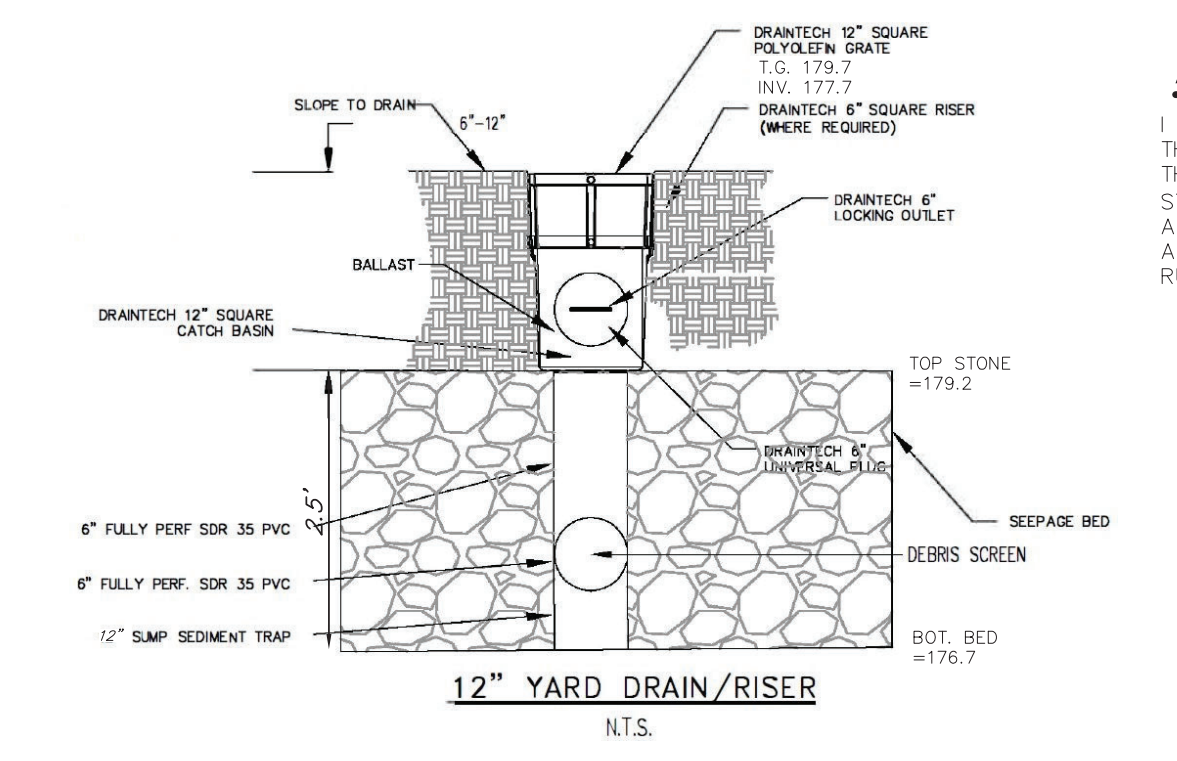
INFILTRATION BED DESIGN

Table for INFILTRATION BED DESIGN showing VOLUME CONTROL CALCULATIONS/INFILTRATION DRY WELL SIZING. Includes rows for TOTAL IMPERVIOUS AREA OVER 18%, TOTAL IMPERVIOUS SURFACE OVER 18%, and PROPOSED TRENCH VOLUME.



EARTHWORK STAGING

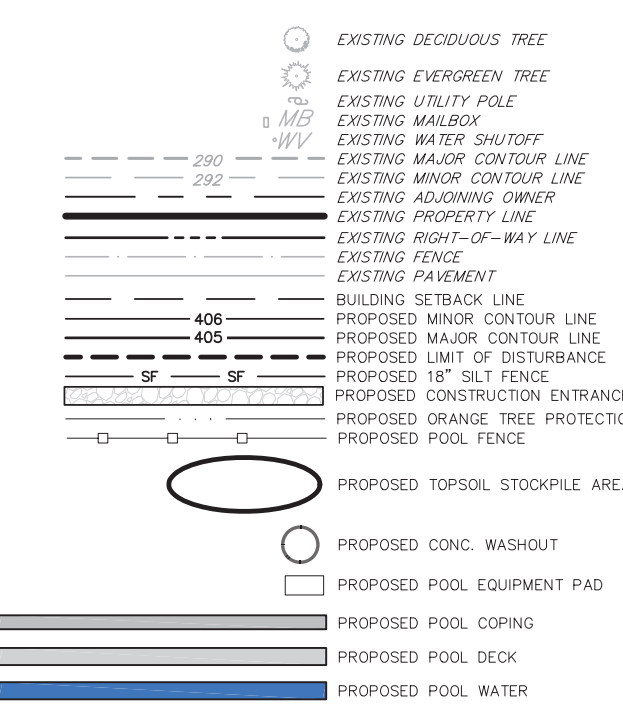
- PLACE SILT FENCING/SOCK AS DEPICTED ON PLANS AND DOWNSTREAM OF ALL TOPSOIL STOCKPILING AREAS. INSTALL CONSTRUCTION ENTRANCE. (SEE CONSTRUCTION ENTRANCE NOTE).
- CLEAR AND GRUB PROPOSED CONSTRUCTION AREA OF EXISTING VEGETATION.
- STRIP TOPSOIL AS REQUIRED WITHIN POOL/ADDITION AREA AND STOCKPILE AS SHOWN.
- CONSTRUCT PROPOSED POOL AND APPURTENANCES.
- FINISH GRADE, SEED, MULCH AND LANDSCAPE ENTIRE SITE.
- REMOVE TEMPORARY CONTROL MEASURES AFTER VEGETATION HAS BEEN ESTABLISHED AND STABILIZATION OF THE SITE IS COMPLETE. AREAS DISTURBED DURING THE REMOVAL OF THE CONTROLS MUST BE STABILIZED.



THE UNDERGROUND UTILITY LINE PROTECTION LAW  
(ACT 287 OF 1974 AS AMENDED BY ACT 187 OF 1996)  
1-800-242-1776  
SITE SERIAL NO. 20222860245  
DATE: 10/13/2022

ATTENTION ALL CONTRACTORS: LOCATIONS OF EXISTING UTILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM THE UTILITY COMPANY RECORDS AND OR ABOVE GROUND INSPECTION OF SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND UTILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT 287 OF 1974 AS AMENDED BY ACT 187 OF 1996, CONTRACTORS MUST VERIFY LOCATIONS OF UNDERGROUND UTILITIES BY NOTIFYING FACILITY OWNERS THROUGH THE ONE CALL SYSTEM. 1-800-242-1776, NO LESS THAN 3 NOR MORE THAN 10 DAYS PRIOR TO EXCAVATION OR DEMOLITION WORK.

LEGEND



SOILS DATA

ENTIRE SITE IS WITHIN THE FOLLOWING SOIL TYPE:  
U8 - URBAN LAND - LANSDALE COMPLEX, 0 TO 8 PERCENT SLOPES

IMPERVIOUS CALCULATIONS

Table for IMPERVIOUS CALCULATIONS comparing existing and proposed values for DWELLING, DRIVEWAY, FRONT WALK & PORCH, REAR PATIO/WALKS/WALLS (TBR), BILCO DOOR, and STEPPING STONES (TBR).

TOTAL INCREASE TO IMPERVIOUS SURFACE IS 1,895 SF.  
TOTAL IMPERVIOUS SURFACE OVER 18% IS 2,469 SF.



SITE LOCATION MAP  
1' = 2000'  
TAX PARCEL INFORMATION

SUBJECT TRACT MAY BE IDENTIFIED BY BUCKS COUNTY TAX INFORMATION AS FOLLOWS:  
LOWER MAKEFIELD TOWNSHIP  
RECORDED DEED DATA IS AS FOLLOWS:

Table with columns: BARCEL ID, INSTRUMENT NO., RECORD OWNER, TRACT AREA. Lists deed information for the site.

ZONING DATA

Table for ZONING DATA showing requirements for DISTRICT CLASSIFICATION 'R-1' - RESIDENTIAL MEDIUM-DENSITY. Includes rows for MINIMUM LOT AREA, FRONT YARD RESTRICTION, SIDE YARD RESTRICTION, REAR YARD RESTRICTION, MAXIMUM BUILDING HEIGHT, and MAXIMUM IMPERVIOUS COVERAGE.

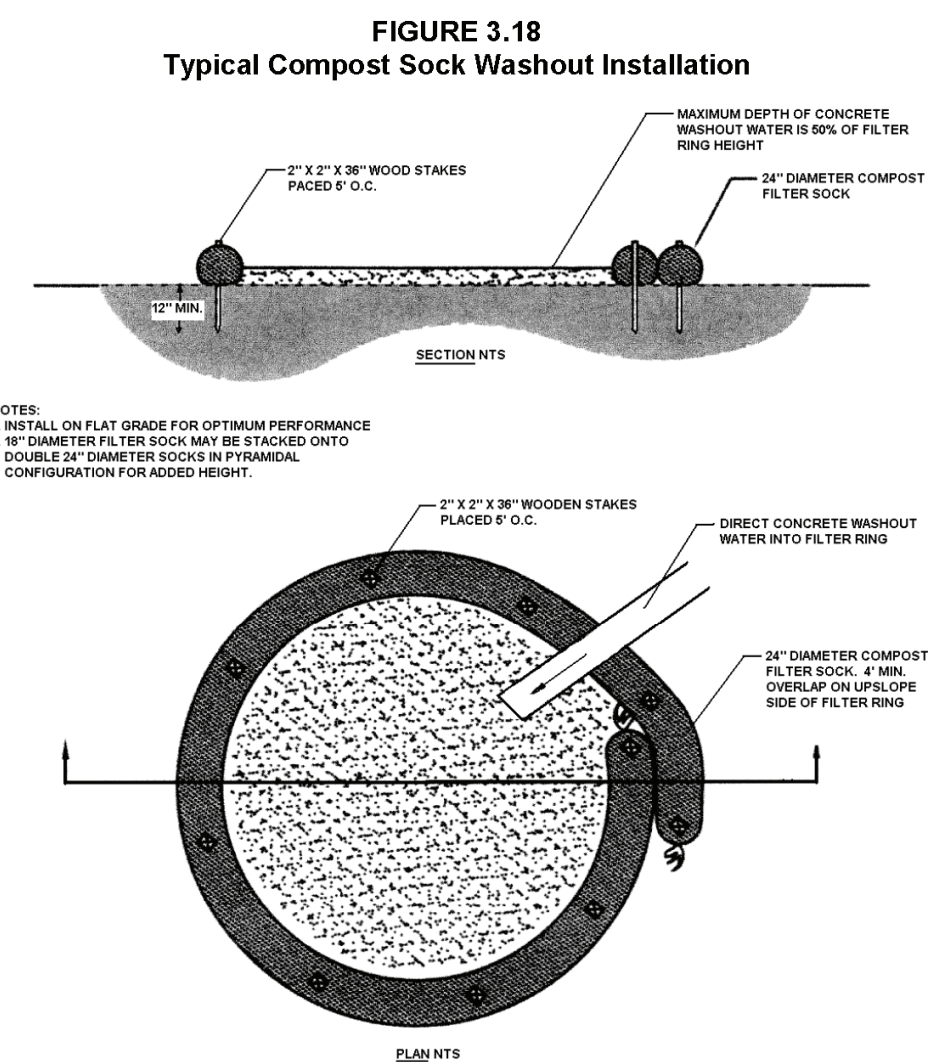
\* A VARIANCE IS BEING REQUESTED FROM LOWER MAKEFIELD TOWNSHIP ZONING ORDINANCE CHAPTER 200 ARTICLE IV, SECTION 200-19B IMPERVIOUS SURFACE REQUIREMENTS CHART THAT LISTS THE MAXIMUM PERCENTAGE FOR A LOT SIZE OF 15,001 SQUARE FEET OR UP, TO BE 18% BY HOMEOWNER.

GENERAL NOTES

- BOUNDARY TAKEN FROM EXISTING DEEDS.
- REFERENCE PLANS: FINAL PLAN OF MAKEFIELD BROOK, PREPARED BY TRI-STATE ENGINEERS & LAND SURVEYORS, DATED DECEMBER 11, 1985 AND LAST REVISED MARCH 14, 1986.
- BEARINGS SHOWN HEREON BASED ON CURRENT DEED/PLAN OF RECORD, VERTICAL DATUM BASED ON NAVD83. THE SITE BENCHMARK FOR THIS PROJECT SHALL BE THE REAR DOOR SILL NEAR THE BILCO HAVING AN ELEVATION OF 185.1.
- TOPOGRAPHY BASED ON A SURVEY PERFORMED BY BRIAN K. PATTERSON, PLS ON SEPTEMBER 11, 2023. ONLY EXISTING TREES WITHIN THE LIMIT OF DISTURBANCE HAVE BEEN SURVEY LOCATED. ALL OTHER TREES, BUSHES, AND DRIP LINES OF TREES ARE DERIVED FROM AERIAL IMAGERY.
- PROPERTY IS SERVICED BY PUBLIC WATER AND SEWER.
- ALL EXISTING/PROPOSED FENCE ENCLOSURES FOR SWIMMING POOLS SHALL MEET THE MINIMUM REQUIREMENTS OF THE PENNSYLVANIA UNIFORM CONSTRUCTION CODE AS AMENDED. ALL GATES MUST OPEN IN AN OUTWARD DIRECTION AND BE EQUIPPED WITH SELF CLOSING AND LATCHING GATES.
- TEMPORARY CONSTRUCTION FENCE MUST BE INSTALLED AROUND THE POOL AREA ONCE EXCAVATED AND UNTIL SUCH TIME THE POOL IS FILLED AND FINAL PERIMETER POOL FENCING HAS BEEN INSTALLED.
- PROVISIONS SHALL BE MADE FOR DRAINAGE OF THE POOL AND BACKWASH WATER DISPOSAL. THE USE OF OPEN FIELDS, OR DRY WELLS SHALL BE PERMITTED FOR THIS PURPOSE, PROVIDED THAT THEY MEET THE REQUIREMENTS OF THE PENNSYLVANIA DEPARTMENT OF HEALTH. WATER SHALL NOT BE EMPTIED ONTO PUBLIC ROADS, SANITARY SEWER OR ADJOINING LOTS.
- THE TOWNSHIP'S ENGINEER'S OFFICE MUST BE CONTACTED A MINIMUM OF 48 HOURS IN ADVANCE OF INSTALLATION OF STORMWATER MANAGEMENT FACILITIES.
- ANY DAMAGE WITHIN THE RIGHT OF WAY OF GRINDAN DRIVE CAUSED BY THE CONTRACTOR DURING POOL CONSTRUCTION SHALL BE REPAIRED/REPLACED/AS DIRECTED BY THE TOWNSHIP ENGINEER AT THE SOLE EXPENSE OF THE OWNER/CONTRACTOR.
- LOWER MAKEFIELD IS HEREBY GRANTED A BLANKET EASEMENT TO ENTER THE SITE FOR THE PURPOSE OF INSPECTION OF THE STORMWATER BMP'S SHOWN ON THIS PLAN.
- NO WATER SHALL BE PLACED IN THE POOL UNTIL A FENCE AS REQUIRED BY TOWNSHIP ORDINANCES IS INSTALLED.
- EACH DWELLING DOOR THAT DIRECTLY ACCESSES THE POOL SHALL BE EQUIPPED WITH AN ALARM THAT SOUNDS AT LEAST THIRTY (30) SECONDS WHEN THE DOOR IS OPENED AND IS AUDIBLE THROUGHOUT THE DWELLING. (PENNSYLVANIA UNIFORM CONSTRUCTION CODE - SWIMMING POOL).
- PEDESTRIAN GATES SHALL OPEN OUTWARD AWAY FROM THE POOL AND HAVE A SELF-LATCHING DEVICE.

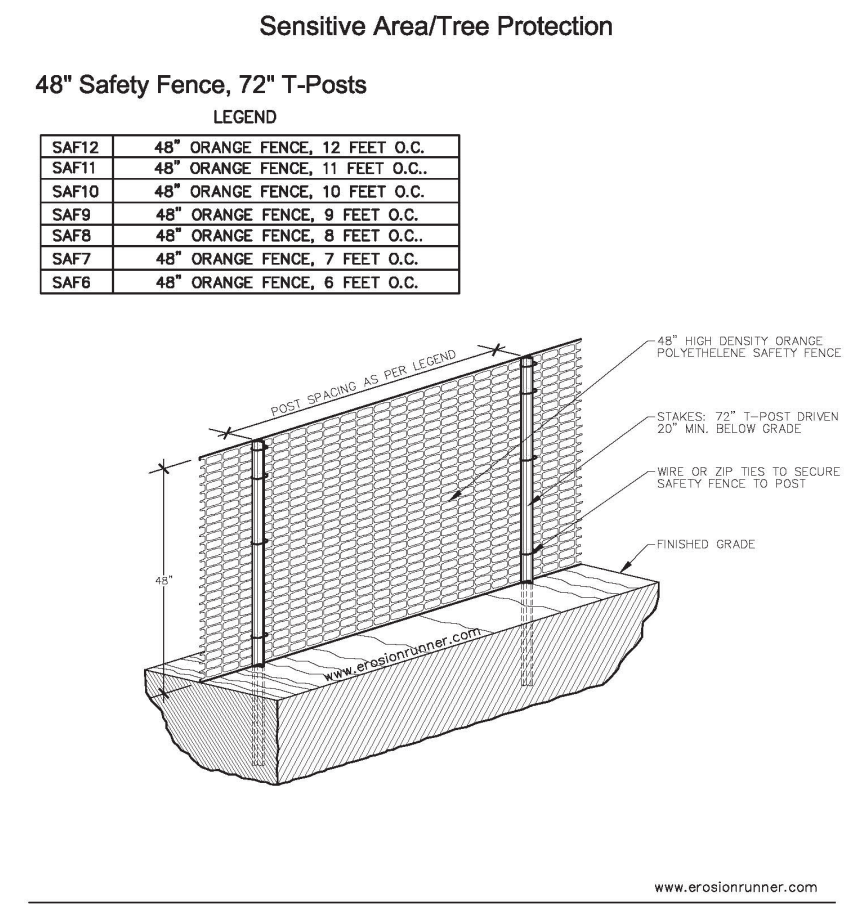
Vertical sidebar containing: PREPARED FOR: ALAN & EILEEN BRACKUP; PROJECT NO: BRACKUP; DRAWING NUMBER: D-01; CHECKED BY: BKP; PROJECT NO: 10/16/2023; DRAWING NUMBER: 1756 ASHBOURNE DRIVE; BUCKS COUNTY, PENNSYLVANIA.



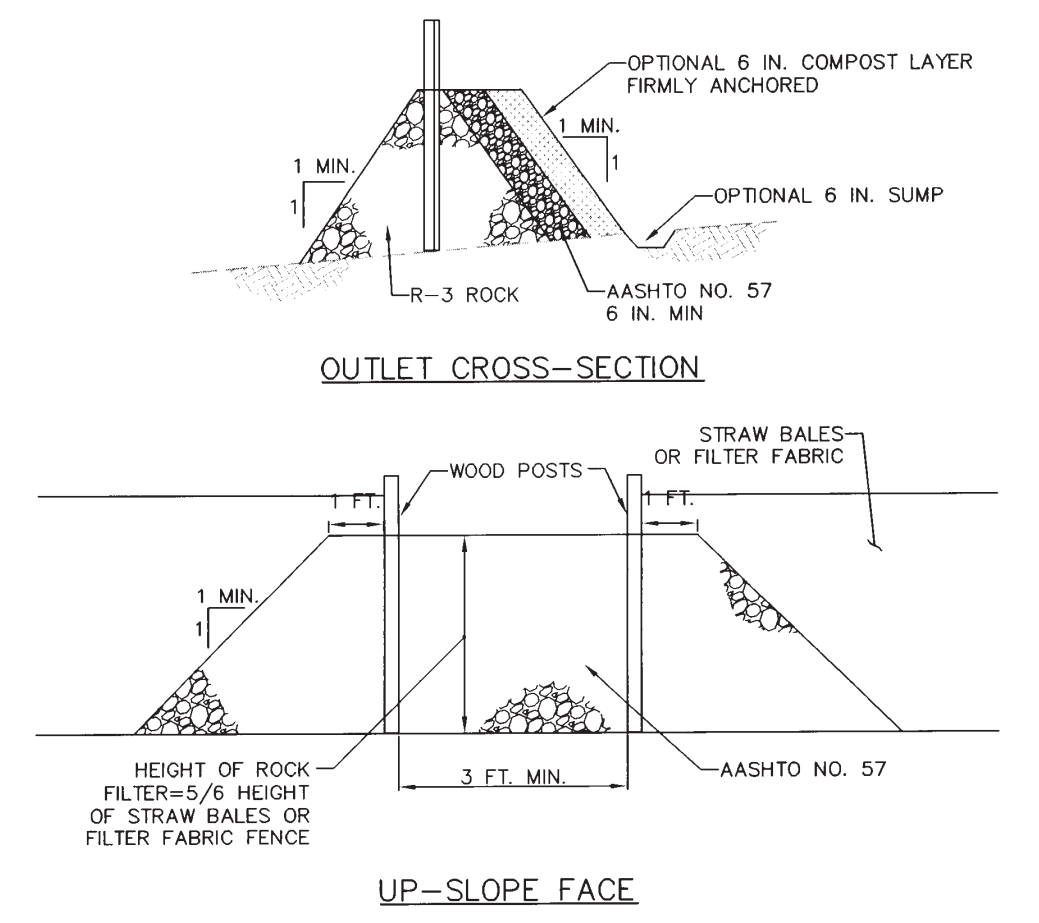


A suitable impervious geomembrane shall be placed at the location of the washout prior to installing the socks.  
Adapted from Filtrix

363-2134-008 / March 31, 2012 / Page 58

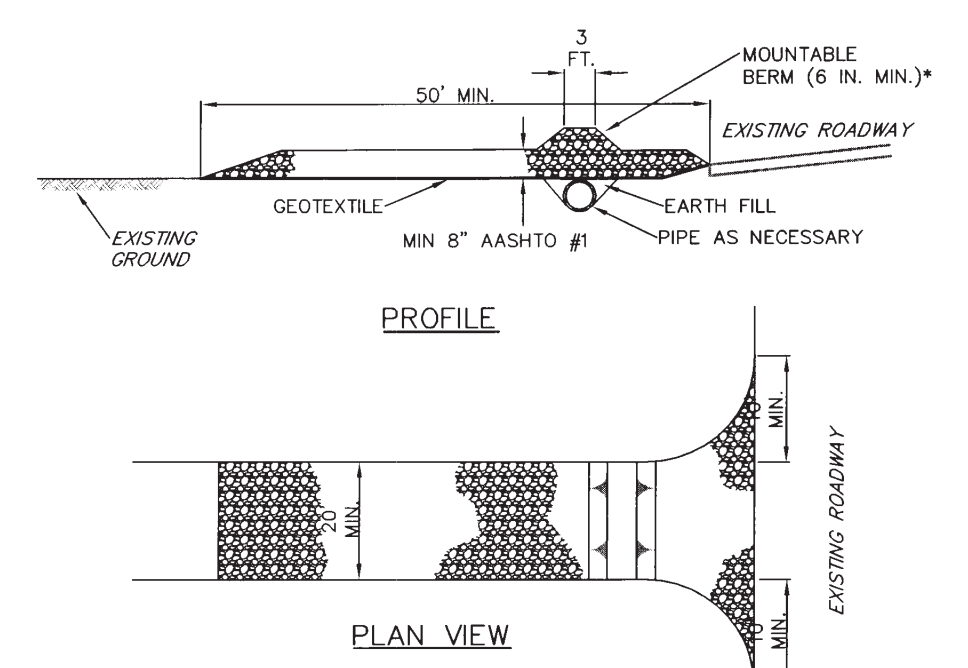


1. ALL SENSITIVE AREAS SHALL BE PROTECTED AS PER PLAN.
2. ALL AREAS IN THE CONSTRUCTION AREA NOT SPECIFICALLY DESIGNATED FOR REMOVAL SHALL BE INTERFERED WITH BY THE CONSTRUCTION OF SENSITIVE AREAS.
3. SAFETY FENCE SHOULD BE FASTENED SECURELY TO THE T-POSTS.
4. THE FENCING MUST REMAIN IN PLACE UNTIL ALL PHASES OF CONSTRUCTION ANY CHANGE OF THE PROTECTIVE FENCING MUST BE APPROVED.



NOTES:  
A ROCK FILTER OUTLET SHALL BE INSTALLED WHERE FAILURE OF A SILT FENCE OR STRAW BALE BARRIER HAS OCCURRED DUE TO CONCENTRATED FLOW. ANCHORED COMPOST LAYER SHALL BE USED ON UPSLOPE FACE IN HQ AND EV WATERSHEDS.

STANDARD CONSTRUCTION DETAIL #4-6  
ROCK FILTER OUTLET  
NOT TO SCALE

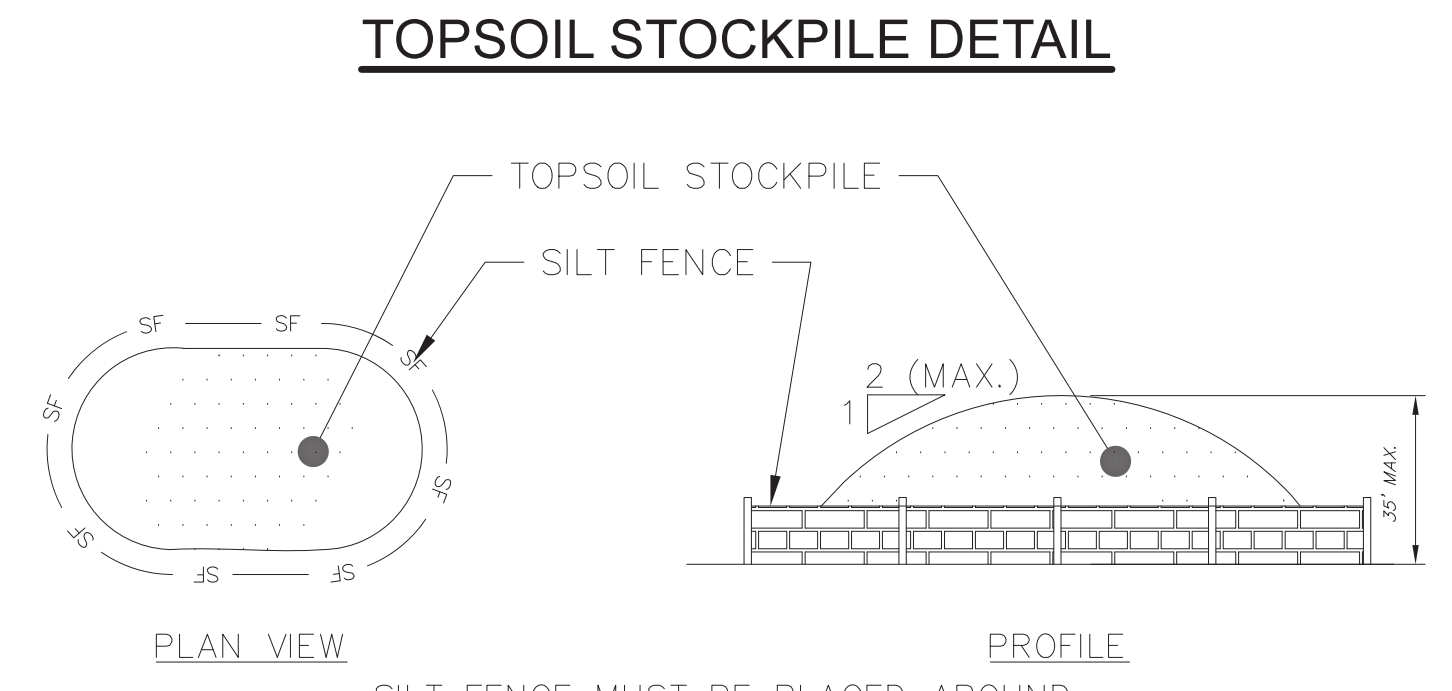


\* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

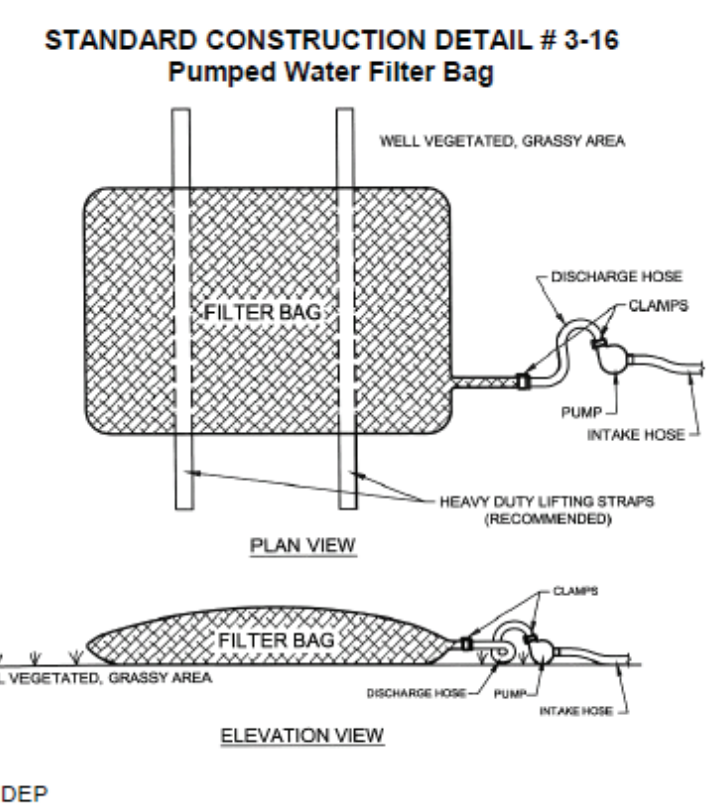
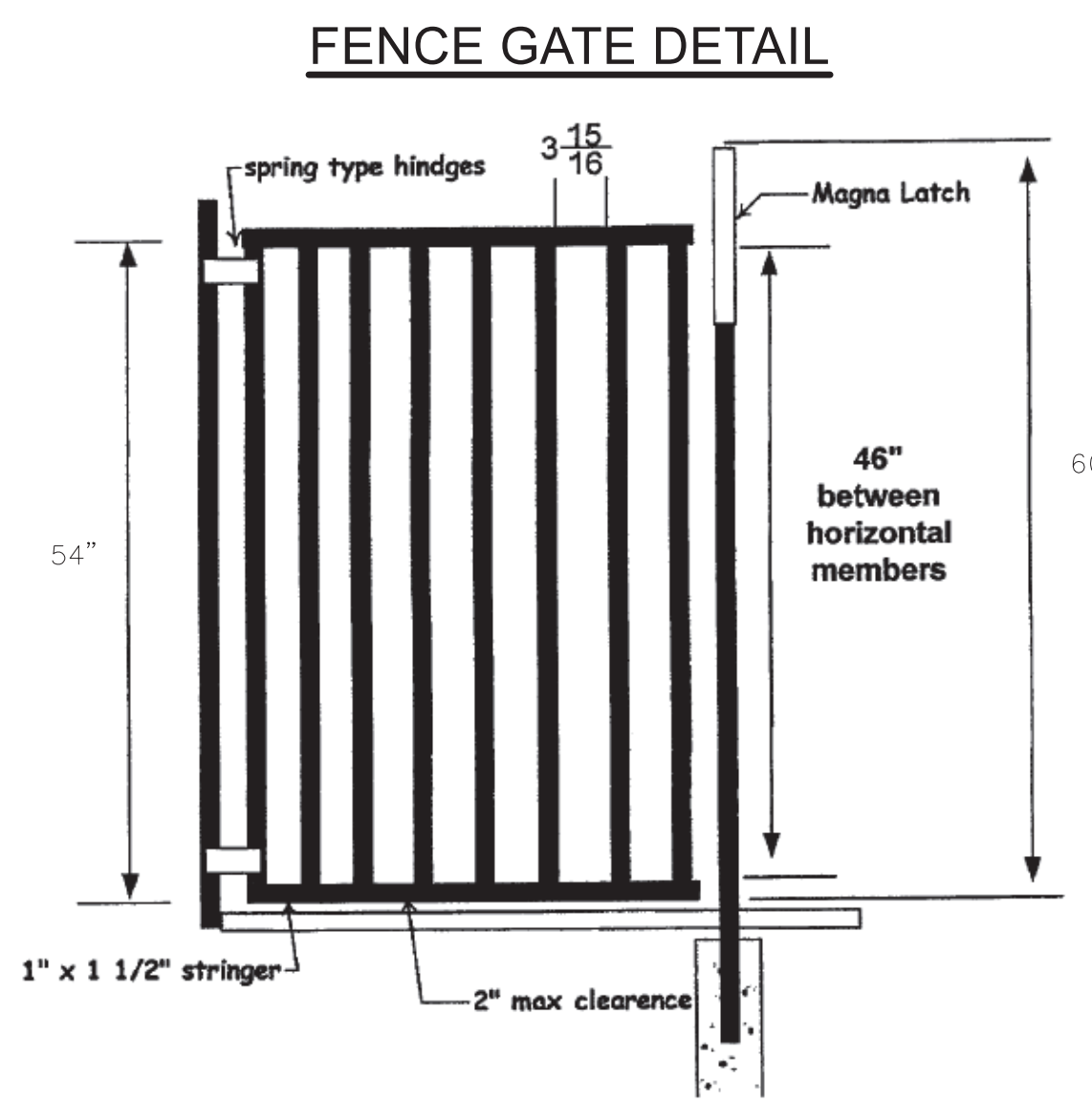
NOTES:  
REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.  
RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

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

STANDARD CONSTRUCTION DETAIL #3-1  
ROCK CONSTRUCTION ENTRANCE  
NOT TO SCALE



SILT FENCE MUST BE PLACED AROUND THE PERIMETER OF ALL STOCKPILES. IMMEDIATELY APPLY TEMPORARY SEEDING TO STOCKPILES.



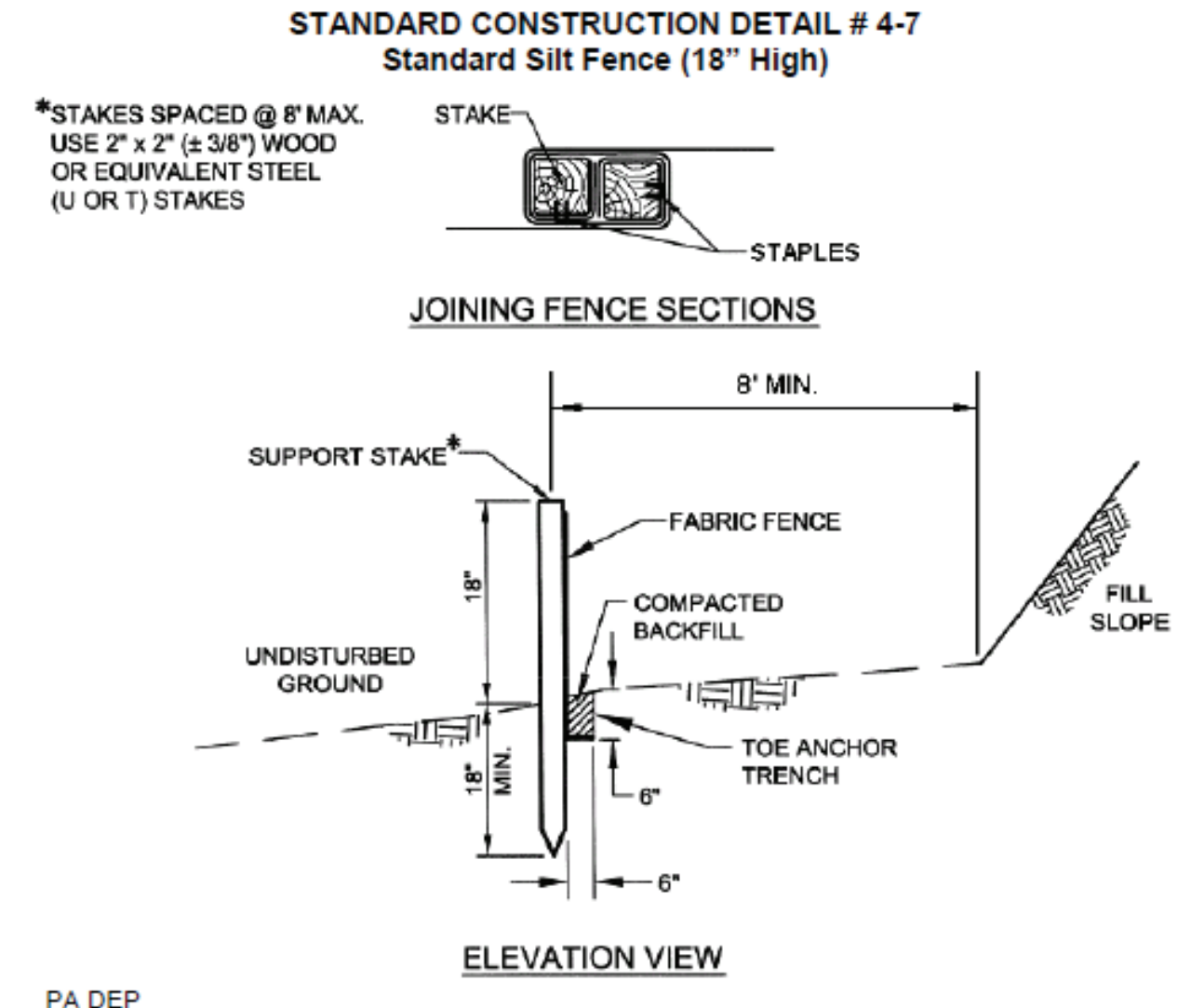
Low volume filter bags shall be made from non-woven geotextile material sewn with high strength, double stitched "J" type seams. They shall be capable of trapping particles larger than 150 microns. High volume filter bags shall be made from woven geotextiles that meet the following standards:

Property	Test Method	Minimum Standard
Avg. Wide Width Strength	ASTM D-4884	60 lb/in
Grab Tensile	ASTM D-4632	205 lb
Puncture	ASTM D-4833	110 lb
Mullen Burst	ASTM D-3786	350 psi
UV Resistance	ASTM D-4355	70%
AOS % Retained	ASTM D-4751	80 Sieve

A suitable means of accessing the bag with machinery required for disposal purposes shall be provided. Filter bags shall be replaced when they become 1/3 full of sediment. Spare bags shall be kept available for replacement of those that have failed or are filled. Bags shall be placed on straps to facilitate removal unless bags come with lifting straps already attached.

Bags shall be located in well-vegetated (grassy) area, and discharge onto stable, erosion resistant areas. Where this is not possible, a geotextile underlayment and flow path shall be provided. Bags may be placed on filter stone to increase discharge capacity. Bags shall not be placed on slopes greater than 5%. For slopes exceeding 5%, clean rock or other non-erodible and non-polluting material may be placed under the bag to reduce slope steepness.

No downslope sediment barrier is required for most installations. Compost berm or compost filter sock shall be installed below bags located in HQ or EV watersheds, within 50 feet of any receiving surface water or where grassy area is not available.



Fabric shall have the minimum properties as shown in Table 4.3.

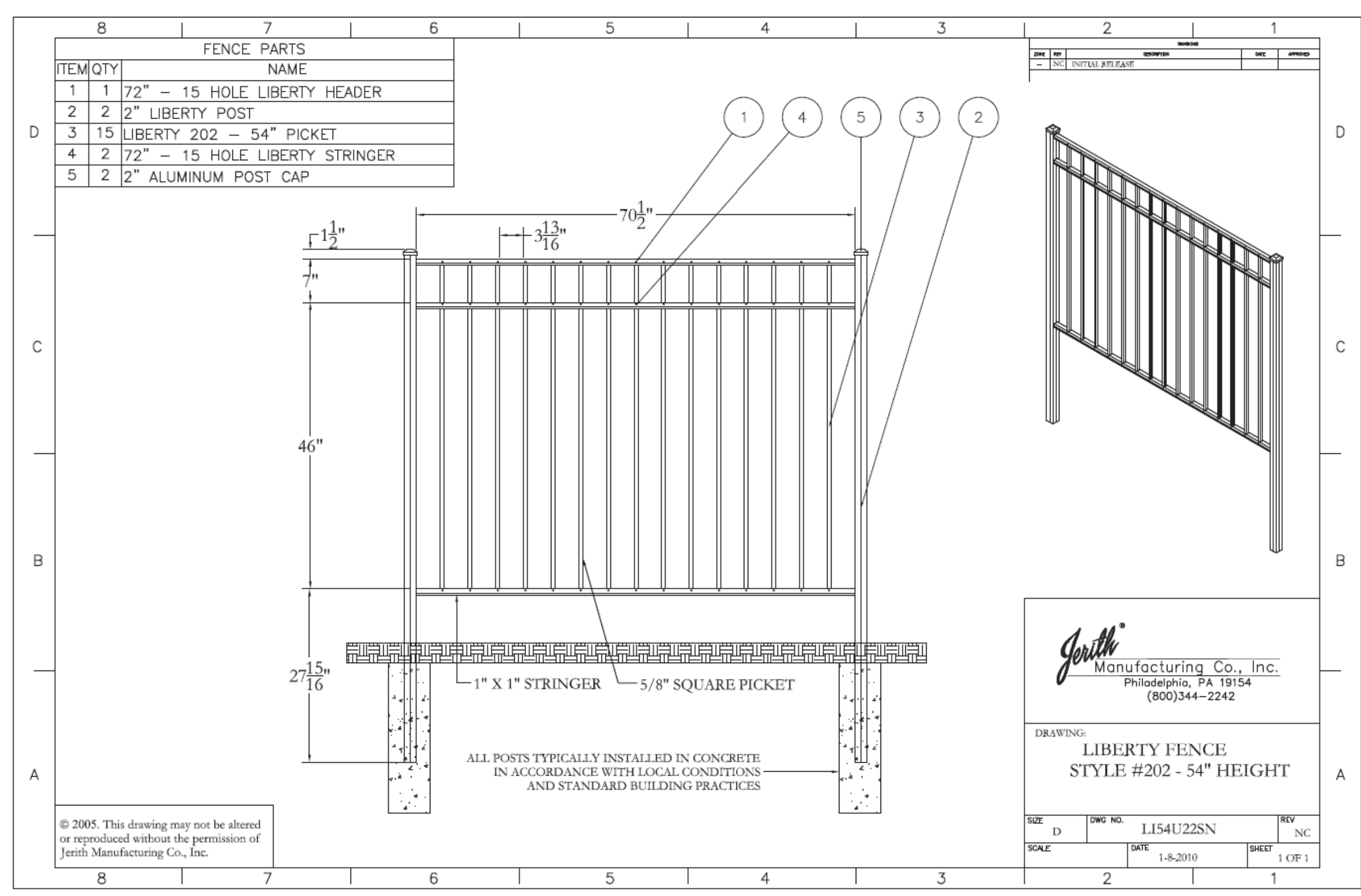
Fabric width shall be 30\"/>

Silt fence shall be placed at level existing grade. Both ends of the fence shall be extended at least 8 feet up slope at 45 degrees to the main fence alignment (see Figure 4.1).

Sediment shall be removed when accumulations reach half the aboveground height of the fence.

Any section of silt fence which has been undermined or topped shall be immediately replaced with a rock filter outlet (Standard Construction Detail # 4.6).

Fence shall be removed and properly disposed of when tributary area is permanently stabilized.



South Manufacturing Co., Inc.  
Philadelphia, PA 19154  
(800)344-2242

LIBERTY FENCE  
STYLE #202 - 54\"/>

DATE: 1-8-2010  
SHEET: 1 OF 1

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PREPARED BY: <b>ALAN &amp; EILEEN BRACKUP</b> 1756 ASHBOURNE DRIVE YARDLEY, PA 19067							
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CONSTRUCTION DETAIL SHEET <b>1756 ASHBOURNE DRIVE</b>							
DRAWING NO: L154U22SN DATE: 1-8-2010 SHEET: 1 OF 1							
DRAWING NUMBER: <b>D-02</b>							