



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: 9-23-20 **ONSITE SEWAGE DISPOSAL SYSTEM** P 567991

APPROVAL DATE: 12/28/2020 **PERMIT: CONSTRUCTION** A _____

PROPERTY ADDRESS: 1801 DAVIS BRANCH ROAD, WOODSTOCK, MD 21163

SUBDIVISION: MYRTUE PROPERTY LOT: 4 TAX ID: 03-352366

CONTRACTOR: FARM + HOME EMAIL: _____

CONTRACTOR ADDRESS: _____ PHONE: _____

PROPERTY OWNER: Abilash Rao Trustee (Srivaishnavi Rao) EMAIL: greinsmith@keystonecustomhomes.

OWNER ADDRESS: 10923 Atwood Lane, Ellicott City, MD 21042 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: 5 APPLICATION RATE: 0.6

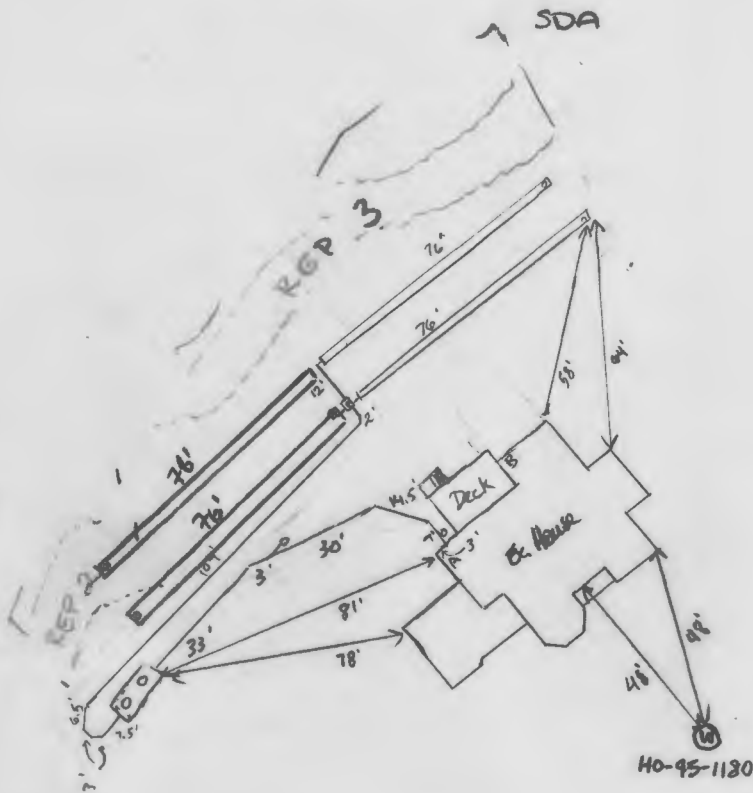
TRENCHES:	LINEAR FEET REQUIRED: <u>298</u>	INLET DEPTH: <u>2.0</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>8.0</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>6.5</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:	INSTALL CLEANOUTS AT BENDS IN SHC.	

ISSUED BY: R BRICKER ISSUE DATE: 10-30-20 EXPIRATION DATE: 9-23-21

- 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 Davis Branch Rd

TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	2'	8'
NUMBER OF TRENCHES		4
TOTAL LENGTH		304 F
ABSORPTION AREA		912 SF + SIDE WALL
DISTRIBUTION BOX LEVEL		SPEED
DISTRIBUTION BOX BAFFLE		yes
DISTRIBUTION BOX PORT		yes

SEPTIC TANK DATA

SEPTIC TANK I LEVEL	
MANUFACTURER	BABYLON
CAPACITY	2000 GAL
SEAM LOC	TOP
TANK LID DEPTH	6.5'
BAFFLES	YES
BAFFLE FILTER	NO
MANHOLE LOC	FRONT/BACK
6" PORT LOC	-
WATERTIGHT TEST	-
SLOTTED	YES
DATE ON LID	10/1/2020

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:

12/1/2020 Laid out 4 x 75' trenches according to plan and on contour. Doesn't look like there will be enough fall for SL coming out beneath footer to tank. Contractor plans to measure fall when basement is excavated and tell builder if they need hung sewer.

INSTALLATION: 12/21/2020 S.H. SL, TANK INSTALLED. (+) Y-cleanup OK (+)

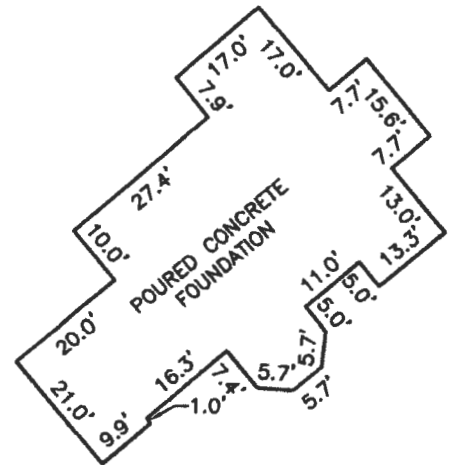
12/29/2020 2 x 76' trenches installed, d-box set. Connected to tank. Contractor intends to install final trenches tomorrow dependant on weather. 12/28/2020 TRENCHES COMPLETE; P-box LEVELLED WITH SPEED LEVELS. (+)

FINAL INSPECTOR

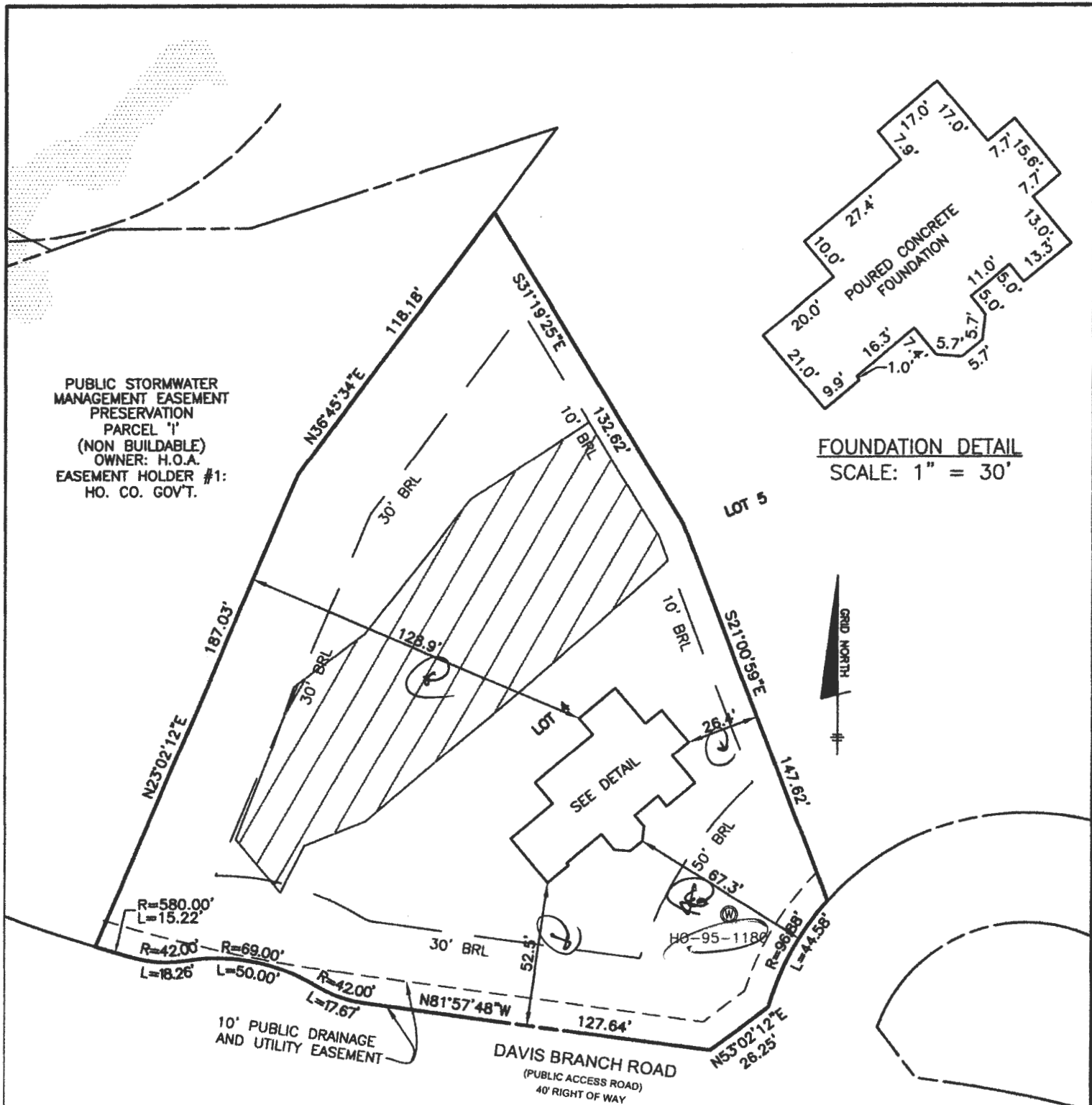
DATE OF APPROVAL

12/28/2020

PUBLIC STORMWATER
MANAGEMENT EASEMENT
PRESERVATION
PARCEL '1'
(NON BUILDABLE)
OWNER: H.O.A.
EASEMENT HOLDER #1:
HO. CO. GOV'T.



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 1-7-2021 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 08/20/2020.

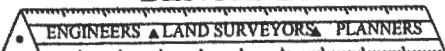
TOP OF FOUNDATION WALL = 384.3'
OFFSET DIMENSIONS TO PROPERTY LINES ARE ± 0.1'

APPROVED
10/30/2020

STATE OF MARYLAND
DONALD A. MASON
PROFESSIONAL LAND SURVEYOR
MARYLAND REG. No. 21320
9/28/2020

FEMA FIRM No. 24027C0080D
ZONE: X
DATED: 11/06/2013

BENCHMARK



ENGINEERING, INC.

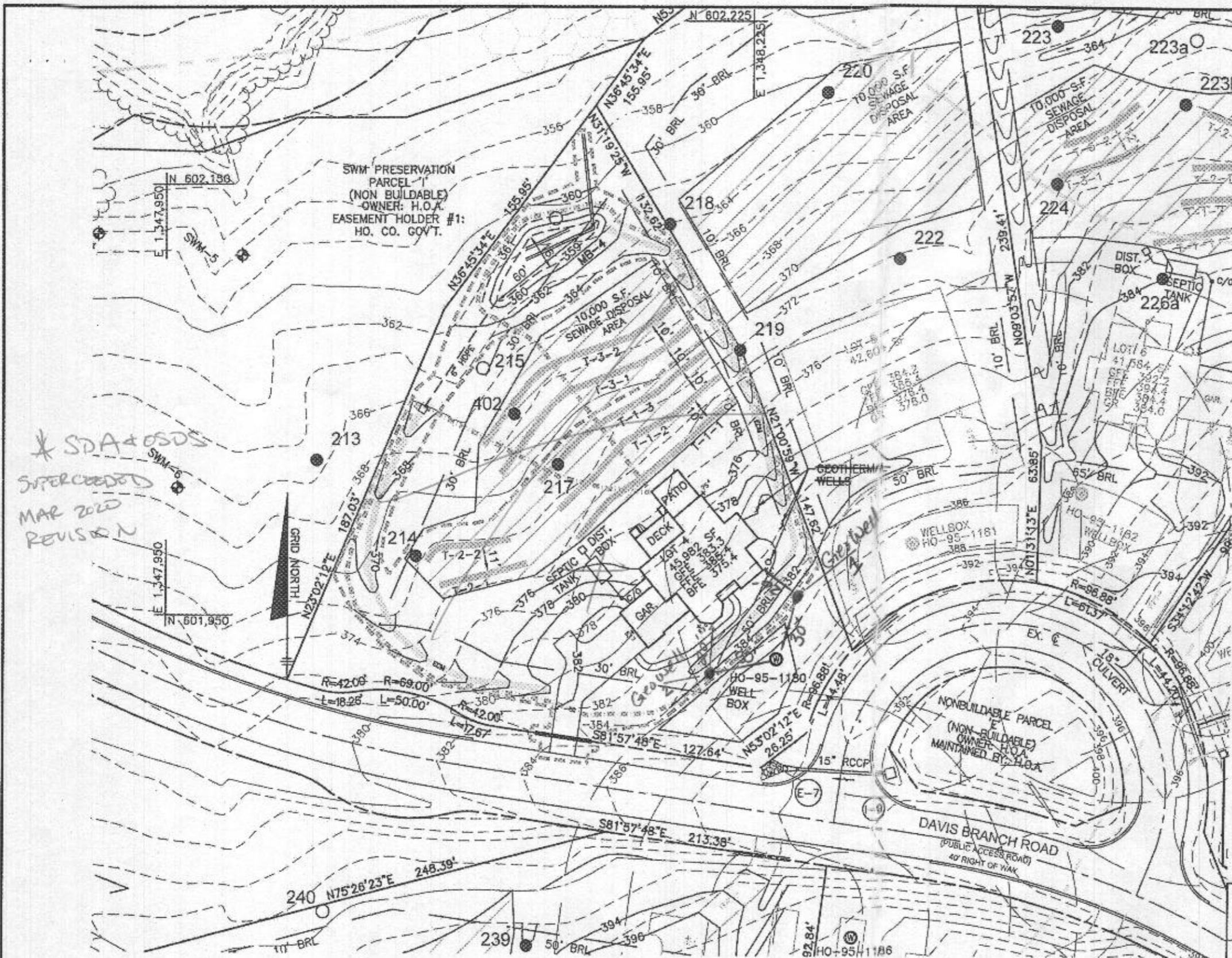
8480 BALTIMORE NATIONAL PIKE SUITE 315
ELLCOTT CITY, MARYLAND 21043
(P) 410-485-8105 (F) 410-485-8644

**WALL CHECK
MYRTUE PROPERTY
PLAT No. 23865
LOT No. 4**

1801 DAVIS BRANCH ROAD

3rd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

FIELD OBS. BY ML
COMP. BY DAM
DRAWN BY EWFS
SCALE: 1" = 50' DATE: Rev. 09-28-2020



LEGEND

- 400 PROPOSED CONTOURS
- 398 EXISTING CONTOURS
- EXISTING PRIVATE SEWAGE AREA
- FOREST CONSERVATION EASEMENT
- EXISTING WELL BOX
- PROPOSED TREELINE
- EXISTING TREELINE
- STREAM
- AREA OF NON-TIDAL WETLAND
- SOILS MAP SYMBOL
- SOILS DELINEATION LINE
- PERC TEST PASSED
- PERC TEST FAILED

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.



PLAN VIEW

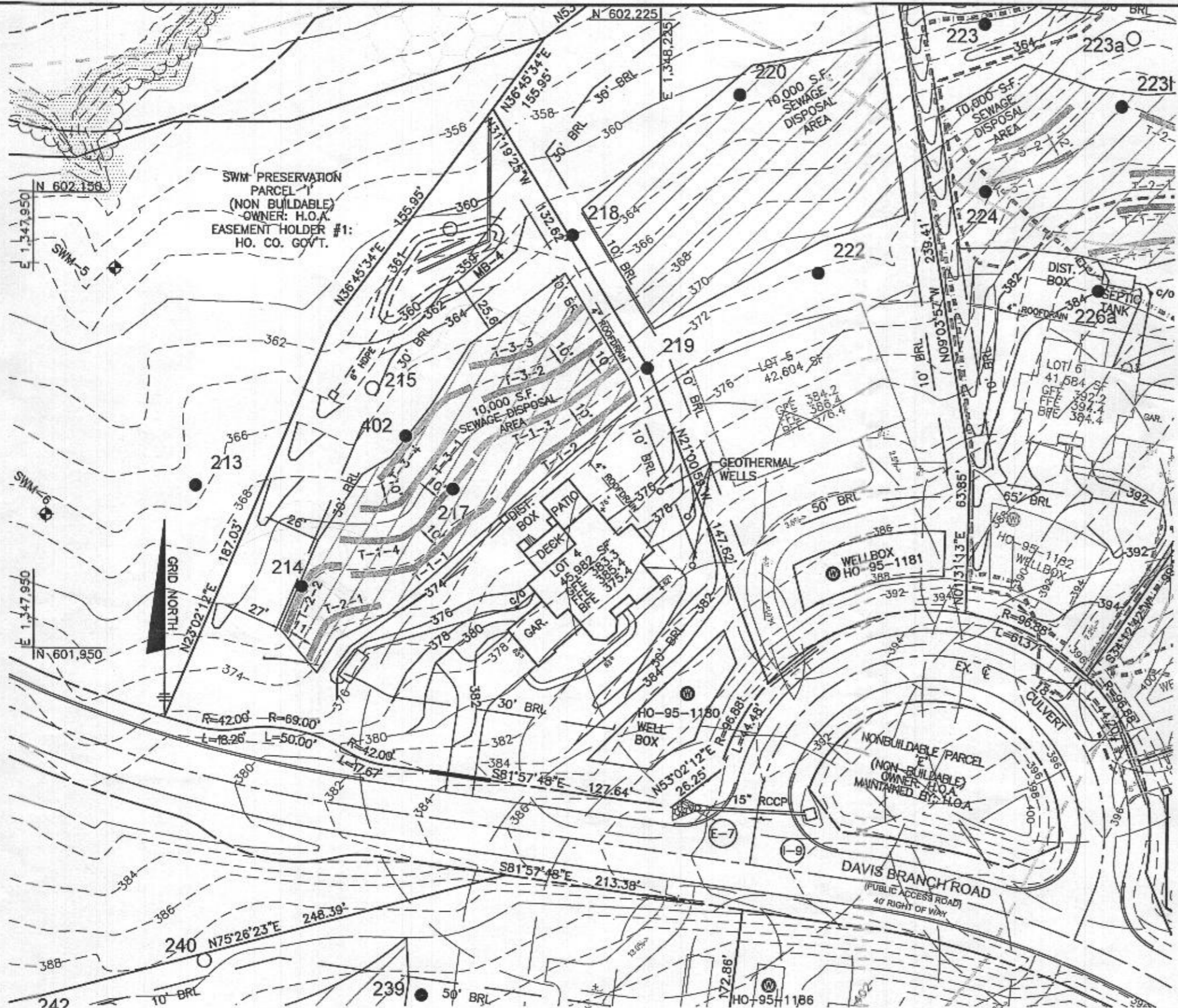
1" = 50'

APPROVED 01/04/2020
 STAKED BY DRILLER
 MYRTUE PROP LOT H
 1801 DAVIS BRANCH

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-CIVILENGINEERING.COM

PROJECT:	MYRTUE PROPERTY LOT 4	
LOCATION:	TAX MAP: 10, GRID: 24, PARCEL: 225, ZONED: RC-DEO 1825 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:	JANUARY, 2020	PROJECT NO. 2099
SCALE:	AS SHOWN	DRAWING 2 OF 3



PLAN VIEW
1" = 50'

- LEGEND**
- 400 PROPOSED CONTOURS
 - 398 EXISTING CONTOURS
 - 400 EXISTING PRIVATE SEWAGE AREA
 - 398 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

*Approved Septic System Plan
Howard County Health Department
2007-2011 Septic Tank to
Draw 24 Drain Field to
R. Miller
Signature
4/13/2020*

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.



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

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(P) 410-465-8105 (F) 410-465-8644
WWW.BEJ-CMLENGINEERING.COM

PROJECT:		MYRTUE PROPERTY LOT 4	
LOCATION:		TAX MAP: 10, GRID: 24, PARCEL: 225, ZONED: RC-DEO 1801 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 4			
System	Application Rate	Effective Depth	Bottom Depth
1st Replacement	0.6	6.5	8.0
2nd Replacement	1.2	4.0	8.0
3rd Replacement	0.6	5.5	8.0

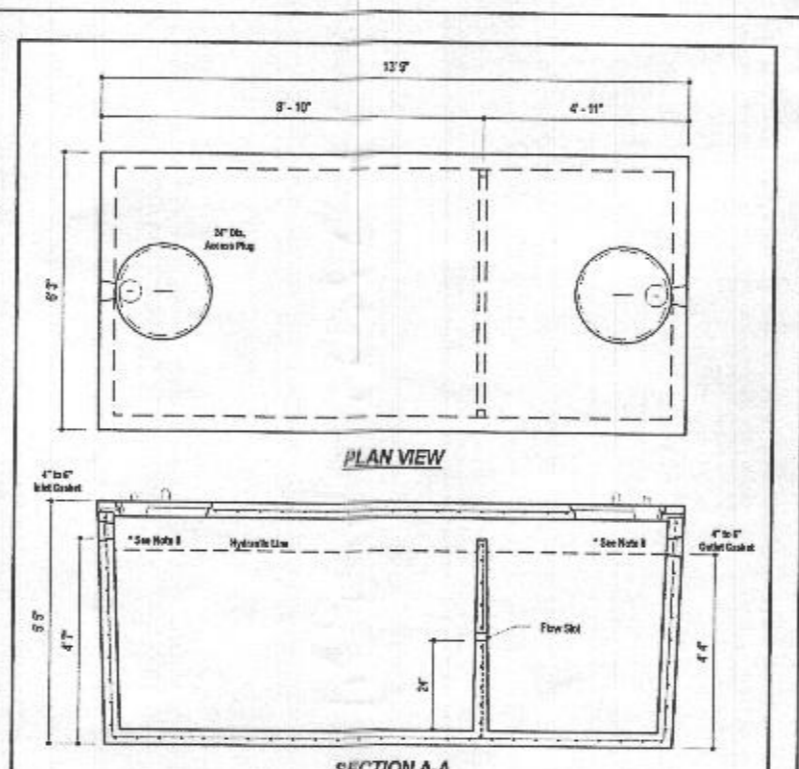
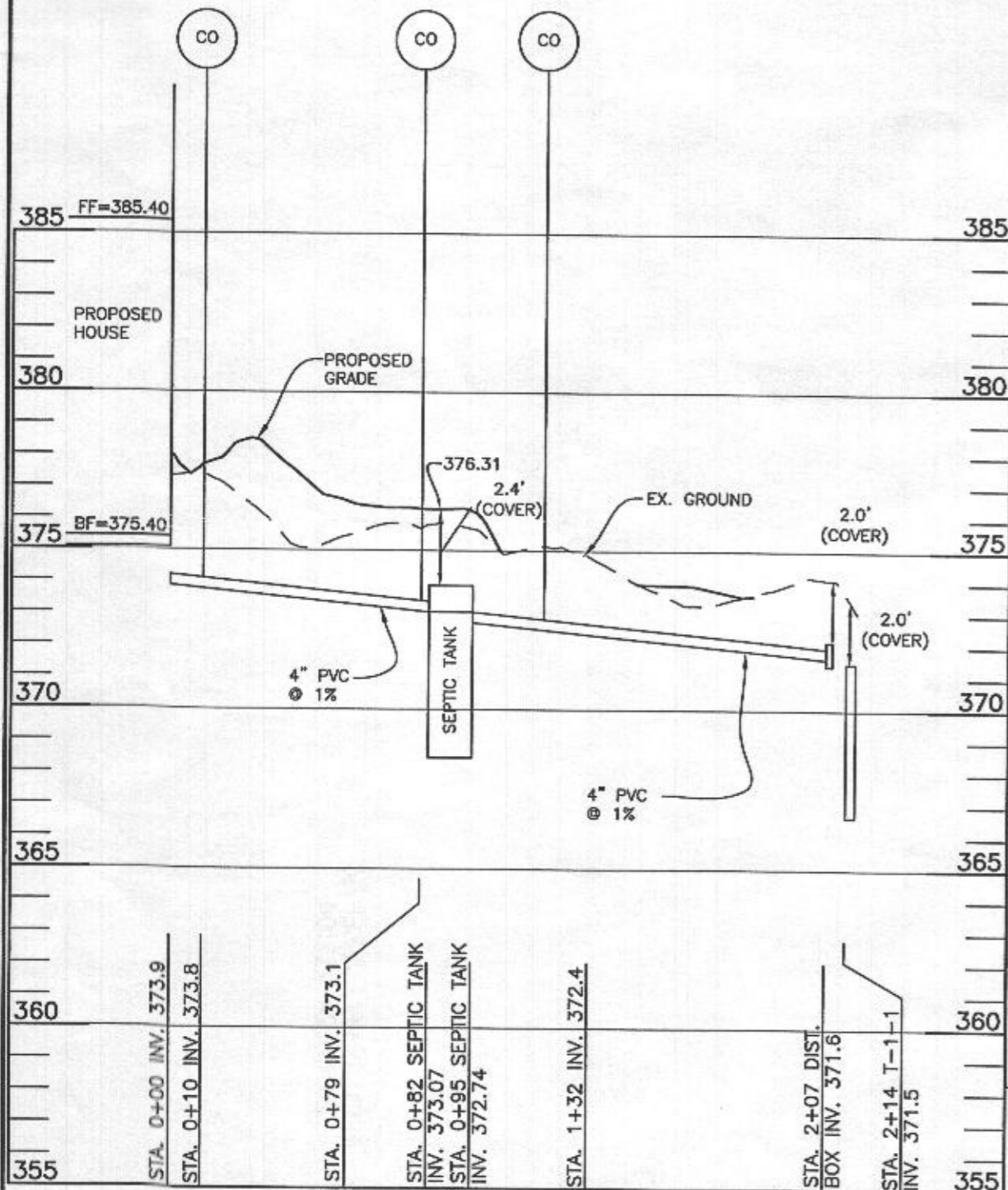
SEPTIC INVERT CHART - LOT 4	
INV @ HOUSE	373.9
GROUND @ HOUSE	378.0
INV IN SEPTIC TANK	373.07
INV OUT SEPTIC TANK	372.74
TOP OF SEPTIC TANK	373.9
GROUND OVER SEPTIC TANK	376.3

TRENCH DESIGN - LOT 4					
INITIAL SYSTEM		1ST REPLACEMENT SYSTEM		2ND REPLACEMENT SYSTEM	
T-1-1	LENGTH 74.5 ft	T-2-1	LENGTH 43.5 ft	T-3-1	LENGTH 57.9 ft
	GROUND ELEVATION 372.2		GROUND ELEVATION 373.5		GROUND ELEVATION 369.2
	INVERT ELEVATION 370.2		INVERT ELEVATION 371.5		INVERT ELEVATION 367.2
	MAX BOTTOM ELEVATION 364.2		MAX BOTTOM ELEVATION 365.5		MAX BOTTOM ELEVATION 361.2
T-1-2	LENGTH 74.5 ft	T-2-2	LENGTH 43.5 ft	T-3-2	LENGTH 57.9 ft
	GROUND ELEVATION 373.0		GROUND ELEVATION 372.1		GROUND ELEVATION 368.9
	INVERT ELEVATION 371.0		INVERT ELEVATION 370.1		INVERT ELEVATION 366.9
	MAX BOTTOM ELEVATION 365.0		MAX BOTTOM ELEVATION 364.1		MAX BOTTOM ELEVATION 360.9
T-1-3	LENGTH 74.5 ft			T-3-3	LENGTH 57.9 ft
	GROUND ELEVATION 370.8				GROUND ELEVATION 367.0
	INVERT ELEVATION 368.8				INVERT ELEVATION 365.0
	MAX BOTTOM ELEVATION 362.8				MAX BOTTOM ELEVATION 359.0
T-1-4	LENGTH 74.5 ft			T-3-4	LENGTH 57.9 ft
	GROUND ELEVATION 370.7				GROUND ELEVATION 367.9
	INVERT ELEVATION 368.7				INVERT ELEVATION 365.9
	MAX BOTTOM ELEVATION 362.7				MAX BOTTOM ELEVATION 359.9

INITIAL SYSTEM		
Number of Bedrooms	5	
Application Rate	0.6	gpd/sf
Effective Area Beginning Depth	6.5	ft
Bottom Max Depth	8.0	ft
Design Flow	750	gpd
Drainage Field square footage	1250	sf
Sidewall Reduction Credit	0.71	
Trench width	3	ft
Effective Area Depth	1.5	ft
Trench Spacing	10	ft
Linear Length of trench Required	298	lf

1ST REPLACEMENT SYSTEM		
Number of Bedrooms	5	
Application Rate	1.2	gpd/sf
Effective Area Beginning Depth	4.0	ft
Bottom Max Depth	8.0	ft
Design Flow	750	gpd
Drainage Field square footage	625	sf
Sidewall Reduction Credit	0.42	
Trench width	3	ft
Effective Area Depth	4	ft
Trench Spacing	11	ft
Linear Length of trench Required	87	lf

2ND REPLACEMENT SYSTEM		
Number of Bedrooms	5	
Application Rate	0.6	gpd/sf
Effective Area Beginning Depth	5.5	ft
Bottom Max Depth	8.0	ft
Design Flow	750	gpd
Drainage Field square footage	1250	sf
Sidewall Reduction Credit	0.56	
Trench width	3	ft
Effective Area Depth	2.5	ft
Trench Spacing	10	ft
Linear Length of trench Required	231	lf



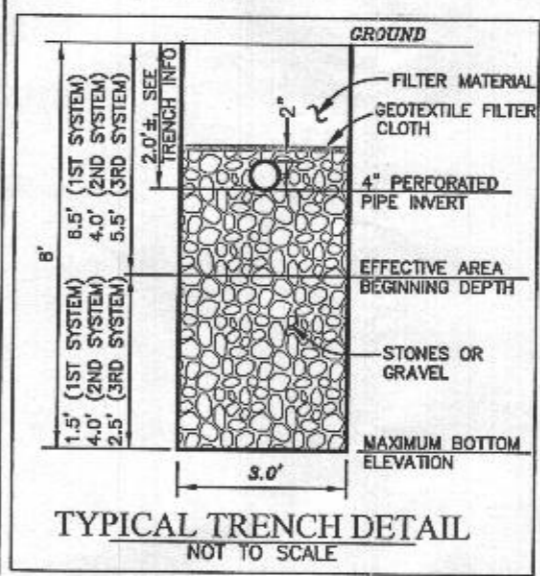
DESIGN DATA & GENERAL NOTES

- Concrete strength F_{cm}=4000 psi, F_{cp} 28 days. Density = 150 pcf.
- Concrete - Portland Type III per ASTM C 150-02.
- Reinforcing steel per ASTM A 618-02.
- Reinforcing per ASTM A 618, Min. 1-1/2" cover.
- Top slab finished with 1/2" top finish.
- 4" max. 1" bars, 18" top to bottom.
- Max 2' of cover.
- 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]

Dwg. No. 2300-2C No Scale Aug 11, 2008

Approved Septic System Plan
Howard County Health Department
2000-gal Septic Tank
for Gravity Drainfield
for 5 bedrooms SFD
Signature: J. Bucher Date: 4/13/2020



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.



LOT 4 OSDS
SCALE: 1"=50' HORIZ., 1"=5' VERT.

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

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DATE:	MARCH, 2020	PROJECT NO.	2099
SCALE:	AS SHOWN	DRAWING	3 OF 3