

**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: 4/15/19

**ONSITE SEWAGE DISPOSAL SYSTEM**

P 565360-A

APPROVAL DATE: 5/6/2019

**PERMIT: CONSTRUCTION**

A \_\_\_\_\_

PROPERTY ADDRESS: 13864 Mill Creek Court

SUBDIVISION: Crawford Subdivision

LOT: 11

TAX ID: \_\_\_\_\_

CONTRACTOR: South Carroll Backhoe

EMAIL: sbackhoe@comcast.com

CONTRACTOR ADDRESS: 4410 Salem Bottom Road, Westminster, MD 21157

PHONE: 410-596-3618

PROPERTY OWNER: NVR INC.

EMAIL: \_\_\_\_\_

OWNER ADDRESS: 9720 Patuxent Woods Drive, Columbia, MD 21046

PHONE: 410-379-5956

SEPTIC TANK SIZE (GALLONS): 2000

TANK MANUFACTURER: Babylon

PUMP MODEL: N/A

PUMP SIZE \_\_\_\_\_

N/A

PUMP TANK CAPACITY: N/A

DISTRIBUTION SYSTEM:



GRAVITY



PRESSURE DOSED

BEDROOMS: 5

APPLICATION RATE

1.2

TRENCHES:	LINEAR FEET REQUIRED: <u>104.2</u>	INLET DEPTH: <u>4</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>8</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>5</u>
LOCATION:	<b>PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.</b>	
NOTES:	Install 2 trenches @ 55'	

ISSUED BY: Dana Bernard

ISSUE DATE: 4/15/19

EXPIRATION DATE: 4/15/20

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

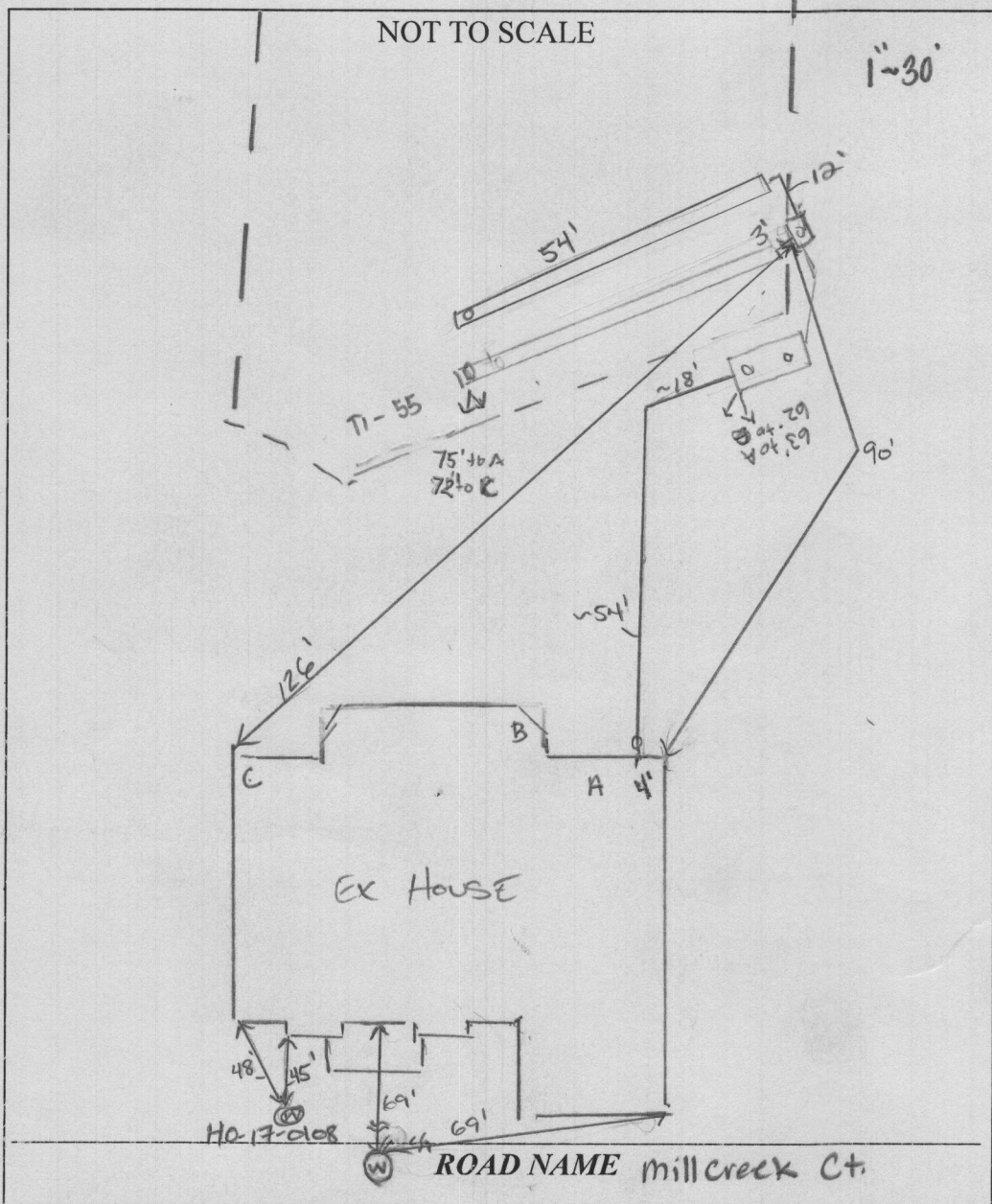
N/A

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.**



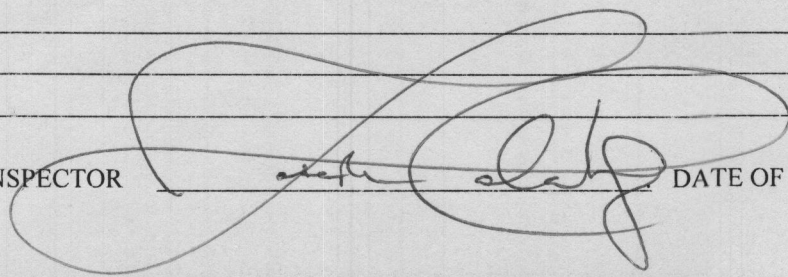
TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
3'	4'	8'
NUMBER OF TRENCHES		2
TOTAL LENGTH		109'
ABSORPTION AREA		327 FT <sup>2</sup> + SIDE WALL
DISTRIBUTION BOX LEVEL		YES
DISTRIBUTION BOX BAFFLE		YES
DISTRIBUTION BOX PORT		YES

SEPTIC TANK DATA	
SEPTIC TANK I LEVEL	yes
MANUFACTURER	Babylon
CAPACITY	2000 GAL
SEAM LOC	top
TANK LID DEPTH	2.5' to 3'
BAFFLES	6" F / 4" B
BAFFLE FILTER	-
MANHOLE LOC	Front/back
6" PORT LOC	-
WATERTIGHT TEST	-
SLOTTED	yes
DATE ON LID	2/19/19
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:**

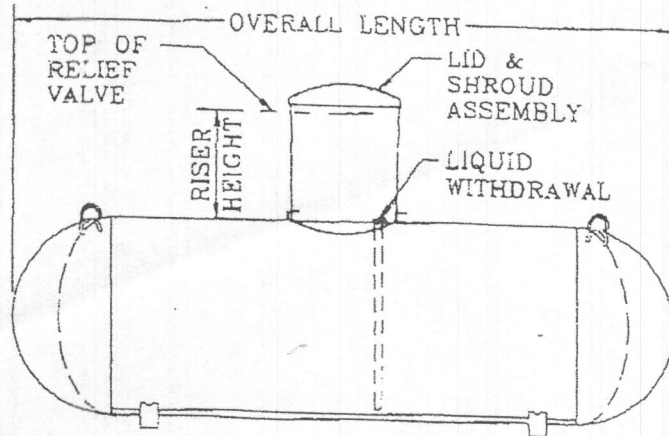
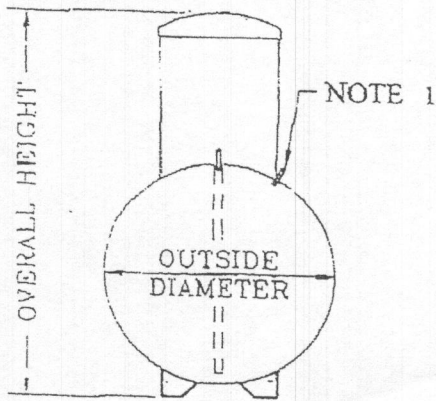
4/23/19 Met S. Carroll on site for layout. Tank + SDA corner stakes present. Shot contour + laid out 2 x 55' trenches per plan. (SC)

INSTALLATION: 5/3/19 - site inspection, contractor onsite, SHC made, tank set, dbox set's 1st trench complete, stone looks good, 8' bottom, 4' inlet, 3' wide, ok to continue. (RP) 5/6/2019 LOWER TRENCH COMPLETE. D BOX SET AND LEVELED WITH SPEED LEVELS. OK TO BACKFILL. (RP)

FINAL INSPECTOR  DATE OF APPROVAL 05/06/2019

# TRINITY INDUSTRIES, INC.

## Underground Vessel



### General Specifications

Conforms to the latest edition and addenda of the ASME, Section VIII, div.1 code for Pressure Vessels. Complies with NFPA 58 and is listed by Underwriters Laboratories, Inc.

Rated at 250 psig from -20°F. to 125°F. All tanks may be evacuated to a full (14.7 psi) vacuum.

Vessel Finish: Coated with epoxy red powder.

Applicable federal, state or local regulations may contain specific requirements for protective coatings and cathodic protection. The purchaser and installer are responsible for compliance with such federal, state or local regulations.

All vessel dimensions are approximate

WATER CAPACITY	OUTSIDE DIAMETER	HEAD TYPE	OVERALL LENGTH	OVERALL HEIGHT		WEIGHT	QUANTITY IN FULL LOAD
				Riser Height			
				14"	28"		
120 wg 454.2 L	24" 609.6 mm	Ellip	5' - 5 7/8" 1671.8 mm	3' - 9 7/8" 1165.2 mm	4' - 8 3/8" 1431.9 mm	252 lbs. 114.3 kg	63
250 wg 946.3 L	31.5" 800.1 mm	Hemi	7' - 2 1/2" 2197.1 mm	4' - 5 3/8" 1355.7 mm	5' - 3 3/8" 1609.7 mm	472 lbs. 214.1 kg	42
320 wg 1211.2 L	31.5" 800.1 mm	Hemi	8' - 11 3/4" 2736.9 mm	4' - 5 3/8" 1355.7 mm	5' - 3 3/8" 1609.7 mm	588 lbs. 266.7 kg	35
500 wg 1892.5 L	37.42" 950.5 mm	Hemi	9' - 10" 2997.2 mm	4' - 11 3/8" 1506.6 mm	5' - 9 7/8" 1773.2 mm	921 lbs. 417.8 kg	25
1000 wg 3785.0 L	40.96" 1040.4 mm	Hemi	15' - 10 7/8" 4846.6 mm	5' - 2 7/8" 1597.0 mm	6' - 1 3/8" 1863.7 mm	1731 lbs. 785.2 kg	15
2000 wg 3785.6 L	46.614" 1183.9 mm	Ellip	23' - 9 3/8" 7248.5 mm	5' - 8 13/16" 1747.8 mm	6' - 7 5/16" 2014.5 mm	3685 lbs. 1671.4 kg	8

**Bernard, Dana**

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**From:** Bernard, Dana  
**Sent:** Thursday, January 10, 2019 10:11 AM  
**To:** Kristy Pierce (kpierce@glwpa.com)  
**Subject:** 13864 Mill Creek Court Lot #11

Kristy,

Lot 11 at 13864 Mill Creek OSDS plan has been approved. However, the location of the distribution box may not provide the most efficiency and may be adjusted in the field during the layout inspection.

Thank you & Have a\*")

,:,:\*") ,:,:\*")

(,,:\* Wonderful Day!

*Dana Bernard*  
Dana Bernard, R.E.H.S./L.E.H.S.

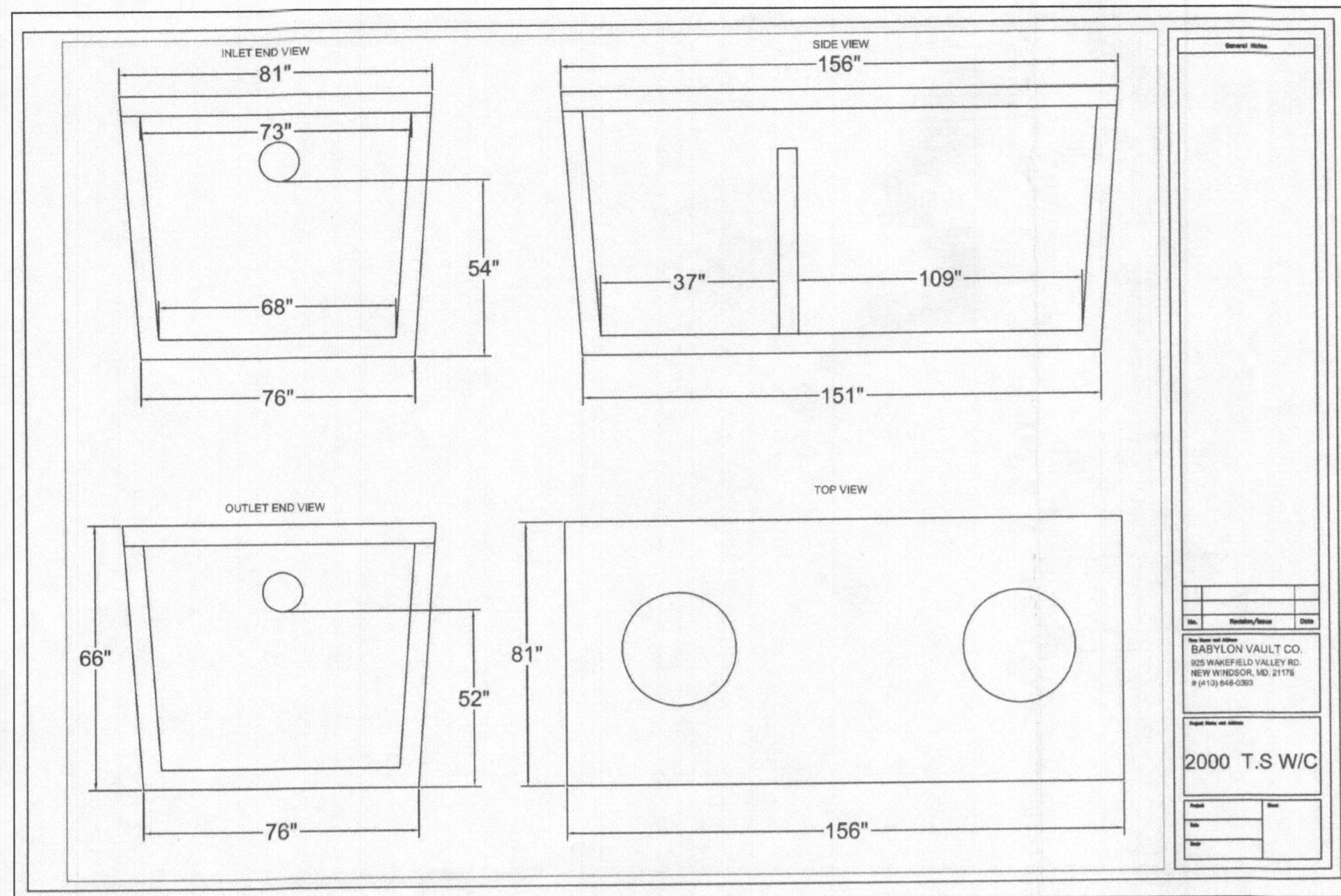
Environmental Specialist II

Bureau of Environmental Health

Well and Septic Program

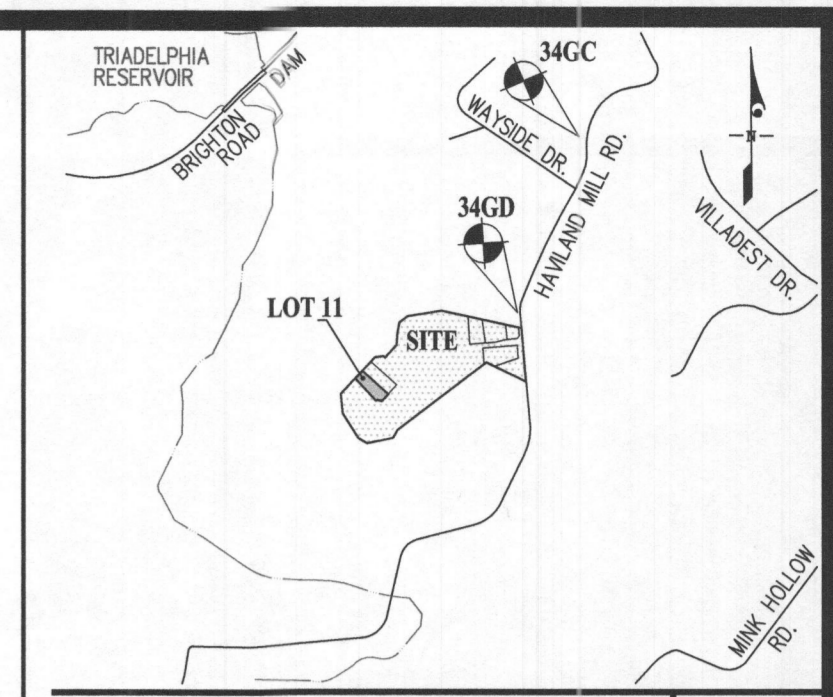
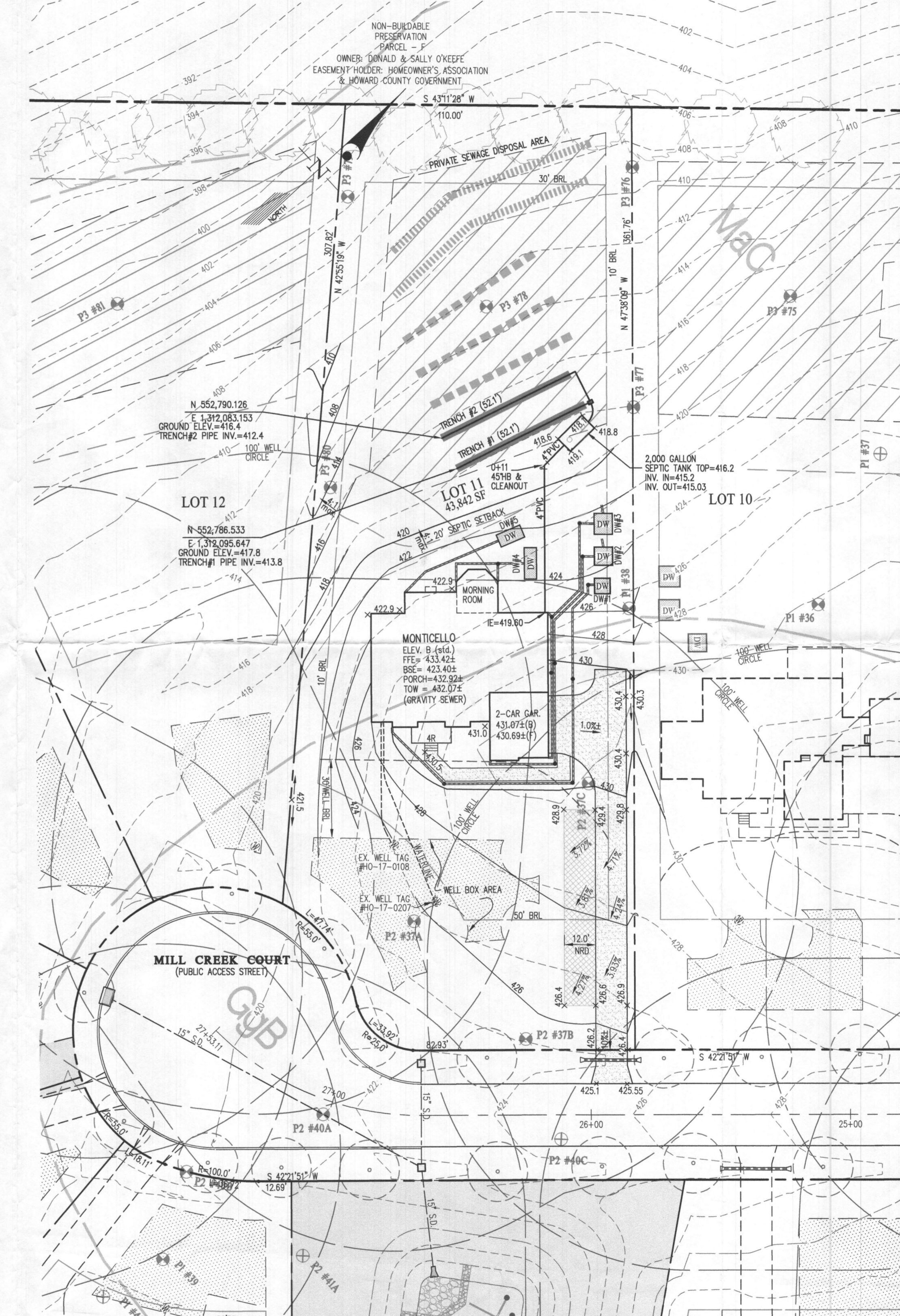
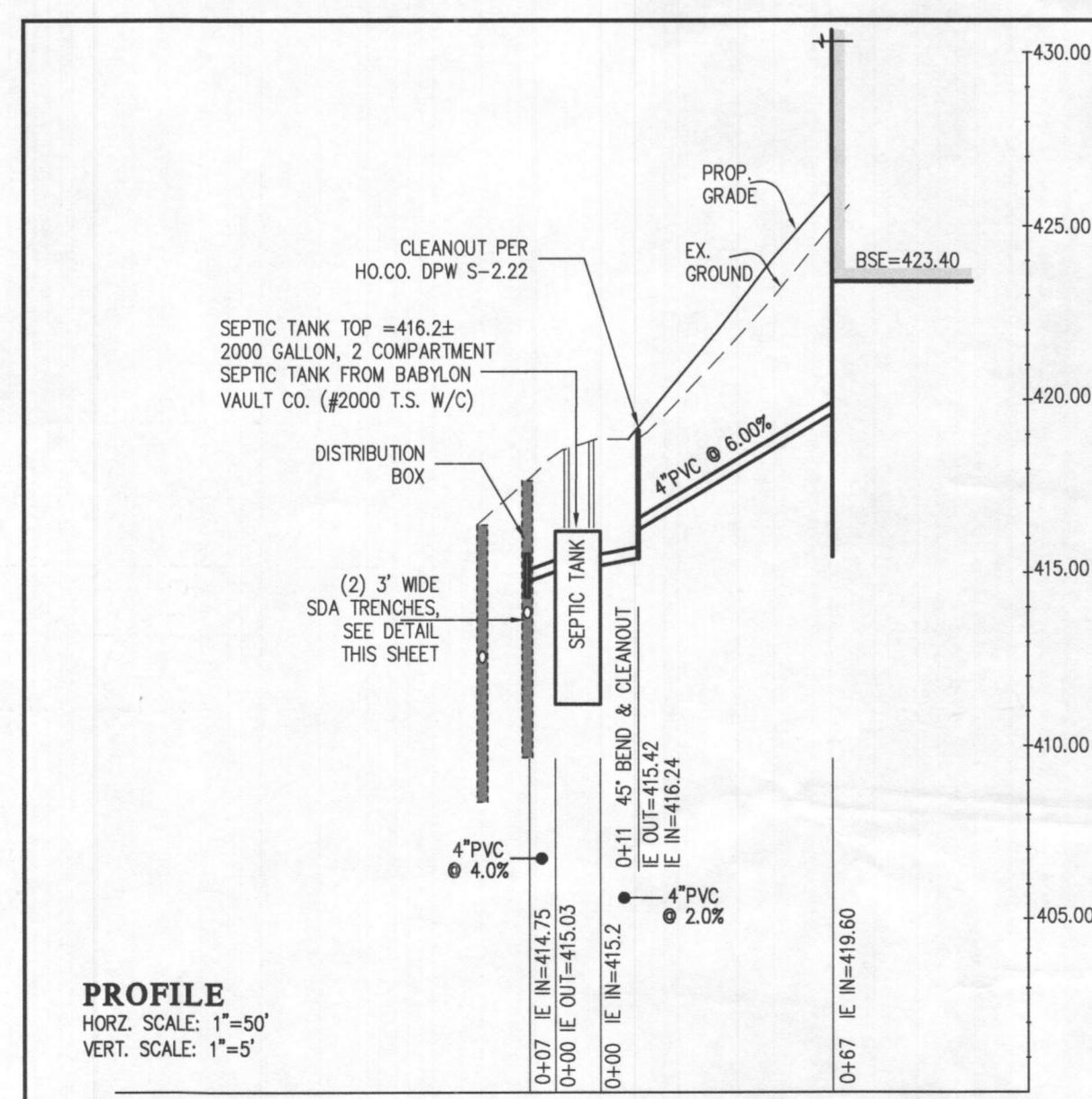
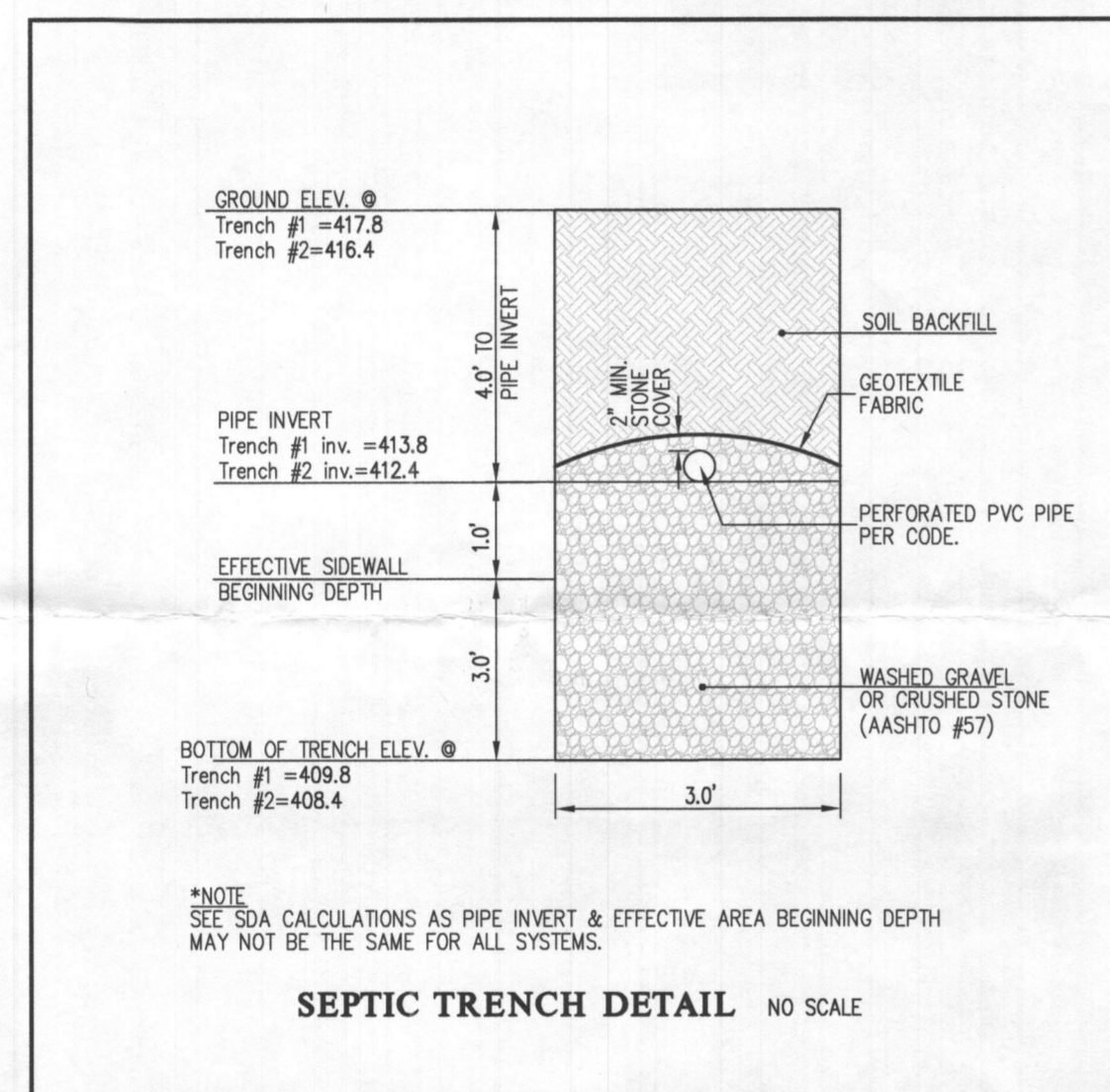
Phone (410) 313-2775

E-mail: [DBernard@howardcountymd.gov](mailto:DBernard@howardcountymd.gov)



**SDA TRENCH SIZE CALCULATIONS**

System Input Information	Lot 11		
	Initial System	Replacem't System No.1	Replacem't System No.2
Application Rate	1.2	1.2	1.2
Effective area beginning depth	5.0	7.0	7.0
Effective area maximum bottom depth	8.0	8.0	8.0
Number of Bedrooms	5	5	5
Design flow at 150 gal./day/bedroom	750	750	750
<b>Absorption Trench Calculations</b>			
Drainfield area required (Design flow/application rate)	625 s.f.	625 s.f.	625 s.f.
Effluent pipe depth to invert (cannot exceed 4'; if < 2', then field run topsoil at 1.5-ft interval is required)	4.0	4.0	4.0
Effective sidewall depth "D" = depth between the effective beginning depth or pipe depth (which ever is deeper) and maximum trench bottom.	3.0	1.0	1.0
Trench Width "W" (2 or 3 feet)	3.0	3.0	3.0
SideWall Reduction Percent = (W+2)/(W+1+2D)	50.00%	83.33%	83.33%
Linear feet of trench required = (drainfield area x sidewall reduction)/W	104.2	173.6	173.6
<b>Trench Layout Information</b>			
Approximate length available on contour & not exceeding 100-ft	55	60	88
Number of trenches to use	2	3	2
Min. length (linear feet)	52.1	57.9	86.9
Total (linear feet)	104.2	173.7	173.8
Minium Trench Spacing : For trenches with no sidewall credit the spacing is 6' for a 2' wide trench and 9' for a 3' wide trench (measured edge to edge). All trenches utilizing sidewall reduction credit must be spaced a min. of 10' for effective sidewall not over 3.5'. If > 3.5', then spacing formula is 2D+W up to a maximum of 18'.	10.0	10.0	10.0
Approx. width of absorption Area	16 ft.		
Approx. drainfield Area (sq. feet)	834		



**BENCHMARKS**

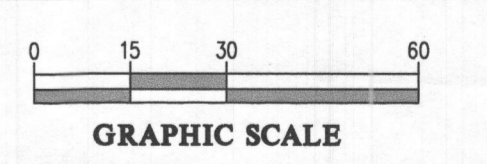
34CC	ELEV. 482.873	N = 554,882.960	E = 1,314,248.668
34GD	ELEV. 465.288	N = 553,733.762	E = 1,313,736.594

**LEGEND**

- 600 --- EXISTING CONTOUR
- 600 --- PROPOSED CONTOUR
- FFE FIRST FLOOR ELEVATION
- TOW TOP OF FOUNDATION WALL
- BSE BASEMENT SLAB ELEVATION
- PRIVATE SEWAGE DISPOSAL AREA
- INITIAL SYSTEM 3' WIDE TRENCH
- 1st REPLACEMENT SYSTEM TRENCH
- 2nd REPLACEMENT SYSTEM TRENCH
- P # PERCOLATION TEST HOLES (PASSED)
- P # PERCOLATION TEST HOLES (FAILED)
- W EXISTING WELL LOCATION

- NOTES:**
- ANY CHANGE 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.
  - THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
  - THE WELL (TAG #10-17-0108 and #10-17-207) HAVE BEEN FIELD LOCATED AND ARE ACCURATELY SHOWN.
  - ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARIES AND 200' DOWN GRADIENT OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.

Approved Septic System Plan  
Howard County Health Department  
*DBurnard* 1-9-19  
Signature Date  
SBR

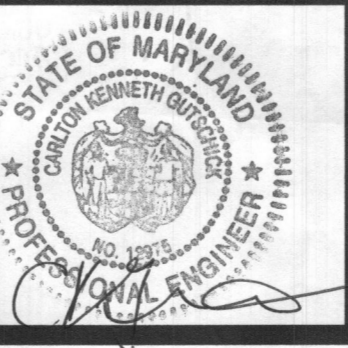


**GLW**  
PLANNING | ENGINEERING | SURVEYING  
3909 NATIONAL DRIVE | SUITE 250 | BURTONSVILLE, MD 20866 | GLWPA.COM  
PHONE: 301-421-4024 | BALT: 410-880-1820 | DC&VA: 301-989-2524 | FAX: 301-421-4186

DESIGNED BY:	DATE	REVISION	BY	APPR.
MBT				
DRAWN BY:				
KLP				
CHECKED BY:				
CKG				

PREPARED FOR:  
NVR INC.  
9720 PATUXENT WOODS DRIVE  
COLUMBIA, MARYLAND 21046  
PH: 410-379-5956

PROFESSIONAL CERTIFICATION  
I HEREBY CERTIFY THAT THESE PLANS 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. 12975  
EXPIRATION DATE: MAY 26, 2020  
12/20/18



**ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN**

**CRAWFORD SUBDIVISION**  
LOT 11 (13864 MILL CREEK COURT)  
PLAT NO. 24600-24607

ELECTION DISTRICT No. 5  
HOWARD COUNTY, MARYLAND

SCALE 1"=30'	ZONING RR-DEO	G. L. W. FILE No. 17071
DATE DEC. 2018	TAX MAP - GRID 34&39-19&6	SHEET 1 OF 1

