

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: 12/6/21 **ONSITE SEWAGE DISPOSAL SYSTEM** P 570868

APPROVAL DATE: 1/19/22 **PERMIT: CONSTRUCTION** A _____

PROPERTY ADDRESS: 7151 Mink Hollow Road

SUBDIVISION: Francisco Property LOT: _____ TAX ID: _____

CONTRACTOR: Hatfields Equipment EMAIL: ken@hatfieldsequipment.com

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

PROPERTY OWNER: Columbia Builders Group, LLC EMAIL: igreenfield@columbiabuilders.com

OWNER ADDRESS: 10715 Little Patuxent Parkway, Suite 150 PHONE: 410-703-3939

SEPTIC TANK SIZE (GALLONS): 2000 TANK MANUFACTURER: Mayer Bros

PUMP MODEL: _____ PUMP SIZE _____ PUMP TANK CAPACITY: _____

DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 6 APPLICATION RATE: 1.2

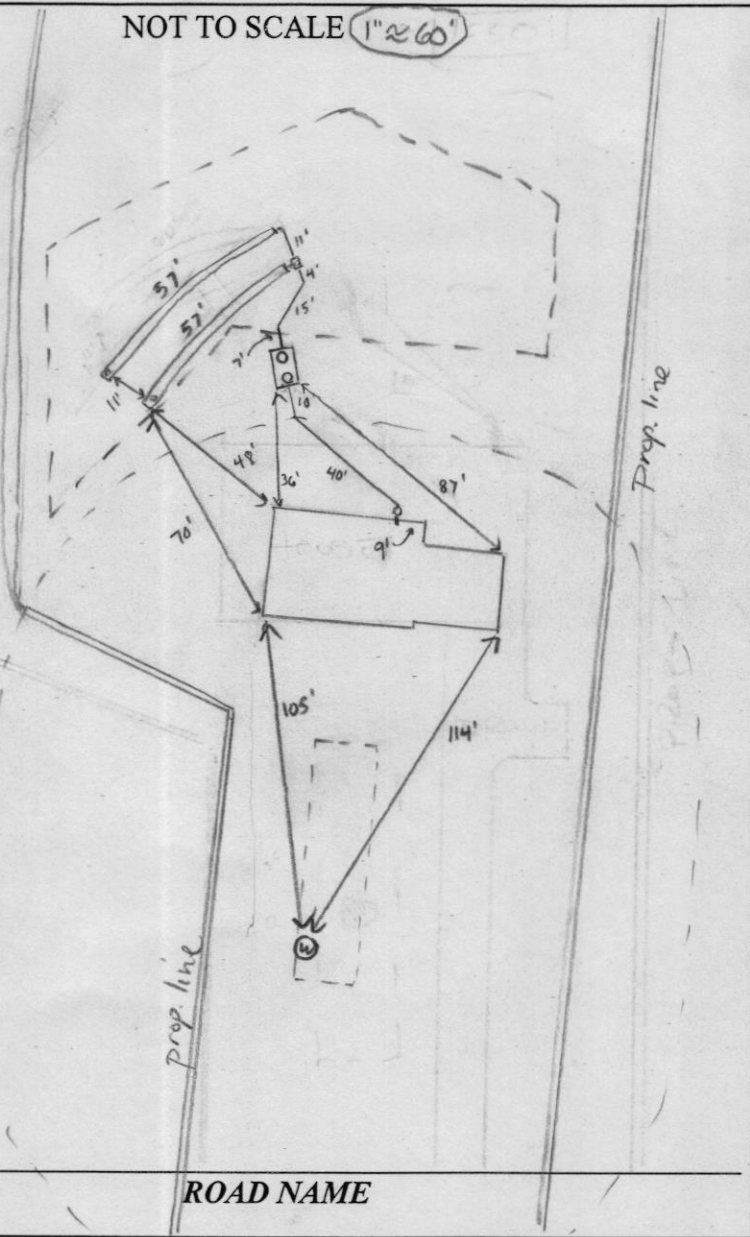
TRENCHES:	LINEAR FEET REQUIRED: <u>112.5</u>	INLET DEPTH: <u>3</u>
	TRENCH WIDTH: <u>9</u>	MAXIMUM BOTTOM DEPTH: <u>8</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>3.5</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:		

ISSUED BY: Dana Bernard ISSUE DATE: 12/6/21 EXPIRATION DATE: 12/6/22

- 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 TANKS REQUIRED
- NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE AT LEAST 100 FEET DOWNGRADIENT 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
 ELECTRICAL PERMIT ISSUED E N.A.
- 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 1" = 60'



TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	3.5'	7'
NUMBER OF TRENCHES		2
TOTAL LENGTH		114'
ABSORPTION AREA		342 sq ft + sidewall
DISTRIBUTION BOX LEVEL		yes
DISTRIBUTION BOX BAFFLE		concrete
DISTRIBUTION BOX PORT		PVC

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL yes
 MANUFACTURER Babylon
 CAPACITY 2000 GAL
 SEAM LOC top
 TANK LID DEPTH 2'
 BAFFLES inlet + outlet
 BAFFLE FILTER -
 MANHOLE LOC inlet + outlet
 6" PORT LOC -
 WATERTIGHT TEST -
 SLOTTED yes
 DATE ON LID 11-16-21

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:

01/04/2022 LAID OUT TANK LOC. SNOW + FILL - LAY OUT TRS @
TANK SETTING. (ST)
 01/19/22 Laid out 2x57' trenches on same side of SDA to avoid strange
 contour on garage side of SDA.

INSTALLATION:

1/19/22 Tank set and ST constructed. D-box set and leveled,
 2x57' trenches installed. (ST)

FINAL INSPECTOR

Ausa Thomas

DATE OF APPROVAL

11/19/22

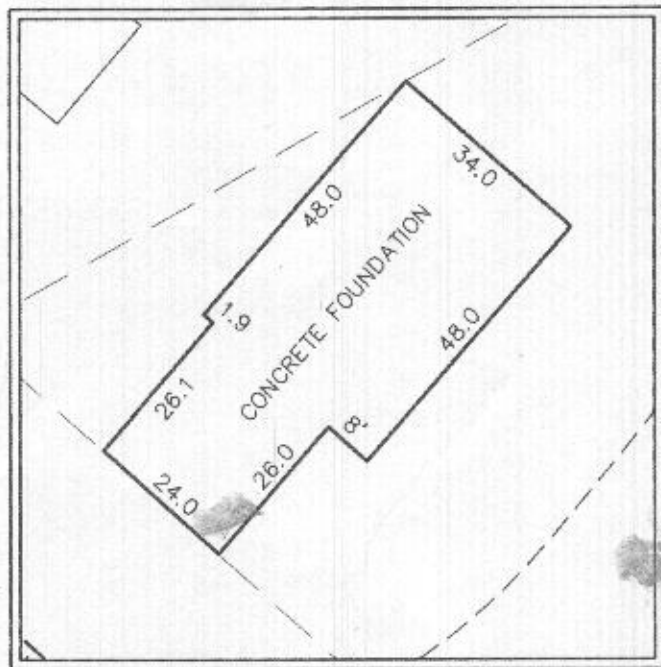
1. THIS IS NOT A BOUNDARY SURVEY.
2. THIS DRAWING WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT
3. BEARINGS SHOWN HEREON ARE BASED ON RECORD PLAT DATUM (NAD27).
4. DIMENSION SHOWN FROM THE BUILDINGS TO THE PROPERTY LINE ARE AT AN ACCURACY OF 0.1' (PLUS OR MINUS)
5. THE INFORMATION SHOWN HAS BEEN ESTABLISHED BY CURRENT ACCEPTABLE SURVEY PROCEDURES AND FROM AVAILABLE RECORD INFORMATION. THIS DRAWING IS TO BE USED FOR TITLE TRANSFER FINANCING, OR REFINANCING ONLY AND IS NOT TO BE USED FOR THE ESTABLISHMENT OF PROPERTY LINES, LOCATION OF FENCES, GARAGES, BUILDINGS, OR OTHER EXISTING OR FUTURE IMPROVEMENTS.
6. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROPERTY LINE SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 574, EXPIRATION DATE: 03/21/23.

Gary E. Lane

11/24/21

DATE

GARY E. LANE
PROP. LINE SURVEYOR MARYLAND No. 574



HOUSE DETAIL (SCALE: 1" = 30')

TAX MAP 40
PARCEL 409
L. 6199 F. 473

TAX MAP 40
PARCEL 14
L. 5218 F. 311
3.00 AC.

ADDRESS: 7151 MINK HOLLOW ROAD
DEED REF.: 20233 / 495
TOP OF WALL ELEV. = 453.6 ±
FIRST FLOOR ELEV. = N/A
(DRAWING SIZE = 11" x 17")

N36° 31' 34"E 110.40'
MINOR COLLECTOR
MINK HOLLOW ROAD

N60° 36' 44"E 73.56'
100'
S46° 37' 26"E 280.66'
FENCE

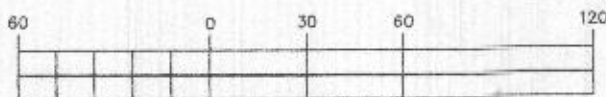


30.1' AND 30' BRL
200' LOT WIDTH
SEE DETAIL
114'
30.1'
N48° 37' 26"W 787.95'
FENCE
304.6'

TAX MAP 40
PARCEL 48
L. 334 F. 277

*Wall Check
OK
12-6-21
GEL*

GRAPHIC SCALE



(IN FEET)
1 inch = 60 ft

**TAX MAP 40 PARCEL 14
FRANCISCO PROPERTY**

FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

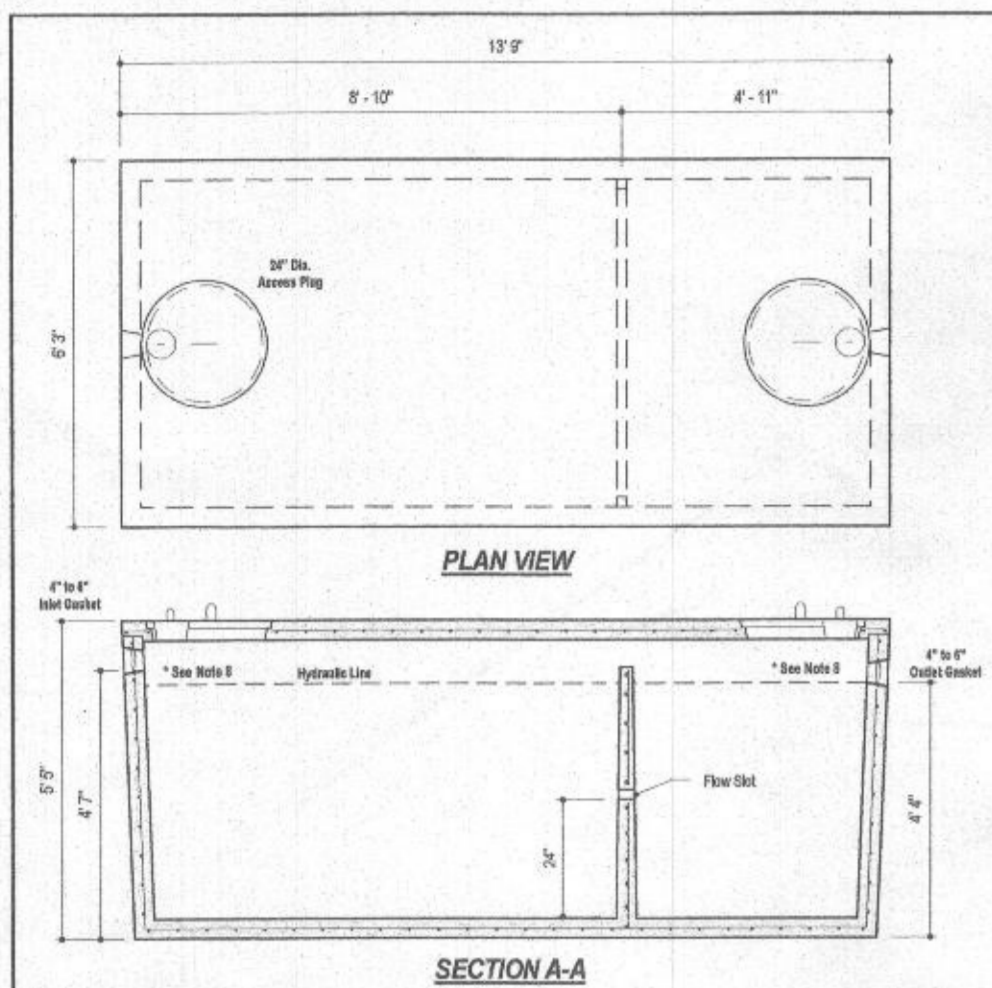
**MILDENBERG
BOENDER, & ASSOC., INC.**

Engineers Planners Surveyors
7350-B Grace Drive, Columbia, MD 21044 (410) 997-0296 TEL. (410) 997-0298 FAX

FOUNDATION	DATE: 11/16/21	FINAL LOCATION	DATE: N/A
DRAWN BY: MES	CHECKED BY: GEL	SCALE: 1" = 60'	
PROJECT NO.: 20-013	LOCATION DRAWING		

SOILS TABLE

SYMBOL	RATING	NAME	K FACTOR	SOIL MAP #
GgB	(B)	GLENELG LOAM, 3-8% SLOPES.	.37	
GnB	(C)	GLENVILLE-BAILE SILT LOAMS, 0-8% SLOPES	.43	
MaC	(B)	MANOR LOAM, 8-15% SLOPES.	.32	
MaD	(B)	MANOR LOAM, 15-25% SLOPES.	.32	



DESIGN DATA & GENERAL NOTES

- 1) Construct trench 12" x 12" x 12" @ 12" max. Density = 100 pcf.
- 2) Construct trench 12" x 12" x 12" @ 12" max. Density = 100 pcf.
- 3) Manufacture & position per ASTM D 2000-01 C 400-01.
- 4) Reinforcing per ASTM A 601, No. 10, 12" max.
- 5) Do not install with any pipe joints.
- 6) 12" x 12" x 12" @ 12" max. Density = 100 pcf.
- 7) 12" x 12" x 12" @ 12" max. Density = 100 pcf.
- 8) 12" x 12" x 12" @ 12" max. Density = 100 pcf.

MBI Mayer Bros., Inc.
 1524 River Road
 Ellicott City, Maryland 21119
 Tel: 410.786.1424
 Fax: 410.786.1425
 www.mayerbros.com

2,000 GALLON SEPTIC TANK
 2-Compartment
 Stock Item (Approx. 19,900 lbs)
 Dep. No. 2000-02 No Scale Aug 11, 2008

SEPTIC TANK

SEWER SYSTEM ELEVATIONS

DESCRIPTION	ELEVATION
BASEMENT ELEVATION	444.83
INVERT OUT OF THE HOUSE	442.33
INVERT INTO SEPTIC TANK	437.67
INVERT OUT OF SEPTIC TANK	437.41
FINISHED GRADE AT SEPTIC TANK	441.0
TOP OF THE SEPTIC TANK	438.5
INVERT INTO DISTRIBUTION BOX	434.67

SEPTIC TRENCH ELEVATIONS

TRENCH	EX. GROUND ELEVATION	INVERT ELEVATION	BOTTOM OF TRENCH EL.
PRIMARY A	438.0	434.5	431.0
PRIMARY B	438.0	434.5	431.0
SECONDARY A	436.0	432.5	429.0
SECONDARY B	436.0	432.5	429.0
TERTIARY A	434.0	430.5	427.0
TERTIARY B	434.0	430.5	427.0

SEPTIC TRENCH SIZING

SYSTEM	APPLICATION RATE (GPD / SF)	MAXIMUM FLOW RATE (GPD)	AREA OF REQUIRED TRENCH (SF)	LENGTH OF TRENCH (FT)	EFFECTIVE DEPTH (FT)	TRENCH BOTTOM DEPTH (FT)	TRENCH REDUCTION FACTOR**	ADJUSTED LENGTH OF REQUIRED TRENCH (LF)	MINIMUM SPACING (FT)	NUMBER OF TRENCHES	PROVIDED TRENCH LENGTH (FT)	
PRIMARY	1.2	900	750	3	250.0	3.5	7.0	0.45	112.5	10.0'	2	57.0'
SECONDARY	1.2	900	750	3	250.0	3.5	7.0	0.45	112.5	10.0'	2	57.0'
TERTIARY	1.2	900	750	3	250.0	3.5	7.0	0.45	112.5	10.0'	2	57.0'

DEVELOPER

JIM GREENFIELD
 COLUMBIA BUILDERS INC. PO
 BOX 999 COLUMBIA, MD
 21044
 443-324-4732

APPROVED FOR PRIVATE WATER AND PRIVATE SEPTIC
 HOWARD COUNTY HEALTH DEPARTMENT



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. 26859, EXP. DATE 08/0/21

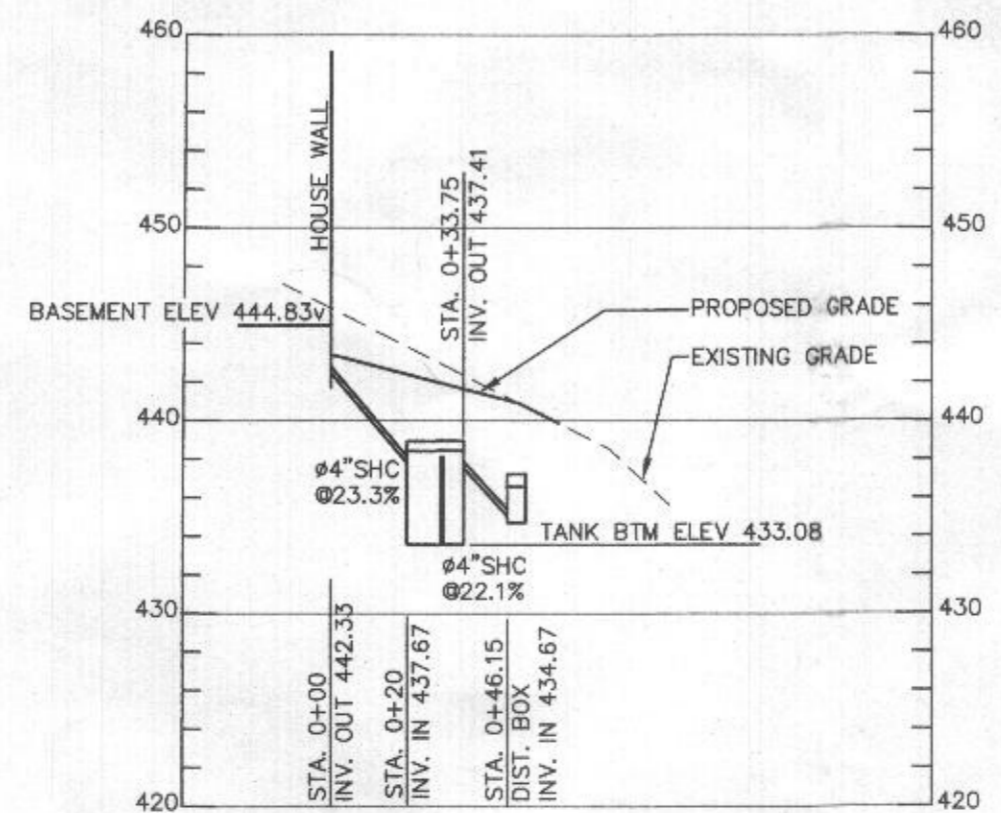
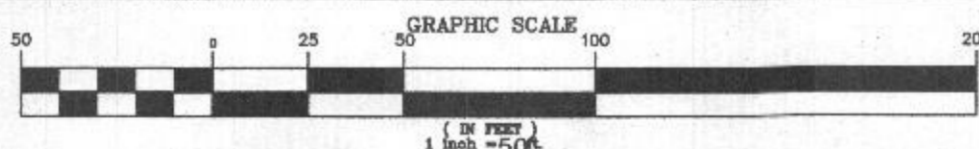
SAMER A. ALOMER P.E.

7/16/2020

DATE:

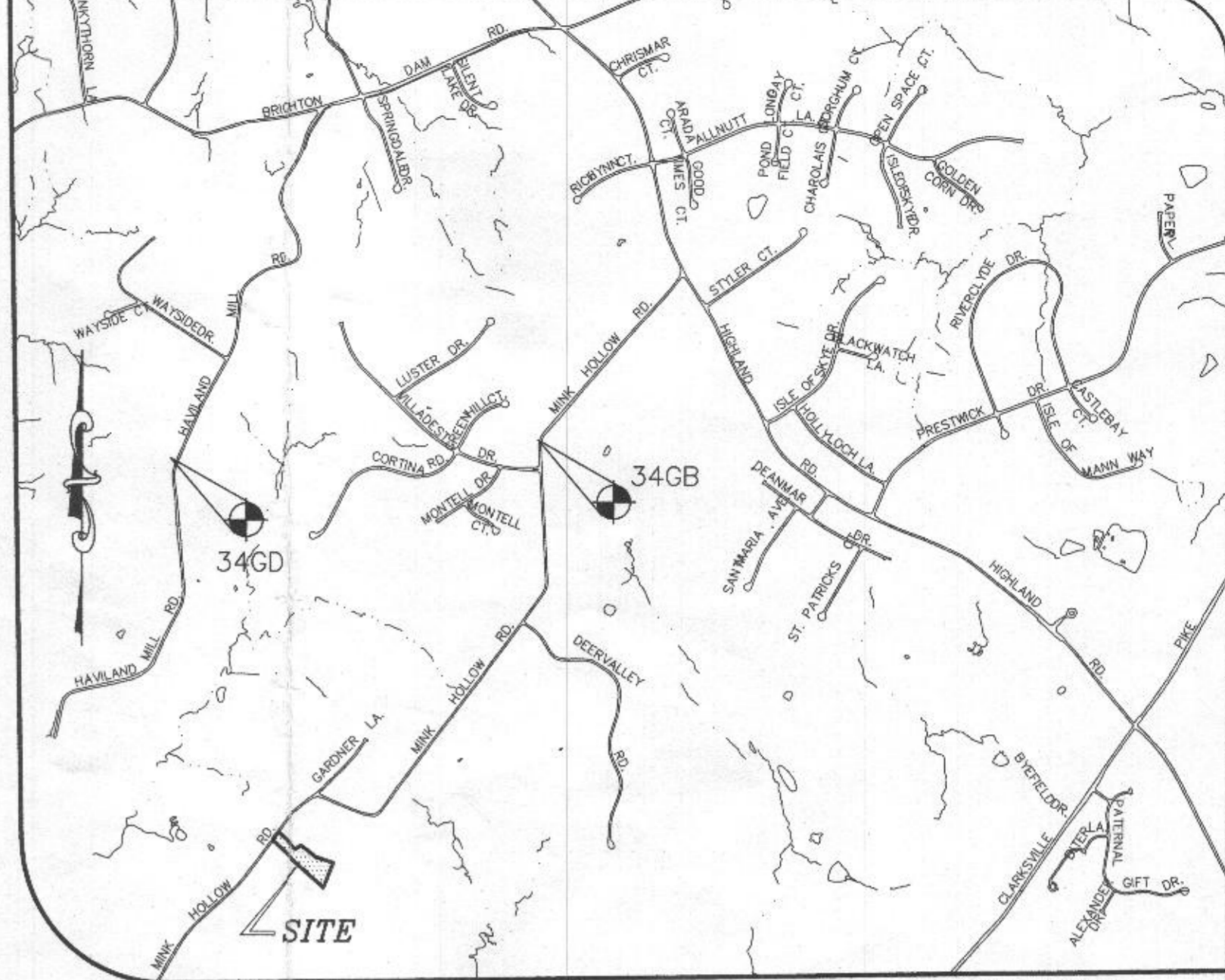


ON-SITE SEWAGE DISPOSAL SYSTEM PLAN



SEPTIC TANK PROFILE

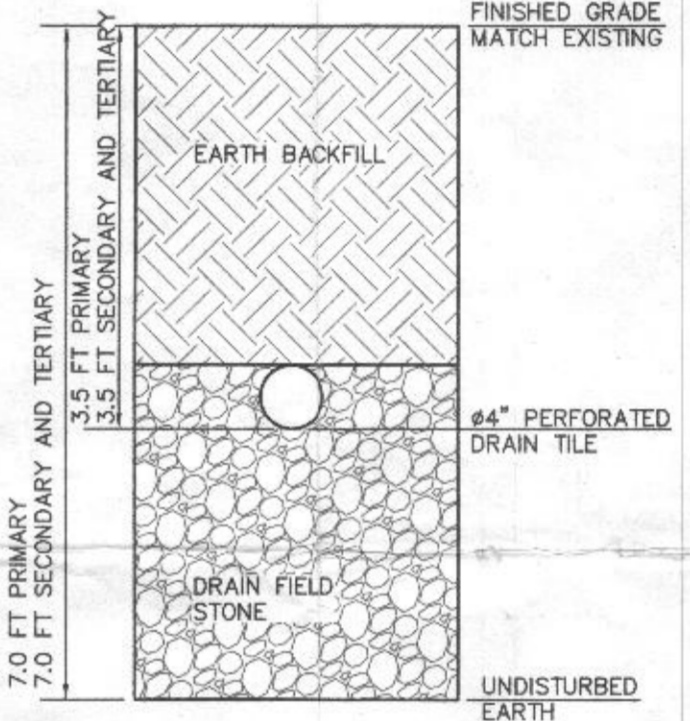
1" = 50 FT HORIZONTAL, 1" = 10 FT VERTICAL



VICINITY MAP

SCALE: 1" = 2000'

Approved Septic System Plan
 Howard County Health Department
 Signature: *Bernad B-H 2*
 Date: _____



TRENCH DETAIL

NOT TO SCALE

LEGEND

- ⊕ PASSED TEST PIT
- ⊙ PROPOSED WELL LOCATION
- ▨ POTABLE WATER WELL ZONES
- ▧ GREATER THAN 24.99% SLOPES

WELL CERTIFICATION

THE PROPOSED WELL IS ACCURATELY SHOWN ON THIS PLAN.

ON-SITE SEWAGE DISPOSAL SYSTEM:

RESIDENTIAL SYSTEM DESIGN:
 6 BEDROOM HOUSE (LIVING AREA=3,500 SQ.FT.)
 150 GALLONS X # OF BEDROOMS = VOLUME OF WASTEWATER /DAY
 150 X 6 = 900 GPD

PRIMARY SYSTEM:

PERC RATE = 2-5 MINUTES/INCH
 APPLICATION RATE = 1.2 GPD/SQ.FT.
 DESIGN FLOW + APPLICATION RATE = SQ.FT. OF TRENCH REQUIRED
 900 ÷ 1.2 = 750 SQ.FT.
 SQ.FT. REQUIRED + WIDTH OF TRENCH = LENGTH OF TRENCH
 750 + 3.0' = 250 FT
 USE 42" OF GRAVEL BELOW DRAIN PIPE
 250 X 0.45 = 112.5
 USE TWO (2) REQUIRED LENGTH OF TRENCHES (56.25'). PROVIDE (57')
 A MINIMUM OF 10' BETWEEN TRENCHES UTILIZING SIDEWALL
 REDUCTION CREDIT.
 MINIMUM TANK CAPACITY = 2000 GALLONS
 USE MAYER BROS. PRODUCT OR EQUIVALENT.

SECONDARY SYSTEM:

PERC RATE = 2-5 MINUTES/INCH
 APPLICATION RATE = 1.2 GPD/SQ.FT.
 DESIGN FLOW + APPLICATION RATE = SQ.FT. OF TRENCH REQUIRED
 900 ÷ 1.2 = 750 SQ.FT.
 SQ.FT. REQUIRED + WIDTH OF TRENCH = LENGTH OF TRENCH
 750 + 3.0' = 250 FT
 USE 42" OF GRAVEL BELOW DRAIN PIPE
 250 X 0.45 = 112.5 USE TWO (2) TRENCHES (57').
 A MINIMUM OF 10' BETWEEN TRENCHES UTILIZING SIDEWALL
 REDUCTION CREDIT.

TERTIARY SYSTEM:

PERC RATE = 2-5 MINUTES/INCH
 APPLICATION RATE = 1.2 GPD/SQ.FT.
 DESIGN FLOW + APPLICATION RATE = SQ.FT. OF TRENCH REQUIRED
 900 ÷ 1.2 = 750 SQ.FT.
 SQ.FT. REQUIRED + WIDTH OF TRENCH = LENGTH OF TRENCH
 750 + 3.0' = 250 FT
 USE 42" OF GRAVEL BELOW DRAIN PIPE
 250 X 0.45 = 112.5 USE TWO (2) TRENCHES (57').
 A MINIMUM OF 10' BETWEEN TRENCHES UTILIZING SIDEWALL
 REDUCTION CREDIT.

GENERAL NOTES:

1. THE SUBJECT PROPERTY IS ZONED RR-DEO PER THE 10/06/2013 COMPREHENSIVE ZONING PLAN.
2. **PROPERTY BACKGROUND:**
 ADDRESS: 7151 MINK HOLLOW ROAD, HIGHLAND, MD. 20777
 TAX MAP 40 - PARCEL 14
 ELECTION DISTRICT : 5TH
 AREA : 3.00± ACRES
3. PROJECT BOUNDARY IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT MAY, 2020 BY MILDENBERG, BOENDER & ASSOC.
4. TOPOGRAPHY SHOWN HERE WAS FIELD VERIFIED BY MILDENBERG, BOENDER & ASSOC, INC. IN MAY 2020 TO ACCURATELY REPRESENT THE RELATIVE CHANGES ON THE SUBJECT PROPERTY.
5. HORIZONTAL AND VERTICAL DATUMS ARE RELATED TO THE MARYLAND STATE PLANE COORDINATE SYSTEM AS PROJECTED FROM HOWARD COUNTY CONTROL STATIONS NO. 15FC & 15FD
 STA. No. 34 GB: N 553,966.730; E 1,317,752.578; EL. 505.048
 STA. No. 34 GD: N 553,733.738; E 1,313,736.647; EL. 465.294
6. 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.
7. THE MAXIMUM EARTH COVER OVER THE SEPTIC TANK IS THREE (3) FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
8. WELL LOCATIONS SHOWN ARE BASED ON HEALTH DEPARTMENT RECORDS VERIFIED BY PRIVATE VISIT.
9. PRIVATE WELL AND SEPTIC WILL BE UTILIZED.
10. SEPTIC TANKS AND DRAIN FIELD SHOWN IS BASED ON DATA PROVIDED BY HOWARD COUNTY HEALTH DEPARTMENT.
11. ANY CHANGES TO THE LOCATION OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED PLAN MAY BE REQUIRED.
12. ALL TRENCHES ARE FED BY GRAVITY FROM THE DISTRIBUTION BOX.

THIS AREA DESIGNATES A PRIVATE SEWERAGE AREA 10,000 SQ. FT. AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE 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. RECOVERSION OF A MODIFIED EASEMENT SHALL NOT BE NECESSARY.

project	date	20-013	JUL 2020
illustration	engineering	DAM	SA
score	approval	SA	SA

no.	description	date
	revisions	

MINK HOLLOW ROAD PROPERTY
 TAX MAP 40 - PARCEL 14
 FIFTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
ON-SITE SEWAGE DISPOSAL SYSTEM

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 7850B GRACE DRIVE, COLUMBIA, MD 21044
 (410) 997-0296 Ball. (410) 997-0298 Fax.