

**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: 5-9-19 **ONSITE SEWAGE DISPOSAL SYSTEM** P 565484

APPROVAL DATE: 7/1/19 **PERMIT: CONSTRUCTION** A \_\_\_\_\_

PROPERTY ADDRESS: 5528 Jacks Landing Way

SUBDIVISION: Jacks Landing LOT: 2 TAX ID: 599483

CONTRACTOR: Forn + Hogan EMAIL: \_\_\_\_\_

CONTRACTOR ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

CONTRACTOR CERTIFIED FOR BAT INSTALLATION:  MDE  MANUFACTURER:

PROPERTY OWNER: Ashok and Vahini Patibandla EMAIL: \_\_\_\_\_

OWNER ADDRESS: 11737 State Route 108, Clarksville, MD 21029 PHONE: \_\_\_\_\_

BAT UNIT MODEL: NORWECO TNTLP 500 PUMP SIZE: \_\_\_\_\_ PUMP TANK CAPACITY: \_\_\_\_\_

OPERATION & MAINTENANCE AGREEMENT DATE SIGNED: 6/24/19 DATE RECORDED: 6/25/19

DISTRIBUTION SYSTEM:  GRAVITY  PRESSURE DOSED BEDROOMS: 5 APPLICATION RATE: 0.8

TRENCHES:	LINEAR FEET REQUIRED: <u>169</u>	INLET DEPTH: <u>2.5</u>
	TRENCH WIDTH: <u>2</u>	MAXIMUM BOTTOM DEPTH: <u>8</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>4</u>

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

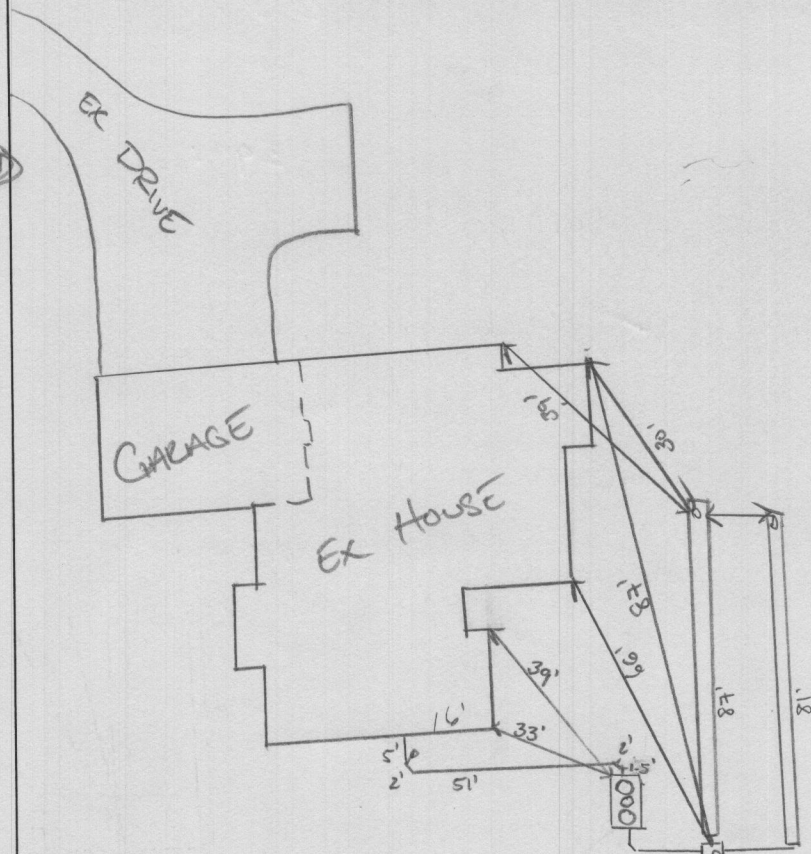
NOTES: Design pump for LPD system

ISSUED BY: Hank Oswald ISSUE DATE: 5-9-19 EXPIRATION DATE: 5-9-20

- 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 SEPTIC 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 19001557
- NOTE: AN INDIVIDUAL CERTIFIED BY MDE AND THE MANUFACTURER FOR BAT INSTALLATION MUST BE PRESENT AT ALL TIMES DURING BAT INSTALLATION.
- 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 MEASURED W/ RANGE FINDER



ROAD NAME JACK'S LANDING

TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
2'	2.5'	8'
NUMBER OF TRENCHES		2
TOTAL LENGTH		168 ±
ABSORPTION AREA		336 ft <sup>2</sup>
DISTRIBUTION BOX LEVEL		YES
DISTRIBUTION BOX BAFFLE		YES
DISTRIBUTION BOX PORT		YES

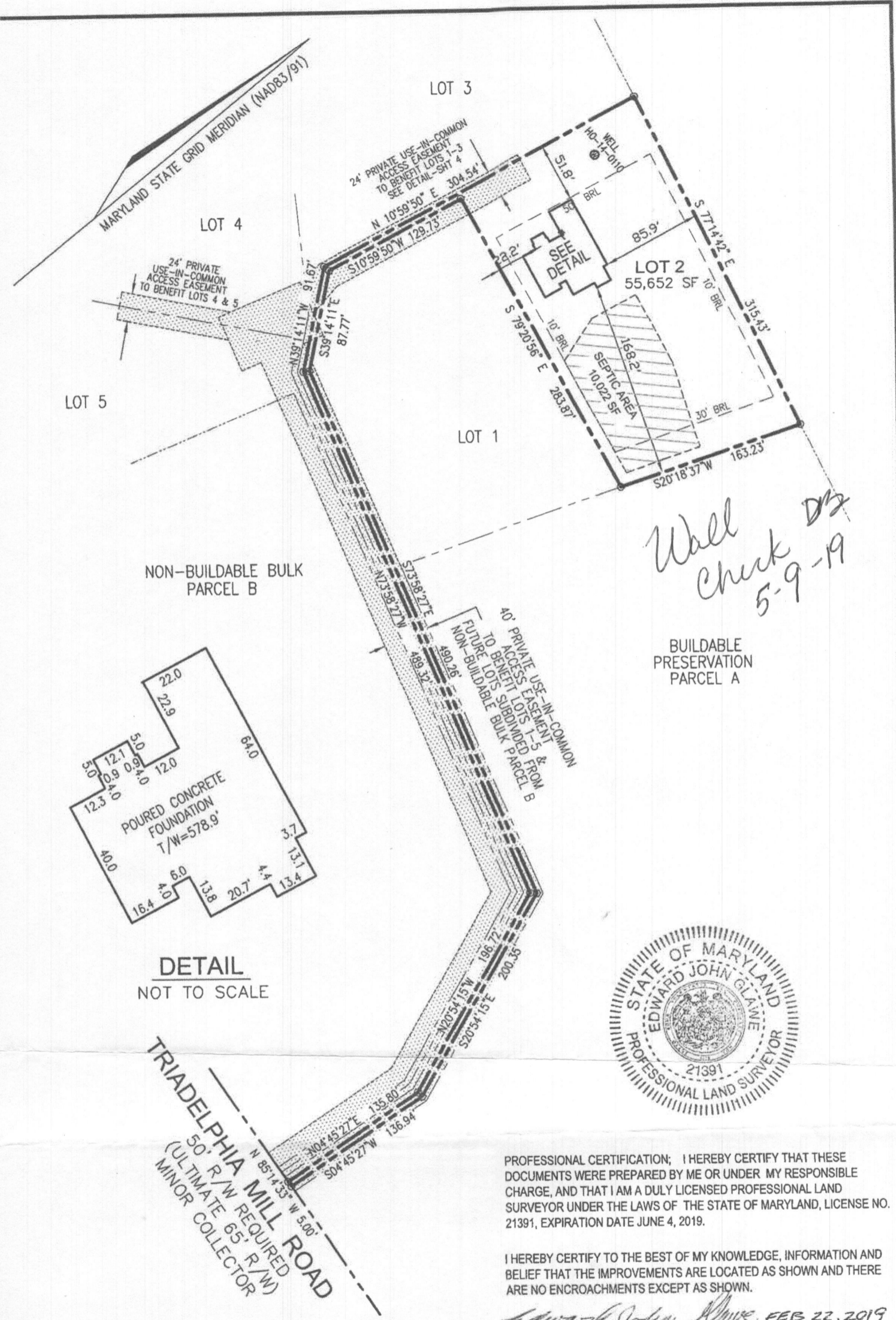
SEPTIC TANK DATA	
SEPTIC TANK I LEVEL	Yes
MANUFACTURER	BACK RIVER
CAPACITY	INTL 500 GAL
SEAM LOC	TOP
TANK LID DEPTH	1'
BAFFLES	N/A
BAFFLE FILTER	NO
MANHOLE LOC	FRONT/MID/BACK
6" PORT LOC	none
WATERTIGHT TEST	—
SLOTTED	Yes
DATE ON LID	4/8/2019
PUMP/SEPTIC TANK LEVEL	
MANUFACTURER	
CAPACITY	
SEAM LOC	
TANK LID DEPTH	
BAFFLES	
BAFFLE FILTER	
MANHOLE LOC	
6" PORT LOC	
WATERTIGHT TEST	
SLOTTED	
DATE ON LID	

BAT - NORWECO

PRE-CONSTRUCTION: 5/14/2019 NS' fill over T<sub>1</sub> (UPPER). IS OK 2x8' TRENCHES. CONTRACTOR CAN EASILY IDENTIFY ORIGINAL SOIL AND pull 13' CENTER TO CENTER OFF OF T<sub>2</sub> (LOWER). ⊕

INSTALLATION: 5/14/2019 SHC INSTALLED. SEWER LINE SET TOWARD EXCAVATED TANK PIT. ⊕ 5/15 or 5/16 TANK SET. INSTALLED TO D BOX. ⊕ 5/17/2019 TRENCH (LOWER) PARTIALLY COMPLETE. USED LASER LEVEL, CUTTING THROUGH FILL. ⊕ 5/21/2019 TRENCH 1 (UPPER) COMPLETE. D BOX LEVELED W/ SPEED LEVELS. REINSR ⊕ 7/1/19 start-up confirmation received site inspection made. system looks good.

FINAL INSPECTOR [Signature] DATE OF APPROVAL 7/1/19



Wall Check <sup>D2</sup>  
5-9-19

PROFESSIONAL CERTIFICATION; 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. 21391, EXPIRATION DATE JUNE 4, 2019.

I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF THAT THE IMPROVEMENTS ARE LOCATED AS SHOWN AND THERE ARE NO ENCROACHMENTS EXCEPT AS SHOWN.

*Edward John Glawe* FEB. 22, 2019  
EDWARD J. GLAWE, PROFESSIONAL LAND SURVEYOR #21391 DATE

THIS WALL CHECK DRAWING CONTAINS A HORIZONTAL TOLERANCE IN ACCURACY OF 0.1' AND A VERTICAL TOLERANCE IN ACCURACY OF 0.2'

ALE 1" = 100'	DATE 02/21/2019
AWN BY B.D.A.	CHECKED BY E.J.G.
AT NUMBER	JOB NUMBER

VOGEL ENGINEERING + TIMMONS GROUP  
ENGINEERS - SURVEYORS - PLANNERS  
3300 NORTH RIDGE ROAD  
SUITE 110  
ELICOTT CITY MARYLAND 21043

WALL CHECK DRAWING  
5528 JACK'S LANDING WAY  
LOT 2  
JACK'S LANDING  
PLAT NUMBER 23953  
FIFTH ELECTION DISTRICT

## Oswald, Hank

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**From:** Oswald, Hank  
**Sent:** Monday, December 03, 2018 2:42 PM  
**To:** Rob Vogel (rvogel@vogeleng.com)  
**Subject:** BAT Plan\_5528 Jacks Landing\_Lot 2  
**Attachments:** BAT\_Memo\_Jacks Landing Lot 2.pdf; lot 2.pdf

Hi Rob:

Attached, please find comments pertaining to the BAT Plan for Jacks Landing Lot 2.

Thanks,

Hank

Hank Oswald  
Licensed Environmental Health Specialist  
Howard County Health Department  
Bureau of Environmental Health  
Well & Septic Program  
8930 Stanford Boulevard  
Columbia, MD 21045  
410.313.1786 (Office)  
[hoswald@howardcountymd.gov](mailto:hoswald@howardcountymd.gov)

### CONFIDENTIALITY NOTICE

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**Maura J. Rossman, M.D., Health Officer**

**MEMORANDUM**

**TO: Vogel Engineering**

**FROM: Hank Oswald, L.E.H.S.**  
**Well & Septic Program**

**RE: BAT Plan**  
**5528 Jacks Landing Way**  
**Jack's Landing, Lot 2**

**Date: December 3, 2018**

The following comments refer to the BAT Plan for 5528 Jacks Landing Way:

- 1.) Change the title to "Site Plan for BAT Installation".
- 2.) Move a couple of drywells down (if possible) and/or add a berm along SDA to redirect flow from slope (see attachment).
- 3.) Make tank depth as shallow as possible while maintaining at least 2% fall in the pipe from the house.
- 4.) Make trench depths as shallow as possible up to a minimum of 18 inch depth while maintaining minimum 2% fall from tank to distribution box "This is in keeping with proper system design for the most effective performance and ease of maintenance."

**VOGEL ENGINEERING + TIMMONS GROUP**

3300 North Ridge Road, Suite 110, Ellicott City, MD 21043  
P 410.461.7666 F 410.461.8961 [www.timmons.com](http://www.timmons.com)

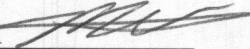
**Date:** December 10, 2018  
**To:** Howard County Health Department  
**Attn:** Mr. Hank Oswald  
**cc:**  
**Subject:** Jack's Landing – Lot 2  
**Project Number:** 13-31.00

**ATTACHED:**

# Copies	Description
3	Site Plan for Bat Installation

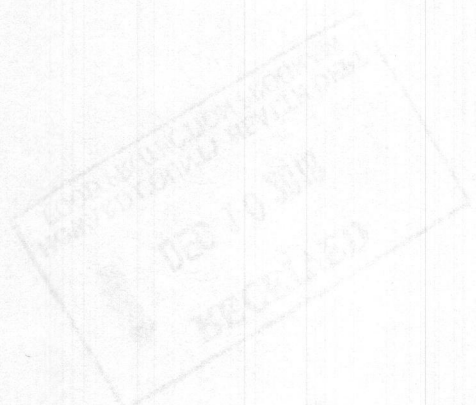
Remarks:

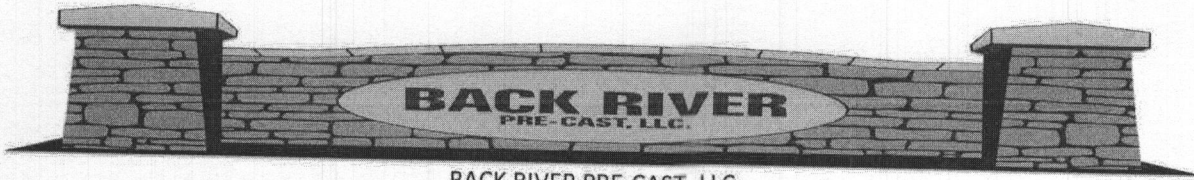
Thank you

Matthew Ahearn 

Transmitted by:

Received by:





BACK RIVER PRE-CAST, LLC  
 PO BOX 329  
 GLYNDON, MD 21071  
 PH# 410-833-3394

**NORWECO CERTIFICATION**

PROPERTY OWNER: ASHOK PATBANDLA	INSTALLATION COMPANY: FARM & HOME
ADDRESS: 5528 JACKS LANDING WAY	CERTIFIED INSTALLER: BILL INGRAM
CITY, ZIPCODE & COUNTY: CLARKSVILLE, 21029, HOWARD	PERMIT#
SIZE OF SYSTEM INSTALLED:	DATE INSTALLED: 05-15-19
600 GPD CONCRETE	START-UP DATE: 06-28-19
NUMBER OF BEDROOMS:	DATE OF FINAL INSPECTION:
TYPE OF INSTALLATION: NEW CONSTRUCTION	DATE OF ELECTRICAL INSPECTION:
ELECTRICAL WIRING PER ELECTRICAL INSTRUCTIONS: YES	TANK LEVEL: YES
HT. OF CONTROL PANEL ABOVE FINAL GRADE: 38"	BURIAL DEPTH OF TANK: 14"
SYSTEM WIRED ON A 15-AMP DEDICATED CIRCUIT WITH STD. BREAKER: YES	RISERS 4" - 6" ABOVE GRADE: YES
LENGTH(S) OF UF WIRE PAST LAST AERATION RISER(S): 30"	VENTED LID(S) ON AERATION CHAMBER(S): YES
FEMALE PLUG(S) WIRED TO UF WIRE: YES	ANY GROUND SETTLING AROUND TANK: NO
CONDUIT(S) ENTERING AERATION RISER MADE WITH A WATERTIGHT CONNECTION: YES	
IS THE INSIDE OF THE CONDUIT ENTERING THE CONTROL PANEL(S) AND AERATION RISER(S) SEALED WITH DUCT SEAL: YES	

ON 2<sup>ND</sup> PAGE MAKE A ROUGH SKETCH OF THE HOUSE, WHERE THE SYSTEM IS LOCATED, WHERE THE CONTROL PANEL IS LOCATED, WHERE THE FRONT OF THE IS AND DIRECTIONS TO THE PROPERTY.

DIRECTIONS CAN START A FEW STREETS AWAY

EXAMPLE: RT. X LEFT ONTO XX STREET RIGHT ONTO PRIVATE DRIVEWAY 5<sup>TH</sup> HOUSE OF THE LEFT.

I certify that the Norweco Singlair TNT Wastewater Treatment System was installed according to the manufacture's specifications.

Matthew Geckle

June 28, 2019

Signature of BRP Representative

Vice-President

Date

Maura J. Rossman, M.D., Health Officer

**OPERATION AND MAINTENANCE AGREEMENT  
FOR AN ON-SITE SEWAGE DISPOSAL SYSTEM  
HAVING AN ADVANCED PRE-TREATMENT SYSTEM**

THIS AGREEMENT is made this 24 <sup>(27th)</sup> day of June 2019, among Ashok K Patibandla & Vahini Patibandla, hereinafter collectively referred to as "Owner", and the Howard County Health Department hereinafter referred to as the "County".

WHEREAS, Owner is the owner or contract owner of a parcel of land located at 5528 Jacks Landing Way, Clarksville MD 21029, in the 05 Election District of Howard County, Maryland, and the deed and subdivision plat of the property is recorded among the Land Records of Howard County, Maryland, Tax Map # 0034, Block # 03, Parcel # 0414, Deed Reference # 18178/00341 and Tax Account # 599483 ("the Property").

WHEREAS, The Property is suitable for the installation of a conventional on-site sewage disposal system with an advanced pre-treatment system, utilizing best available technology to perform nitrogen reduction, in accordance with the Code of Maryland Regulations 26.04.02.07, effective November 24, 2016. The pre-treatment device being installed is NDFeco.

NOW, THEREFORE, the parties hereto agree as follows:

A. Owner hereby grants to the County the right to enter upon the Property at any reasonable time with prior notice for access to the system to make periodic inspections and the Owner agrees to provide any information and data in Owner's possession reasonably requested and needed by the County.

B. Owner acknowledges and agrees that neither the County nor any of its agents or employees, either officially or individually, underwrites the operation of any system approved by them.

C. The Owner will devote reasonable care and effort to the operation and maintenance of the system in perpetuity or until a public sewer connection is made so that a system malfunction is not the result of poor maintenance, faulty operation, or neglect.

D. The Owner agrees to enter into a contract reasonably acceptable to the Owner and the County with a private entity to operate and maintain on a regularly scheduled basis an approved advanced pre-treatment system. The owner shall supply a copy of the contract to the County when it is renewed or altered.

E. This agreement shall run with the land and upon Owner's taking title to the Property shall bind the Owner, their heirs, successors, and assigns to the provisions of the agreement as long as

the property is in existence and after installation of the system. Owner further agrees that they shall inform in writing any subsequent purchaser or lessee of the Property that the system shall require maintenance or other attention. Upon taking title to the Property, the Owner agrees to cause this agreement to be recorded in the Land Records of Howard County and assure that it becomes part of the Deed for the subject property in order that prospective buyers may be aware of the special conditions affecting this property.

F. This agreement shall not be construed to limit any authority of the County to protect the public health, safety or comfort or to issue any other orders to take any other action which is now or may hereafter be within its authority.

G. This agreement may be voided at any time at the discretion of the County.

H. This agreement contains the entire agreement and understanding between the County and the Owner. There are no additional terms other than as contained in this agreement. This agreement may not be modified, except in writing signed by each of the parties or by their authorized representatives.

I. The laws of the State of Maryland govern the provisions of all transactions pursuant to this agreement.

J. Owner acknowledges and agrees that interior renovations to increase the number of bedrooms or an increase in living space shall not be permitted without approval from the County.

IN WITNESS WHEREOF, the parties have signed this agreement on the date indicated above.

Beit Norton 6/27/2019  
Howard County Health Department

Ashok K Patibandla 06/24/19  
Owner #1 Signature Date

Ashok K Patibandla  
Owner #1 Print Name

K. Vahini 06/24/2019  
Owner#2 Signature Date

Vahini Patibandla  
Owner #2 Print Name

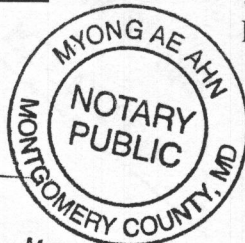
\_\_\_\_\_  
Buyer #1 Signature Date

\_\_\_\_\_  
Buyer #2 Signature Date

\_\_\_\_\_  
Buyer #1 Print Name

\_\_\_\_\_  
Buyer #2 Print Name

June 24, 2019  
[Signature]



My comm. exp.  
Feb. 14, 2021

5524 Jack's Landing Way

Clerk of the Circuit Court  
Howard County  
Land Records/Licensing

6095 Marshalee Drive  
Suite 120  
Elkridge, MD 21075  
410-313-5850

LR - Deed (No-Taxes) Recording Fee  
1x 20.00 20.00

Name: Valluri  
Ref: 16

LR - Deed (No-Taxes) Surcharge  
1x 40.00 40.00

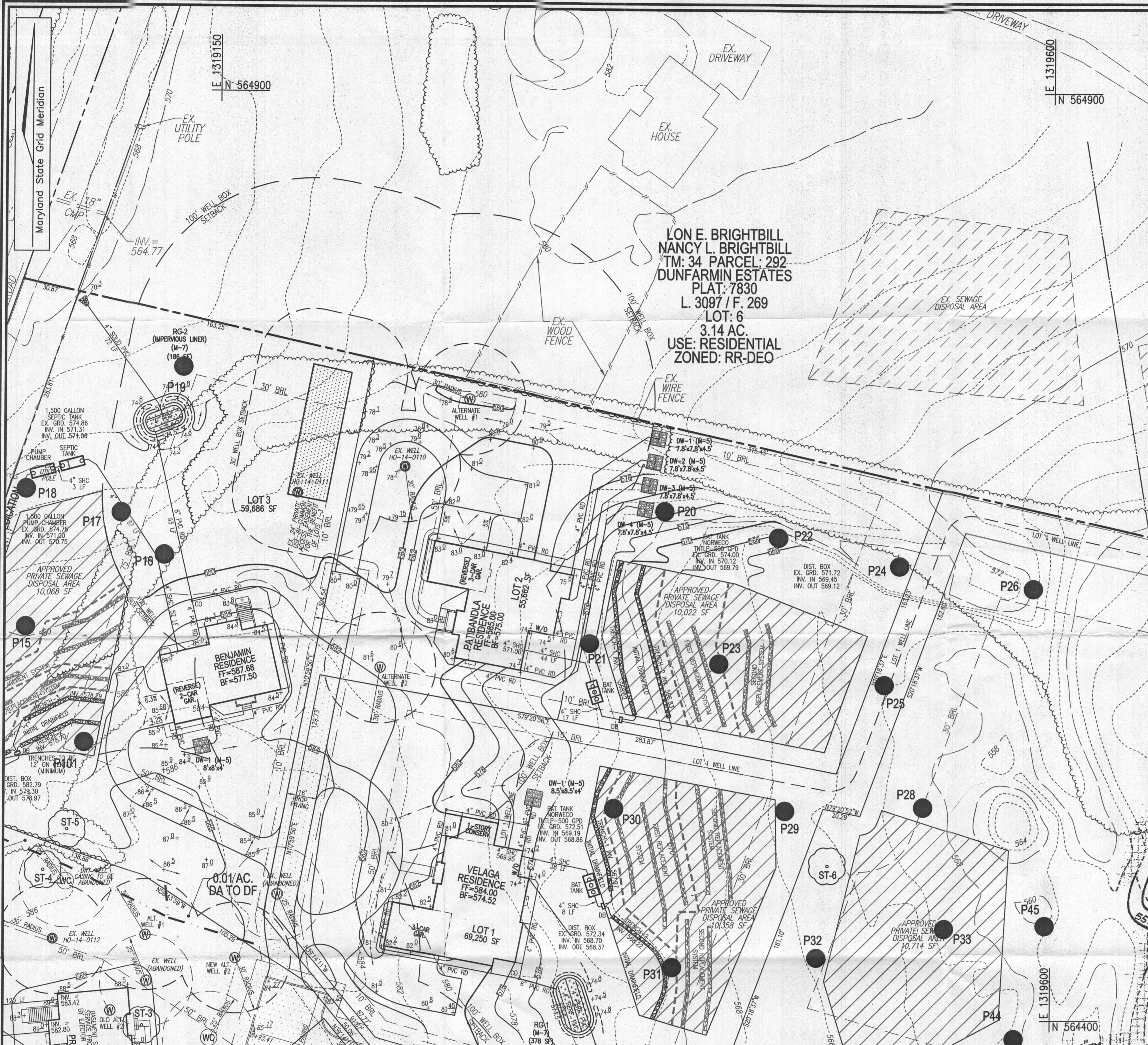
SubTotal: 60.00  
Total: 60.00

REV-Check-BOA 60.00  
Number : 1516

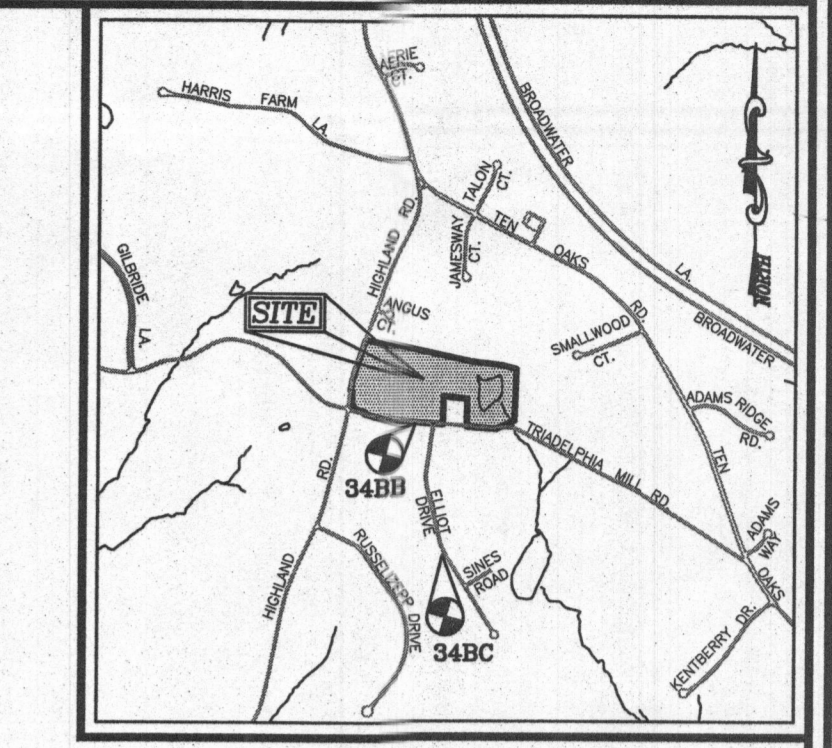
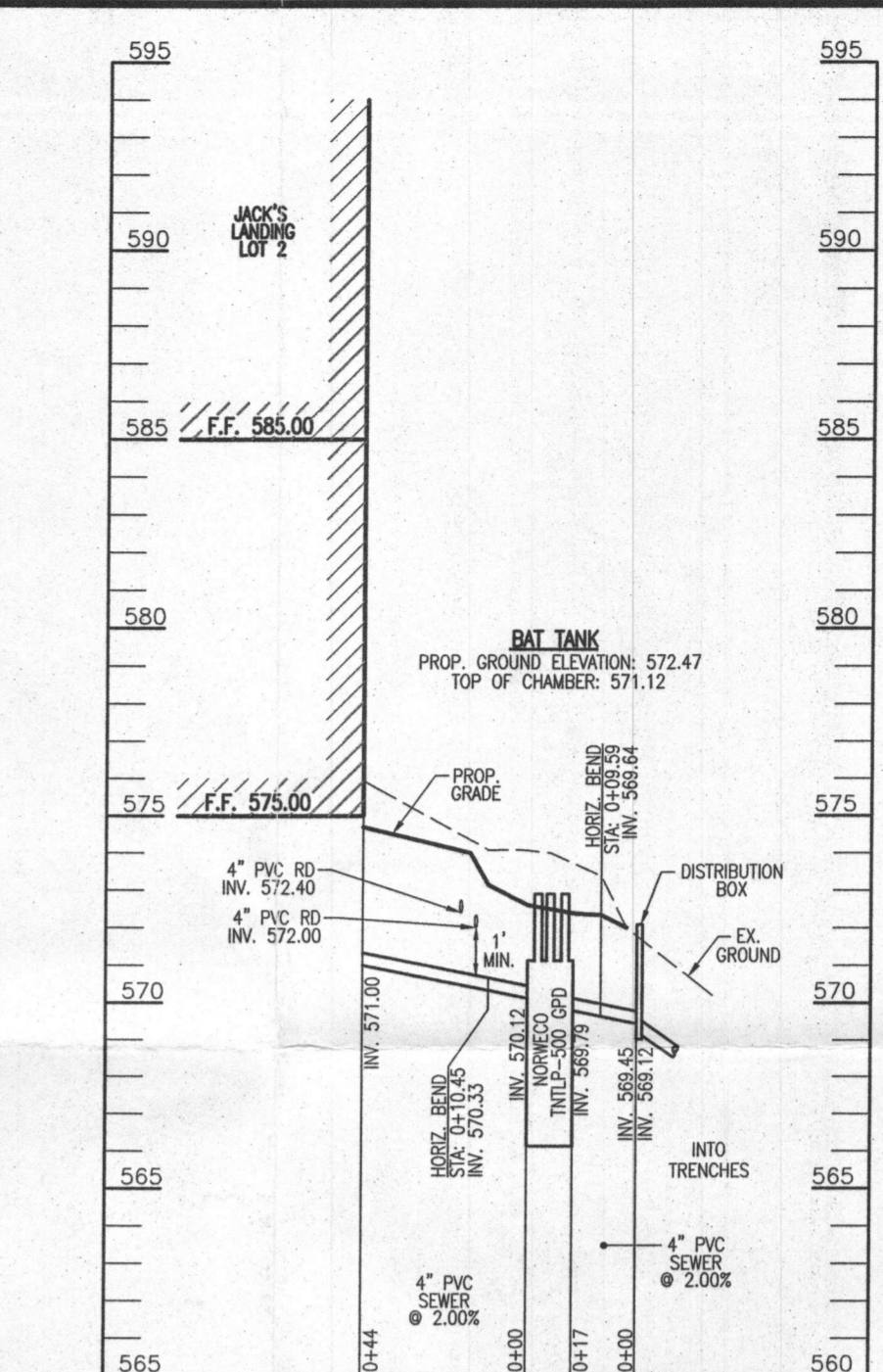
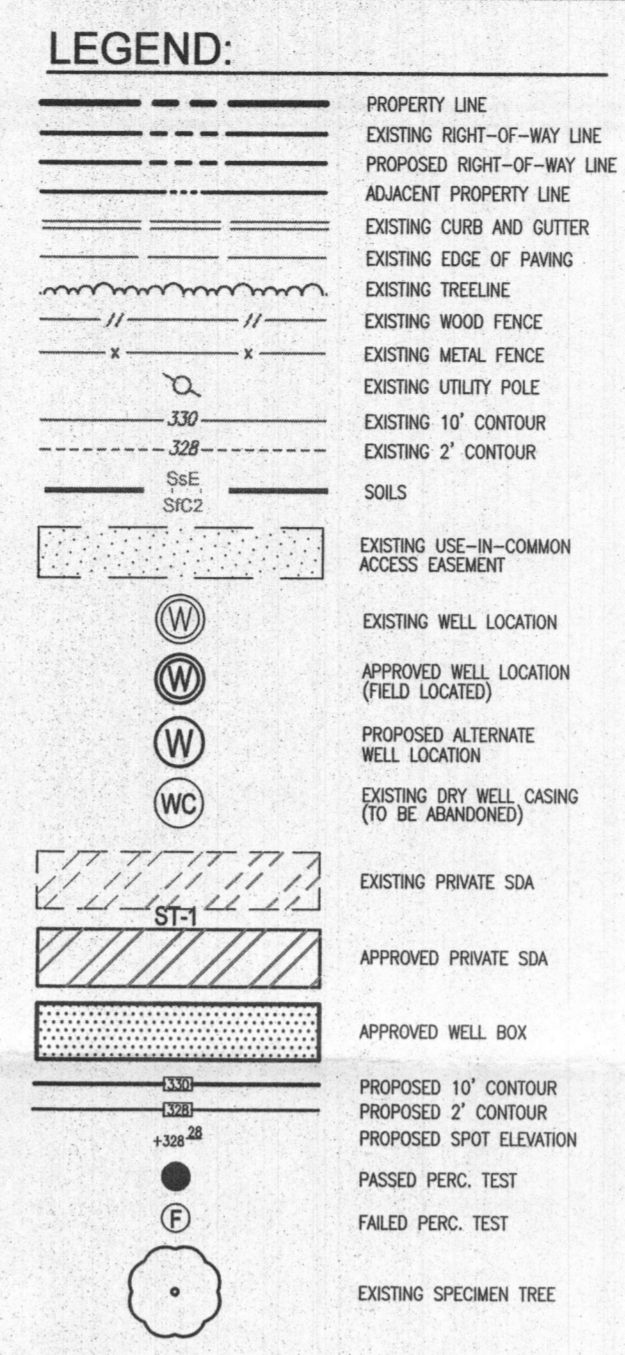
06/28/2019 11:11 CC17-DH  
#12351339/396/109

Thank you for visiting us today~

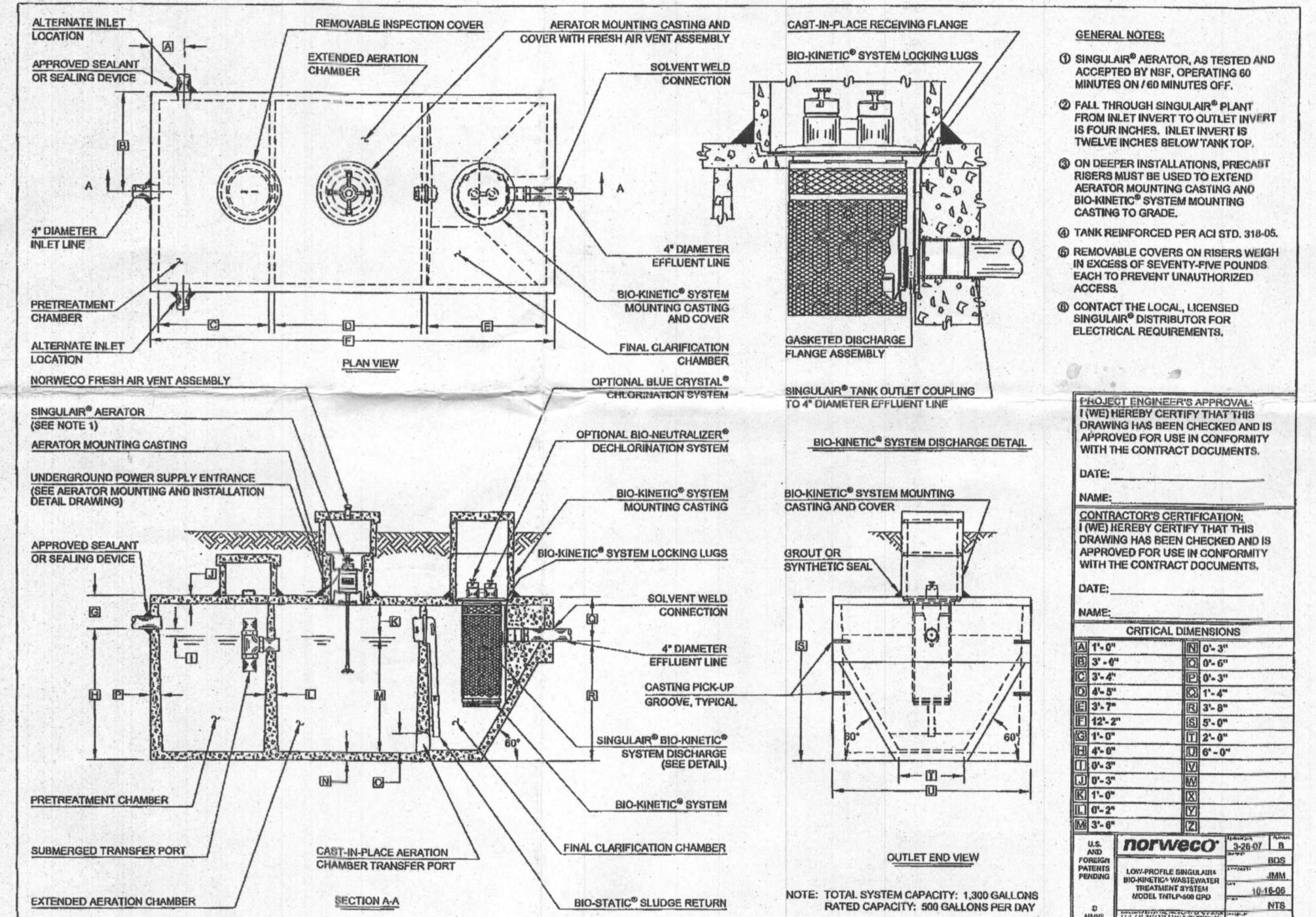
RECEIVED  
JUN 28 2019  
HOWARD COUNTY HEALTH DEPT.  
FOOD PROTECTION PROGRAM



LON E. BRIGHTBILL  
NANCY L. BRIGHTBILL  
TM: 34 PARCEL: 292  
DUNFARMIN ESTATES  
PLAT: 7830  
L. 3097 / F. 269  
LOT: 6  
3.14 AC.  
USE: RESIDENTIAL  
ZONED: RR-DEO



**BENCHMARKS**  
HOWARD COUNTY BENCHMARK 348B (CONC. MON.)  
N 563,899.232 E 1319560.973 ELEV. 559.29  
SOUTH SIDE TRIADLEPHIA MILL ROAD, APPROX. 13' EAST  
OF CENTERLINE OF DRIVEWAY FOR HOUSE # 13295.  
HOWARD COUNTY BENCHMARK 348C (CONC. MON.)  
N 562,546.600 E 1,319,851.319 ELEV. 529.572  
SOUTH SIDE OF ELLIOTT DRIVE, EAST OF CENTERLINE  
FOR THE DRIVEWAY FOR HOUSE NUMBER 13315.



**GENERAL NOTES:**

- SINGULAR® AERATOR, AS TESTED AND ACCEPTED BY HEP, OPERATING 60 MINUTES ON 115V/15A.
- FALL THROUGH SINGULAR® PLANT FROM INLET INVERT TO OUTLET INVERT IS FOUR INCHES. INLET INVERT IS TWELVE INCHES BELOW TANK TOP.
- ON OTHER INSTALLATIONS, PRECAST RISERS MUST BE USED TO ELEVATE AERATOR MOUNTING CASTING AND BIO-KINETIC® SYSTEM MOUNTING CASTING TO GRADE.
- TANK REINFORCED PER ACI STD. 318-88.
- REMOVABLE COVERS ON RISERS MUST BE IN EXCESS OF SEVENTY-FIVE POUNDS EACH TO PREVENT UNAUTHORIZED ACCESS.
- CONTACT THE LOCAL, LICENSED SINGLE-PHASE DISTRIBUTION FOR ELECTRICAL REQUIREMENTS.

**PROJECT ENGINEER'S APPROVAL:**  
I HEREBY CERTIFY THAT THIS DRAWING HAS BEEN CHECKED AND IS APPROVED FOR USE IN CONFORMITY WITH THE CONTRACT DOCUMENTS.  
DATE: \_\_\_\_\_  
NAME: \_\_\_\_\_

**CONTRACTOR'S CERTIFICATION:**  
I HEREBY CERTIFY THAT THIS DRAWING HAS BEEN CHECKED AND IS APPROVED FOR USE IN CONFORMITY WITH THE CONTRACT DOCUMENTS.  
DATE: \_\_\_\_\_  
NAME: \_\_\_\_\_

CRITICAL DIMENSIONS	
1	12'-0"
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100	12'-0"

**NOTE:** TOTAL SYSTEM CAPACITY: 1,300 GALLONS  
RATED CAPACITY: 500 GALLONS PER DAY

**GENERAL NOTES:**

- THE EXISTING TOPOGRAPHY SHOWN HEREON IS BASED ON CURRENT HOWARD COUNTY GIS DATA, AND HAS BEEN FIELD VERIFIED TO BE ACCURATE.
- EXISTING WELLS, SEPTIC SYSTEMS, AND SEWAGE DISPOSAL AREAS WITHIN 100' OF THE PROPERTY AND THOSE WELLS WITHIN 200' DOWNGRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS OR SEWAGE DISPOSAL AREAS HAVE BEEN SHOWN USING ALL REASONABLE EFFORTS.
- THE LOT SHOWN HEREON COMPLES WITH THE MINIMUM OWNERSHIP, WIDTH, AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
- 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.
- ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
- THE MAXIMUM DEPTH OF THE BAT PER THE MANUFACTURER'S SPECIFICATION IS THREE FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
- NO BLOWER IS REQUIRED. THE HOOT WASTEWATER TREATMENT SYSTEM HAS AN AERATOR MOUNTED IN THE TANK.
- THE BAT SYSTEM SHALL BE MAINTAINED AND OPERATED FOR THE LIFE OF THE SYSTEM.
- THE BAT SHALL BE OPERATED BY AND MAINTAINED BY A CERTIFIED SERVICE PROVIDER.
- WITHIN ONE MONTH OF INSTALLATION, A PERSON INSTALLING THE BAT SYSTEM SHALL REPORT TO THE MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) IN A MANNER ACCEPTABLE TO MDE, THE ADDRESS AND DATE OF COMPLETION OF THE BAT INSTALLATION AND THE TYPE OF BAT INSTALLED.
- ELECTRICAL WORK FOR THE BAT INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
- AN AGREEMENT AND EASEMENT MUST BE COMPLETED AND SIGNED BY ALL APPLICABLE PARTIES, AND RECORDED IN LAND RECORDS OF HOWARD COUNTY.
- THE HEALTH DEPARTMENT REQUIRES DOCUMENTATION FOR THE START-UP CERTIFICATION FROM THE MANUFACTURER PRIOR TO FINAL APPROVAL OF THE INSTALLATION.

**PLAN VIEW**  
SCALE: 1"=30'

**WELL LOCATION CERTIFICATION:**  
THE EXISTING WELL SHOWN ON THIS PLAN (TAG #HO-14-0110) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN

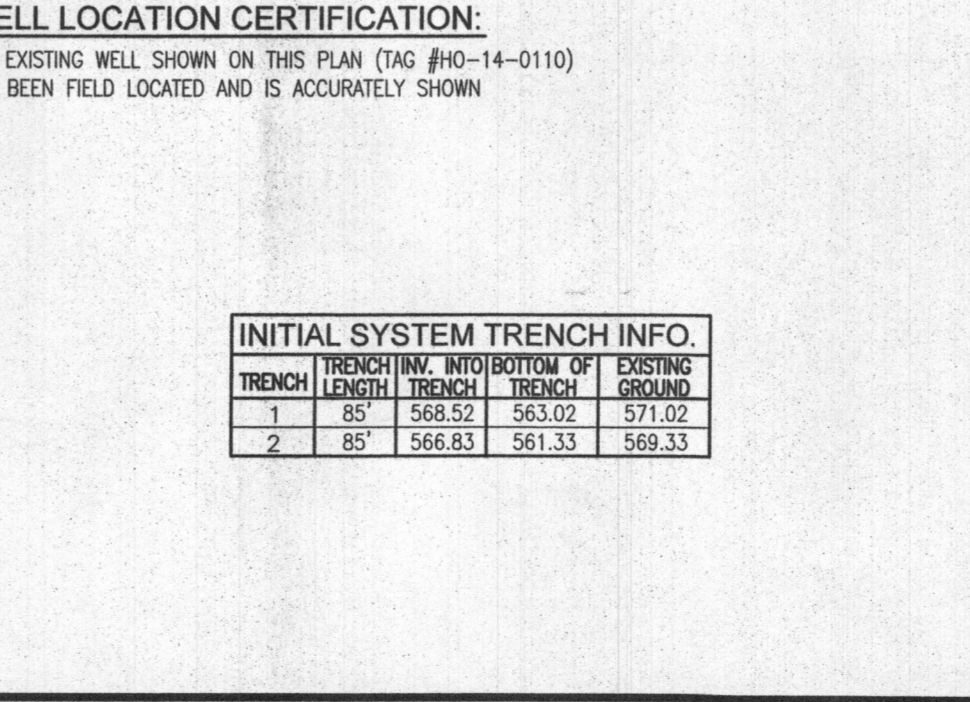
**SYSTEM CALCULATIONS:**

**INITIAL SYSTEM:**  
5 BEDROOMS AT 750gpd / 0.8 ABSORPTION RATE = 938 SQ. FT.  
938 SQ. FT. / 2 (TRENCH WIDTH) x .36 (SIDEWALL REDUCTION) = 169 LINEAR FEET  
170 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE INITIAL SYSTEM.  
(2 TRENCHES OF 85 FEET IN LENGTH)

**FIRST REPLACEMENT SYSTEM:**  
5 BEDROOMS AT 750gpd / 1.2 ABSORPTION RATE = 625 SQ. FT.  
625 SQ. FT. / 2 (TRENCH WIDTH) x .36 (SIDEWALL REDUCTION) = 113 LINEAR FEET  
114 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE FIRST REPLACEMENT SYSTEM.  
(2 TRENCHES OF 57 FEET IN LENGTH)

**SECOND REPLACEMENT SYSTEM:**  
5 BEDROOMS AT 750gpd / 1.2 ABSORPTION RATE = 625 SQ. FT.  
625 SQ. FT. / 2 (TRENCH WIDTH) x .36 (SIDEWALL REDUCTION) = 113 LINEAR FEET  
114 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE SECOND REPLACEMENT SYSTEM.  
(2 TRENCHES OF 57 FEET IN LENGTH)

INITIAL SYSTEM TRENCH INFO			
TRENCH	LENGTH	INVERT (BOTTOM OF TRENCH)	EXISTING GROUND
1	85	568.52	563.02
2	85	566.83	561.33



INITIAL, 1ST REPLACEMENT, & 2ND  
REPLACEMENT SYSTEM TRENCH DETAIL  
NOT TO SCALE

**OWNER**  
ASHOK K. PATIBANDLA  
VAHINI PATIBANDLA  
11737 STATE ROUTE 108  
CLARKSVILLE, MD 21029  
(301) 832-4526

**BUILDER**  
CARUSO HOMES  
C/O GARY EVANS  
2120 BALDWIN AVE., #200  
CROFTON, MD 21114  
(301) 832-4526

**SITE PLAN FOR BAT INSTALLATION**

**JACK'S LANDING - LOT 2**  
5528 JACKS LANDING WAY  
CLARKSVILLE, MD 21029  
1.28 AC.  
(PLAT: 23952-23955)

L 18178 / F. 341  
TAX MAP: 34 GRID: 03  
5TH ELECTION DISTRICT

PARCEL: 414  
ZONED: RR-DEO  
HOWARD COUNTY, MARYLAND

**ROBERT H. VOGEL ENGINEERING, INC.**  
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FAX: 410-461-8961

DESIGN BY: RHY  
DRAWN BY: JMR  
CHECKED BY: RHY  
DATE: OCTOBER 2018  
SCALE: AS SHOWN  
W.O. NO.: 13-31

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. 16183 (EXPIRATION DATE: 08-27-2020)

1 SHEET OF 1