

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.orgFacebook: www.facebook.com/hocohealth**Maura J. Rossman, M.D., Health Officer**RECEIPT DATE: 4-2-21 **ONSITE SEWAGE DISPOSAL SYSTEM**P 508830APPROVAL DATE: 5/13/21 **PERMIT: CONSTRUCTION**

A _____

PROPERTY ADDRESS: 1409 HERITAGE RIDGE ROAD, WOODBINE, MD 21797SUBDIVISION: LINDEN GROVE, PHASE 1LOT: 14

TAX ID:

04-601893CONTRACTOR: CHAVIS ENTERPRISES & SEPTIC SERVICES, LLCEMAIL: Ryan@chavisenterprises.comCONTRACTOR ADDRESS: 23 EAST ELLENDALE, BELL AIR, MD 21014PHONE: (410)838-3007PROPERTY OWNER: TOLL MID-ATLANTIC LP COMPANY, INCEMAIL: Sriley1@tollbrothers.comOWNER ADDRESS: 250 GIBRALTER ROAD, HORSHAM, PA 19044PHONE: (410)381-3271SEPTIC TANK SIZE (GALLONS): 2000

TANK MANUFACTURER:

Back River Pre-Cast, LLCPUMP MODEL: n.a.

PUMP SIZE

n.a.

PUMP TANK CAPACITY:

n.a.

DISTRIBUTION SYSTEM:



GRAVITY



PRESSURE DOSED

BEDROOMS: 6

APPLICATION RATE:

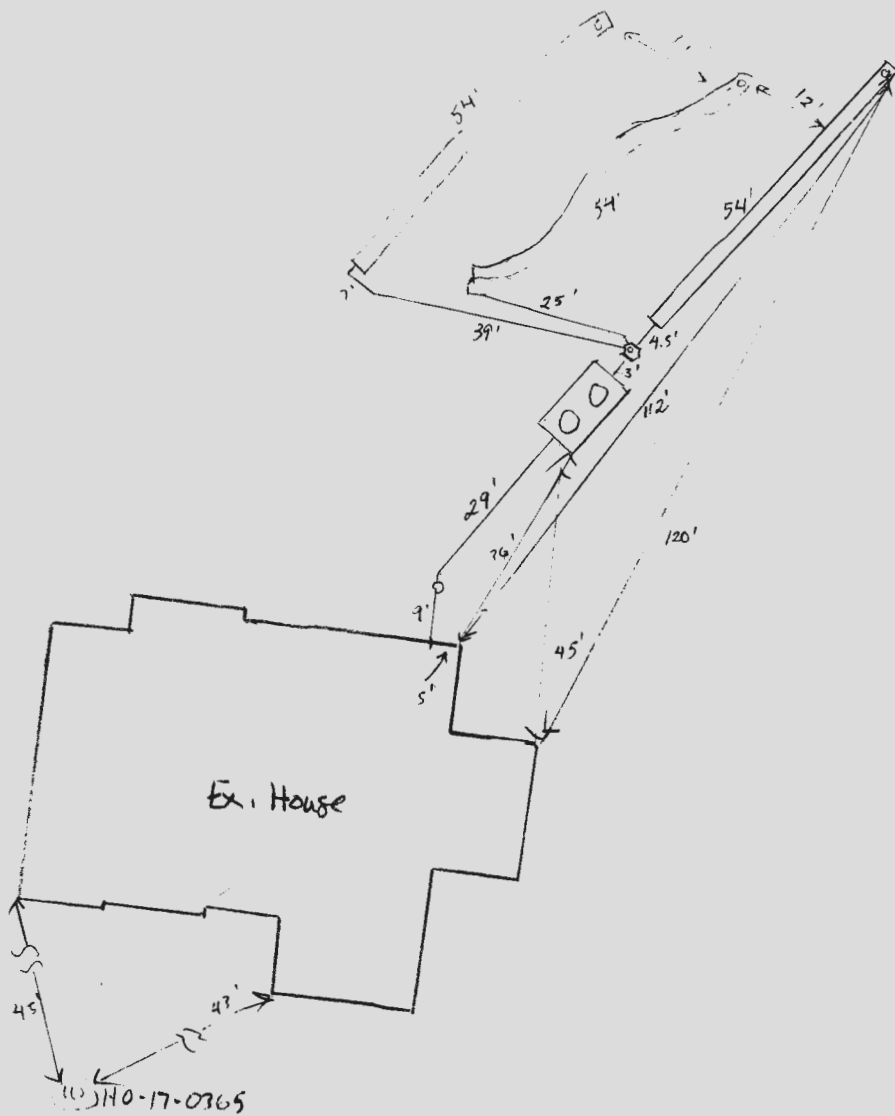
0.8

TRENCHES:	LINEAR FEET REQUIRED: <u>158</u>	INLET DEPTH: <u>4.0</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>8.0</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>11</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>4.0</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:	INSTALL CLEANOUT AT BEND IN SHC.	

ISSUED BY: R BRICKERISSUE DATE: 4-2-21EXPIRATION DATE: 4-2-22**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.**

1409 Heritage Ridge Rd

NOT TO SCALE 1" = 30'



ROAD NAME

Heritage Ridge Rd

TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	4'	8'
NUMBER OF TRENCHES		3
TOTAL LENGTH		162'
ABSORPTION AREA		486 sq ft
DISTRIBUTION BOX LEVEL		yes
DISTRIBUTION BOX BAFFLE		yes
DISTRIBUTION BOX PORT		yes

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL	yes
MANUFACTURER	Babylon
CAPACITY	2000 GAL
SEAM LOC	top
TANK LID DEPTH	15.5'
BAFFLES	inlet + outlet
BAFFLE FILTER	-
MANHOLE LOC	inlet + outlet
6" PORT LOC	-
WATERTIGHT TEST	✓
SLOTTED	yes
DATE ON LID	5-5-21

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:

4/27/21 SDA not staked (ST) 5/4/21 3 x 52' trenches staked out on contour. SL confirmed to be coming out of house in expected location - yard has been graded down to level of basement floor, tank stake is 1' higher in elevation than basement floor as expected (S)

INSTALLATION:

5/12/21 Tank set. SL constructed. Trenches constructed. D-box set + leveled. (Water leaking from one exit. Re-insp for d box water leak (S) 5/13/21 - d box repaired no leak detected, levels set. OK to backfill. (R))

FINAL INSPECTOR

R. Rappaport

DATE OF APPROVAL

5/13/21

HOUSE OPTIONS:

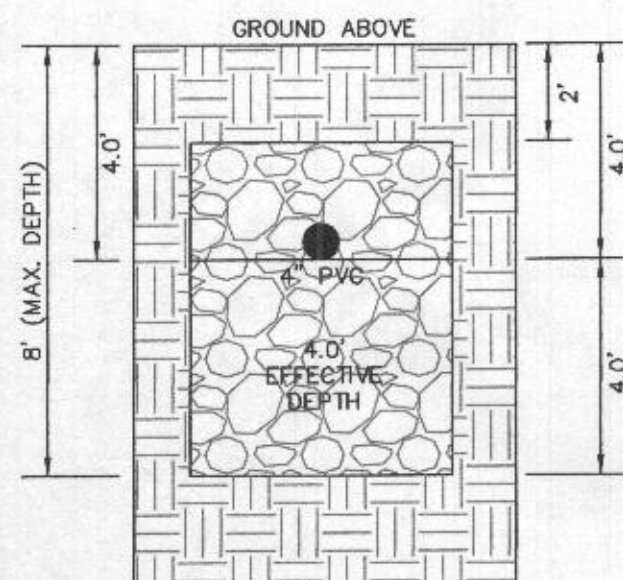
HOUSE TYPE: RIDGEVIEW (TRADITIONAL)

- FINISHED LOWER LEVEL
- WALK-OUT BASEMENT
- ADD'L 1' TO BSMT FOUNDATION WALLS
- ADDITIONAL BATH
- OPTIONAL BATH FOR FINISHED LOWER LEVEL
- WET BAR FOR FINISHED LOWER LEVEL
- MEDIA ROOM FOR FINISHED LOWER LEVEL
- ADD'L ONE CAR FRONT ENTRY GARAGE - 14'
- WALK-OUT LUXURY COVERED DECK
- EXTRA DECKING

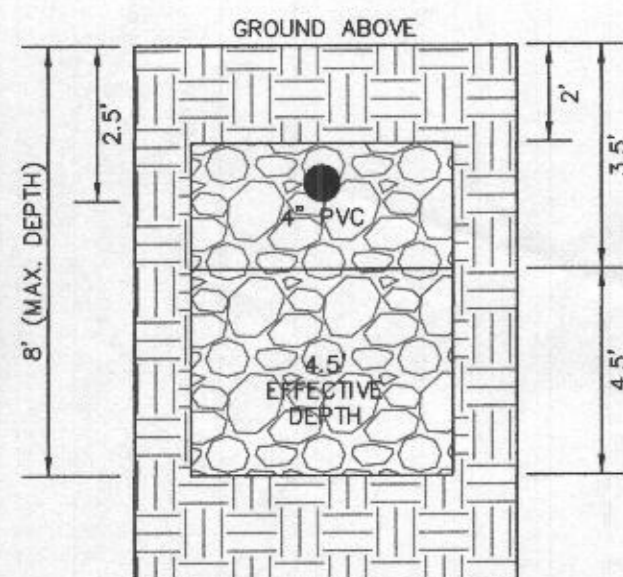
- OPTION NO. 013
- OPTION NO. 017
- OPTION NO. 070
- OPTION NO. 367
- OPTION NO. 383
- OPTION NO. 561
- OPTION NO. 562
- OPTION NO. 263102
- OPTION NO. 263169
- OPTION NO. 90014004

INITIAL TRENCH DATA:

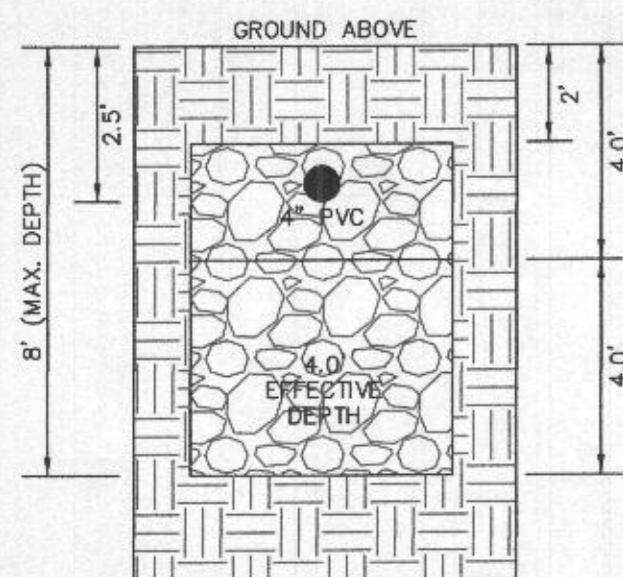
- BOTTOM MAX. DEPTH (8')
- TRENCH 1 (T1): 52.50 LF.**
GROUND ABOVE = 570.60'
INV. IN = 566.60'
BOTTOM TRENCH = 562.60'
- TRENCH 2 (T2): 52.50 LF.**
GROUND ABOVE = 570.20'
INV. IN = 566.20'
BOTTOM TRENCH = 562.20'
- TRENCH 3 (T3): 52.50 LF.**
GROUND ABOVE = 569.30'
INV. IN = 565.30'
BOTTOM TRENCH = 561.30'



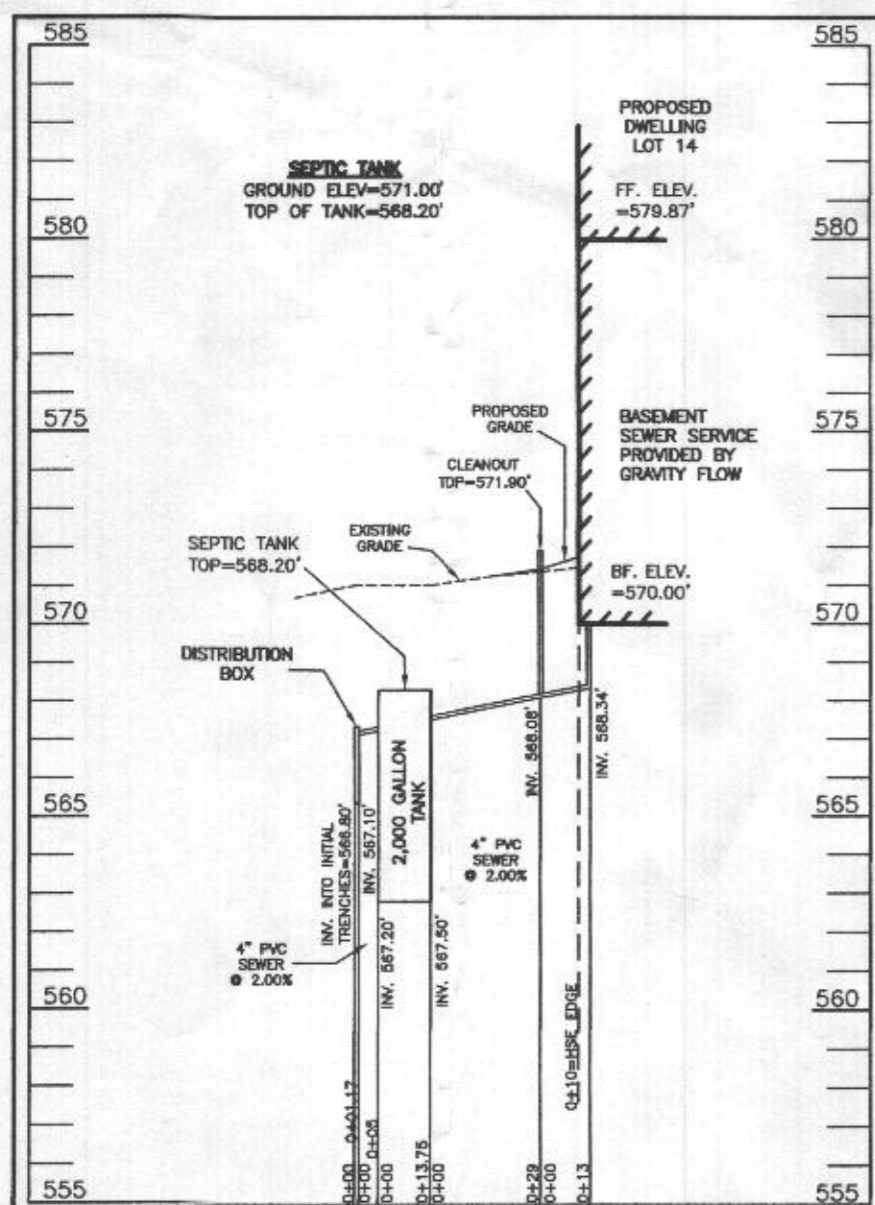
INITIAL SYSTEM TRENCH DETAIL (T1), (T2) & (T3) (NOT TO SCALE)



1ST REPLACEMENT SYSTEM TRENCH DETAIL (T4) AND (T5) (NOT TO SCALE)



2ND REPLACEMENT SYSTEM TRENCH DETAIL (T6) AND (T7) (NOT TO SCALE)

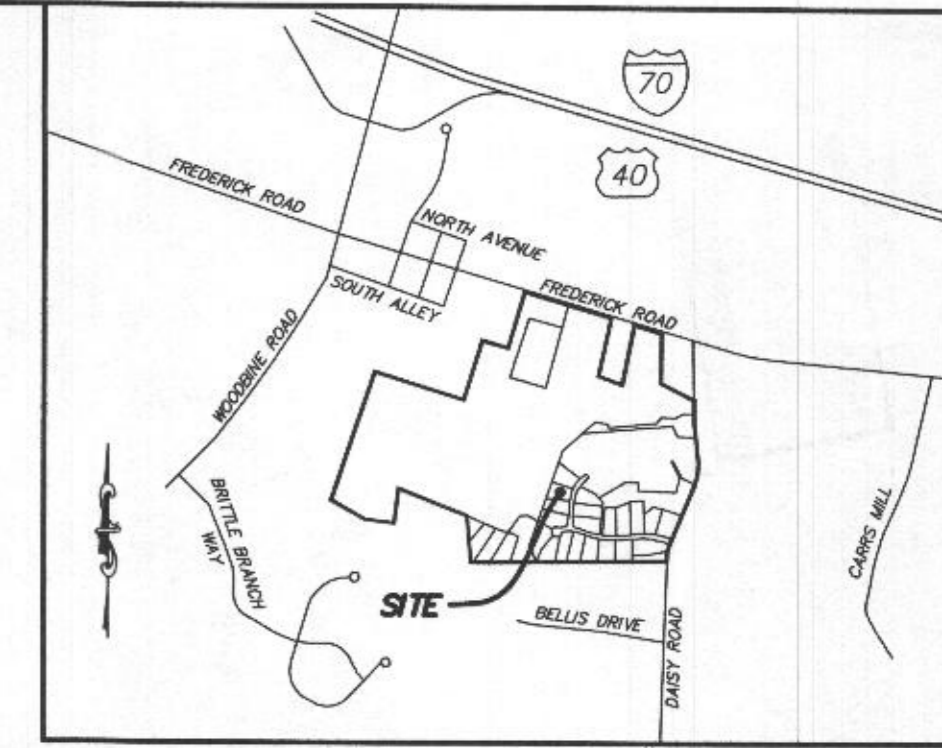


SEPTIC SYSTEM PROFILE SCALE = HORIZONTAL: 1"=50' VERTICAL: 1"=5'

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21328, EXPIRATION DATE 1/8/23.



- LEGEND:**
- BRL BUILDING RESTRICTION LINE
 - T.W. WELL LOCATION
 - G.F. GARAGE FLOOR
 - B.F. BASEMENT FLOOR
 - PA. PASSED PERC LOCATION
 - FA. FAILED PERC LOCATION
 - SEPTIC RESERVE AREA
 - W.B.A. WELL BOX AREA
 - P.T. PROPOSED TREE
 - F.T. FAILED TREE



VICINITY MAP 1" = 1000'

GENERAL NOTES:

1. THESE AREAS DESIGNATE A PRIVATE SEWAGE AREA OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWAGE IS AVAILABLE. THESE AREAS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT VARIANCES FOR ENCROACHMENTS UNTO THE PRIVATE SEWAGE AREA. RECORDATION OF A MODIFIED SEWAGE AREA SHALL NOT BE NECESSARY.
2. EXISTING WELLS, SEPTIC SYSTEMS, AND SEWAGE DISPOSAL AREAS WITHIN 100' OF THE PROPERTY AND THOSE WELLS WITHIN 200' DOWN GRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS OR SEWAGE DISPOSAL AREAS HAVE BEEN SHOWN.
3. ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
4. BUILDING SETBACKS (B.R.L.'s) SHOWN HEREON PER SITE DEVELOPMENT PLAN SETBACK DISTANCES SHOWN HEREON AS "±" HAVE AN ACCURACY OF ±0.1' FOOT.
5. ANY CHANGES 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.
6. THE MAXIMUM EARTH COVER OVER THE TANK IS THREE (3) FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
7. THE LOT SHOWN HEREON COMPLIES WITH THE MINIMUM OWNERSHIP, WIDTH, AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
8. THE EXISTING TOPOGRAPHY SHOWN HEREON IS FROM HOWARD COUNTY GIS, 2' CONTOUR INTERVAL AND FIELD VERIFIED BY FISHER, COLLINS AND CARTER, INC.



Approved Septic System Plan
Howard County Health Department
2000-gal Septic Tank
To Gravity Distribution
for 6-Bedroom SFD
R. B. [Signature]
3/29/2021
Date

SEWAGE DISPOSAL SYSTEM DATA (6 BDRM)

- PROPOSED INVERT AT FOUNDATION WALL: 568.34'
1. EX. GRADE OVER TANK: 571.00'
PROPOSED GRADE OVER TANK: 571.00'
INVERT IN: 567.50' INVERT OUT: 567.20'
 2. DISTRIBUTION BOX
EXISTING GRADE OVER TANK: 570.80'
PROPOSED GRADE OVER TANK: 570.80'
INVERT IN: 567.10' INVERT OUT: 566.80'
 3. INITIAL TRENCH DESIGN (6 BDRM x 150 GPD/BDRM = 900 GPD)
900 GPD ÷ 0.8 APP. RATE = 1,125 SF
USE 3' WIDE TRENCH WITH 48" GRAVEL BELOW PIPE
11' MIN. SPACING BETWEEN TRENCH EDGES
1,125 SF ÷ 3' WIDTH = 375 LF x 0.42 (SIDEWALL REDUCTION) = 157.50 LF MIN.
USE 3 52.50' LONG TRENCHES = 157.50 LF
 4. 1ST REPLACEMENT TRENCH DESIGN (6 BDRM x 150 GPD/BDRM = 900 GPD)
900 GPD ÷ 1.2 APP. RATE = 750 SF
USE 3' WIDE TRENCH WITH 60" GRAVEL BELOW PIPE
12' MIN. SPACING BETWEEN TRENCH EDGES
750 SF ÷ 3' WIDTH = 250 LF x 0.38 (SIDEWALL REDUCTION) = 95 LF MIN.
USE 2 47.50' LONG TRENCHES = 95 LF
 5. 2ND REPLACEMENT TRENCH DESIGN (6 BDRM x 150 GPD/BDRM = 900 GPD)
900 GPD ÷ 0.8 APP. RATE = 1,125 SF
USE 3' WIDE TRENCH WITH 60" GRAVEL BELOW PIPE
11' MIN. SPACING BETWEEN TRENCH EDGES
1,125 SF ÷ 3' WIDTH = 375 LF x 0.42 (SIDEWALL REDUCTION) = 157.50 LF MIN.
USE 2 78.75' LONG TRENCH = 157.50 LF

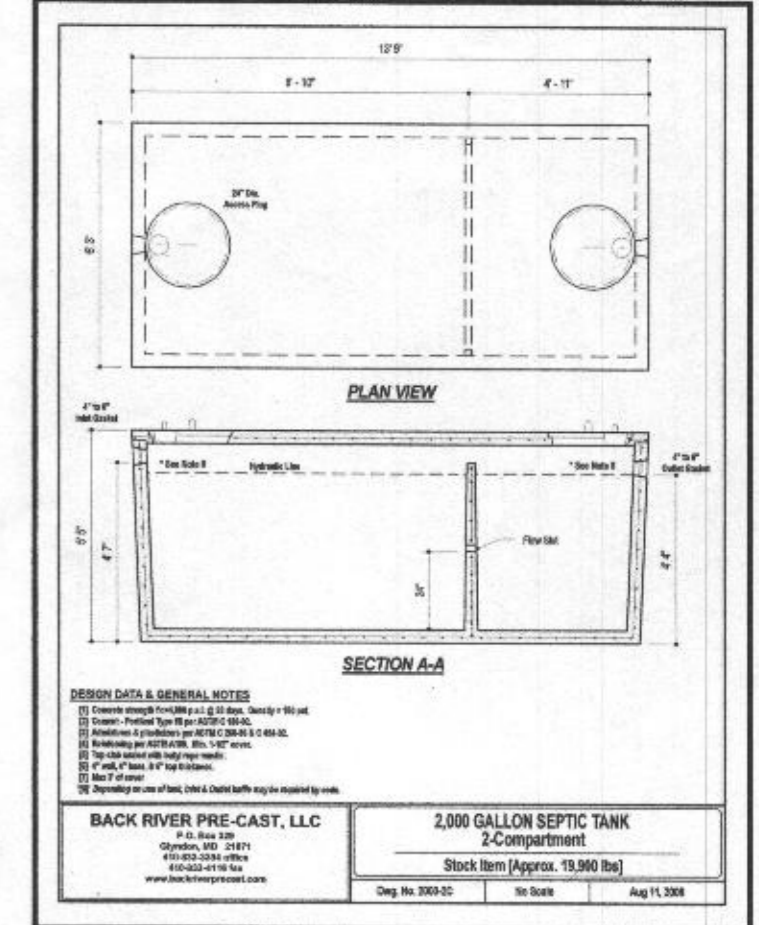
SOILS LEGEND

SOIL	NAME	CLASS	Kw
GgA	GLENELG LOAM, 0 TO 3 PERCENT SLOPES	B	.20
GgB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	B	.20
GmB	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES	C	*** .37

WELL LOCATION CERTIFICATION:

THE EXISTING WELL SHOWN FOR LOT 14 (TAG NO. HO-17-0365) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN HEREON.

ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN
**LOT 14
LINDEN GROVE**
LIBER 19209, FOLIO 403
PLAT NO. 25069
ELECTION DISTRICT No. 4
HOWARD COUNTY, MARYLAND
ADDRESS: 1409 HERITAGE RIDGE ROAD
WOODBINE, MARYLAND 21797




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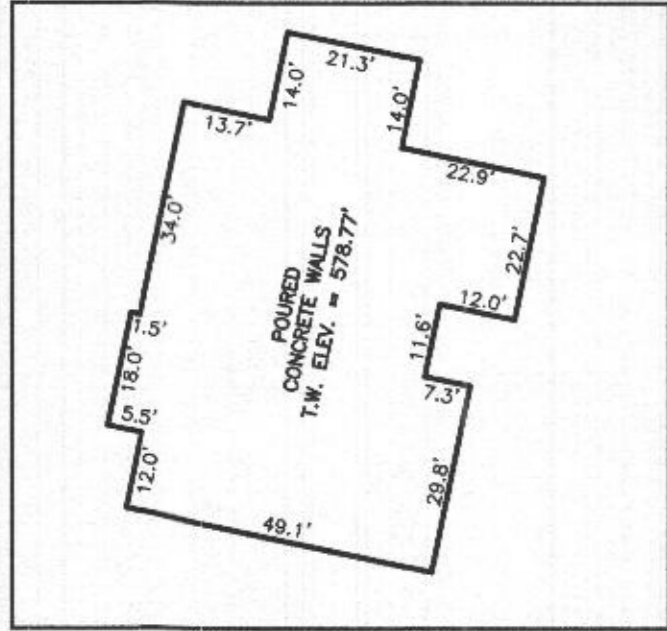
ESE Consultants, Inc.
7164 Columbia Gateway Drive • Suite 230 • Columbia, MD 21046
T: 410-672-9105

DATE: 02/11/2021 SCALE: 1"=30' FILE: OSDS LOT 14_rev2
CHK'D: M.J.B. JOB NO: 4683 DRAWN: R.C.K.

LEGEND:

BRL BUILDING RESTRICTION LINE
 (W) WELL LOCATION
 T.W. TOP OF WALL
 ELEV. ELEVATION

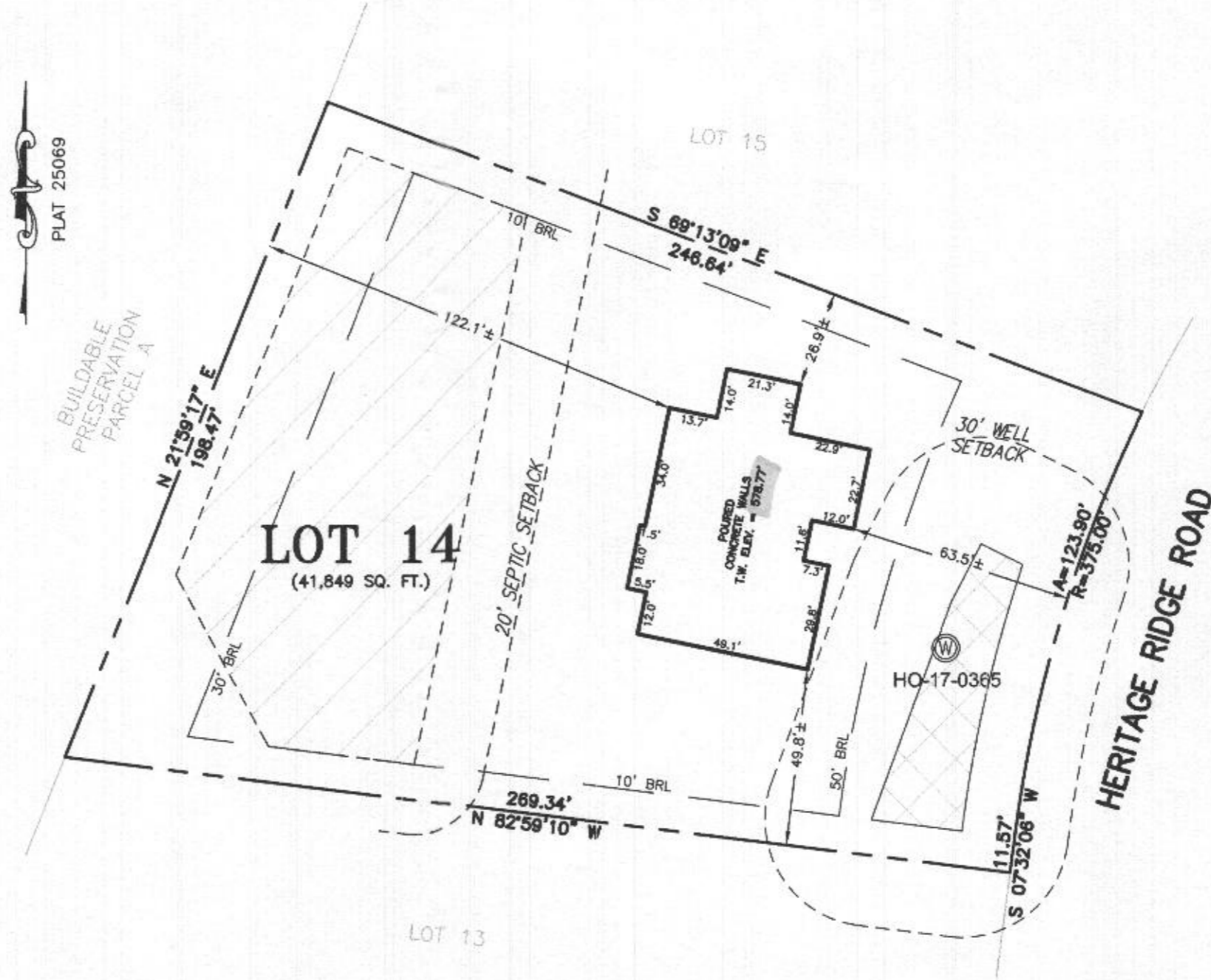
 SEPTIC RESERVE AREA



HOUSE ENLARGEMENT
 NOT TO SCALE

WELL NUMBER: HO-17-0365
 ADDRESS: 1409 HERITAGE RIDGE ROAD
 WOODBINE, MD 21797
 PERMIT NO.: B20003297

BUILDING SETBACKS (B.R.L.'s) SHOWN HEREON PER SITE
 DEVELOPEMENT PLAN SETBACK DISTANCES SHOWN
 HEREON AS "±" HAVE AN ACCURACY OF ±0.1' FOOT.



Approved
 4/27/21 (87)

SURVEYOR'S CERTIFICATE

THIS WALLCHECK WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT. THIS PROPERTY IS SUBJECT TO ANY AND ALL EASEMENTS, RIGHT-OF-WAYS, COVENANTS, AND RESTRICTIONS, ETC. OF RECORD, SOME OR ALL OF WHICH MAY OR MAY NOT BE SHOWN AND/OR REFERENCED HEREON. BEARINGS AND DISTANCES OF THE PROPERTY BOUNDARY LINES SHOWN HEREON ARE PER AVAILABLE RECORDS AND HAVE NOT BEEN FIELD VERIFIED.
THIS IS NOT A "LOCATION DRAWING" AND IS NOT TO BE USED FOR SETTLEMENT PURPOSES.

Michael Joe Boyce 21328 3/25/21
 SIGNATURE: MICHAEL JOE BOYCE MD. LIC NO. DATE

WALLCHECK
 LOT 14
LINDEN GROVE
 LIBER 19209, FOLIO 403
 PLAT NO. 25069
 ELECTION DISTRICT No. 4
 HOWARD COUNTY, MARYLAND

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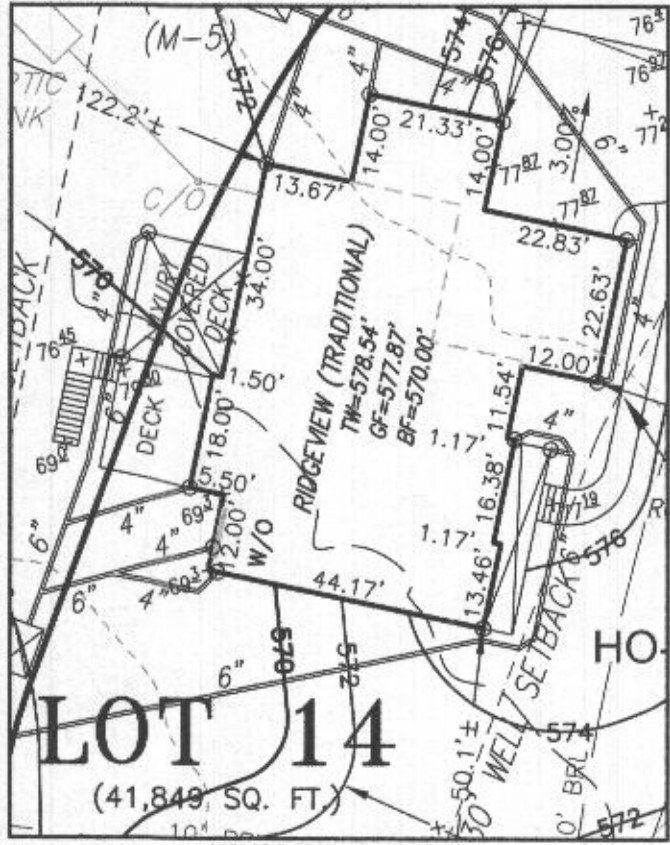
ESE Consultants, Inc.
 7164 Columbia Gateway Drive • Suite 230 • Columbia, MD 21046
 T: 410-872-9105

DATE: 03/25/2021 SCALE: 1" = 40' FILE: 4683 WC LOT 14
 CHK'D: M.J.B. JOB NO: 4683 DRAWN: V.X.P.



- LEGEND:**
- BRL BUILDING RESTRICTION LINE
 - (W) WELL LOCATION
 - T.W. TOP OF WALL
 - G.F. GARAGE FLOOR
 - B.F. BASEMENT FLOOR
 - PASSED PERC LOCATION
 - FAILED PERC LOCATION
 - SILT FENCE
 - STONE CONSTRUCTION ENTRANCE
 - ▨ SEPTIC RESERVE AREA
 - ▨ WELL BOX AREA
 - PROPOSED TREE
 - PROPOSED TREE
 - PROPOSED TREE

NOTE:
TOTAL LIMITS OF DISTURBANCE (LOD) = 31,332 SQ. FT.



Approved Septic System Plan
Howard County Health Department
5 bed room SPD
w/ potential 6th bedroom
when basement finished
Revised 12/10/2020
Date: 11/20/2020
Comments: B20-3297

BUILDING SETBACKS (B.R.L.'s) SHOWN HEREON PER SITE DEVELOPMENT PLAN SETBACK DISTANCES SHOWN HEREON AS "±" HAVE AN ACCURACY OF ±0.1' FOOT.



HOUSE TYPE: RIDGEVIEW (TRADITIONAL)

FINISHED LOWER LEVEL	OPTION No. 013
WALK-OUT BASEMENT	OPTION No. 017
ADD'L 1' TO BSMT FOUNDATION WALLS	OPTION No. 070
ADDITIONAL BATH	OPTION No. 367
OPTIONAL BATH FOR FINISHED LOWER LEVEL	OPTION No. 383
WET BAR FOR FINISHED LOWER LEVEL	OPTION No. 561
MEDIA ROOM FOR FINISHED LOWER LEVEL	OPTION No. 562
ADD'L ONE CAR FRONT ENTRY GARAGE - 14'	OPTION NO. 263102
WALK-OUT LUXURY COVERED DECK	OPTION NO. 263169
EXTRA DECKING	OPTION No. 90014004

WELL NUMBER: HO-17-0365
ADDRESS: 1409 HERITAGE RIDGE ROAD
WOODBINE, MD 21797

PLOT PLAN
LOT 14
LINDEN GROVE
LIBER 19209, FOLIO 403
PLAT NO. 25069
ELECTION DISTRICT No. 4
HOWARD COUNTY, MARYLAND

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ESE Consultants, Inc.
7164 Columbia Gateway Drive • Suite 230 • Columbia, MD 21046
T: 410-872-9105

DATE: 10/22/2020 SCALE: 1" = 40' FILE: 4683 PP LOT 14 - RIDGE. TRAD._rev1
CHK'D: M.J.B. JOB NO: 4683 DRAWN: G.V.S./R.C.K.

Ryan Ketner

From: Bricker, Robert <RBricker@howardcountymd.gov>
Sent: Monday, September 21, 2020 1:31 PM
To: Ryan Ketner
Cc: Michael Boyce
Subject: Linden Grove_Lot 14_OSDS Design Plan

Good Afternoon Ryan,

I have completed review of the OSDS Design Plan submitted for Linden Grove -Lot 14 (1409 Heritage Ridge Road). The plan cannot be approved at this time. The following issues are cited:

1. The calculated coefficients for reduction of trench length are incorrect for each of the three distribution systems. As a result, the calculated trench lengths for the respective systems are incorrect.
2. Efficient use of the SDA can be optimized by raising the sewer invert at the foundation by about 0.5 foot. This should allow you to plan a 57-ft trench from boundary to boundary across the upper SDA.
3. The spacing between trenches is more than the minimum required. I may or may not approve a plan with such an error, depending on the site characteristics. My purpose in bringing up the issue is that the mistake may be due to a mathematical error.

You may revise the proposed plan and re-submit at least three copies for review and approval.

Robert Bricker, REHS/RS, L.E.H.S.

PLEASE SEE THE CALCULATED SIDEWALL REDUCTION CALCULATION SHEET. I BELIEVE THIS IS CORRECT, PLEASE LET ME KNOW IF SOMETHING IS STILL WRONG.

- Ryan