

**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: 7-29-15 **ONSITE SEWAGE DISPOSAL SYSTEM** P 556557  
 APPROVAL DATE: 11/2/15 **PERMIT: CONSTRUCTION** A \_\_\_\_\_  
 PROPERTY ADDRESS: 6207 Heather Glen Way  
 SUBDIVISION: Preserve at Clarksville LOT: 33 TAX ID: \_\_\_\_\_  
 CONTRACTOR: Hatfield's Equipment EMAIL: ken@hatfieldsequipment.com  
 CONTRACTOR ADDRESS: P.O. Box 519, Annapolis Junction, MD 20701 PHONE: 301-480-4289

CONTRACTOR CERTIFIED FOR BAT INSTALLATION:  MDE  MANUFACTURER:

PROPERTY OWNER: Williamsburg Group LLC EMAIL: marinamorris@williamsburgllc.com  
 OWNER ADDRESS: 5485 Harpers Farm Road, Columbia, MD 21044 PHONE: 410-997-8800

**NORWECO TNTLP-**  
 BAT UNIT MODEL: 600GPD PUMP SIZE: N/A PUMP TANK CAPACITY: 600gpd

OPERATION & MAINTENANCE AGREEMENT DATE SIGNED: 2/23/15 DATE RECORDED: \_\_\_\_\_

DISTRIBUTION SYSTEM:  GRAVITY  PRESSURE DOSED BEDROOMS: 5 APPLICATION RATE: 1.2 (~80 tan.)

TRENCHES:	LINEAR FEET REQUIRED: <u>95</u> <u>200</u>	INLET DEPTH: <u>3</u> <u>3</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>8</u> <u>5</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u> <u>11</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>4.5</u>

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

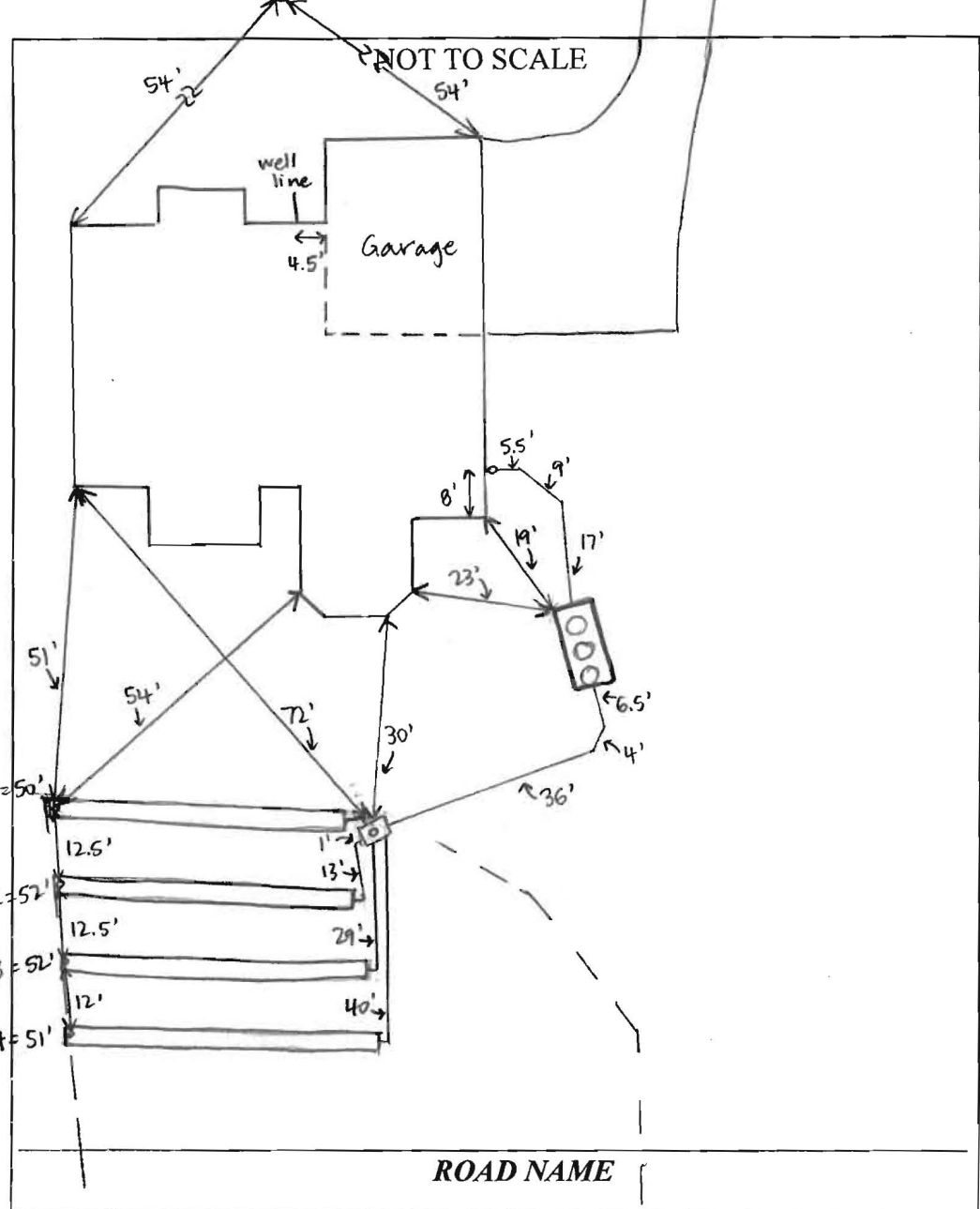
NOTES: 7x50'

ISSUED BY: Dana Bernard ISSUE DATE: 7-29-15 EXPIRATION DATE: 7-29-16

- 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 15000 4089
- 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.**

H0-95-0245



TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
3'	3'	5'
NUMBER OF TRENCHES	4	
TOTAL LENGTH	209'	
ABSORPTION AREA	627' + SIDEWALL	
DISTRIBUTION BOX LEVEL	YES	
DISTRIBUTION BOX BAFFLE	YES	
DISTRIBUTION BOX PORT	YES	

SEPTIC TANK DATA	
SEPTIC TANK I LEVEL	YES
MANUFACTURER	NORWECO
CAPACITY	1300 GAL
SEAM LOC	TOP
TANK LID DEPTH	2'
BAFFLES	NO
BAFFLE FILTER	NO
MANHOLE LOC	FRONT, MID, REAR
6" PORT LOC	NONE
WATERTIGHT TEST	NO
SLOTTED	NO
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:**

8/19/15 Layout with Jeff from Hatfield's. Laid out four 50' trenches on contour on the southwestern corner of the SDA. Fill over the upper portion of the SDA - 10" over T1 close to middle of SDA and 6" over middle portion of T2. Hatfield's will dig trenches using a transit + measuring depths from original grade. Tank not staked - Superintendent okay with measuring location off house (SC)

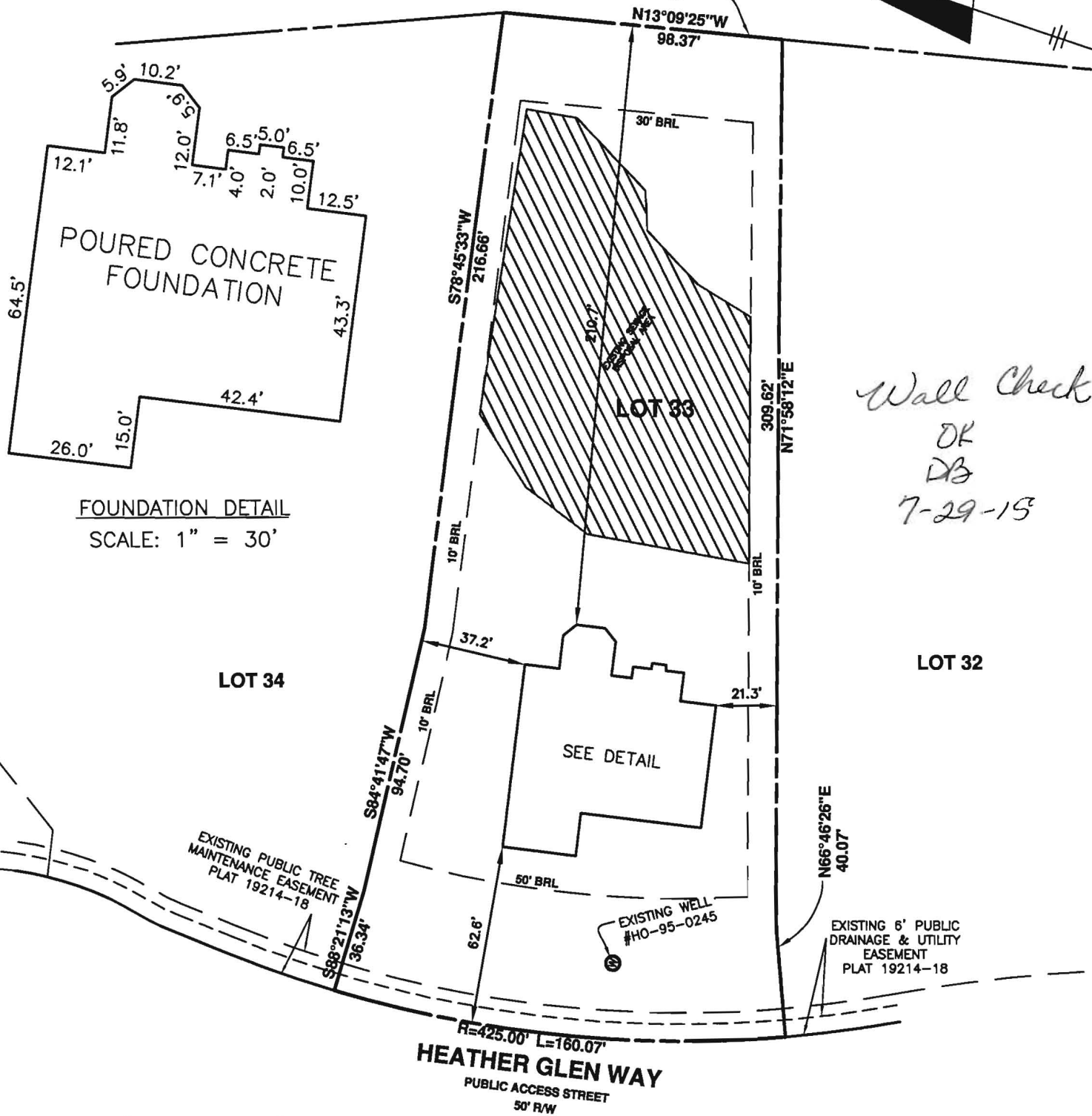
INSTALLATION: 8/25/15 Tank set and connected to D-box. Tank is 19' off corner of house - I spoke with Jeff from Hatfield's and explained that they can either move the tank to meet the 20' setback or state in writing that they set the tank 19' off the house and have the builder sign. D-box set, T1 finished + left open at the ends. 2.5' to stone, 3' wide. Currently digging T2 (SC) 8/26/15 T2, T3, + T4 finished + left open at ends. D-box leveled with speedlevelers. House connection made, under footer. Need BAT startup certification. (SC) BAT startup certification received.

FINAL INSPECTOR H. Wall DATE OF APPROVAL 11/2/15

NON-BUILDABLE PRESERVATION  
PARCEL D  
THE PRESERVE AT CLARKSVILLE  
PLAT NO. 19214-18

EXISTING PRIVATE DRAINAGE &  
UTILITY EASEMENT  
PLAT 19214-18

GRID NORTH



FOUNDATION DETAIL  
SCALE: 1" = 30'

Wall Check  
OK  
DB  
7-29-15

**SURVEYOR'S CERTIFICATE**

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. 21320, EXPIRATION DATE 1-7-2017 AND TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION AND BELIEF THAT THE DIMENSIONS OF THE BUILDING WALLS SHOWN HEREON ARE CORRECT; THAT THEY ARE BASED ON A FIELD RUN SURVEY PERFORMED BY BENCHMARK ENGINEERING, INC. ON 05/27/2015.

TOP OF FOUNDATION WALL ELEVATION = 474.4'  
OFFSET DIMENSIONS TO PROPERTY LINES ARE ± 0.1'

*Donald A. Mason*  
DONALD A. MASON  
PROFESSIONAL LAND SURVEYOR  
MD REG. No. 21320  
FOR BENCHMARK ENGINEERING, INC.  
MD REG. No. 351  
FEMA FIRM No. 24027C013D  
ZONE: X  
DATED: 11/06/13



BENCHMARK  
ENGINEERS • LAND SURVEYORS • PLANNERS  
ENGINEERING, INC.

8480 BALTIMORE NATIONAL PIKE • SUITE 315  
ELLCOTT CITY, MARYLAND 21043  
phone: 410-465-6105 • fax: 410-465-6644  
www.bei-civilengineering.com

WALL CHECK  
THE PRESERVE AT CLARKSVILLE  
PHASE 2  
PLAT No. 22892  
LOT No. 33

6207 HEATHER GLEN WAY

FIELD OBS. BY DH&AIS  
COMP. BY EWF  
DRAWN BY EWF

5TH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
SCALE: 1" = 50' DATE: 05/27/2015

# 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 Singlair TNT 600 GPD Septic Tank installed at 6207 Heather Glen Way, Clarksville, MD 21029 on August 25, 2015 was installed according to the manufacture's specifications.

Installer: Jeff Reiter

Property Owner: Williamsburg Group

Permit #



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MATTHEW GECKLE

Vice-President

Bureau of Environmental Health  
Well & Septic Program  
7178 Columbia Gateway Drive  
Columbia, MD 21046

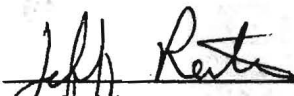
Re: The Preserve @ Clarksville lot 33  
6207 Heather Glen Way  
Clarksville, MD 21029

OK  
(Kmw) 9/29/15

To whom it may concern:

This is to inform Howard County that Williamsburg Group and Hatfields Equipment are aware of a 19 Ft. set back on the front left corner of septic tank, as looking at from rear of property. The septic work was completed on 8/25/15.

Thank you,

  
\_\_\_\_\_  
Hatfields Equipment

  
\_\_\_\_\_  
Williamsburg Group

# THE PRESERVE AT CLARKSVILLE

## LOT 33

6207 HEATHER GLEN WAY  
CLARKSVILLE, MARYLAND 21029

TAX MAP: 34    GRID: 11    PARCEL: 77  
ZONED: RC-DEO  
ELECTION DISTRICT NO: 5

**BUILDER:**

WILLIAMSBURG HOMES, INC.  
5485 HARPER'S FARM ROAD  
SUITE 200  
COLUMBIA, MARYLAND 21044  
410-997-8800

EON IS  
UNDER  
THE

### SITE PLAN FOR BAT INSTALLATION

DATE: MAY 8, 2015

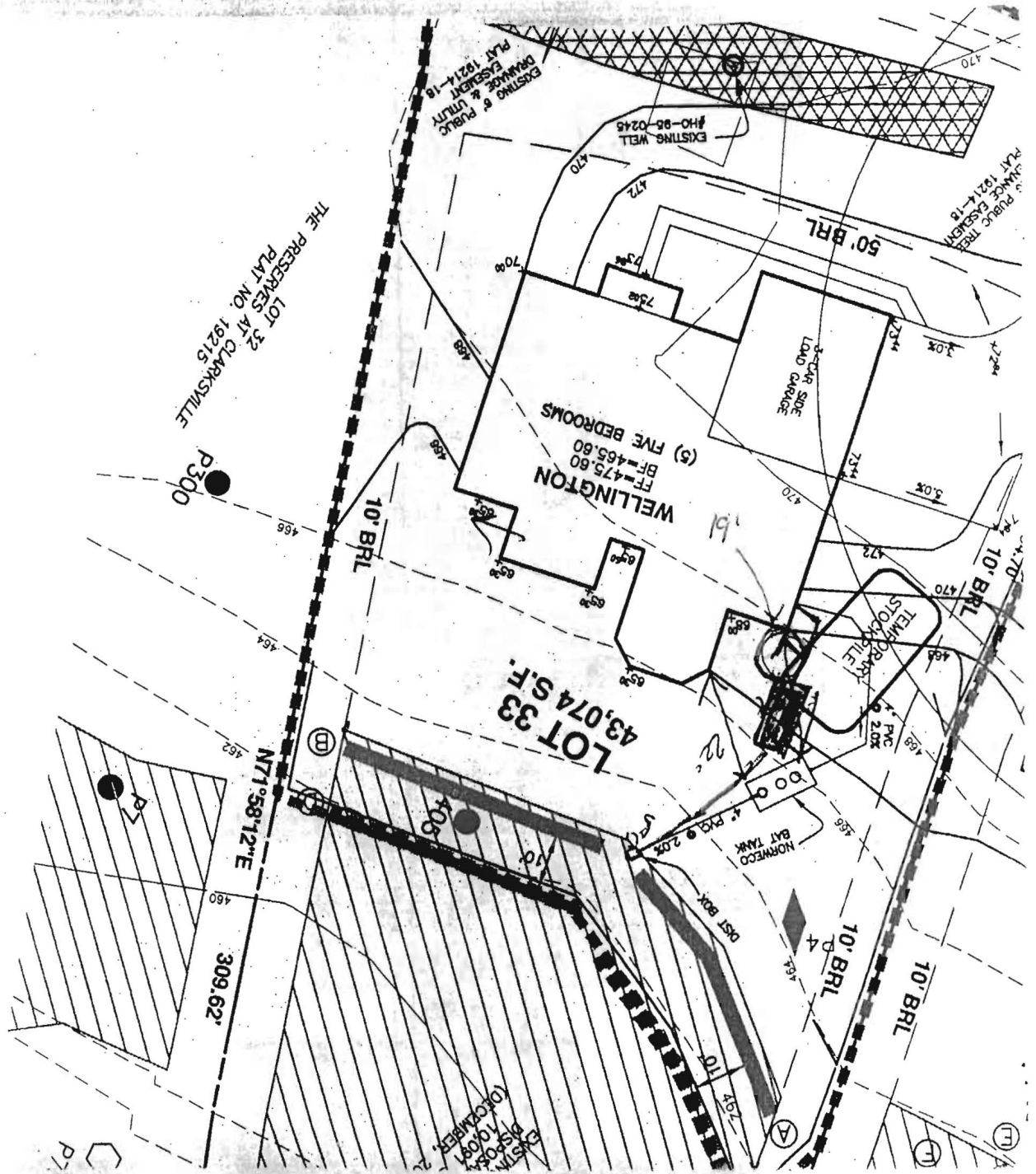
BEI PROJECT NO: 1407-W

DESIGN: DBT

DRAWN: DBT

SCALE: AS SHOWN

SHEET 1 OF 1





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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

THIS AGREEMENT is made this 28 day of February, 2015, among Mahendra and Alpa Patel, 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 Preserves at Clarksville Lot 33, 6207 Heather Glen Way, in the 5th 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 15231 Folio 0041

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. The pre-treatment device being installed is NORWECO.

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

20
50
CH

JW 8/8/2014

Handwritten initials/signatures

LR - Agreement
Recording Fee 20.00
Grantor/Grantee Name:
Patel
Reference/Control #: 91
LR - Agreement
Charge 40.00
Total: 60.00
11/08 120.00
09/2015 11.08
09010 CC0503 - CC13-CH
Howard Co
Inbiba/CC05.03.03 -
Register 03

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.

[Signature] 7/19/15  
Howard County Health Department

[Signature] 2-23-15  
Owner #1 Signature                      Date  
BOB CORBETT  
Williamsburg Group LLC  
Owner #1 Print Name

\_\_\_\_\_  
Owner #2 Signature                      Date  
  
\_\_\_\_\_  
Owner #2 Print Name

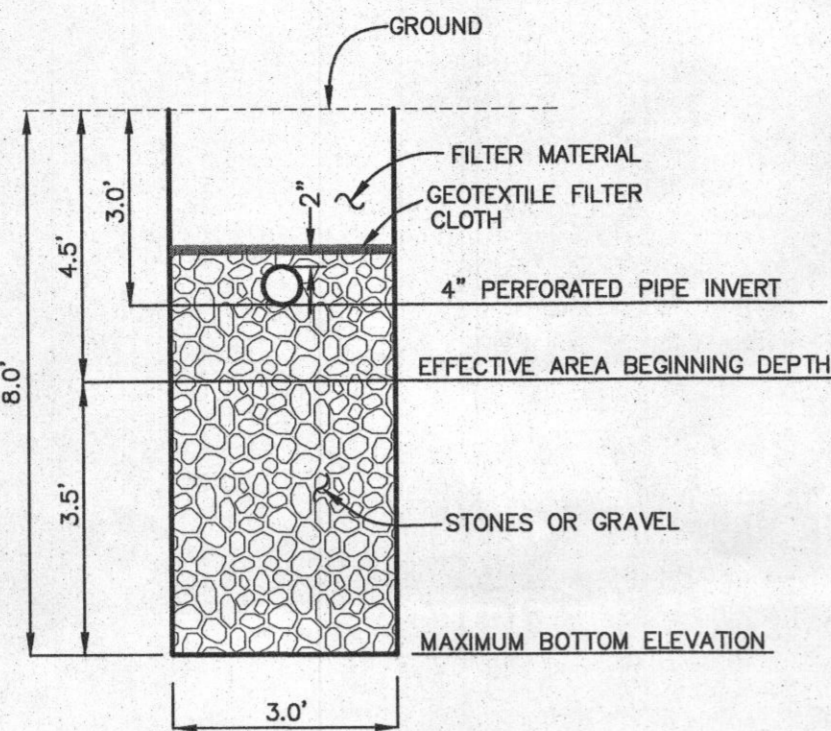
[Signature] 02/28/15  
Buyer #1 Signature                      Date  
MAHENDRA PATEL

\_\_\_\_\_  
Buyer #2 Signature                      Date  
  
\_\_\_\_\_  
Buyer #2 Print Name

[Signature] 2/28/15  
Buyer #1 Print Name  
ALPA PATEL

**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.
- 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 (1) 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.
- AT ANY TIME IN THE FUTURE THAT A BUILDING PERMIT IS SUBMITTED TO FINISH THE BASEMENT WHICH ADDS A 6TH BEDROOM, THE EXISTING SEPTIC SYSTEM MAY HAVE TO BE UPGRADED.



TYPICAL TRENCH DETAIL  
NOT TO SCALE

**LEGEND**

BOUNDARY  
EXISTING TOPOGRAPHY  
SEWAGE DISPOSAL AREA  
1,500 SF WELLBOX  
INITIAL TRENCH SYSTEM  
1st REPLACEMENT SYSTEM

WELL LOCATION  
PASSED TEST HOLE TESTED APRIL/MAY 2003  
FAILED TEST HOLE TESTED APRIL/MAY 2003  
PASSED TEST HOLE TESTED JANUARY/FEB 2004  
FAILED TEST HOLE TESTED JANUARY/FEB 2004  
PASSED TEST HOLE TESTED JUNE 2004  
FAILED TEST HOLE TESTED JUNE 2004  
PASSED TEST HOLE TESTED NOV-DEC 2000

Ggb SOILS CLASSIFICATION  
SOILS DELINEATION LINE

**NRCS SOILS CHART - HoCo Soils Map No. 16**

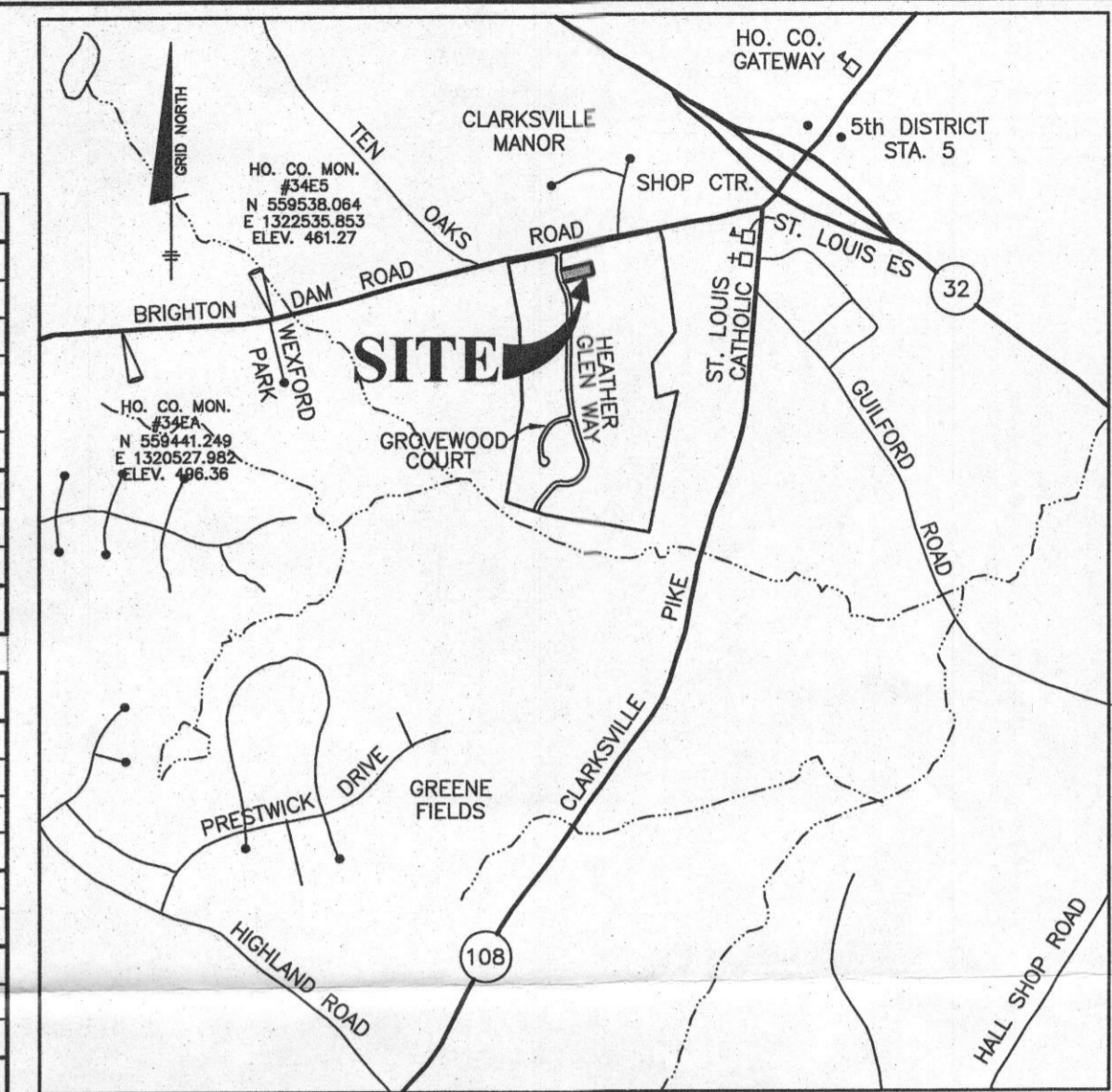
SYMBOL	HYDRIC	GROUP	Kw	MAP UNIT NAME
Ggb		B	0.37	GLENELG LOAM, 3 TO 8 PERCENT SLOPES

**INITIAL SYSTEM**

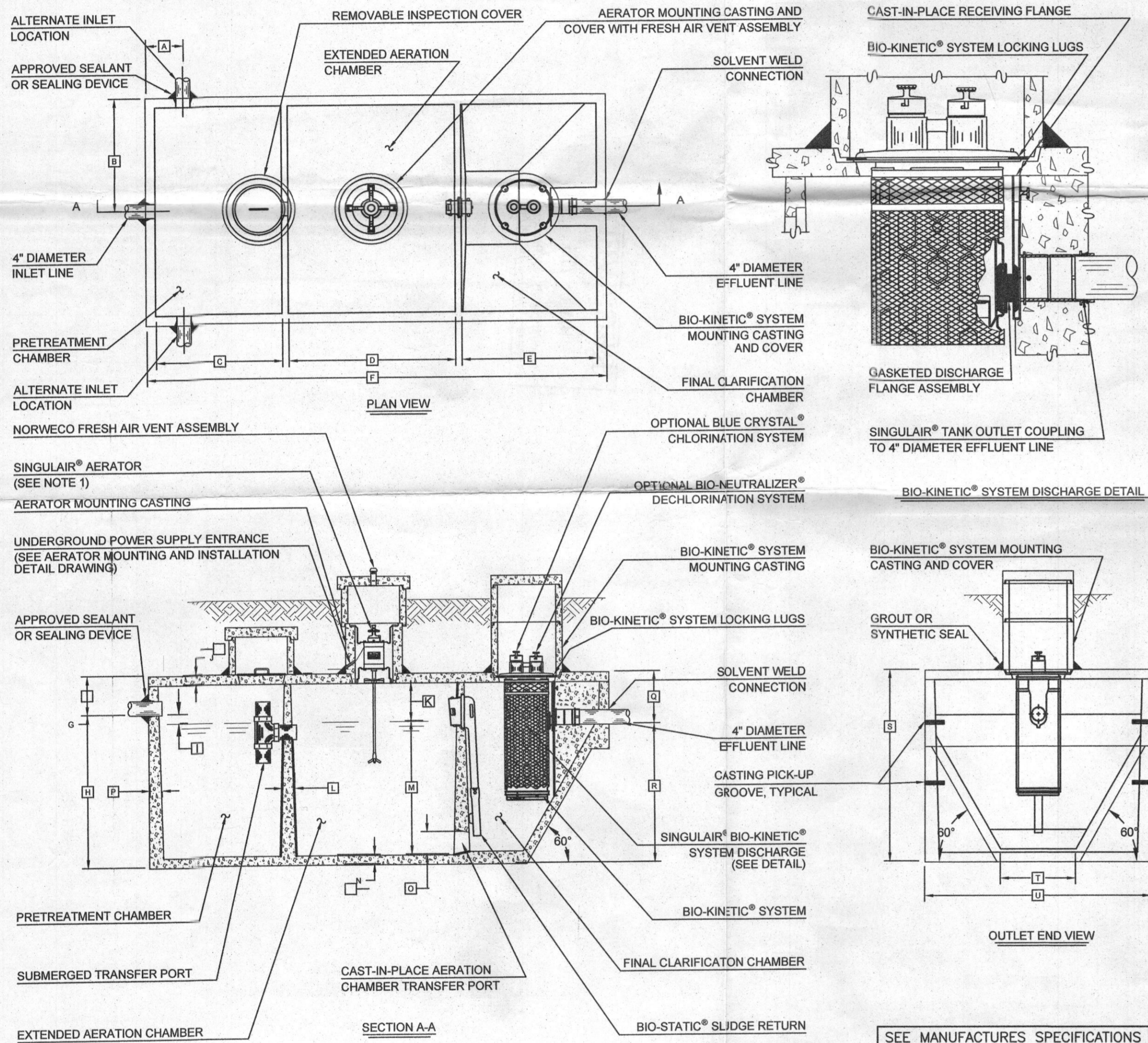
Number of Bedrooms	5
Application Rate	1.2 gpd/sf
Effective Area Beginning Depth	4.5 ft
Bottom Max Depth	8 ft
Design Flow	750 gpd
Drainage Field square footage	625 sf
Sidewall reduction credit	0.5
Trench width	3
Effective Area Depth	3.5
Linear Length of trench Required	95 lf

**1st REPLACEMENT SYSTEM**

Number of Bedrooms	5
Application Rate	1.2 gpd/sf
Effective Area Beginning Depth	4.5 ft
Bottom Max Depth	8 ft
Design Flow	750 gpd
Drainage Field square footage	625 sf
Sidewall reduction credit	0.5
Trench width	3
Effective Area Depth	3.5
Linear Length of trench Required	95 lf



34E5 - STAMPED BRASS DISK SET ON TOP OF CONCRETE BASE  
34E4 - STAMPED BRASS DISK SET ON TOP OF CONCRETE BASE  
**VICINITY MAP**  
SCALE: 1" = 2000'



SEE MANUFACTURER'S SPECIFICATIONS FOR DETAILS. WWW.NORWECO.COM

**CRITICAL DIMENSIONS**

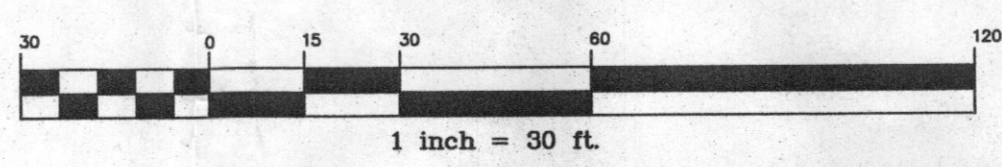
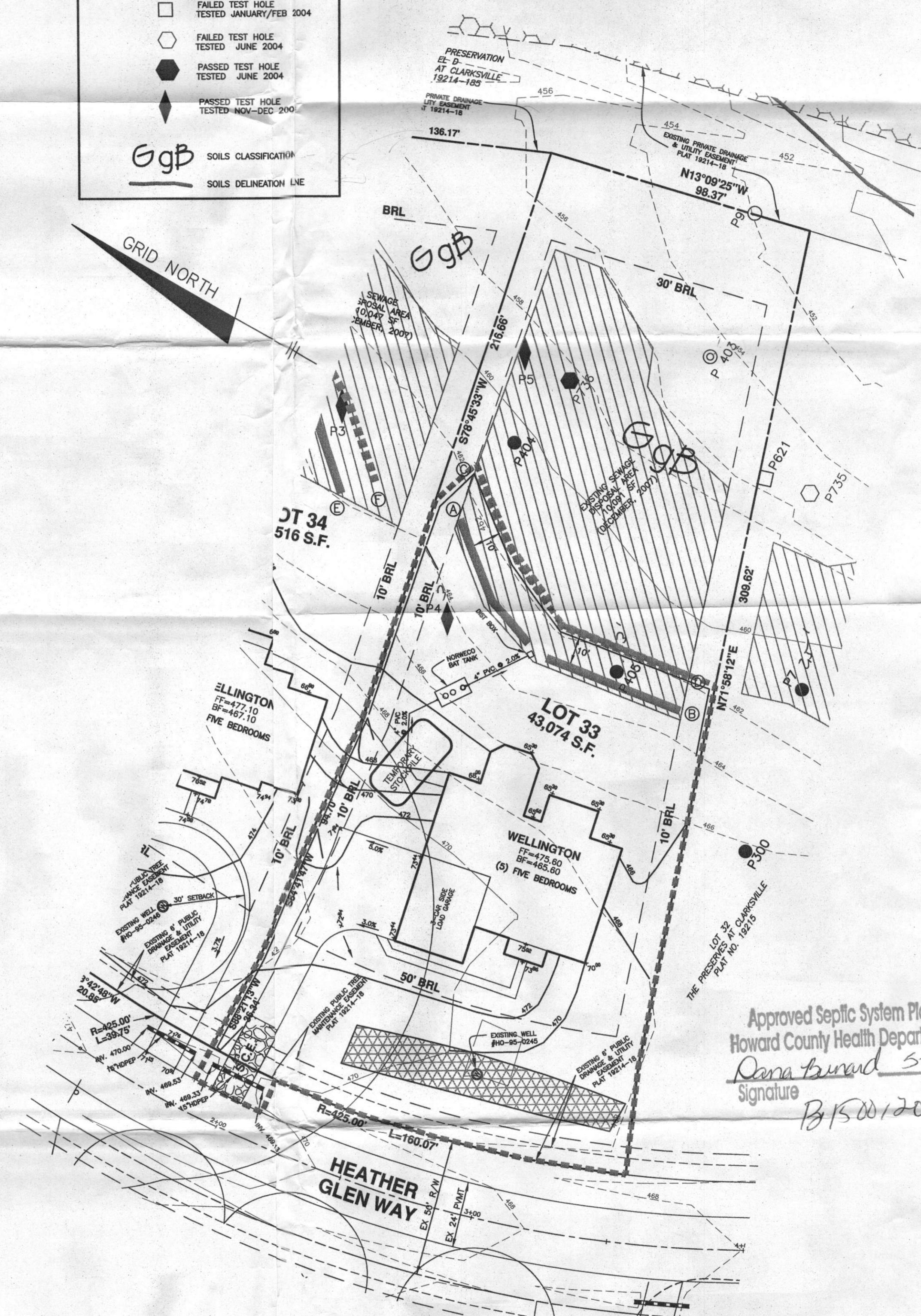
A	1'-0"	N	0'-3"
B	3'-0"	O	0'-6"
C	3'-4"	P	0'-3"
D	4'-5"	Q	1'-4"
E	3'-7"	R	3'-8"
F	12'-2"	S	5'-0"
G	1'-0"	T	2'-0"
H	4'-0"	U	6'-0"
I	0'-3"	V	
J	0'-3"	W	
K	1'-0"	X	
L	0'-2"	Y	
M	3'-6"	Z	

U.S. AND FOREIGN PATENTS PENDING  
**norweco** 3-26-07 B  
LOW-PROFILE SINGULAR® BIO-KINETIC® WASTEWATER TREATMENT SYSTEM MODEL: THTL-400-GPD  
NTS  
PC-5-7091

- 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 AG 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.

NOTES: TOTAL SYSTEM CAPACITY: 1,300 GALLONS  
RATED CAPACITY: 600 GALLONS PER DAY PER MANUFACTURER.  
ABLE TO SERVICE UP TO FIVE (5) BEDROOMS.

**BENCHMARK ENGINEERING, INC.**  
ENGINEERS & LAND SURVEYORS & PLANNERS  
6480 BALTIMORE NATIONAL PIKE & SUITE 315 & ELLICOTT CITY, MARYLAND 21043  
(P) 410-485-8105 (F) 410-485-8944  
WWW.BEI-CIVILENGINEERING.COM



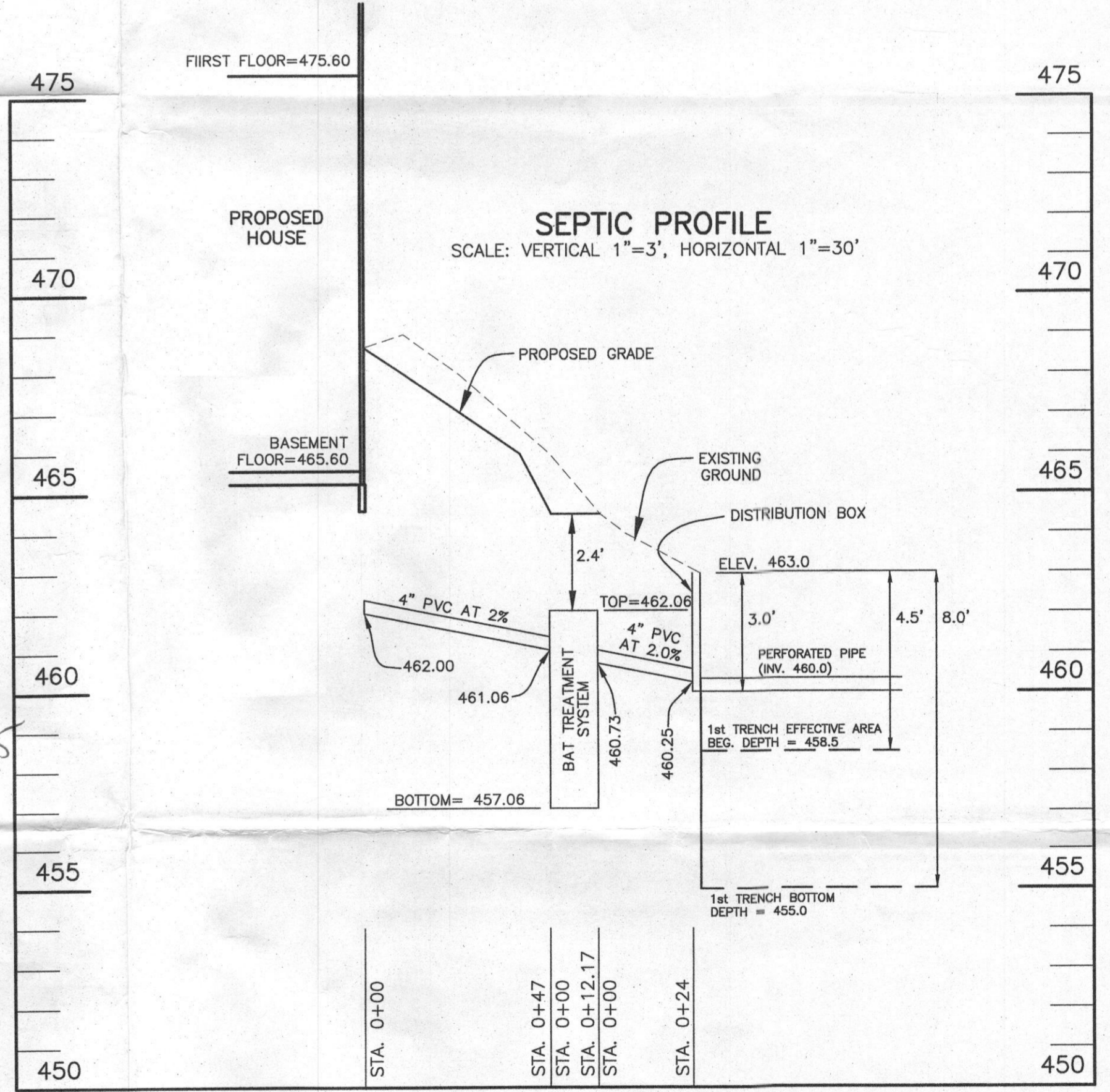
I CERTIFY THAT THE INFORMATION SHOWN HEREON IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AND IS CORRECT, TO THE BEST OF MY KNOWLEDGE AND BELIEF.  
DAVID THOMPSON 5/8/2015

**SEPTIC INVERT CHART**

INV @ HOUSE	462.00
GROUND @ HOUSE	469.00
INV IN BAT TANK	461.06
INV OUT BAT TANK	460.73
TOP OF BAT TANK	462.06
GROUND OVER TANK	464.46
INV IN DIST BOX	460.25
INV OUT DIST BOX	460.00
GROUND AT DIST BOX	463.00

**TRENCH INFORMATION**

A	TRENCH LENGTH	52 LF	C	TRENCH LENGTH	52 LF
	GROUND ELEVATION	463.0		GROUND ELEVATION	461.8
	PIPE INVERT	460.0		PIPE INVERT	458.8
	EFFECTIVE BEGINNING ELEV	458.5		EFFECTIVE BEGINNING ELEV	457.3
	MAX BOTTOM ELEV	455.0		MAX BOTTOM ELEV	453.0
B	TRENCH LENGTH	52 LF	D	TRENCH LENGTH	52 LF
	GROUND ELEVATION	463.0		GROUND ELEVATION	462.0
	PIPE INVERT	460.0		PIPE INVERT	459.0
	EFFECTIVE BEGINNING ELEV	458.5		EFFECTIVE BEGINNING ELEV	457.5
	MAX BOTTOM ELEV	455.0		MAX BOTTOM ELEV	454.0



**THE PRESERVE AT CLARKSVILLE LOT 33**  
6207 HEATHER GLEN WAY  
CLARKSVILLE, MARYLAND 21029  
TAX MAP: 34 GRID: 11 PARCEL: 77  
ZONED: RC-DEO ELECTION DISTRICT NO. 5

**SITE PLAN FOR BAT INSTALLATION**

DATE: MAY 8, 2015 BEI PROJECT NO: 1407-W  
SCALE: AS SHOWN SHEET 1 OF 1