

**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 515360  
 APPROVAL DATE: 5/16/19 **PERMIT: CONSTRUCTION** A \_\_\_\_\_  
 PROPERTY ADDRESS: 13834 Mill Creek Court  
 SUBDIVISION: Crawford Subdivision LOT: 6 TAX ID: \_\_\_\_\_  
 CONTRACTOR: South Carroll Backhoe EMAIL: scbackhoe@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>74.6</u>	INLET DEPTH: <u>3</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>8</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>13</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>3</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 @ 37.3'	

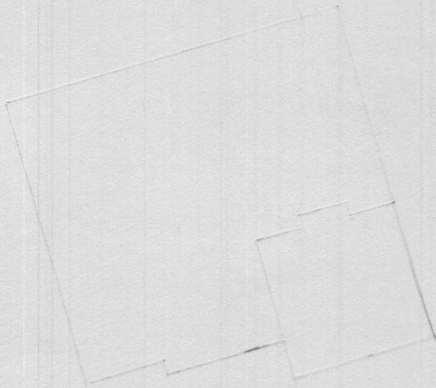
ISSUED BY: Hank Oswald ISSUE DATE: 4/15/19 EXPIRATION DATE: 4/15/20

- 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 DOWNGRAIDENT 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

SEE ATTACHED  
AS BUILT



ROAD NAME

**TRENCH/DRAINFIELD DATA**

WIDTH	INLET	BOTTOM
<u>3'</u>	<u>3'</u>	<u>8'</u>
NUMBER OF TRENCHES		<u>2</u>
TOTAL LENGTH		<u>78 FT</u>
ABSORPTION AREA		<u>234 SF</u>
DISTRIBUTION BOX LEVEL		<u>SPEED</u>
DISTRIBUTION BOX BAFFLE		<u>YES</u>
DISTRIBUTION BOX PORT		<u>YES</u>

**SEPTIC TANK DATA**

SEPTIC TANK I LEVEL	<u>YES</u>
MANUFACTURER	<u>BABYLON</u>
CAPACITY	<u>2000</u> GAL
SEAM LOC	<u>TOP</u>
TANK LID DEPTH	<u>&lt; 8'</u>
BAFFLES	<u>YES</u>
BAFFLE FILTER	<u>NO</u>
MANHOLE LOC	<u>FRONT/BACK</u>
6" PORT LOC	<u>---</u>
WATERTIGHT TEST	<u>---</u>
SLOTTED	<u>YES</u>
DATE ON LID	<u>04/02/2019</u>
<b>PUMP/SEPTIC TANK LEVEL</b> _____	
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 and SDA corner stakes present. Shot contour and laid out upper trench at 37' and lower at 38'. A couple of trees to be removed prior to install. (SC)

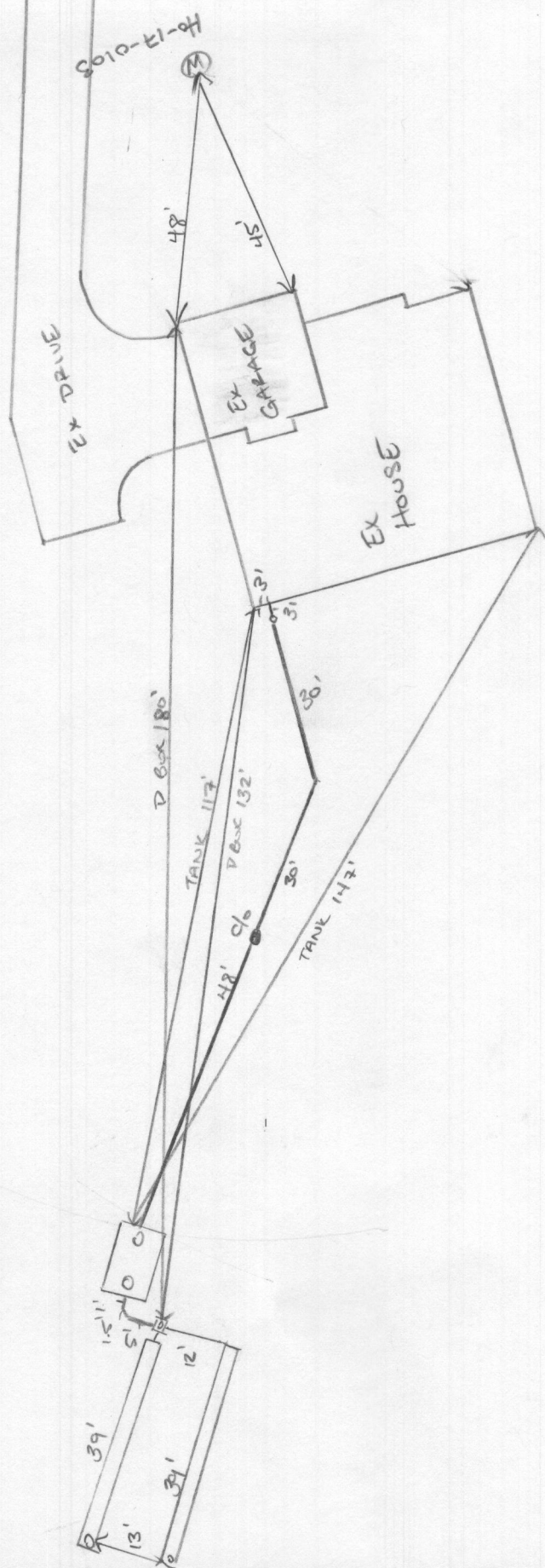
INSTALLATION: 5/9/2019 SHC INSTALLED AND SEWER LINE DOWN TO TANK LOCATION. TANK ARRIVED AND TO BE SET. @ (PM VIA PHOTO) TANK SET. @ 5/16/2019 TRENCHES COMPLETED. D BOX LEVELLED WITH SPEED LEVELS. (C)

FINAL INSPECTOR

DATE OF APPROVAL

05/16/2019

NOT TO SCALE



PIPE SPEC:  
4" SCH 40 PVC  
TRENCH STONE WAS GREAT.

## Bernard, Dana

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**From:** Bernard, Dana  
**Sent:** Thursday, January 10, 2019 10:19 AM  
**To:** Kristy Pierce (kpierce@glwpa.com)  
**Subject:** 13834 Mill Creek Court Lot #6

Kristy,

Lot 6 at 13834 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

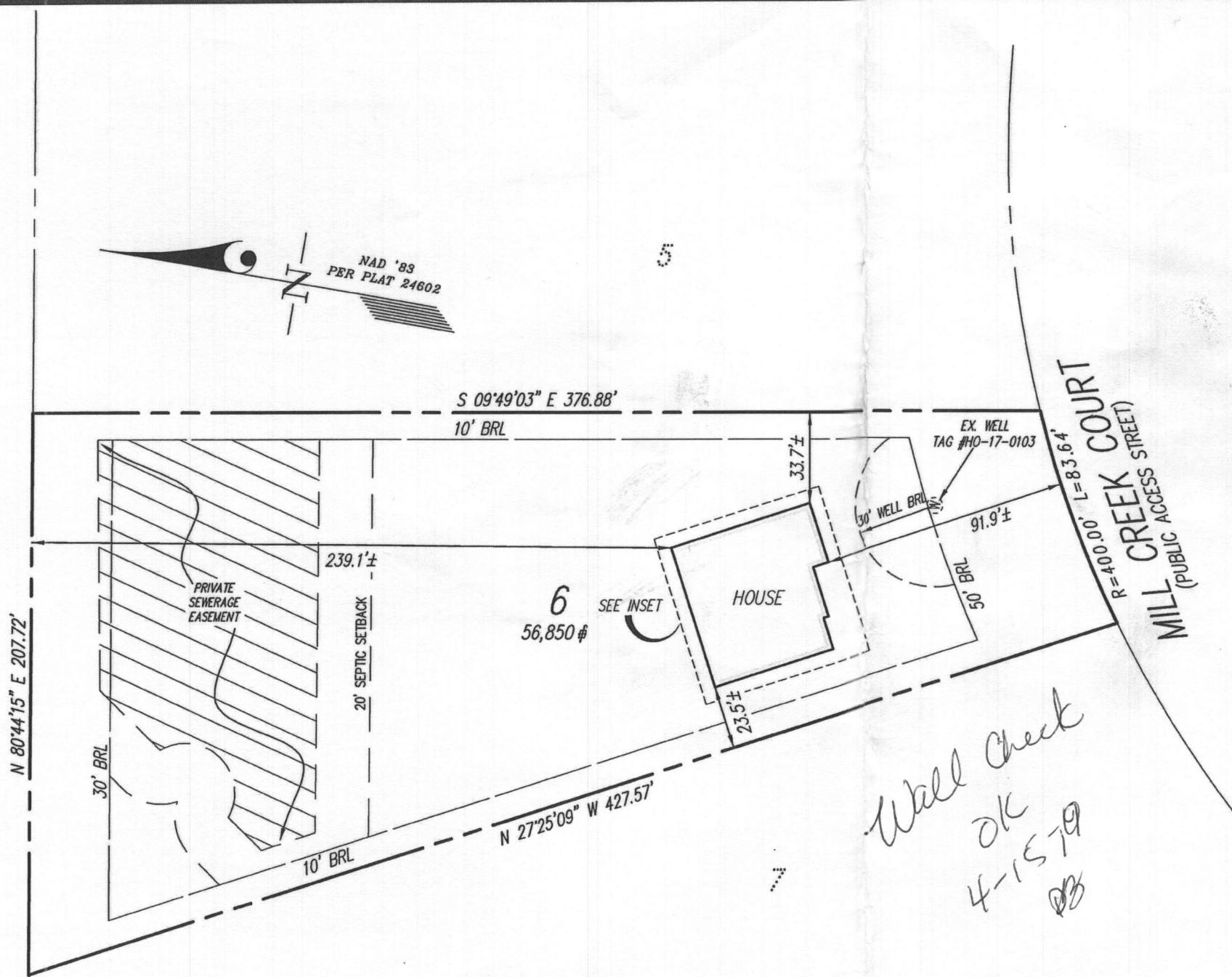
Bureau of Environmental Health

Well and Septic Program

Phone (410) 313-2775

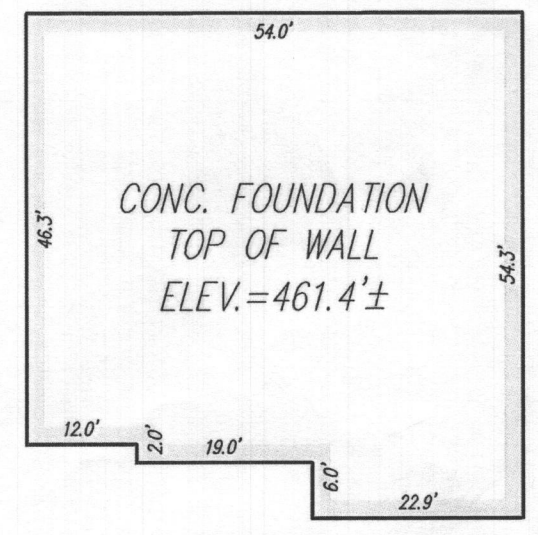
E-mail: [DBernard@howardcountymd.gov](mailto:DBernard@howardcountymd.gov)

S:\Survey Drawings\WALLCHECK\MILL CREEK-1707\WCK\1707\WCK-6.dwg, 4/12/2019 11:24:05 AM, morgamb, 5601\_SURVEY (COLOR).pc3, 1:1



**NOTES:**  
 THIS WALLCHECK WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT, THIS PROPERTY IS SUBJECT TO ANY AND ALL EASEMENTS, RIGHTS-OF-WAY, COVENANTS, AND RESTRICTIONS, ETC. OF RECORD, SOME OR ALL OF WHICH MAY OR MAY NOT BE SHOWN AND/OR REFERENCED HEREON. BEARINGS AND DISTANCES OF THE PROPERTY BOUNDARY LINES SHOWN HEREON ARE PER AVAILABLE RECORDS AND HAVE NOT BEEN FIELD VERIFIED.  
 THIS IS NOT A "LOCATION DRAWING" AND IS NOT TO BE USED FOR SETTLEMENT PURPOSES.  
 THE PROPERTY SHOWN HEREON LIES WITHIN ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS SHOWN ON THE F.E.M.A. FLOOD INSURANCE RATE MAP, MAP NUMBER 24027C0140D, EFFECTIVE DATE NOVEMBER 6, 2013.  
 BUILDING SETBACKS (B.R.L.'S) SHOWN HEREON PER PLOT PLAN.  
 SETBACK DISTANCES SHOWN HEREON ARE TO THE OUTERMOST FACE OF THE FOUNDATION WALLS AND HAVE AN ACCURACY OF ± 0.1' FOOT.

INSET 1"=20'



Wall Check  
OK  
4-15-19  
MB

**SURVEYOR'S CERTIFICATE**

THIS IS TO CERTIFY TO:  
'NVR, INC.'

THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF,  
THE POSITION OF THIS BUILDING FOUNDATION  
HAS BEEN ESTABLISHED BY ACCEPTED FIELD PRACTICES.

*[Signature]* 4/1/2019

For Gutschick, Little and Weber, P.A.  
Thomas C. O'Connor, Jr.,  
Professional Land Surveyor, No. 10954 (EXP. DATE: 07/03/2020)

THIS WALLCHECK IS VALID ONLY WITH AN ORIGINAL SIGNATURE AND EMBOSSED SEAL OF THE ABOVE SURVEYOR.

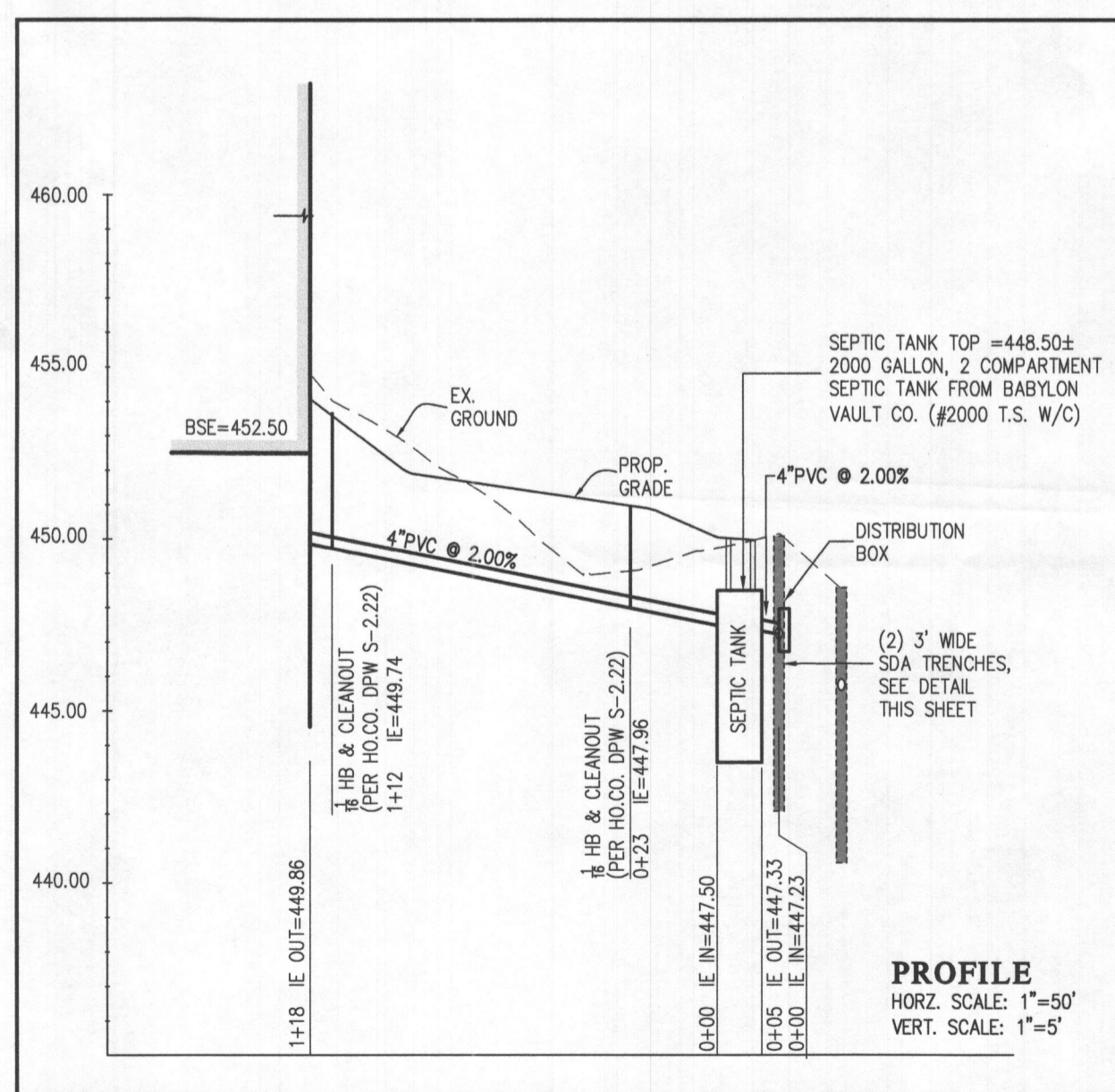
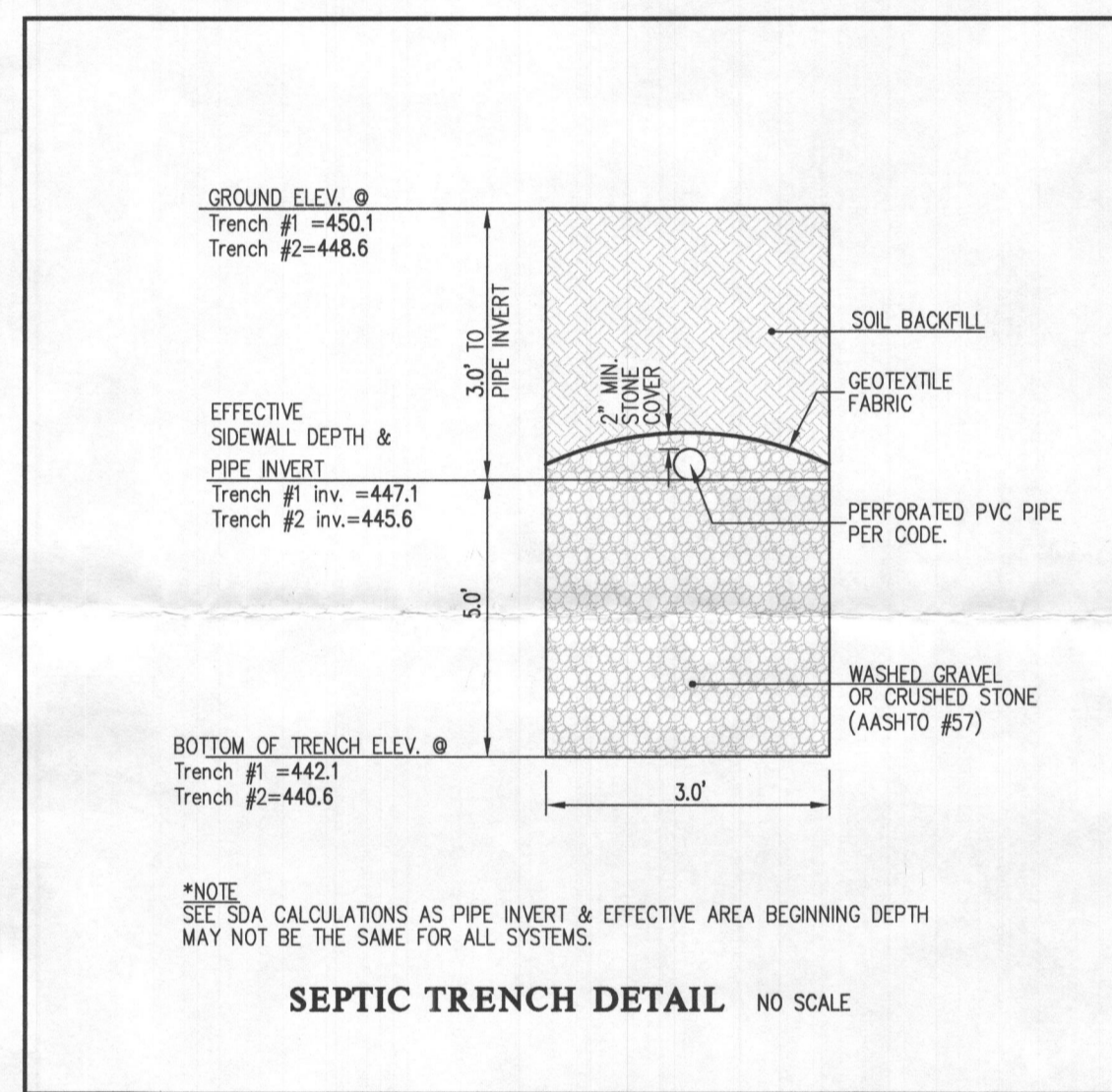
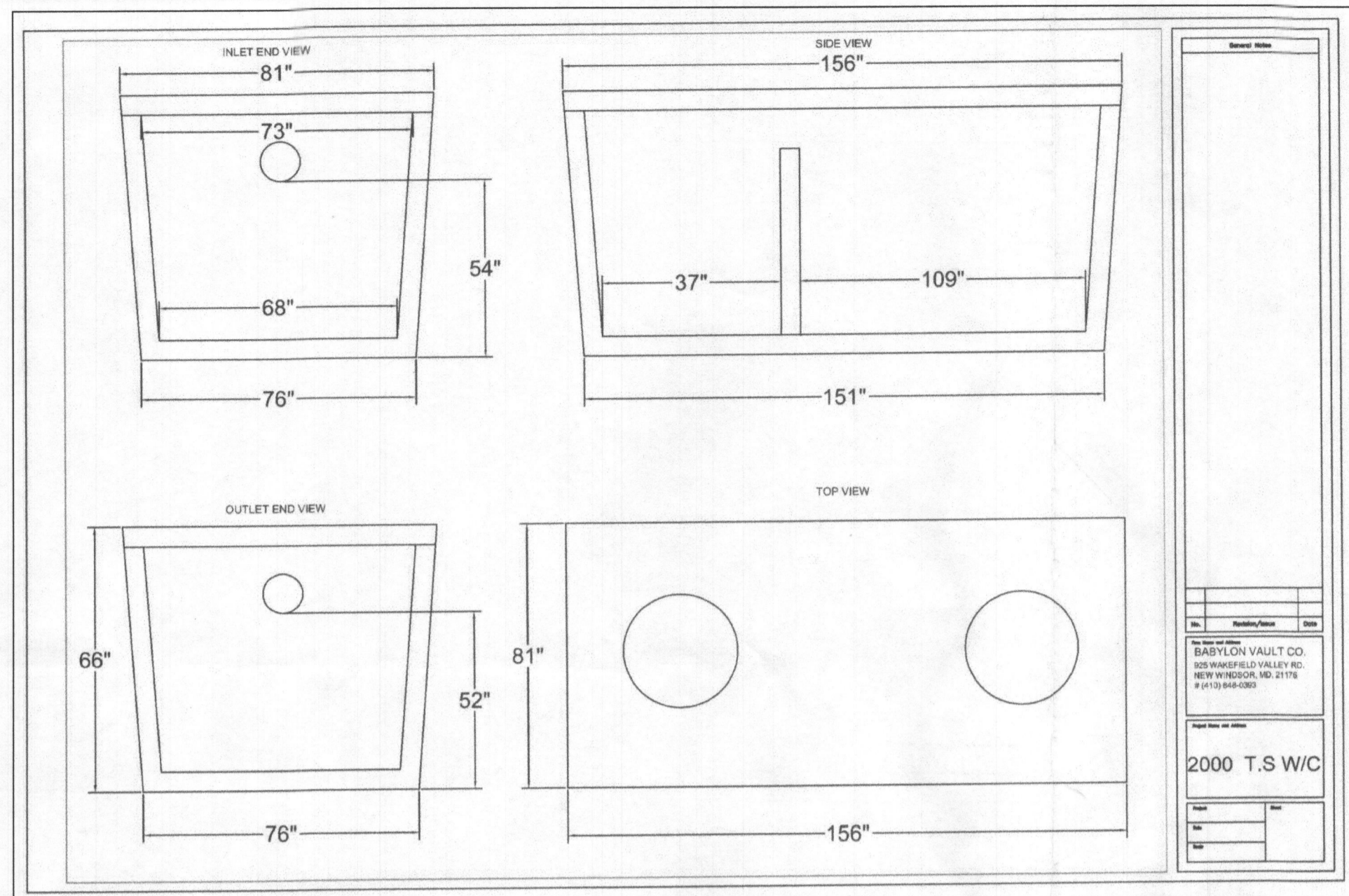
**WALLCHECK**  
(SPECIAL PURPOSE SURVEY)

CRAWFORD SUBDIVISION  
LOT 6  
13870 MILL CREEK COURT

HOWARD COUNTY, MARYLAND	
DATE OF LATEST FIELD WORK: 3/29/2019	G.L.W. FILE No. 17071
REFERENCE: PLAT No.: 24602	SCALE: 1"=50'

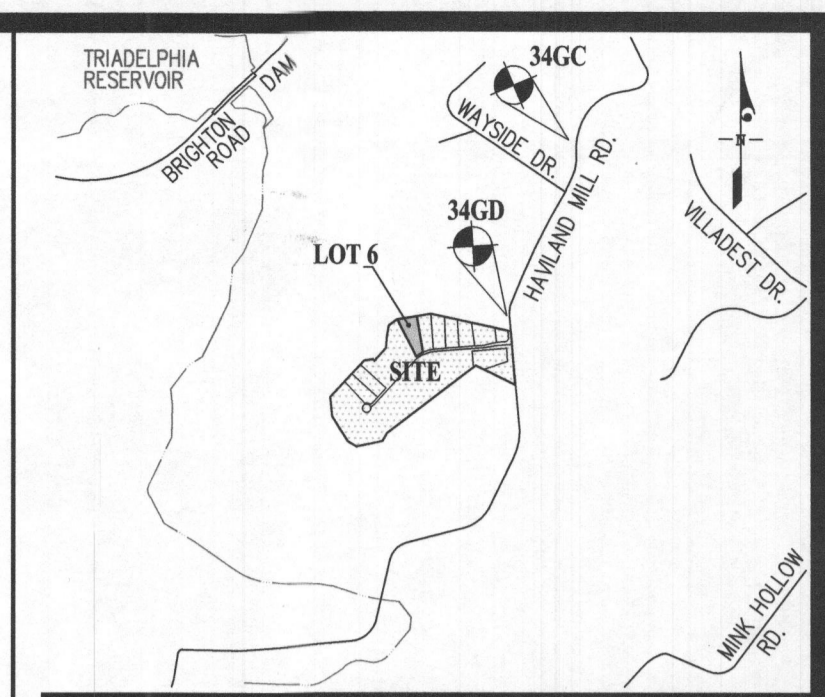


DES.	PREPARED FOR: NVR, INC. 9720 PATUXENT WOODS DRIVE COLUMBIA, MD 21046
DRN. MAB	
CHK.	



**SDA TRENCH SIZE CALCULATIONS**

Crawford Subdivison (Mill Creek)	Lot 6		
<b>System Input Information</b>	Initial System	Replacem't System No.1	Replacem't System No.2
Application Rate	1.2	1.2	1.2
Effective area beginning depth	3.0	3.0	3.0
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 topo at 1-ft interval is required).	3.0	3.0	3.0
Effective sidewall depth "D" = depth between the effective beginning depth or pipe depth (which ever is deeper) and maximum trench bottom.	5.0	5.0	5.0
Trench Width "W" (2 or 3 feet)	3.0	3.0	3.0
Sidewall Reduction Percent = (W+2)/(W+1+2D)	35.71%	35.71%	35.71%
Linear feet of trench required = (drainfield area x sidewall reduction)/W	74.4	74.4	74.4
<b>Trench Layout Information</b>			
Number of trenches to use	2	2	2
Min. length (linear feet)	37.3	37.3	37.3
Total (linear feet)	74.6	74.6	74.6
Minimum 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'.	13.0	13.0	13.0
Approx. width of absorption Area	19 ft.		
Approx. drainfield Area (sq. feet)	709		



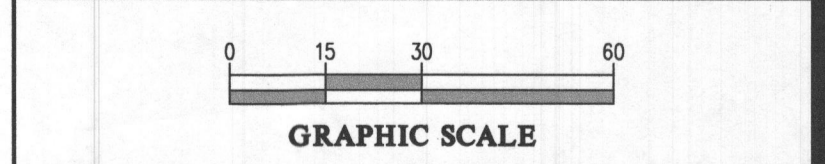
**BENCHMARKS**

34GC	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**
- 500 --- EXISTING CONTOUR
  - 600 --- PROPOSED CONTOUR
  - FFE --- FIRST FLOOR ELEVATION
  - TOW --- TOP OF FOUNDATION WALL
  - BSE --- BASEMENT SLAB ELEVATION
  - [Hatched Area] --- PRIVATE SEWAGE DISPOSAL AREA
  - [Solid Line] --- INITIAL SYSTEM 3' WIDE TRENCH
  - [Dashed Line] --- 1st REPLACEMENT SYSTEM TRENCH
  - [Dotted Line] --- 2nd REPLACEMENT SYSTEM TRENCH
  - P # --- PERCOLATION TEST HOLES (PASSED)
  - ⊕ P# --- PERCOLATION TEST HOLES (FAILED)
  - ⊙ --- 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 WELLS (TAG #10-17-0103) 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  
*Dana Bernard* 1-9-19  
Signature Date  
5BR



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

DESIGNED BY: MBT

DRAWN BY: KLP

CHECKED BY: CKG

DATE	REVISION	BY	APPR.

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 6 (13834 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