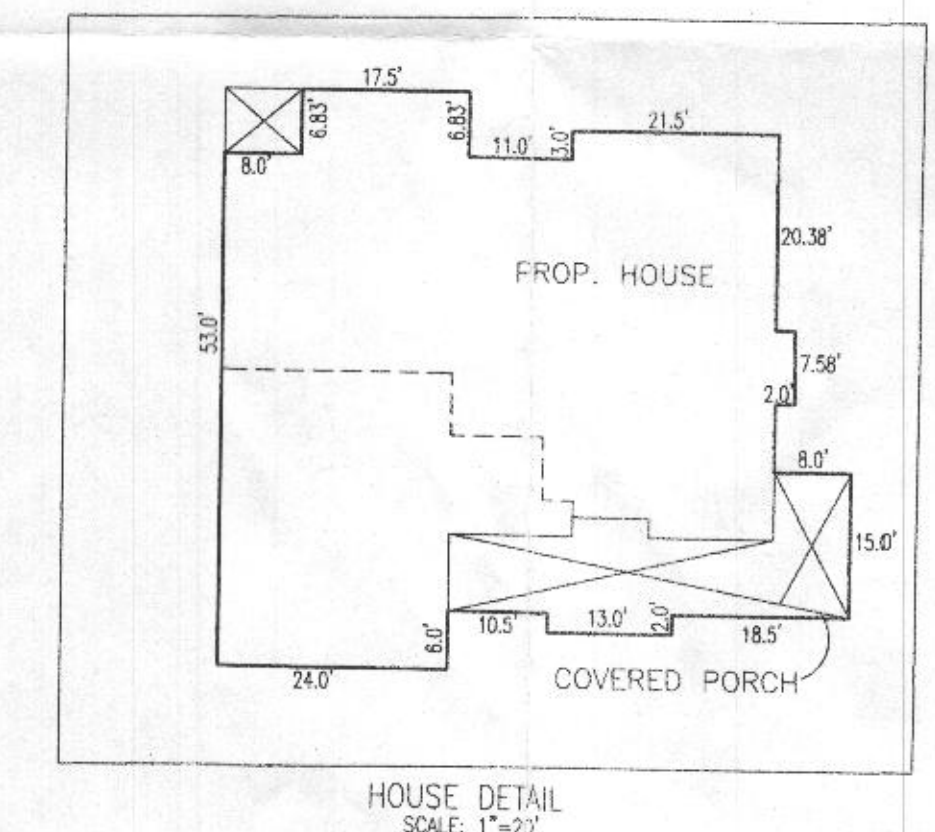


- GENERAL NOTES:**
- TOPOGRAPHY & PLANIMETRIC FEATURES SHOWN HEREON TAKEN FROM COPYRIGHTED GIS DATA FROM HOWARD COUNTY, SUPPLEMENTED WITH FIELD LOCATIONS BY VANMAR ASSOCIATES, INC. CONTOUR INTERVAL IS 2 FEET. VERTICAL DATUM IS NAVD83.
  - THE EXISTING WELLS SHOWN ON THIS PLAN HAVE BEEN FIELD LOCATED BY VANMAR ASSOCIATES OR TAKEN FROM AVAILABLE RECORDS AND ACCURATELY SHOWN.
  - ZONING DISTRICT: RC-DEO
  - LIMIT OF DISTURBANCE (LOD) = 17,500 SQ.FT.
  - THERE ARE NO STREAMS, PONDS, FLOODPLAINS OR WETLANDS ON THIS LOT.
  - STORM WATER MANAGEMENT FOR THIS LOT IS PROVIDED BY N-1 ROOFTOP DISCONNECTION, N-2 NON-ROOFTOP DISCONNECTION AND N-3 SHEETFLOW TO CONSERVATION AREA



**SEPTIC SYSTEM TRENCH DESIGN**

INITIAL NUMBER OF BEDROOMS	= 4
APPLICATION RATE	= 1.2 GPD / sq.ft.
DESIGN FLOW: 150 GPD X 4 BEDROOMS	= 600 GPD
600 GPD / 1.2 GPD/sq.ft.	= 500 sq.ft.
500 sq.ft. / 3 ft. WIDE TRENCH	= 167 LF TRENCH
167 LF TRENCH X 0.71 REDUCTION CREDIT	= 118.5 LF TRENCH
TRENCH T1-1 EX. GRD=791.0 -INV. TRENCH=788.0 -B. TRENCH=785.0	
TRENCH T1-2 EX. GRD=790.0 -INV. TRENCH=787.0 -B. TRENCH=784.0	

**1st REPLACEMENT**

APPLICATION RATE	= 1.2 GPD / sq.ft.
DESIGN FLOW: 150 GPD X 4 BEDROOMS	= 600 GPD
600 GPD / 1.2 GPD/sq.ft.	= 500 sq.ft.
500 sq.ft. / 3 ft. WIDE TRENCH	= 167 LF TRENCH
167 LF TRENCH X 0.71 REDUCTION CREDIT	= 118.5 LF TRENCH
TRENCH T2-1 EX. GRD=788.5 -INV. TRENCH=785.5 -B. TRENCH=781.5	
TRENCH T2-2 EX. GRD=787.5 -INV. TRENCH=784.5 -B. TRENCH=780.5	

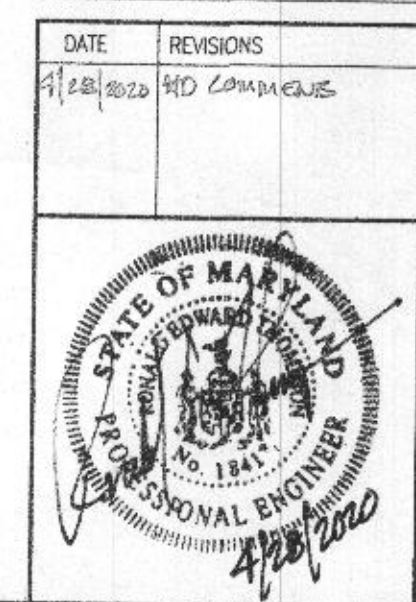
**2nd REPLACEMENT**

APPLICATION RATE	= 1.2 GPD / sq.ft.
DESIGN FLOW: 150 GPD X 4 BEDROOMS	= 600 GPD
600 GPD / 1.2 GPD/sq.ft.	= 500 sq.ft.
500 sq.ft. / 3 ft. WIDE TRENCH	= 167 LF TRENCH
167 LF TRENCH X 0.50 REDUCTION CREDIT	= 83.5 LF TRENCH
TRENCH T3-1 EX. GRD=786.0 -INV. TRENCH=783.0 -B. TRENCH=779.0	

- SITE PLAN NOTES:**
- ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
  - MAXIMUM COVER OVER THE TANK IS 3 FEET. GREATER DEPTH WILL REQUIRE A HEAVY LOAD BEARING TANK.
  - ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
  - THE WELL (TAG #H0-17-0392) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
  - ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARIES AND 200' DOWN GRADIENT OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.

Approved Septic System Plan  
 Howard County Health Department  
 1500-gal. septic tank  
 to Gravity drain field  
 for 4-bed room SFD  
 J. Bink  
 Signature 5/11/2020  
 Date

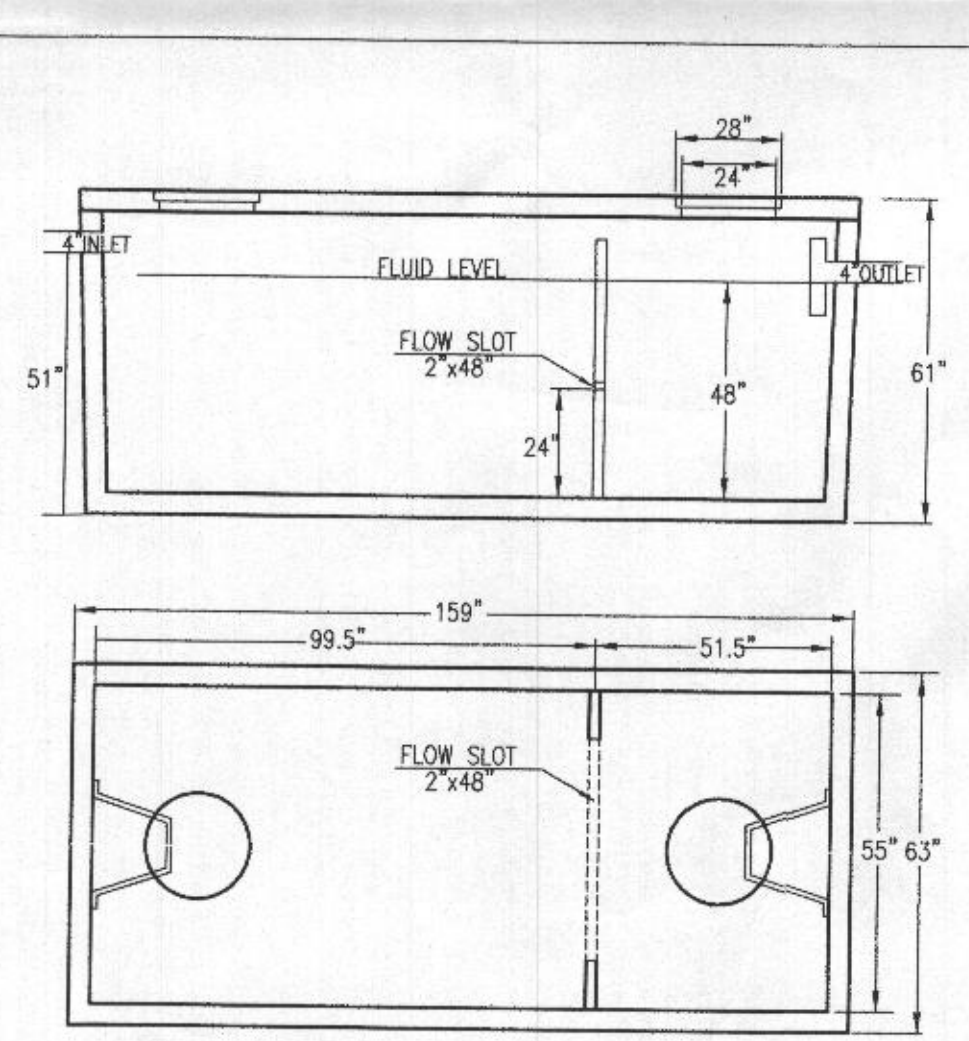
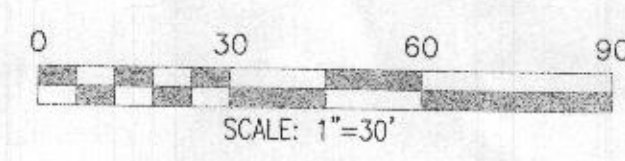
PROFESSIONAL CERTIFICATION  
 I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 18417, Expiration Date: 9-18-21.



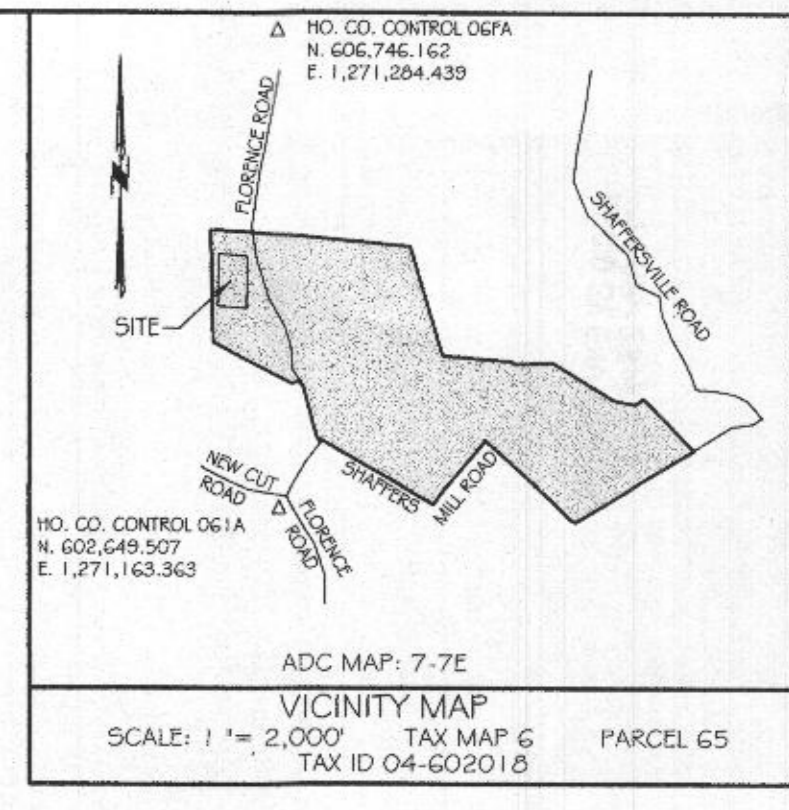
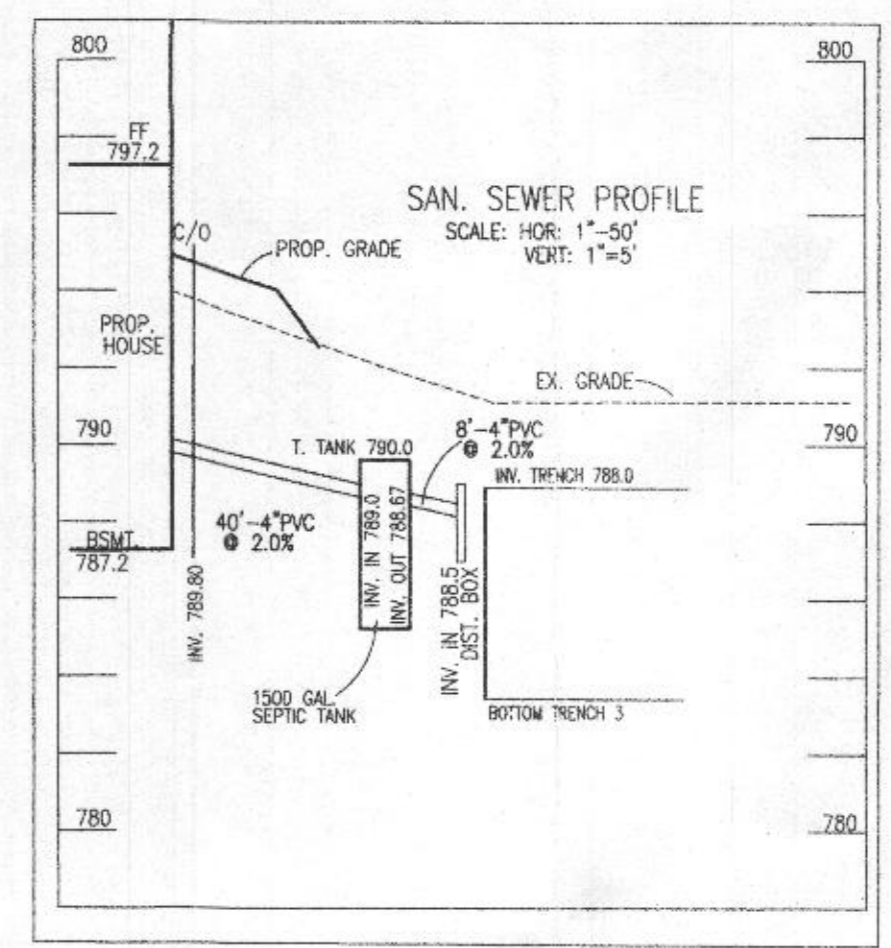
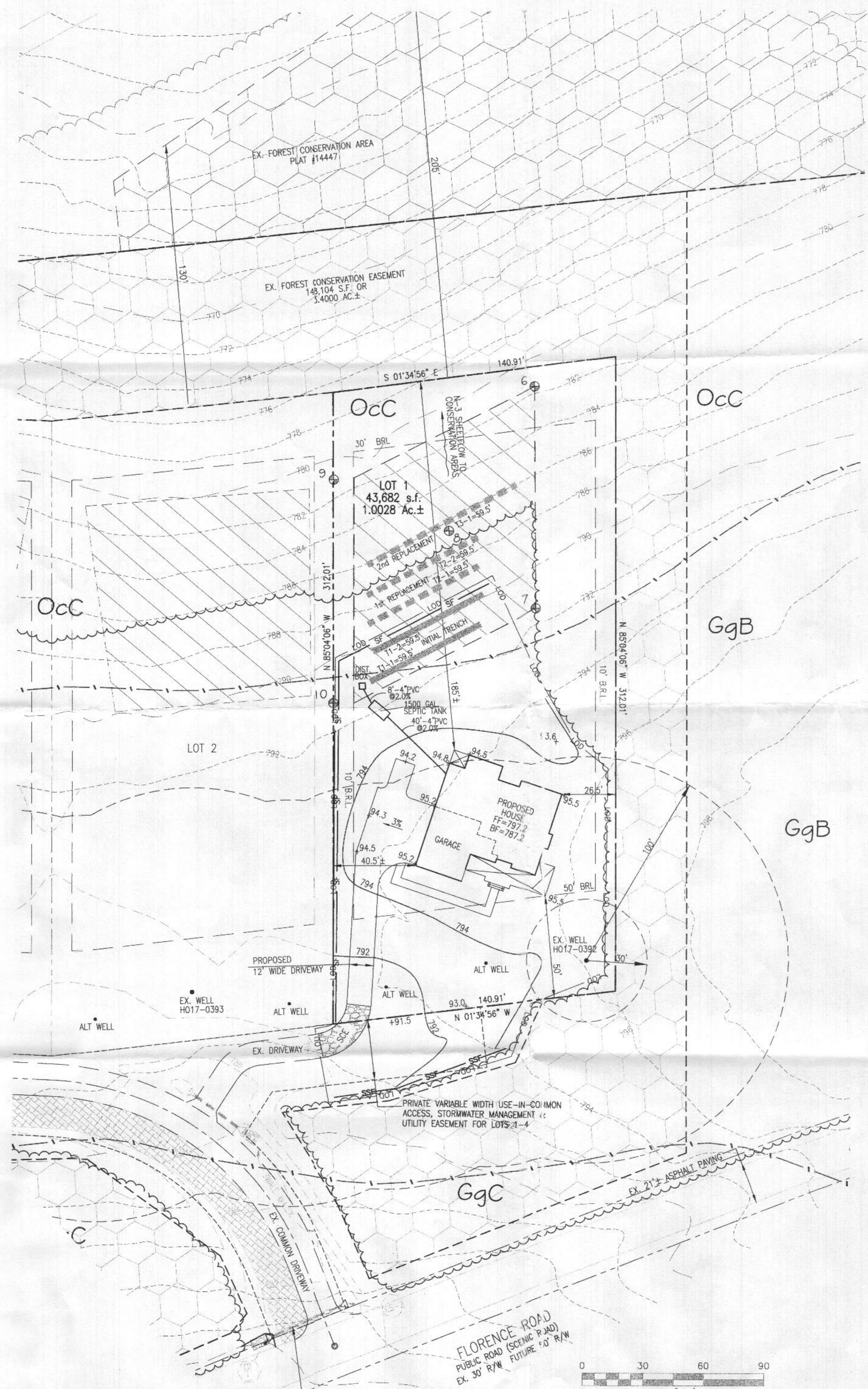
**ON SITE SEWAGE SYSTEM DISPOSAL PLAN**  
 1600 FLORENCE ROAD  
 LOT 1  
**PATRICK FAMILY LIMITED PARTNERSHIP II**  
 PLAT No. 25140

1600 FLORENCE ROAD  
 FOURTH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 30' APRIL 2020  
**VANMAR ASSOCIATES, INC.**  
 Engineers/Surveyors/Planners  
 310 South Main Street Mount Airy, Maryland 21771  
 (301) 828-2890 (301) 831-5015 (410) 549-2751  
 Fax (301) 831-5803 ©Copyright, Latest Date Shown

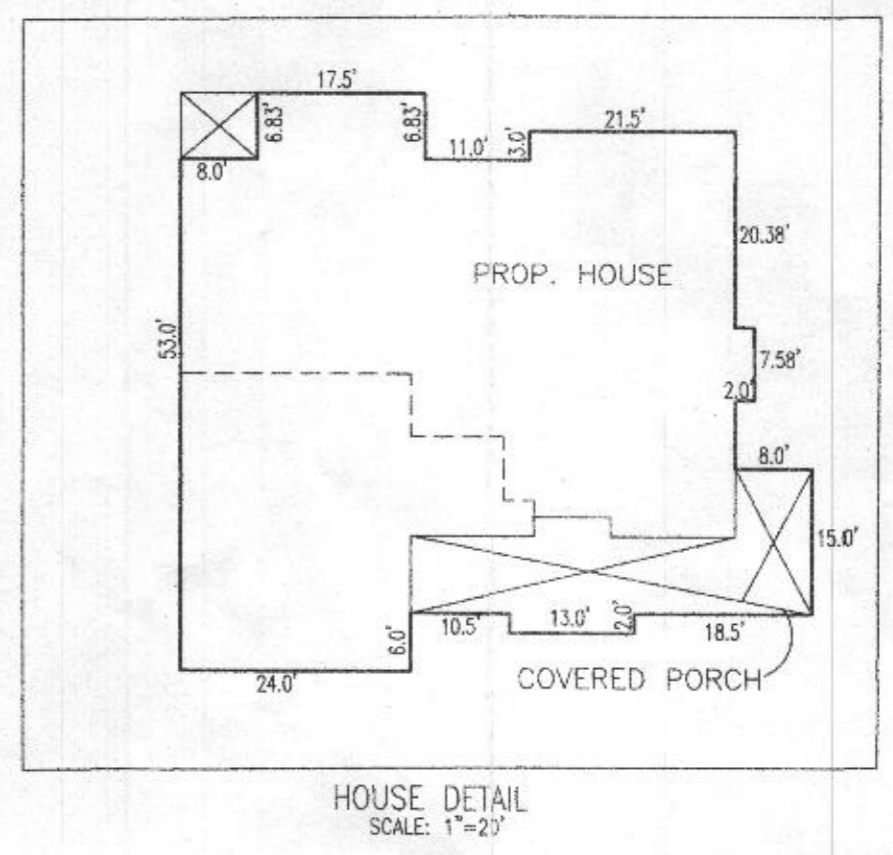
OWNER / DEVELOPER  
 PATRICK FAMILY LIMITED PARTNERSHIP II  
 c/o TIM FEAGA  
 P.O. BOX 492  
 USBDN, MARYLAND 21765  
 (410) 489-7900



1500 GALLON  
 2-COMPARTMENT SEPTIC TANK  
 N.T.S.



- GENERAL NOTES:**
- TOPOGRAPHY & PLANIMETRIC FEATURES SHOWN HEREON TAKEN FROM COPYRIGHTED GIS DATA FROM HOWARD COUNTY, SUPPLEMENTED WITH FIELD LOCATIONS BY VANMAR ASSOCIATES, INC. CONTOUR INTERVAL IS 2 FEET. VERTICAL DATUM IS NAVD83.
  - THE EXISTING WELLS SHOWN ON THIS PLAN HAVE BEEN FIELD LOCATED BY VANMAR ASSOCIATES OR TAKEN FROM AVAILABLE RECORDS AND ACCURATELY SHOWN.
  - ZONING DISTRICT: RC-DEO
  - LIMIT OF DISTURBANCE (LOD) = 17,500 SQ.FT.
  - THERE ARE NO STREAMS, PONDS, FLOODPLAINS OR WETLANDS ON THIS LOT.
  - STORM WATER MANAGEMENT FOR THIS LOT IS PROVIDED BY N-1 ROOFTOP DISCONNECTION, N-2 NON-ROOFTOP DISCONNECTION AND N-3 SHEETFLOW TO CONSERVATION AREA



**SEPTIC SYSTEM TRENCH DESIGN**

INITIAL NUMBER OF BEDROOMS	= 4
APPLICATION RATE	= 1.2 GPD / sq.ft.
DESIGN FLOW: 150 GPD X 4 BEDROOMS = 600 GPD	
600 GPD / 1.2 GPD/sq.ft.	= 500 sq.ft.
500 sq.ft. / 3 ft. WIDE TRENCH = 167 LF TRENCH	
167 LF TRENCH X 0.71 REDUCTION CREDIT = 118.5 LF TRENCH	
TRENCH T1-1 EX. GRD=791.0 -INV. TRENCH=788.0 -B. TRENCH=785.0	
TRENCH T1-2 EX. GRD=790.0 -INV. TRENCH=787.0 -B. TRENCH=784.0	

<b>1st REPLACEMENT</b>	
APPLICATION RATE	= 1.2 GPD / sq.ft.
DESIGN FLOW: 150 GPD X 4 BEDROOMS = 600 GPD	
600 GPD / 1.2 GPD/sq.ft.	= 500 sq.ft.
500 sq.ft. / 3 ft. WIDE TRENCH = 167 LF TRENCH	
167 LF TRENCH X 0.71 REDUCTION CREDIT = 118.5 LF TRENCH	
TRENCH T2-1 EX. GRD=788.5 -INV. TRENCH=785.5 -B. TRENCH=781.5	
TRENCH T2-2 EX. GRD=787.5 -INV. TRENCH=784.5 -B. TRENCH=780.5	

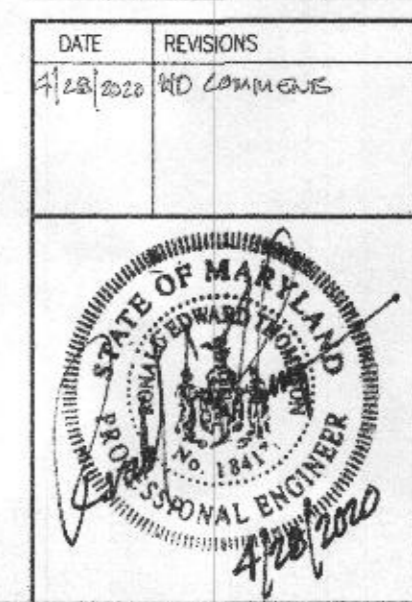
  

<b>2nd REPLACEMENT</b>	
APPLICATION RATE	= 1.2 GPD / sq.ft.
DESIGN FLOW: 150 GPD X 4 BEDROOMS = 600 GPD	
600 GPD / 1.2 GPD/sq.ft.	= 500 sq.ft.
500 sq.ft. / 3 ft. WIDE TRENCH = 167 LF TRENCH	
167 LF TRENCH X 0.50 REDUCTION CREDIT = 83.5 LF TRENCH	
TRENCH T3-1 EX. GRD=786.0 -INV. TRENCH=783.0 -B. TRENCH=779.0	

- SITE PLAN NOTES:**
- ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
  - MAXIMUM COVER OVER THE TANK IS 3 FEET. GREATER DEPTH WILL REQUIRE A HEAVY LOAD BEARING TANK.
  - ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
  - THE WELL (TAG #HO-17-0392) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
  - ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARIES AND 200' DOWN GRADIENT OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.

Approved Septic System Plan  
 Howard County Health Department  
 1500-gal Septic Tank  
 To Gravity Drain Field  
 for 4-Bedroom SFD  
 RB Baker 5/11/2020  
 Signature Date

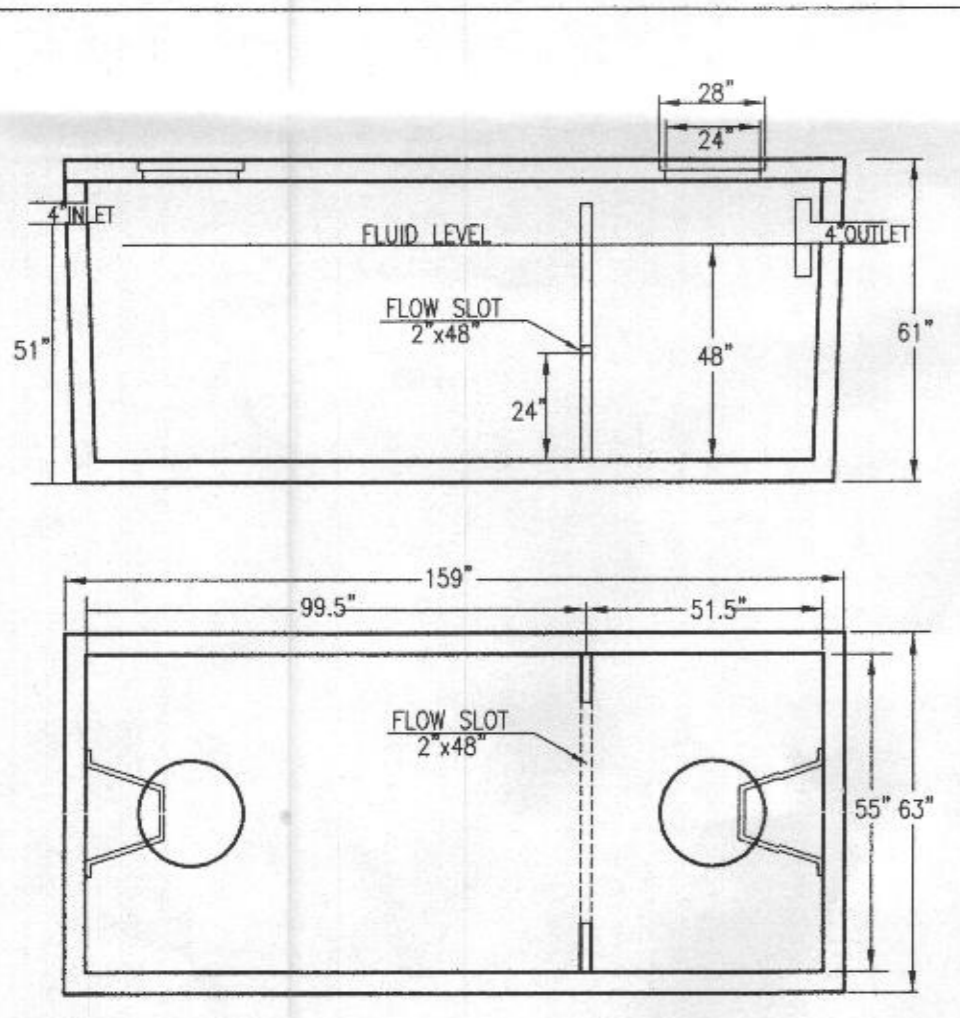
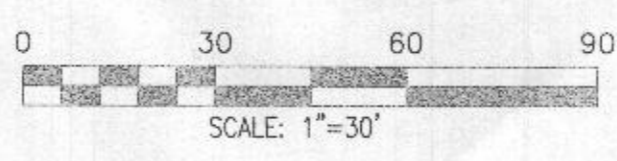
PROFESSIONAL CERTIFICATION  
 I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 18417, Expiration Date: 9-18-21.



**ON SITE SEWAGE SYSTEM DISPOSAL PLAN**  
 1600 FLORENCE ROAD  
 LOT 1  
**PATRICK FAMILY LIMITED PARTNERSHIP II**  
 PLAT No. 25140  
 1600 FLORENCE ROAD  
 FOURTH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 30' APRIL 2020

**VANMAR ASSOCIATES, INC.**  
 Engineers Surveyors Planners  
 310 South Main Street Mount Airy, Maryland 21771  
 (301) 829-2890 (301) 831-5015 (410) 549-2751  
 Fax (301) 831-5603 ©Copyright, Latest Date Shown

OWNER / DEVELOPER  
 PATRICK FAMILY LIMITED PARTNERSHIP II  
 c/o TIM FEAGA  
 P.O. BOX 482  
 LISBON, MARYLAND 21765  
 (410) 489-7900



1500 GALLON  
 2-COMPARTMENT SEPTIC TANK  
 N.T.S.

B-4-2 STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS

Definition: The process of preparing the soil to sustain adequate vegetative stabilization.

Purpose: To provide a suitable soil medium for vegetative growth.

Conditions Where Practice Applies: Where vegetative stabilization is to be established.

- Criteria:
A. Soil Preparation
1. Temporary Stabilization
a. Seedbed preparation consists of loosening soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment...

B-4-3 STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING

Definition: The application of seed and mulch to establish vegetative cover.

Purpose: To protect disturbed soils from erosion during and at the end of construction.

Conditions Where Practice Applies: To the surface of all perimeter controls, slopes, and any disturbed area not under active grading.

- Criteria:
A. Seeding
1. Specifications
a. All seed must meet the requirements of the Maryland State Seed Law. All seed must be subjected to re-testing by a recognized seed laboratory...

HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

1) A pre-construction meeting must occur with the Howard County Department of Public Works, Construction Inspection Division (CID), 410-313-1555 after the future LEO and protected area marked clearly in the field. A minimum of 48 hour notice to CID must be given a the following dates:

- a. Prior to the start of earth disturbance.
b. Upon completion of the installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading.
c. Prior to the start of another phase of construction or opening of another grading unit.

SWM TREATMENT SUMMARY

Table with 6 columns: PRACTICE, DRAINAGE AREA, IMPERVIOUS AREA TREATED, METHODOLOGY, VOLUME (ESD) REQUIRED, VOLUME (ESD) PROVIDED. Rows include N-2 NON-ROOFTOP DISCONNECTION, N-1 ROOFTOP DISCONNECTION, N-3 SHEET FLOOR TO CONSERVATION AREA, and TOTAL ES/D PROVIDED.

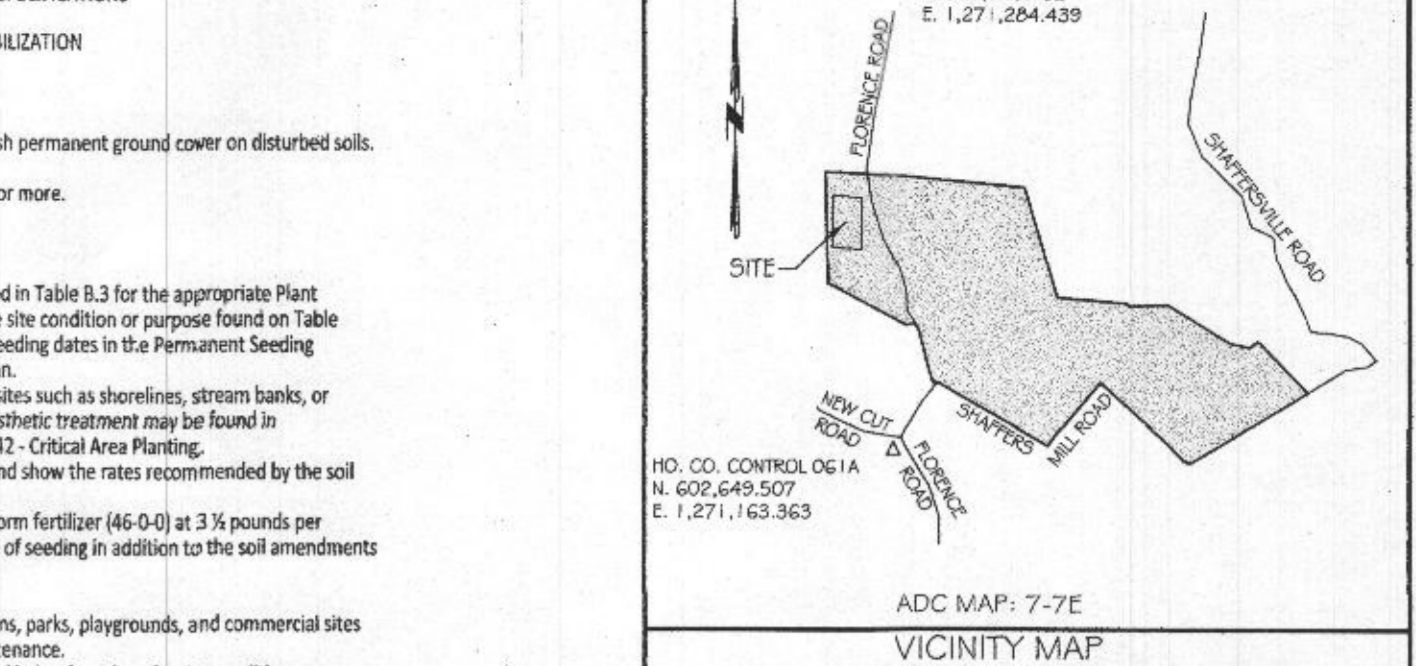
B-4-5 STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

Definition: To stabilize disturbed soils with permanent vegetation.

Purpose: To use long-lived perennial grasses and legumes to establish permanent ground cover on disturbed soils.

Conditions Where Practice Applies: Disturbed soils where ground cover is needed for 6 months or more.

- Criteria:
A. Seed Mixtures
1. General Use
a. Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardiness Zone...



- 2) Following initial soil disturbance or re-disturbance, permanent or temporary stabilization is required within three (3) calendar days...
3) All disturbed areas must be stabilized within the time period specified above in accordance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR TOPSOIL...
4) All disturbed areas must be stabilized within the time period specified above in accordance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR TOPSOIL...



- 5) Any permanent control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
6) Additional sediment control must be provided, if deemed necessary by the CID. The site and all controls shall be inspected by the contractor weekly and the next day after each rain event.
7) Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance...

TEMPORARY STABILIZATION SPECIFICATIONS TABLE. Columns: No., Species, Application Rate (lb/acre), Seeding Dates, Seeding Depths, Fertilizer Rate, Lime Rate.

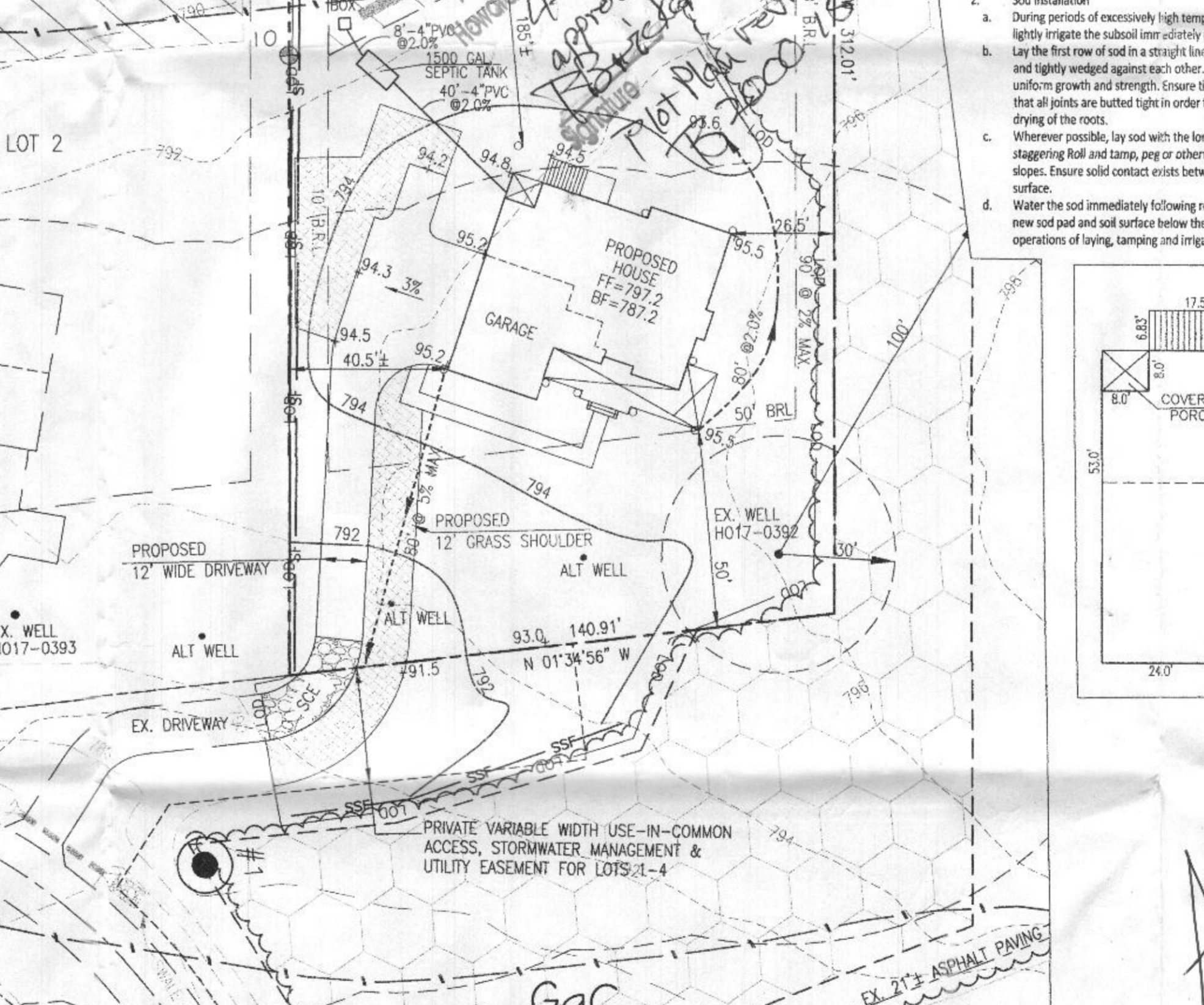
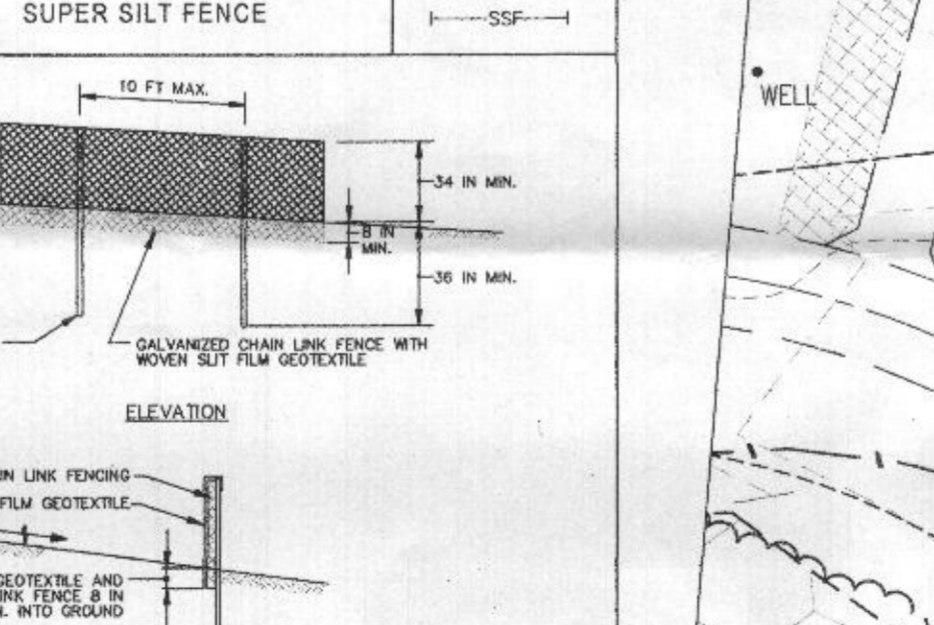
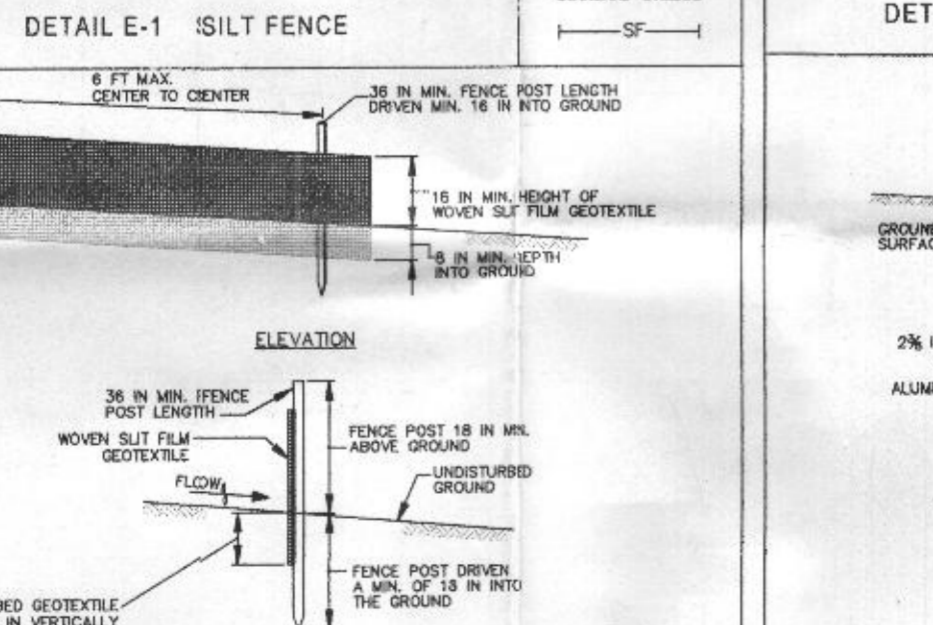
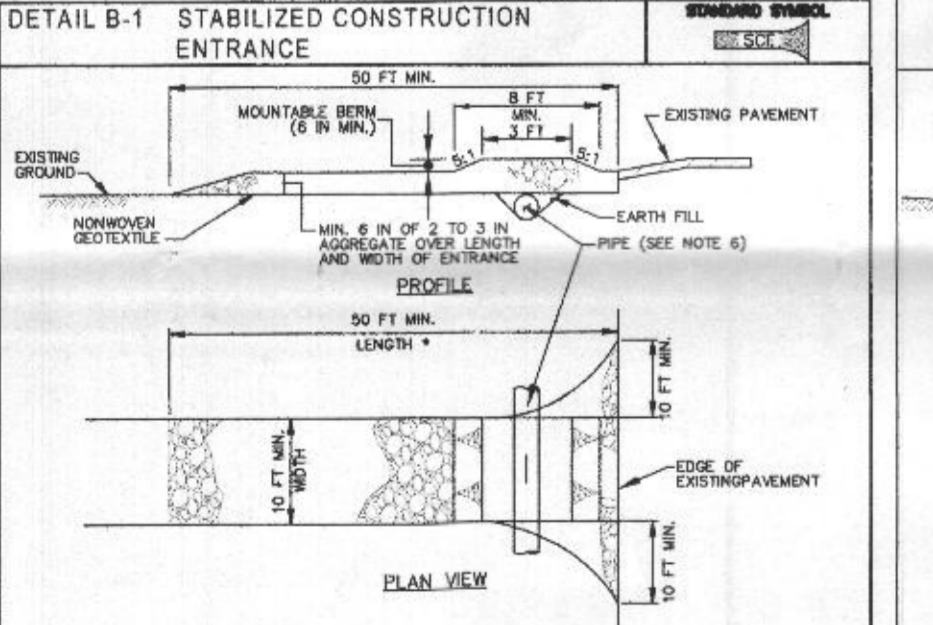
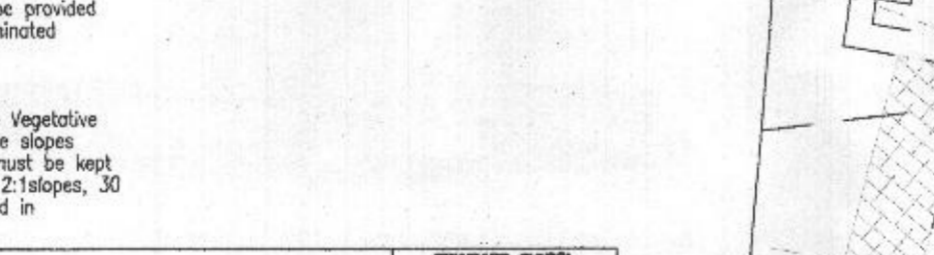
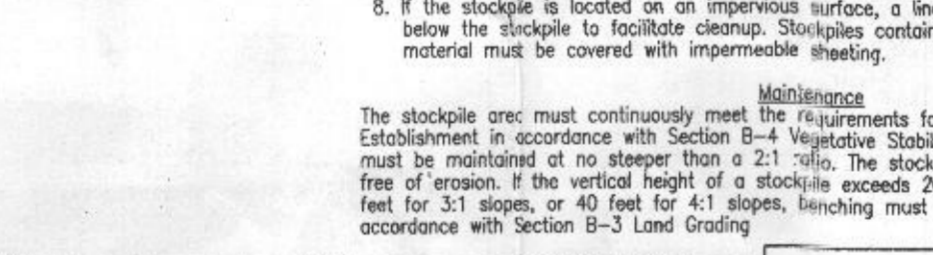
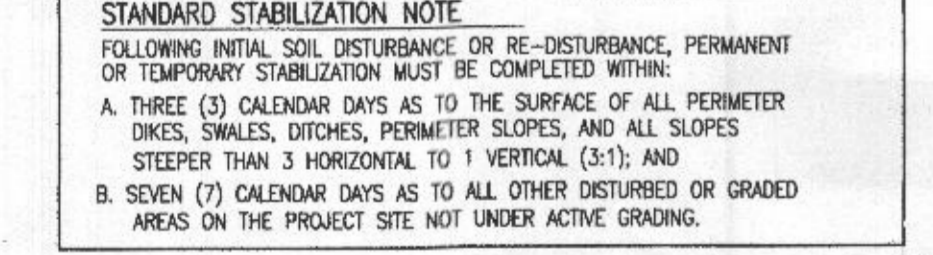
PERMANENT STABILIZATION SPECIFICATIONS TABLE. Columns: No., Species, Application Rate (lb/acre), Seeding Dates, Seeding Depths, Fertilizer Rate, Lime Rate.

STOCKPILE AREA. Definition: A mound or pile of soil protected by appropriately designed erosion and sediment control measures.

DUST CONTROL. DUST CONTROL METHOD FOR THIS SITE TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES...
STANDARD STABILIZATION NOTE. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:

- 1. The stockpile location and all related sediment control practices must be clearly indicated on the erosion and sediment control plan.
2. The footprint of the stockpile must be sized to accommodate the anticipated volume of material stored and based on a side slope no steeper than 2:1.

- 1. INSTALL 28 INCH DIAMETER GALVANIZED STEEL POSTS OF 0.093 INCH WALL THICKNESS AND SIX FOOT LENGTHS SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
2. FASTEN 8 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2% MINIMUM OPENING) 4 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR 140Z BRADS.



SEQUENCE OF CONSTRUCTION. 1. OBTAIN ALL REQUIRED GRADING, MDC PERMITS, APPROVALS AND LICENSES FROM APPROPRIATE AGENCIES. (1 WEEK)
2. NOTIFY SEDIMENT CONTROL INSPECTOR AT LEAST THREE (3) WORKING DAYS PRIOR TO STARTING WORK. (1 WEEK)
3. INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE AND OTHER SEDIMENT CONTROL DEVICES AS SHOWN IN THE SEDIMENT CONTROL PLAN. (2 WEEKS)
4. STABILIZE ALL THE GRADED AREAS UP TO 20' OUTSIDE OF THE LIMIT OF GRADING AS PER PERMANENT SEEDING NOTES. (3 WEEKS)
5. EXCAVATE HOUSE FOUNDATION, HOUSE CONSTRUCTION, UTILITIES, AND INSTALL SEPTIC. (2 WEEKS)
6. ANY AREAS THAT CAN BE TEMPORARILY SEEDED DURING CONSTRUCTION MUST BE TEMPORARILY STABILIZED PER SEEDING NOTES.
7. INSTALL DRIVEWAY & GRASS SHOULDER. (2 WEEKS)
8. STABILIZE DISTURBED AREAS PER PERMANENT SEEDING NOTES. (1 WEEK)
9. UPON APPROVAL OF SEDIMENT CONTROL INSPECTOR, REMOVE ALL TEMPORARY SEDIMENT CONTROL DEVICES FOR HOUSE CONSTRUCTION. (1 WEEK)
10. NOTIFY INSPECTOR FOR FINAL INSPECTION. (1 WEEK)

DEVELOPER'S CERTIFICATE. I/WE CERTIFY THAT CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT THE RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF TRAINING FROM THE MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD COUNTY SOIL CONSERVATION DISTRICT, AND/OR MDE.

ENGINEER'S CERTIFICATE. I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS, AND THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. U.S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, 2011.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. U.S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, 2011.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. U.S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, 2011.

CONSTRUCTION SPECIFICATIONS. 1. INSTALL 28 INCH DIAMETER GALVANIZED STEEL POSTS OF 0.093 INCH WALL THICKNESS AND SIX FOOT LENGTHS SPACED NO FURTHER THAN 10 FEET APART... 2. FASTEN 8 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2% MINIMUM OPENING) 4 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR 140Z BRADS...

PLOT PLAN AND SEDIMENT CONTROL PLAN. 1600 FLORENCE ROAD, LOT 1, PATRICK FAMILY LIMITED PARTNERSHIP II, PLAT No. 25140. Includes a professional seal for Ronald E. Thompson, P.E., and a date of 6/2/2020.