

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: 3/15/23 **ONSITE SEWAGE DISPOSAL SYSTEM** P 574032
 APPROVAL DATE: 5/9/23 **PERMIT: CONSTRUCTION** A _____
 PROPERTY ADDRESS: 18406 Hidden Creek Ct.
 SUBDIVISION: Windsor Forest Knolls LOT: 1 TAX ID: _____
 CONTRACTOR: Farm & Home Excavation Inc EMAIL: _____
 CONTRACTOR ADDRESS: _____ PHONE: 410.442.2139
 PROPERTY OWNER: Senshine MD, LP EMAIL: _____
 OWNER ADDRESS: 227 Granite Run Dr. SE 100 Lancaster PA PHONE: 717.464.9060
 SEPTIC TANK SIZE (GALLONS): 2,000 TANK MANUFACTURER: MBI
 PUMP MODEL: _____ PUMP SIZE _____ PUMP TANK CAPACITY: _____

DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 6 APPLICATION RATE: 0.8

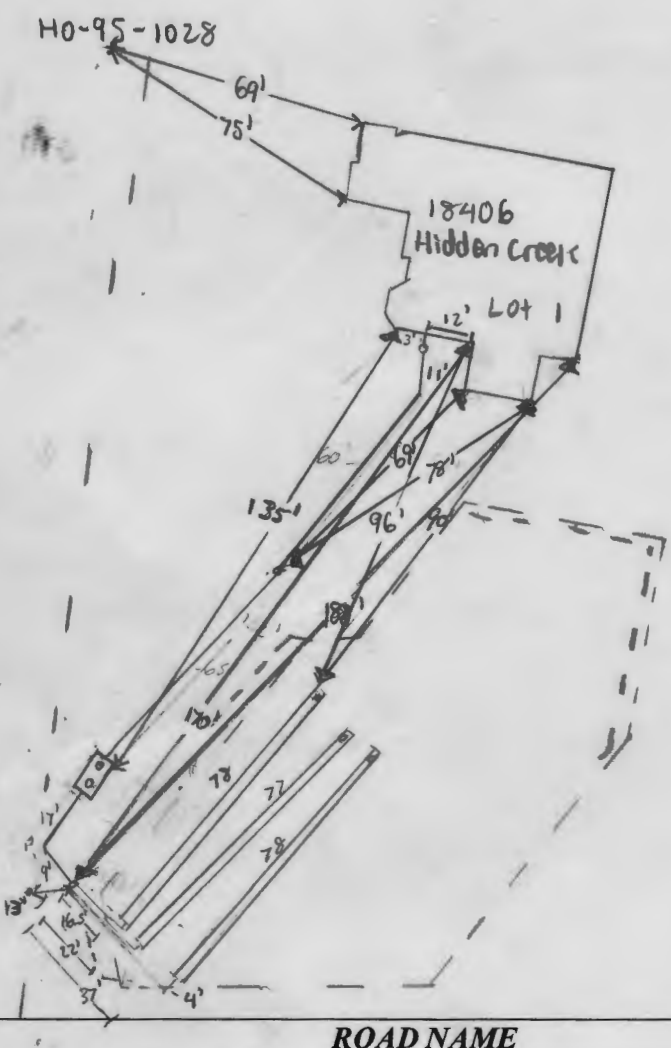
TRENCHES:	LINEAR FEET REQUIRED: <u>234'</u>	INLET DEPTH: <u>2'</u>
	TRENCH WIDTH: <u>3'</u>	MAXIMUM BOTTOM DEPTH: <u>7'</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10'</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>5'</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:		

ISSUED BY: Hank Oswald ISSUE DATE: 3/15/23 EXPIRATION DATE: 3/15/24

- 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" ≈ 50'



TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3	2'-2.5'	7
NUMBER OF TRENCHES		3
TOTAL LENGTH		233
ABSORPTION AREA		699 ft ²
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	2.5"
BAFFLES	6" front & 4" back
BAFFLE FILTER	—
MANHOLE LOC	front & back
6" PORT LOC	—
WATERTIGHT TEST	—
SLOTTED	yes
DATE ON LID	3/28/23

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:

4/5/23 - pre-con mtg w/ Bill w/ Faru's Home. SDA's tank location staked; the tank will need to be relocated, there's a telephone pole w/ support wires right in the middle of this area, 3x79' trenches laid out w/ flags along contour, trenches had to shift down a little bit to accommodate the telephone pole's overhead wires. We measured 100' well arc from corner of well box - try and find a new location for the tank & d box. Any changes to the plan which are required will need to be worked out w/ the contractor's engineer. Contractor will not

INSTALLATION: install system until revisions are finalized. (SP) 5/2/2023 - 1, 2, 3 on contour

& length per plan. 1, 2 end of trench moved slightly to go with contour. Tank moved 5' from utility wires. (SP)

5/8/2023 - SCD 410 pipe used on front line, 2 c/o installed, 17' fall verified. Saw 2 complement tank, saw baffles, less than 3' of cover on tank. Measured distance from backline to D-box. D-box 13' from electrical post. Measured trench length

5/9/2023 - Measured lower trench @ 78'. Inlet @ 2.5'. Levelled D-box. Give OK to backfill. Measured well to house. (SP)

FINAL INSPECTOR Sheparn Page DATE OF APPROVAL 5/9/2023

Is the sample for a public water system? Yes No

HOME LAND LABS

239814 Due Date: 06/05/2023
Client: Barlow Wel

Phone: (443) 505-8375 Email: lab@homelandhealthyhomes.com

1220 E Joppa Rd. Ste C505 108 Old Solomons Island Road, Ste L2 3430 Rockefeller Court 2216 Commerce Road, Ste 2A
Towson, MD 21286 Annapolis, MD 21401 Waldorf, MD 20602 Forest Hill, MD 21050
MD Lab # 365 MD Lab # 106 MD Lab # 139

Client Name: <u>Michael Barlow Well Drilling</u>	Property Address:
Email Address: <u>misom@mbwd.us</u>	<u>18406 Hidden Creek</u>
Phone Number: <u>(410) 838-6910</u>	<u>Woodbine, MD</u>

Field Collection Information

Sampler Name: <u>Steve Duklewski</u>	Field pH: <u>N/A</u>
Sampler ID #: <u>309150</u>	Field Chlorine (mg/L): <u>∅</u>
Date Sampled: <u>6-2-23</u> Time Sampled: <u>9:00 AM</u>	Sand: <u>∅</u>
Well Tag Number: <u>H0-95-1028</u>	Clarity: <u>∅</u>

Well Casing and Cap Condition

Well Type: Drilled Well Pit Below Grade Artesian Hand Dug N/A Other: _____

Height Above Grade: <u>12"</u>	Cap Type: <u>2 Piece PVC</u>	Casing: <u>PVC</u>	Conduit: <u>PVC</u>
Sample Point: <u>Kitchen Sink</u>		Water Conditioning: <u>N/A</u>	

Requested Testing: (Please check all that apply)

- Potability (Bacteria, Nitrate + Nitrite, Turbidity)
- FHA/VA (Bacteria, Nitrate + Nitrite, Turbidity, Lead, Iron)
- Bacteria Chlorides Total Dissolved Solids
- Lead Hardness Copper
- Nitrate + Nitrite Arsenic VOCs
- Iron Cadmium Other: _____
- Turbidity Gross Alpha Other: _____

List rush samples below
Refer to table for rush turnaround times and fees

Release Signatures

Released By: [Signature] Date/Time: 6-2-23 2:43

Released By: _____ Date/Time: _____

Released By: _____ Date/Time: _____


Received in lab by: [Signature] Date/Time: 6-2-23 2:43p

Sample temperature upon receipt: _____

Is the sample for a public water system? Yes No

HOME LAND

LABS



239023 Due Date: 05/18/2023
Client: Barlow Wel

Phone: (443) 505-8375 Email: lab@homeandhealthyhomes.com

1220 E Joppa Rd. Ste C505 108 Old Solomons Island Road, Ste L2 3430 Rockefeller Court 2216 Commerce Road, Ste 2A
Towson, MD 21286 Annapolis, MD 21401 Waldorf, MD 20602 Forest Hill, MD 21050
MD Lab # 365 MD Lab # 106 MD Lab # 139

Client Name: <u>Michael Barlow Well Drilling</u>	Property Address:
Email Address: <u>misom@mbwd.us</u>	<u>18406 Hidden Creek</u>
Phone Number: <u>(410) 838-6910</u>	<u>Woodbine, MD</u>

Field Collection Information

Sampler Name: Michael Barlow <u>Jayden Edwards</u>	Field pH: <u>N/A</u>
Sampler ID #: 3059 JE <u>3059 JE</u>	Field Chlorine (mg/L): <u>∅</u>
Date Sampled: <u>5-16-23</u> Time Sampled: <u>9:00am</u>	Sand: <u>∅</u>
Well Tag Number: <u>HO-95-1028</u>	Clarity: <u>∅</u>

Well Casing and Cap Condition

Well Type: Drilled Well Pit Below Grade Artesian Hand Dug N/A Other: _____

Height Above Grade: <u>12"</u>	Cap Type: <u>PVC 2-Piece</u>	Casing: <u>PVC</u>	Conduit: <u>PVC</u>
Sample Point: <u>PSI Tank</u>	Water Conditioning: <u>N/A</u>		

Requested Testing: (Please check all that apply)

- Potability (Bacteria, Nitrate + Nitrite, Turbidity)
- FHA/VA (Bacteria, Nitrate + Nitrite, Turbidity, Lead, Iron)
- Bacteria Chlorides Total Dissolved Solids
- Lead Hardness Copper
- Nitrate + Nitrite Arsenic VOCs
- Iron Cadmium Other: Sand
- Turbidity Gross Alpha Other: PH

List rush samples below
Refer to table for rush turnaround times and fees

Release Signatures

Released By: [Signature] Date/Time: 5-16-23 3:45 PM

Released By: _____ Date/Time: _____

Released By: _____ Date/Time: _____

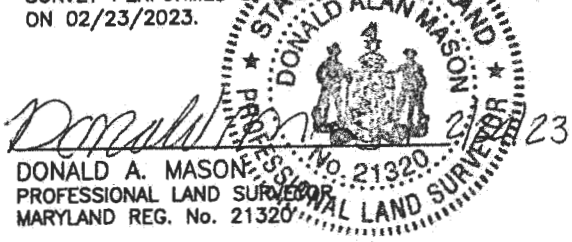
Received in lab by: [Signature] Date/Time: 3:51 5-16-23 3:45 PM

Sample temperature upon receipt: _____

TOP OF FOUNDATION WALL = 805.8'
 OFFSET DIMENSIONS TO PROPERTY LINES ARE ± 0.1'

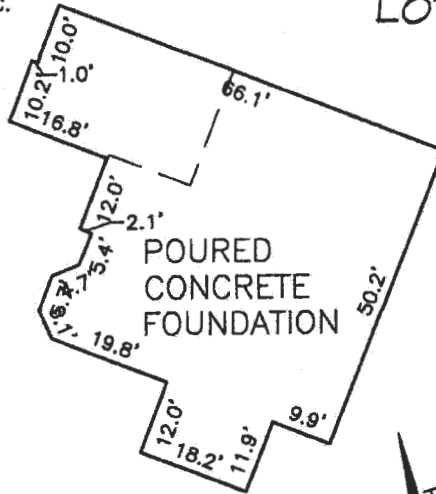
SURVEYOR'S CERTIFICATE

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. 21320, EXPIRATION DATE 1-7-2025 AND TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION AND BELIEF, THAT THE DIMENSIONS OF THE BUILDING WALLS SHOWN HEREON ARE CORRECT; THAT THEY ARE BASED ON A FIELD RUN SURVEY PERFORMED BY BENCHMARK ENGINEERING, INC. ON 02/23/2023.



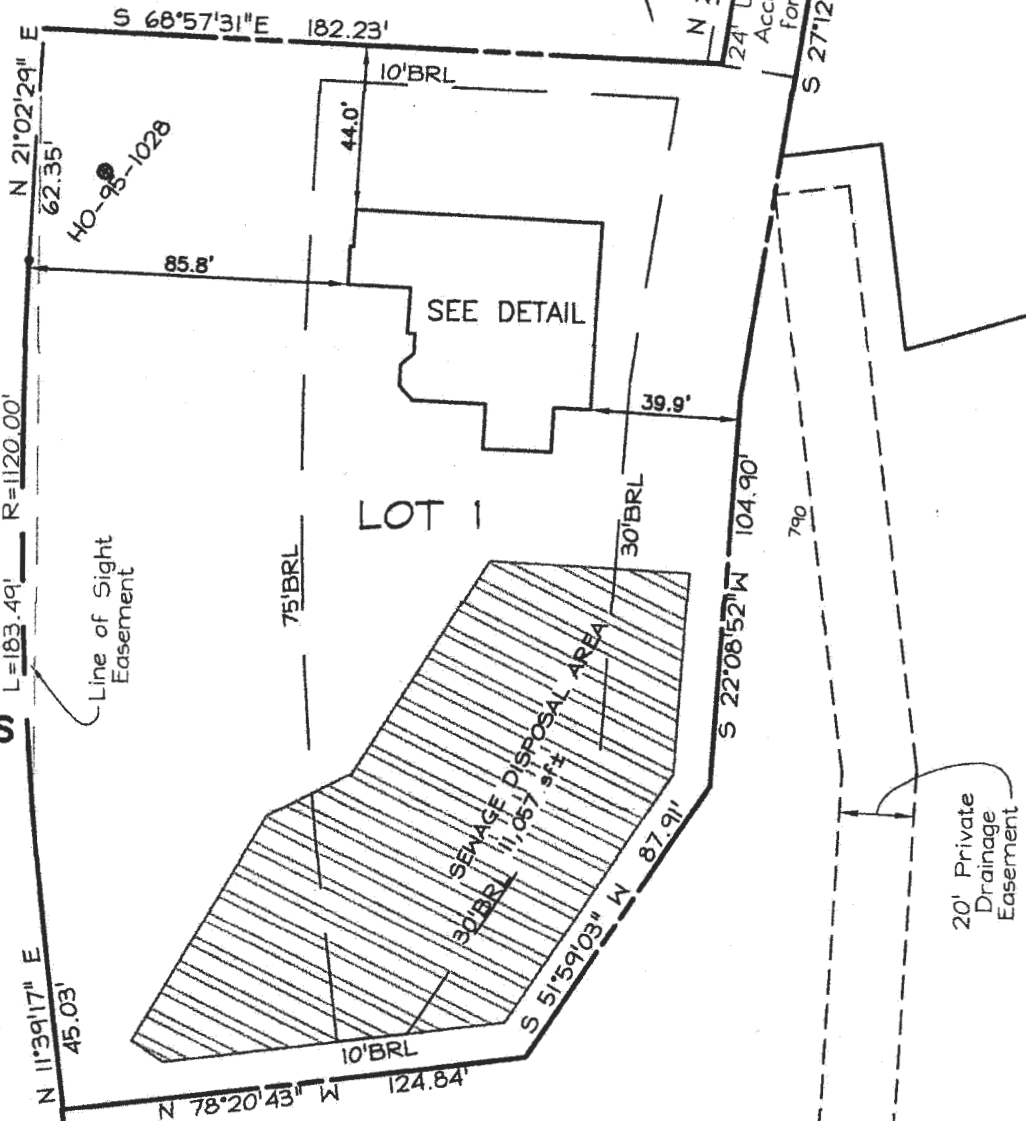
FEMA FIRM No. 24027C0010D
 ZONE: X
 DATED: 11/6/2013

10' Public Tree Maintenance Easement
HIDDEN CREEK WAY
 (Public Access Place)
 (R/W 40')



FOUNDATION DETAIL
 SCALE: 1" = 30'

LOT 2



WALL CHECK

WINDSOR FOREST KNOLLS
 LOTS 1 THRU 18
 PLAT No. 19396
 LOT No. 1

18406 HIDDEN CREEK WAY
 4TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE: 1"=50' DATE: 02/23/2023

BENCHMARK

ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS
ENGINEERING, INC.

3300 NORTH RIDGE ROAD ▲ SUITE 140
 ELLICOTT CITY, MARYLAND 21043
 (P) 410-485-6105 ▲ (F) 410-485-6644

PARCEL 'C' ENVIRONMENTAL
 PRESERVATION NON-BUILDABLE
 Privately Owned and Maintained
 Easement Holders: HOA & Howard Co.

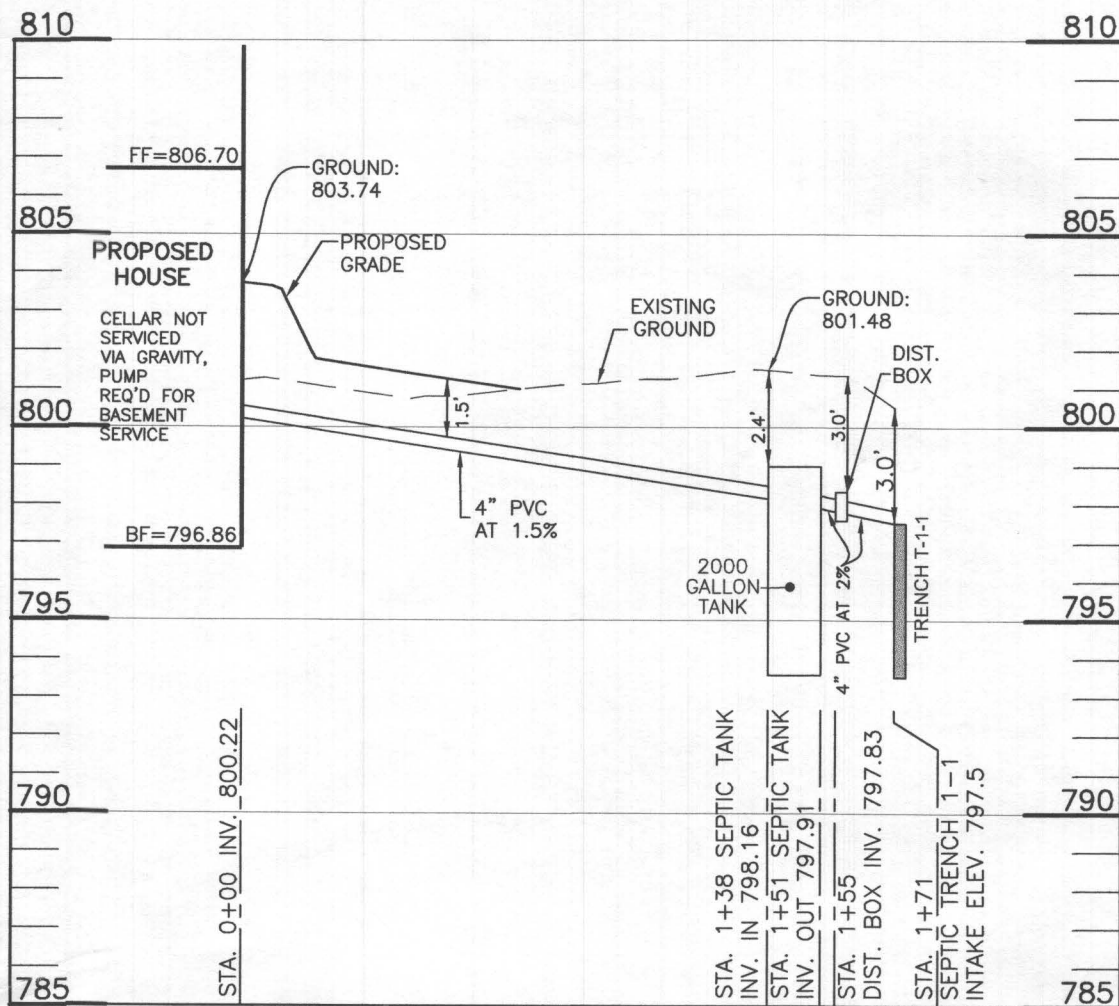
FIELD OBS. BY ML
 COMP. BY EWF
 DRAWN BY EWF



email
 Show on plans →
 John Carney/Alice
KeyStone
 cc: Bill -
 Utilities / above → overhead

4/6/23





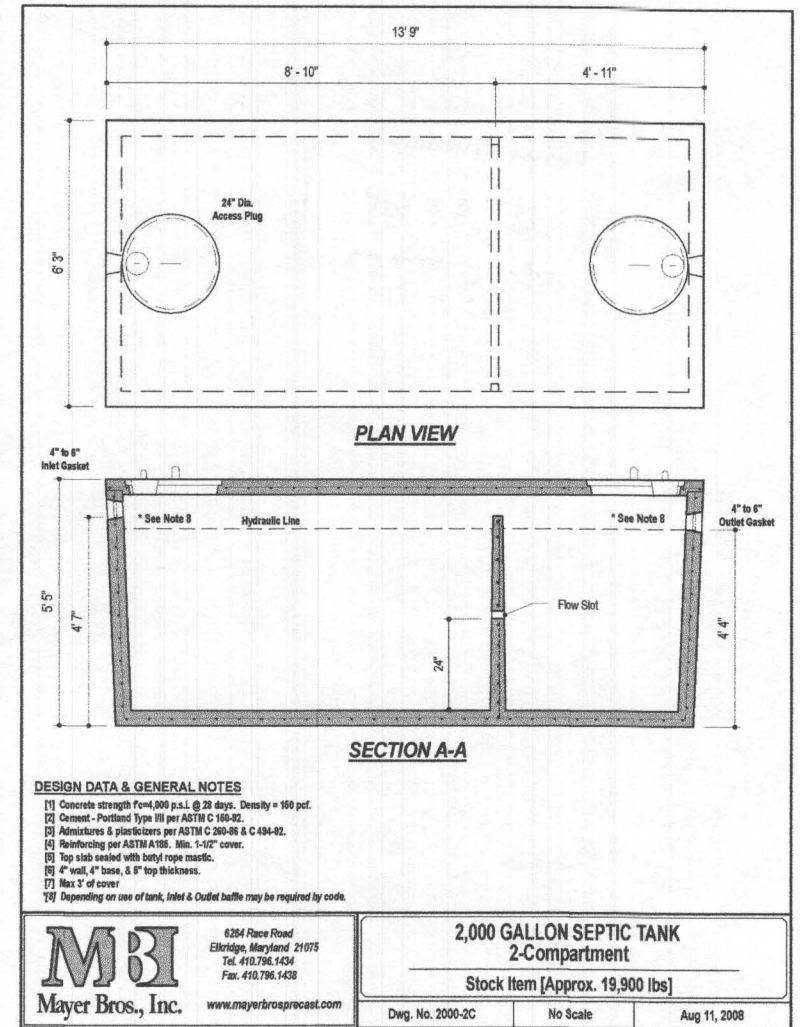
LOT 1 SEPTIC PROFILE
SCALE: 1"=50' HORIZ., 1"=5' VERT.

INITIAL SYSTEM		
Number of Bedrooms	6	
Application Rate	0.8	gpd/sf
Effective Area Beginning Depth	5.0	ft
Bottom Max Depth	7.0	ft
Design Flow	900	gpd
Drainage Field square footage	1125	sf
Sidewall Reduction Credit	0.63	
Trench width	3	ft
Effective Area Depth	2	ft
Trench Spacing	10	ft
Trench Length Required	234	lf

1ST REPLACEMENT SYSTEM		
Number of Bedrooms	6	
Application Rate	0.8	gpd/sf
Effective Area Beginning Depth	5.0	ft
Bottom Max Depth	7.0	ft
Design Flow	900	gpd
Drainage Field square footage	1125	sf
Sidewall Reduction Credit	0.63	
Trench width	3	ft
Effective Area Depth	2	ft
Trench Spacing	10	ft
Trench Length Required	234	lf

2ND REPLACEMENT SYSTEM		
Number of Bedrooms	6	
Application Rate	0.8	gpd/sf
Effective Area Beginning Depth	5.0	ft
Bottom Max Depth	7.0	ft
Design Flow	900	gpd
Drainage Field square footage	1125	sf
Sidewall Reduction Credit	0.63	
Trench width	3	ft
Effective Area Depth	2	ft
Trench Spacing	10	ft
Trench Length Required	234	lf

Approved Septic System Plan
Howard County Health Department
[Signature]
4/27/23
Date



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 150-02.
 [3] Admixtures & plasticizers per ASTM C 260-06 & C 494-02.
 [4] Reinforcing per ASTM A108. Min. 1-1/2" cover.
 [5] Top slab sealed with butyl rope mastic.
 [6] 4" wall, 4" base, 3" top thickness.
 [7] Max 3" of cover.
 [8] Depending on use of tank, Inlet & Outlet baffles may be required by code.

MBI
Mayer Bros., Inc.
6264 Race Road
Elkridge, Maryland 21075
Tel. 410.796.1434
Fax. 410.796.1438
www.mayerbrosprecast.com

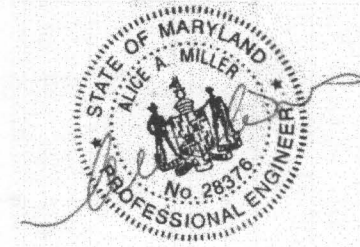
2,000 GALLON SEPTIC TANK
2-Compartment
Stock Item [Approx. 19,900 lbs]
Dwg. No. 2000-2C No Scale Aug 11, 2008

TRENCH DESIGN - LOT 1					
INITIAL SYSTEM					
T-1-1	LENGTH	78.2 ft	T-1-2	LENGTH	78.2 ft
	GROUND ELEVATION	800.5		GROUND ELEVATION	798.9
	INVERT ELEVATION	797.5		INVERT ELEVATION	795.9
	MAX BOTTOM ELEVATION	793.5		MAX BOTTOM ELEVATION	791.9
1ST REPLACEMENT SYSTEM					
T-2-1	LENGTH	58.6 ft	T-2-2	LENGTH	58.6 ft
	GROUND ELEVATION	799.4		GROUND ELEVATION	798.1
	INVERT ELEVATION	796.4		INVERT ELEVATION	795.1
	MAX BOTTOM ELEVATION	792.4		MAX BOTTOM ELEVATION	791.1
T-2-3	LENGTH	58.6 ft	T-2-4	LENGTH	58.6 ft
	GROUND ELEVATION	796.9		GROUND ELEVATION	794.9 ft
	INVERT ELEVATION	793.9		INVERT ELEVATION	791.9
	MAX BOTTOM ELEVATION	789.9		MAX BOTTOM ELEVATION	787.9
2ND REPLACEMENT SYSTEM					
T-3-1	LENGTH	78.2 ft	T-3-2	LENGTH	78.2 ft
	GROUND ELEVATION	795.7		GROUND ELEVATION	794.0
	INVERT ELEVATION	792.7		INVERT ELEVATION	791.0
	MAX BOTTOM ELEVATION	788.7		MAX BOTTOM ELEVATION	787.0
T-3-3	LENGTH	78.2 ft		LENGTH	78.2 ft
	GROUND ELEVATION	792.0		GROUND ELEVATION	792.0
	INVERT ELEVATION	789.0		INVERT ELEVATION	789.0
	MAX BOTTOM ELEVATION	785.0		MAX BOTTOM ELEVATION	785.0

SEPTIC INVERT CHART - LOT 1	
INV @ HOUSE	800.2
GROUND @ HOUSE	803.7
INV IN SEPTIC TANK	798.2
INV OUT SEPTIC TANK	797.9
TOP OF SEPTIC TANK	799.0
GROUND OVER SEPTIC TANK	801.5
INV IN DIST BOX	797.9
INV OUT DIST BOX	797.8
GROUND AT DIST BOX	801.3

HEALTH DEPARTMENT SPEC SHEET INFORMATION - LOT 1			
System	Application Rate	Effective Depth	Bottom Depth
1st System	0.8	5.0	7.0
2nd system	0.8	5.0	7.0
3rd System	0.8	5.0	7.0

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. 28376, Expiration Date: 01-01-2025.



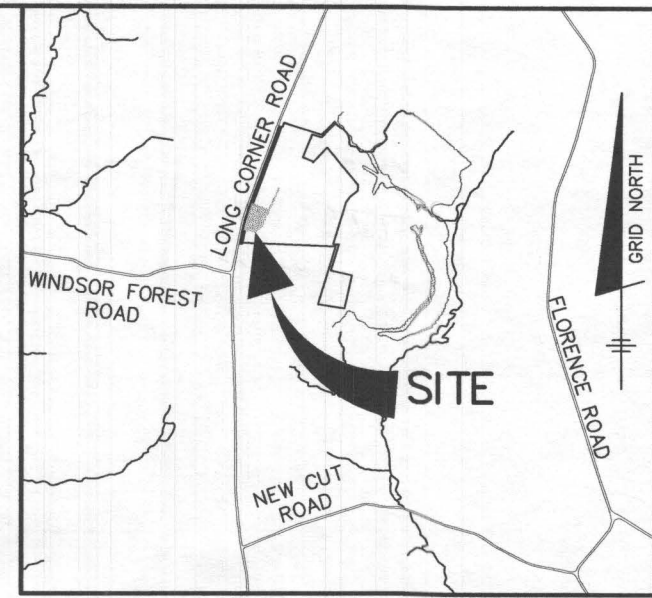
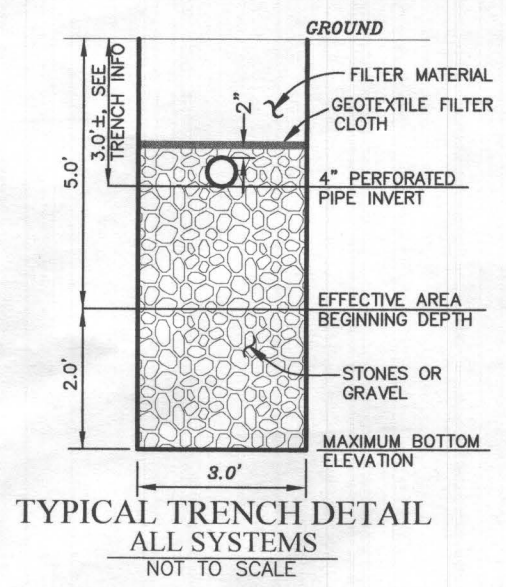
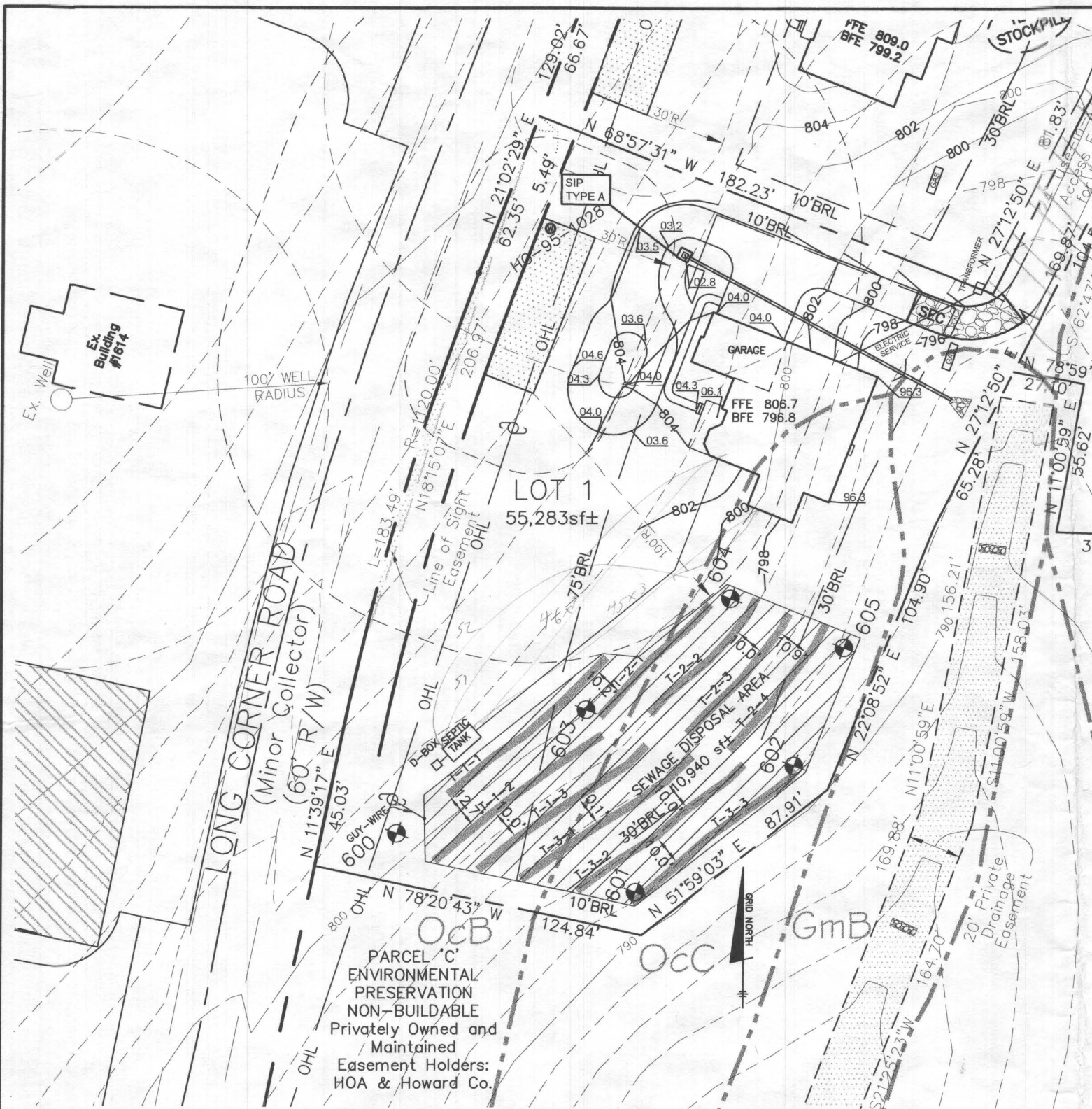
BEI-AAM

2023.04.17 15:19:25 -04'00

OWNER/BUILDER:
KEYSTONE CUSTOM HOMES, INC.
227 GRANITE RUN DR.
SUITE 100
LANCASTER, PA 17601
717-464-9060

BENCHMARK
ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS
ENGINEERING, INC.
3300 NORTH RIDGE ROAD ▲ SUITE 140
ELLCOTT CITY, MARYLAND 21043
(P) 410-465-6105 ▲ (F) 410-465-6644
WWW.BEI-CIVILENGINEERING.COM

PROJECT:	WINDSOR FOREST KNOLLS LOT 1		
LOCATION:	TAX MAP: 6 - GRID: 16 - PARCEL: 57 18406 HIDDEN CREEK WAY, TAX ID# 04-373162 ELECTION DISTRICT NO. 4 - HOWARD COUNTY, MARYLAND		
TITLE:	ONSITE SEWAGE DISPOSAL PLAN		
HOUSE TYPE:	CUSTOM - KEYSTONE HOMES		
DATE:	APRIL, 2023	PROJECT NO.	2986
SCALE:	AS SHOWN	DRAWING	2 OF 2



GENERAL NOTES

1. THE LOT SHOWN HEREON WAS RECORDED ON THE PLAT FOR WINDSOR FOREST KNOLLS, PLAT NUMBER 19395. REFER TO THE PLAT FOR LOT DIMENSIONS, LOT AREA, ALL EASEMENTS AND CONDITIONS.
2. THE EXISTING WELL SHOWN ON THIS PLAN (HO-95-1028) HAS BEEN FIELD LOCATED BY BENCHMARK ENGINEERING INC. JULY 2020 AND IS ACCURATELY SHOWN.
3. TOPOGRAPHY SHOWN WAS BASED ON FIELD RUN TOPOGRAPHY BY C.B. MILLER & ASSOCIATES IN APRIL, 2002, AND WAS SUPPLEMENTED BY FIELD RUN TOPOGRAPHY BY BENCHMARK ENGINEERING, INC. JULY 2020.
4. SEDIMENT AND EROSION CONTROLS WILL BE SUBMITTED BY HOWARD SOILS CONSERVATION DISTRICT AS A CUSTOM GRADING PLAN.
5. ALL DRAINAGE AND STORMWATER MANAGEMENT FEATURES USED ON THIS SITE MUST COMPLY WITH THE APPROVED BUILDING PERMIT AND CUSTOM GRADING PLANS.
6. ANY CHANGES TO A PRIVATE SEWAGE DISPOSAL AREA OR WELL BOX SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
7. 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.
8. THE SEPTIC TANK WILL BE A 2000 GALLON TWO COMPARTMENT TANK.
9. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
10. ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARIES AND 200' DOWN GRADIENT OF ANY WELLS/OR SEPTIC SYSTEM HAVE BEEN SHOWN.

VICINITY MAP
SCALE: 1"=2000'

LEGEND

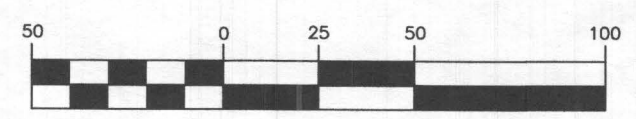
- 400 — PROPOSED CONTOURS
- 400 — EXISTING CONTOURS
- 398 — EXISTING PRIVATE SEWAGE DISPOSAL AREA
- EXISTING WELL BOX
- MaC — SOILS MAP SYMBOL
- SOILS DELINEATION LINE
- PERC TEST PASSED

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. 28376, Expiration Date: 01-01-2025.



BEI-AAM

2023.04.17 15:18:57 -04'00



(IN FEET)
1 inch = 50 ft.

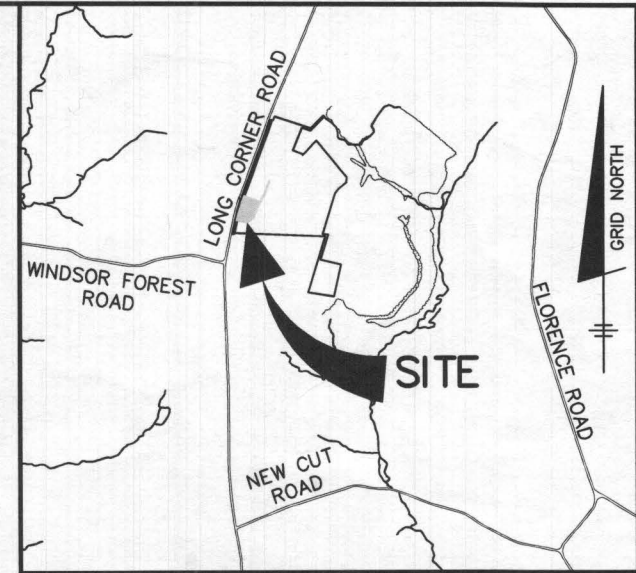
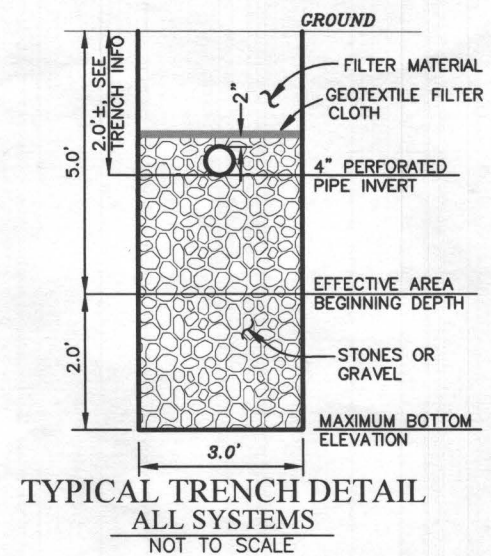
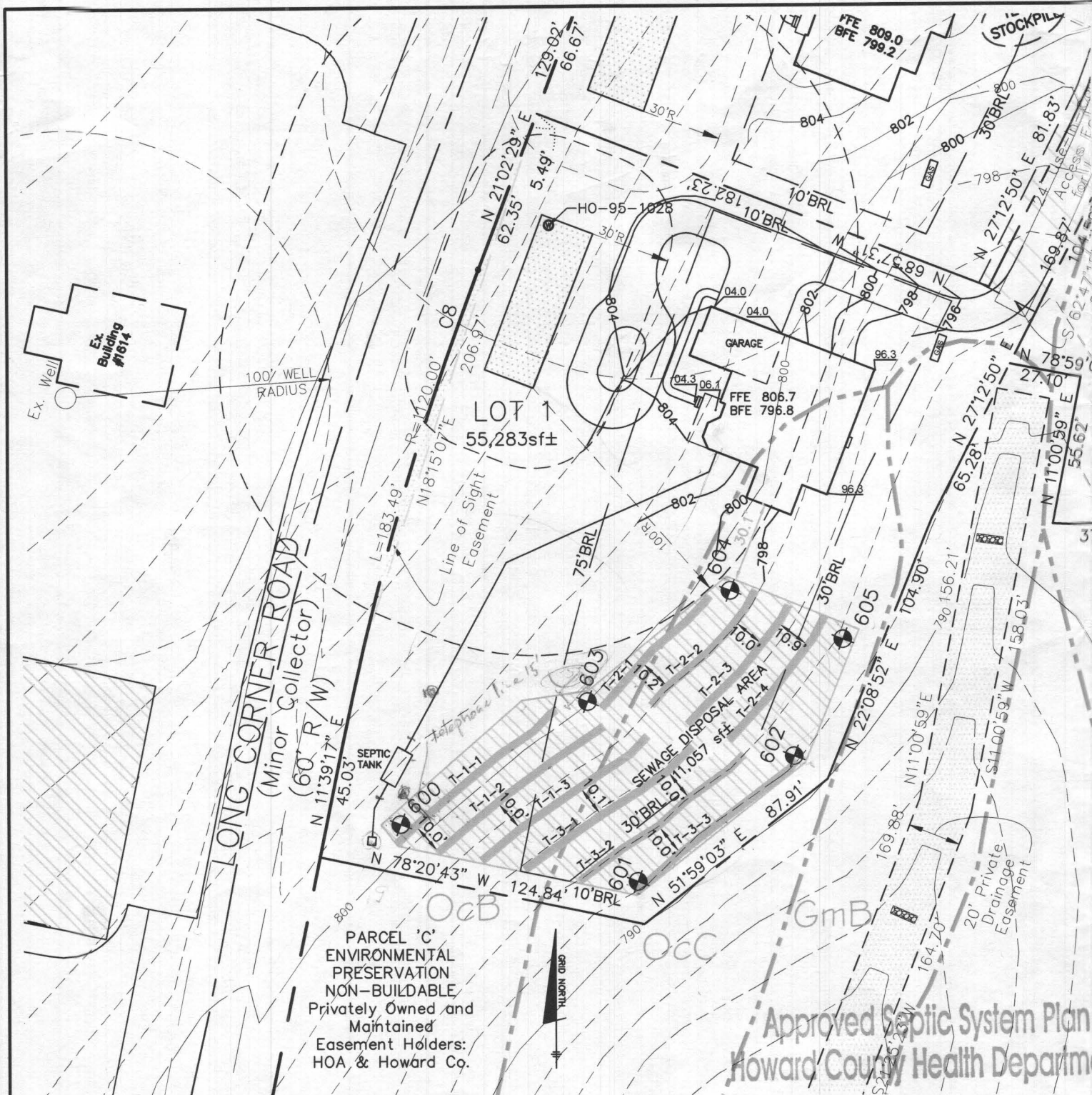
PLAN VIEW
1" = 50'

Approved Septic System Plan
Howard County Health Department
Signature
4/27/23
Date

OWNER/BUILDER:
KEYSTONE CUSTOM HOMES, INC.
227 GRANITE RUN DR.
SUITE 100
LANCASTER, PA 17601
717-464-9060

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(P) 410-465-6105 ▲ (F) 410-465-6644
WWW.BEI-CIVILENGINEERING.COM

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LOCATION:		TAX MAP: 6 - GRID: 16 - PARCEL: 57 18406 HIDDEN CREEK WAY, TAX ID# 04-373162 ELECTION DISTRICT NO. 4 - HOWARD COUNTY, MARYLAND	
TITLE:		REVISED ONSITE SEWAGE DISPOSAL PLAN	
HOUSE TYPE:		CUSTOM - KEYSTONE HOMES	
DATE:	APRIL, 2023	PROJECT NO.	2986
SCALE:	AS SHOWN	DRAWING	1 OF 2



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7. 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.
8. THE SEPTIC TANK WILL BE A 2000 GALLON TWO COMPARTMENT TANK.
9. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
10. ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARIES AND 200' DOWN GRADIENT OF ANY WELLS/OR SEPTIC SYSTEM HAVE BEEN SHOWN.

LEGEND

- 400 — PROPOSED CONTOURS
- 400 — EXISTING CONTOURS
- 398 — EXISTING PRIVATE SEWAGE DISPOSAL AREA
- EXISTING WELL BOX
- MaC — SOILS MAP SYMBOL
- SOILS DELINEATION LINE
- PERC TEST PASSED

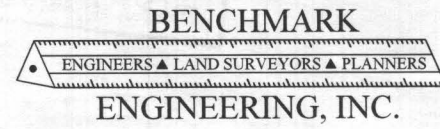
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 28376, Expiration Date: 01-01-2023.

BEI-AAM
2022.05.31 12:00:37 -04'00

PROJECT: WINDSOR FOREST KNOLLS LOT 1	
LOCATION: TAX MAP: 6 - GRID: 16 - PARCEL: 57 18406 HIDDEN CREEK WAY, TAX ID# 04-373162 ELECTION DISTRICT NO. 4 - HOWARD COUNTY, MARYLAND	
TITLE: ONSITE SEWAGE DISPOSAL PLAN	
HOUSE TYPE: CUSTOM - KEYSTONE HOMES	
DATE: AUGUST, 2020	PROJECT NO. 2986
SCALE: AS SHOWN	DRAWING <u>1</u> OF <u>2</u>

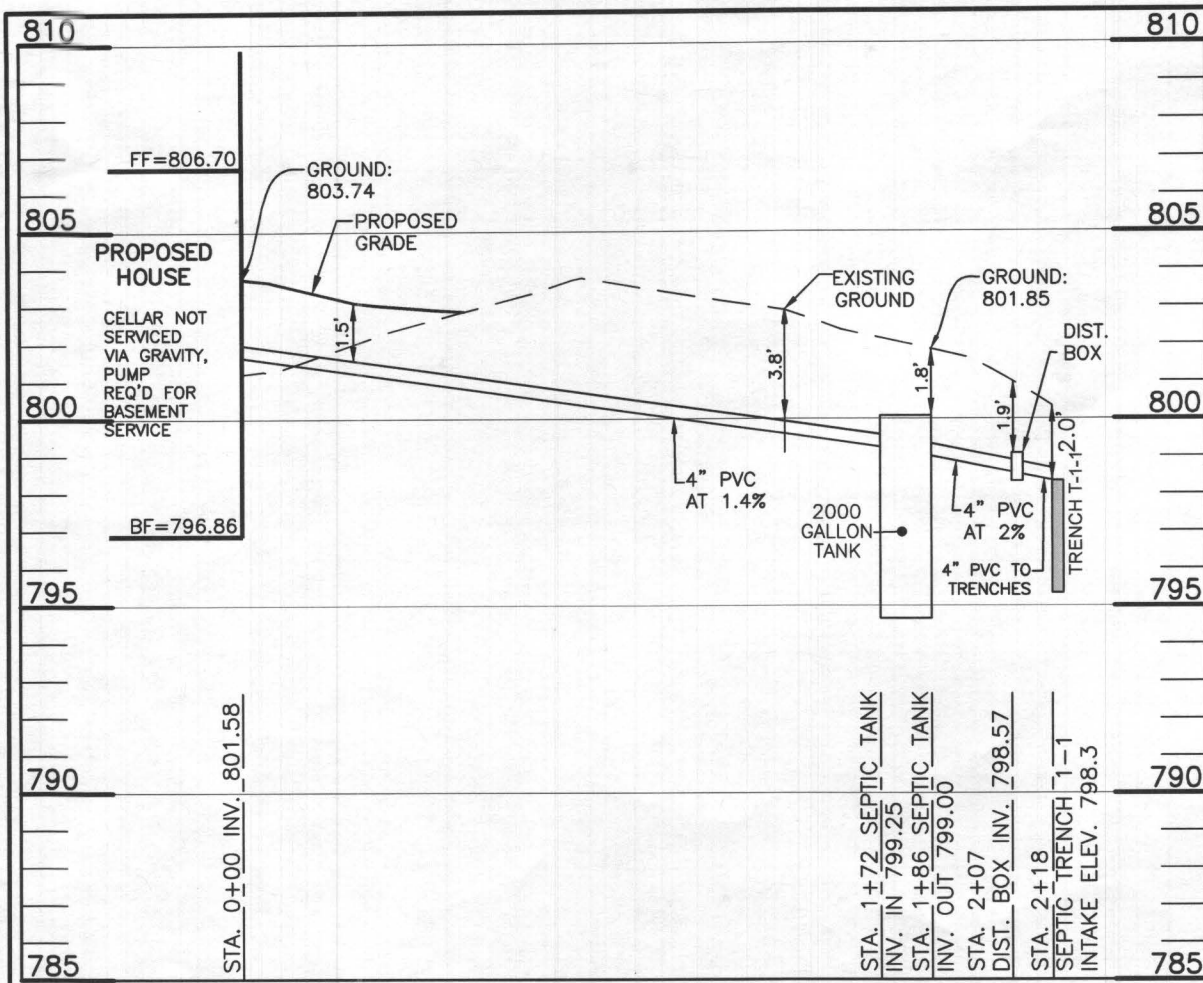
Signature: *gjs*
OWNER/BUILDER: **KEYSTONE CUSTOM HOMES, INC.**
227 GRANITE RUN DR. SUITE 100
LANCASTER, PA 17601
717-464-9060

Date: **7/18/22**



10 dig
8 ft
from pole

(IN FEET)
1 inch = 50 ft.



LOT 1 SEPTIC PROFILE
SCALE: 1"=50' HORIZ., 1"=5' VERT.

INITIAL SYSTEM		
Number of Bedrooms	6	
Application Rate	0.8	gpd/sf
Effective Area Beginning Depth	5.0	ft
Bottom Max Depth	7.0	ft
Design Flow	900	gpd
Drainage Field square footage	1125	sf
Sidewall Reduction Credit	0.63	
Trench width	3	ft
Effective Area Depth	2	ft
Trench Spacing	10	ft
Trench Length Required	234	lf

1ST REPLACEMENT SYSTEM		
Number of Bedrooms	6	
Application Rate	0.8	gpd/sf
Effective Area Beginning Depth	5.0	ft
Bottom Max Depth	7.0	ft
Design Flow	900	gpd
Drainage Field square footage	1125	sf
Sidewall Reduction Credit	0.63	
Trench width	3	ft
Effective Area Depth	2	ft
Trench Spacing	10	ft
Trench Length Required	234	lf

2ND REPLACEMENT SYSTEM		
Number of Bedrooms	6	
Application Rate	0.8	gpd/sf
Effective Area Beginning Depth	5.0	ft
Bottom Max Depth	7.0	ft
Design Flow	900	gpd
Drainage Field square footage	1125	sf
Sidewall Reduction Credit	0.63	
Trench width	3	ft
Effective Area Depth	2	ft
Trench Spacing	10	ft
Trench Length Required	234	lf

TRENCH DESIGN - LOT 1					
INITIAL SYSTEM					
T-1-1	LENGTH	78.2 ft	T-1-2	LENGTH	78.2 ft
	GROUND ELEVATION	800.3		GROUND ELEVATION	798.9
	INVERT ELEVATION	798.3		INVERT ELEVATION	796.9
	MAX BOTTOM ELEVATION	793.3		MAX BOTTOM ELEVATION	791.9
1ST REPLACEMENT SYSTEM					
T-2-1	LENGTH	78.2 ft	T-2-2	LENGTH	78.2 ft
	GROUND ELEVATION	795.7		GROUND ELEVATION	794.0
	INVERT ELEVATION	793.7		INVERT ELEVATION	792.0
	MAX BOTTOM ELEVATION	788.7		MAX BOTTOM ELEVATION	787.0
2ND REPLACEMENT SYSTEM					
T-3-1	LENGTH	58.6 ft	T-3-2	LENGTH	58.6 ft
	GROUND ELEVATION	799.4		GROUND ELEVATION	798.1
	INVERT ELEVATION	797.4		INVERT ELEVATION	796.1
	MAX BOTTOM ELEVATION	792.4		MAX BOTTOM ELEVATION	791.1
T-3-3	LENGTH	58.6 ft	T-3-4	LENGTH	58.6 ft
	GROUND ELEVATION	796.9		GROUND ELEVATION	794.9
	INVERT ELEVATION	794.9		INVERT ELEVATION	792.9
	MAX BOTTOM ELEVATION	789.9		MAX BOTTOM ELEVATION	787.9

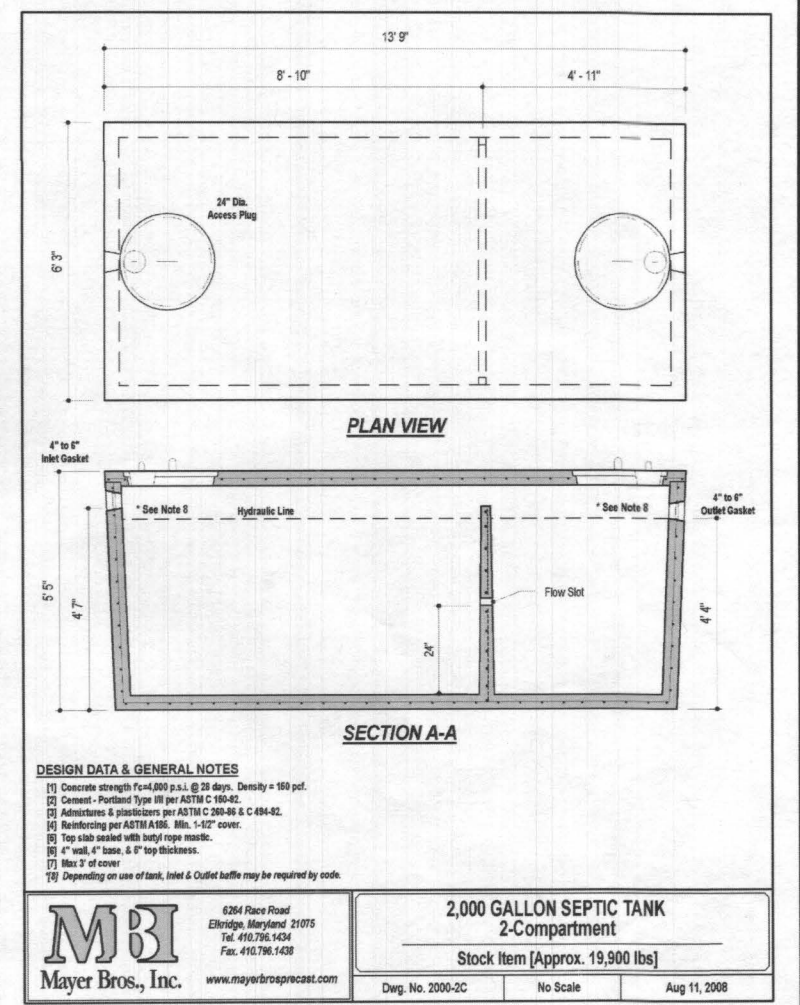
SEPTIC INVERT CHART - LOT 1	
INV @ HOUSE	801.6
GROUND @ HOUSE	803.7
INV IN SEPTIC TANK	799.3
INV OUT SEPTIC TANK	799.0
TOP OF SEPTIC TANK	800.1
GROUND OVER SEPTIC TANK	801.9
INV IN DIST BOX	798.6
INV OUT DIST BOX	798.5
GROUND AT DIST BOX	800.4

HEALTH DEPARTMENT SPEC SHEET INFORMATION - LOT 1			
System	Application Rate	Effective Depth	Bottom Depth
1st System	0.8	5.0	7.0
2nd system	0.8	5.0	7.0
3rd System	0.8	5.0	7.0

OWNER/BUILDER:
KEYSTONE CUSTOM HOMES, INC.
227 GRANITE RUN DR.
SUITE 100
LANCASTER, PA 17601
717-464-9060

BENCHMARK
ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS
ENGINEERING, INC.
3300 NORTH RIDGE ROAD ▲ SUITE 140
ELLCOTT CITY, MARYLAND 21043
(P) 410-465-6105 ▲ (F) 410-465-6644
WWW.BEI-CIVILENGINEERING.COM

PROJECT:	WINDSOR FOREST KNOLLS LOT 1		
LOCATION:	TAX MAP: 6 - GRID: 16 - PARCEL: 57 18406 HIDDEN CREEK WAY, TAX ID# 04-373162 ELECTION DISTRICT NO. 4 - HOWARD COUNTY, MARYLAND		
TITLE:	ONSITE SEWAGE DISPOSAL PLAN		
HOUSE TYPE:	CUSTOM - KEYSTONE HOMES		
DATE:	MAY, 2022	PROJECT NO.	2986
SCALE:	AS SHOWN	DRAWING	<u>2</u> OF <u>2</u>



- DESIGN DATA & GENERAL NOTES**
- Concrete strength $f_c=4000$ p.s.i. @ 28 days. Density = 150 pcf.
 - Cement - Portland Type III per ASTM C 150-02.
 - Admixtures & plasticizers per ASTM C 260-09 & C 494-02.
 - Reinforcing per ASTM A 601. Min. 1-1/2" cover.
 - Top slab sealed with butyl rope mastic.
 - 4" wall, 4" base, & 6" top thickness.
 - Max 3" of cover
 - Depending on use of tank, inlet & outlet baffles may be required by code.

MBI Mayer Bros., Inc. 6264 Place Road, Elbridge, Maryland 21075, Tel. 410.796.1434, Fax. 410.796.1438, www.mayerbroscorcast.com

2,000 GALLON SEPTIC TANK 2-Compartment
Stock Item [Approx. 19,900 lbs]

Dwg. No. 2000-2C No Scale Aug 11, 2008

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. 28376, Expiration Date: 01-01-2023.



BEI-AAM

2022.05.31 12:00:59 -04'00