

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
 Facebook: www.facebook.com/hocohealth

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

RECEIPT DATE: 2/2/15 **ONSITE SEWAGE DISPOSAL SYSTEM** P 555729

INSTALLATION
 APPROVAL DATE: 3/9/15 SEC **PERMIT** A _____
CONSTRUCTION

PROPERTY ADDRESS: 2034 Drovers Lane
 SUBDIVISION: Vista Ridge LOT: 10 TAX ID: 04-595475
 CONTRACTOR: Fogle's Septic Clean Inc. EMAIL: kevin@foglesinc.com
 CONTRACTOR ADDRESS: 580 Obrecht Road, Sykesville, MD 21784 PHONE: 410-795-5670
 PROPERTY OWNER: DR Horton EMAIL: _____
 OWNER ADDRESS: 1356 Beverly Road, McLean, VA 22101 PHONE: 571-723-0813

BAT UNIT MODEL: Norweco PUMP SIZE: _____ PUMP TANK CAPACITY: 750GPD
 DISTRIBUTION SYSTEM: GRAVITY LOW PRESSURE DOSED NUMBER OF BEDROOMS: 5

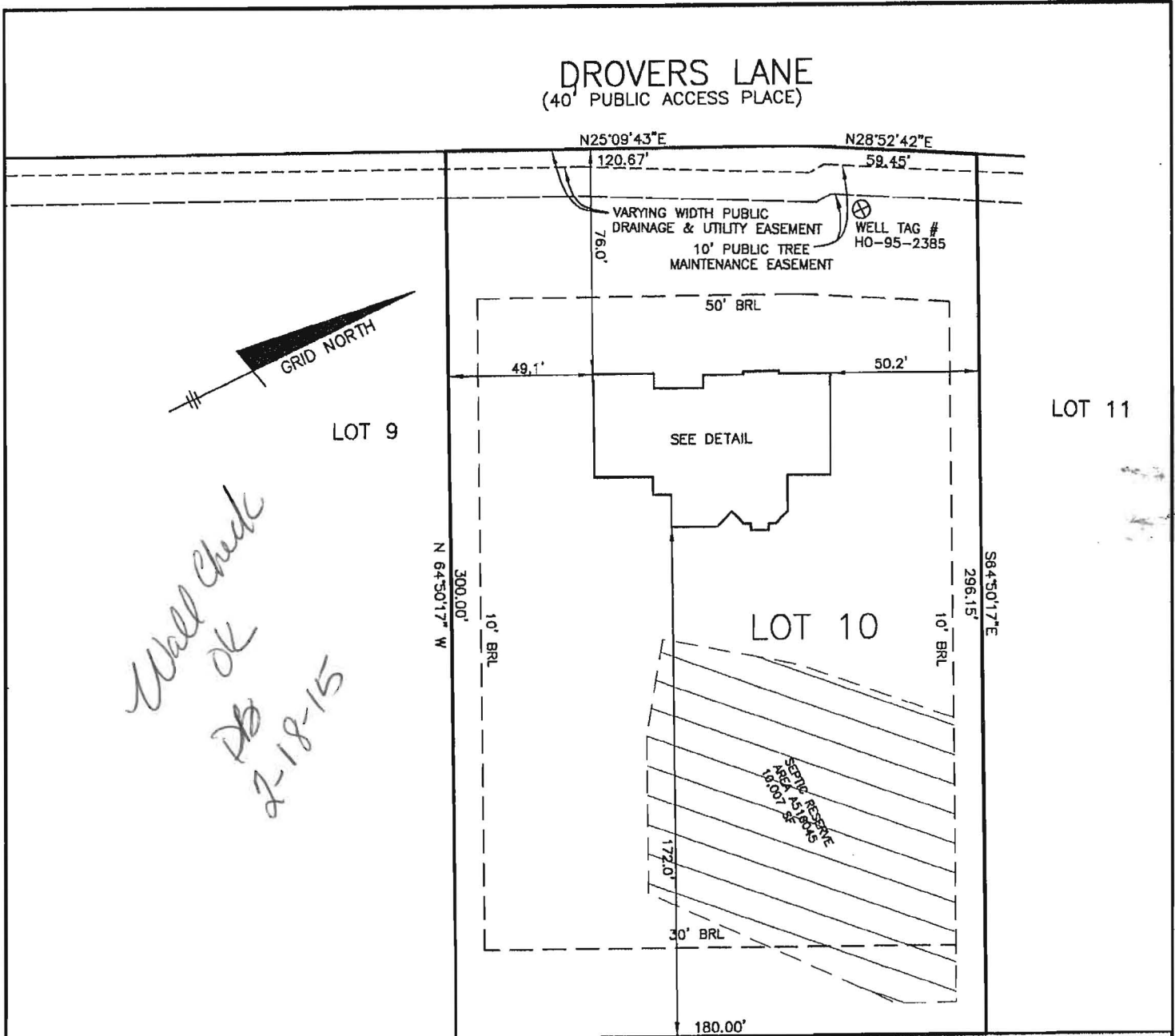
TRENCHES:	LINEAR FEET REQUIRED: <u>158 206'</u>	INLET DEPTH: <u>4'</u>
	TRENCH WIDTH: <u>3'2'</u>	MAXIMUM BOTTOM DEPTH: <u>9'</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10'</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>6'</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND BAT UNIT LOCATION MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:	Install BAT Unit per plan. $5 \text{ BR} \times 150 \text{ GPD} = 937.5 \text{ ft}^2 \div 2 \text{ ft wide} = 469' \text{ total length}$ $\times 0.44 \text{ sidewall credit} = \boxed{206' \text{ total}}$	

ISSUED BY: Dana Bernard ISSUE DATE: _____ EXPIRATION DATE: _____

- 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
- 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.

DROVERS LANE
(40' PUBLIC ACCESS PLACE)



*Wall Check
OK
DB
2-18-15*

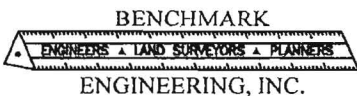
ROBB PROPERTY
PLAT NO. 3940

TOP OF FOUNDATION WALL = 637.0
OFFSET DIMENSIONS TO PROPERTY LINES ARE ± 0.1'

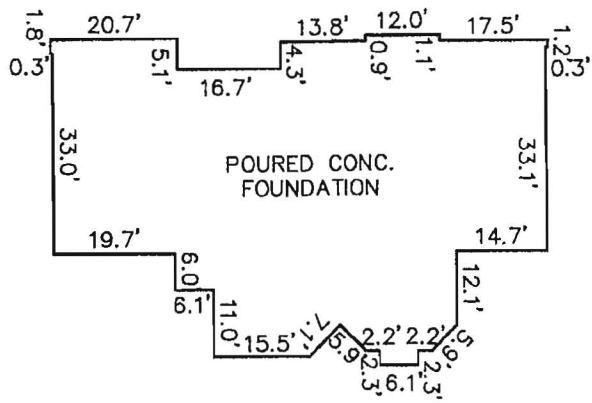
SURVEYOR'S CERTIFICATE

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 1-7-2015 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 11/13/14.

Donald A. Mason
DONALD A. MASON
PROFESSIONAL LAND SURVEYOR
MD REG. No. 21320
FOR BENCHMARK ENGINEERING, INC.
MD REG. No. 351
FEMA FIRM No. 24027C0035D
ZONE: X
DATED: 11/06/2013



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



FOUNDATION DETAIL
SCALE: 1" = 30'

WALL CHECK
VISTA RIDGE
PLAT No. 22432
LOT No. 10

2034 DROVERS LANE

4TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

FIELD OBS. BY DH/ML
COMP. BY DAM
DRAWN BY DAM
SCALE: 1" = 50' DATE: 11-13-14

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 2034 Drovers Ln., Cooksville, MD 21723 February 27, 2015 was installed according to the manufacture's specifications.

Installer: Ricky Colson

Property Owner: DR Horton



MATTHEW GECKLE

Vice-President

Wolf, Kevin

From: John Carney <jcarney@bei-civilengineering.com >
Sent: Thursday, February 26, 2015 3:30 PM
To: Wolf, Kevin
Subject: RE: 2034 Drovers Lane Vista Ridge Lot 10

Kevin, Seems like they are going to fix it to be per plan. No need for a pump. John

From: Wolf, Kevin [mailto:KWolf@howardcountymd.gov]
Sent: Thursday, February 26, 2015 11:54 AM
To: John Carney
Subject: RE: 2034 Drovers Lane Vista Ridge Lot 10

John,
Here are the new trench specs: **INLET = 4' below grade, BOTTOM = 9' below grade, EFF AREA = 6' below grade, TRENCH WIDTH = 2' wide, SPACING = 10'**
We laid out 4 trenches totaling 205' or 4x51' trenches running in both directions. Contour runs pretty much as shown on the plan. Just ADD trench 2-1 into the initial system design and show the 2nd replacement system the same, placed below the initial 4x51' trenches.

Besides that, I think we are on the same mind set here. Send something over and I'll take a look at it. It may be cost beneficial for them to switch to a BAT unit that has a pump discharge (i.e. Hoot, Advantex). This will eliminate the need for a separate pump tank and separate effluent pump. Also, I believe that Hoot can certify a tank mold that can go deeper than 3ft of earth cover over the tank. I have seen them certify up to 6ft.
Kevin

From: John Carney [mailto:jcarney@bei-civilengineering.com]
Sent: Thursday, February 26, 2015 11:33 AM
To: Wolf, Kevin
Subject: RE: 2034 Drovers Lane Vista Ridge Lot 10

Kevin, It looks like they might be able to run a 1% outfall down to the 428 contour and put in a pump tank. The BAT site plan and profile would have to be revised and a pump selected.

I'll take the new trench specs when you get a chance. I've emailed DR Horton to discuss it with them. John

From: Wolf, Kevin [mailto:KWolf@howardcountymd.gov]
Sent: Thursday, February 26, 2015 9:18 AM
To: John Carney
Subject: RE: 2034 Drovers Lane Vista Ridge Lot 10

John, yes the house sewer is running under the basement slab. No ejector pit in basement. Basement is finished off also.

From: John Carney [mailto:jcarney@bei-civilengineering.com]
Sent: Thursday, February 26, 2015 8:46 AM
To: Wolf, Kevin
Subject: RE: 2034 Drovers Lane Vista Ridge Lot 10

Kevin, This project is mine. I heard about this from our survey department. I will look at the plan and see if there is any quick solution. Does the whole house sewer drain under the basement slab or are we just talking about basement service not having a sump. John

From: Wolf, Kevin [mailto:KWolf@howardcountymd.gov]

Sent: Wednesday, February 25, 2015 4:11 PM

To: John Carney (jcarney@bei-civilengineering.com)

Subject: 2034 Drovers Lane Vista Ridge Lot 10

John,

I am not sure if you know this or not, we were onsite today with Fogle's for a pre-construction meeting to lay the septic system out when we encountered a problem. They brought the house sewer under the footer. After an extensive site evaluation (determining elevations, grades, slopes, pipe inverts, etc...) we could not get the grade to work with the existing invert @ the house as installed. The plan (BAT site plan) for this particular property was approved with 'hung' sewer. I explained this to the super intendant on site and he said he would get in touch with you. The site does not slope much (about 4% or so) but they may be able to move the tank all the way down near the end of the lot at the bottom of the SRA. The house looks almost complete. Let me know what you come up with or if you need me to advise. Oh and the BAT unit proposed was the Norweco but they may change as a pump tank will be needed, possibly a Hoot. I also have the revised trench spec's too if you need them.

Thanks,

Kevin M. Wolf, EHS Supervisor

Groundwater Mgmt. Sec.

Well & Septic Program

Bureau of Environmental Health

8930 Stanford Blvd.

Columbia, MD 21045

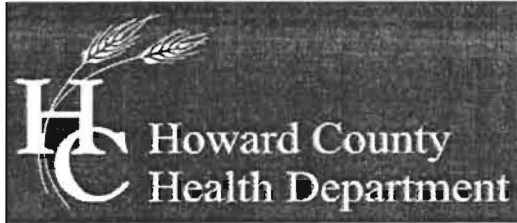
(o) 410-313-2645

(f) 410-313-2648



CONFIDENTIALITY NOTICE

This message and the accompanying documents are intended only for the use of the individual or entity to which they are addressed and may contain information that is privileged, confidential, or exempt from disclosure under applicable law. If the reader of this email is not the intended recipient, you are hereby notified that you are strictly prohibited from reading, disseminating, distributing, or copying this communication. If you have received this email in error, please notify the sender immediately and destroy the original transmission.



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

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 25 day of Sept, among DR Horton Inc., 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 2034 Drivers Lane, in the ___ 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 ___ Folio ___.

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

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.

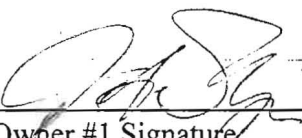
H. This agreement contains the entire agreement and understanding between the County and the Owner. There are no additional terms other than as contained in this agreement. This agreement may not be modified, except in writing signed by each of the parties or by their authorized representatives.

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.


Howard County Health Department

 9/25/14
Owner #1 Signature Date

Owner #2 Signature Date

Owner #1 Print Name

Owner #2 Print Name

Buyer #1 Signature Date

Buyer #2 Signature Date

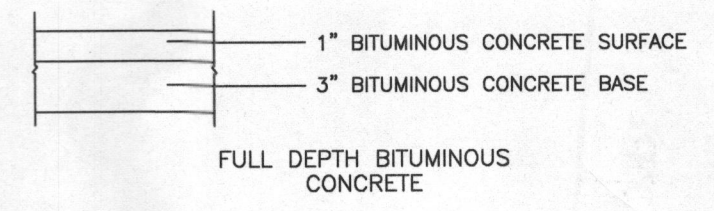
Buyer #1 Print Name

Buyer #2 Print Name



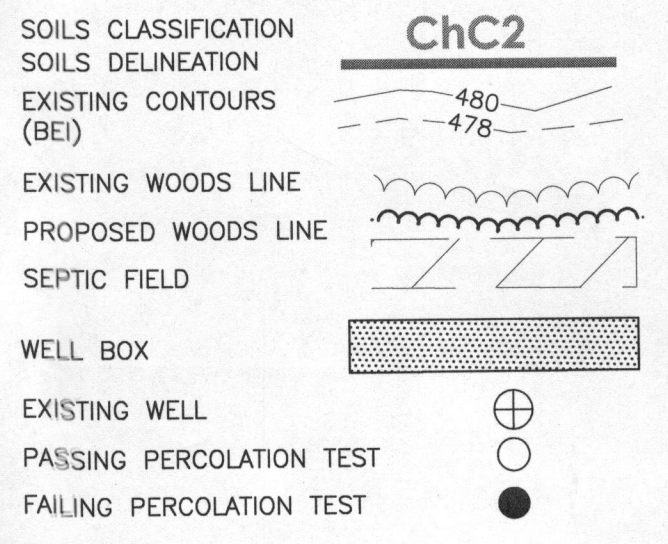
SOILS LEGEND		
MAP SYMBOL	SOIL GROUP	SOIL TYPE
GnB2	C	GLENVILLE, SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
MgC2	B	MANOR GRAVELLY LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED
-	-	-

* INDICATES HYDRIC SOILS
 TAKEN FROM SOILS SURVEY, ISSUED JULY 1968, MAP NO. 33



PAVING SECTION
NOT TO SCALE

LEGEND



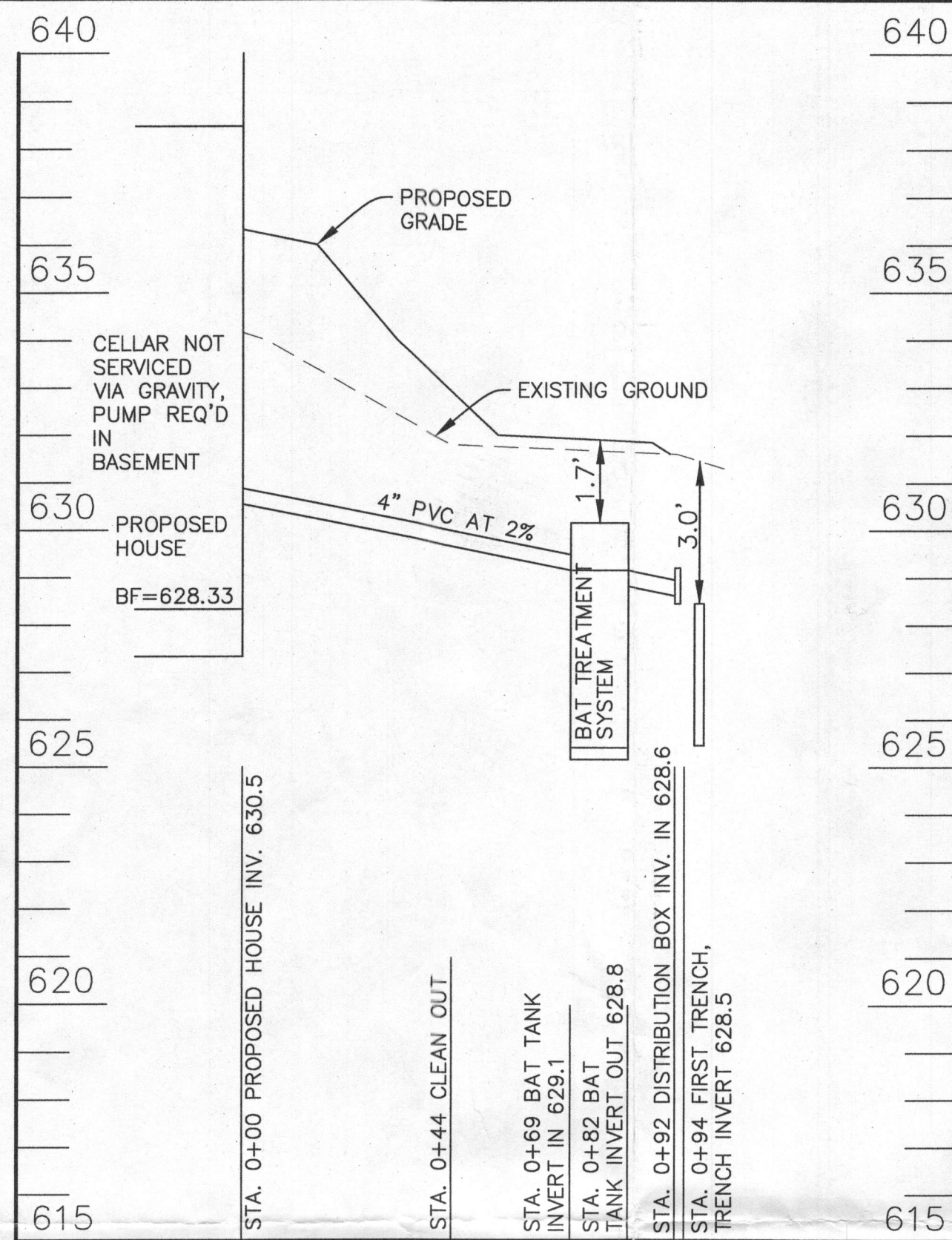
BUILDING PERMIT PLAN NOTES:

1. THE LOT SHOWN HEREON WAS RECORDED ON THE PLAT FOR VISTA RIDGE, PLAT Nos. 22430-22435. REFER TO THE PLATS FOR LOT DIMENSIONS, LOT AREAS, ALL EASEMENTS AND CONDITIONS.
2. SEDIMENT AND EROSION CONTROLS WERE APPROVED BY HOWARD SOIL CONSERVATION DISTRICT UNDER A GRADING PLAN AND MODIFIED FOR THIS SPECIFIC HOUSE.
3. TOPOGRAPHY SHOWN HEREON IS TAKEN FROM THE APPROVED ROAD CONSTRUCTION PLANS AND TOPOGRAPHIC INFORMATION PROVIDED BY ACCUBID, INC., ON OR ABOUT JUNE 27, 2013.
4. ALL SEDIMENT AND EROSION CONTROL FEATURES USED ON THIS SITE SHALL COMPLY WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
5. ALL DRAINAGE AND STORMWATER MANAGEMENT FEATURES USED ON THIS SITE MUST COMPLY WITH THE APPROVED ROAD CONSTRUCTION PLANS EXCEPT AS WAIVED.
6. THE EXISTING WELL SHOWN ON THIS PLAN, HO-95-2385, HAS BEEN FIELD LOCATED BY BENCHMARK ENGINEERING, INC., AND IS ACCURATELY SHOWN.
7. THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
8. ANY CHANGES TO A PRIVATE SEWAGE EASEMENT OR WELL BOX SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
9. STORMWATER MANAGEMENT FOR THIS LOT WAS DESIGNED TO BE PROVIDED BY BOTH POND #1, A POCKET POND, AND IN POND #2, A MICROPOND ED POND.
10. THE DRIVEWAY CULVERT REQUIRED FOR THIS LOT, IS SIZED IN ACCORDANCE WITH THE DRIVEWAY CULVERT REPORT SUBMITTED TO DEVELOPMENT ENGINEERING DIVISION IN CONJUNCTION WITH THIS PERMIT PLAN.
11. THIS PLAN HAS BEEN REVISED TO REFLECT THE LIMITS OF GRADING AS SHOWN ON F-08-136.

BENCHMARK
ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS
ENGINEERING, INC.

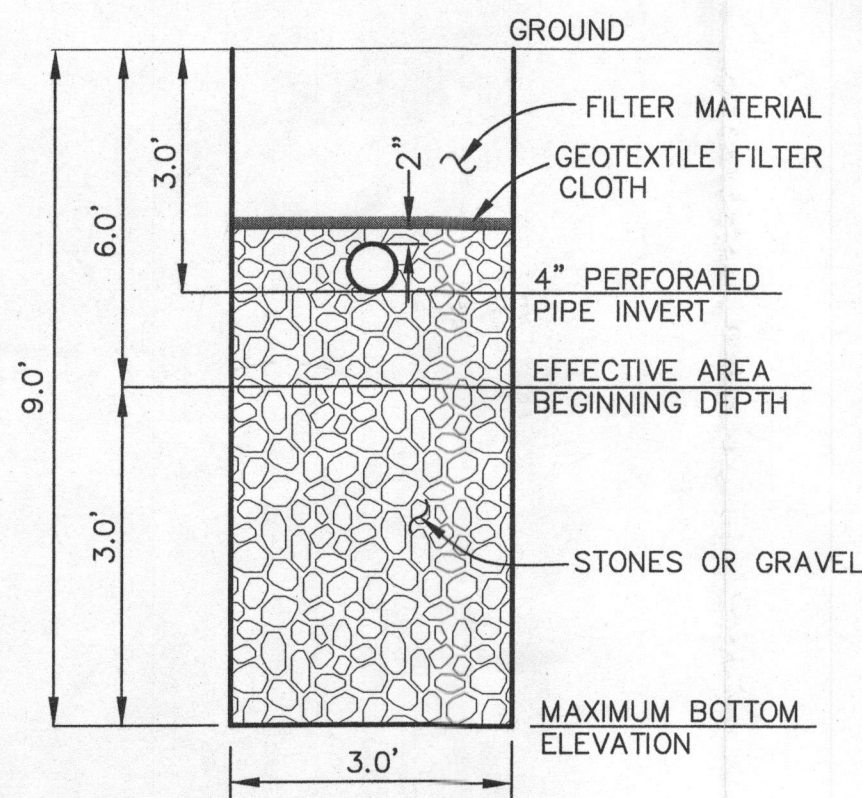
8480 BALTIMORE NATIONAL PIKE ▲ SUITE 315
 ELLICOTT CITY, MARYLAND 21043
 PHONE: 410-465-6105 ▲ FAX: 410-465-6644
 BEI@BEI-CIVILENGINEERING.COM

OWNER/BUILDER: DR HORTON, INC. 1356 BEVERLY ROAD SUITE 300 McLEAN, VA 22101 PHONE: 571-723-0813 FAX: 800-551-5015	PROJECT: VISTA RIDGE LOT 10 LOCATION: 2034 DROVERS LANE COOKSVILLE, MD 21723 <small>TAX MAP No. 8 - BLOCK No. 23 - PARCEL No. 176 4TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND</small> TITLE: BUILDING PERMIT PLAN AND BAT SITE PLAN HOUSE TYPE: SOMERSET DATE: JULY 29, 2014 PROJECT NO. 1635
DESIGN: JMC	DRAFT: JMC
SCALE: 1" = 30'	DRAWING <u>1</u> OF <u>2</u>



SEWER PROFILE - LOT 10
SCALE: VERTICAL 1"=3', HORIZONTAL 1"=30'

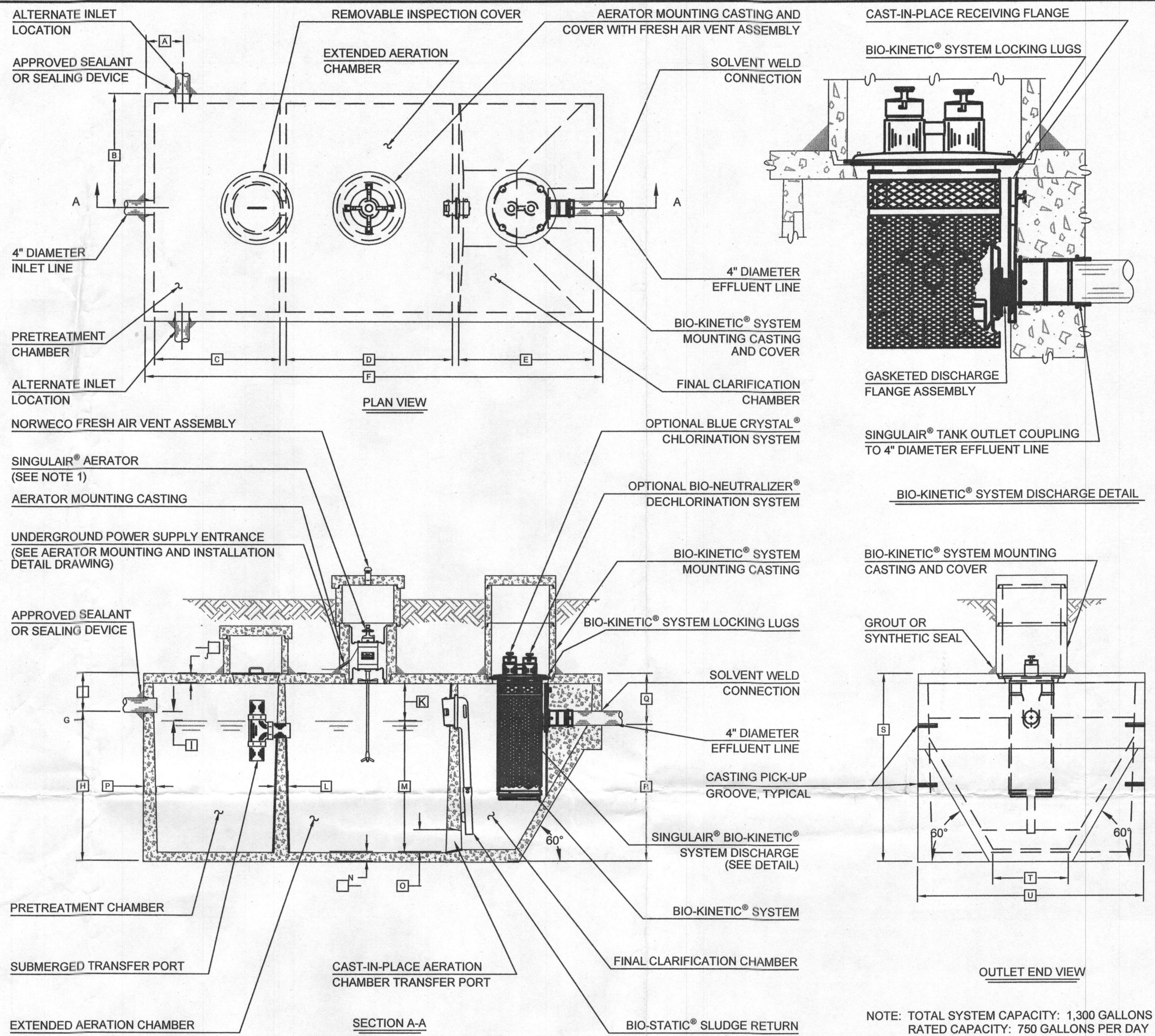
TRENCH INFORMATION			
TRENCH 1-1	52 LF	TRENCH 2-1	52 LF
TRENCH LENGTH	631.4	TRENCH LENGTH	631.5
GROUND ELEVATION	628.4	GROUND ELEVATION	628.5
INVERT ELEVATION	622.4	INVERT ELEVATION	622.5
MAX. BOTTOM ELEV.		MAX. BOTTOM ELEV.	
TRENCH 1-2	52 LF	TRENCH 2-2	52 LF
TRENCH LENGTH	631.7	TRENCH LENGTH	631.1
GROUND ELEVATION	628.7	GROUND ELEVATION	628.1
INVERT ELEVATION	622.7	INVERT ELEVATION	622.1
MAX. BOTTOM ELEV.		MAX. BOTTOM ELEV.	
TRENCH 1-3	52 LF		
TRENCH LENGTH	631.1		
GROUND ELEVATION	628.1		
INVERT ELEVATION	622.1		
MAX. BOTTOM ELEV.			



TYPICAL TRENCH DETAIL
NOT TO SCALE

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	

norweco
LOW-PROFILE SINGULAIR® BIO-KINETIC® WASTEWATER TREATMENT SYSTEM
MODEL TNTLP-600 GPD
PC-5-7091



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

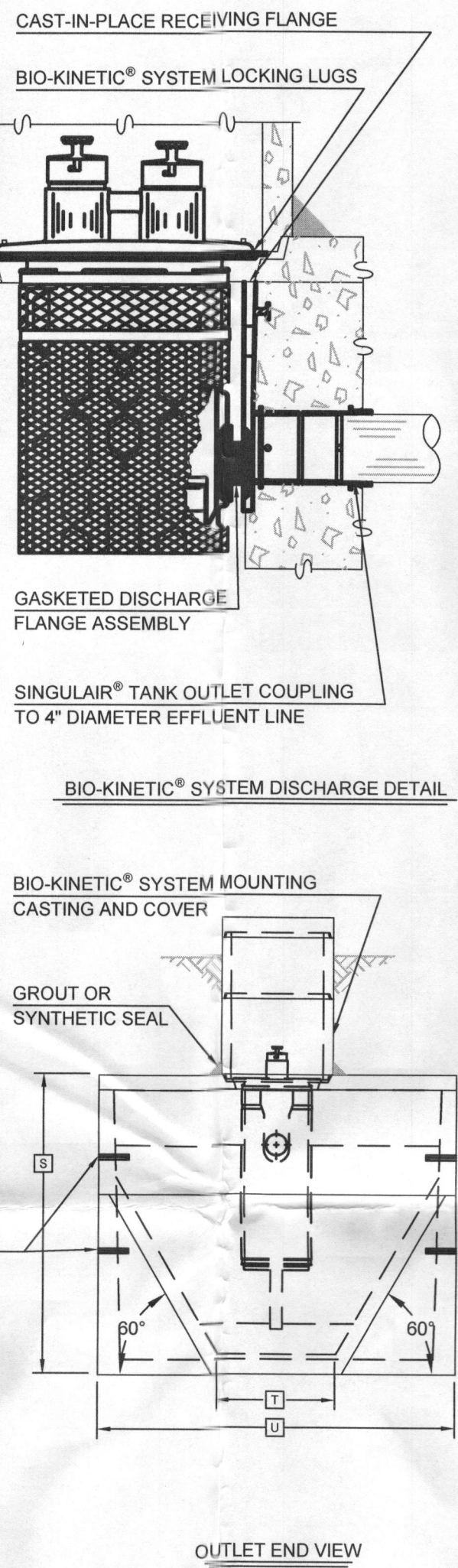
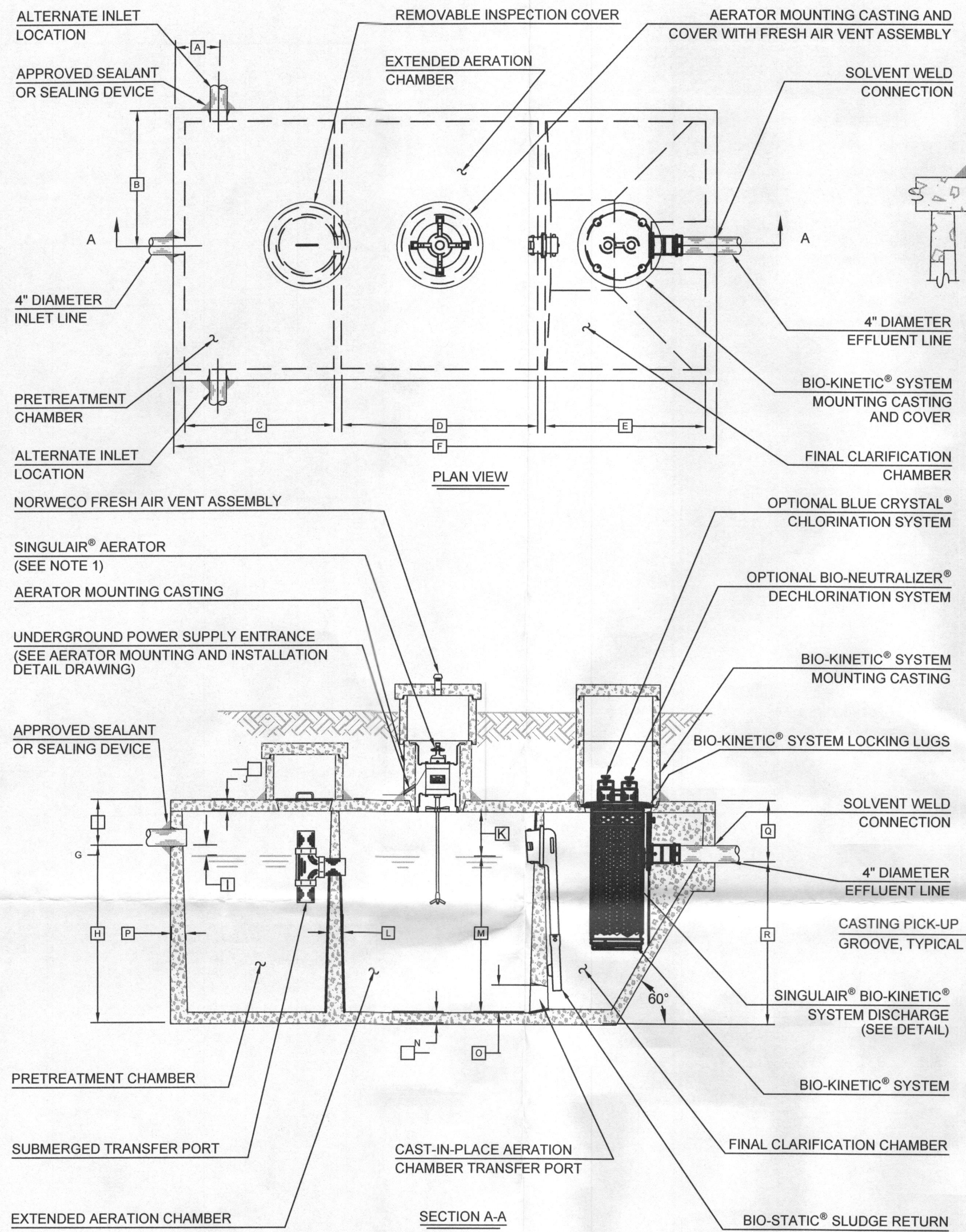
SEE MANUFACTURER'S SPECIFICATIONS FOR
DETAILS. WWW.NORWECO.COM

- Required BAT Site Plan 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 sit plan may be required.
 - The maximum depth of the BAT shall be per the manufacturer's specification, 3.0'.
 - The blower may not be located further from the tank than the manufacturer's specifications, 75'.
 - 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.

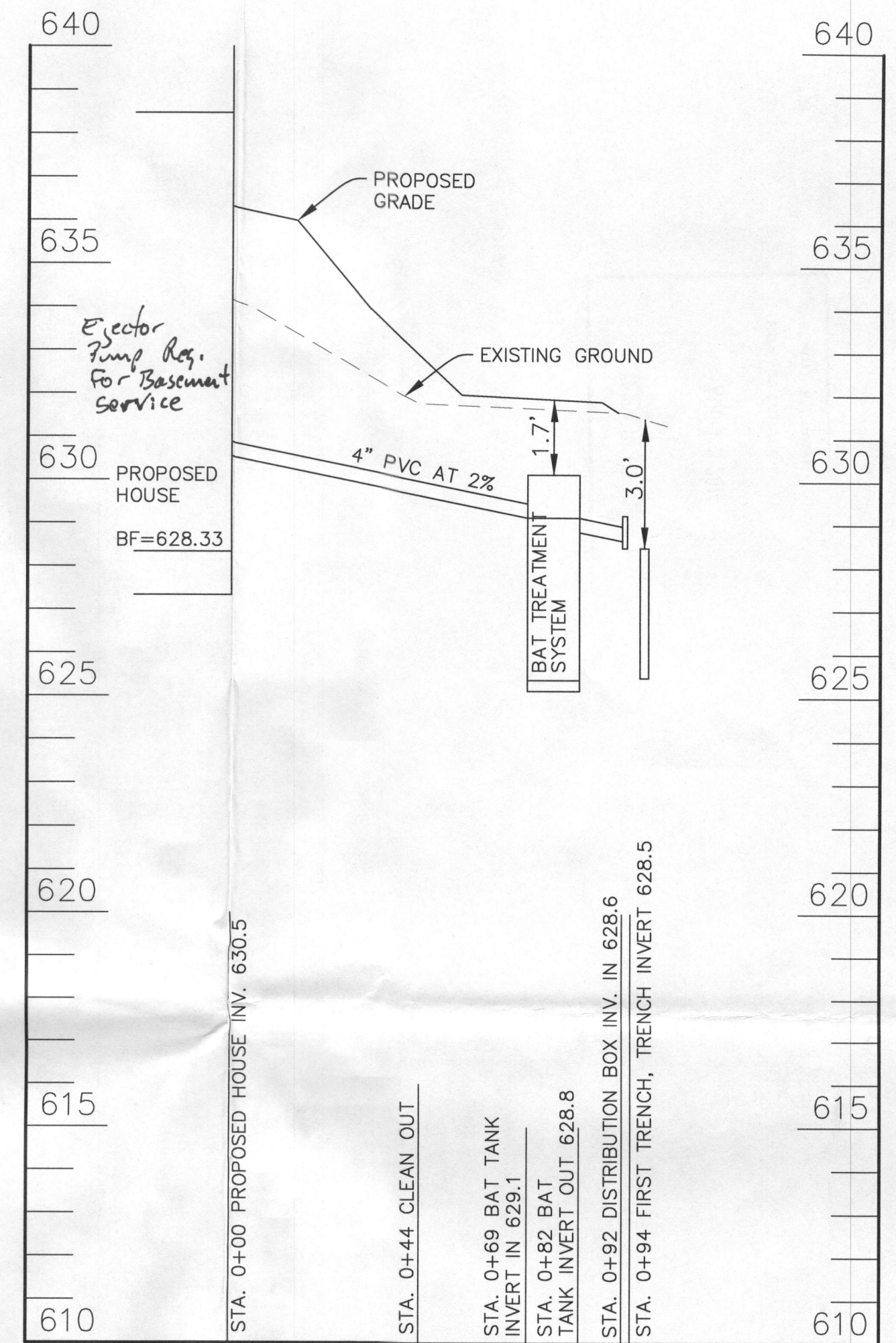
BENCHMARK ENGINEERING, INC.
ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS
8480 BALTIMORE NATIONAL PIKE ▲ SUITE 315
ELLCOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 ▲ FAX: 410-465-6644
BEI@BEI-CIVILENGINEERING.COM

SIGNATURE AND SEAL ARE FOR
CULVERT PROFILE ONLY:
Professional Certification. 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. 45577, Expiration Date: 6-08-2016.

OWNER/BUILDER: DR HORTON, INC. 1356 BEVERLY ROAD SUITE 300 McLEAN, VA 22101 PHONE: 571-723-0813 FAX: 800-551-5015	PROJECT: VISTA RIDGE LOT 10
LOCATION: 2034 DROVERS LANE COOKSVILLE, MD 21723 TAX MAP No. 8 - BLOCK No. 23 - PARCEL No. 176 4TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND TAX ID NUMBER 04-595485	TITLE: BUILDING PERMIT PLAN AND BAT SITE PLAN
HOUSE TYPE: SOMERSET	DATE: AUGUST 6, 2014 SEPTEMBER 12, 2014
DESIGN: JMC	DRAFT: JMC
SCALE: 1" = 30'	PROJECT NO. 1635 DRAWING 2 OF 2



NOTE: TOTAL SYSTEM CAPACITY: 1,300 GALLONS
 RATED CAPACITY: 750 GALLONS PER DAY
 PER MANUFACTURER.



SEWER PROFILE - LOT 10
 SCALE: VERTICAL 1"=3', HORIZONTAL 1"=30'

GENERAL NOTES:

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

SEE MANUFACTURERS 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	DATE: 3-26-07	REVISION: B
	LOW-PROFILE SINGULAIR® BIO-KINETIC® WASTEWATER TREATMENT SYSTEM MODEL TNTLP-600 GPD	DESIGNED BY: BDS	DRAWN BY: JMM
		DATE: 10-16-06	SCALE: NTS
			PC-5-7081

Required BAT Site Plan Notes

1. 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 sit plan may be required.
2. The maximum depth of the BAT shall be per the manufacturer's specification, 3.0'.
3. The blower may not be located further from the tank than the manufacturer's specifications, 75'.
4. The BAT system shall be maintained and operated for the life of the system.
5. The BAT shall be operated by and maintained by a certified service provider.
6. 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.
7. Electrical work for the BAT installation must be performed by a licensed electrician.
8. An agreement and Easement must be completed and signed by all applicable parties, and recorded in Land Records of Howard County.
9. The Health Department requires documentation for the start-up certification from the manufacturer prior to final approval of the installation.

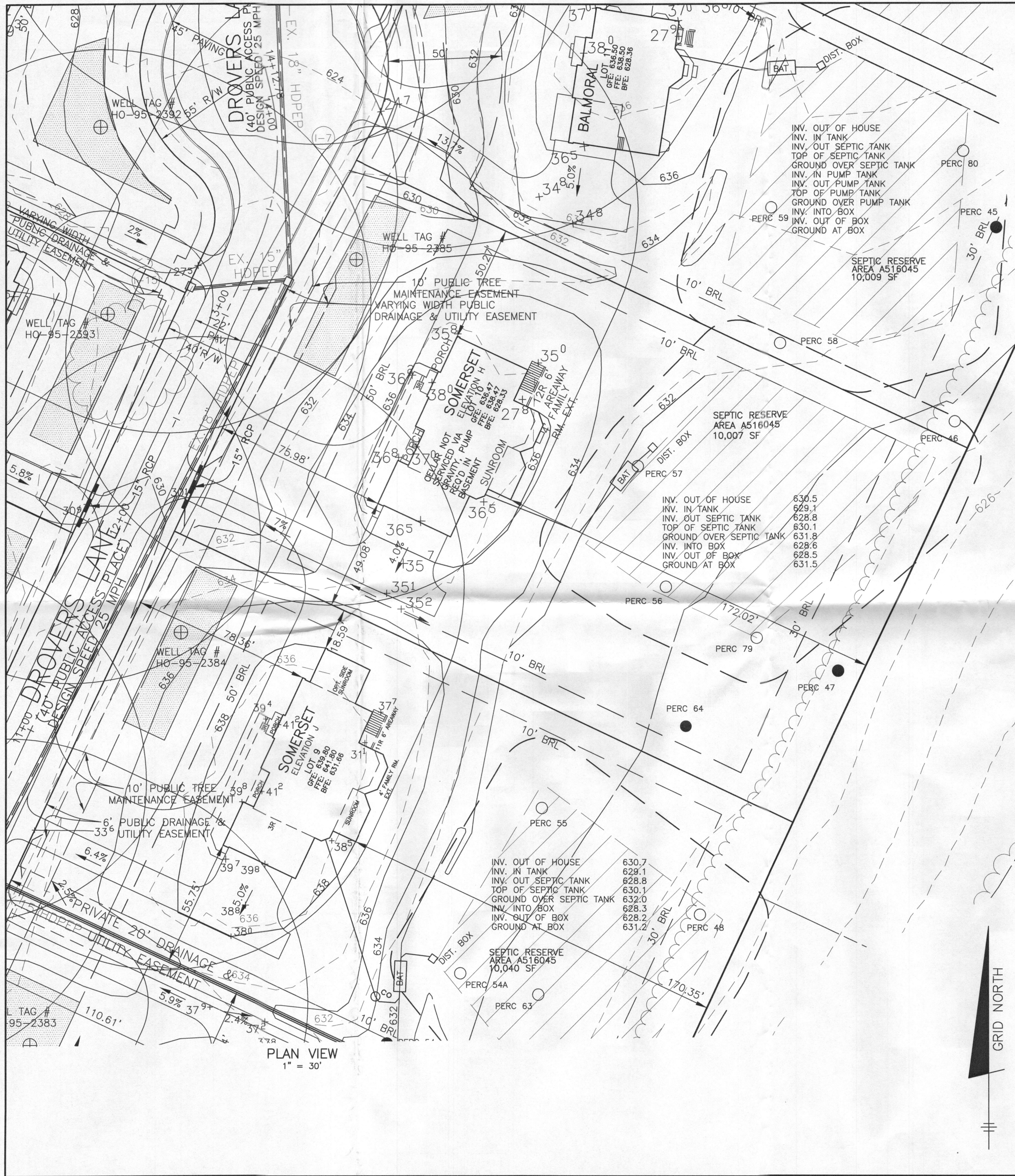
BENCHMARK ENGINEERING, INC.

8480 BALTIMORE NATIONAL PIKE ▲ SUITE 315
 ELLICOTT CITY, MARYLAND 21043
 PHONE: 410-465-6105 ▲ FAX: 410-465-6644
 BEI@BEI-CIVILENGINEERING.COM

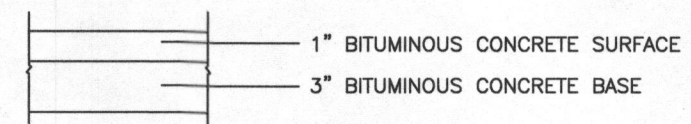
SIGNATURE AND SEAL ARE FOR CULVERT PROFILE ONLY:

Professional Certification: 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. 45577, Expiration Date: 6-08-2016.

OWNER/BUILDER: DR HORTON, INC. 1356 BEVERLY ROAD SUITE 300 MCLEAN, VA 22101 PHONE: 571-723-0813 FAX: 800-551-5015	PROJECT: VISTA RIDGE LOT 10
LOCATION: 2034 DROVERS LANE COOKSVILLE, MD 21723 TAX MAP No. 8 - BLOCK No. 23 - PARCEL No. 176 4TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND TAX ID NUMBER 04-595485	
TITLE: BUILDING PERMIT PLAN AND BAT SITE PLAN	
HOUSE TYPE: SOMERSET	
DATE: JULY 31, 2014	PROJECT NO. 1635
DESIGN: JMC	DRAFT: JMC
SCALE: 1" = 30'	DRAWING 2 OF 2

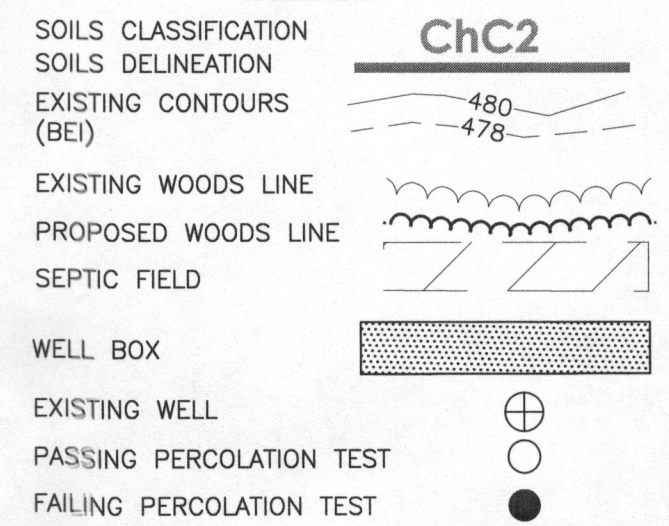


SOILS LEGEND		
MAP SYMBOL	SOIL GROUP	SOIL TYPE
GnB2	C	GLENVILLE, SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
MgC2	B	MANOR GRAVELLY LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED
* INDICATES HYDRIC SOILS TAKEN FROM SOILS SURVEY, ISSUED JULY 1968, MAP NO. 33		



PAVING SECTION
NOT TO SCALE

LEGEND



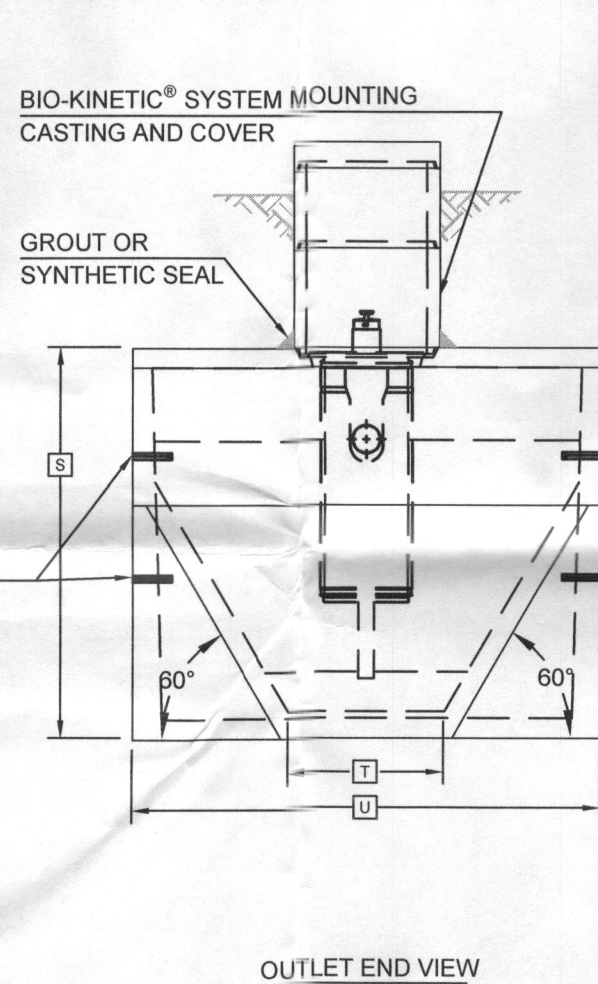
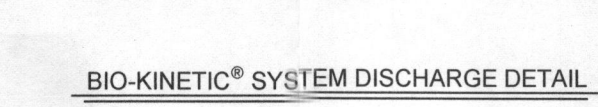
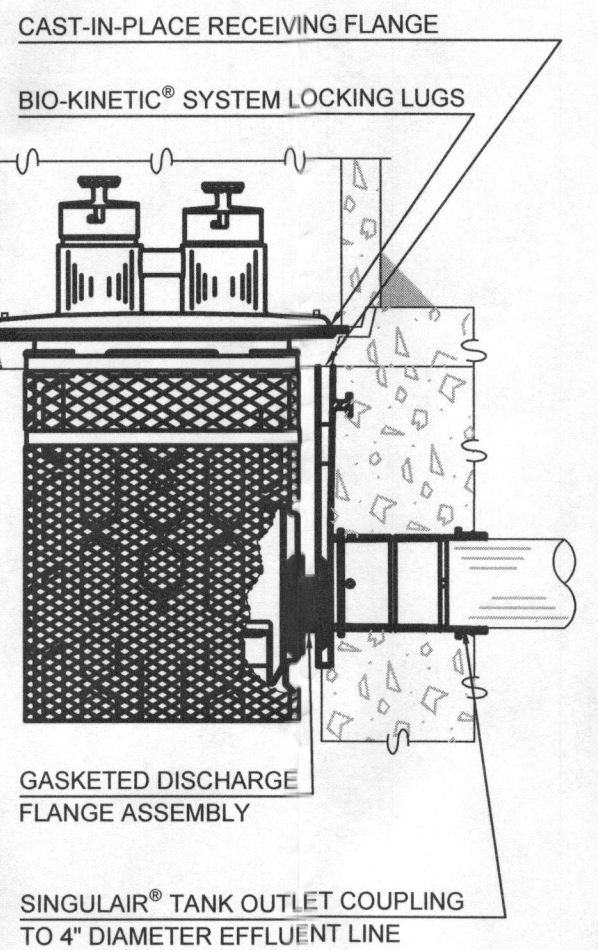
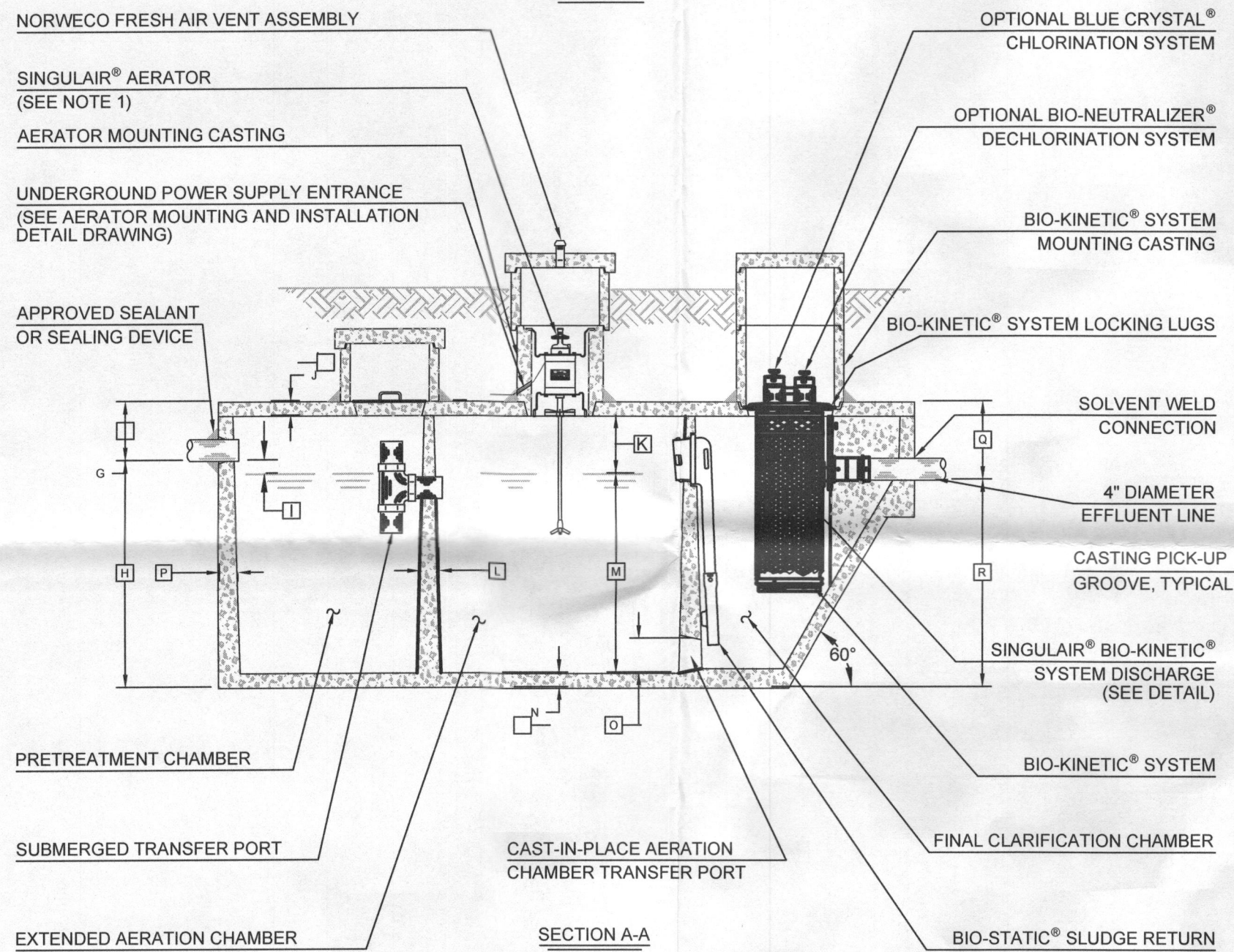
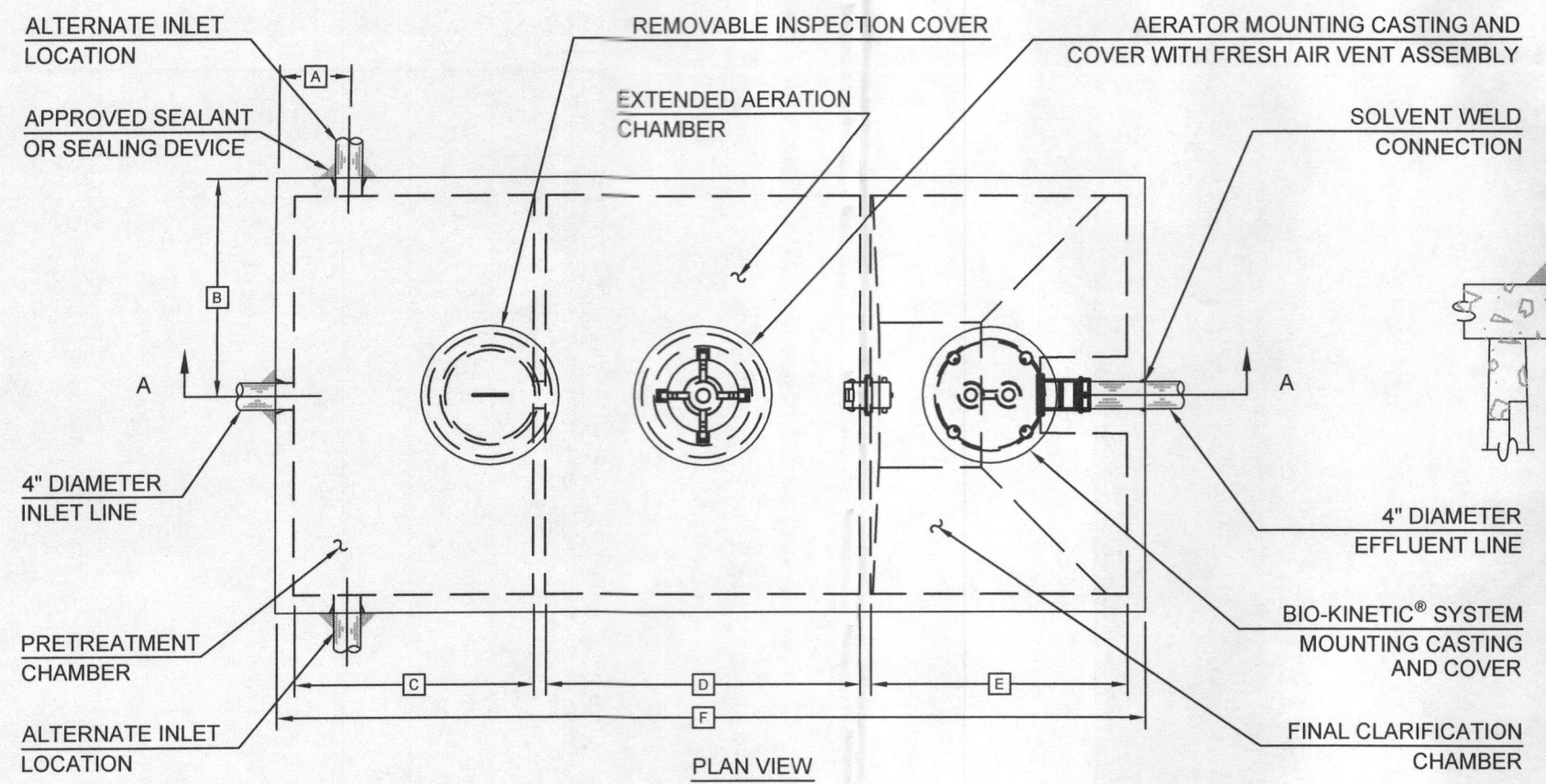
BUILDING PERMIT PLAN NOTES:

1. THE LOT SHOWN HEREON WAS RECORDED ON THE PLAT FOR VISTA RIDGE, PLAT Nos. 22430-22435. REFER TO THE PLATS FOR LOT DIMENSIONS, LOT AREAS, ALL EASEMENTS AND CONDITIONS.
2. SEDIMENT AND EROSION CONTROLS WERE APPROVED BY HOWARD SOIL CONSERVATION DISTRICT UNDER A GRADING PLAN AND MODIFIED FOR THIS SPECIFIC HOUSE.
3. TOPOGRAPHY SHOWN HEREON IS TAKEN FROM THE APPROVED ROAD CONSTRUCTION PLANS AND TOPOGRAPHIC INFORMATION PROVIDED BY ACCUBID, INC., ON OR ABOUT JUNE 27, 2013.
4. ALL SEDIMENT AND EROSION CONTROL FEATURES USED ON THIS SITE SHALL COMPLY WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
5. ALL DRAINAGE AND STORMWATER MANAGEMENT FEATURES USED ON THIS SITE MUST COMPLY WITH THE APPROVED ROAD CONSTRUCTION PLANS EXCEPT AS WAIVED.
6. THE EXISTING WELL SHOWN ON THIS PLAN, HO-95-2385, HAS BEEN FIELD LOCATED BY BENCHMARK ENGINEERING, INC., AND IS ACCURATELY SHOWN.
7. THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
8. ANY CHANGES TO A PRIVATE SEWAGE EASEMENT OR WELL BOX SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
9. STORMWATER MANAGEMENT FOR THIS LOT WAS DESIGNED TO BE PROVIDED BY BOTH POND #1, A POCKET POND, AND IN POND #2, A MICROPOL ED POND.
10. THE DRIVEWAY CULVERT REQUIRED FOR THIS LOT, IS SIZED IN ACCORDANCE WITH THE DRIVEWAY CULVERT REPORT SUBMITTED TO DEVELOPMENT ENGINEERING DIVISION IN CONJUNCTION WITH THIS PERMIT PLAN.
11. THIS PLAN HAS BEEN REVISED TO REFLECT THE LIMITS OF GRADING AS SHOWN ON F-08-136.

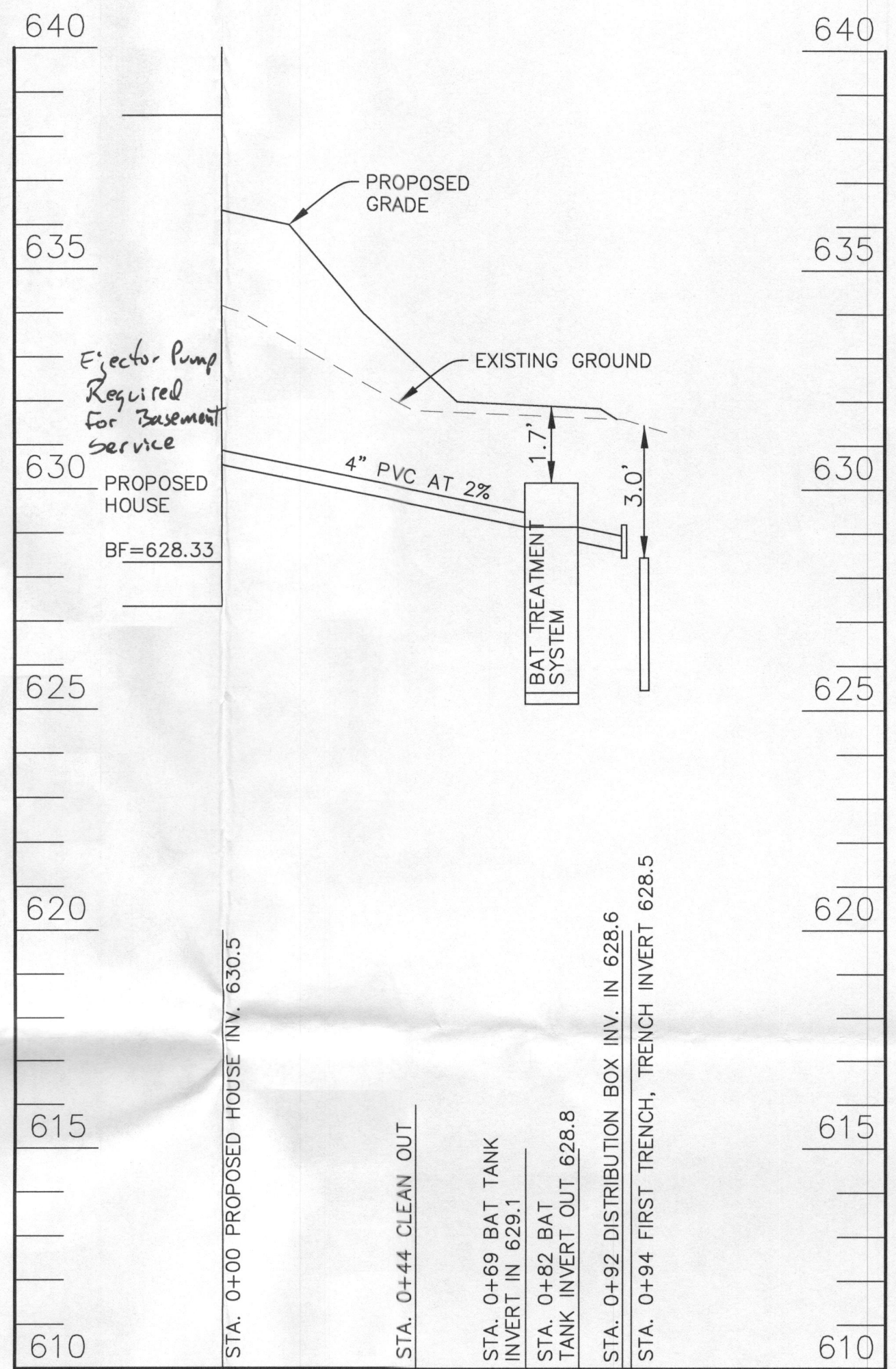
BENCHMARK
ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS
ENGINEERING, INC.

8480 BALTIMORE NATIONAL PIKE ▲ SUITE 315
ELLCOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 ▲ FAX: 410-465-6644
BEI@BEI-CIVILENGINEERING.COM

<p>OWNER/BUILDER: DR HORTON, INC. 1356 BEVERLY ROAD SUITE 300 McLEAN, VA 22101 PHONE: 571-723-0813 FAX: 800-551-5015</p>	<p>PROJECT: VISTA RIDGE LOT 10</p> <p>LOCATION: 2034 DROVERS LANE COOKSVILLE, MD 21723 TAX MAP No. 8 - BLOCK No. 23 - PARCEL No. 176 4TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND</p> <p>TITLE: BUILDING PERMIT PLAN AND BAT SITE PLAN</p> <p>HOUSE TYPE: SOMERSET</p> <p>DATE: JULY 29, 2014 PROJECT NO. 1635</p> <p>SCALE: 1" = 30' DRAWING 1 OF 2</p>
DESIGN: JMC	DRAFT: JMC



NOTE: TOTAL SYSTEM CAPACITY: 1,300 GALLONS
 RATED CAPACITY: 750 GALLONS PER DAY
 PER MANUFACTURER.



SEWER PROFILE - LOT 10
 SCALE: VERTICAL 1"=3', HORIZONTAL 1"=30'

GENERAL NOTES:

- SINGULAIR® AERATOR, AS TESTED AND ACCEPTED BY NSF, OPERATING 60 MINUTES ON / 60 MINUTES OFF.
- FALL THROUGH SINGULAIR® 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 SINGULAIR® DISTRIBUTOR FOR ELECTRICAL REQUIREMENTS.

SEE MANUFACTURERS 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	

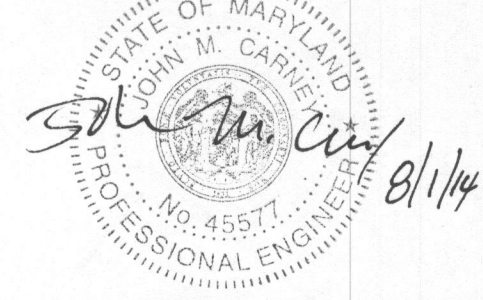
U.S. AND FOREIGN PATENTS PENDING	norweco	3-26-07	B
© MMVII	LOW-PROFILE SINGULAIR® BIO-KINETIC® WASTEWATER TREATMENT SYSTEM MODEL TNTLP-600 GPD	DATE	10-16-06
		DESIGNER	BDS
		DRAWN BY	JMM
		DATE	10-16-06
		PROJECT NO.	NTS
		PC-5-7091	

Required BAT Site Plan 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 sit plan may be required.
- The maximum depth of the BAT shall be per the manufacturer's specification, 3.0'.
- The blower may not be located further from the tank than the manufacturer's specifications, 75'.
- 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.

BENCHMARK
 ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS
ENGINEERING, INC.
 8480 BALTIMORE NATIONAL PIKE ▲ SUITE 315
 ELLICOTT CITY, MARYLAND 21143
 PHONE: 410-465-6105 ▲ FAX: 410-465-6644
 BEI@BEI-CIVILENGINEERING.COM

SIGNATURE AND SEAL ARE FOR CULVERT PROFILE ONLY:
 Professional Certification. 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. 45577, Expiration Date: 6-08-2016.



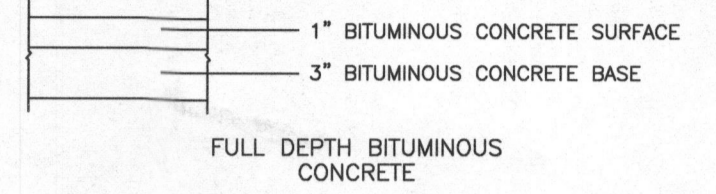
OWNER/BUILDER: DR HORTON, INC. 1356 BEVERLY ROAD SUITE 300 McLEAN, VA 22101 PHONE: 571-723-0813 FAX: 800-551-5015	PROJECT: VISTA RIDGE LOT 10
	LOCATION: 2034 DROVERS LANE COOKSVILLE, MD 21723 TAX MAP No. 8 - BLOCK No. 23 - PARCEL No. 176 4TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND TAX ID NUMBER 04-595485
DESIGN: JMC	TITLE: BUILDING PERMIT PLAN AND BAT SITE PLAN
DRAFT: JMC	HOUSE TYPE: SOMERSET
DATE: JULY 31, 2014	PROJECT NO. 1635
SCALE: 1" = 30'	DRAWING 2 OF 2



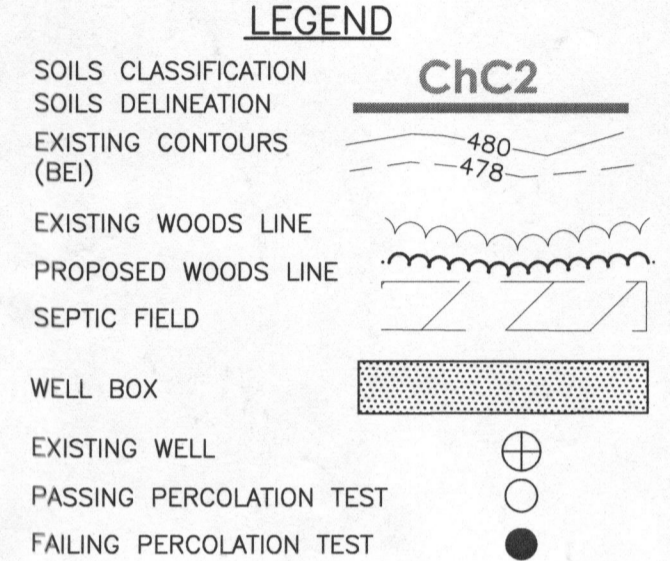
PLAN VIEW
1" = 30'

SOILS LEGEND		
MAP SYMBOL	SOIL GROUP	SOIL TYPE
GnB2	C	GLENVILLE, SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
MgC2	B	MANOR GRAVELLY LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED
-	-	-

* INDICATES HYDRIC SOILS
TAKEN FROM SOILS SURVEY, ISSUED JULY 1968, MAP NO. 33



PAVING SECTION
NOT TO SCALE



- BUILDING PERMIT PLAN NOTES:**
1. THE LOT SHOWN HEREON WAS RECORDED ON THE PLAT FOR VISTA RIDGE, PLAT Nos. 22430-22435. REFER TO THE PLATS FOR LOT DIMENSIONS, LOT AREAS, ALL EASEMENTS AND CONDITIONS.
 2. SEDIMENT AND EROSION CONTROLS WERE APPROVED BY HOWARD SOIL CONSERVATION DISTRICT UNDER A GRADING PLAN AND MODIFIED FOR THIS SPECIFIC HOUSE.
 3. TOPOGRAPHY SHOWN HEREON IS TAKEN FROM THE APPROVED ROAD CONSTRUCTION PLANS AND TOPOGRAPHIC INFORMATION PROVIDED BY ACCUBID, INC., ON OR ABOUT JUNE 27, 2013.
 4. ALL SEDIMENT AND EROSION CONTROL FEATURES USED ON THIS SITE SHALL COMPLY WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
 5. ALL DRAINAGE AND STORMWATER MANAGEMENT FEATURES USED ON THIS SITE MUST COMPLY WITH THE APPROVED ROAD CONSTRUCTION PLANS EXCEPT AS WAIVED.
 6. THE EXISTING WELL SHOWN ON THIS PLAN, HO-95-2385, HAS BEEN FIELD LOCATED BY BENCHMARK ENGINEERING, INC., AND IS ACCURATELY SHOWN.
 7. THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
 8. ANY CHANGES TO A PRIVATE SEWAGE EASEMENT OR WELL BOX SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
 9. STORMWATER MANAGEMENT FOR THIS LOT WAS DESIGNED TO BE PROVIDED BY BOTH POND #1, A POCKET POND, AND IN POND #2, A MICROPOLYMER POND.
 10. THE DRIVEWAY CULVERT REQUIRED FOR THIS LOT, IS SIZED IN ACCORDANCE WITH THE DRIVEWAY CULVERT REPORT SUBMITTED TO DEVELOPMENT ENGINEERING DIVISION IN CONJUNCTION WITH THIS PERMIT PLAN.
 11. THIS PLAN HAS BEEN REVISED TO REFLECT THE LIMITS OF GRADING AS SHOWN ON F-08-136.

BENCHMARK
ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS
ENGINEERING, INC.

8480 BALTIMORE NATIONAL PIKE ▲ SUITE 315
ELLICOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 ▲ FAX: 410-465-6644
BEI@BEI-CIVILENGINEERING.COM

OWNER/BUILDER: DR HORTON, INC. 1356 BEVERLY ROAD SUITE 300 McLEAN, VA 22101 PHONE: 571-723-0813 FAX: 800-551-5015	PROJECT: VISTA RIDGE LOT 10
LOCATION: 2034 DROVERS LANE COOKSVILLE, MD 21723 TAX MAP No. 8 - BLOCK No. 23 - PARCEL No. 176 4TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND	TITLE: BUILDING PERMIT PLAN AND BAT SITE PLAN
HOUSE TYPE: SOMERSET	DATE: JULY 29, 2014
DESIGN: JMC	DRAFT: JMC
PROJECT NO. 1635	SCALE: 1" = 30'
DRAWING 1 OF 1	