



Howard County
Health Department

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: 8-2-16 **ONSITE SEWAGE DISPOSAL SYSTEM** P 558814-C

APPROVAL DATE: 10/20/16 **PERMIT: CONSTRUCTION** A _____

PROPERTY ADDRESS: 5015 Altogether Way

SUBDIVISION: Greenberry LOT: 23 TAX ID: 05-598686

CONTRACTOR: South Carroll Backhoe EMAIL: scbackhoe@comcast.net

CONTRACTOR ADDRESS: 4410 Salem Bottom Road PHONE: 410-596-3618

CONTRACTOR CERTIFIED FOR BAT INSTALLATION: MDE MANUFACTURER:

PROPERTY OWNER: NVR Inc. EMAIL: _____

OWNER ADDRESS: 9720 Patuxent Woods Road PHONE: 410-379-5956

BAT UNIT MODEL: Hoot H-600¹⁰⁰⁰BNR PUMP SIZE: 0.4 PUMP TANK CAPACITY: 2000

OPERATION & MAINTENANCE AGREEMENT DATE SIGNED: 2/25/16 DATE RECORDED: 2/25/16

DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 6 APPLICATION RATE: 0.8

TRENCHES:	LINEAR FEET REQUIRED: <u>188</u>	INLET DEPTH: <u>4</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>8</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>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:		

ISSUED BY: Robert Bricker ISSUE DATE: 8-2-16 EXPIRATION DATE: 8-2-17

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 16003679

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

See separate sheet for
as-built

ROAD NAME

TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	4'	8'
NUMBER OF TRENCHES		4
TOTAL LENGTH		184'
ABSORPTION AREA		552' + SIDEWALL
DISTRIBUTION BOX LEVEL		YES
DISTRIBUTION BOX BAFFLE		Elbow
DISTRIBUTION BOX PORT		YES

SEPTIC TANK DATA

SEPTIC TANK I LEVEL	YES
MANUFACTURER	MAYER BROS.
CAPACITY	1000 GAL
SEAM LOC	TOP
TANK LID DEPTH	2.5'
BAFFLES	YES
BAFFLE FILTER	NO
MANHOLE LOC	Front
6" PORT LOC	NONE
WATERTIGHT TEST	NO
SLOTTED	NO
DATE ON LID	---
PUMP/SEPTIC TANK LEVEL	YES
MANUFACTURER	MAYER BROS.
CAPACITY	1000 ² /2000 ³ GAL
SEAM LOC	TOP
TANK LID DEPTH	3' ² /3-3.5' ³
BAFFLES	Front of Pump Tank
BAFFLE FILTER	NO
MANHOLE LOC	Rear, F+R
6" PORT LOC	NONE
WATERTIGHT TEST	Pump Tank
SLOTTED	NO ² /YES ³
DATE ON LID	---

* 1/2 hp pump (Franklin)

* Both 2 + 3 have traffic-bearing lids

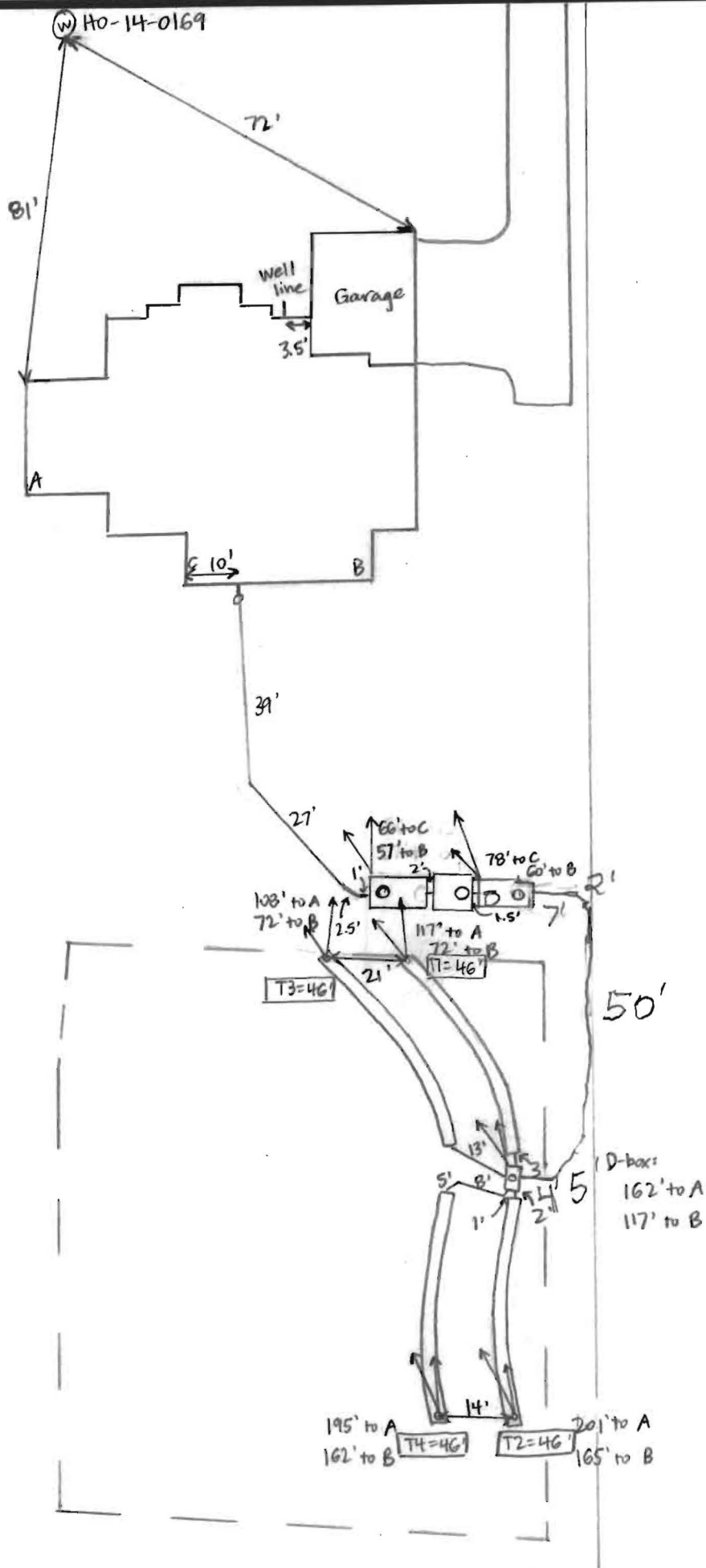
PRE-CONSTRUCTION:

9/6/16 Met S. Carroll on site for layout. All 3 tanks staked, SDA corners marked on west edge, trees marked on east edge. Shot contour and laid out 4x4' trenches. (SC)

INSTALLATION: 9/7/16 T2 finished + left open. 3.5-4' to stone, 3' wide S. Carroll digging T4, 8' bottom. Old driveway ran through ends of T2 + T4 - gravel just under surface. (SC) 9/7/16 T4 finished, 3.5-4' to stone. (SC) 9/8/16 T1 + T3 complete. T1 open at ends and T3 open. 3' wide, 3.5' to stone. D-box installed + connected to trenches. (SC) 9/9/16 On site while Mayer Bros. is setting trash tank. Hoot + pump tanks will be traffic-bearing b/c sewer line comes out deep under footer. House connection made. (SC) 9/15/16 Hoot tank set. On site while pump tank is being set. Patches on bottom of tank - S. Carroll will watertight test prior to backfilling. Pump tank has 2 compartments w/ slot. (SC) 9/22/2016 Pump line installed, Pump tank

FINAL INSPECTOR Sarah Collins DATE OF APPROVAL 10/20/16
 watertight tested, (BB) Need BAT startup certification. 10/19/16 On site for Hoot startup. Alarm sounds, pump pumps effluent to D-box. (SC) 10/20/16 BAT startup received. (SC)

NOT TO SCALE



Letter of Satisfaction

Hoot System Installation

Address of Property: 5015 Altogether Way
Clarksville, MD, 21029

Date of Final Inspection: 10/26/16

Installer: South Carroll Backhoe Service

Hoot Technician/Inspector: Mike Sample

I hereby certify that the Hoot system installed at the property listed above has been installed according to proper Hoot installation practices. I have also verified the startup of the system and it is in proper working order.

Sincerely,

W Michael Dayer
Name of Inspector
Mayer Bros., Inc.

PH: 410-796-1434

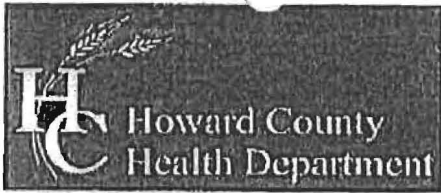
WBE

FX: 410-796-1438

www.mayerbrosprecast.com

Grease Interceptors, Grease Solutions, Aerobic Treatment Units, Septic Tanks, Holding Tanks, Storm Water Structures, Hydroceptors,
Bench Barrier, Water Meter Vaults, Sectional Valve Vaults, Top Slabs, Curb Heads, Curb Bumpers,
Custom Precast Products

lot 23



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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 15th day of November, 2015, among EMMANUEL AGORMEDA AND NVR, 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 5015 Altogether Way, Clarksville, MD 21029, in the S 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 PLAT # 23453

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 HOOT 1000.

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
40
TR

LR - Agreement
Recording Fee 20.00
Grantor/Grantee Name:
Agormeda
Reference/Cont. no1 #:
125
LR - Agreement
Surcharge 40.00
Subtotal: 60.00
Total: 120.00
02/25/2016 03:03 CC13-SR
#5855429 C00503 -
Howard Co
Columbia/CO05.03.04 -
Register 04

JW 8/8/2014

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.

Beit Nyfon 2/23/2016
Howard County Health Department

[Signature] 11/23/15
Owner #1 Signature Date

NVR INC
Owner #1 Print Name

[Signature] 11/16/15
Buyer #1 Signature Date

Emmanuel T Agor meda
Buyer #1 Print Name

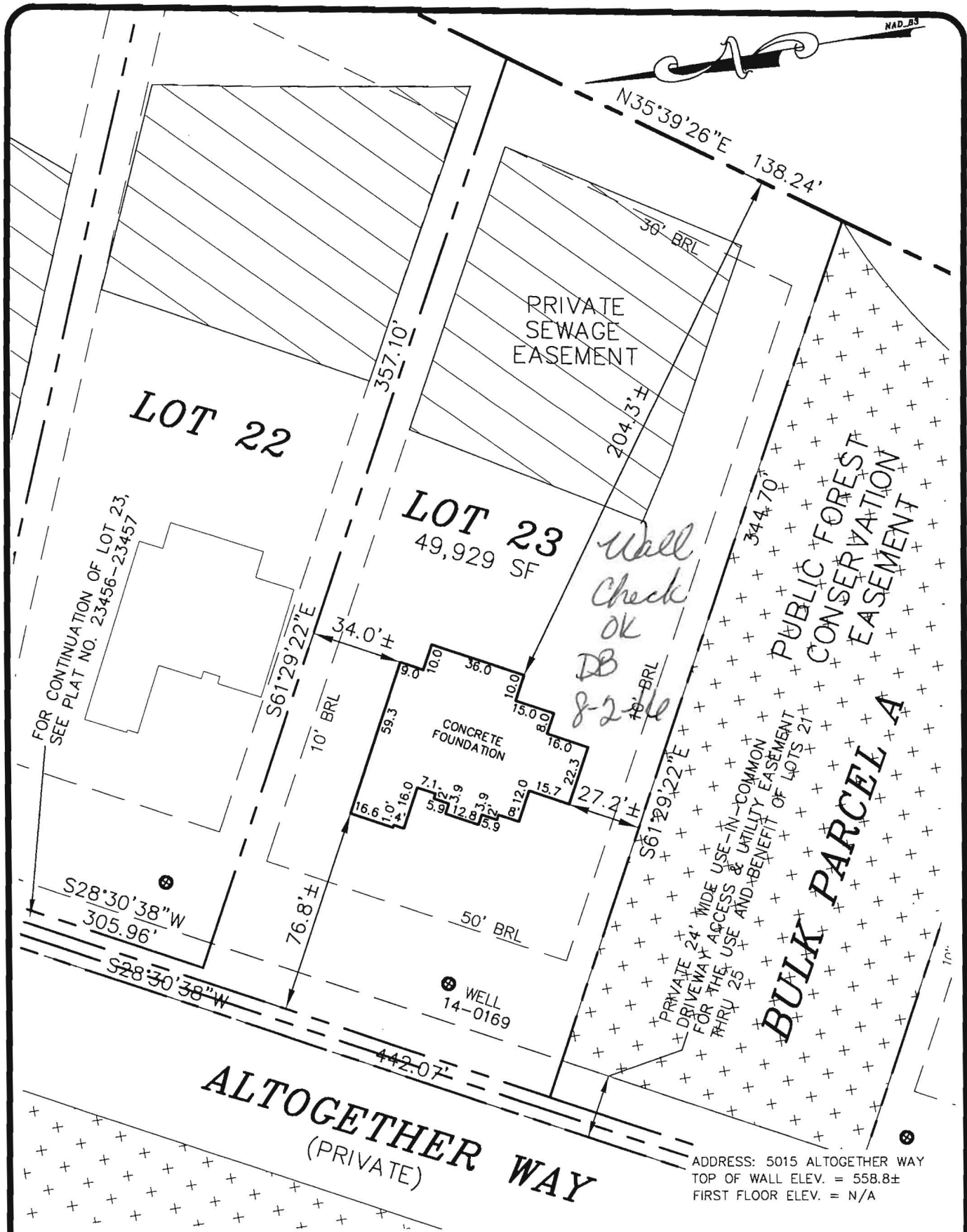
Owner #2 Signature Date

Owner #2 Print Name

Buyer #2 Signature Date

Buyer #2 Print Name

JW R/012014



ALTOGETHER WAY
(PRIVATE)

ADDRESS: 5015 ALTOGETHER WAY
TOP OF WALL ELEV. = 558.8±
FIRST FLOOR ELEV. = N/A

LOT 23
GREENBERRY

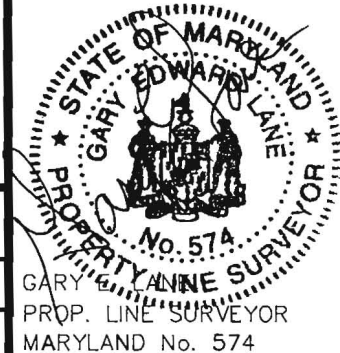
PLATS 23453-23461
ELECTION DISTRICT No. 5
HOWARD COUNTY, MARYLAND

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. 574, EXPIRATION DATE: 03/21/17.

THE INFORMATION SHOWN HAS BEEN ESTABLISHED BY CURRENT ACCEPTABLE SURVEY PROCEDURES AND FROM AVAILABLE RECORD INFORMATION. THIS DRAWING IS TO BE USED FOR TITLE TRANSFER FINANCING, OR REFINANCING ONLY AND IS NOT TO BE USED FOR THE ESTABLISHMENT OF PROPERTY LINES, LOCATION OF FENCES, GARAGES, BUILDINGS, OR OTHER EXISTING OR FUTURE IMPROVEMENTS.

MILDENBERG
BOENDER, & ASSOC., INC.

Engineers Planners Surveyors
7350-B Grace Drive, Columbia, MD 21044
(410) 997-0296 Balt. (410) 997-0298 Fax.



FOUNDATION	DATE: 07/06/16	FINAL LOCATION	DATE: N/A
DRAWN BY: MES	CHECKED BY: GEL	SCALE: 1"=50'	
PROJECT NO.: 15-005	LOCATION DRAWING		

Bricker, Robert

From: Johnson, Ryan <ryjohnso@nvrinc.com>
Sent: Wednesday, September 09, 2015 3:53 PM
To: Bricker, Robert
Cc: Faris, Taylor
Subject: RE: Greenberry homes

Robert,

Good afternoon. Thanks for reaching out. I think we will opt to not install the add'l trench absorption based on speculation of future bath/bedroom in the basement. If, however, we did want to pursue this add'l absorption, what would the revision process consist of (time frame)?

I am cc'ing Taylor Faris as well as he is working closely with Jim Kerwin on these Greenberry permits.

Thank you again for your time in reviewing these lots at Greenberry.

Ryan

Ryan Johnson
Production Manager

P: 410-379-3396
C: 443-309-5572
F: 410-379-2430

ryjohnso@nvrinc.com
www.nvhomes.com
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From: Bricker, Robert [<mailto:RBricker@howardcountymd.gov>]
Sent: Wednesday, September 09, 2015 3:15 PM
To: Johnson, Ryan
Subject: Greenberry homes

Ryan,

Bricker, Robert

From: Faris, Taylor <tfaris@nvrinc.com>
Sent: Friday, September 18, 2015 4:08 PM
To: Bricker, Robert; Johnson, Ryan
Cc: Hanauer, Brent
Subject: RE: Greenberry homes

Robert,

Ryan is out of the office today, but I wanted to respond as quickly as possible. We have discussed the possibility of a customer finishing additional areas in their home, but do not want to design our plans speculating what they may do in the future. For lot 15, we would like to keep the Hoot 600 in the design for a true 6 bedroom home.

Hopefully this answers any concerns, but please let me know if you have any further questions. Please let me know if you have an idea when this BAT plan will be approved.

Have a good weekend

Taylor

Taylor Faris
Construction Cost Manager
Maryland East Division



P: 410-379-5956
C: 443-864-3479
F: 410-379-2430

9720 Patuxent Woods Drive
Columbia, MD 21046

tfaris@nvrinc.com
www.nvhomes.com
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From: Bricker, Robert [mailto:RBricker@howardcountymd.gov]
Sent: Friday, September 18, 2015 3:51 PM
To: Johnson, Ryan
Cc: Faris, Taylor
Subject: RE: Greenberry homes

Bricker, Robert

From: Faris, Taylor <tfaris@nvrinc.com>
Sent: Thursday, December 03, 2015 9:51 AM
To: Bricker, Robert
Cc: jhikmat@hotmail.com; maya@mba-eng.com
Subject: RE: Greenberry Lots 14 and 15

Robert,

Our main concern with these 2 homes was to stay consistent with the rest of the community. We made the decision to upsize to the HOOT 1000 tanks with 6 bedrooms or more, and will do so until the completion of the community. We are still designing our trenches to accommodate the actual amount of bedrooms purchased by the customer, not anticipating future changes.

The intent of these revisions was to maintain consistency throughout the community. We would like to keep the design for 6 bedroom homes on both lots, because that is what we are building.

Thank you
Taylor

Taylor Faris
Construction Cost Manager
Maryland East Division



P: 410-379-5956
C: 443-864-3479
F: 410-379-2430

9720 Patuxent Woods Drive
Columbia, MD 21046

tfaris@nvrinc.com
www.nvhomes.com
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From: Bricker, Robert [mailto:RBricker@howardcountymd.gov]
Sent: Thursday, December 03, 2015 9:26 AM
To: Faris, Taylor
Cc: jhikmat@hotmail.com; maya@mba-eng.com
Subject: RE: Greenberry Lots 14 and 15

Bricker, Robert

From: Faris, Taylor <tfaris@nvrinc.com>
Sent: Thursday, December 31, 2015 12:20 PM
To: Bricker, Robert
Subject: RE: Greenberry Lot 5

Robert,

We'd like to stay consistent with the rest of the community, and design our BAT system for what we are building. This home was sold with 5 bedrooms, so we would like to proceed with the original BAT design for 5 bedrooms.

Thanks and have a happy New Year
Taylor

Taylor Faris
Construction Cost Manager
Maryland East Division



P: 410-379-5956
C: 443-864-3479
F: 410-379-2430

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Columbia, MD 21046

tfaris@nvrinc.com
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From: Bricker, Robert [<mailto:RBricker@howardcountymd.gov>]
Sent: Thursday, December 31, 2015 10:22 AM
To: Faris, Taylor
Subject: Greenberry Lot 5

Taylor,

The proposal for construction of a 'Monticello II' at 5020 Bee Frances Way (Lot 5) includes a "finished lower level". It appears that the Bath will be installed. This creates a situation whereby a sixth (6th) bedroom may easily be created with construction of interior walls, enclosing an area where there is a window.

Do you want to install a septic system with adequate capacity to serve a six-bedroom SFD on Lot 5? '

ROBERT BRICKER, REHS/R.S., L.E.H.S.

SOILS TABLE (WITHIN LOD)

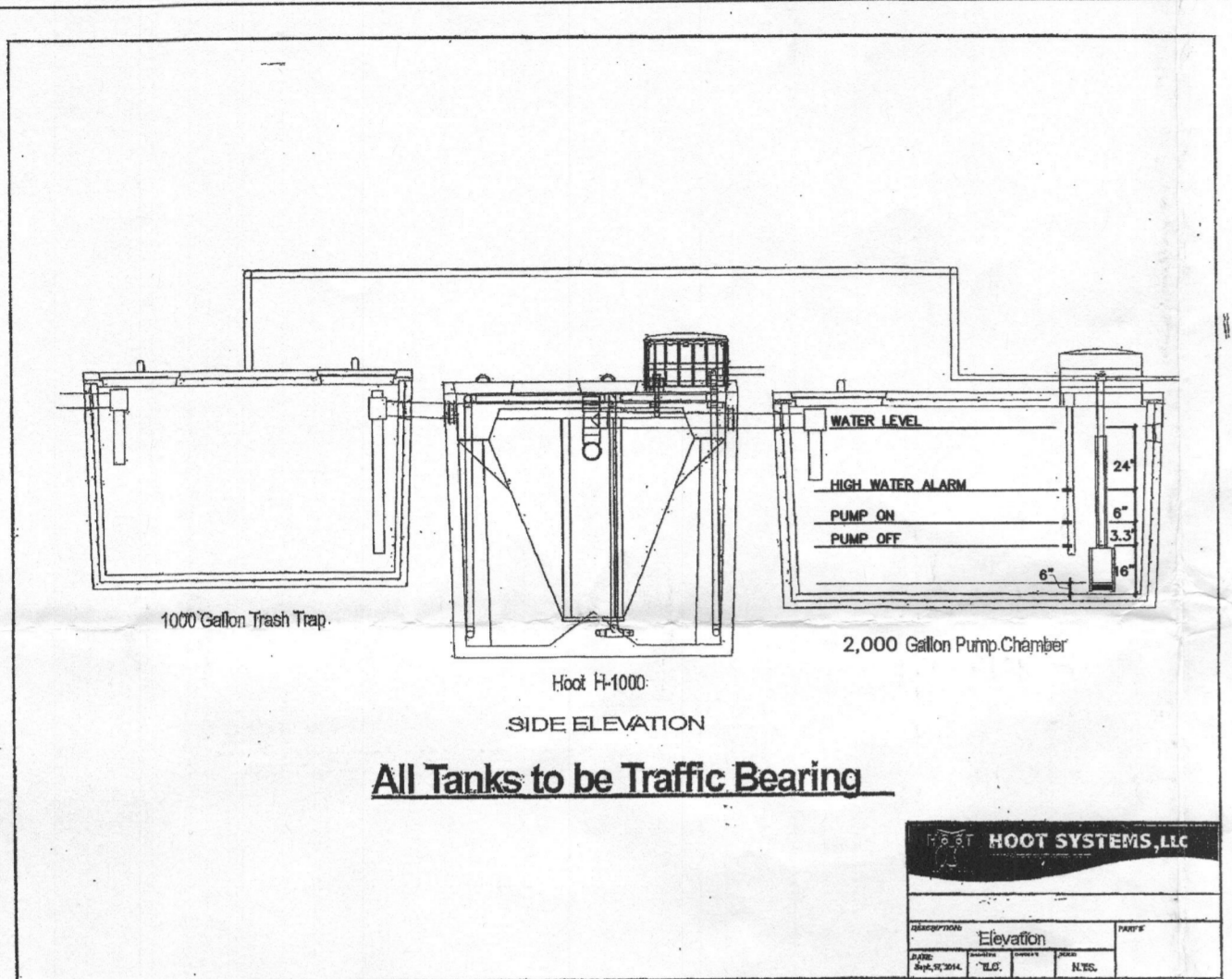
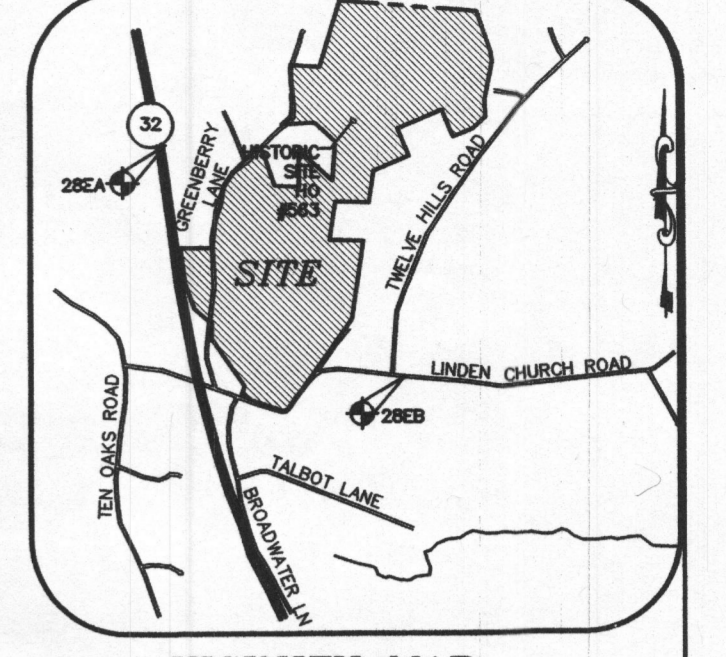
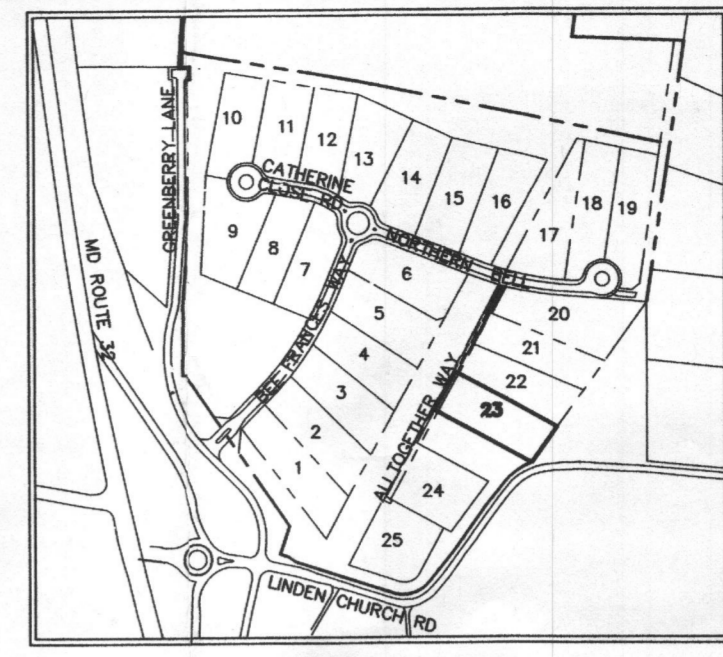
SYMBOL	RATING	NAME	K FACTOR
GgB	(B)	GLENELG LOAM, 3-8% SLOPES.	.20
GmB	(C)	GLENVILLE SILT LOAM, 3-8% SLOPES.	.35

PRIMARY TRENCH DATA

TRENCH	EX. GROUND ELEVATION	INVERT ELEVATION	BOTTOM OF TRENCH EL.
1	548.2	544.2	540.2
2	547.8	543.8	539.8
3	547.8	545.8	539.8
4	547.3	543.3	539.3

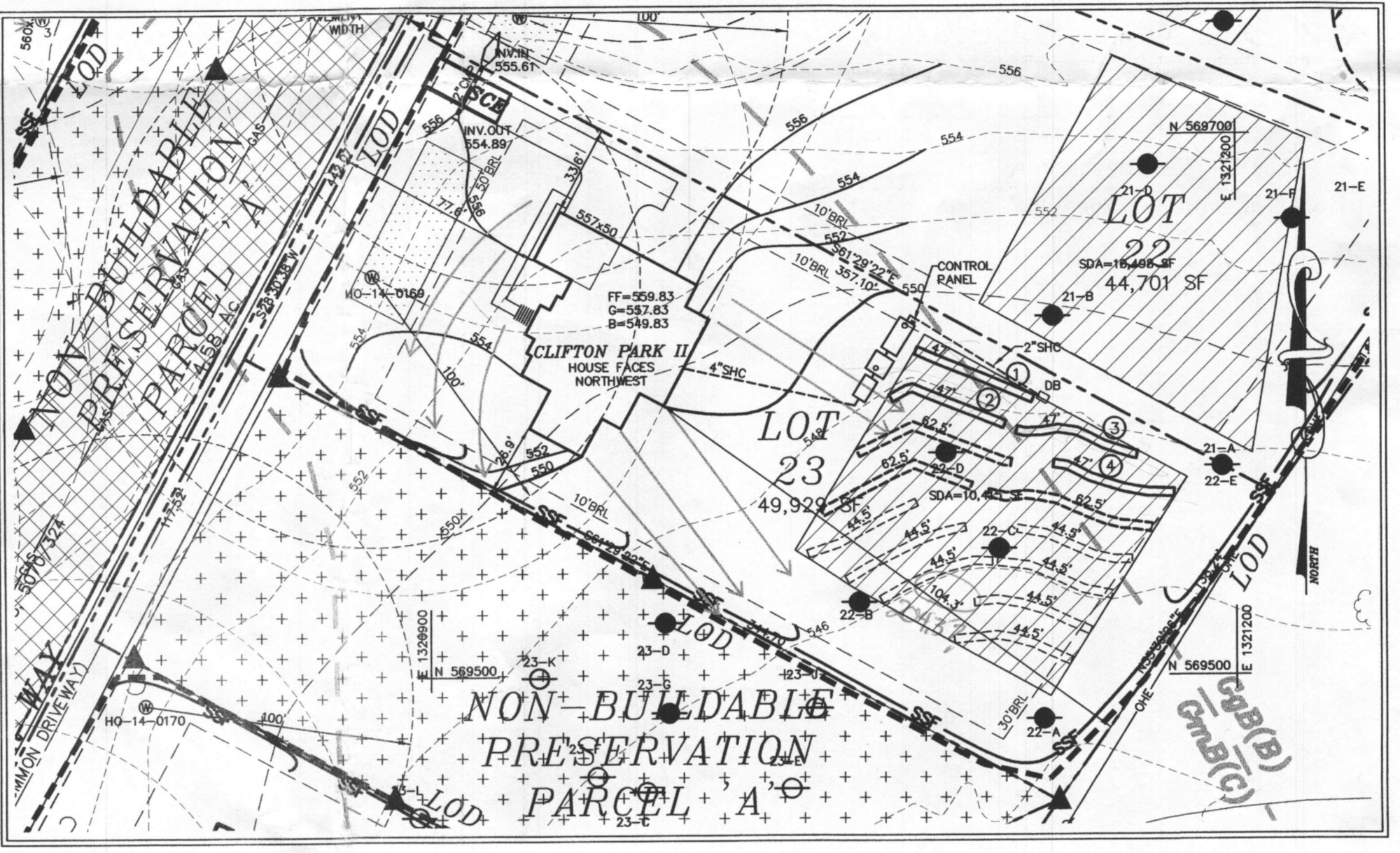
SEPTIC TRENCH SIZING

SYSTEM	APPLICATION RATE (GPD / SF)	MAXIMUM FLOW RATE (GPD)	AREA OF REQUIRED TRENCH (SF)	TRENCH WIDTH (FT)	LENGTH OF REQUIRED TRENCH (LF)	EFFECTIVE DEPTH BEGINS (FT)	TRENCH BOTTOM DEPTH (FT)	TRENCH REDUCTION FACTOR**	ADJUSTED LENGTH OF REQUIRED TRENCH (LF)	MINIMUM TRENCH SPACING (FT)	NUMBER OF TRENCHES	PROVIDED TRENCH LENGTH (FT)
PRIMARY	0.8	900	1,125	3	375	-5.0	8.0	0.50	187.5	10.0'	4	47
SECONDARY	0.8	900	1,125	3	375	4.5	7.5	0.50	187.5	10.0'	3	62.5
TERTIARY	0.6	900	1,500	3	500	5.5	7.5	0.62	310	10.0'	7	44.3'



SEWER SYSTEM CHART

DESCRIPTION	ELEVATION
BASEMENT ELEVATION	549.83
INVERT OUT OF THE HOUSE	547.33
FINISHED GRADE AT SEPTIC TANK	548.00
INVERT INTO SEPTIC TANK	546.31
INVERT OUT OF SEPTIC TANK	546.06
FINISHED GRADE AT HOOT SYSTEM	548.30
INVERT INTO HOOT SYSTEM	546.02
INVERT OUT OF HOOT SYSTEM	545.94
FINISHED GRADE AT PUMP TANK	548.50
TOP OF TANK	547.16
INVERT INTO PUMP TANK	545.90
INVERT OUT OF PUMP TANK	547.49
PUMP TANK FLOOR	541.66
FINISHED GRADE AT DISTRIBUTION BOX	548.20
INVERT INTO DISTRIBUTION BOX	544.20
PUMP OFF	542.99
PUMP ON	543.27
HIGH WATER ALARM	543.71
DOSED RATE	50 GPM
PUMP RUNTIME	3.0 MIN.



GENERAL NOTES:

- THE SUBJECT PROPERTY IS ZONED RC-DEO PER THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN.
- PARCEL BACKGROUND: TAX MAP: 28; PARCEL: 9; LOT: 23; DEED REFERENCE: LIBER 5891 FOLIO 307; ELECTION DISTRICT: FIFTH; ZONING: RR-DEO; AREA: 49,929 S.F.; DPZ FILES: EGP-13-025, SP-13-010, F-14-095, GP-15-081.
- TOPOGRAPHY FOR THE DEVELOPED AREAS IS BASED ON AERIAL SURVEY FLOWN BY WINGS TOPOGRAPHY INC. ON OR ABOUT MARCH 2007.
- PRIVATE WELL AND SEPTIC WILL BE UTILIZED.
- SOILS DATA BASED ON THE USDA SOIL SURVEY OF HOWARD COUNTY, MD, DATED MAY, 2008.
- THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF AT LEAST 10,000 SQ. FT. AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS EASEMENT 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 EASEMENT SHALL NOT BE NECESSARY.
- ANY CHANGES TO A PRIVATE SEWERAGE EASEMENT SHALL REQUIRE A REVISED PERC CERTIFICATION PLAN.
- EXISTING WELLS, SEPTIC SYSTEMS, AND SEWAGE DISPOSAL AREAS WITHIN 100' OF THE PROPERTY AND THOSE WELLS WITHIN 200' DOWN GRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS OR SEWAGE DISPOSAL AREAS HAVE BEEN SHOWN.

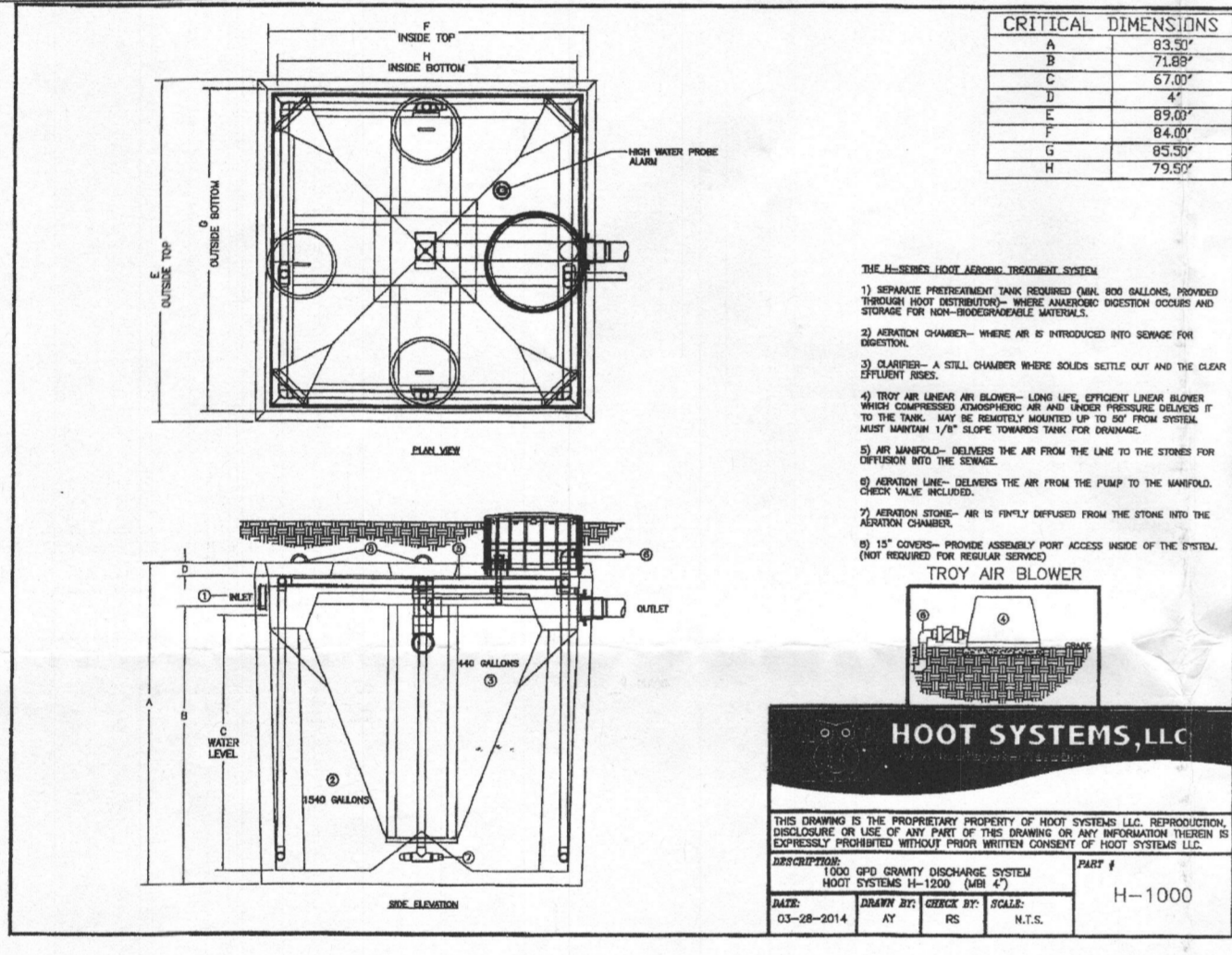
BEST AVAILABLE TECHNOLOGY SITE PLAN NOTES

- 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 SITE PLAN MAY BE REQUIRED.
- THE MAXIMUM DEPTH OF THE BAT PER THE MANUFACTURER'S SPECIFICATION IS 3.0' FEET.
- THE BLOWER MAY NOT BE LOCATED MORE THAN 100 FEET FROM THE TANK BASED ON MANUFACTURER'S SPECIFICATIONS.
- 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 THE 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.

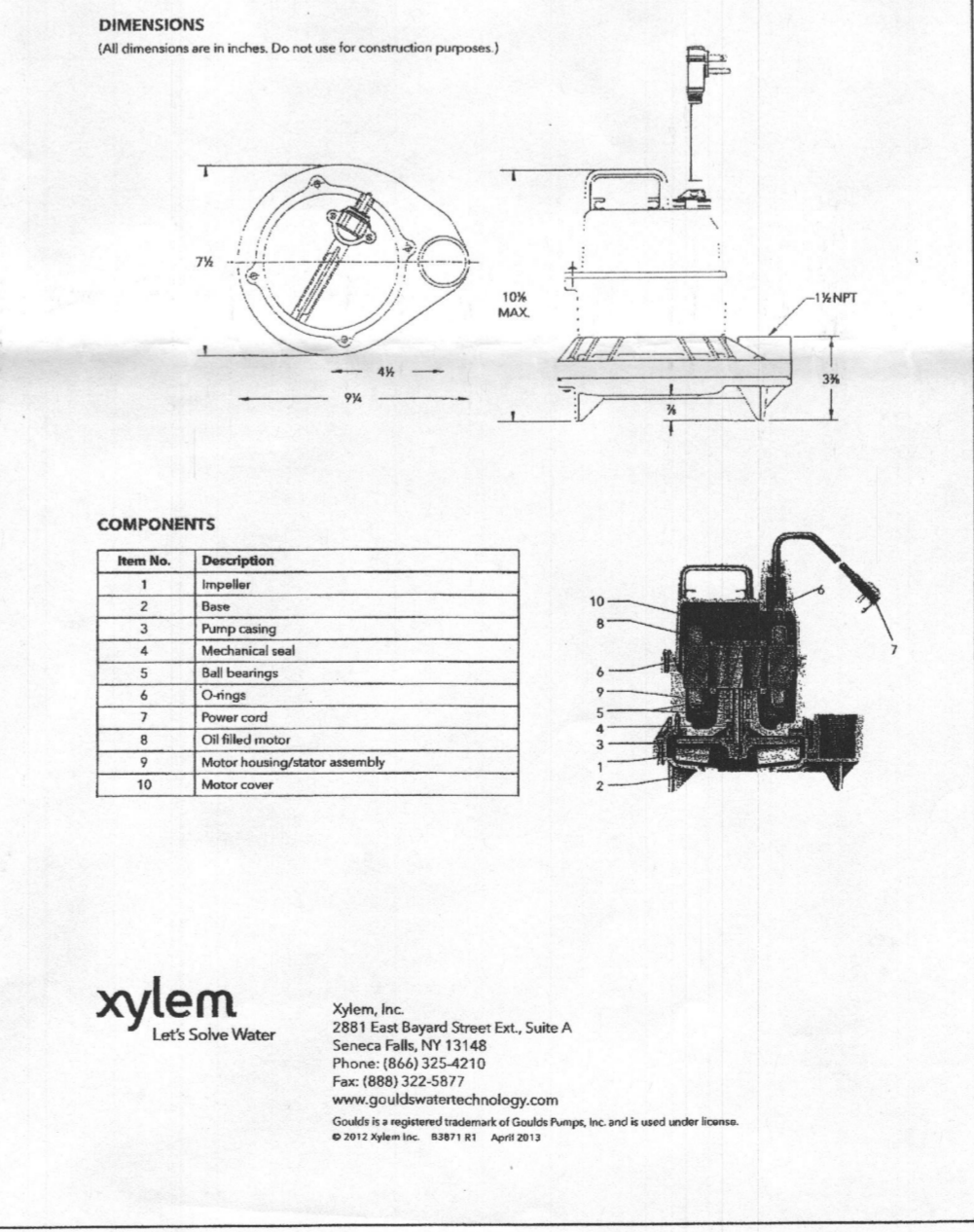
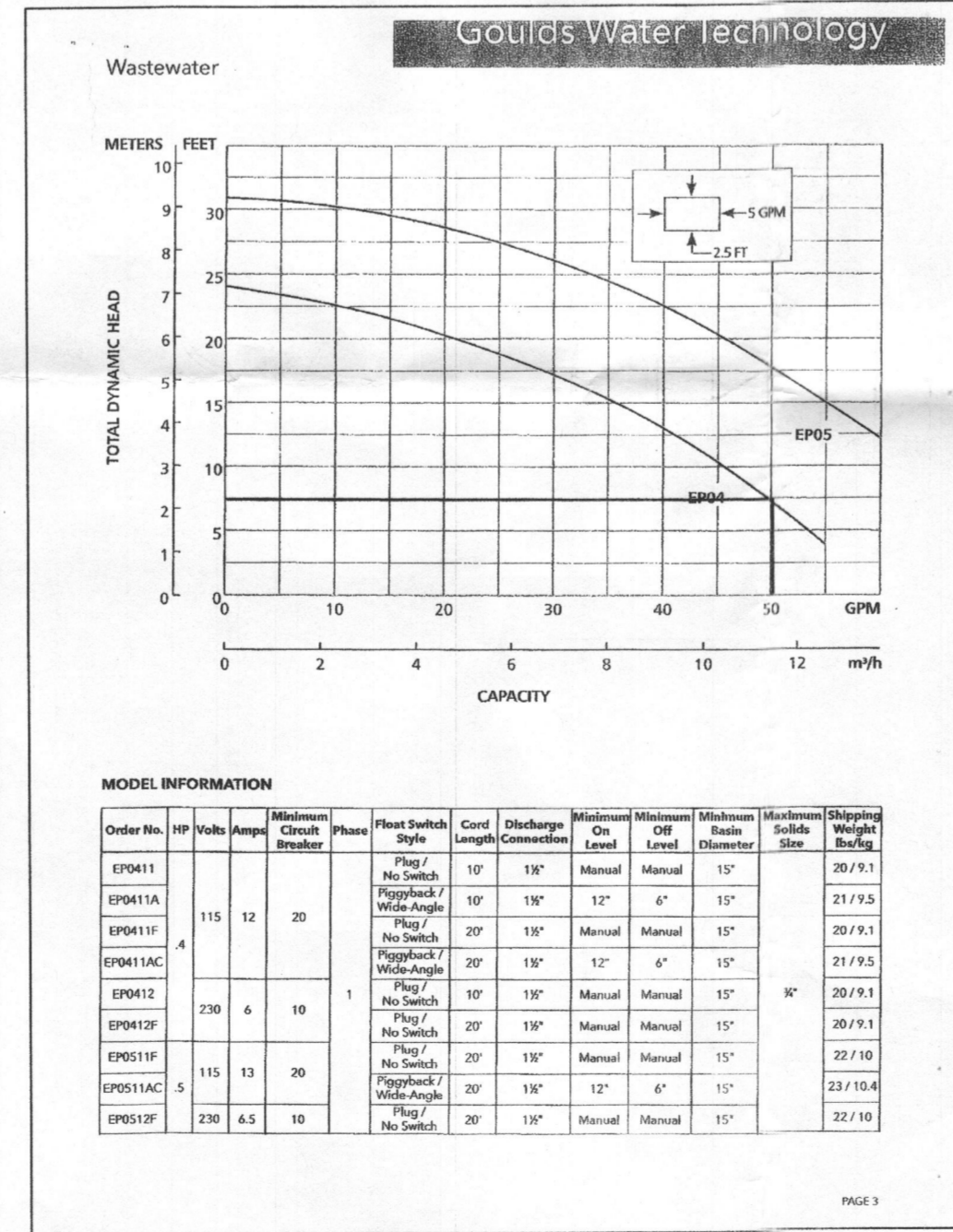
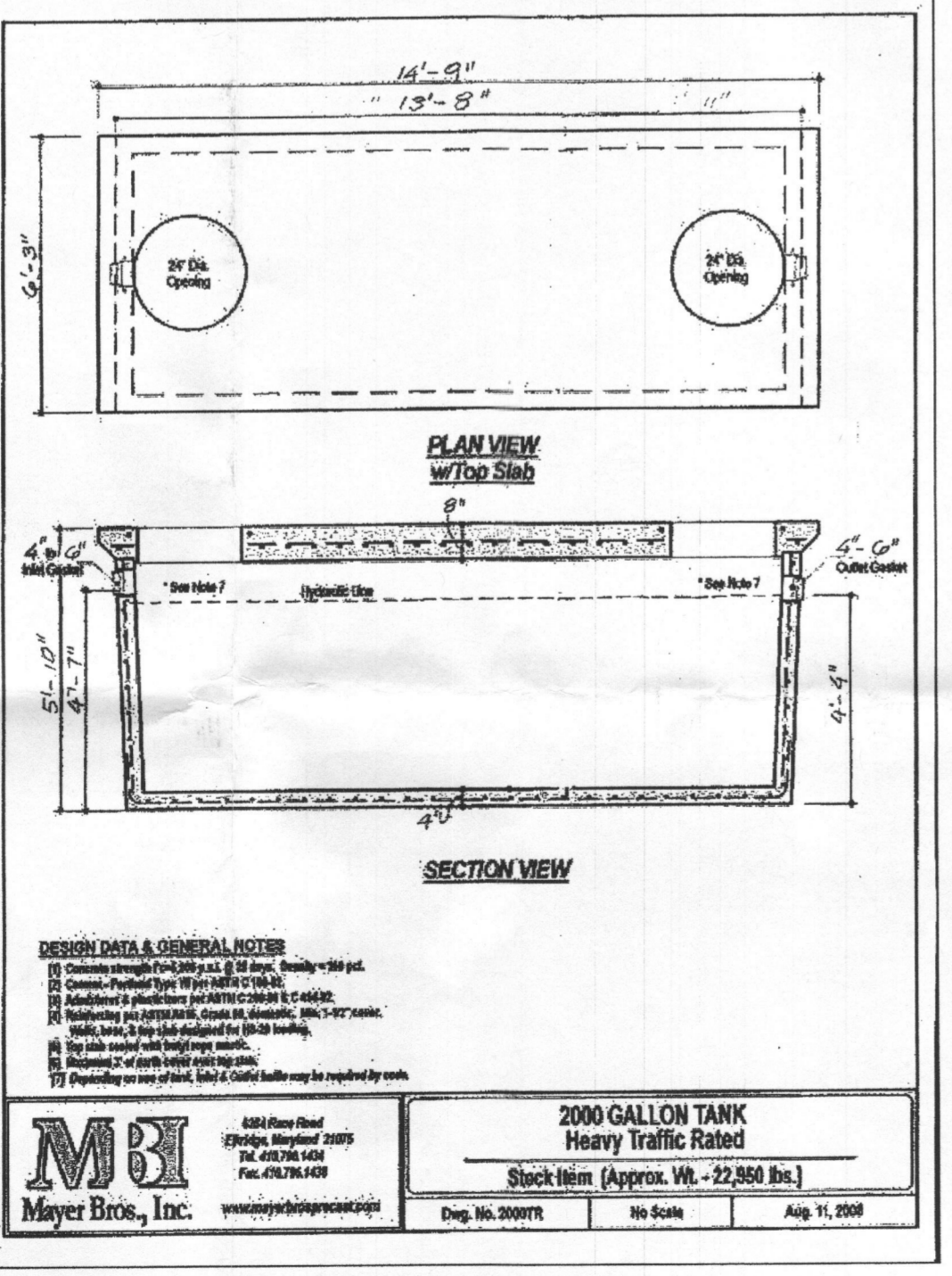
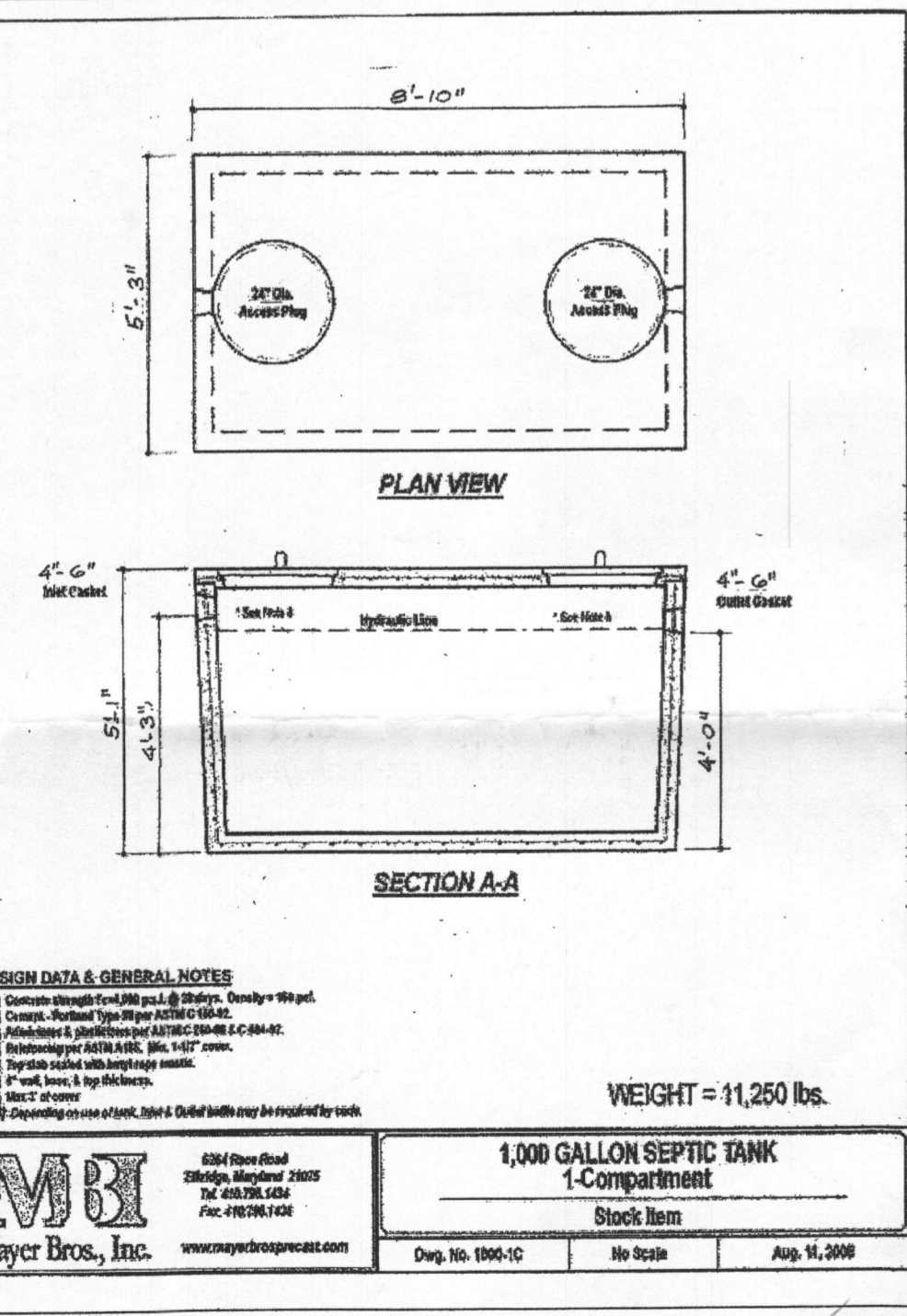
ON-SITE SEWAGE DISPOSAL SYSTEM:

RESIDENTIAL SYSTEM DESIGN: HOOT 1000 BNR
 6 BEDROOM HOUSE (LIVING AREA = 2,350 SQ.FT.)
 150 GALLONS X # OF BEDROOMS = VOLUME OF WASTEWATER / DAY
 150 X 6 = 900 GPD
 PERC RATE = 6-15 MINUTES/INCH
 APPLICATION RATE = 0.8 GPD/SQ.FT.
 DESIGN FLOW + APPLICATION RATE = SQ.FT. OF TRENCH REQUIRED
 900 + 0.8 = 1,125 SQ.FT.
 SQ.FT. REQUIRED + WIDTH OF TRENCH = LENGTH OF TRENCH
 1,125 + 3.0' = 375 FT
 USE 36" OF GRAVEL BELOW DRAIN PIPE
 375 X 0.50 = 187.5
 USE FOUR (4) TRENCHES (47')
 A MINIMUM OF 10' BETWEEN TRENCHES UTILIZING SIDEWALL REDUCTION CREDIT.

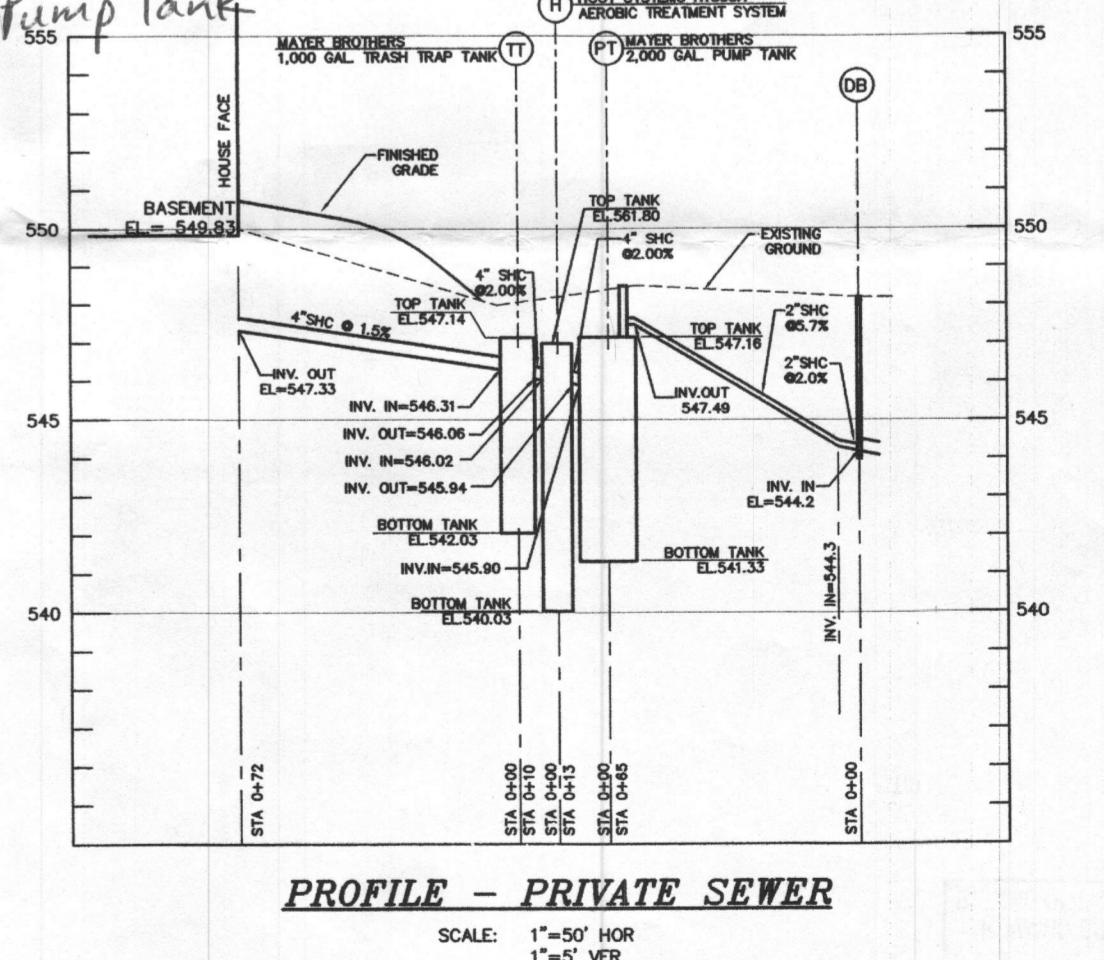
WELL CERTIFICATION:
 THE EXISTING WELL, TAG NO. HO-14-0169, HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN



MINIMUM TANK CAPACITY = 2,000 GALLONS
 PUMP: GOULDS MODEL 3871, EP04 SERIES



Approved Septic System Plan
 Howard County Health Department
 Hoot H-1000 w/2000-gal Pump Tank
 for 6-Bedroom BFD
 Builder signature: [Signature] Date: 2/8/2016
 B16000307



DEVELOPER
 NV HOMES
 9720 PATUXENT WOODS DRIVE
 COLUMBIA, MARYLAND 21046
 (410)379-5956

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS
 COUNTY HEALTH OFFICER
 HOWARD COUNTY HEALTH DEPARTMENT



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. 17942, EXP DATE 09/03/2016.
 R. JACOB HIKMAT, P.E.
 DATE: 2/11/16

5015 ALTOGETHER WAY, CLARKSVILLE MD
GREENBERRY LOT 23
 HOWARD COUNTY
 FIFTH ELECTION DISTRICT
 SITE PLAN FOR BAT INSTALLATION

Project: 15-005
 date: DEC. 2015
 illustration: engineering
 scale: MAM
 approval: MAM
 description: R.H.
 revisions: 1"=50'

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 7350-B Grace Drive, Columbia, Maryland 21044
 (410) 997-0298 Fax

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