

**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: 1/4/2017    **ONSITE SEWAGE DISPOSAL SYSTEM**    P 5-59893

APPROVAL DATE: 1/23/17    **PERMIT: CONSTRUCTION**    A \_\_\_\_\_

PROPERTY ADDRESS: 11809 Collie Court Fulton, MD 20779

SUBDIVISION: Fulton Valley Manor    LOT: 6    TAX ID: \_\_\_\_\_

CONTRACTOR: Legacy Septic    EMAIL: jwalsh@legacycontracting.com

CONTRACTOR ADDRESS: 1538 Manchester Rd Westminster, MD 21157    PHONE: 410.840.8766

PROPERTY OWNER: Collie, LLC.    EMAIL: \_\_\_\_\_

OWNER ADDRESS: 5300 Dorsey hall Dr. Suite 102 Ellicott City    PHONE: 443-367-0422

SEPTIC TANK SIZE (GALLONS): 1500    TANK MANUFACTURER: Mayer Bros

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>130</u>	INLET DEPTH: <u>3</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>6</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>4</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:		

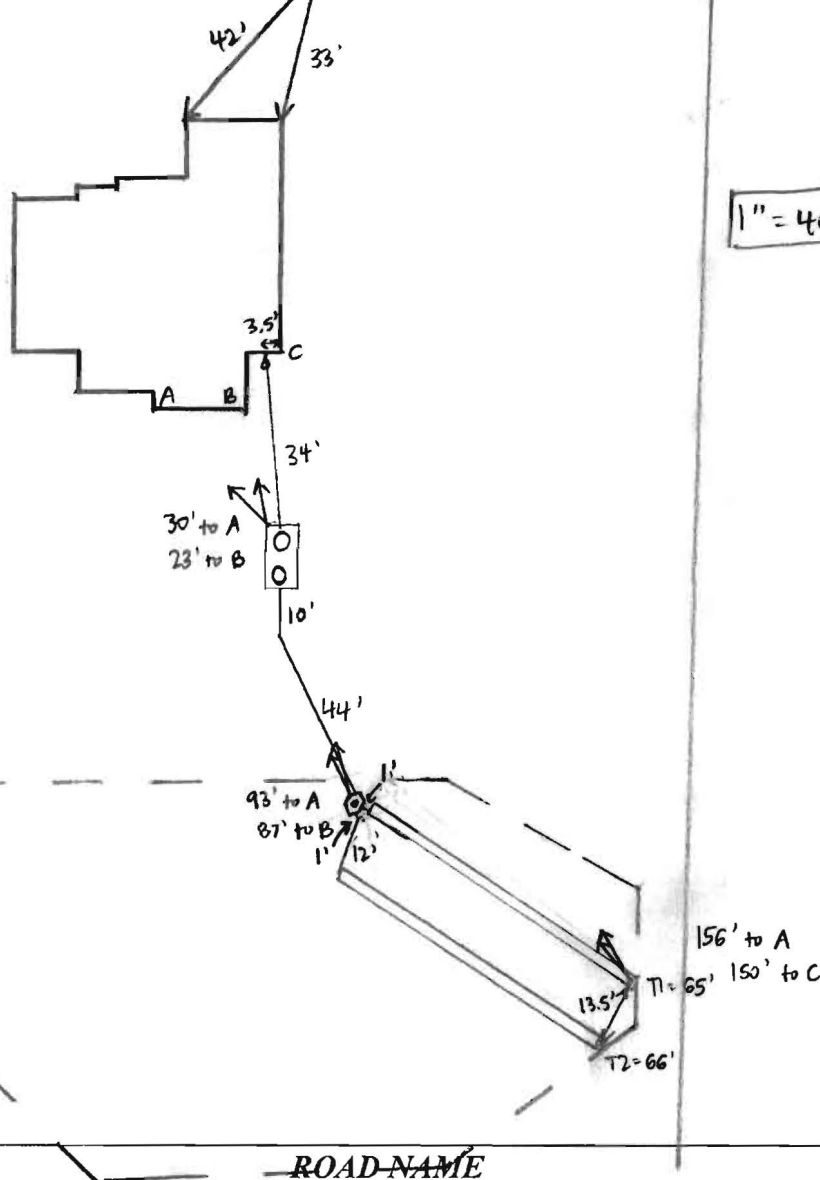
ISSUED BY: Robert Freemon    ISSUE DATE: 1/6/17    EXPIRATION DATE: 1/6/18

- 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 \_\_\_\_\_
- 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.**

H0-95-2684

NOT TO SCALE



**TRENCH/DRAINFIELD DATA**

WIDTH	INLET	BOTTOM
3'	3'	6'
NUMBER OF TRENCHES		2
TOTAL LENGTH		131'
ABSORPTION AREA		393' + SIDEWALK
DISTRIBUTION BOX LEVEL		YES
DISTRIBUTION BOX BAFFLE		YES
DISTRIBUTION BOX PORT		YES

**SEPTIC TANK DATA**

SEPTIC TANK 1 LEVEL	YES
MANUFACTURER	MAYER BROS.
CAPACITY	1500 GAL
SEAM LOC	TOP
TANK LID DEPTH	2'
BAFFLES	YES
BAFFLE FILTER	NO
MANHOLE LOC	FRONT + REAR
6" PORT LOC	NONE
WATERTIGHT TEST	NO
SLOTTED	YES
DATE ON LID	

**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:**

1/9/17 Met Legacy on site for layout. All SDA corner stakes present. Shot contour and laid out 2x85' trenches. Pulled 100' off well and 20' off house to determine tank location. House sewer line coming out of house close to location shown on plan. (SC)

INSTALLATION: 1/9/17 Tank hole dug, line dug from house to tank hole. Legacy waiting for tank delivery. (SC) 1/10/17 Trenches finished. T1 left open and T2 open at ends. 3' wide, 2.5' to stone. Levelled speed levelers on D-box. Tank not yet set - wrong tank delivered yesterday. (SC) 1/10/17 - pm site visit new tank not delivered yet, line from the house to the excavated tank hole and line from the tank hole to the dbox both installed. SHC not yet completed, contractor said that he'd send photos once tank has been placed to verify tank lid depth. (RR)

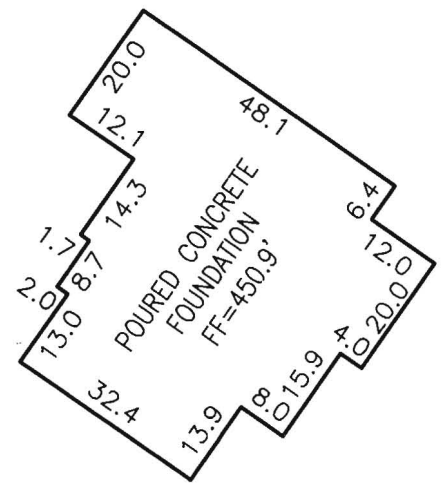
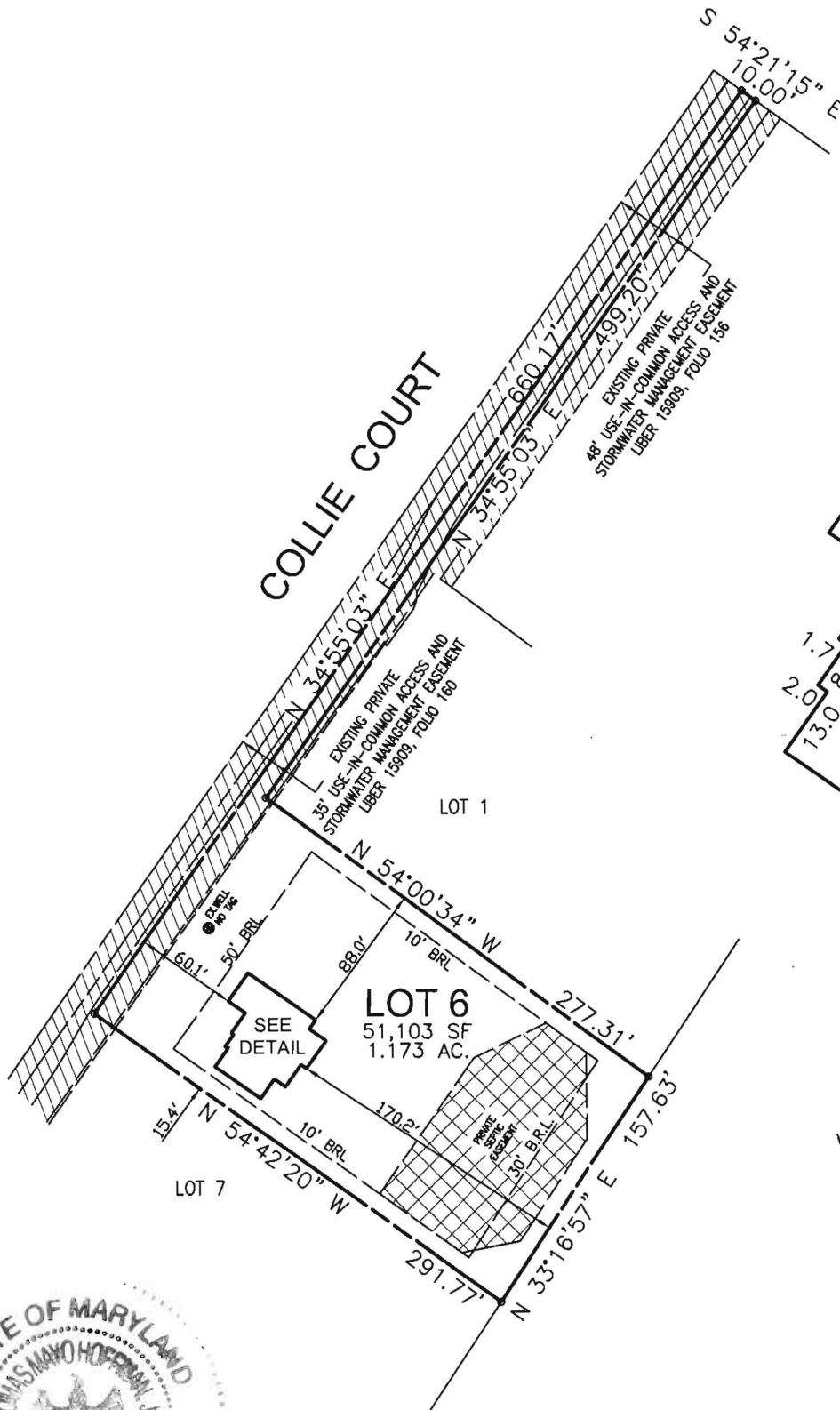
FINAL INSPECTOR

*[Signature]*

DATE OF APPROVAL

1/23/17

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



**DETAIL**  
SCALE: 1"=30'

Wall Check  
OK  
1/6/17  
R.H.

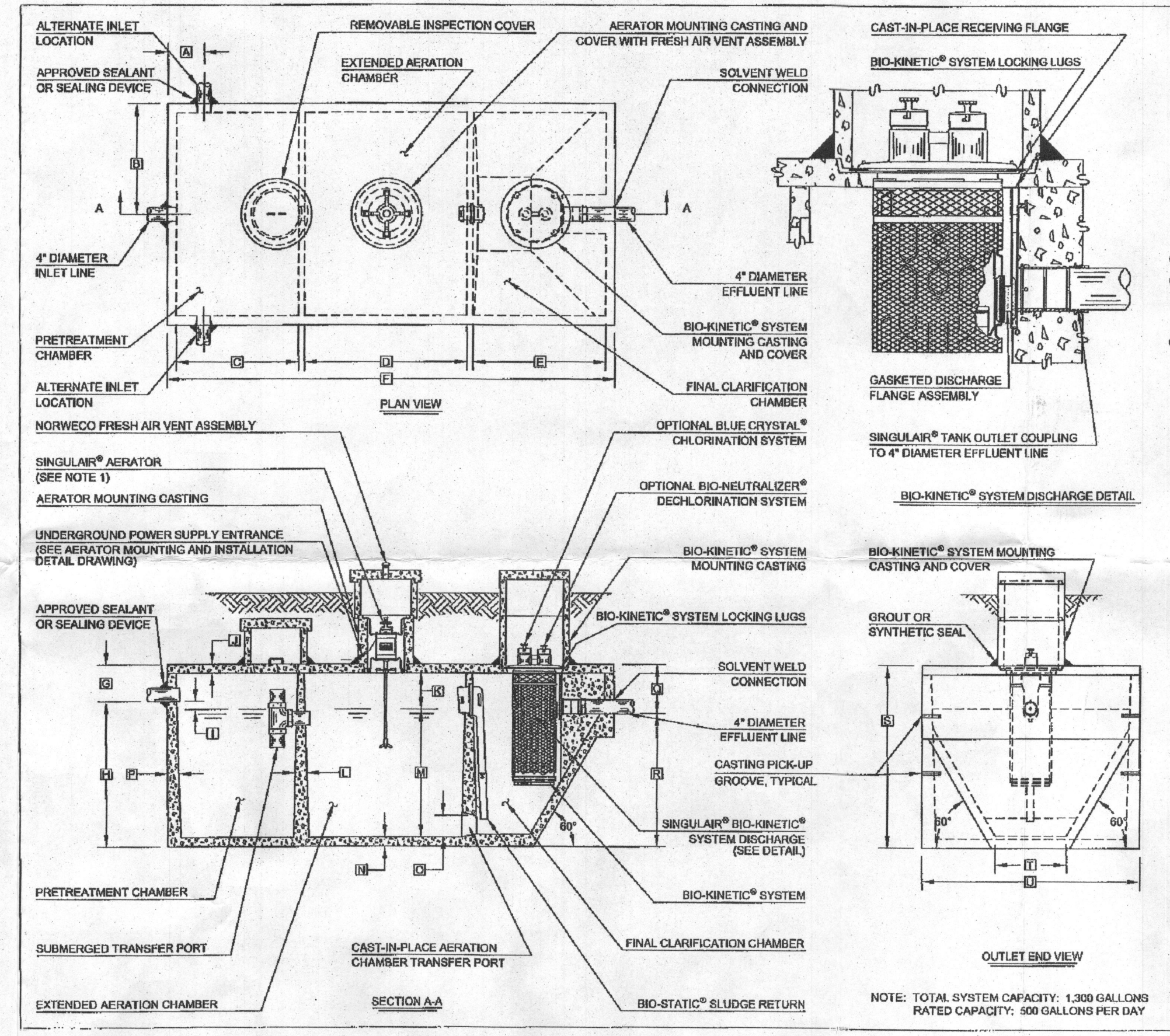


I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF THAT THE IMPROVEMENTS ARE LOCATED AS SHOWN AND THERE ARE NO ENCROACHMENTS EXCEPT AS SHOWN.

*Thomas M. Hoffman Jr.*  
THOMAS M. HOFFMAN JR., PROPERTY LINE SURVEYOR #267 DATE 1.05.17

PROFESSIONAL CERTIFICATION; I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROPERTY LINE SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 267, EXPIRATION DATE JULY 28, 2018.

SCALE 1"= 100'	DATE 04/06/2016	<b>ROBERT H. VOGEL ENGINEERING, INC.</b> ENGINEERS - SURVEYORS - PLANNERS 8407 MAIN STREET ELLICOTT CITY, MARYLAND 21043 TEL: 410-461-7666 FAX: 410-461-8961	<b>WALL CHECK DRAWING</b> 11809 COLLIE COURT LOT 6 FULTON MANOR VALLEY PLAT NO. 23140 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DRAWN BY B.D.A.	CHECKED BY T.M.H.		
PLAT NUMBER 23139-23141	JOB NUMBER 14-24.00		



**GENERAL NOTES:**

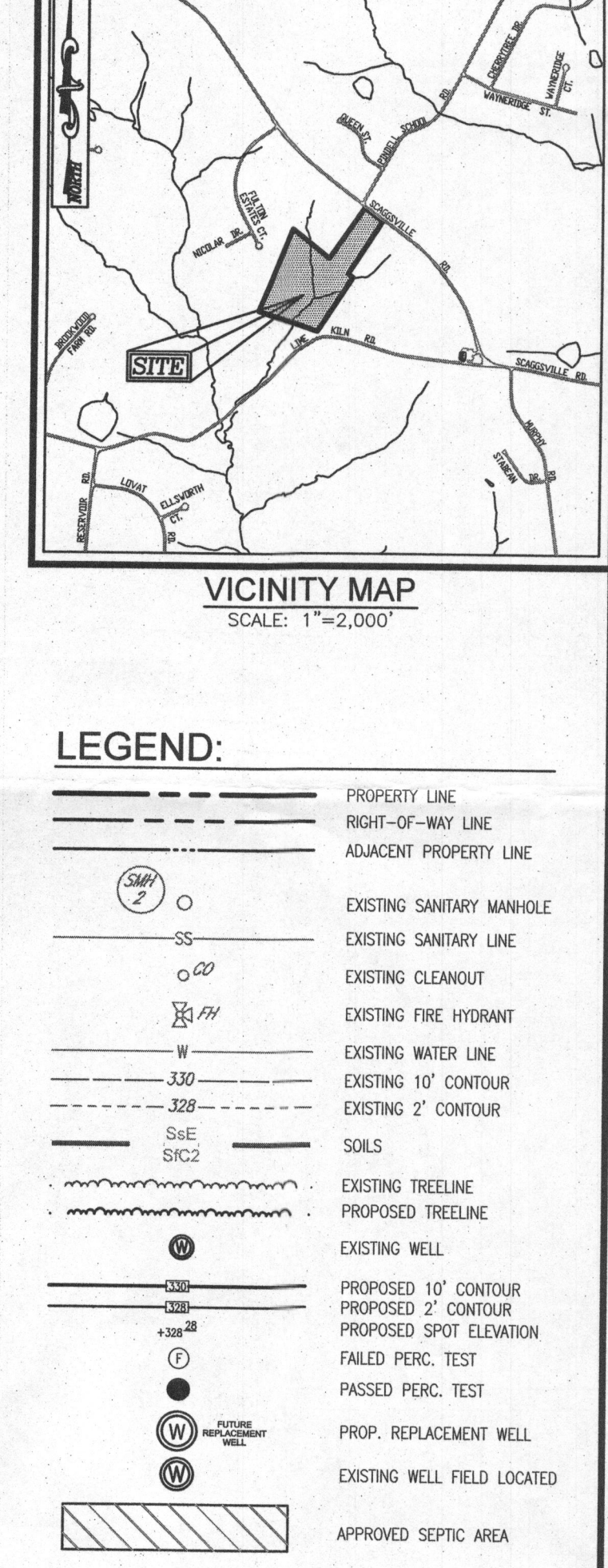
- SINGULAR® AERATOR, AS TESTED AND ACCEPTED BY NSF, OPERATING 60 MINUTES ON / 60 MINUTES OFF.
- FALL THROUGH SINGULAR® PLANT FROM INLET INVERT TO OUTLET INVERT IS FOUR INCHES. INLET INVERT IS TWELVE INCHES BELOW TANK TOP.
- ON DEEPER INSTALLATIONS, PRECAST RISERS MUST BE USED TO EXTEND AERATOR MOUNTING 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) 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: \_\_\_\_\_

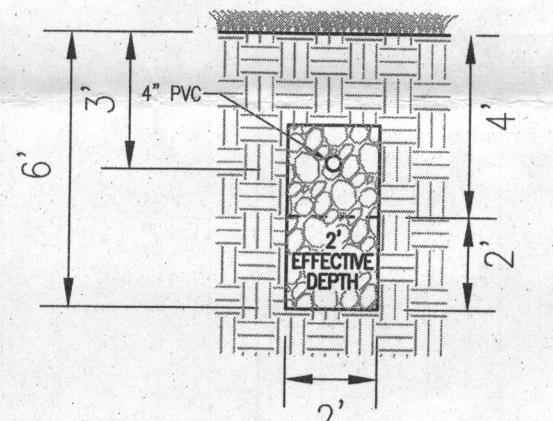
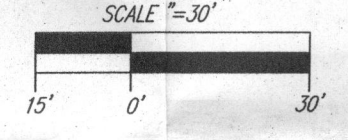
CRITICAL DIMENSIONS			
1'-0"	10'-0"	10'-0"	10'-0"
2'-0"	20'-0"	20'-0"	20'-0"
3'-0"	30'-0"	30'-0"	30'-0"
4'-0"	40'-0"	40'-0"	40'-0"
5'-0"	50'-0"	50'-0"	50'-0"
6'-0"	60'-0"	60'-0"	60'-0"
7'-0"	70'-0"	70'-0"	70'-0"
8'-0"	80'-0"	80'-0"	80'-0"
9'-0"	90'-0"	90'-0"	90'-0"
10'-0"	100'-0"	100'-0"	100'-0"

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



**WELL LOCATION CERTIFICATION:**  
 THE EXISTING WELL SHOWN ON THIS PLAN (TAG #HO-95-2684) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN

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



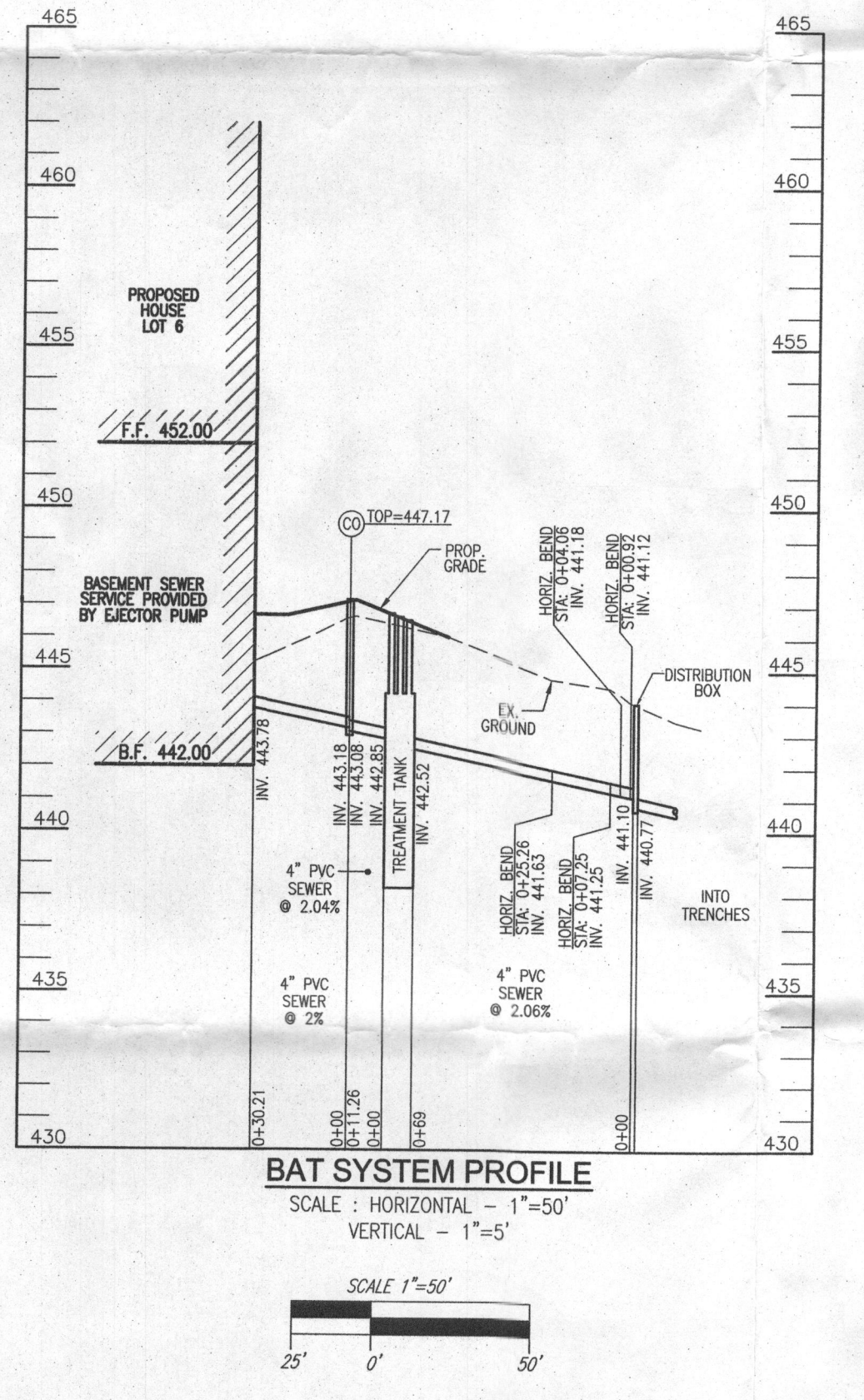
**INITIAL SYSTEM AND 1ST REPLACEMENT TRENCH DETAIL**  
 NOT TO SCALE

TRENCH INFO				
TRENCH	TRENCH LENGTH	INVERT	BOTTOM OF TRENCH	EXISTING GROUND
1	65'	440.13	437.13	443.13
2	65'	439.07	436.07	442.07

**SYSTEM CALCULATIONS:**

**INITIAL SYSTEM:**  
 5 BEDROOMS AT 750gpd / 1.2 ABSORPTION RATE = 625 SQ. FT.  
 625 SQ. FT. / 3 (TRENCH WIDTH) x .62 (SIDEWALL REDUCTION) = 129 LINEAR FEET  
 TWO TRENCHES OF 65 LINEAR FEET ARE PROVIDED WITH THE INITIAL SYSTEM.

**FIRST REPLACEMENT SYSTEM:**  
 5 BEDROOMS AT 750gpd / 1.2 ABSORPTION RATE = 625 SQ. FT.  
 625 SQ. FT. / 3 (TRENCH WIDTH) x .62 (SIDEWALL REDUCTION) = 129 LINEAR FEET  
 TWO TRENCHES OF 65 LINEAR FEET ARE PROVIDED WITH THE FIRST REPLACEMENT SYSTEM.



**GENERAL 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 DEPTH OF THE BAT PER THE MANUFACTURER'S SPECIFICATION IS 3 FEET.
- NO BLOWER IS REQUIRED. THE NORWECO 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.

Approved Septic System Plan  
 Howard County Health Department  
 NORWECO TMTLP-500  
 for 5-bedroom septic tank  
 R. Bicks 12/2/2015  
 Signature Date  
 B15004186

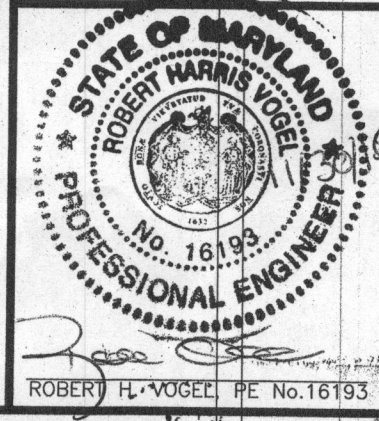
**OWNER**  
 COLLIE, LLC  
 5300 DORSEY HALL DR., SUITE 102  
 ELLICOTT CITY, MARYLAND 21042  
 ATTN: MR. DONALD R. REIWER, JR.  
 443-367-0422

**BUILDER**  
 DOUGLAS HOMES, INC.  
 5034 DORSEY HALL DR., SUITE 102  
 ELLICOTT CITY, MARYLAND 21042  
 410-984-4234

**SITE PLAN FOR BAT INSTALLATION**  
 FULTON MANOR VALLEY - LOT 6  
 11809 COLLIE COURT  
 HIGHLAND, MD 20777  
 BUILDING PERMIT #

TAX MAP: 41 GRID, 19 5TH ELECTION DISTRICT  
 PARCELS: 78 & 456  
 ZONED: RR-DED  
 HOWARD COUNTY, MARYLAND

**ROBERT H. VOGEL ENGINEERING, INC.**  
 ENGINEERS • SURVEYORS • PLANNERS  
 8407 MAIN STREET ELLICOTT CITY, MD 21043  
 TEL: 410.461.7666 FAX: 410.461.8961



**DESIGN BY:** RHV  
**DRAWN BY:** JMR  
**CHECKED BY:** RHV  
**DATE:** DECEMBER 2015  
**SCALE:** AS SHOWN  
**W.O. NO.:** 14-24

**PROFESSIONAL CERTIFICATE**  
 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. 16193 EXPIRATION DATE: 09-27-2018

1 SHEET OF 1

THIS AREA DESIGNATES A PRIVATE SEWAGE EASEMENT OF AT LEAST 10,000 SQ. FT. AS REQUIRED BY THE MARYLAND DEPARTMENT OF ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS EASEMENT ARE RESTRICTED. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE EASEMENT. RECORDATION OF A REVISED SEWAGE EASEMENT SHALL NOT BE NECESSARY.