

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

RECEIPT DATE: 3/22/21 **ONSITE SEWAGE DISPOSAL SYSTEM** P 208806A

APPROVAL DATE: 07/08/2021 **PERMIT: CONSTRUCTION** A _____

PROPERTY ADDRESS: 18439 Hidden Creek Way

SUBDIVISION: Windsor Forest Knolls LOT: 9 TAX ID: 04-373242

CONTRACTOR: FARM AND HOME EMAIL: _____

CONTRACTOR ADDRESS: 901 DRIVER ROAD MARBLOTTSVILLE MD 21104 PHONE: 410 442 2159

PROPERTY OWNER: Keystone Custom Homes EMAIL: _____

OWNER ADDRESS: 227 Granite Run Drive PHONE: _____

SEPTIC TANK SIZE (GALLONS): 2000 TANK MANUFACTURER: MayorBros

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

DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 5 APPLICATION RATE: 0.8

TRENCHES:	LINEAR FEET REQUIRED: <u>260</u>	INLET DEPTH: <u>2</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>6</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:	Install 4 trenches at 65.2 LF	

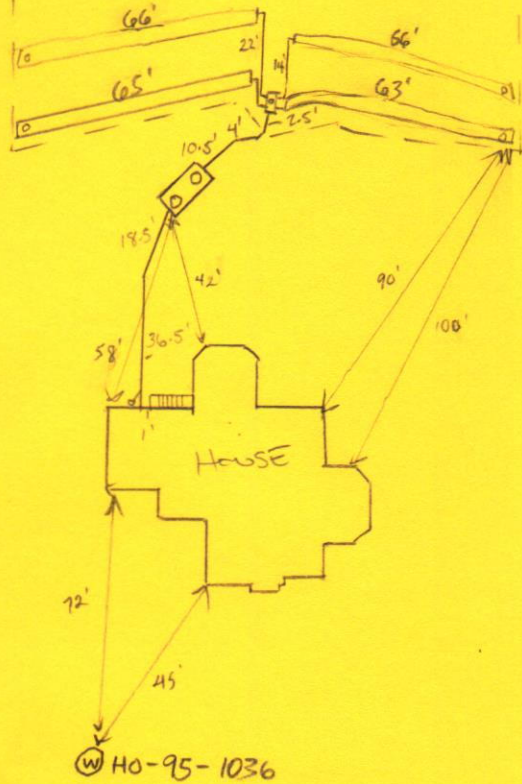
ISSUED BY: CABATHUG 001997 ISSUE DATE: 06/23/2021 EXPIRATION DATE: 06/23/2024

- 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 DOWNGRADE 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.**

18439 Hidden Creek Way

NOT TO SCALE 1" = 50'



ROAD NAME

Hidden Creek Way

TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	2'	6"
NUMBER OF TRENCHES		4
TOTAL LENGTH		260'
ABSORPTION AREA		780 sq ft + sidewalk
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	1.5'
BAFFLES	YES
BAFFLE FILTER	-
MANHOLE LOC	FRONT/BACK
6" PORT LOC	-
WATERTIGHT TEST	-
SLOTTED	YES
DATE ON LID	04/21/2021

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:

6/23/21 Laid out 4 x 66' trenches on contour according to plan. (S)

INSTALLATION: 06/25/2021 TANK SET, D BOX SET TRENCH CONSTRUCTION COMMENCED. (S)

7/7/21 Trenches installed. D box leveled. Re-insp for ST and SHC. (S)

07/08/2021 SEWER LINE COMPLETE. (S)

FINAL INSPECTOR

Joseph Calaf

DATE OF APPROVAL

07/08/2021

HIDDEN CREEK WAY
(Public Access Place)

10'X30'
REVERTIBLE
EASEMENT

(R/W 40') N 02°08'52" E
145.00'

10' Public Tree
Maintenance
Easement



50' BRL

45.8'

SEE DETAIL

19.1'

N 87°51'08" W 263.95'

10' BRL

LOT 9

10' BRL

LOT 10

24' Private
Use-In-Common
Access Easement for
Lots 7, 8 &
Buildable Preservation
Parcel 'A'

150.02'

S 17°00'59" W

S 87°51'08" E
302.45'

30' BRL

TOP OF FOUNDATION WALL = 804.0'

OFFSET DIMENSIONS TO PROPERTY LINES ARE ± 0.1'

SURVEYOR'S CERTIFICATE

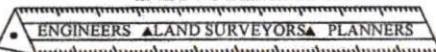
I HEREBY CERTIFY THAT THESE DOCUMENTS, WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21320, EXPIRATION DATE 1-7-2023 AND TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION AND BELIEF,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



DONALD A. MASON
PROFESSIONAL LAND SURVEYOR
MARYLAND REG. No. 21320

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

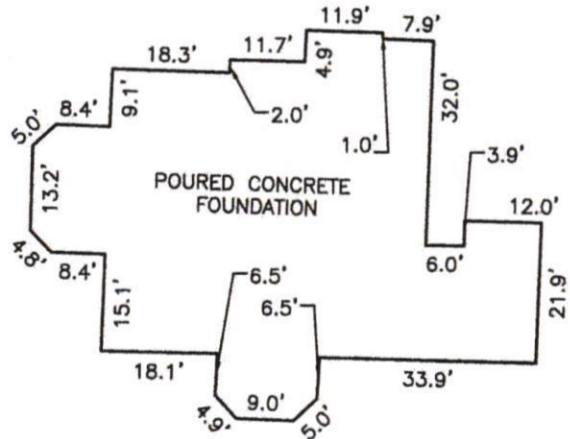
BENCHMARK



ENGINEERING, INC.

8480 BALTIMORE NATIONAL PIKE SUITE 315
ELLCOTT CITY, MARYLAND 21043
(P) 410-465-6105 (F) 410-465-6644

WWW.BEI-CIVILENGINEERING.COM



Approved 3/23/21 (SP)

FOUNDATION DETAIL

SCALE: 1" = 30'

WALL CHECK

WINDSOR FOREST KNOLLS

LOTS 1 THRU 18

PLAT No. 19396

LOT No. 9

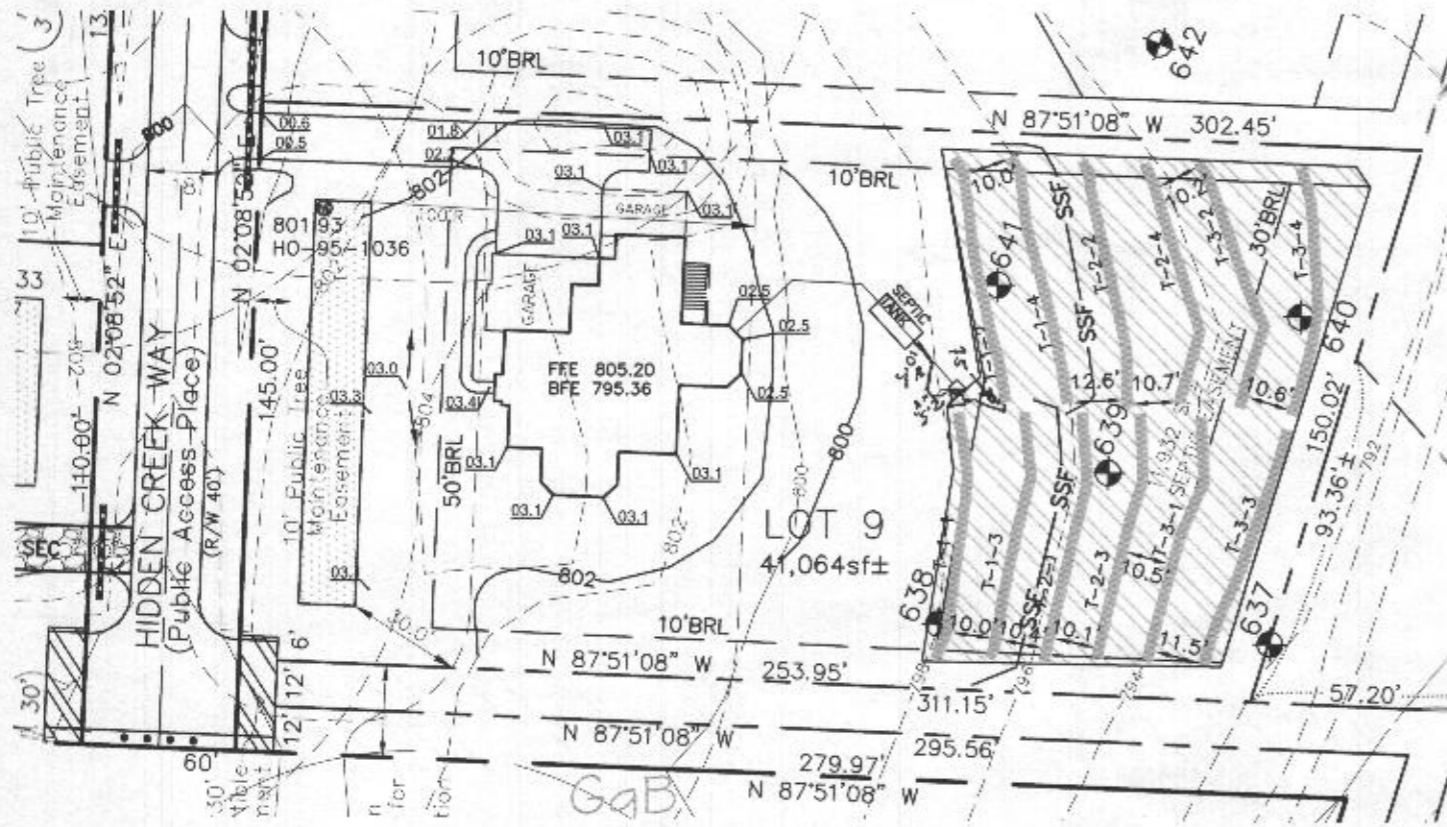
18439 HIDDEN CREEK WAY

4TH ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

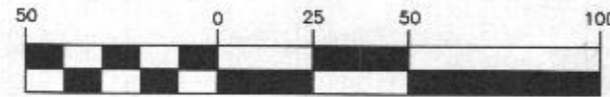
FIELD OBS. BY AS
COMP. BY EWF

DRAWN BY EWF SCALE: 1" = 50' DATE: 03/11/2021



PLAN VIEW

1" = 50'

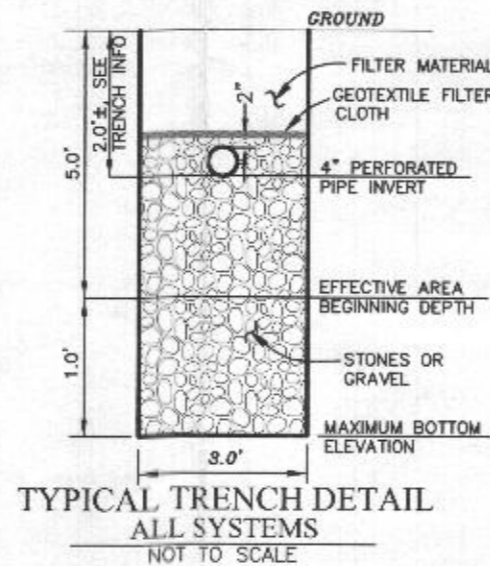


(IN FEET)

1 inch = 50 ft.

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-95-1036) HAS BEEN FIELD LOCATED BY BENCHMARK ENGINEERING INC. JULY 2020 AND IS ACCURATELY SHOWN.
3. THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
4. 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.
5. SEDIMENT AND EROSION CONTROLS WILL BE SUBMITTED BY HOWARD SOILS CONSERVATION DISTRICT AS A CUSTOM GRADING PLAN.
6. ALL DRAINAGE AND STORMWATER MANAGEMENT FEATURES USED ON THIS SITE MUST COMPLY WITH THE APPROVED BUILDING PERMIT AND CUSTOM GRADING PLANS.
7. ANY CHANGES TO A PRIVATE SEWAGE DISPOSAL AREA OR WELL BOX SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
8. 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.
9. ANY ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
10. THE SEPTIC TANK WILL BE A 2000 GALLON TWO COMPARTMENT TANK.
11. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
12. 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.



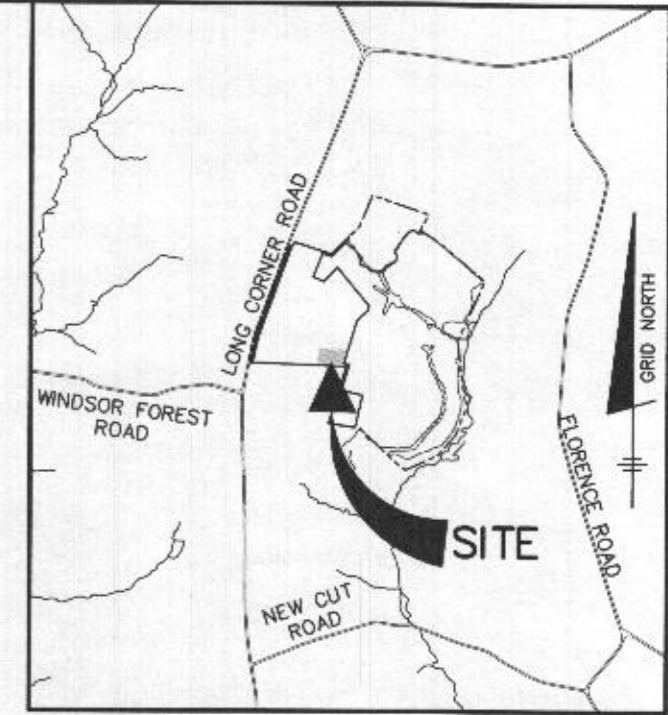
TYPICAL TRENCH DETAIL
ALL SYSTEMS
NOT TO SCALE



Approved Septic System Plan
Howard County Health Department

Hank Oswald
Signature

11/10/20
Date



VICINITY MAP

SCALE: 1" = 2000'

LEGEND

- 400 PROPOSED CONTOURS
- 398 EXISTING CONTOURS
- 400 EXISTING CONTOURS
- EXISTING PRIVATE SEWAGE DISPOSAL AREA
- ADDITIONAL SEWAGE DISPOSAL AREA
- EXISTING WELL BOX
- SOILS MAP SYMBOL
- 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: 01-01-2021.

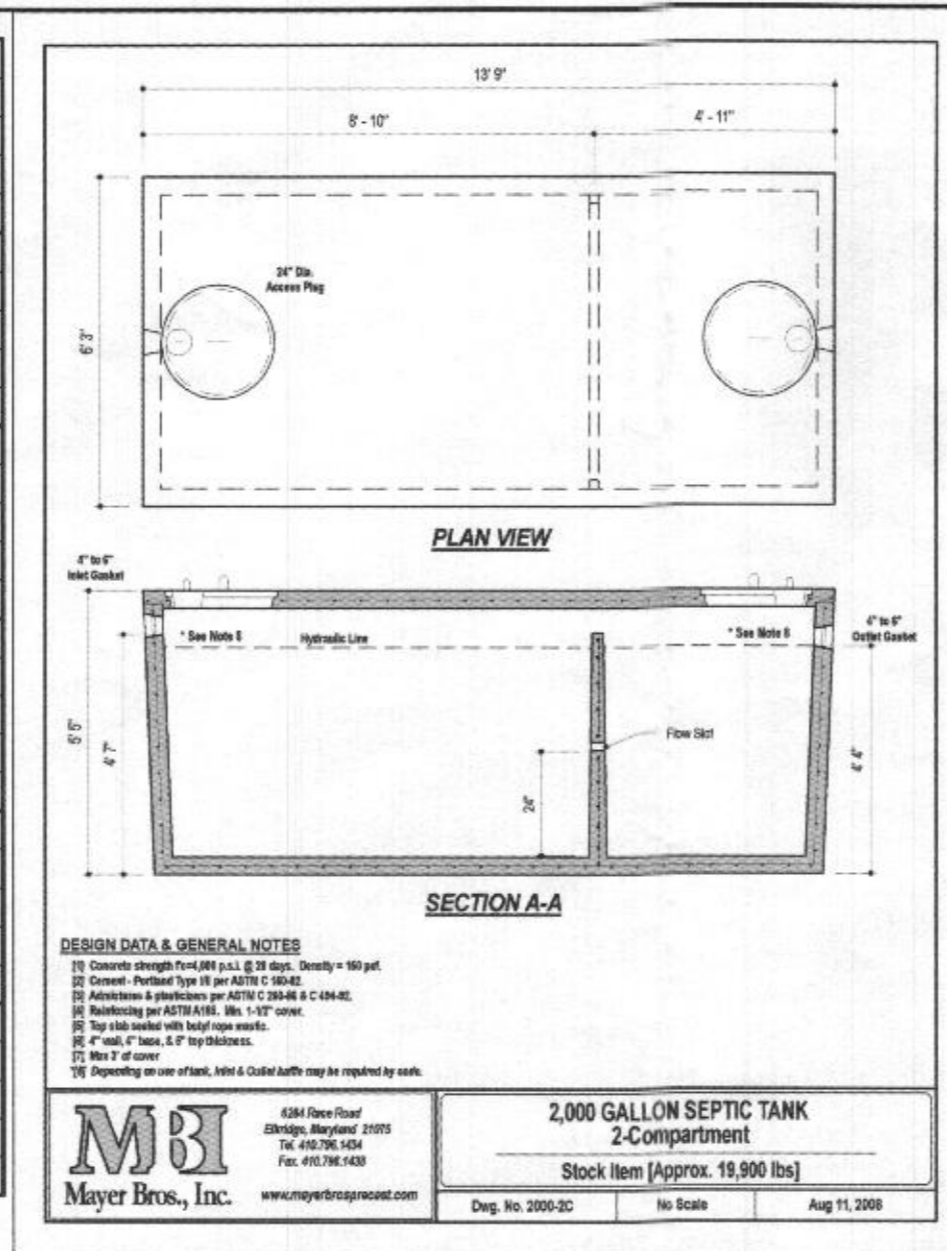
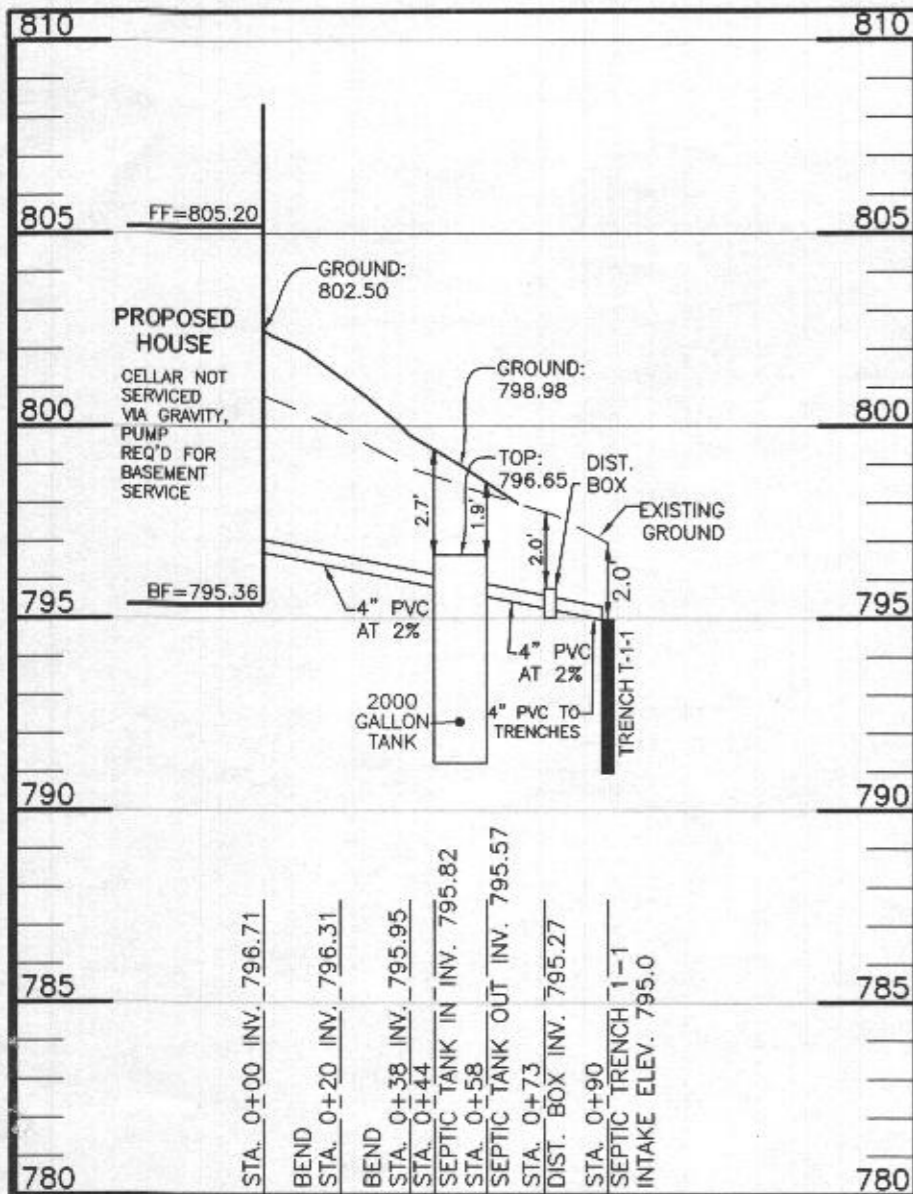


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PROJECT:		WINDSOR FOREST KNOLLS LOT 9	
LOCATION:		TAX MAP: 6 - GRID: 16 - PARCEL: 57 18439 HIDDEN CREEK WAY - TAX ID # 04-373243 ELECTION DISTRICT NO. 4 - HOWARD COUNTY, MARYLAND	
TITLE:		ONSITE SEWAGE DISPOSAL PLAN	
HOUSE TYPE:		CUSTOM - KEYSTONE HOMES	
DATE:	OCTOBER, 2020	PROJECT NO.	2986
SCALE:	AS SHOWN	DRAWING	1 OF 2

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
ELLCOTT CITY, MARYLAND 21043
(P) 410-465-6105 ▲ (F) 410-465-6644
WWW.BEI-CMLENGINEERING.COM



TRENCH DESIGN - Lot 9

INITIAL SYSTEM					
T-1-1	LENGTH	65.2 ft	T-1-3	LENGTH	65.2 ft
	GROUND ELEVATION	797.8		GROUND ELEVATION	796.8
	INVERT ELEVATION	795.8		INVERT ELEVATION	794.8
	MAX BOTTOM ELEVATION	791.8		MAX BOTTOM ELEVATION	790.8
T-1-2	LENGTH	65.2 ft	T-1-4	LENGTH	65.2 ft
	GROUND ELEVATION	797.0		GROUND ELEVATION	796.0
	INVERT ELEVATION	795.0		INVERT ELEVATION	794.0
	MAX BOTTOM ELEVATION	791.0		MAX BOTTOM ELEVATION	790.0
1ST REPLACEMENT SYSTEM					
T-2-1	LENGTH	65.2 ft	T-2-3	LENGTH	65.2 ft
	GROUND ELEVATION	795.8		GROUND ELEVATION	794.8
	INVERT ELEVATION	793.8		INVERT ELEVATION	792.8
	MAX BOTTOM ELEVATION	789.8		MAX BOTTOM ELEVATION	788.8
T-2-2	LENGTH	65.2 ft	T-2-4	LENGTH	65.2 ft
	GROUND ELEVATION	794.9		GROUND ELEVATION	794.2
	INVERT ELEVATION	792.9		INVERT ELEVATION	792.2
	MAX BOTTOM ELEVATION	788.9		MAX BOTTOM ELEVATION	788.2
2ND REPLACEMENT SYSTEM					
T-3-1	LENGTH	65.2 ft	T-3-3	LENGTH	65.2 ft
	GROUND ELEVATION	794.0		GROUND ELEVATION	793.0
	INVERT ELEVATION	792.0		INVERT ELEVATION	791.0
	MAX BOTTOM ELEVATION	788.0		MAX BOTTOM ELEVATION	787.0
T-3-2	LENGTH	65.2 ft	T-3-4	LENGTH	65.2 ft
	GROUND ELEVATION	793.6		GROUND ELEVATION	793.0
	INVERT ELEVATION	791.6		INVERT ELEVATION	791.0
	MAX BOTTOM ELEVATION	787.6		MAX BOTTOM ELEVATION	787.0

LOT 9 SEPTIC PROFILE
SCALE: 1"=50' HORIZ., 1"=5' VERT.

INITIAL SYSTEM		1ST REPLACEMENT SYSTEM		2ND REPLACEMENT SYSTEM	
Number of Bedrooms	5	Number of Bedrooms	5	Number of Bedrooms	5
Application Rate	0.8 gpd/sf	Application Rate	0.8 gpd/sf	Application Rate	0.8 gpd/sf
Effective Area Beginning Depth	5.0 ft	Effective Area Beginning Depth	5.0 ft	Effective Area Beginning Depth	5.0 ft
Bottom Max Depth	6.0 ft	Bottom Max Depth	6.0 ft	Bottom Max Depth	6.0 ft
Design Flow	750 gpd	Design Flow	750 gpd	Design Flow	750 gpd
Drainage Field square footage	937.5 sf	Drainage Field square footage	937.5 sf	Drainage Field square footage	938 sf
Sidewall Reduction Credit	0.83	Sidewall Reduction Credit	0.83	Sidewall Reduction Credit	0.83
Trench width	3 ft	Trench width	3 ft	Trench width	3 ft
Effective Area Depth	1 ft	Effective Area Depth	1 ft	Effective Area Depth	1 ft
Trench Spacing	10 ft	Trench Spacing	10 ft	Trench Spacing	10 ft
Trench Length Required	260 lf	Trench Length Required	260 lf	Trench Length Required	260 lf

HEALTH DEPARTMENT SPEC SHEET INFORMATION - Lot 9

System	Application Rate	Effective Depth	Bottom Depth
1st System	0.8	5.0	6.0
2nd system	0.8	5.0	6.0
3rd System	0.8	5.0	6.0

Mayer Bros., Inc.
4284 Race Road, Elkridge, Maryland 21075
Tel. 410.796.1434 Fax. 410.796.1430
www.mayerbrosgroup.com

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

SEPTIC INVERT CHART - Lot 9

INV @ HOUSE	796.7
GROUND @ HOUSE	802.5
INV IN SEPTIC TANK	795.8
INV OUT SEPTIC TANK	795.6
TOP OF SEPTIC TANK	796.7
GROUND OVER SEPTIC TANK	799.0
INV IN DIST BOX	795.3
INV OUT DIST BOX	795.2
GROUND AT DIST BOX	797.8

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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LOCATION: TAX MAP: 6 - GRID: 16 - PARCEL: 57
18439 HIDDEN CREEK WAY - TAX ID # 04-373243
ELECTION DISTRICT NO. 4 - HOWARD COUNTY, MARYLAND

TITLE: ONSITE SEWAGE DISPOSAL PLAN

HOUSE TYPE: CUSTOM - KEYSTONE HOMES

DATE: OCTOBER, 2020 **PROJECT NO.:** 2986

SCALE: AS SHOWN **DRAWING 2 OF 2**

OWNER/BUILDER:
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SUITE 100
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