

**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: 8/5/20 **ONSITE SEWAGE DISPOSAL SYSTEM** P 567929

APPROVAL DATE: 9/8/20 **PERMIT: CONSTRUCTION** A \_\_\_\_\_

PROPERTY ADDRESS: 1819 DAVIS BRANCH ROAD, WOODSTOCK, MD 21163

SUBDIVISION: MYRTUE PROPERTY LOT: 7 TAX ID: 03-352390

greinsmith@keystonecustomhomes.c

CONTRACTOR: Bill Ingram/ Farm and Home Excavating EMAIL: om

CONTRACTOR ADDRESS: 901 Driver Road, Marriottsville, MD 21104 PHONE: 410-984-0189

PROPERTY OWNER: SONSHINE MD LP EMAIL: \_\_\_\_\_

OWNER ADDRESS: 227 GRANITE RUN ROAD, LANCASTER, PA 17601 PHONE: 717-464-9060

SEPTIC TANK SIZE (GALLONS): 2000 TANK MANUFACTURER: MAYER BROS., INC.

PUMP MODEL: n.a. PUMP SIZE n.a. PUMP TANK CAPACITY: n.a.

DISTRIBUTION SYSTEM:  GRAVITY  PRESSURE DOSED BEDROOMS: 4 APPLICATION RATE: 0.8

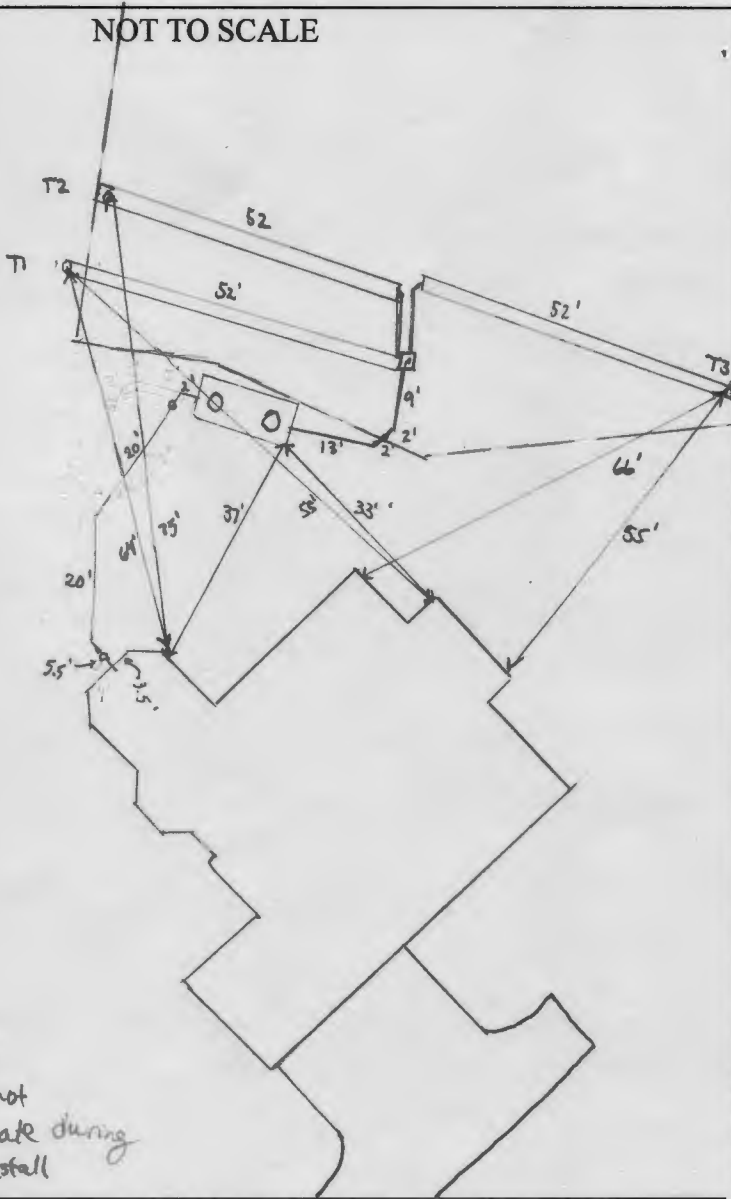
TRENCHES:	LINEAR FEET REQUIRED: <u>156</u>	INLET DEPTH: <u>2.0</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>5.0</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>3.0</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:	INSTALL CLEANOUTS AT BENDS IN SHC.	

ISSUED BY: R BRICKER 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 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



**TRENCH/DRAINFIELD DATA**

WIDTH	INLET	BOTTOM
3'	2'	5'
NUMBER OF TRENCHES		3
TOTAL LENGTH		156'
ABSORPTION AREA		468 sqft + sidewall
* DISTRIBUTION BOX LEVEL		yes
DISTRIBUTION BOX BAFFLE		yes
DISTRIBUTION BOX PORT		yes

**SEPTIC TANK DATA**

SEPTIC TANK 1 LEVEL	see note
MANUFACTURER	Babylon
CAPACITY	2000 GAL
SEAM LOC	top
TANK LID DEPTH	2'
BAFFLES	front + back
BAFFLE FILTER	
MANHOLE LOC	front + back
6" PORT LOC	
WATERTIGHT TEST	
SLOTTED	yes
DATE ON LID	7-9-20

**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	

(W) could not field locate during septic install

ROAD NAME

**PRE-CONSTRUCTION:**

9/2/2020 Laid out 3x52' trenches according to plan. Trench 1 may be slightly beyond SDA on west side, but still within property lines. SD

**INSTALLATION:**

9/2/2020 Tank set with quarter bubble pitch to outlet, contractor said this was to ensure fall. STC constructed but not with 4/0 on plan, contractor said he would add one cleanout in the middle, R. Bricker approved. Reinspect for C/P. SD 9/3/20-contractor thought insp. from 9/2/20 was completed w/ recorded dimensions so most of the work was already covered, dimension for as built were estimates provided by contractor, 3 trenches complete, stone ok, geotextile fabric in place, the dbox had a leak where the T3 trench pipe was exiting the dbox. OK to back fill all work except dbox, the leak must be repaired, reinspected and the levelers repositioned properly. PA 9/8/2020 D-box leveled, no sign of leak. Could not field locate well. May be buried under dirt pile. SD

FINAL INSPECTOR

*Steve Thomas*

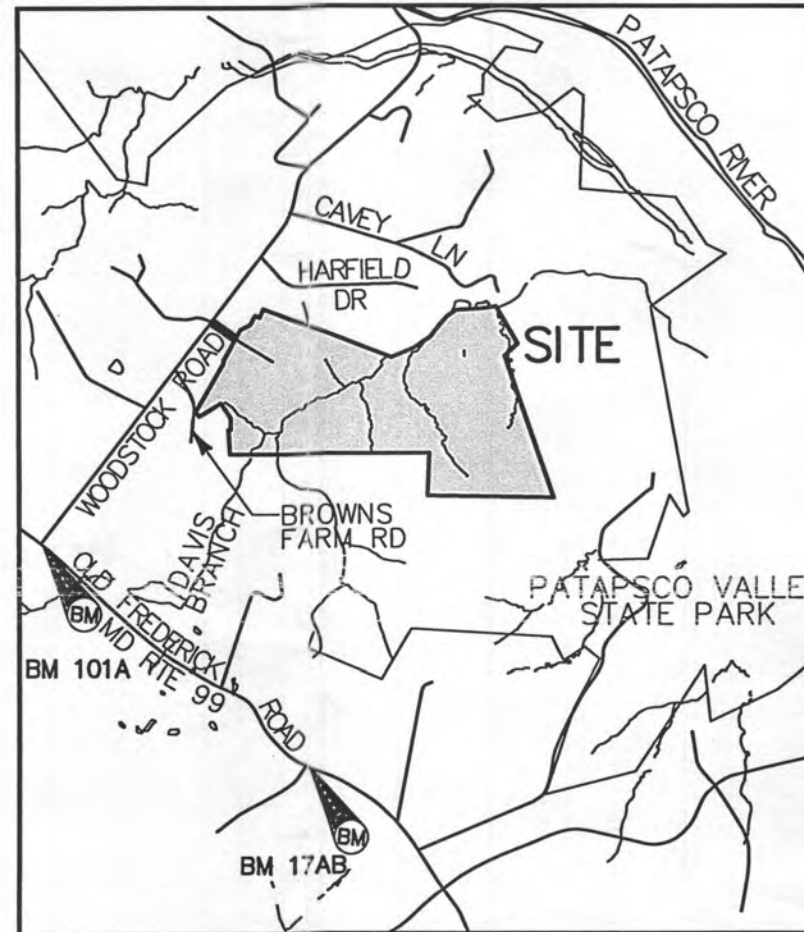
DATE OF APPROVAL

9/9/2020



## GENERAL NOTES

1. THE LOT SHOWN HEREON WAS RECORDED ON THE PLAT FOR MYRTUE PROPERTY, PLAT NUMBER 23865. REFER TO THE PLAT FOR LOT DIMENSIONS, LOT AREA, ALL EASEMENTS AND CONDITIONS.
2. THE EXISTING WELL SHOWN ON THIS PLAN (HO-95-1183) HAS BEEN FIELD LOCATED ON JUNE, 2019 BY BENCHMARK ENGINEERING, INC. 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 FLOWN BY VIRGINIA RESOURCE MAPPING, INC. DATED FEBUARY 2003 AND SUPPLEMENTED WITH FIELD SURVEY BY DMW, INC. DATED 2005 AND BENCHMARK ENGINEERING, INC. DATED JUNE, 2019 WHICH CONSISTS OF 2 FOOT CONTOUR INTERVALS.
5. SEDIMENT AND EROSION CONTROLS HAVE BEEN SUBMITTED TO 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.
13. ANY FUTURE WELLS SHALL BE 10 FEET AWAY FROM THE DRIVEWAY.



VICINITY MAP

SCALE: 1"=2000'

GRID NORTH

### BENCHMARK INFORMATION NAD83

Ho. Co. STATION 101A  
STAMPED DISC SET ON TOP  
OF CONCRETE COLUMN

NORTHING: 565347.937'  
EASTING: 1319266.269'  
ELEVATION: 588.708'

Ho. Co. STATION 17AB  
STAMPED DISC SET ON TOP  
OF CONCRETE COLUMN

NORTHING: 564468.943'  
EASTING: 1318257.375'  
ELEVATION: 561.105'

Approved Septic System Plan  
 Howard County Health Department  
 2000-gal Septic Tank  
 to Gravity Drain Field  
 for 4-Bedroom STD  
 RB Miller 4/13/2020  
 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.



3-23-20

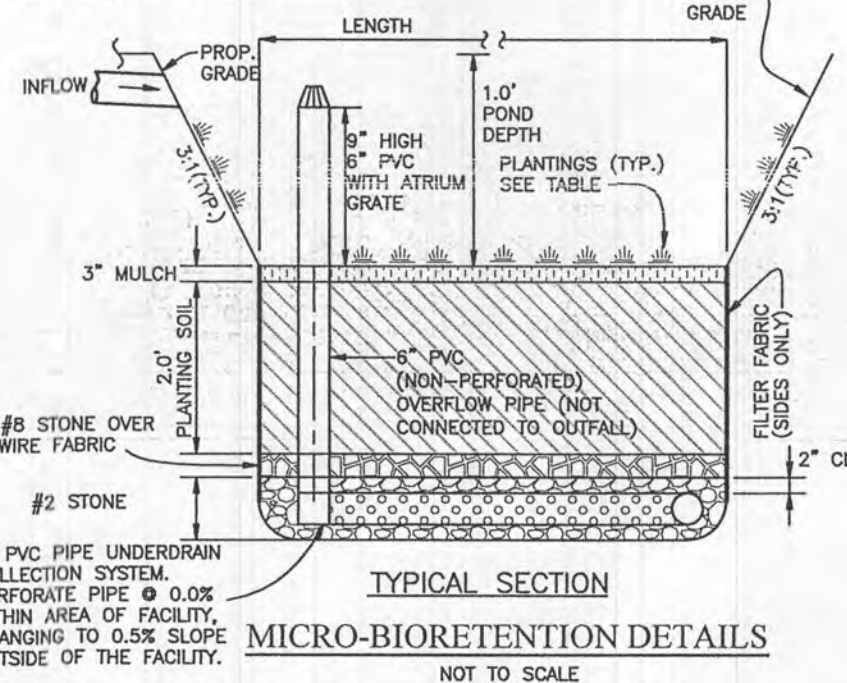
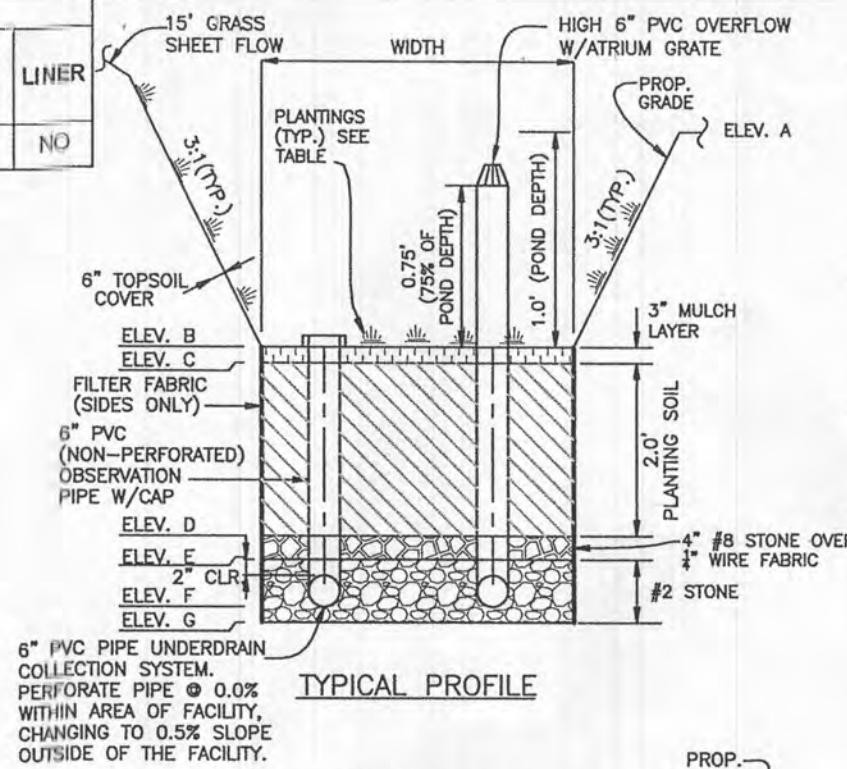
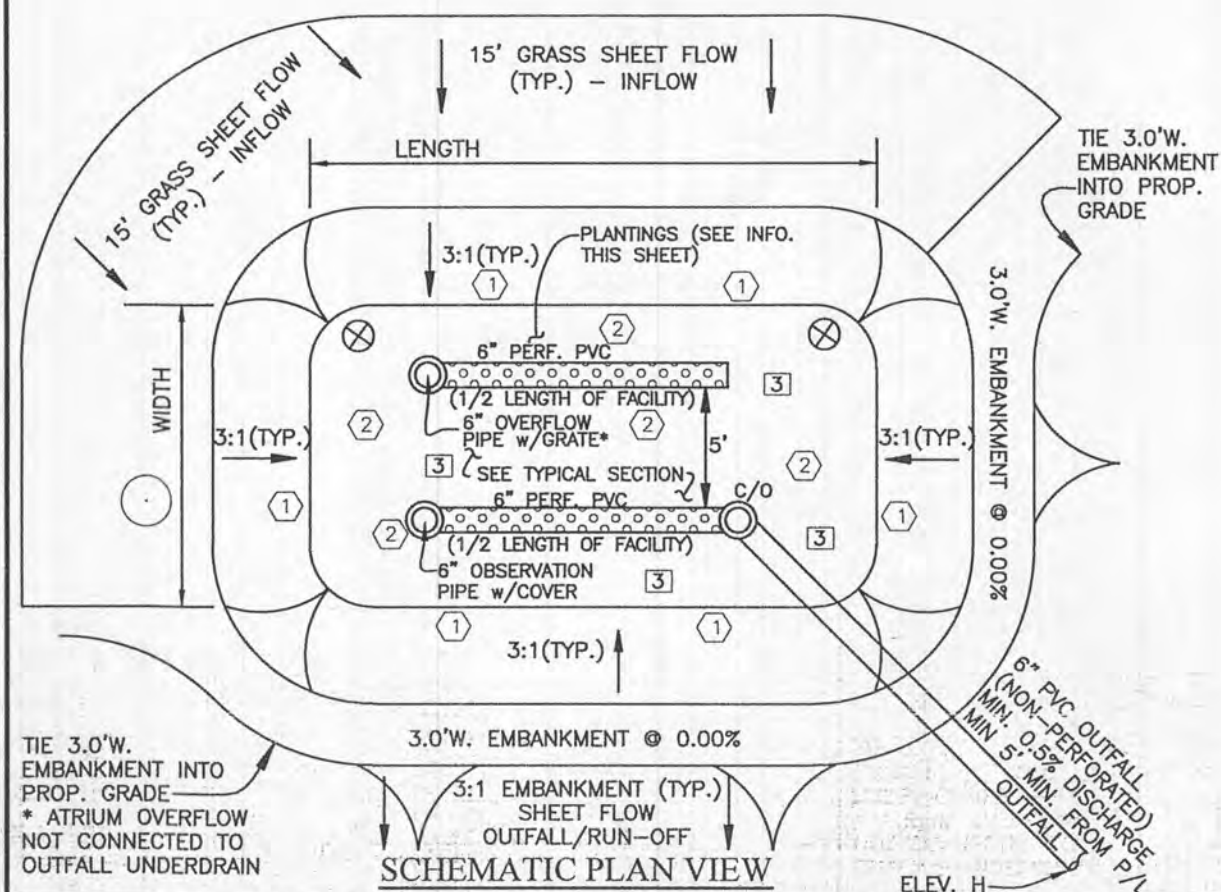
PROJECT:		<b>MYRTUE PROPERTY LOT 7</b>	
LOCATION: TAX MAP: 10, GRID: 24, PARCEL: 225, ZONED: RC-DEO 1819 DAVIS BRANCH RD. WOODSTOCK, MD 21163 6TH ELECTION DISTRICT, HOWARD COUNTY, MD, TAX ID 352404			
TITLE:		ONSITE SEWAGE DISPOSAL PLAN	
HOUSE TYPE:		CUSTOM - KEYSTONE HOMES	
DATE:	MARCH, 2020	PROJECT NO.	2099
SCALE:	AS SHOWN	DRAWING	1 OF 3

**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-CIVILENGINEERING.COM

**ON-LOT BIORETENTION DIMENSIONS**

Practice	#	A	B	C	D	E	F	G	H	LENGTH	WIDTH	FILTER AREA	PLANTINGS			LINER
													①	②	③	
(M-6) Micro-Bioretenion	7	384.00	383.00	382.75	380.75	380.42	379.92	379.17	379.60	45	11	457	51	51	25	NO



- OPERATION AND MAINTENANCE SCHEDULE FOR MICRO-BIORETENTION (M-6)**
- THE OWNER SHALL MAINTAIN THE PLANT MATERIAL, MULCH LAYER AND SOIL LAYER ANNUALLY. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUME II, TABLE A.4.1 AND 2.
  - THE OWNER SHALL PERFORM A PLANT INSPECTION IN THE SPRING AND IN THE FALL OF EACH YEAR. DURING THE INSPECTION, THE OWNER SHALL REMOVE DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, REPLACE DEAD PLANT MATERIAL WITH ACCEPTABLE REPLACEMENT PLANT MATERIAL, TREAT DISEASED TREES AND SHRUBS, AND REPLACE ALL DEFICIENT STAKES AND WIRES.
  - THE OWNER SHALL INSPECT THE MULCH EACH SPRING. THE MULCH SHALL BE REPLACED EVERY TWO TO THREE YEARS. THE PREVIOUS MULCH LAYER SHALL BE REMOVED BEFORE THE NEW LAYER IS APPLIED.
  - THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM.

**OWNER/BUILDER:**  
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 717-464-9060

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 ELLICOTT CITY, MARYLAND 21043  
 (P) 410-465-6105 • (F) 410-465-6644  
 WWW.BEI-CVLENGINEERING.COM

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.



**MATERIALS & SPECIFICATIONS FOR MICRO-BIORETENTION**

MATERIAL	SPECIFICATION	SIZE	NOTES:
PLANTINGS	SEE APPENDIX A; TABLE A.4	N/A	PLANTINGS ARE SITE SPECIFIC
PLANTING SOIL (2.0' TO 4.0' DEEP)	LOAMY SAND 60-65% COMPOST 35-40% OR SANDY LOAM 30% COARSE SAND 30% & COMPOST 40%	N/A	USDA SOIL TYPES: LOAMY SAND OR SANDY LOAM; CLAY CONTENT <5%
ORGANIC CONTENT	MIN 10% BY DRY WEIGHT ASTM D 2974		
MULCH	SHREDDED HARDWOOD	N/A	AGED 6 MONTHS, MINIMUM, NO PINE OR WOOD CHIPS
GEOTEXTILE (CLASS "C")		N/A	PE TYPE 1 NONWOVEN
GEOTEXTILE (1/4" WIRE MESH)		1/4" WIRE MESH	1/4" WIRE MESH
UNDERDRAIN GRAVEL	AASHTO M-43	NO. 57 OR NO. 6	0.375" TO 0.750"
UNDERDRAIN PIPING	F758, TYPE PS28 OR AASHTO M-278	4" TO 6" RIGID SCH.40 PVC, SDR35 OR HDPE	3/8" PERF. @ 6" O/C, 4 HOLES PER ROW; MINIMUM OF 3" OF GRAVEL OVER PIPES, NOT NECESSARY UNDERNEATH PIPES. PIPE SHALL BE WRAPPED WITH 1/4-INCH GALVANIZED HARDWARE CLOTH
IMPERVIOUS LINER	ASTM-D-4833 (THICKNESS) ASTM-D-412 (TENSILE STRENGTH 1,100 LB., ELONGATION 200%) ASTM-D-624 (TEAR RESISTANCE - 150 LB./IN) ASTM-D-471 (WATER ADSORPTION: +8 TO -2% MASS)	30 MIL. THICK	LINER TO BE ULTRAVIOLET RESISTANT. A GEOTEXTILE FABRIC SHOULD BE USED TO PROTECT THE LINER FROM PUNCTURE.
GEOTEXTILE (BELOW IMPERV. LINER)	ASTM-D-4833 (PUNCTURE STRENGTH 125LB) ASTM-D-4632 (TENSILE STRENGTH 300 LB.)		

**MICROBIORETENTION PLANTING SCHEDULE**

- (PLANTING SPECIES AND DENSITY CAN BE CHANGED OR SUBSTITUTED BY A LANDSCAPE ARCHITECT OR QUALIFIED DESIGNER)
- ① IRIS FULVA (COPPER IRIS) (1 PER SY)
  - ② LOBELIA CARDINALIS (CARDINAL FLOWER)
  - ③ RUDBECKIA SUBTOMENTOSA (SWEET CONEFLOWER)
  - ⊗ CALLUNA VULGARIS (HEATHER) (1 PER FACILITY)
  - ACER GINNALA (ARMUR MAPLE) (1 PER FACILITY)

**MICROBIORETENTION PLANTING DATA**

- PLANTINGS WITHIN THE PONDING AREA OF THE FACILITY ARE TO BE OF A MEDIUM TO HIGH WATER TOLERANCE
- PLANTINGS ALONG THE PERIMETER (BERM) AREA OF THE FACILITY ARE TO BE OF A LOW TO MEDIUM WATER TOLERANCE
- AVOID PLANTINGS WITH EXCESSIVE ROOT MASS IN POND AREA OF THE RAIN GARDEN NEAR O.B. PIPE AND UNDERDRAIN.

**PROJECT:** MYRTUE PROPERTY LOT 7

**LOCATION:** TAX MAP: 10, GRID: 24, PARCEL: 225 ZONED: 1819 DAVIS BRANCH ROAD 6TH ELECTION DISTRICT, HOWARD COUNTY, MD, TAX ID #352404

**TITLE:** BUILDING PERMIT PLAN

**HOUSE TYPE:** CUSTOM - KEYSTONE HOMES

**DATE:** MARCH, 2020 **PROJECT NO.:** 2099

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



**LEGEND**

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

*Approved Septic System Plan  
 Howard County Health Department  
 2000-gal Septic Tank  
 for Gravity Drainfield  
 for 4-Bedroom SFD  
 4/13/2020  
 Signature*

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.



3-23-20

**PLAN VIEW**  
 1" = 50'

**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) 410-465-8644  
 WWW.BEI-CMLENGINEERING.COM

PROJECT: MYRTUE PROPERTY LOT 7	
LOCATION: TAX MAP: 10, GRID: 24, PARCEL: 225, ZONED: RC-DEO 1819 DAVIS BRANCH RD. WOODSTOCK, MD 21163 6TH ELECTION DISTRICT, HOWARD COUNTY, MD, TAX ID 352404	
TITLE: ONSITE SEWAGE DISPOSAL PLAN	
HOUSE TYPE: CUSTOM - KEYSTONE HOMES	
DATE: MARCH, 2020	PROJECT NO. 2099
SCALE: AS SHOWN	DRAWING 2 OF 3

HEALTH DEPARTMENT SPEC SHEET INFORMATION - LOT 7			
System	Application Rate	Effective Depth	Bottom Depth
Initial System	0.8	3.0	5.0
1st Replacement	0.8	3.0	8.0
2nd Replacement	0.8	3.0	8.0

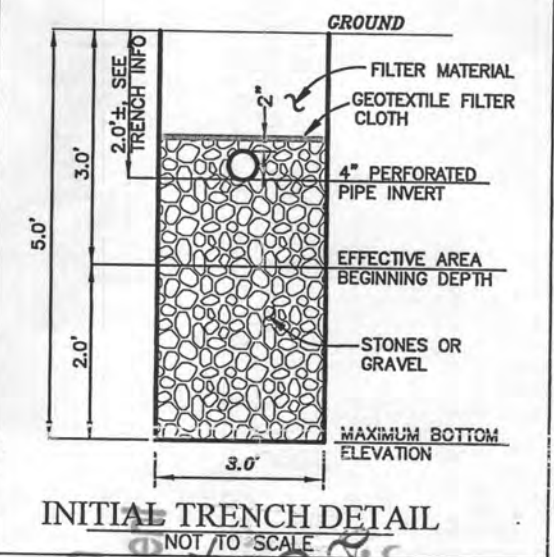
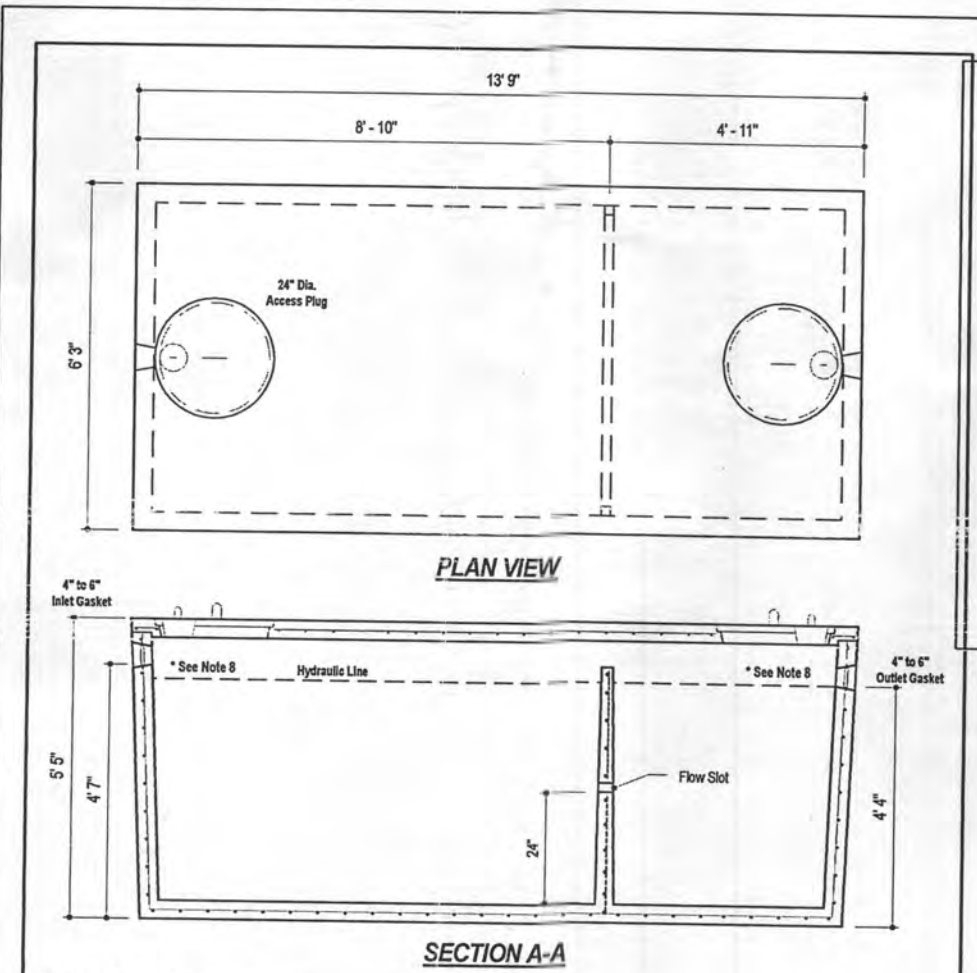
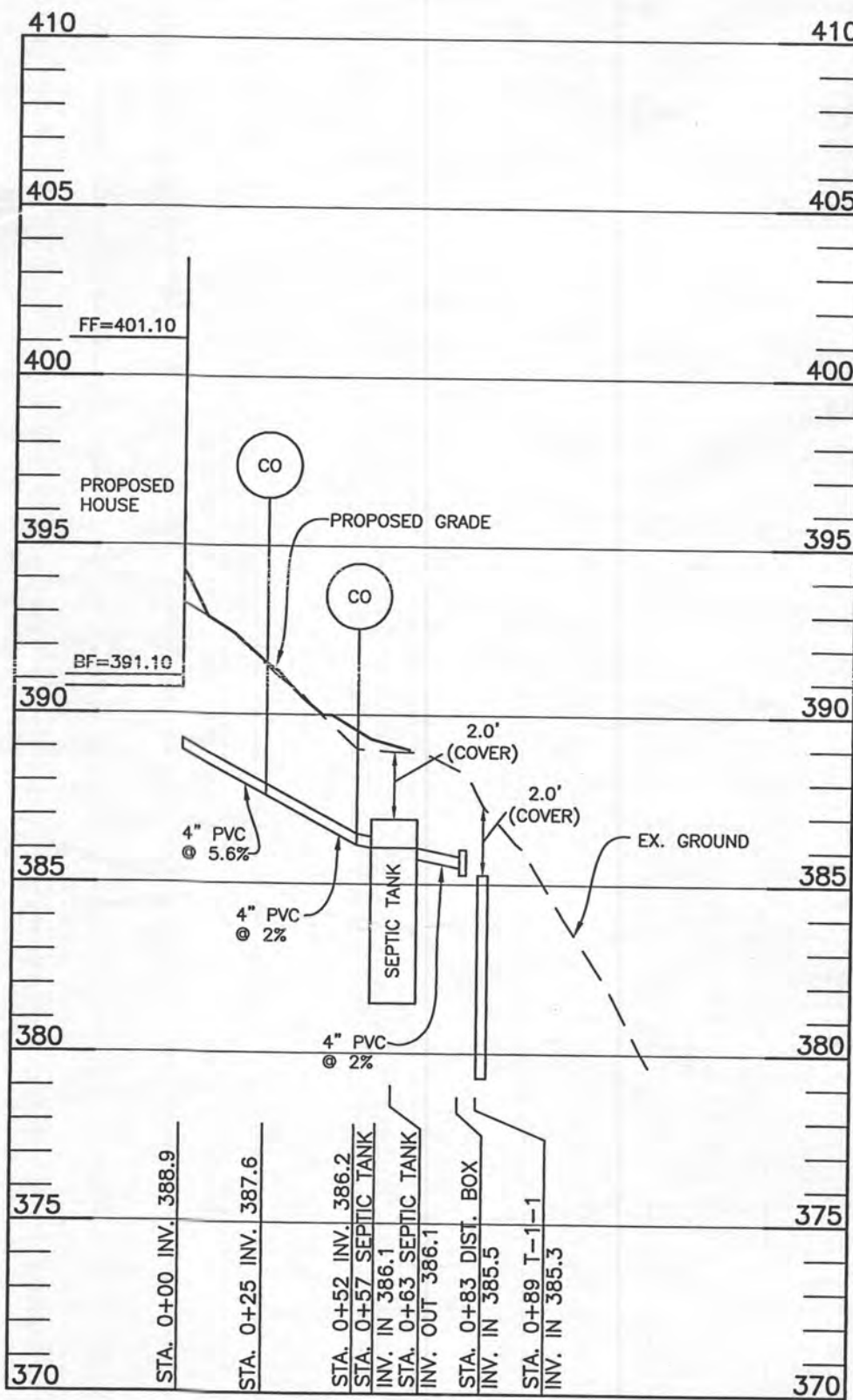
TRENCH DESIGN - LOT 7					
INITIAL SYSTEM		1ST REPLACEMENT SYSTEM		2ND REPLACEMENT SYSTEM	
T-1-1	LENGTH 52.1 ft	T-2-1	LENGTH 44.7 ft	T-3-1	LENGTH 44.7 ft
	GROUND ELEVATION 387.4		GROUND ELEVATION 381.0		GROUND ELEVATION 377.0
	INVERT ELEVATION 385.4		INVERT ELEVATION 379.0		INVERT ELEVATION 375.0
	MAX BOTTOM ELEVATION 382.4		MAX BOTTOM ELEVATION 373.0		MAX BOTTOM ELEVATION 369.0
T-1-2	LENGTH 52.1 ft	T-2-2	LENGTH 44.7 ft	T-3-2	LENGTH 44.7 ft
	GROUND ELEVATION 385.0		GROUND ELEVATION 379.1		GROUND ELEVATION 374.1
	INVERT ELEVATION 383.0		INVERT ELEVATION 377.1		INVERT ELEVATION 372.1
	MAX BOTTOM ELEVATION 380.0		MAX BOTTOM ELEVATION 371.1		MAX BOTTOM ELEVATION 366.1
T-1-3	LENGTH 52.1 ft				
	GROUND ELEVATION 385.0				
	INVERT ELEVATION 383.0				
	MAX BOTTOM ELEVATION 380.0				

SEPTIC INVERT CHART - LOT 7	
INV @ HOUSE	388.9
GROUND @ HOUSE	394.2
INV IN SEPTIC TANK	386.5
INV OUT SEPTIC TANK	386.1
TOP OF SEPTIC TANK	387.2
GROUND OVER SEPTIC TANK	389.2

INITIAL SYSTEM		
Number of Bedrooms	4	
Application Rate	0.8	gpd/sf
Effective Area Beginning Depth	3.0	ft
Bottom Max Depth	5.0	ft
Design Flow	600	gpd
Drainage Field square footage	750	sf
Sidewall Reduction Credit	0.63	
Trench width	3	ft
Effective Area Depth	2	ft
Trench Spacing	10	ft
Linear Length of trench Required	156	lf

1ST REPLACEMENT SYSTEM		
Number of Bedrooms	4	
Application Rate	0.8	gpd/sf
Effective Area Beginning Depth	3.0	ft
Bottom Max Depth	8.0	ft
Design Flow	600	gpd
Drainage Field square footage	750	sf
Sidewall Reduction Credit	0.36	
Trench width	3	ft
Effective Area Depth	5	ft
Trench Spacing	13	ft
Linear Length of trench Required	89	lf

2ND REPLACEMENT SYSTEM		
Number of Bedrooms	4	
Application Rate	0.8	gpd/sf
Effective Area Beginning Depth	3.0	ft
Bottom Max Depth	8.0	ft
Design Flow	600	gpd
Drainage Field square footage	750	sf
Sidewall Reduction Credit	0.36	
Trench width	3	ft
Effective Area Depth	5	ft
Trench Spacing	13	ft
Linear Length of trench Required	89	lf



**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 150-92.
- [3] Admixtures & plasticizers per ASTM C 260-88 & C 494-92.
- [4] Reinforcing per ASTM A165, 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 baffle 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

Approved Septic System Plan  
Howard County Health Department  
2000-gal Septic Tank  
Gravity Drainage  
for 4 Bed. S.F.  
Signature  
4/13/20

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.



**LOT 7 OSDS**  
SCALE: 1"=50' HORIZ., 1"=5' VERT.

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

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PROJECT: **MYRTUE PROPERTY LOT 7**

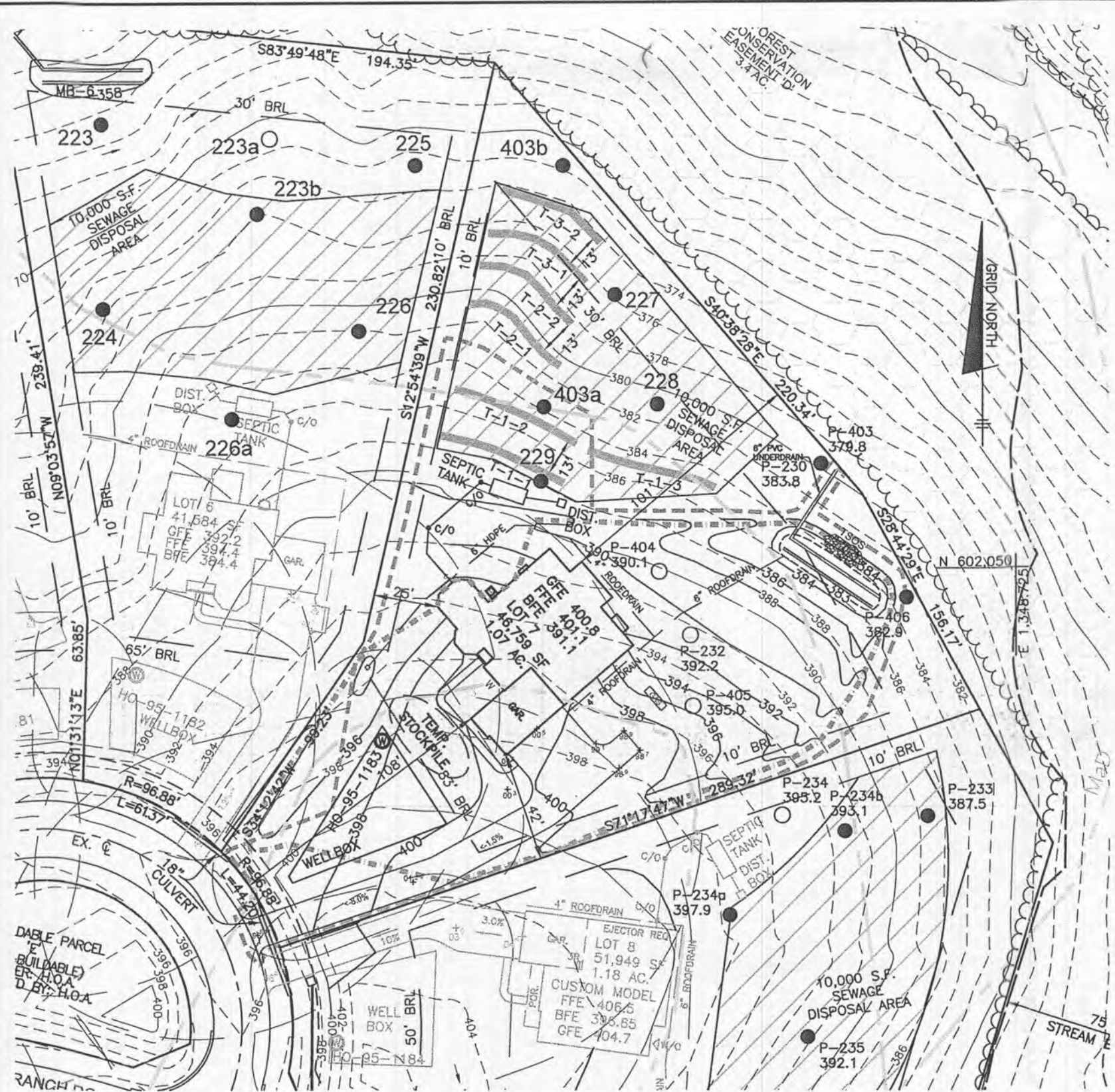
LOCATION: TAX MAP: 10, GRID: 24, PARCEL: 225, ZONED: RC-DEO  
1819 DAVIS BRANCH RD. WOODSTOCK, MD 21163  
6TH ELECTION DISTRICT, HOWARD COUNTY, MD, TAX ID 352404

TITLE: **ONSITE SEWAGE DISPOSAL PLAN**

HOUSE TYPE: **CUSTOM - KEYSTONE HOMES**

DATE: MARCH, 2020 PROJECT NO. 2099

SCALE: AS SHOWN DRAWING 3 OF 3



**PLAN VIEW**  
1" = 50'

**ESD STORMWATER MANAGEMENT SUMMARY TABLE**

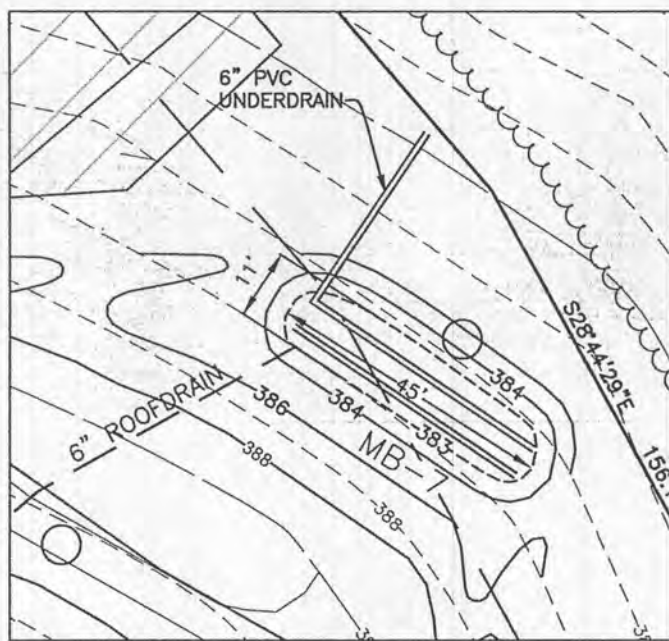
Pe=	1.60	inches	Qe=	0.18	inches	ESDv=	794	cf	Rv=	0.32	
Practice	#	DA to practice	Imp Area to practice	Af (s.f.)		ESDv		Rev (AC)		Ownership	
(M-6) Micro-Bioretenion	#7	18,522	5,588	Required	Provided	2% DA?	Required	Provided	Pe Provided	Required	Provided
				370	457	PASS	596	626	1.7	198.51	137.10
										Depth of Stone: 9 inches	

**LEGEND**

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

**GENERAL NOTES**

1. THE LOT SHOWN HEREON WAS RECORDED ON THE PLAT FOR THE MYRTUE PROPERTY, PLAT No. 23865. REFER TO THE PLATS FOR LOT DIMENSIONS, LOT AREAS, ALL EASEMENTS AND CONDITIONS.
2. SEDIMENT AND EROSION CONTROLS WERE APPROVED BY HOWARD SOIL CONSERVATION DISTRICT UNDER GP-20-45.
3. TOPOGRAPHY SHOWN HEREON IS TAKEN FROM THE APPROVED ROAD CONSTRUCTION PLANS F-06-104, PREPARED BY DAFT, McCUNE WALKER, INC. SEPT. 2007 AND REVISED BY BENCHMARK ENGINEERING, INC., DEC. 2015.
4. ALL SEDIMENT AND EROSION CONTROL FEATURES USED ON THIS SITE SHALL COMPLY WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
5. ALL DRAINAGE AND STORMWATER MANAGEMENT FEATURES USED ON THIS SITE MUST COMPLY WITH THE APPROVED ROAD CONSTRUCTION PLANS EXCEPT AS WAIVED.
6. THE EXISTING WELL SHOWN ON THIS PLAN, HO-95-1183, HAS BEEN FIELD LOCATED BY BENCHMARK ENGINEERING, INC., AND IS ACCURATELY SHOWN.
7. THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
8. ANY CHANGES TO A PRIVATE SEWAGE DISPOSAL AREA OR WELL BOX SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
9. STORMWATER MANAGEMENT FOR THIS LOT IS PROVIDED BY ONE MICRO-BIORETENTION FACILITY (MDE M-6).
10. RAINWATER SHALL BE CONVEYED TO THE MICRO-BIORETENTION WITH 4" OR 6" ROOF LEADERS, AS SHOWN.
11. BOLLARDS ARE REQUIRED FOR THE PROTECTION OF ANY WELL THAT MAY BE INSTALLED WITHIN 10' OF THE DRIVEWAY.



**MB-7 DETAIL**  
1" = 30'

Approved Septic System Plan  
Howard County Health Department  
*4-bed room SFD w/rough in both in unfinished basement*  
*R. Baile 5/7/2020*

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.



3-25-26

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

PROJECT: MYRTUE PROPERTY  
LOT 7  
LOCATION: TAX MAP: 10, GRID: 24, PARCEL: 225 ZONED:  
1819 DAVIS BRANCH ROAD  
6TH ELECTION DISTRICT, HOWARD COUNTY, MD, TAX ID #352404

**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

TITLE: BUILDING PERMIT PLAN  
HOUSE TYPE: CUSTOM - KEYSTONE HOMES  
DATE: MARCH, 2020 PROJECT NO. 2099  
SCALE: AS SHOWN DRAWING 1 OF 2