

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: 4.25.23 ONSITE SEWAGE DISPOSAL SYSTEM

P 574092

APPROVAL DATE: 6/15/2023 SP PERMIT: CONSTRUCTION

A

PROPERTY ADDRESS: 1933 Davis Branch Rd

SUBDIVISION: Myrtle Property LOT: 20 TAX ID:

CONTRACTOR: Farm 2 Home Excavating EMAIL:

CONTRACTOR ADDRESS: 901 Drucker Rd PHONE:

PROPERTY OWNER: Keystone Custom Homes EMAIL:

OWNER ADDRESS: 227 Granite Run Dr, Lancaster PA PHONE:

SEPTIC TANK SIZE (GALLONS): 2,000 TANK MANUFACTURER: Meyer Bios Inc.

PUMP MODEL: PUMP SIZE PUMP TANK CAPACITY:

DISTRIBUTION SYSTEM: [X] GRAVITY [ ] PRESSURE DOSED BEDROOMS: 7 APPLICATION RATE: 0.8

TRENCHES:	LINEAR FEET REQUIRED:	243'	INLET DEPTH:	3'
	TRENCH WIDTH:	3'	MAXIMUM BOTTOM DEPTH:	8'
	MINIMUM SPACE BETWEEN TRENCHES:	10'	EFFECTIVE AREA BEGINNING DEPTH:	5.5"

LOCATION: PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.

NOTES: ~~Blank~~

ISSUED BY: Hank Oswald ISSUE DATE: 4.25.23 EXPIRATION DATE: 4.25.24

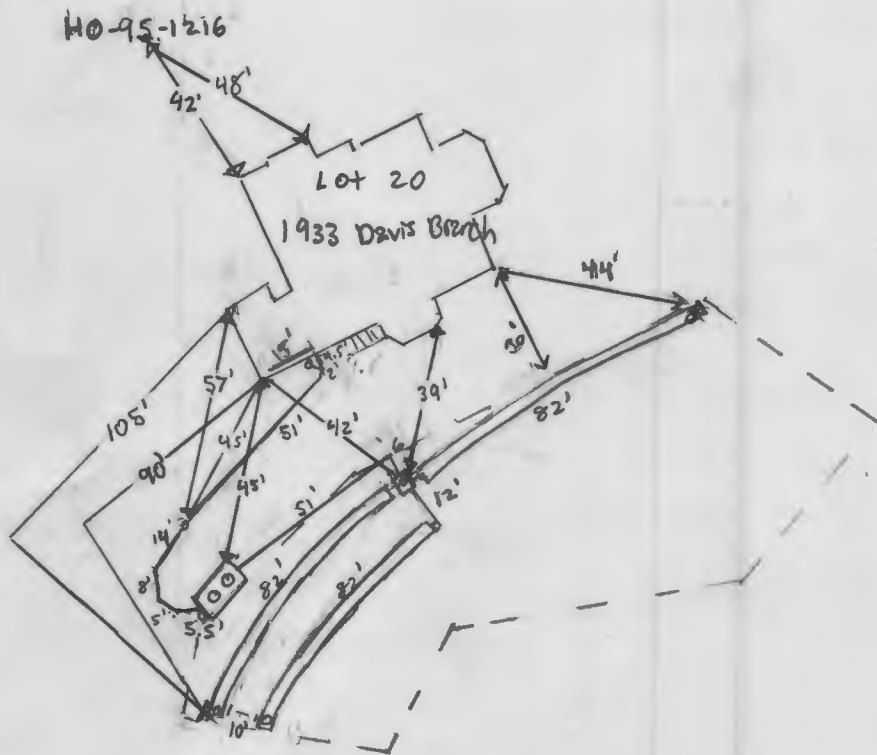
- NOTE: CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION INSPECTION PRIOR TO BEGINNING ANY INSTALLATION
- NOTE: CONTRACTOR MUST SCHEDULE AN INSPECTION AND GAIN APPROVAL OF ALL COMPONENTS PRIOR TO COVERING
- NOTE: STONE MUST BE APPROVED BY HEALTH DEPARTMENT AND GRAVEL TICKET MUST BE AVAILABLE FOR REVIEW.
-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



ROAD NAME

**TRENCH/DRAINFIELD DATA**

WIDTH	INLET	BOTTOM
3'	3'	5.5'
NUMBER OF TRENCHES		3
TOTAL LENGTH		246
ABSORPTION AREA		738 ft <sup>3</sup>
DISTRIBUTIONBOX LEVEL		yes
DISTRIBUTIONBOX BAFFLE		yes
DISTRIBUTIONBOX PORT		yes

**SEPTIC TANK DATA**

SEPTIC TANK 1 LEVEL	yes
MANUFACTURER	Baby/lon
CAPACITY	2000 GAL
SEAM LOC	Top
TANK LID DEPTH	12"-16"
BAFFLES	Rear & Front
BAFFLE FILTER	-
MANHOLE LOC	Front/Rear
6" PORT LOC	none
WATERTIGHT TEST	-
SLOTTED	yes
DATE ON LID	5-1-2023

**PUMP/SEPTIC TANK LEVEL** N/A

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

**PRE-CONSTRUCTION:**

5/22/2023 - SNA staked. Tank staked, fall confirmed. Upper part of SDA has light disturbance. Laid out upper trench confirmed trench still on contour 2" difference. Measured 13' below upper trench, measured 81' of trench. Beginning of lower trench 2' too low, moved beginning of upper & lower trench up 2'. Measured 6' off upper trench for D-box. Then laid out 2" upper trench. Measured 81'. Elevation on contour 2" difference. (P)

**INSTALLATION:**

6/15/2023 septic tank set on line per the SNA, upper right tank working on lower trench now. Need to use laser level while installing tanks (P)

6/15/2023 - Front line installed. C/O @ house, SCHO 40 PVC used, verified fall from house. Measured foundation to tank. C/O in middle of front line. D-box set & leveled, saw baffle & port. Measured upper trench length @ 82' per plan. Inlet @ 3' per plan. Space between trenches 10' edge to edge. Saw obs port @ end of trenches. Gave OK to backfill all work. (P)

FINAL INSPECTOR S. Page DATE OF APPROVAL 6/15/2023

# Howard County Health Department

Bureau of Environmental Health, Columbia, MD 21045 - 410-313-1771

SEWAGE DISPOSAL PERMIT NO. A- \_\_\_\_\_ P- \_\_\_\_\_

RESIDENTIAL PERMIT   
(NUMBER OF BEDROOMS: \_\_\_\_\_)

COMMERCIAL PERMIT   
(DESIGN FLOW: \_\_\_\_\_ GPD)

PERMITEE: \_\_\_\_\_

LOCATION: \_\_\_\_\_

1933 Davis Branch Road Myrtle Property Lot 20

**\*\*POST THIS CARD WHERE IT CAN BE SEEN FROM ROAD\*\***

STOP ALL CONSTRUCTION ON SEWAGE  
DISPOSAL SYSTEM AND CONTACT HEALTH  
DEPARTMENT BEFORE CONTINUING

\_\_\_\_\_  
Inspector

\_\_\_\_\_  
Date

WORK IS SATISFACTORY, OK TO  
CONTINUE

\_\_\_\_\_  
Inspector

\_\_\_\_\_  
Date

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

FINAL INSPECTION MADE, OK TO  
COVER ALL WORK

\_\_\_\_\_  
Inspector

\_\_\_\_\_  
Date

**From:** Bricker, Robert <RBricker@howardcountymd.gov>  
**Sent:** Tuesday, June 14, 2022 4:39 PM  
**To:** Alice Miller (amiller@bei-civilengineering.com)  
**Cc:** Silvast, Zackary  
**Subject:** 1933 Davis Branch Road\_OSDS Design Plan

Good afternoon Alice,

Revision of the OSDS Design Plan for Myrtue Property, Lot 20 (1933 Davis Branch Road) is required. The following issues are cited:

- The original SDA appears on this plan, and the symbol in Legend matches the symbol for the original SDA. Delete the original SDA and edit the Legend symbol to match the one used for the revised SDA.
- It appears that there is enough space to fit Trench 1-3 on the same contour as Trench 1-2. Spreading the effluent discharge across the SDA, when possible, is preferable to stacking. Try swapping the positions of Trench 1-3 and Trench 2-1.

When edited, you may submit at least three copies of the OSDS Design Plan to the Bureau of Environmental Health.

Robert Bricker, REHS/RS, L.E.H.S.  
Environmental Sanitarian II  
Bureau of Environmental Health, Well and Septic Program  
8930 Stanford Blvd., Columbia, MD 21045

Phone: (410)313-2691  
Email: rbricker@howardcountymd.gov

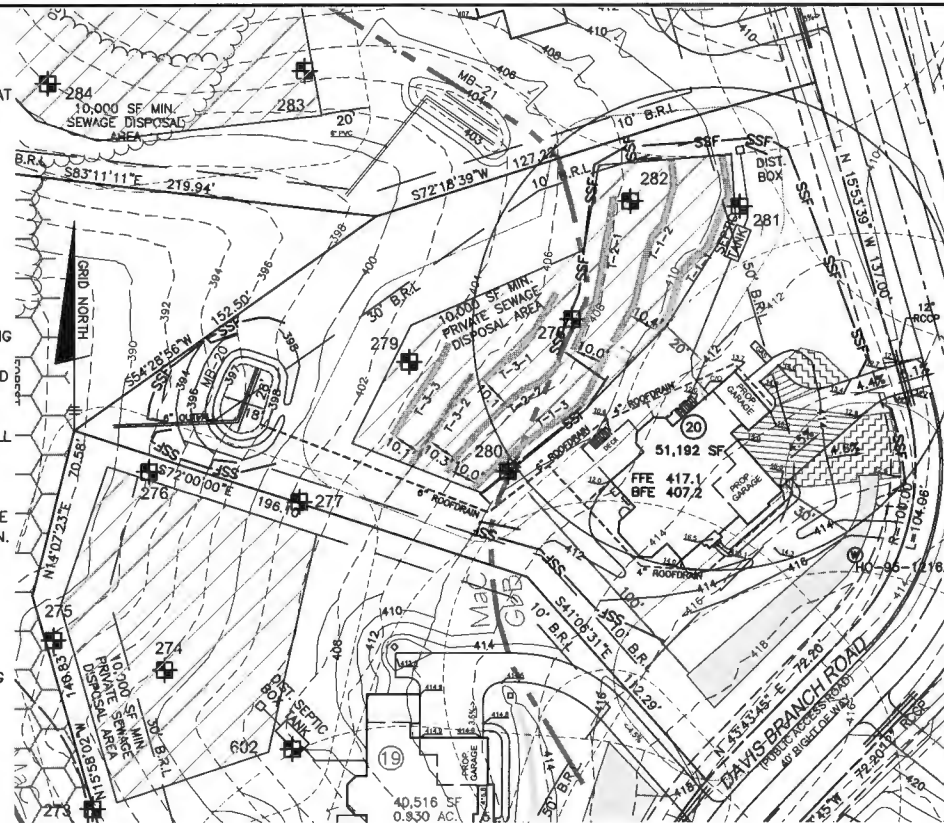


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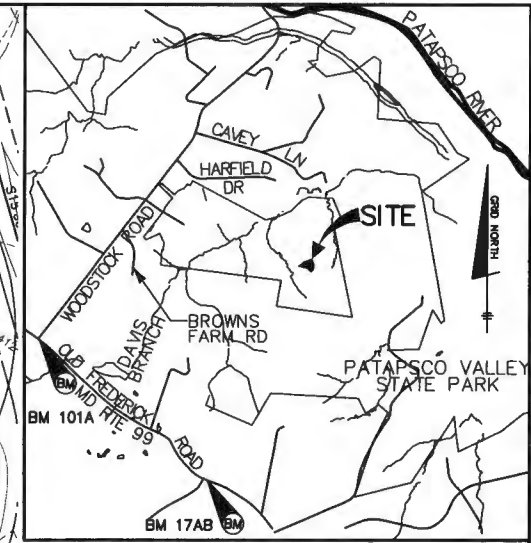
# GENERAL NOTES

1. THE LOT SHOWN HEREON WAS RECORDED ON THE PLAT FOR MYRTUE PROPERTY, PLAT NUMBER 23866. REFER TO THE PLAT FOR LOT DIMENSIONS, LOT AREA, ALL EASEMENTS AND CONDITIONS.
2. THE EXISTING WELL SHOWN ON THIS PLAN (HO-95-1216) HAS BEEN FIELD LOCATED BY DAFT, McCUNE WALKER, INC. AND IS SHOWN IN ACCORDANCE WITH THEIR SURVEY.
3. THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
4. TOPOGRAPHY SHOWN WAS FLOWN BY VIRGINIA RESOURCE MAPPING, INC. DATED FEBRUARY 2003 AND SUPPLEMENTED WITH FIELD SURVEY BY DMW, INC. DATED 2005.
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.
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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.



## PLAN VIEW

1" = 50'



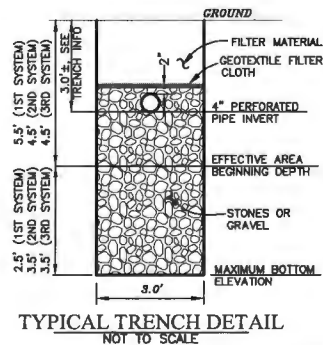
## LOCATION MAP

SCALE: 1" = 2000'

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.

## LEGEND

- PROPOSED CONTOURS
- EXISTING CONTOURS
- EXISTING PRIVATE SEWAGE DISPOSAL AREA
- EXISTING WELL BOX
- PROPOSED TREELINE
- EXISTING TREELINE
- SOILS MAP SYMBOL
- SOILS DELINEATION LINE
- PERC TEST PASSED



TYPICAL TRENCH DETAIL  
NOT TO SCALE

### 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) 410-483-6105 • (F) 410-485-8844  
WWW.BE-CMLENGINEERING.COM

### PROJECT:

MYRTUE PROPERTY  
LOT 20

### LOCATION:

TAX MAP: 10, GRID: 24, PARCEL: 225, ZONED: RC-DEO  
1933 DAVIS BRANCH RD. WOODSTOCK, MD 21163  
6TH ELECTION DISTRICT, HOWARD COUNTY, MD, TAX ID 352544

### TITLE:

ONSITE SEWAGE DISPOSAL PLAN

### HOUSE TYPE:

CUSTOM - KEYSTONE HOMES

### DATE:

APRIL, 2022

### PROJECT NO.:

2099

### SCALE:

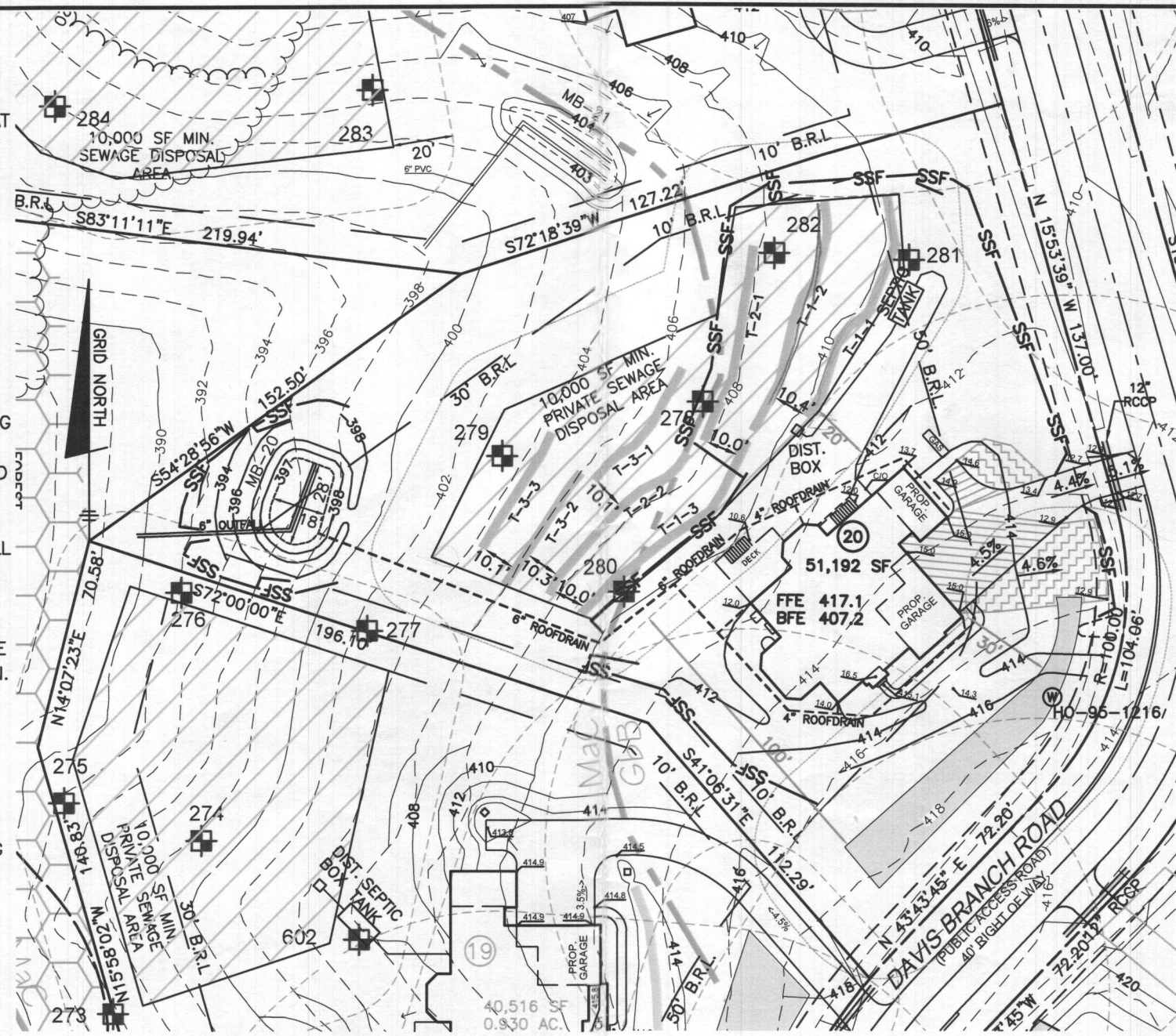
AS SHOWN

### DRAWING

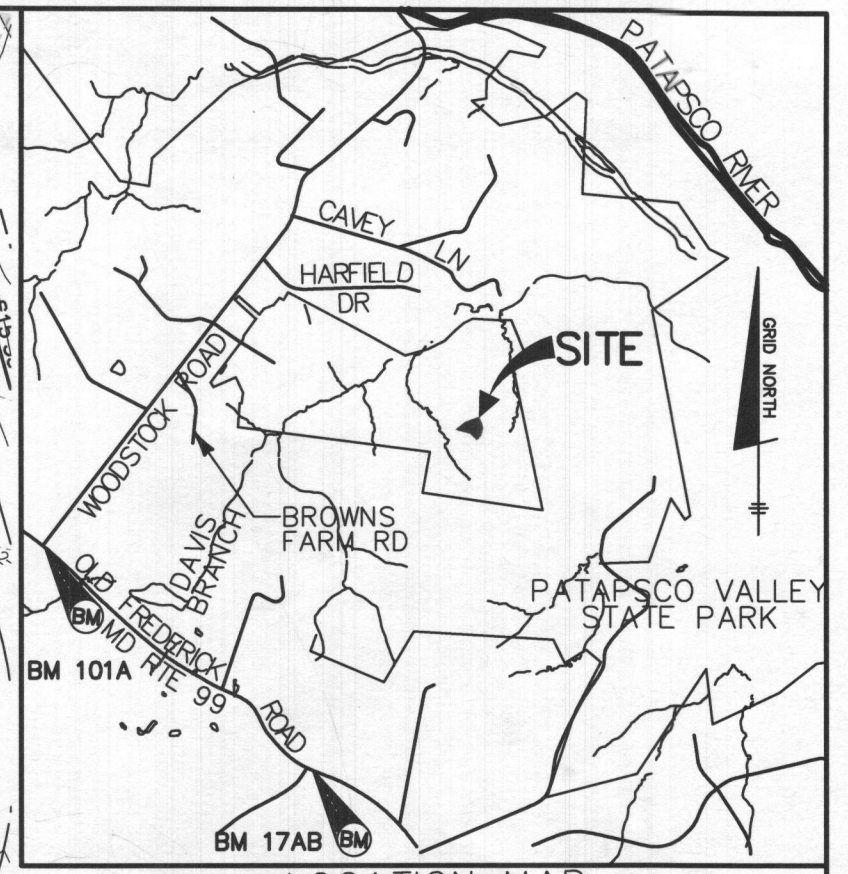
1 OF 2

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PLAN VIEW  
1" = 50'



LOCATION MAP  
SCALE: 1" = 2000'

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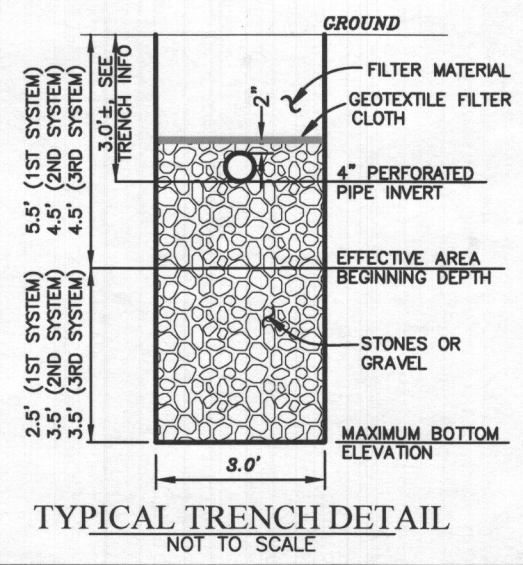


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## LEGEND

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



TYPICAL TRENCH DETAIL  
NOT TO SCALE

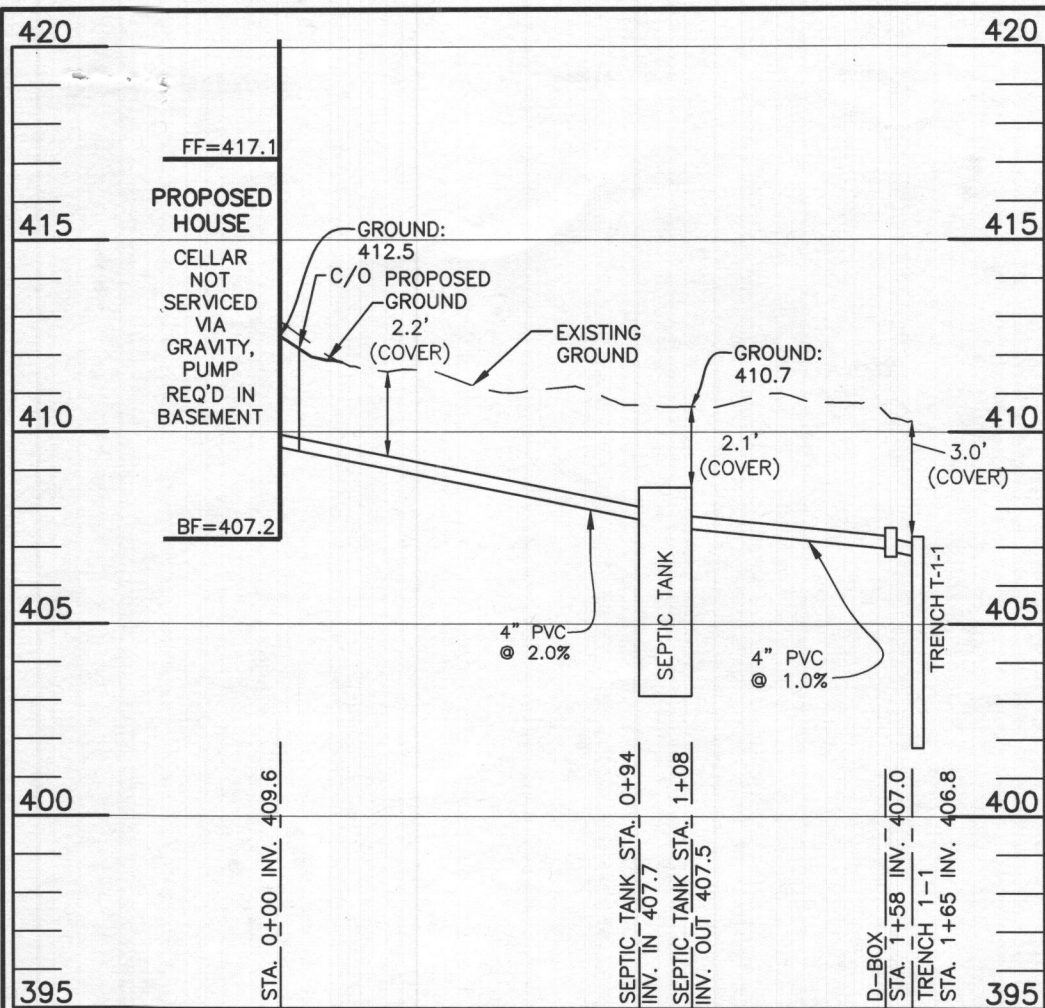
Approved Septic System Plan  
Howard County Health Department

*Blank Osuab 10.17.22*  
Signature Date

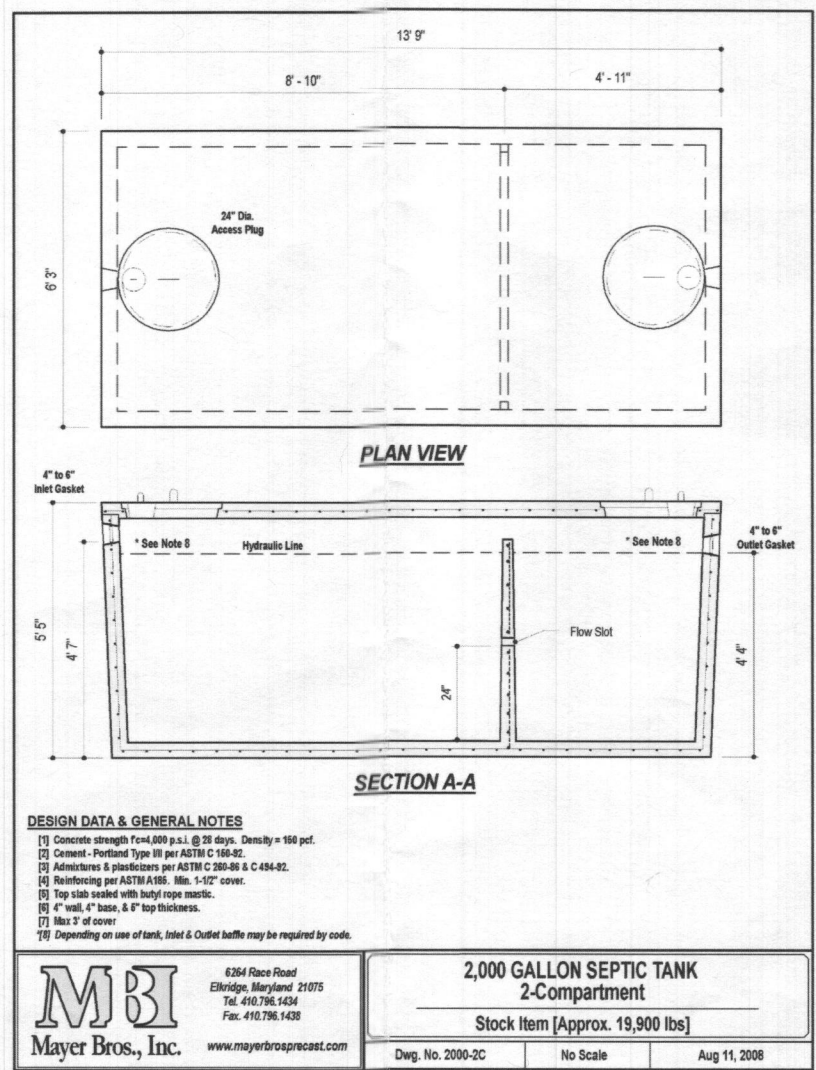
OWNER/BUILDER:  
KEYSTONE CUSTOM HOMES, INC.  
227 GRANITE RUN DR.  
SUITE 100  
LANCASTER, PA 17601  
717-464-9060

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:		MYRTUE PROPERTY LOT 20	
LOCATION: TAX MAP: 10, GRID: 24, PARCEL: 225, ZONED: RC-DEO 1933 DAVIS BRANCH RD. WOODSTOCK, MD 21163 6TH ELECTION DISTRICT, HOWARD COUNTY, MD, TAX ID 352544			
TITLE: REVISED ONSITE SEWAGE DISPOSAL PLAN			
HOUSE TYPE: CUSTOM - KEYSTONE HOMES			
DATE:	AUGUST, 2022	PROJECT NO.	2099
SCALE:	AS SHOWN	DRAWING	1 OF 2



**LOT 20 SEWER PROFILE**  
SCALE: 1"=50' HORIZ., 1"=5' VERT.



**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 150-82.  
 [3] Admixtures & plasticizers per ASTM C 260-96 & C 494-92.  
 [4] Reinforcing per ASTM A 955. Min. 1-1/2" cover.  
 [5] Top slab sealed with butyl rope mastic.  
 [6] 4" wall, 4" base, & 6" top thickness.  
 [7] Max 2" of cover.  
 [8] Depending on use of tank, Inlet & Outlet baffles may be required by code.

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

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

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

INITIAL SYSTEM		
Number of Bedrooms	7	
Application Rate	0.8	gpd/sf
Effective Area Beginning Depth	5.5	ft
Bottom Max Depth	8.0	ft
Design Flow	1050	gpd
Drainage Field square footage	1312.5	sf
Sidewall Reduction Credit	0.56	
Trench width	3	ft
Effective Area Depth	2.5	ft
Trench Spacing	10	ft
<b>Linear Length of trench Required</b>	<b>243</b>	<b>lf</b>

1ST REPLACEMENT SYSTEM		
Number of Bedrooms	7	
Application Rate	1.2	gpd/sf
Effective Area Beginning Depth	4.5	ft
Bottom Max Depth	8.0	ft
Design Flow	1050	gpd
Drainage Field square footage	875	sf
Sidewall Reduction Credit	0.45	
Trench width	3	ft
Effective Area Depth	3.5	ft
Trench Spacing	10	ft
<b>Linear Length of trench Required</b>	<b>133</b>	<b>lf</b>

2ND REPLACEMENT SYSTEM		
Number of Bedrooms	7	
Application Rate	1.2	gpd/sf
Effective Area Beginning Depth	4.5	ft
Bottom Max Depth	8.0	ft
Design Flow	1050	gpd
Drainage Field square footage	875	sf
Sidewall Reduction Credit	0.45	
Trench width	3	ft
Effective Area Depth	3.5	ft
Trench Spacing	10	ft
<b>Linear Length of trench Required</b>	<b>133</b>	<b>lf</b>

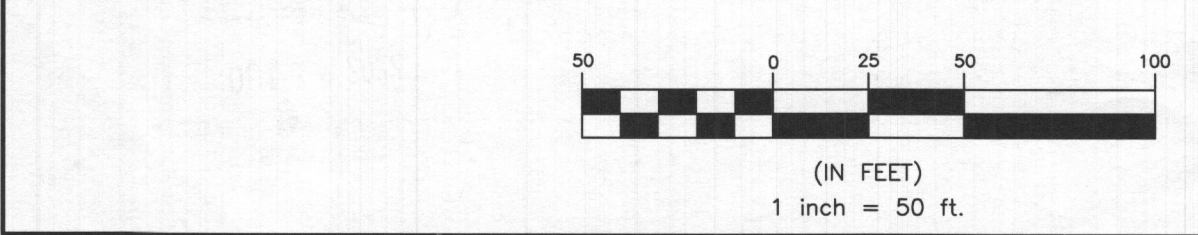
TRENCH DESIGN - Lot 20					
INITIAL SYSTEM		T-1-2		T-1-3	
T-1-1	LENGTH 81.1 ft	T-2-1	LENGTH 66.3 ft	T-3-1	LENGTH 44.2 ft
	GROUND ELEVATION 410.2		GROUND ELEVATION 407.6		GROUND ELEVATION 404.5
	INVERT ELEVATION 407.2		INVERT ELEVATION 404.6		INVERT ELEVATION 401.5
	MAX BOTTOM ELEVATION 402.2		MAX BOTTOM ELEVATION 399.6		MAX BOTTOM ELEVATION 398.5

1ST REPLACEMENT SYSTEM					
T-2-1	LENGTH 66.3 ft	T-2-2	LENGTH 66.3 ft	T-3-2	LENGTH 44.2 ft
	GROUND ELEVATION 407.8		GROUND ELEVATION 407.6		GROUND ELEVATION 406.0
	INVERT ELEVATION 404.8		INVERT ELEVATION 404.6		INVERT ELEVATION 403.0
	MAX BOTTOM ELEVATION 399.8		MAX BOTTOM ELEVATION 399.6		MAX BOTTOM ELEVATION 398.0

2ND REPLACEMENT SYSTEM					
T-3-1	LENGTH 44.2 ft	T-3-2	LENGTH 44.2 ft	T-3-3	LENGTH 44.2 ft
	GROUND ELEVATION 406.5		GROUND ELEVATION 406.0		GROUND ELEVATION 404.5
	INVERT ELEVATION 403.5		INVERT ELEVATION 403.0		INVERT ELEVATION 401.5
	MAX BOTTOM ELEVATION 398.5		MAX BOTTOM ELEVATION 398.0		MAX BOTTOM ELEVATION 396.5

SEPTIC INVERT CHART - Lot 20	
INV @ HOUSE	409.6
GROUND @ HOUSE	412.5
INV IN SEPTIC TANK	407.7
INV OUT SEPTIC TANK	407.5
TOP OF SEPTIC TANK	408.6
GROUND OVER SEPTIC TANK	410.7
INV IN DIST BOX	407.0
INV OUT DIST BOX	406.9
GROUND AT DIST BOX	410.5

HEALTH DEPARTMENT SPEC SHEET INFORMATION - Lot 20			
System	Application Rate	Effective Depth	Bottom Depth
1st System	0.8	5.5	8.0
2nd system	1.2	4.5	8.0
3rd System	1.2	4.5	8.0



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PROJECT: **MYRTUE PROPERTY LOT 20**

LOCATION: TAX MAP: 10, GRID: 24, PARCEL: 225, ZONED: RC-DEO  
1933 DAVIS BRANCH RD, WOODSTOCK, MD 21163  
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TITLE: **REVISED ONSITE SEWAGE DISPOSAL PLAN**

HOUSE TYPE: **CUSTOM - KEYSTONE HOMES**

DATE: **AUGUST, 2022** PROJECT NO. **2099**

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

SIGNATURE AND SEAL ARE FOR SEPTIC PROFILE AND CALCULATIONS ONLY, TANK, PUMP AND DETAILS WERE NOT DESIGNED OR REVIEWED BY THE ENGINEER:

**THIS PLAN IS FOR SEPTIC DESIGN ONLY**

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.

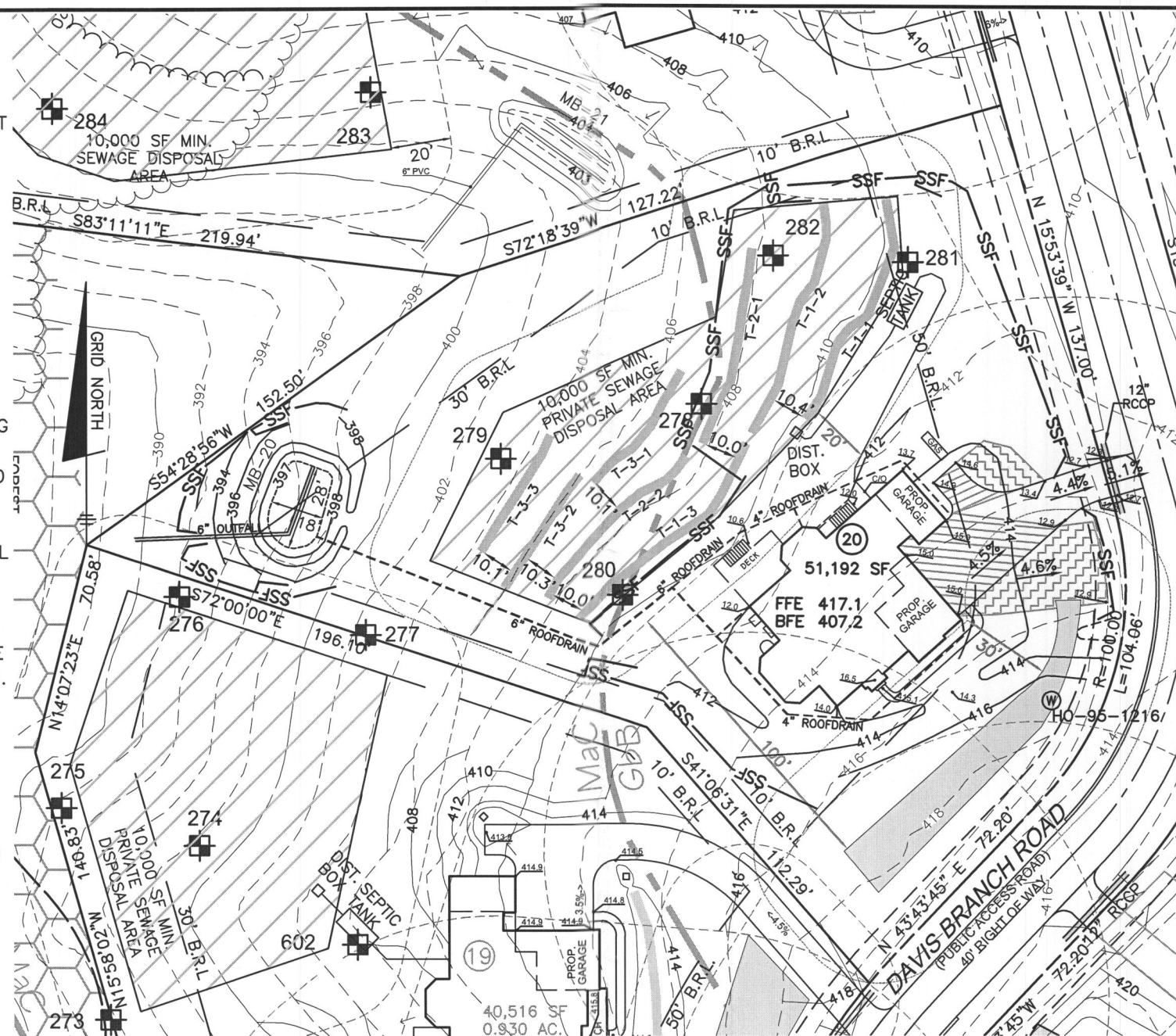


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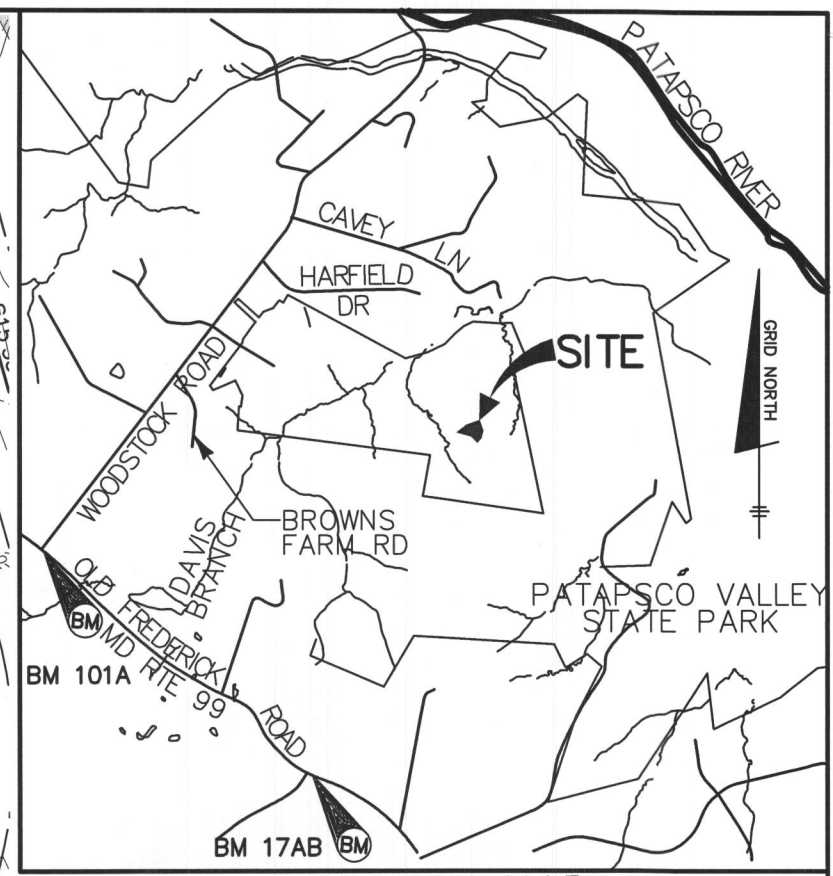
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**PLAN VIEW**  
1" = 50'



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

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.

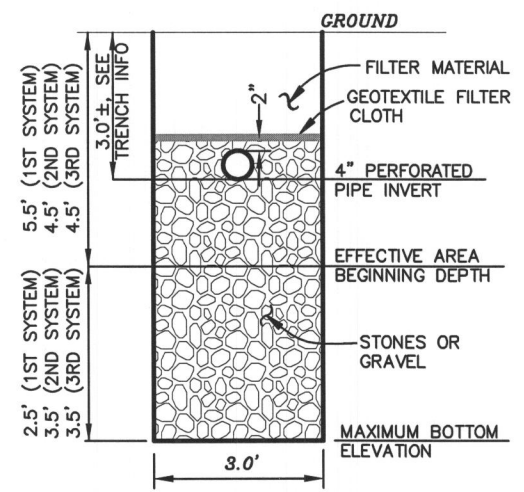


BEI-AAM

2022.08.30 10:06:03 -04'00

## LEGEND

- PROPOSED CONTOURS
- EXISTING CONTOURS
- EXISTING PRIVATE SEWAGE DISPOSAL AREA
- EXISTING WELL BOX
- PROPOSED TREELINE
- EXISTING TREELINE
- SOILS MAP SYMBOL
- SOILS DELINEATION LINE
- PERC TEST PASSED



**TYPICAL TRENCH DETAIL**  
NOT TO SCALE

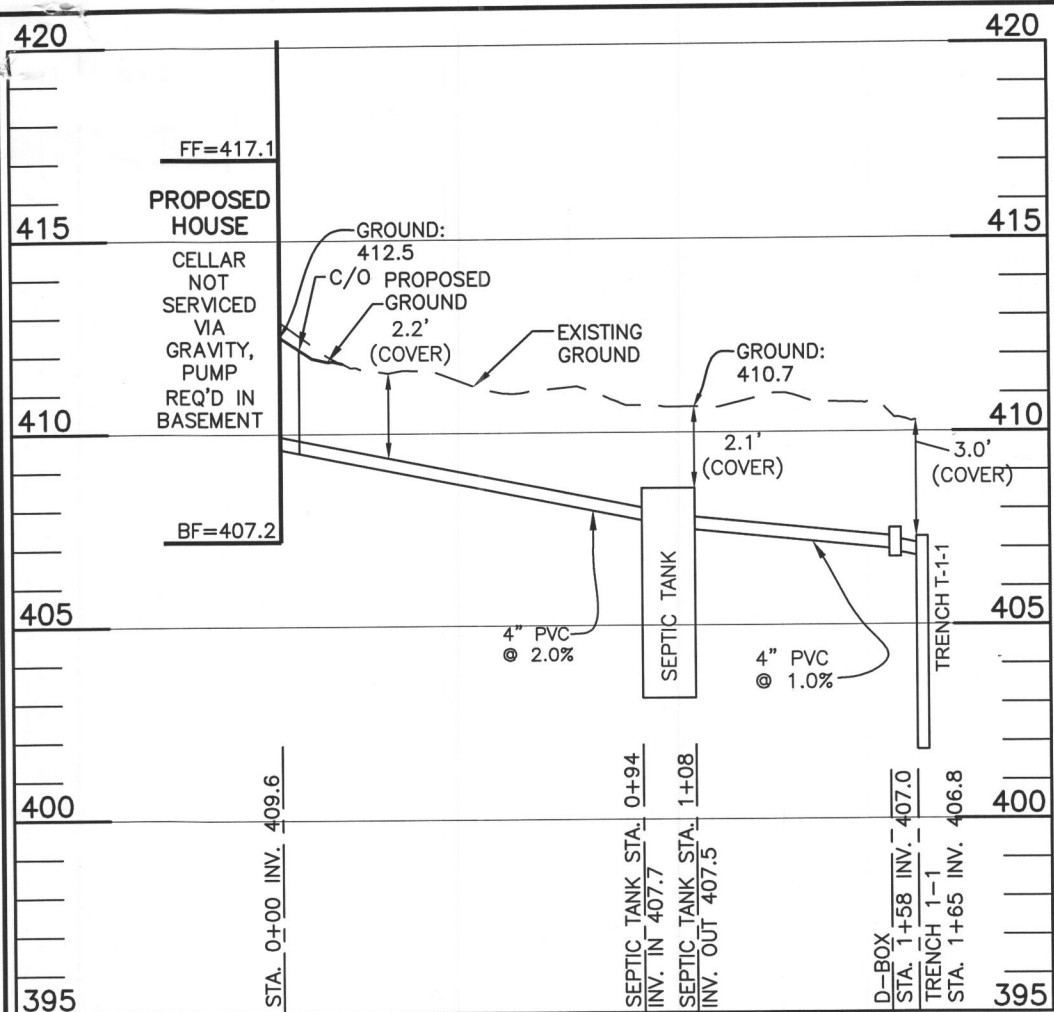
Approved Septic System Plan  
Howard County Health Department

*Hank Oswald* 10.17.22  
Signature Date

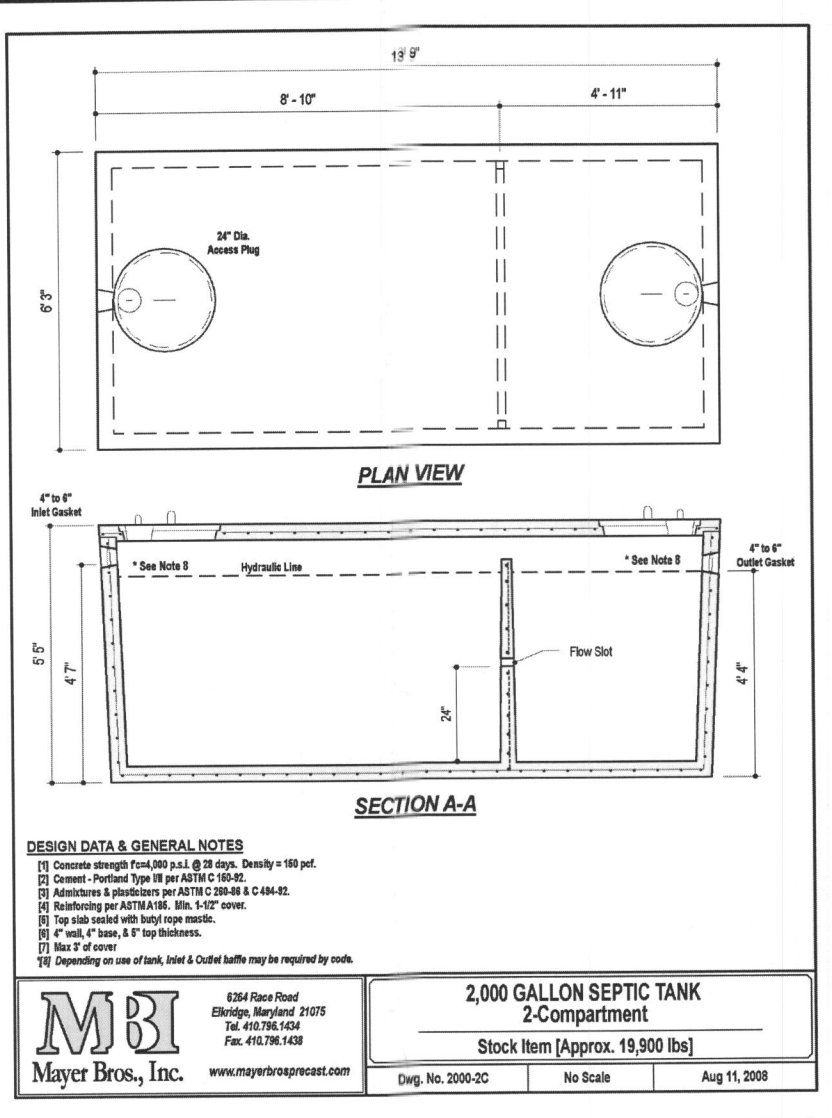
**OWNER/BUILDER:**  
KEYSTONE CUSTOM HOMES, INC.  
227 GRANITE RUN DR.  
SUITE 100  
LANCASTER, PA 17601  
717-464-9060

**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:		<b>MYRTUE PROPERTY LOT 20</b>	
LOCATION: TAX MAP: 10, GRID: 24, PARCEL: 225, ZONED: RC-DEO 1933 DAVIS BRANCH RD. WOODSTOCK, MD 21163 6TH ELECTION DISTRICT, HOWARD COUNTY, MD, TAX ID 352544			
TITLE:		<b>REVISED ONSITE SEWAGE DISPOSAL PLAN</b>	
HOUSE TYPE:		<b>CUSTOM - KEYSTONE HOMES</b>	
DATE:	AUGUST, 2022	PROJECT NO.	2099
SCALE:	AS SHOWN	DRAWING	1 OF 2



**LOT 20 SEWER PROFILE**  
SCALE: 1"=50' HORIZ., 1"=5' VERT.



**DESIGN DATA & GENERAL NOTES**  
 [1] Concrete strength  $f'_{cm}$ =4,000 p.s.i. @ 28 days. Density = 150 pcf.  
 [2] Cement - Portland Type III per ASTM C 150-92.  
 [3] Admixtures & plasticizers per ASTM C 260-08 & C 484-92.  
 [4] Reinforcing per ASTM A106. Min. 1-1/2" cover.  
 [5] Top slab sealed with butyl rope mastic.  
 [6] 4" wall, 4" base, & 6" top thickness.  
 [7] Max 3" of cover.  
 [8] Depending on use of tank, Inlet & Outlet baffles may be required by code.

**M B I**  
Mayer Bros., Inc.  
8264 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

INITIAL SYSTEM		
Number of Bedrooms	7	
Application Rate	0.8	gpd/sf
Effective Area Beginning Depth	5.5	ft
Bottom Max Depth	8.0	ft
Design Flow	1050	gpd
Drainage Field square footage	1312.5	sf
Sidewall Reduction Credit	0.56	
Trench width	3	ft
Effective Area Depth	2.5	ft
Trench Spacing	10	ft
<b>Linear Length of trench Required</b>	<b>243</b>	<b>lf</b>

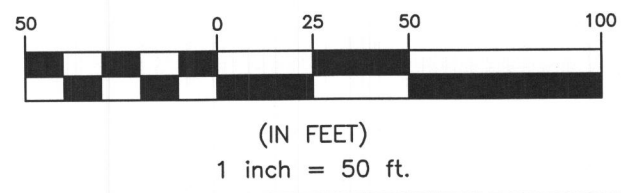
1ST REPLACEMENT SYSTEM		
Number of Bedrooms	7	
Application Rate	1.2	gpd/sf
Effective Area Beginning Depth	4.5	ft
Bottom Max Depth	8.0	ft
Design Flow	1050	gpd
Drainage Field square footage	875	sf
Sidewall Reduction Credit	0.45	
Trench width	3	ft
Effective Area Depth	3.5	ft
Trench Spacing	10	ft
<b>Linear Length of trench Required</b>	<b>133</b>	<b>lf</b>

2ND REPLACEMENT SYSTEM		
Number of Bedrooms	7	
Application Rate	1.2	gpd/sf
Effective Area Beginning Depth	4.5	ft
Bottom Max Depth	8.0	ft
Design Flow	1050	gpd
Drainage Field square footage	875	sf
Sidewall Reduction Credit	0.45	
Trench width	3	ft
Effective Area Depth	3.5	ft
Trench Spacing	10	ft
<b>Linear Length of trench Required</b>	<b>133</b>	<b>lf</b>

TRENCH DESIGN - Lot 20					
INITIAL SYSTEM					
T-1-1	LENGTH	81.1 ft	T-1-2	LENGTH	81.1 ft
	GROUND ELEVATION	410.2		GROUND ELEVATION	409.0
	INVERT ELEVATION	407.2		INVERT ELEVATION	406.0
	MAX BOTTOM ELEVATION	402.2		MAX BOTTOM ELEVATION	401.0
T-1-3	LENGTH	81.1 ft		LENGTH	81.1 ft
	GROUND ELEVATION	409.0		GROUND ELEVATION	409.0
	INVERT ELEVATION	406.0		INVERT ELEVATION	406.0
	MAX BOTTOM ELEVATION	401.0		MAX BOTTOM ELEVATION	401.0
1ST REPLACEMENT SYSTEM					
T-2-1	LENGTH	66.3 ft	T-2-2	LENGTH	66.3 ft
	GROUND ELEVATION	407.8		GROUND ELEVATION	407.6
	INVERT ELEVATION	404.8		INVERT ELEVATION	404.6
	MAX BOTTOM ELEVATION	399.8		MAX BOTTOM ELEVATION	399.6
2ND REPLACEMENT SYSTEM					
T-3-1	LENGTH	44.2 ft	T-3-2	LENGTH	44.2 ft
	GROUND ELEVATION	406.5		GROUND ELEVATION	406.0
	INVERT ELEVATION	403.5		INVERT ELEVATION	403.0
	MAX BOTTOM ELEVATION	398.5		MAX BOTTOM ELEVATION	398.0
T-3-3	LENGTH	44.2 ft		LENGTH	44.2 ft
	GROUND ELEVATION	404.5		GROUND ELEVATION	404.5
	INVERT ELEVATION	401.5		INVERT ELEVATION	401.5
	MAX BOTTOM ELEVATION	396.5		MAX BOTTOM ELEVATION	396.5

SEPTIC INVERT CHART - Lot 20	
INV @ HOUSE	409.6
GROUND @ HOUSE	412.5
INV IN SEPTIC TANK	407.7
INV OUT SEPTIC TANK	407.5
TOP OF SEPTIC TANK	408.6
GROUND OVER SEPTIC TANK	410.7
INV IN DIST BOX	407.0
INV OUT DIST BOX	406.9
GROUND AT DIST BOX	410.5

HEALTH DEPARTMENT SPEC SHEET INFORMATION - Lot 20			
System	Application Rate	Effective Depth	Bottom Depth
1st System	0.8	5.5	8.0
2nd system	1.2	4.5	8.0
3rd System	1.2	4.5	8.0



**OWNER/BUILDER:**  
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SIGNATURE AND SEAL ARE FOR SEPTIC PROFILE AND CALCULATIONS ONLY, TANK, PUMP AND DETAILS WERE NOT DESIGNED OR REVIEWED BY THE ENGINEER.

**THIS PLAN IS FOR SEPTIC DESIGN ONLY**

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

2022.08.30 10:05:35 -04'00

PROJECT:	<b>MYRTUE PROPERTY LOT 20</b>		
LOCATION:	TAX MAP: 10, GRID: 24, PARCEL: 225, ZONED: RC-DEO 1933 DAVIS BRANCH RD. WOODSTOCK, MD 21163 6TH ELECTION DISTRICT, HOWARD COUNTY, MD, TAX ID 352544		
TITLE:	<b>REVISED ONSITE SEWAGE DISPOSAL PLAN</b>		
HOUSE TYPE:	CUSTOM - KEYSTONE HOMES		
DATE:	AUGUST, 2022	PROJECT NO.	2099
SCALE:	AS SHOWN	DRAWING	<u>2</u> OF <u>2</u>