

Bureau of Environmental Health
 8930 Stanford Boulevard, Columbia, MD 21045
 Main: 410-313-2640 | Fax: 410-313-2648
 TDD 410-313-2323 | Toll Free 1-866-313-6300
www.hchealth.org
 Facebook: www.facebook.com/hocohealth

Maura J. Rossman, M.D., Health Officer

RECEIPT DATE: 12/6/17 **ONSITE SEWAGE DISPOSAL SYSTEM** P 562351

INSTALLATION APPROVAL DATE: 12/28/17 **PERMIT** A UPGRADE
UPGRADE

PROPERTY ADDRESS: 7156 Mink Hollow Road TAX ID: _____

CONTRACTOR: Hatfield's Equipment EMAIL: ken@hatfieldsequipment.com

CONTRACTOR ADDRESS: P.O. Box 519 Annapolis Junction, MD 20701 PHONE: 301-490-4289

PROPERTY OWNER: Elm Tree LLC. EMAIL: _____

OWNER ADDRESS: 4994 Windpower Way PHONE: _____

SEPTIC TANK SIZE (GALLONS): 2000 PUMP TANK CAPACITY _____

FLOW RATE (GALLONS PER DAY): _____ APPLICATION RATE: 1.2 0.8

DISTRIBUTION SYSTEM: GRAVITY FED LOW PRESSURE DOSED

TRENCHES:	LINEAR FEET REQUIRED: <u>69</u>	INLET DEPTH: <u>3'4"</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>8</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>3'4"</u>

LOCATION: PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND BAT UNIT LOCATION MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.

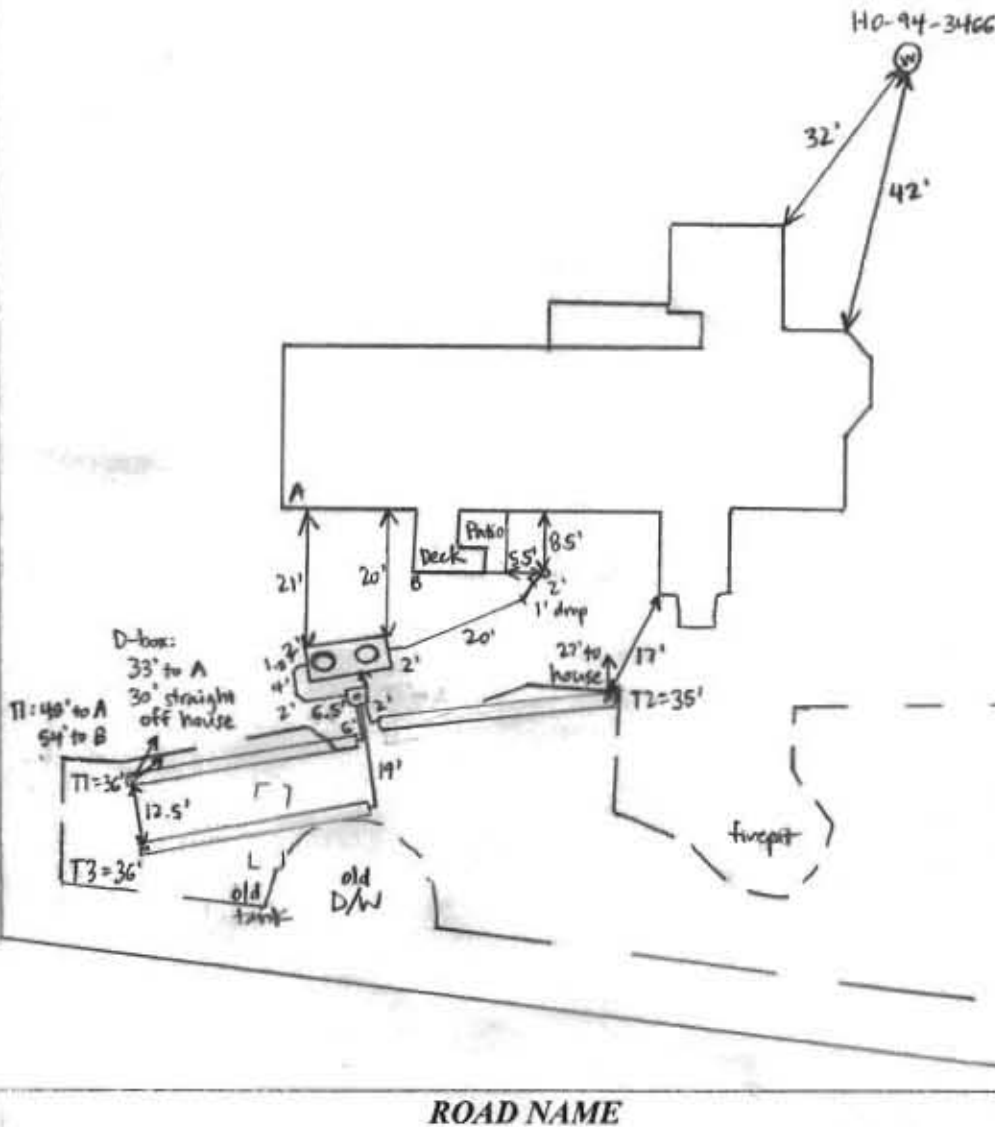
NOTES:

ISSUED BY: Hank Oswald ISSUE DATE: 12/6/17 EXPIRATION DATE: 12/6/18

- NOTE: CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION INSPECTION PRIOR TO BEGINNING ANY INSTALLATION
- NOTE: CONTRACTOR MUST SCHEDULE AN INSPECTION AND GAIN APPROVAL OF ALL COMPONENTS PRIOR TO COVERING
- NOTE: STONE MUST BE APPROVED BY HEALTH DEPARTMENT AND GRAVEL TICKET MUST BE AVAILABLE FOR REVIEW.
- NOTE: WATERTIGHT SEPTIC TANKS REQUIRED
- NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE AT LEAST 100 FEET DOWNGRAIENT FROM ANY WATER WELL
- NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS
- NOTE: AN ELECTRICAL PERMIT IS REQUIRED FOR INSTALLATION OF ANY ELECTRICAL COMPONENTS OF THE SYSTEM
- NOTE: AN INDIVIDUAL CERTIFIED BY MDE AND THE MANUFACTURER FOR BAT INSTALLATION MUST BE PRESENT AT ALL TIMES DURING BAT INSTALLATION.
- NOTE: MDE RECOMMENDS SEPTIC TANKS, BAT, AND OTHER PRETREATMENT UNITS BE PUMPED AT A FREQUENCY ADEQUATE TO ENSURE THAT SOLIDS ARE NOT DISCHARGED TO THE DISPOSAL AREA

NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM. PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT. CALL 410-313-1771 TO SCHEDULE INSPECTIONS.

NOT TO SCALE



TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
3'	5.5'	9.5'
NUMBER OF TRENCHES	3	
TOTAL LENGTH	107'	
ABSORPTION AREA	321' + SIDEWALL	
DISTRIBUTION BOX LEVEL	YES	
DISTRIBUTION BOX BAFFLE	YES	
DISTRIBUTION BOX PORT	YES	

SEPTIC TANK DATA	
SEPTIC TANK I LEVEL	YES
MANUFACTURER	BABYLON
CAPACITY	2000 GAL
SEAM LOC	TOP
TANK LID DEPTH	4.5-5'
BAFFLES	YES
BAFFLE FILTER	NO
MANHOLE LOC	FRONT - REAR
6" PORT LOC	NONE
WATERTIGHT TEST	NO
SLOTTED	YES
DATE ON LID	10-28-17

PUMP/SEPTIC TANK LEVEL	
MANUFACTURER	
CAPACITY	GAL
SEAM LOC	
TANK LID DEPTH	
BAFFLES	
BAFFLE FILTER	
MANHOLE LOC	
6" PORT LOC	
WATERTIGHT TEST	
SLOTTED	
DATE ON LID	

PRE-CONSTRUCTION:

12/21/17 Met Hatfield's on site for layout. SDA not staked - perc holes locations still evident, can determine SDA in area of first system. Shot contour + laid out two trenches with D-box in center. OK to install one continuous trench with two pipes to feed both trenches. Start adding stone @ center to ensure slight fall towards trench ends. Use solid pipe if trench crosses area of existing tank, do not count towards trench length. (SC)

INSTALLATION:

12/27/17 Tank set + connected to existing plumbing. Tank is deeper than shown on plan, lid is traffic-bearing. Will not make 4" inlet - change spec to 5.5" inlet, 9.5' bottom, and add 1x35' trench below. Existing tank + drywell pumped and collapsed. (SC) 12/28/17 Trenches complete, T2 left open for inspection and T1-T3 left open at ends. 3' wide, 5' to stone, leveled speed levelers in D-box. Outlet pipes from D-box sealed with hydraulic cement. (SC)

FINAL INSPECTOR Sarah Collins DATE OF APPROVAL 12/28/17

Oswald, Hank

From: Oswald, Hank
Sent: Monday, November 06, 2017 9:02 AM
To: 'John Carney'
Subject: RE: Mink Hollow
Attachments: mink hollow plan.pdf

Hi John:

Per Jeff, the depth of the sewer line will need to be determined now and noted on the OSDS Plan so we know it will make fall. The initial trench invert must not exceed 4 feet or add pump tank. The existing septic tank will need to be completely removed in order to run the initial trench through that area. Remove portion of SDA where the new tank is located because the area won't be used (see attachment).

Please contact me with any questions.

Hank

From: John Carney [<mailto:jcarney@bei-civilengineering.com>]
Sent: Friday, November 03, 2017 3:19 PM
To: Oswald, Hank
Subject: RE: Mink Hollow

Hank, thanks. I am revising the plan now. If I specify a 1.0% outfall I can get the invert of the lateral to be 4.0 feet below grade. See attached. If the invert out of the house is less than 2.5' below the slab I would recommend steepening the pipe and not raising the tank. Let me know what you think. John

From: Oswald, Hank [<mailto:hoswald@howardcountymd.gov>]
Sent: Friday, November 03, 2017 2:20 PM
To: John Carney (jcarney@bei-civilengineering.com) <jcarney@bei-civilengineering.com>
Subject: Mink Hollow

Hi John:

I found the OSDS Plans but Jeff is not in the office. I will get back to you on Monday.

Hank

Hank Oswald
Licensed Environmental Health Specialist
Howard County Health Department
Bureau of Environmental Health
Well & Septic Program
8930 Stanford Boulevard
Columbia, MD 21045
410.313.1786 (Office)
hoswald@howardcountymd.gov

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BENCHMARK



ENGINEERING, INC.

8480 Baltimore National Pike • Suite 315 • Ellicott City, Maryland 21043
 410-465-6105 410-465-6644 (Fax)

LETTER OF TRANSMITTAL

DATE	11/13/17	PROJECT No.	2864
ATTENTION	Frank Oswald		
RE:	7156 Mink Hollow Rd		

TO: Health

- WE ARE SENDING YOU Attached Under separate cover via _____ the following items
- Photocopies Prints Originals Samples
 - Specifications Invoices Change Order Other _____

COPIES of	No. of SHEETS	DESCRIPTION
3	1	Per Cent
3	1	Septic Permit Plan
1	1	Response letter

THESE ARE TRANSMITTED as checked below

- For Comment For your use For Approval
- For Review As requested Other _____

REMARKS: _____

COPY TO: _____

RECEIVED BY: [Signature]

SIGNED: [Signature]

If enclosures are not as noted, kindly notify us at once.

Oswald, Hank

From: John Carney <jcarney@bei-civilengineering.com>
Sent: Tuesday, December 05, 2017 1:44 PM
To: Oswald, Hank
Subject: RE: OSDS Plan_7156 Mink Hollow Road
Attachments: mayer brothers 2000 gallon 2 compartment.pdf

Hank, It would just be a 2000 gallon 2 compartment tank. Could you attach this to the permit? Thanks, John

From: Oswald, Hank [<mailto:hoswald@howardcountymd.gov>]
Sent: Tuesday, December 05, 2017 1:21 PM
To: John Carney (jcarney@bei-civilengineering.com) <jcarney@bei-civilengineering.com>
Subject: OSDS Plan_7156 Mink Hollow Road

Hi John:

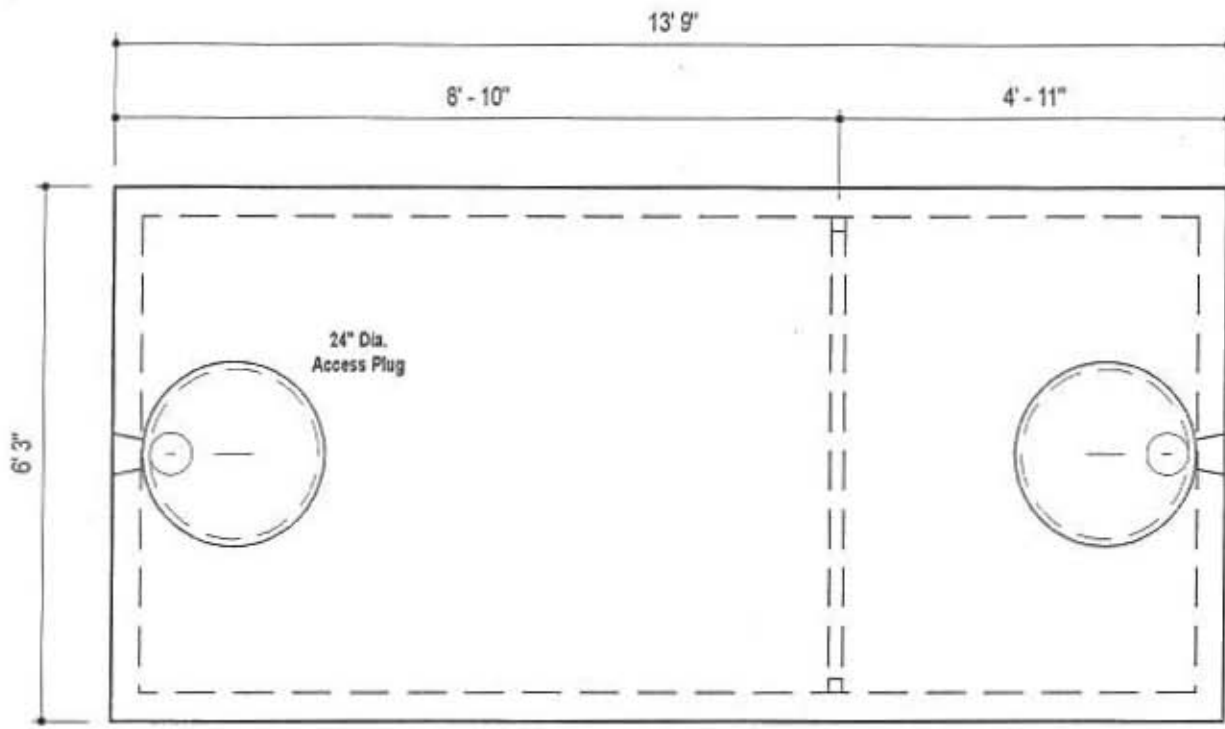
I just took one last look at the OSDS Plan and I noticed it's missing the cross section/details about the septic tank.

Hank

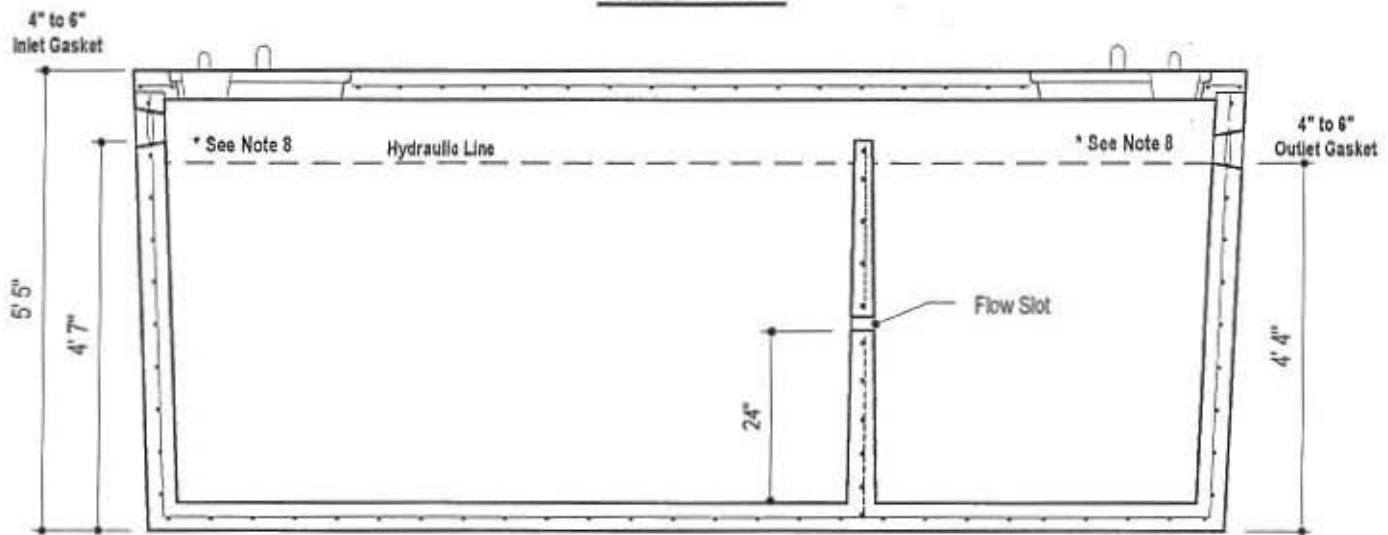
Hank Oswald
Licensed Environmental Health Specialist
Howard County Health Department
Bureau of Environmental Health
Well & Septic Program
8930 Stanford Boulevard
Columbia, MD 21045
410.313.1786 (Office)
hoswald@howardcountymd.gov

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PLAN VIEW



SECTION A-A

DESIGN DATA & GENERAL NOTES

- [1] Concrete strength $f_c=4,000$ p.s.i. @ 28 days. Density = 150 pcf.
- [2] Cement - Portland Type III per ASTM C 150-82.
- [3] Admixtures & plasticizers per ASTM C 260-86 & C 494-82.
- [4] Reinforcing per ASTM A185. Min. 1-1/2" cover.
- [5] Top slab sealed with butyl rope mastic.
- [6] 4" wall, 4" base, & 5" top thickness.
- [7] Max 3" of cover
- [8] Depending on use of tank, Inlet & Outlet baffle may be required by code.



Mayer Bros., Inc.

6264 Race Road
Elkridge, Maryland 21075
Tel. 410.796.1434
Fax. 410.796.1438

www.mayerbrosprecast.com

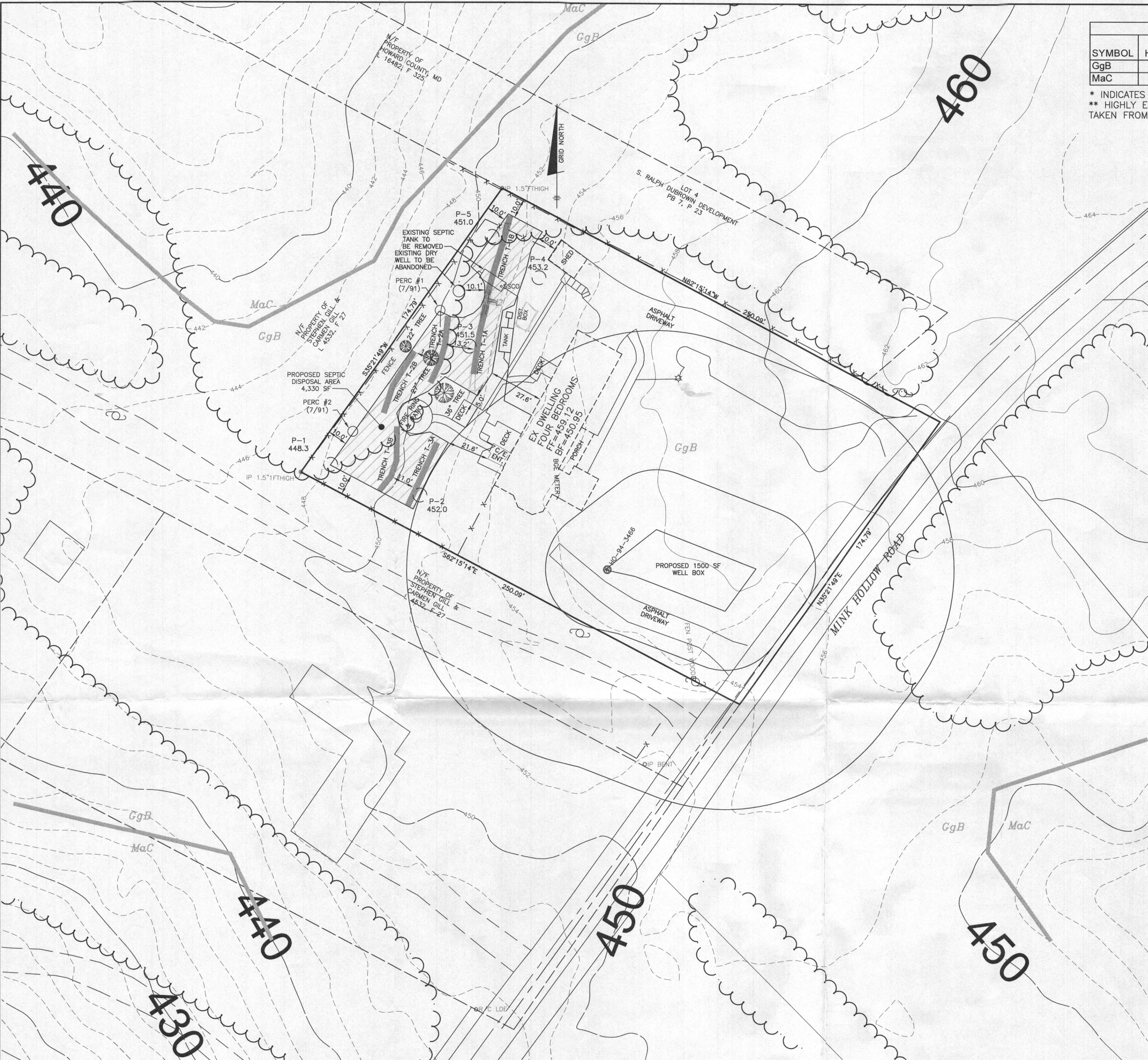
**2,000 GALLON SEPTIC TANK
2-Compartment**

Stock Item [Approx. 19,900 lbs]

Dwg. No. 2000-2C

No Scale

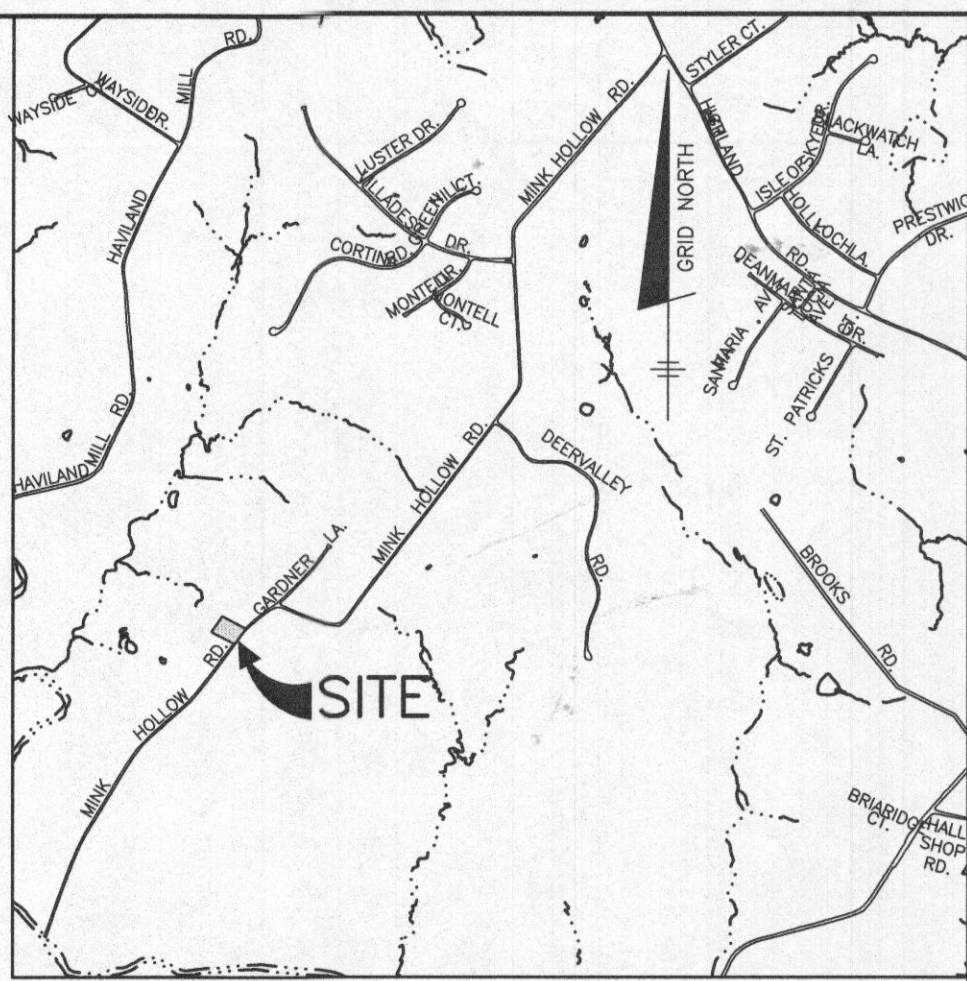
Aug 11, 2008



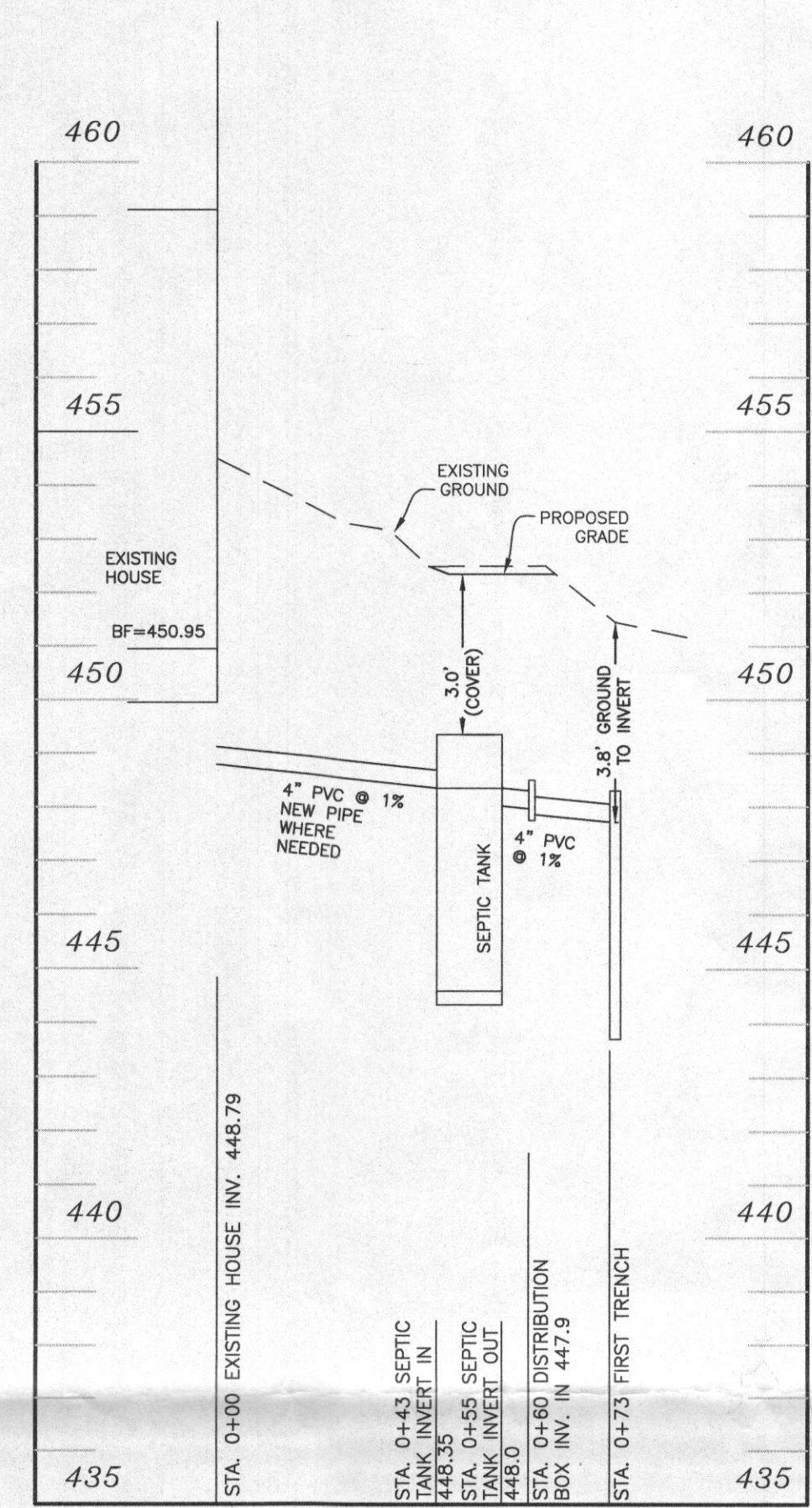
SOILS CHART - SOIL SURVEY HOWARD COUNTY, MARYLAND

SYMBOL	HYDRIC	HYDROLOGIC GROUP	ALTERNATE GROUP	NAME	K-VALUE
GgB		B		GLENELG LOAM, 3 TO 8 PERCENT SLOPES	0.20
MaC		B		MANOR LOAM, 8 TO 15 PERCENT SLOPES	0.24

* INDICATES HYDRIC SOILS
 ** HIGHLY ERODIBLE, K>0.35, AND/OR 15% OR GREATER SLOPES
 TAKEN FROM THE NRCS WEB SOIL SURVEY, OCTOBER 2017, MAP 22.



VICINITY MAP
 SCALE: 1" = 2000'

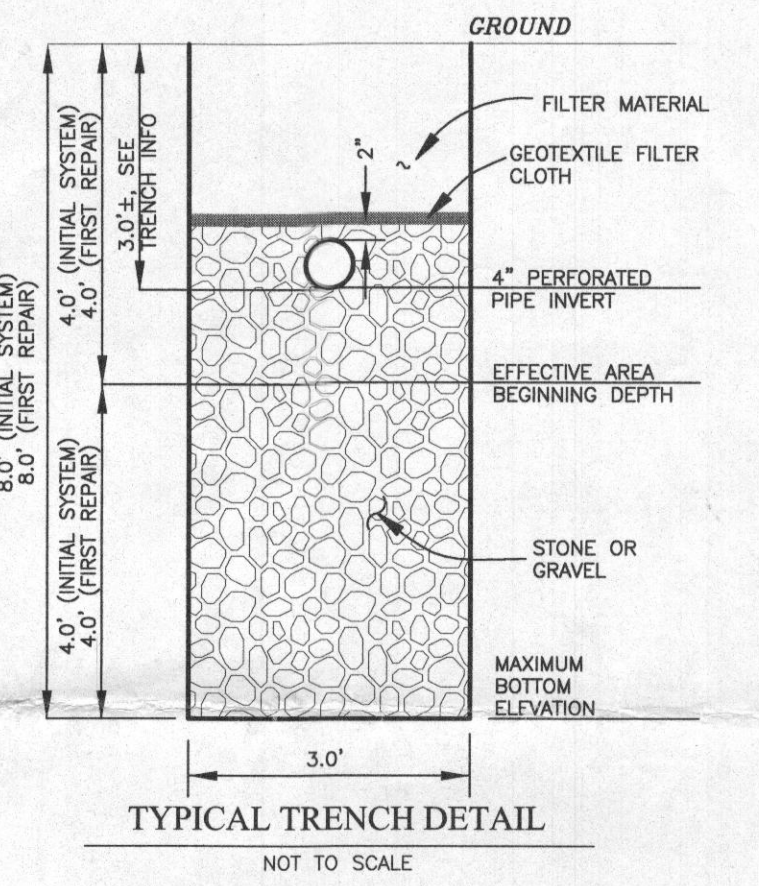


SEWER PROFILE
 SCALE: VERTICAL 1"=3', HORIZONTAL 1"=30'

TRENCH INFORMATION

INITIAL SYSTEM	FUTURE FIRST REPAIR
TRENCH T-1A	TRENCH T-2A
TRENCH LENGTH 35 LF	TRENCH LENGTH 35 LF
GROUND ELEVATION 451.5	GROUND ELEVATION 450.2
INVERT ELEVATION 447.5	INVERT ELEVATION 446.2
MAX. BOTTOM ELEV. 443.5	MAX. BOTTOM ELEV. 442.2
TRENCH T-1B	TRENCH T-2B
TRENCH LENGTH 41 LF*	TRENCH LENGTH 35 LF
GROUND ELEVATION 451.4	GROUND ELEVATION 449.2
INVERT ELEVATION 447.4	INVERT ELEVATION 446.2
MAX. BOTTOM ELEV. 443.4	MAX. BOTTOM ELEV. 441.2

5.3' FEET OF TRENCH 1B IS NOT AVAILABLE FOR DISPOSAL DUE TO REMOVAL OF EXISTING SEPTIC TANK

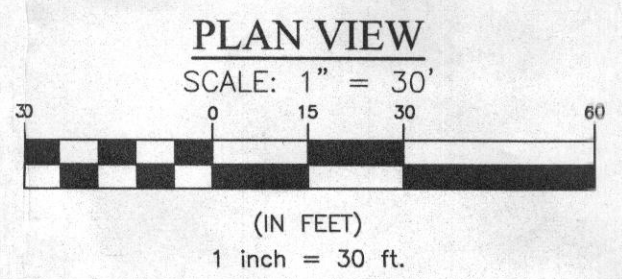


TYPICAL TRENCH DETAIL
 NOT TO SCALE

GENERAL NOTES

- THIS AREA DESIGNATES A PRIVATE SEWERAGE DISPOSAL AREA AS REQUIRED BY THE STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL. IMPROVEMENTS IN THIS AREA IS RESTRICTED UNTIL PUBLIC SEWER IS AVAILABLE. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED SEWERAGE EASEMENT PLAT SHALL NOT BE NECESSARY.
- THE LOT SHOWN HEREON COMPLIES WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT. THE LOT SIZE OF THIS LOT WILL FULFILL THE REQUIREMENTS OF THE ZONING REGULATIONS.
- ANY CHANGES TO A SEWERAGE EASEMENT SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
- THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THE PROPERTY'S BOUNDARIES EXCEPT THAT WHICH ARE SHOWN.
- TOPOGRAPHY SHOWN ON THIS LOT WAS FIELD VERIFIED BY BENCHMARK ENGINEERING, INC., ON OR ABOUT SEPTEMBER, 2017. SITE VISIT VERIFIED NO STEEP SLOPES IN THE AREA OF THE SEPTIC DISPOSAL AREA.
- EXISTING WELL, TAG NUMBER HO-94-3468, HAS BEEN FIELD LOCATED BY BENCHMARK ENGINEERING, INC., IN SEPTEMBER, 2017, AND IS ACCURATELY SHOWN.
- SEPTIC TANK MUST BE SIZED TO FULFILL COMAR REQUIREMENT. IF DEEPER THAN 3.0' OF COVER USE A TRAFFIC BEARING TANK.
- PERCOLATION TEST FEE RECEIPT NUMBER, REFERENCED IN THE APPROVING AUTHORITY CORRESPONDENCE, IS A561549.
- THERE IS ONE SPECIMEN TREE BEHIND HOUSE ON THIS PROPERTY AND IS NOT WITHIN THE SEPTIC DISPOSAL AREA.
- THE EXISTING DWELLING IS TO REMAIN.
- THE EXISTING SEPTIC TANK IS TO BE REMOVED AND REPLACED WITH MATERIAL FROM TRENCH 1A. THIS MATERIAL IS TO BE PLACED IN 8" LIFTS AND COMPACTED PRIOR TO TRENCH EXCAVATION. DRY WELL TO BE PUMPED DRY AND FILLED WITH SOIL.
- THE EXISTING FIRE PIT AND PATIO MAY HAVE TO BE REMOVED FOR THE INSTALLATION OF THE SECOND REPAIR SYSTEM (TRENCHES T-3A AND T-3B).

- LEGEND
- 480 EXISTING CONTOURS
 - EXISTING TREELINE
 - LIMIT OF SUBMISSION
 - PROPOSED SEPTIC AREA
 - WELL BOX
 - SOILS DELINEATION
 - PASSING TEST LOCATION (10/2017)
 - EXISTING PASSING PERCOLATION TEST (7/91)



INITIAL SYSTEM

Number of Bedrooms	4
Application Rate	1.2 gpd/sf
Effective Area Beginning Depth	4 ft
Bottom Max Depth	8 ft
Design Flow	600 gpd
Drainage Field square footage	500 sf
Sidewall reduction credit	0.41666667
Trench width	3
Effective Area Depth	4
Linear Length of trench Required	69 lf

1st REPLACEMENT SYSTEM

Number of Bedrooms	4
Application Rate	1.2 gpd/sf
Effective Area Beginning Depth	4 ft
Bottom Max Depth	8 ft
Design Flow	600 gpd
Drainage Field square footage	500 sf
Sidewall reduction credit	0.41666667
Trench width	3
Effective Area Depth	4
Linear Length of trench Required	69 lf

THIS PLAN IS FOR SEPTIC DESIGN ONLY

Approved Septic System Plan
 Howard County Health Department
 Hank Oswald
 Signature Date

SEE MANUFACTURERS SPECIFICATIONS FOR DETAILS.
 WWW.MAYERPRECAST.COM
 EQUIVALENT FROM OTHER MANUFACTURERS CAN BE SUBSTITUTED.

SIGNATURE AND SEAL ARE FOR SEPTIC PROFILE AND CALCULATIONS ONLY. TANK AND DETAILS WERE NOT DESIGNED OR REVIEWED BY THE ENGINEER.

NO.	DATE	REVISION

BENCHMARK ENGINEERING, INC.
 ENGINEERS LAND SURVEYORS PLANNERS
 8480 BALTIMORE NATIONAL PIKE SUITE 315 • ELLICOTT CITY, MARYLAND 21043
 (P) 410-465-6105 (F) 410-465-6644
 WWW.BE-CIVILENGINEERING.COM

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. 43577, Expired 07/06-08-2018.

OWNER:
 ELM THREE LLC
 C/O MARTIN TICAR
 4994 WINDPOWER WAY
 ELLICOTT CITY, MD 21043
 443-878-2361
 MTICARELM@GMAIL.COM

7156 MINK HOLLOW ROAD
 HIGHLAND, MD 20777

TAX MAP: 40, GRID: 11, PARCEL: 11
 ZONED: RC-DEO
 ELECTION DISTRICT NO. 5 - HOWARD COUNTY, MARYLAND
 ACCOUNT ID: 05-362733

SEPTIC PERMIT PLAN

DATE: NOVEMBER, 2017
 DESIGN: JC DRAFT: JC

BEI PROJECT NO. 2864
 SCALE: 1" = 30'
 SHEET 1 OF 1

BENCHMARK

ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS

ENGINEERING, INC.

8480 Baltimore National Pike • Suite 315 • Ellicott City, Maryland 21043
410-465-6105 410-465-6644 (Fax)

LETTER OF TRANSMITTAL

DATE	11/2/17	PROJECT No.	7864
ATTENTION	Hank Oswald		
RE:	7156 Mink Hollow Rd		
	Per Cert &		
	Septic Plan		

TO: Health

WE ARE SENDING YOU Attached Under separate cover via _____ the following items

Photocopies Prints Originals Samples
 Specifications Invoices Change Order Other _____

COPIES of	No. of SHEETS	DESCRIPTION
3	1	Per Cert Plan
3	1	Septic Permit Plan

THESE ARE TRANSMITTED as checked below

- For Comment For your use For Approval
 For Review As requested Other _____

REMARKS: House has 4 existing bedrooms.
Had to specify Traffic Bearing Tank
due to depth.

COPY TO: _____
RECEIVED BY: [Signature]
If enclosures are not as noted, kindly notify us at once.

SIGNED: [Signature]



Christopher A. Malagari, P.E., President
Donald A. Mason, P.E., L.S., Vice President

Ellicott City, MD
410-465-6105 301-371-3505
410-465-6644 FAX

November 13, 2017

Hank Oswald
Howard County Health Department
Well and Septic Program
8930 Stanford Blvd.
Columbia, MD 21046

Re: Septic Site Plan
Percolation Certification Plan
7156 Mink Hollow Road
Revised Plan Submissions

Dear Mr. Oswald:

This letter is in response to your email comments dated November 3, 2017 on the above mentioned property. The following is a point by point response:

1. Three systems are shown on the Septic Permit Plan.
2. The 10' setback is shown to the drywell.
3. The proposed Septic Tank is shown on the Septic Permit Plan. The 20' setback to the house is shown.
4. The note regarding the existing well location is included in the general notes as note #6..
5. Note 6 has been deleted as requested.
6. The ring rink/patio area is excluded from the Sewage Disposal Area. The 5' dimension to the deck is shown.
7. The 10' setback distances to the shed and to the property line are shown.

Additional comments from your email dated November 6, 2017 were also addressed.

Should you have any additional questions or concerns please do not hesitate to contact me.

Sincerely,

John M. Carney, P.E.
Project Manager