



Howard County
Health Department

Bureau of Environmental Health
7178 Gateway Drive Columbia, MD 21046
(410) 313-2640 Fax (410) 313-2648
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

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

RECEIPT DATE: 11/5/2014

ONSITE SEWAGE DISPOSAL SYSTEM

P 555300

INSTALLATION

APPROVAL

DATE: 1/9/2015

PERMIT

A

REPAIR
New Construction

PROPERTY ADDRESS: 2516 Daisy Road

SUBDIVISION: River Farms

LOT: 11 TAX ID: 04-331052

CONTRACTOR: Fogles Septic Clean Inc.

EMAIL: kevin@foglesinc.com

CONTRACTOR ADDRESS: 580 Obrecht Road, Sykesville, MD 21784

PHONE: 410-795-5670

PROPERTY OWNER: Deborah Schonemann

EMAIL:

OWNER ADDRESS: 2516 Daisy Road Woodbine, MD 21797

PHONE:

SEPTIC TANK SIZE (GALLONS):

PUMP CHAMBER CAPACITY (GALLONS): STATIC HEAD (FEET):

NUMBER OF BEDROOMS: 4 HOUSE SQ. FT. 4620

APPLICATION

RATE: 1.2

DISTRIBUTION SYSTEM: GRAVITY FED ☒

LOW PRESSURE DOSED ☐

TRENCHES:	LINEAR FEET REQUIRED: <u>112'</u>	INLET DEPTH: <u>4</u>
	TRENCH WIDTH: <u>2</u>	MAXIMUM BOTTOM DEPTH: <u>8</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>5</u>
LOCATION:		
NOTES:		

ISSUED BY: Robert Bricker

ISSUE DATE: 12/10/14

EXPIRATION DATE: 12/10/15

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 DOWNGRADE FROM ANY WATER WELL

NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS

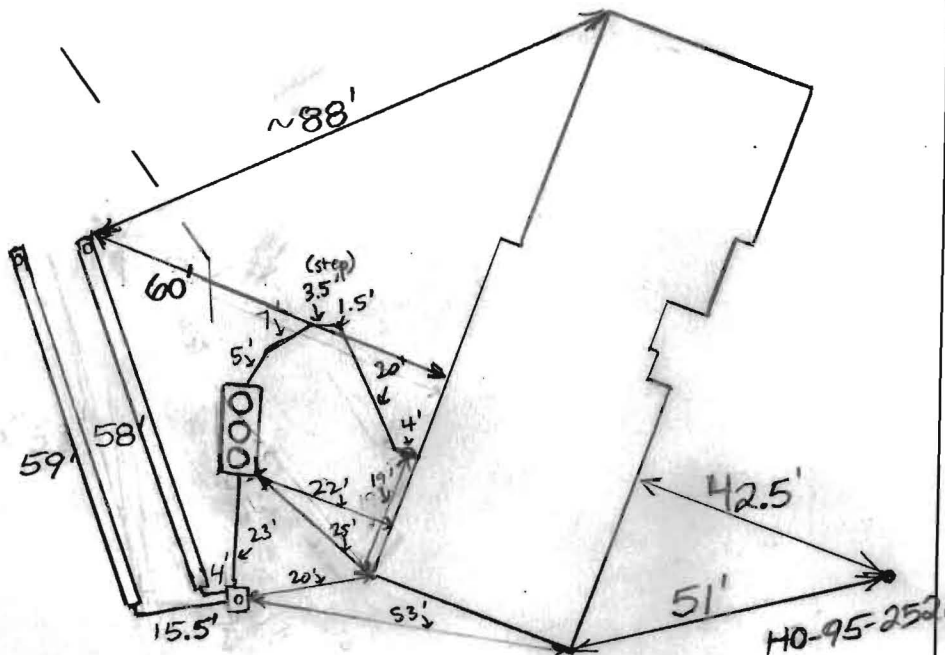
NOTE: AN ELECTRICAL PERMIT IS REQUIRED FOR INSTALLATION OF ANY ELECTRICAL COMPONENTS OF THE SYSTEM

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



ROAD NAME

TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
2	4'	8'

NUMBER OF TRENCHES 2

TOTAL LENGTH 117'

ABSORPTION AREA 351

DISTRIBUTION BOX LEVEL Levelers

DISTRIBUTION BOX BAFFLE YES

DISTRIBUTION BOX PORT YES

SEPTIC TANK DATA

SEPTIC TANK I LEVEL Yes

MANUFACTURER Back River

CAPACITY Norweco GAL/300

SEAM LOC Top

TANK LID DEPTH 2'

BAFFLES no

BAFFLE FILTER Yes

MANHOLE LOC FRONT, MID, REAR

6" PORT LOC none

WATERTIGHT TEST - No

SLOTTED Yes

DATE ON LID 12-11-14

PUMP/SEPTIC TANK LEVEL N/A

MANUFACTURER _____

CAPACITY _____ GAL

SEAM LOC _____

TANK LID DEPTH _____

BAFFLES _____

BAFFLE FILTER _____

MANHOLE LOC _____

6" PORT LOC _____

WATERTIGHT TEST _____

SLOTTED _____

DATE ON LID _____

PRE-CONSTRUCTION:

1/5/2015 Tank location staked. Set the dist. box near the top center of the easement and install two 56' trenches on contour towards the north. (BB)

INSTALLATION:

1/7/15 BAT unit being set. Tank off level. Had to re-set, tank surer area. Bottom of tank seen on side. Looks good. No trenches dug. 1/8/15 House connection made. Step at 3.5' piece of pipe. D-box set, first trench dug and open for inspection. 4.5' to paper and 8' deep at observation pipe. Eagle's was digging second trench at time of visit. (SC)

1/9/2014 System finished except for BAT start-up approval from Norweco inspector. Requested from Back-River. (BB)

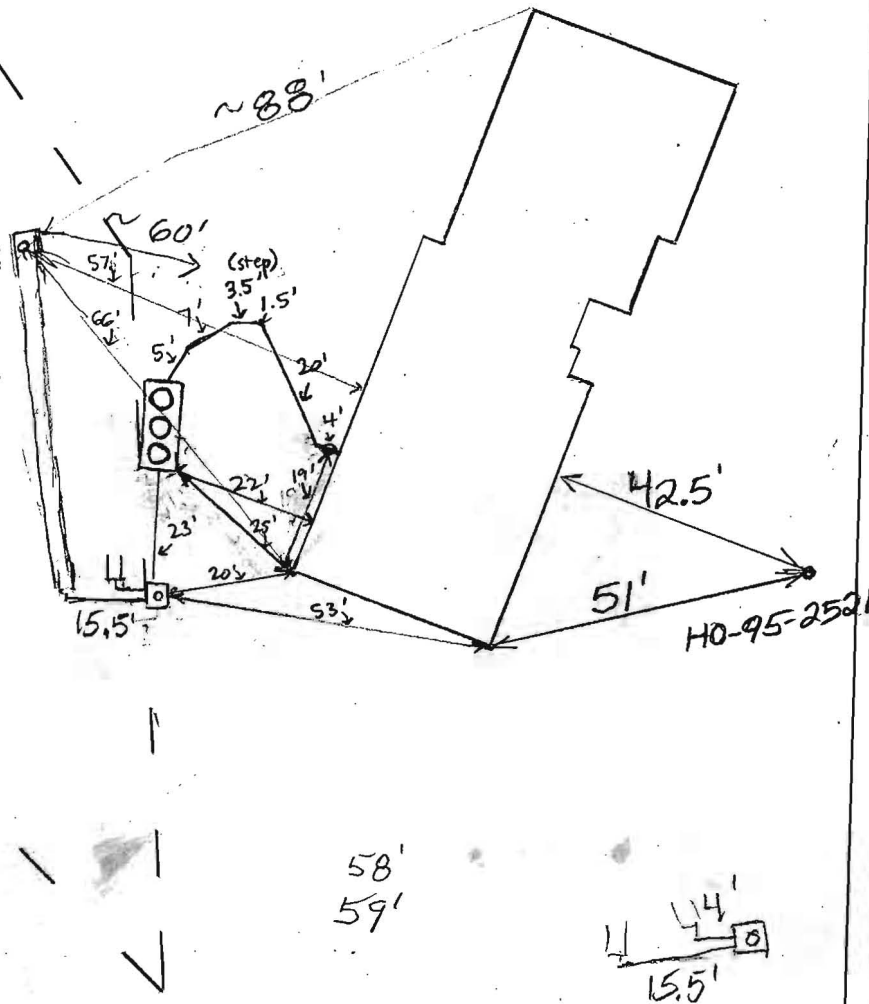
FINAL INSPECTOR

B. Baker

DATE OF APPROVAL

1/9/2015

NOT TO SCALE



TRENCH/DRAINFIELD DATA

WIDTH 2 INLET 4' BOTTOM 8'
 NUMBER OF TRENCHES 2
 TOTAL LENGTH _____
 ABSORPTION AREA _____
 DISTRIBUTION BOX LEVEL Levelers
 DISTRIBUTION BOX BAFFLE YES
 DISTRIBUTION BOX PORT YES

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL Yes
 MANUFACTURER Buckner
 CAPACITY Norweco GAL
 SEAM LOC Top
 TANK LID DEPTH 2'
 BAFFLES no
 BAFFLE FILTER Yes
 MANHOLE LOC FRONT, MID, REAR
 6" PORT LOC none
 WATERTIGHT TEST -
 SLOTTED Yes
 DATE ON LID 12-11-14
 PUMP/SEPTIC TANK LEVEL N/A
 MANUFACTURER _____
 CAPACITY _____ GAL
 SEAM LOC _____
 TANK LID DEPTH _____
 BAFFLES _____
 BAFFLE FILTER _____
 MANHOLE LOC _____
 6" PORT LOC _____
 WATERTIGHT TEST _____
 SLOTTED _____
 DATE ON LID _____

PRE-CONSTRUCTION:

1/5/2015 Tank location staked. Set the dist. box near the top center of the easement and install two 56' trenches on contour towards the north. (PB)

INSTALLATION:

1/7/15 PAT unit being set. Tank off back. Had to re-set, tank several times. Bottom of tank seen on side. Looks good. No handles dug. 1/8/15 House connection made. step at 3.5' piece of pipe. D-box set, first trench dug and open for inspection. 4.5' to paper and 8' deep at observation pipe. Fogle's was digging second trench at time of visit. (SC)
1/9/2014

FINAL INSPECTOR _____ DATE OF APPROVAL _____

Back River Pre-Cast, LLC

PO BOX 329
Glyndon, MD 21071
Phone # 410-833-3394
Fax # 410-833-4116

Letter of Certification

This is to certify that the Norweco Singulair TNT 600 GPD Septic Tank installed at 2516 Daisy Rd., Woodbine, MD 21797 January 07, 2015 was installed according to the manufacture's specifications.

Installer: Ricky Colson



MATTHEW GECKLE
Vice-President

Clerk of the Circuit Court for
Howard County
Land Records/Licensing

The Thomas Dorsey Building
9250 Bendix Road
Columbia, MD 21045
410-313-5850

=====

LR - Agreement Recording Fee		
	1x 20.00	20.00

Grantor/Grantee Name: sCHONEMANN
Reference/Control #: 191

LR - Agreement Surcharge

	1x 40.00	40.00
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SubTotal:		60.00
Total:		60.00

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REV-Check-BOA		60.00
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Number : 3862

10/07/2014 13:35 CC13-NN
#3384238 /494/109
***** DUPLICATE #001 *****

10/07/2014 13:36 CC13-NN
Thank you for visiting us today



Bureau of Environmental Health

7178 Columbia Gateway Drive, Columbia, MD 21046-2147

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www.hchealth.org

Facebook: www.facebook.com/hocohealth

Twitter: HowardCoHealthDep

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

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

000191

THIS AGREEMENT is made this 7th day of October, among Deborah Schonemann, 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 2516 Daisy Road, Woodbine Maryland 21797, in the 4th Election District of Howard County, Maryland, and the deed to same is recorded or shall be recorded among the Land Records of Howard County, Maryland in Liber 15629 Folio 080.

WHEREAS, The Lot 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 January 1, 2013.

NOW, THEREFORE, the parties hereto agree as follows:

- A. Owner hereby grants to the County the right to enter upon the Lot at any reasonable time 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 to develop accurate and thorough test results.
- 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 Lot 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 Lot that the system shall require maintenance or other attention. Upon taking title to the Lot, 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.

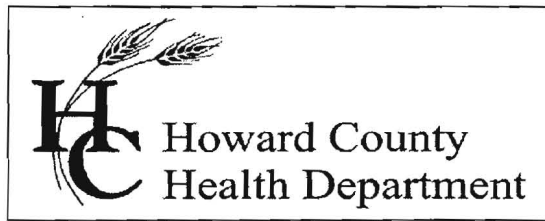
IN WITNESS WHEREOF, the parties have signed and sealed this agreement on the date indicated above.

Deborah Schonemann 10/2/2014
Owner Date

DEBORAH SCHONEMANN

Bev Ryan 10/7/2014
Howard County Health Department

LIB - Agreement
Recording Fee 20.00
Grantor/Grantee Name:
SCHONEMANN
Reference/Control #: 101
LIB - Agreement
Subcharge 40.00
Subtotal: 60.00
Total: 60.00
10/07/2014 01:35
#3864238 CC0503 - CC13-NW
Howard Co
Columbia/CC05.03.02 -
Register 02



Bureau of Environmental Health

8930 Stanford Blvd., Columbia, MD 21045
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www.hchealth.org
Facebook: www.facebook.com/hocohealth
Twitter: HowardCoHealthDep

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

October 27, 2014

To: Stephanie Tuitte, Fisher, Collins & Carter, Inc.

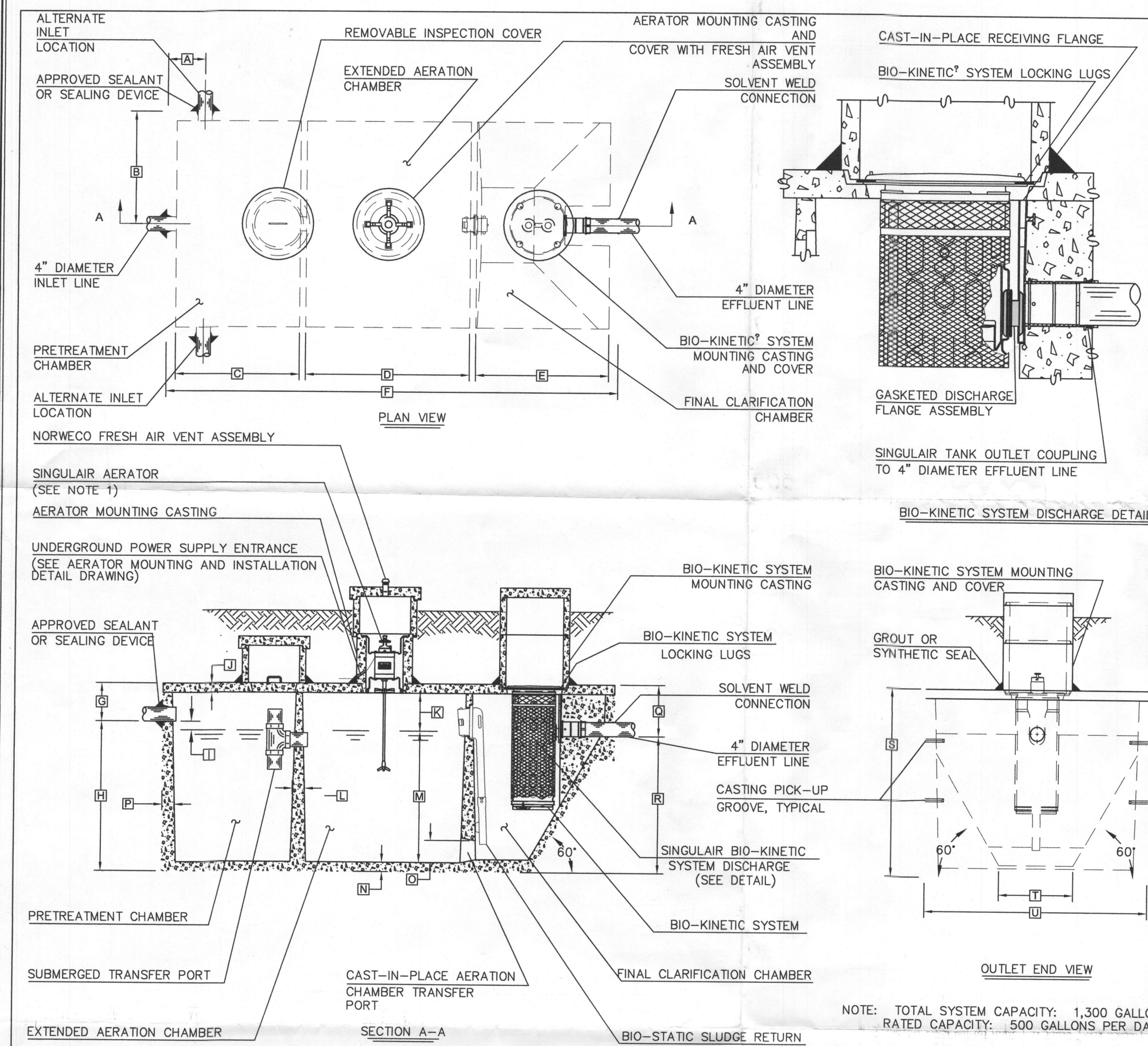
From: Robert Bricker, REHS/R.S., L.E.H.S.
Environmental Sanitarian II
Well and Septic Program

RE: 2651 Daisy Road, BAT Plan comment

Revise BAT Plan as follows:

1. Illustrate the Alternate Well locations as shown on the most recently approved percolation certification plan.
2. Include the proposed distribution pipe inverts for the initial system trenches. Inverts of distribution pipes for the replacement trenches should also be listed.
3. Field-run topography at 1-foot contour intervals is required in the sewage disposal area (SDA) as a relatively deep sunken farm lane transects the SDA. Adjust proposed trench locations accordingly.

Copy: Gerald and Debbie Schonemann, gschon4620@gmail.com
file



- GENERAL NOTES:**
- SINGULAR AERATOR, AS TESTED AND ACCEPTED BY NSF, OPERATING 60 MINUTES ON / 60 MINUTES OFF.
 - FALL THROUGH SINGULAR[®] PLANT FROM INLET INVERT TO OUTLET INVERT IS FOUR INCHES. INLET INVERT IS TWELVE INCHES BELOW TANK TOP.
 - ON DEEPER INSTALLATIONS, PRECAST RISERS MUST BE USED TO EXTEND AERATOR MOUNTING CASTING AND BIO-KINETIC SYSTEM MOUNTING CASTING TO GRADE.
 - TANK REINFORCED PER ACI STD. 318-05.
 - REMOVABLE COVERS ON RISERS WEIGH IN EXCESS OF SEVENTY-FIVE POUNDS EACH TO PREVENT UNAUTHORIZED ACCESS.
 - CONTACT THE LOCAL, LICENSED SINGULAR DISTRIBUTOR FOR ELECTRICAL REQUIREMENTS.

PROJECT ENGINEER'S APPROVAL:
I (WE) 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 (WE) HEREBY CERTIFY THAT THIS DRAWING HAS BEEN CHECKED AND IS APPROVED FOR USE IN CONFORMITY WITH THE CONTRACT DOCUMENTS.

DATE: _____
NAME: _____

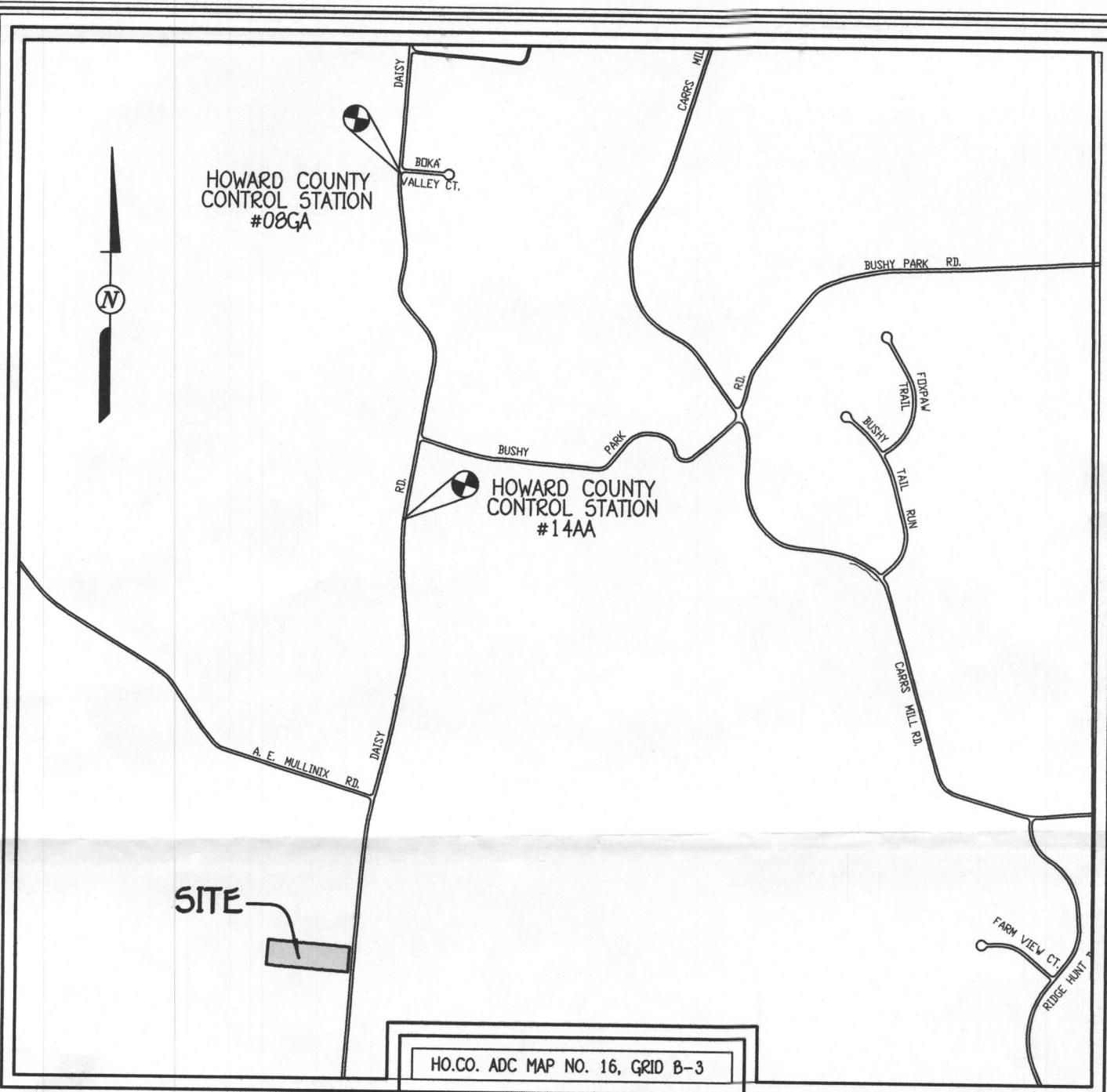
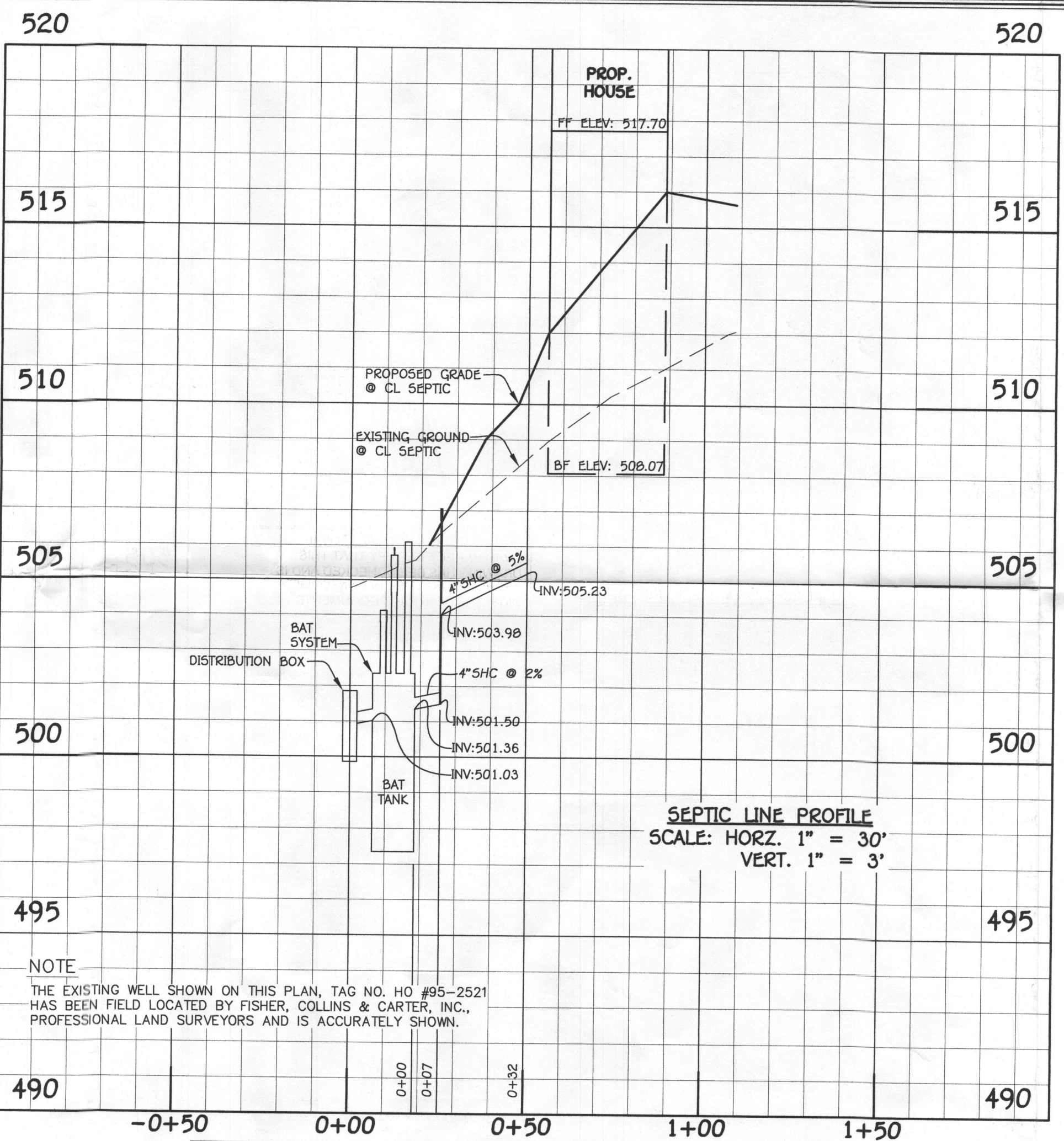
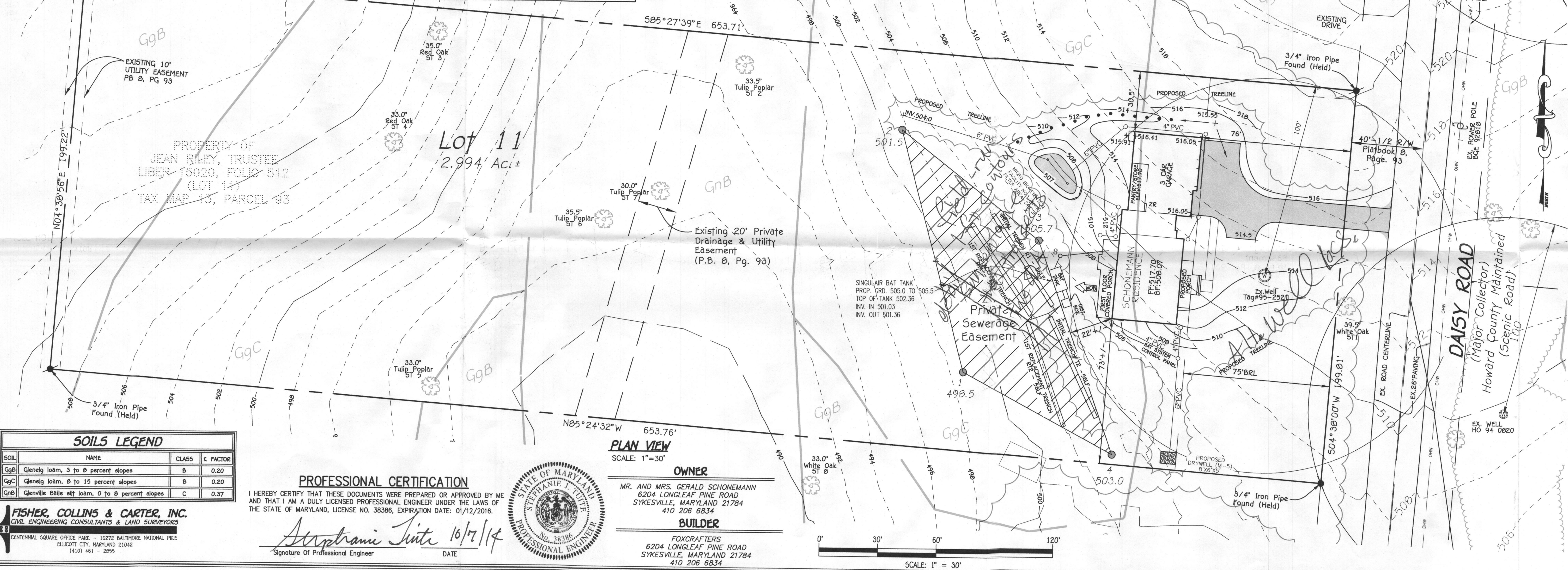
CRITICAL DIMENSIONS

A	1'-0"	N	0'-3"
B	3'-0"	O	0'-6"
C	3'-4"	P	0'-3"
D	4'-5"	Q	1'-4"
E	3'-7"	R	3'-8"
F	12'-2"	S	5'-0"
G	1'-0"	T	2'-0"
H	4'-0"	U	6'-0"
I	0'-3"	V	
J	0'-3"	W	
K	1'-0"	X	
L	0'-2"	Y	
M	3'-0"	Z	

norweco
LOW-PROFILE SINGULAR[®] BIO-KINETIC WASTEWATER TREATMENT SYSTEM
MODEL: NTP-1000-001
PC-S-7091

LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL	---	SUPER SILT FENCE
---	PROPOSED CONTOUR 2' INTERVAL	---	PROPOSED WALKOUT
•	362.5 SPOT ELEVATION	---	PERC TEST HOLE (PASSED)
---	5' - 5' SILT FENCE	---	LIMITS OF DISTURBANCE



BENCHMARK INFORMATION

B.M.#1 - HOWARD COUNTY CONTROL STATION #14AA - HORIZONTAL - (NAD '83)
(LOCATED 77.4' SOUTH OF BG&E POLE #377382 & 83.3' SW OF BG&E POLE #272942)
N 599,438.275, E 1,294,825.928
ELEVATION = 554.90 - VERTICAL - (NAVD '88)

B.M.#2 - HOWARD COUNTY CONTROL STATION #08CA - HORIZONTAL - (NAD '83)
(LOCATED 42.1' NE OF C&P POLE #25 AND 16.5' NW OF BG&E POLE #542475)
N 602,165.193, E 1,294,794.871
ELEVATION = 550.64 - VERTICAL - (NAVD '88)

- GENERAL NOTES**
- SUBJECT PROPERTY ZONED: RC-DEO
 - TOTAL AREA OF PROPERTY: 2.994 AC.
 - LIMIT OF DISTURBANCE: 19,368 SQ.FT. OR 0.44 ACRES.
 - SITE WILL UTILIZE PRIVATE WELL AND SEPTIC. WELL, TAG #952521, HAS BEEN FIELD LOCATED BY FISHER, COLLINS & CARTER, INC. ON OR ABOUT FEBRUARY 2014.
 - LENGTH OF TRENCH TO BE DETERMINED AT TIME OF SEPTIC PERMIT ISSUANCE.
 - CONTRACTOR/BUILDER TO VERIFY ELEVATION IN THE FIELD BEFORE BEGINNING ANY CONSTRUCTION.
 - LOT / BOUNDARY OUTLINE BASED ON FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON/ OR ABOUT FEBRUARY 2014 BY FISHER, COLLINS AND CARTER, INC.
 - FIELD RUN TOPOGRAPHIC SURVEY CONDUCTED BY FISHER, COLLINS & CARTER, INC. IN FEBRUARY, 2014 AND SUPPLEMENTED WITH HOWARD COUNTY GIS TOPOGRAPHIC INFORMATION.
 - NO WETLANDS OR STEEP SLOPES EXIST ON THIS LOT.
 - STREAM, AND STREAM BUFFER EXIST TO THE REAR OF THE PROPERTY. EXISTING 20' PRIVATE DRAINAGE & UTILITY EASEMENT TAKEN FROM PLAT BOOK 8, PAGE 93.
 - SOILS SHOWN HEREON ARE BASED ON NRCS WEB SOIL SURVEY.
 - PREVIOUS OFZ FILE NOS.: PB 8, PG 93.
 - THIS PLAN COMPLIES WITH THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BY EXECUTION OF A DECLARATION OF INTENT FOR CLEARING UNDER 20,000 SQUARE FEET FOR FOREST, 19,368 SQUARE FEET, IS PROPOSED TO BE CLEARED.
 - THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED SEWERAGE EASEMENT SHALL NOT BE NECESSARY.
 - NO STRUCTURES EXIST ON THIS PROPERTY.

- BAT 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 COVER OVER THE BAT SHALL BE 3 FEET.
 - 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.
 - ANY ELECTRICAL WORK FOR THE BAT INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN. AN AGREEMENT AND EASEMENT HAS BEEN COMPLETED AND SIGNED BY ALL APPLICABLE PARTIES, AND IS RECORDED IN THE LAND RECORDS OF HOWARD COUNTY, LIBER 15, FOLIO 512.
 - THE HEALTH DEPARTMENT REQUIRES DOCUMENTATION FOR THE START-UP CERTIFICATION FROM THE MANUFACTURER PRIOR TO FINAL APPROVAL OF THE INSTALLATION.
 - SURFACE RUNOFF SHALL BE DIRECTED AROUND THE BAT TANK.

SEPTIC SYSTEM DESIGN
4 BEDROOM HOUSE
LOADING RATE = 600 GPD
APPLICATION RATE = 1.2
EFFECTIVE SIDEWALL BEGINS AT 5.0 FEET
TRENCH DEPTH = 3 FEET
TRENCH WIDTH (W) = 2 FEET
EFFECTIVE DEPTH (D) = 3.0 FEET
COEFFICIENT OF REDUCTION OF TRENCH LENGTH =
(W+2)/(W+1+2D) = (2+2)/(2+1+(2x3)) = 0.44
SF OF DRAINFIELD = 600 GPD / 1.2 = 500 SF
TRENCH LENGTH = 500 SF / 2 = 250 FEET
SIDEWALL REDUCTION CREDIT = 250 X 0.44 = 111.11 LF

SEPTIC SYSTEM ELEVATIONS
FFE = 517.70
ESE = 508.07
INV. OUT OF HOUSE = 505.23
TOP OF BAT TANK = 502.36
COVER OVER BAT TANK = 3 FT TO 4 FT
INVERT INTO BAT TANK = 501.36
INVERT OUT OF BAT TANK = 501.03
INVERT INTO DISTRIBUTION BOX = 500.94
INVERT OUT OF DISTRIBUTION BOX = 500.44

BAT SITE PLAN FOR BAT INSTALLATION
RIVER FARMS INC.
SECTION 1
LOT 11
2516 DAISY ROAD,
WOODBINE MARYLAND. 21719
(PLAT BOOK 8, PAGE 93)
ZONED RC-DEO
TAX MAP No. 13 GRID No. 12 PARCEL Nos. 93
FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: OCTOBER 8, 2014
SHEET 1 OF 1