



**Howard County  
Health Department**

**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](http://www.hchealth.org)  
Facebook: [www.facebook.com/hocohealth](http://www.facebook.com/hocohealth)

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

RECEIPT DATE: 3-22-21 **ONSITE SEWAGE DISPOSAL SYSTEM** P 5108806-A  
 APPROVAL DATE: 6/16/21 **PERMIT: CONSTRUCTION** A \_\_\_\_\_  
 PROPERTY ADDRESS: 18438 Hidden Creek Way  
 SUBDIVISION: Windsor Forest Knolls LOT: 6 TAX ID: 1404373219  
 CONTRACTOR: Ferny Home Excavating EMAIL: \_\_\_\_\_  
 CONTRACTOR ADDRESS: 901 Driver Road, Marriottsville, MD 21104 PHONE: 410-984-0189  
 PROPERTY OWNER: Keystone Custom Homes EMAIL: \_\_\_\_\_  
 OWNER ADDRESS: 227 Granite Run Dr. Suite 100 Lancaster, PA 17601 PHONE: 717-464-9060

SEPTIC TANK SIZE (GALLONS): 2000 TANK MANUFACTURER: Mayer Bros  
 PUMP MODEL: NA PUMP SIZE NA PUMP TANK CAPACITY: NA

DISTRIBUTION SYSTEM:  GRAVITY  PRESSURE DOSED BEDROOMS: 5 APPLICATION RATE: 0.6

TRENCHES:	LINEAR FEET REQUIRED: <u>357</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>5.5</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: Robert Freemon ISSUE DATE: \_\_\_\_\_ EXPIRATION DATE: \_\_\_\_\_

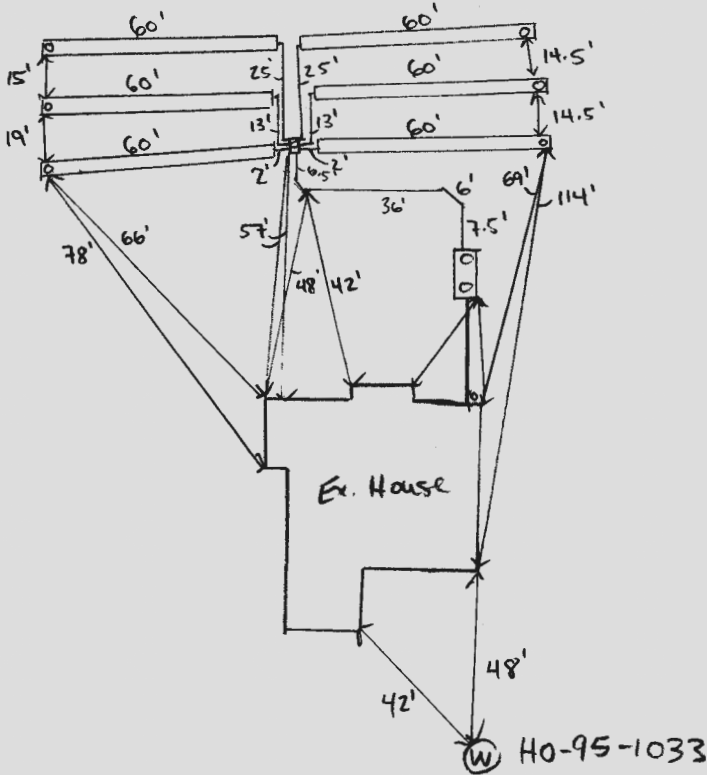
- NOTE: CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION INSPECTION PRIOR TO BEGINNING ANY INSTALLATION
- NOTE: CONTRACTOR MUST SCHEDULE AN INSPECTION AND GAIN APPROVAL OF ALL COMPONENTS PRIOR TO COVERING
- NOTE: STONE MUST BE APPROVED BY HEALTH DEPARTMENT AND GRAVEL TICKET MUST BE AVAILABLE FOR REVIEW.
- 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 \_\_\_\_\_
- 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.**

18438 Hidden Creek Way

279189279189

NOT TO SCALE 1" = 50'



ROAD NAME  
Hidden Creek Way

**TRENCH/DRAINFIELD DATA**

WIDTH	INLET	BOTTOM
3'	2'	7'
NUMBER OF TRENCHES <u>6'</u>		
TOTAL LENGTH <u>360'</u>		
ABSORPTION AREA <u>1080 SF + 1.5'</u>		
DISTRIBUTION BOX LEVEL <u>YES</u>		
DISTRIBUTION BOX BAFFLE <u>YES</u>		
DISTRIBUTION BOX PORT <u>YES</u>		

SIDE WALL

PRE-CONSTRUCTION:

**SEPTIC TANK DATA**

SEPTIC TANK 1 LEVEL	<u>YES</u>
MANUFACTURER	<u>BABYLON</u>
CAPACITY	<u>2000</u> GAL
SEAM LOC	<u>TOP</u>
TANK LID DEPTH	<u>~2'</u>
BAFFLES	<u>YES</u>
BAFFLE FILTER	<u>-</u>
MANHOLE LOC	<u>FRONT/BACK</u>
6" PORT LOC	<u>-</u>
WATERTIGHT TEST	<u>-</u>
SLOTTED	<u>YES</u>
DATE ON LID	<u>                    </u>

**PUMP/SEPTIC TANK LEVEL**

MANUFACTURER	<u>                    </u>
CAPACITY	<u>                    </u> GAL
SEAM LOC	<u>                    </u>
TANK LID DEPTH	<u>                    </u>
BAFFLES	<u>                    </u>
BAFFLE FILTER	<u>                    </u>
MANHOLE LOC	<u>                    </u>
6" PORT LOC	<u>                    </u>
WATERTIGHT TEST	<u>                    </u>
SLOTTED	<u>                    </u>
DATE ON LID	<u>                    </u>

INSTALLATION: 05/1/2021 TANKS SET IN GROUND. 06/10/2021 INSTALLED SEWER LINE, D BOX AND TRENCHES. REINSPECT D BOX FOR LEVEL TEST. 6/16/21 D-box level (SI)

FINAL INSPECTOR

*Aura Thomas*

DATE OF APPROVAL

6/16/21

HIDDEN CREEK WAY  
(PUBLIC ACCESS PLACE)  
40' R/W

S 02°08'52" W  
130.00'

10' Public Tree  
Maintenance  
Easement

10'x30'  
Reversible  
Easement

HO-95-1033

77.7'

50' BRL

GRID NORTH

18.6'

SEE  
DETAIL

10' BRL

18.6'

55.1'

325.00'

LOT 5

S 87°51'08" E  
325.00'

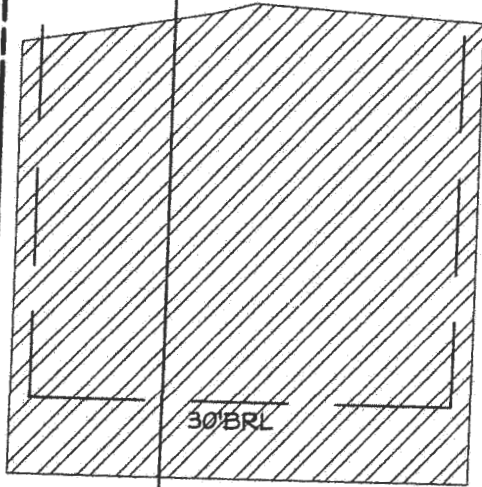
N 87°51'08" W  
325.00'

PAYNE'S VIEW  
LOT 1  
PLAT NO.: 10069  
ZONED: RC

LOT 6

10' BRL

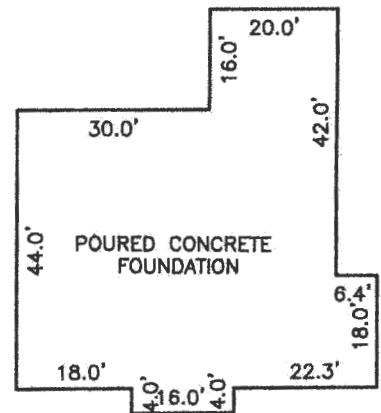
183.28'



30' BRL

N 02°08'52" E 130.00'

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



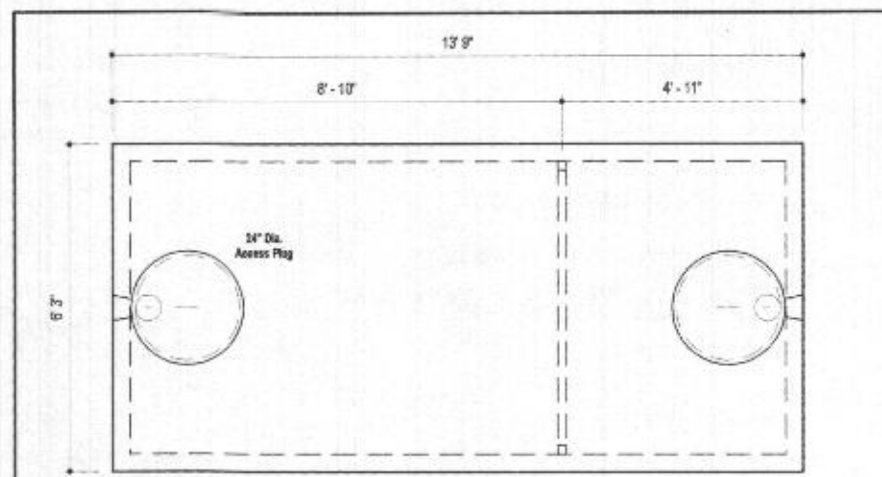
FOUNDATION DETAIL  
SCALE: 1" = 30'

**SURVEYOR'S CERTIFICATE**

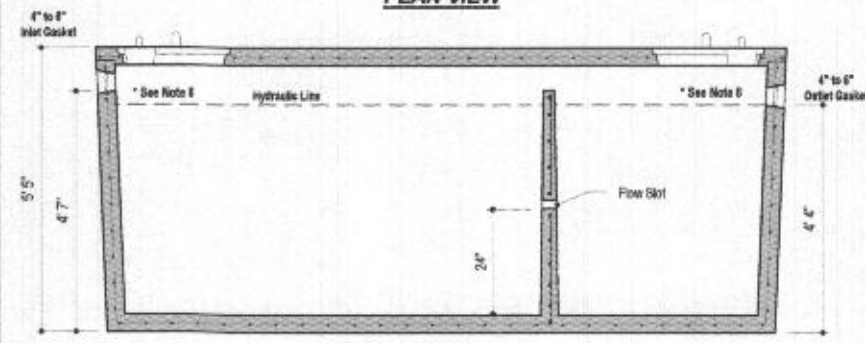
I HEREBY CERTIFY THAT THESE DOCUMENTS, WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21320, EXPIRATION DATE 1-7-2023 AND TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION AND BELIEF, 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 03/11/2021.

TOP OF FOUNDATION WALL = 806.7'  
OFFSET DIMENSIONS TO PROPERTY LINES ARE ± 0.1'





PLAN VIEW

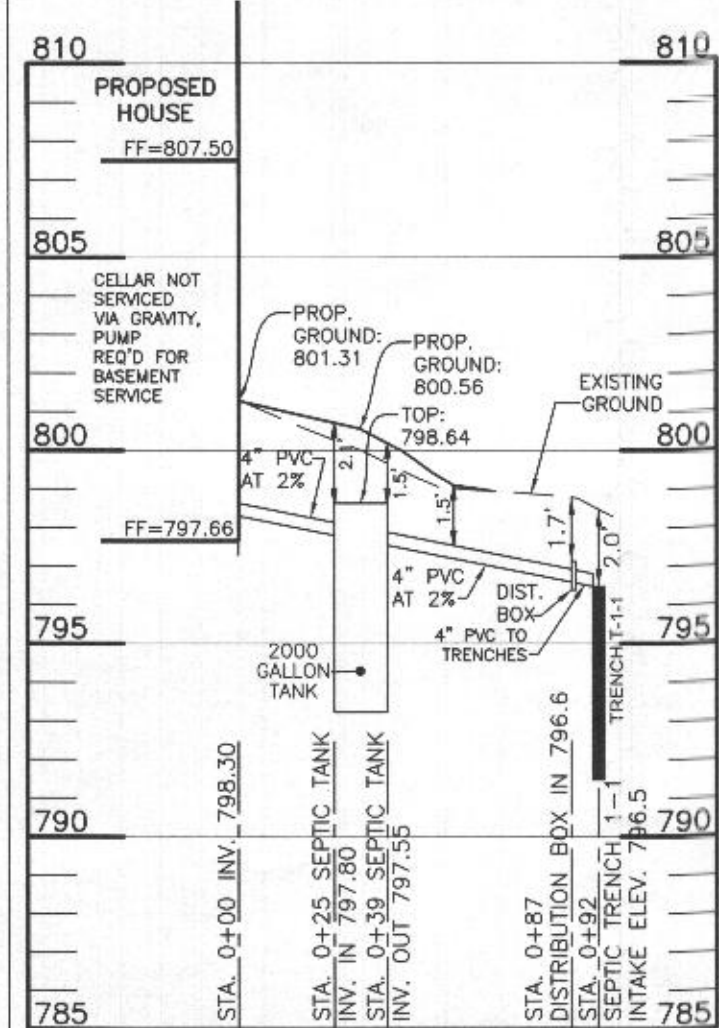


SECTION A-A

**DESIGN DATA & GENERAL NOTES**  
 [1] Concrete strength f<sub>cm</sub> 4,000 p.s.i. @ 28 days. Density = 150 pcf.  
 [2] Cement - Portland Type IV per ASTM C 150-02.  
 [3] Admixtures & plasticizers per ASTM C 494-02.  
 [4] Reinforcing per ASTM A185. Min. 1-1/2" cover.  
 [5] Top slab sealed with butyl rope mastic.  
 [6] 4" wall, 4" base, & 4" top thickness.  
 [7] Min. 2" of cover.  
 [8] Depending on use of tank, inlet & outlet baffles may be required by code.

**M B**  
 Mayer Bros., Inc.  
 6254 Race Road  
 Elkridge, Maryland 21075  
 Tel. 410.796.1434  
 Fax. 410.796.1438  
 www.maybrosprecast.com

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



**LOT 6 SEPTIC PROFILE**  
 SCALE: 1"=50' HORIZ., 1"=5' VERT.

TRENCH DESIGN - Lot 6					
<b>INITIAL SYSTEM</b>					
T-1-1	LENGTH	59.6 ft	T-1-2	LENGTH	59.6 ft
	GROUND ELEVATION	798.5		GROUND ELEVATION	798.2
	INVERT ELEVATION	796.5		INVERT ELEVATION	796.2
	MAX BOTTOM ELEVATION	791.5		MAX BOTTOM ELEVATION	791.2
T-1-4	LENGTH	59.6 ft	T-1-5	LENGTH	59.6 ft
	GROUND ELEVATION	797.5		GROUND ELEVATION	796.9
	INVERT ELEVATION	795.5		INVERT ELEVATION	794.9
	MAX BOTTOM ELEVATION	790.5		MAX BOTTOM ELEVATION	789.9
T-1-6	LENGTH	59.6 ft			
	GROUND ELEVATION	796.7			
	INVERT ELEVATION	794.7			
	MAX BOTTOM ELEVATION	789.7			
<b>1ST REPLACEMENT SYSTEM</b>					
T-2-1	LENGTH	59.6 ft	T-2-2	LENGTH	59.6 ft
	GROUND ELEVATION	796.1		GROUND ELEVATION	795.9
	INVERT ELEVATION	794.1		INVERT ELEVATION	793.9
	MAX BOTTOM ELEVATION	789.1		MAX BOTTOM ELEVATION	788.9
T-2-4	LENGTH	59.6 ft	T-2-5	LENGTH	59.6 ft
	GROUND ELEVATION	795.1		GROUND ELEVATION	794.4
	INVERT ELEVATION	793.1		INVERT ELEVATION	792.4
	MAX BOTTOM ELEVATION	788.1		MAX BOTTOM ELEVATION	787.4
T-2-6	LENGTH	59.6 ft			
	GROUND ELEVATION	794.4			
	INVERT ELEVATION	792.4			
	MAX BOTTOM ELEVATION	787.4			
<b>2ND REPLACEMENT SYSTEM</b>					
T-3-1	LENGTH	59.6 ft	T-3-2	LENGTH	59.6 ft
	GROUND ELEVATION	793.6		GROUND ELEVATION	793.6
	INVERT ELEVATION	791.6		INVERT ELEVATION	791.6
	MAX BOTTOM ELEVATION	786.6		MAX BOTTOM ELEVATION	786.6
T-3-3	LENGTH	59.6 ft			
	GROUND ELEVATION	792.6			
	INVERT ELEVATION	790.6			
	MAX BOTTOM ELEVATION	785.6			
T-3-4	LENGTH	59.6 ft	T-3-5	LENGTH	59.6 ft
	GROUND ELEVATION	792.7		GROUND ELEVATION	791.6
	INVERT ELEVATION	790.7		INVERT ELEVATION	789.6
	MAX BOTTOM ELEVATION	785.7		MAX BOTTOM ELEVATION	784.6
T-3-6	LENGTH	59.6 ft			
	GROUND ELEVATION	791.7			
	INVERT ELEVATION	789.7			
	MAX BOTTOM ELEVATION	784.7			

SEPTIC INVERT CHART - Lot 6	
INV @ HOUSE	798.30
GROUND @ HOUSE	801.32
INV IN SEPTIC TANK	797.80
INV OUT SEPTIC TANK	797.55
TOP OF SEPTIC TANK	798.64
GROUND OVER SEPTIC TANK	800.56
INV IN DIST BOX	796.60
INV OUT DIST BOX	796.50
GROUND AT DIST BOX	798.80

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: 01-01-2021.



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INITIAL SYSTEM		1ST REPLACEMENT SYSTEM		2ND REPLACEMENT SYSTEM	
Application Rate	0.6 gpd/sf	Application Rate	0.6 gpd/sf	Application Rate	0.6 gpd/sf
Effective Area Beginning Depth	5.5 ft	Effective Area Beginning Depth	5.5 ft	Effective Area Beginning Depth	5.5 ft
Bottom Max Depth	7.0 ft	Bottom Max Depth	7.0 ft	Bottom Max Depth	7.0 ft
Design Flow	900 gpd	Design Flow	900 gpd	Design Flow	900 gpd
Drainage Field square footage	1500 sf	Drainage Field square footage	1500 sf	Drainage Field square footage	1500 sf
Sidewall Reduction Credit	0.71	Sidewall Reduction Credit	0.71	Sidewall Reduction Credit	0.71
Trench width	3 ft	Trench width	3 ft	Trench width	3 ft
Effective Area Depth	1.5 ft	Effective Area Depth	1.5 ft	Effective Area Depth	1.5 ft
Trench Spacing	10 ft	Trench Spacing	10 ft	Trench Spacing	10 ft
Trench Length Required	357 lf	Trench Length Required	357 lf	Trench Length Required	357 lf

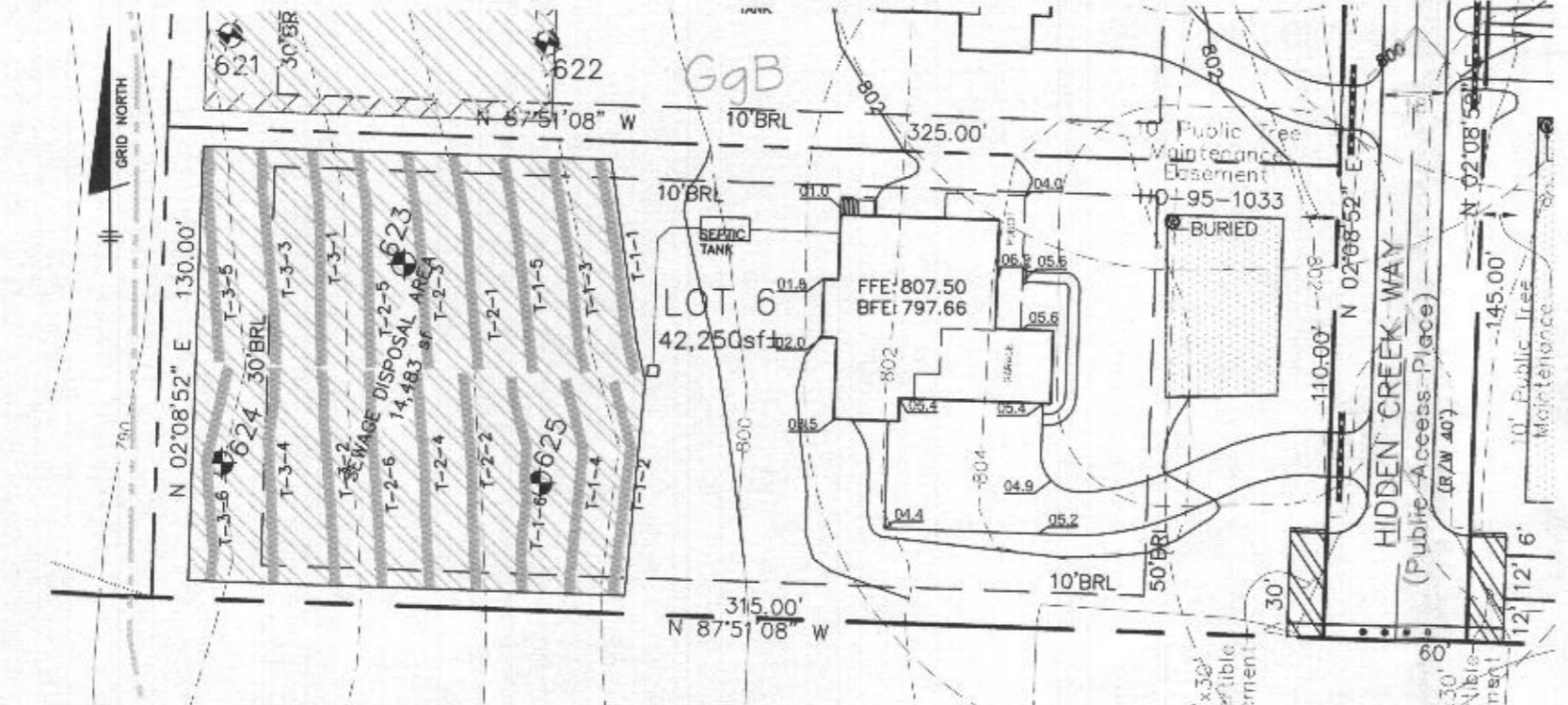
Approved Septic System Plan  
 Howard County Health Department  
*[Signature]* 10/27/2020  
 Signature Date

PROJECT:	WINDSOR FOREST KNOLLS LOT 6	
LOCATION:	TAX MAP: 6 - GRID: 16 - PARCEL: 57 18438 HIDDEN CREEK WAY, TAX ID# 04-373219 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 2 OF 2

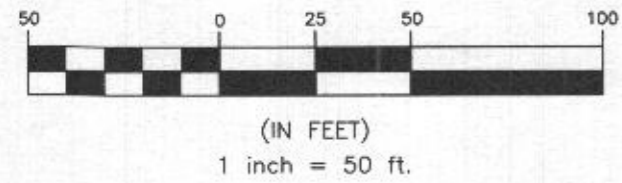
HEALTH DEPARTMENT SPEC SHEET INFORMATION - Lot 6			
System	Application Rate	Effective Depth	Bottom Depth
1st System	0.6	5.5	7.0
2nd system	0.6	5.5	7.0
3rd System	0.6	5.5	7.0

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

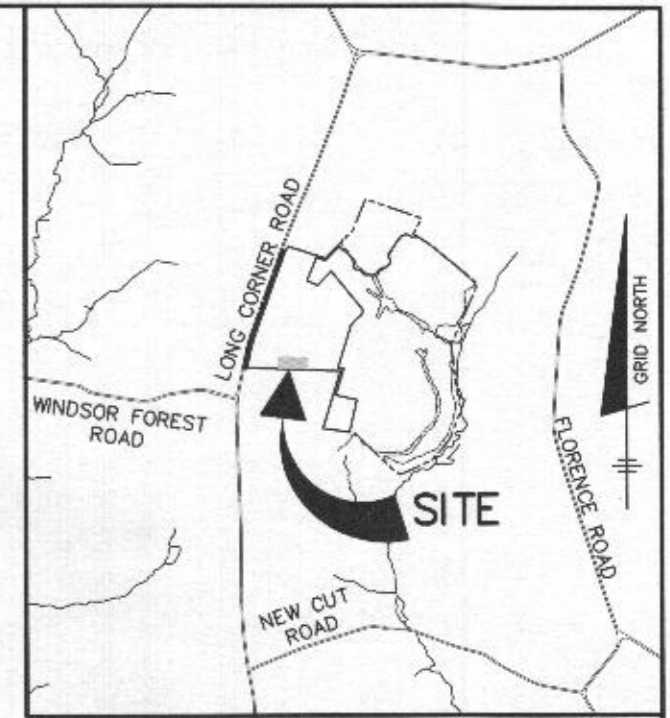
**BENCHMARK**  
 ENGINEERS • LAND SURVEYORS • PLANNERS  
**ENGINEERING, INC.**  
 8480 BALTIMORE NATIONAL PIKE SUITE 315  
 ELLICOTT CITY, MARYLAND 21043  
 (P) 410-465-6105 • (F) 410-465-6644  
 WWW.BEI-CVILENGINEERING.COM



**PLAN VIEW**  
1" = 50'



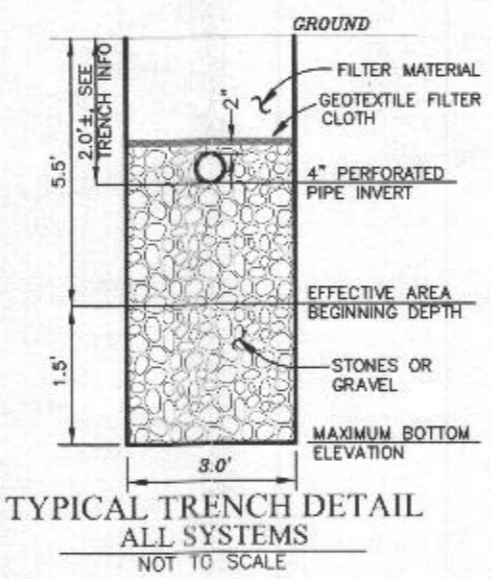
- LEGEND**
- 400 PROPOSED CONTOURS
  - 398 EXISTING CONTOURS
  - EXISTING PRIVATE SEWAGE DISPOSAL AREA
  - ADDITIONAL SEWAGE DISPOSAL AREA
  - EXISTING WELL BOX
  - SOILS MAP SYMBOL
  - SOILS DELINEATION LINE
  - PERC TEST PASSED



**VICINITY MAP**  
SCALE: 1" = 2000'

**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-95-1033) 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.



**TYPICAL TRENCH DETAIL**  
ALL SYSTEMS  
NOT TO SCALE

Approved Septic System Plan  
Howard County Health Department  
*[Signature]* 10/27/2020  
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. 28376, Expiration Date: 01-01-2021.



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

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**ENGINEERING, INC.**  
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ELLICOTT CITY, MARYLAND 21043  
(P) 410-465-6105 • (F) 410-465-6644  
WWW.BEI-CMLENGINEERING.COM

PROJECT:		<b>WINDSOR FOREST KNOLLS LOT 6</b>	
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HOUSE TYPE:		CUSTOM - KEYSTONE HOMES	
DATE:	AUGUST, 2020	PROJECT NO.	2986
SCALE:	AS SHOWN	DRAWING	1 OF 2