



Building Permit Application

Howard County Maryland
Department of Inspections, Licenses and Permits
3430 Court House Drive
Permits: 410-313-2455
www.howardcountymd.gov

001 P 2017 JAN 26 10:58

Date Received: _____

Permit No.: B17000006

Building Address: 1760 Florence Rd
 City: _____ State: _____ Zip Code: _____
 Suite/Apt. # _____ SDP/WP/BA #: _____
 Census Tract: _____ Subdivision: _____
 Section: _____ Area: _____ Lot: 2
 Tax Map: _____ Parcel: _____ Grid: _____
 Zoning: _____ Map Coordinates: _____ Lot Size: _____

Existing Use: _____
 Proposed Use: _____
 Estimated Construction Cost: \$ _____
 Description of Work: _____

Occupant/Tenant Name: _____
 Was tenant space previously occupied? Yes No
 Contact Name: _____
 Address: _____
 City: _____ State: _____ Zip Code: _____
 Phone: _____ Fax: _____
 Email: _____

Property Owner's Name: _____
 Address: _____
 City: _____ State: _____ Zip Code: _____
 Phone: _____ Fax: _____
 Email: _____

Applicant's Name & Mailing Address, (if other than stated herein)
 Applicant's Name: _____
 Address: _____
 City: _____ State: _____ Zip Code: _____
 Phone: _____ Fax: _____
 Email: _____

Contractor Company: _____
 Contact Person: _____
 Address: _____
 City: _____ State: _____ Zip Code: _____
 License No.: _____
 Phone: _____ Fax: _____
 Email: _____

Engineer/Architect Company: _____
 Responsible Design Prof.: _____
 Address: _____
 City: _____ State: _____ Zip Code: _____
 Phone: _____ Fax: _____
 Email: _____

Commercial Building Characteristics	Residential Building Characteristics
Height: _____	<input type="checkbox"/> SF Dwelling <input type="checkbox"/> SF Townhouse
No. of stories: _____	Depth Width
Gross area, sq. ft./floor: _____	1 st floor: _____
	2 nd floor: _____
Area of construction (sq. ft.): _____	Basement: _____
	<input type="checkbox"/> Finished Basement
Use group: _____	<input type="checkbox"/> Unfinished Basement
	<input type="checkbox"/> Crawl Space
Construction type:	<input type="checkbox"/> Slab on Grade
<input type="checkbox"/> Reinforced Concrete	No. of Bedrooms: _____
<input type="checkbox"/> Structural Steel	Multi-family Dwelling
<input type="checkbox"/> Masonry	No. of efficiency units: _____
<input type="checkbox"/> Wood Frame	No. of 1 BR units: _____
<input type="checkbox"/> State Certified Modular	No. of 2 BR units: _____
	No. of 3 BR units: _____
	Other Structure: _____
	Dimensions: _____
<input checked="" type="checkbox"/> Roadside Tree Project Permit	Footings: _____
<input type="checkbox"/> Yes <input type="checkbox"/> No	Roof: _____
Roadside Tree Project Permit #	<input type="checkbox"/> State Certified Modular
	<input type="checkbox"/> Manufactured Home

Utilities	
Electric: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Gas: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Water Supply	
<input type="checkbox"/> Public	
<input type="checkbox"/> Private	
Sewage Disposal	
<input type="checkbox"/> Public	
<input type="checkbox"/> Private	
Heating System	
<input type="checkbox"/> Electric <input type="checkbox"/> Oil	
<input type="checkbox"/> Natural Gas <input type="checkbox"/> Propane Gas	
<input type="checkbox"/> Other: _____	
Sprinkler System:	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
Grading Permit Number:	
Building Shell Permit Number:	

THE UNDERSIGNED HEREBY CERTIFIES AND AGREES AS FOLLOWS: (1) THAT HE/SHE IS AUTHORIZED TO MAKE THIS APPLICATION; (2) THAT THE INFORMATION IS CORRECT; (3) THAT HE/SHE WILL COMPLY WITH ALL REGULATIONS OF HOWARD COUNTY WHICH ARE APPLICABLE THERETO; (4) THAT HE/SHE WILL PERFORM NO WORK ON THE ABOVE REFERENCED PROPERTY NOT SPECIFICALLY DESCRIBED IN THIS APPLICATION; (5) THAT HE/SHE GRANTS COUNTY OFFICIALS THE RIGHT TO ENTER ONTO THIS PROPERTY FOR THE PURPOSE OF INSPECTING THE WORK PERMITTED AND POSTING NOTICES.

Applicant's Signature _____ Print Name _____
Email Address _____ Date _____
Title/Company _____

Checks Payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY
 PLEASE WRITE NEATLY & LEGIBLY
 -FOR OFFICE USE ONLY-

AGENCY	DATE	SIGNATURE OF APPROVAL	DPZ SETBACK INFORMATION	Filing Fee
State Highways			Front: _____	\$ _____
Building Officials			Rear: _____	Permit Fee \$ _____
PSZA (Zoning)			Side: _____	Tech Fee \$ _____
PSZA (Engineering)			Side St.: _____	Excise Tax \$ _____
Health	1/13/17	<u>[Signature]</u>	All minimum setbacks met? <input type="checkbox"/> Yes <input type="checkbox"/> No	PSFS \$ _____
			Is Entrance Permit Required? <input type="checkbox"/> Yes <input type="checkbox"/> No	Guaranty Fund \$ _____
			Historic District? <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l per Fee \$ _____
			Lot Coverage for New Town Zone: _____	Total Fees \$ _____
			SDP/Red-line approval date: _____	Sub- Total Paid \$ _____
				Balance Due \$ _____
				Check # _____

Williams, Jeffrey

From: Williams, Jeffrey
Sent: Friday, December 23, 2016 11:56 AM
To: 'Sams Creek'
Subject: RE: BAT changes

It's upgrade of neighboring wells on New Cut and Florence.

From: Sams Creek [<mailto:sams.creek@aol.com>]
Sent: Friday, December 23, 2016 11:54 AM
To: Williams, Jeffrey
Subject: Re: BAT changes

Jeff-

Wait . . . looking at the plan & speaking with Dan at viking . . . the septic is upgrade from the well?

Thanks,
Jessica

Sams Creek

Phone # (443) 821-4932
Fax # (410) 875-0170
email: sams.creek@aol.com
www.samscreeksc.com

-----Original Message-----

From: Williams, Jeffrey <jewilliams@howardcountymd.gov>
To: Sams Creek <sams.creek@aol.com>
Sent: Fri, Dec 23, 2016 11:25 am
Subject: RE: BAT changes

1760 Florence requires a BAT for downgrade wells. For future projects, just call our program general number to ask: 410-313-1771. Thanks
Jeff

From: Sams Creek [<mailto:sams.creek@aol.com>]
Sent: Friday, December 23, 2016 10:42 AM
To: Williams, Jeffrey
Subject: Re: BAT changes

Jeff-

Perfect!

Viking Custom Homes has a permit for 1760 Florence Road Mt. Airy, MD 21771 . . . can I ask you or who should I ask?

Thanks,
jessica

Sams Creek

Phone # (443) 821-4932
Fax # (410) 875-0170
email: sams.creek@aol.com
www.samscreeksc.com

-----Original Message-----

From: Williams, Jeffrey <jewilliams@howardcountymd.gov>
To: Sams Creek <sams.creek@aol.com>
Sent: Fri, Dec 23, 2016 10:38 am
Subject: RE: BAT changes

If you have properties where a BAT unit was already approved and you want to switch, you will have to ask us and provide addresses. We will look them up. For future projects, if a BAT unit is required it will be stated on the system specs we give to the designers/engineers before they design a system.

From: Sams Creek [<mailto:sams.creek@aol.com>]
Sent: Friday, December 23, 2016 9:10 AM
To: Williams, Jeffrey
Subject: Re: BAT changes

Jeff-

Okay next question :-)

How would I know if you guys require the BAT due To site specific reasons?

Thanks,
Jessica

Sent from my iPhone

On Dec 23, 2016, at 8:29 AM, Williams, Jeffrey <jewilliams@howardcountymd.gov> wrote:

A septic permit needs a design plan. If the design plan calls for a BAT, then the septic permit will reflect that. If the owner wishes to switch to a traditional tank and we don't require a BAT for a site specific reason, the design plan must be changed. Either a revised plan can be submitted or the plan preparer can physically come to our office to mark up the approved drawings in pen: crossing out the BAT details and switching them to a traditional tank. Based on the newly revised plans, we can then issue a new septic permit.

From: Sams Creek [<mailto:sams.creek@aol.com>]
Sent: Thursday, December 22, 2016 12:19 PM
To: Williams, Jeffrey
Subject: Re: BAT changes

Hi Jeff-

What do mean by redline? I have a permit that needs to be changed for Viking Custom Homes at Florence Road & just wasn't sure how to proceed?

Thanks,
Jessica

Sams Creek

Phone # (443) 821-4932
Fax # (410) 875-0170
email: sams.creek@aol.com
www.samscreeksc.com

-----Original Message-----

From: Williams, Jeffrey <jewilliams@howardcountymd.gov>
To: Sams Creek <sams.creek@aol.com>
Sent: Tue, Dec 13, 2016 1:19 pm
Subject: RE: BAT changes

See attached guidance. It addresses the process to revise. There is no fee unless a septic permit has not yet been issued or has expired, then it's just the usual permit fee still needed. The plans can be revised and resent, or someone can come to our office to redline them if we've given the go ahead. Let me know if there are questions after reading the document. Thanks
Jeff

From: Sams Creek [<mailto:sams.creek@aol.com>]
Sent: Tuesday, December 13, 2016 11:20 AM
To: Williams, Jeffrey
Subject: BAT changes

Hi Jeff-

I got your voicemail.

Yes if you could please send me your updated protocol on changing and existing septic permit requiring the BAT to the conventional tank.

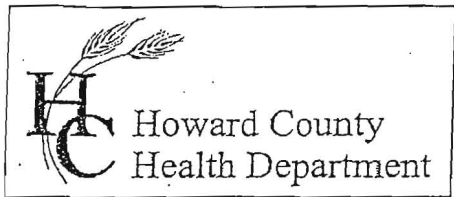
The usual questions are is there a fee? & do they need to submit revised ENGINEERED drawings?

Thanks for all your help!

Thanks,
Jessica

Sams Creek

Phone # (443) 821-4932
Fax # (410) 875-0170
email: sams.creek@aol.com
www.samscreeksc.com



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: _____ **ONSITE SEWAGE DISPOSAL SYSTEM** P _____

APPROVAL DATE: _____ **PERMIT: CONSTRUCTION** A _____

PROPERTY ADDRESS: 1760 Florence Rd

SUBDIVISION: Mockingbird Forest LOT: 2 TAX ID: _____

CONTRACTOR: _____ EMAIL: _____

CONTRACTOR ADDRESS: _____ PHONE: _____

CONTRACTOR CERTIFIED FOR BAT INSTALLATION: MDE MANUFACTURER:

PROPERTY OWNER: John D. & Jill O. Sadowski EMAIL: _____

OWNER ADDRESS: 2655 Leslie Rd, Mt. Airy 21771 PHONE: _____

BAT UNIT MODEL: Norweco 600GPA PUMP SIZE: WEO3L PUMP TANK CAPACITY: 1250 gal

OPERATION & MAINTENANCE AGREEMENT DATE SIGNED: _____ DATE RECORDED: _____

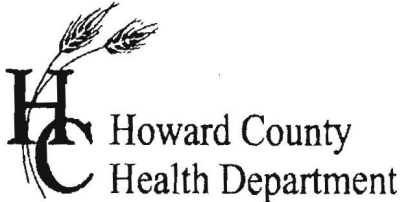
DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 4 APPLICATION RATE: 0.8

TRENCHES:	LINEAR FEET REQUIRED: _____	INLET DEPTH: _____
	TRENCH WIDTH: _____	MAXIMUM BOTTOM DEPTH: _____
	MINIMUM SPACE BETWEEN TRENCHES: _____	EFFECTIVE AREA BEGINNING DEPTH: _____
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND BAT UNIT LOCATION MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:	<u>See BAT plan for LPD design.</u>	

ISSUED BY: _____ 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
 ELECTRICAL PERMIT ISSUED E _____
- 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.



APPLICATION

FOR PERCOLATION TESTING AND SITE EVALUATION

TEST DATE(S) 10/7/03 TEST TIME _____ AP 517963
 AGENCY REVIEW: _____ DATE _____

DO NOT WRITE ABOVE THIS LINE

I HEREBY APPLY FOR THE NECESSARY TESTING/EVALUATION PRIOR TO ISSUANCE OF SEWAGE DISPOSAL SYSTEM PERMIT(S) TO:

CHECK AS NEEDED:

- CONSTRUCT NEW SEPTIC SYSTEM(S)
- REPAIR/ADD TO AN EXISTING SEPTIC SYSTEM
- REPLACE AN EXISTING SEPTIC SYSTEM

CHECK AS NEEDED:

- NEW STRUCTURE(S)
- ADDITION TO AN EXISTING STRUCTURE
- REPLACE AN EXISTING STRUCTURE

CHECK ONE:

- CREATE NEW LOT(S)
- BUILD ON AN EXISTING LOT IN A SUBDIVISION
- BUILD ON AN EXISTING PARCEL OF RECORD

IS THE PROPERTY WITHIN 2500' OF ANY RESERVOIR?

- YES
- NO

THE TYPE OF STRUCTURE IS:

- RESIDENTIAL WITH _____ PROPOSED BEDROOMS IN THE COMPLETED STRUCTURE (NOTE *UNKNOWN* IF APPROPRIATE)
- COMMERCIAL (PROVIDE DETAIL OF NUMBERS AND TYPES OF EMPLOYEES/ CUSTOMERS ON ACCOMPANYING PLAN)
- INSTITUTIONAL/GOVERNMENT (PROVIDE DETAIL OF NUMBERS AND TYPES OF EMPLOYEES/USERS ON ACCOMPANYING PLAN)

PROPERTY OWNER(S) Gerald & Shirley Baker

DAYTIME PHONE 301-829-2403 CELL _____ FAX _____

MAILING ADDRESS 1730 Florence Road
STREET CITY/TOWN STATE ZIP

APPLICANT Jeff McAlister

DAYTIME PHONE 301-831-7197 CELL _____ FAX _____

MAILING ADDRESS 2610 Mullinix Mill Road, Mt. Airy
STREET CITY/TOWN STATE ZIP

APPLICANT'S ROLE: DEVELOPER BUILDER BUYER RELATIVE/FRIEND REALTOR CONSULTANT

PROPERTY LOCATION: SUBDIVISION/PROPERTY NAME Baker Property LOT NO. Proposed 2

PROPERTY ADDRESS Florence Road
STREET TOWN/POST OFFICE

TAX MAP PAGE(S) 6 GRID _____ PARCEL(S) 151 PROPOSED LOT SIZE 3ac

AS APPLICANT, I UNDERSTAND THE FOLLOWING: THE SYSTEM INSTALLED SUBSEQUENT TO THIS APPLICATION IS ACCEPTABLE ONLY UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS APPLICATION IS COMPLETE WHEN ALL APPLICABLE FEES AND A SUITABLE SITE PLAN HAVE BEEN RECEIVED. I ACCEPT THE RESPONSIBILITY FOR COMPLIANCE WITH ALL M.O.S.H.A. AND "MISS UTILITY" REQUIREMENTS. APPROVAL IS BASED UPON SATISFACTORY REVIEW OF A PERC CERTIFICATION PLAN.

TEST RESULTS WILL BE MAILED TO APPLICANT. _____
SIGNATURE OF APPLICANT

HOWARD COUNTY HEALTH DEPARTMENT, BUREAU OF ENVIRONMENTAL HEALTH, WELL AND SEPTIC PROGRAM
3525-H ELLICOTT MILLS DRIVE, ELLICOTT CITY, MARYLAND 21043-4544 (410) 313-1771 FAX (410) 313-2648
TDD (410) 313-2323 TOLL FREE 1-877-4MD-DHMH

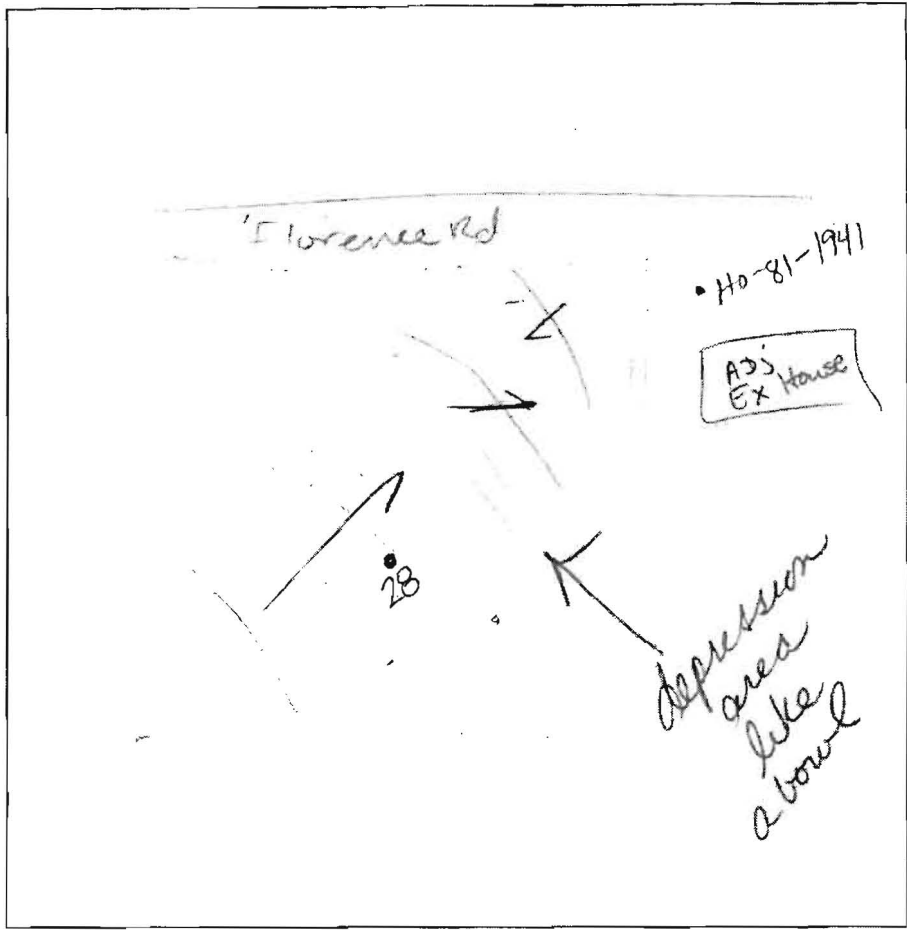
AP 517963
Center hole

Strong
CL
Stony 25-10%
wk org, yellow
S.L
H chroma
due to
parent
Rock
Rc 2 15-20%
10'
hard
sop frags
LS
Bottom 14'

(28)

Rd Brn
Dense
CL

8'
Rock
area
begins
water
perched
@ 10'
Rc 2 50%



DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2nd INCH	P/F/H
10/7	Middle Lax 2	62 1/2' / 14'	3:08 ³⁰	3:10 ³⁰	3:15	5	P
	(28)	Water perched by Barry. H ₂ O @ 10' Fails					F

Quick Soil Analysis
done w/ Barry Glatfelter

REMARKS Holes Staked by owner
 SANITARIAN Kare & Barry BACKHOE Fyock OTHERS _____
 TEST HOLES USED IN SDA _____ AVG. PERC TIME _____ SQ. FT/BR _____
 TRENCH WIDTH _____ INLET DEPTH _____ MAX. BOT DEPTH _____ EFFECTIVE SW _____

APPLICATION

PERCOLATION TESTING

A 517963

P _____

HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
3525-H ELLICOTT MILLS DRIVE/ELLICOTT CITY, MARYLAND 21043
TELEPHONE: 313-2640

DISTRICT _____

DATE _____

TO: THE COUNTY HEALTH OFFICER
ELLICOTT CITY, MARYLAND

I HEREBY APPLY FOR THE NECESSARY TEST PRIOR TO APPLICATION FOR PERMIT TO CONSTRUCT (OR RECONSTRUCT) A SEWAGE DISPOSAL SYSTEM.

PROPERTY OWNER Gerald R. Baker and Shirley A. Baker

ADDRESS 1730 Florence Road Mt. Airy, MD PHONE 301-829-2403

AGENT OR PROSPECTIVE BUYER Jeffrey McAlister

ADDRESS 2210 Mullinix Mill Rd. Mt. Airy, MD PHONE 301-831-7197

PROPERTY LOCATION:

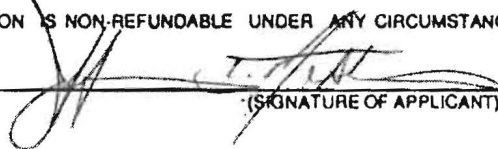
SUBDIVISION Baker Property LOT NO. 2

ROAD AND DESCRIPTION Florence Road (Front Lot - Left)

TAX MAP 6 PARCEL # 151

SIZE OF LOT 3.03 Ac ± TYPE BLDG. Single Family
(SINGLE FAMILY DWELLING OR COMMERCIAL)

THE SYSTEM INSTALLED UNDER THIS APPLICATION IS ACCEPTABLE ONLY UNTIL PUBLIC FACILITIES BECOME AVAILABLE. I FULLY UNDERSTAND THE FEE CONNECTED WITH THE FILING OF THIS PERC TEST APPLICATION IS NON-REFUNDABLE UNDER ANY CIRCUMSTANCES. I ALSO AGREE TO COMPLY WITH ALL M.O.S.H.A. REQUIREMENTS IN TESTING THIS LOT.


(SIGNATURE OF APPLICANT)

APPROVED BY _____ FOR _____ DATE _____

DISAPPROVED BY _____ FOR _____ DATE _____

HOLD PENDING FURTHER TESTS _____

REASONS FOR REJECTION OR HOLDING _____

PERCOLATION TEST PLAT/PRELIMINARY PLAT - TITLE OR I.D. # _____ DATE _____

SITE DEVELOPMENT PLAN/FINAL PLAT - TITLE OR I.D. # _____ DATE _____

THIS IS NOT A PERMIT

517963

COUNTY #

SOIL PROFILE

0' (7) (8) (10)

DK Brn Gibbons
1" CLM

Cherty frags - 2'

Sticky gritty MLLM sm

some cone-in @ 6' - 6'

Hard sticky sandy loam

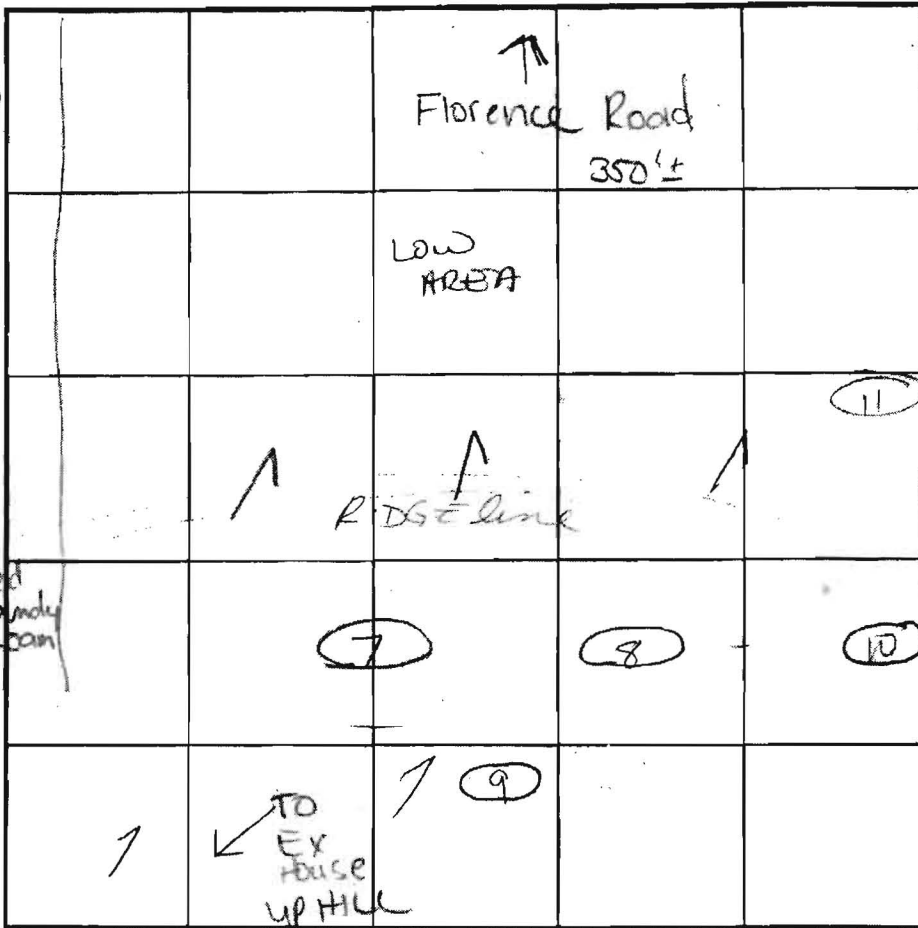
Rx 35-50% Bottom

(9)

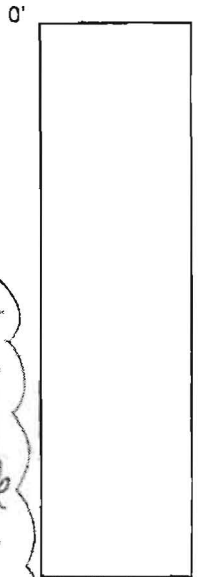
Dense CLM

4' buffer tx zone not avail here

Rx ≥ 50% in w/ CLM Refusal 9'



SOIL PROFILE



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
12-2-02	(7)	5' / 9' Ref	11:20:25	11:31:21	11:31:21	11:56	ANOTHER 1/2" SL DW
		Poured 2 1/2 gallon in bottom - ran out quickly					F
	(8)	MORE ROCK < 50%					F
	(9)	Refusal @ 9'					50% frags begin @ 5'
	(7)	3' 4"	11:42	11:46	11:46	12:03	16 min
	(10)	refusal @ 9'					No tx zone (F)
	(9)	5'	12:07:41	12:16			No more pulled (F)
	(11)	Refusal @ 8'					hard run binder @ 3' (F)

Dir + fell into hole

REMARKS

Holes dug per plan

TYPE OF SOIL

TESTED BY

Kacie

ALSO PRESENT

Natfield

TRENCH DESIGN DATA: AVERAGE PERCOLATION TIME

TRENCH WIDTH

INLET DEPTH

MAXIMUM BOTTOM DEPTH

SO. FT./BEDROOM

APPLICATION

PERCOLATION TESTING

A 519609

P _____

HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
3525-H ELLICOTT MILLS DRIVE/ELLICOTT CITY, MARYLAND 21043
TELEPHONE: 313-2640

DISTRICT _____

DATE 11/20/03

TO: THE COUNTY HEALTH OFFICER
ELLICOTT CITY, MARYLAND

I HEREBY APPLY FOR THE NECESSARY TEST PRIOR TO APPLICATION FOR PERMIT TO CONSTRUCT (OR RECONSTRUCT) A SEWAGE DISPOSAL SYSTEM.

PROPERTY OWNER Gerald R. Baker & Shirley A. Baker

ADDRESS 1730 Florence Rd. ^{MT. AIRY} MD PHONE 301-829-2403

AGENT OR PROSPECTIVE BUYER Jeffrey McAlister

ADDRESS 2810 Mullinix Mill Rd. ^{MT. AIRY} MD 21771 PHONE 301-831-7197

PROPERTY LOCATION:

SUBDIVISION Baker Property LOT NO. 2

ROAD AND DESCRIPTION Florence Rd.

TAX MAP 6 PARCEL # 151

SIZE OF LOT 3.09 (Front Left) TYPE BLDG. Single Family
(SINGLE FAMILY DWELLING OR COMMERCIAL)

THE SYSTEM INSTALLED UNDER THIS APPLICATION IS ACCEPTABLE ONLY UNTIL PUBLIC FACILITIES BECOME AVAILABLE. I FULLY UNDERSTAND THE FEE CONNECTED WITH THE FILING OF THIS PERC TEST APPLICATION IS NON-REFUNDABLE UNDER ANY CIRCUMSTANCES. I ALSO AGREE TO COMPLY WITH ALL M.O.S.H.A. REQUIREMENTS IN TESTING THIS LOT.

APPROVED BY _____ FOR _____ DATE _____
[Signature] *[Signature]*
(SIGNATURE OF APPLICANT)

DISAPPROVED BY _____ FOR _____ DATE _____

HOLD PENDING FURTHER TESTS _____

REASONS FOR REJECTION OR HOLDING _____

PERCOLATION TEST PLAT/PRELIMINARY PLAT - TITLE OR I.D. # _____ DATE _____

SITE DEVELOPMENT PLAN/FINAL PLAT - TITLE OR I.D. # _____ DATE _____

THIS IS NOT A PERMIT

51969

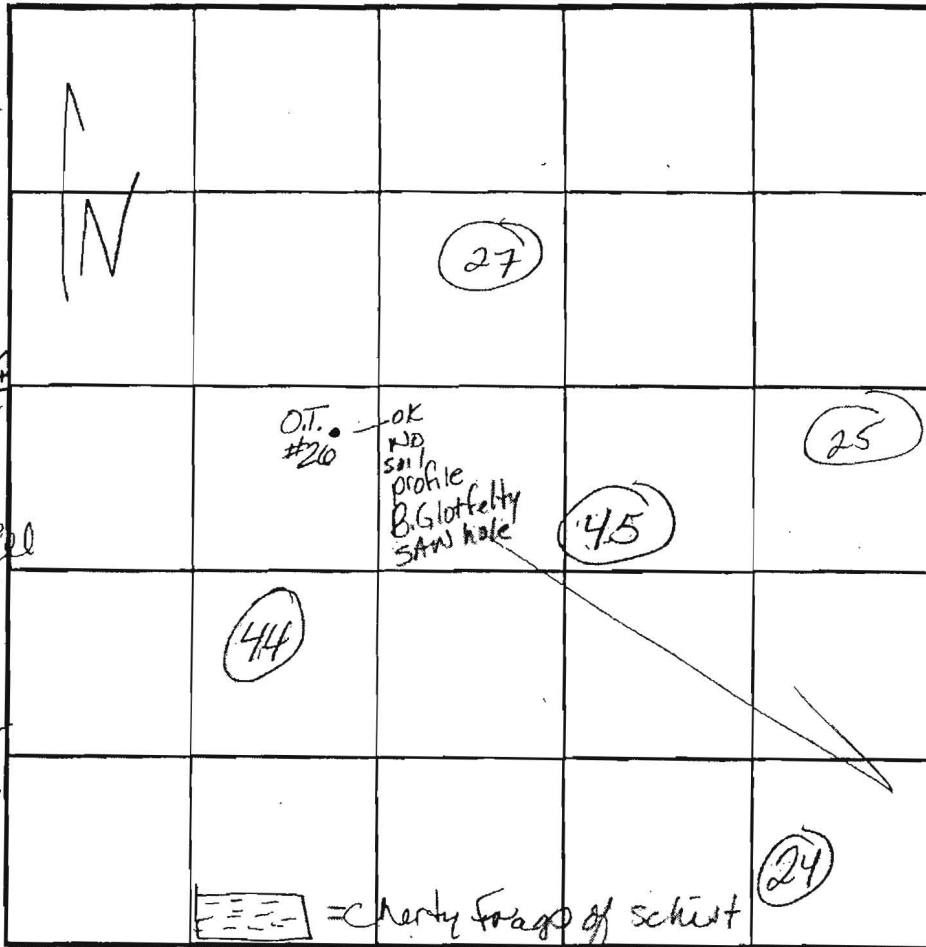
COUNTY #

SOIL PROFILE

0' (44) (27)
 rd brn
 hvysCLL
 pebbles +
 stones
 sm. cherty
 frags
 ~25-30%
 4 1/2'
 wk rd brn
 brn
 siL or
 fine S loam
 ~7 1/2'
 9 1/2'
 Bottom

SOIL PROFILE

0' (24)
 Str y brn
 tan
 si CLL
 Strong red
 tan fine
 Sand
 almost
 set
 Rx ~10%
 4'
 6'
 Bottom



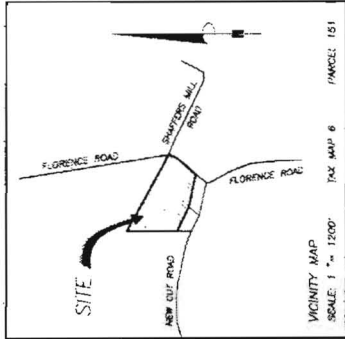
INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.

SW (45) NE
 strong brn
 hvyl-CLL
 4 1/2'
 si-f Sand
 5'
 7'
 25-30%
 Lt brn
 Sand
 Lt
 pockets
 CLL
 brn
 Sand
 Fine
 Rx ~10%±
 Bottom

(25)
 wk rd brn
 si CLL
 3'
 SCL
 5'
 tan, y brn
 fine Sand
 sm rx frags
 ~20-30%
 Bottom

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
4/29/04	(44)	5' S	9:04	9:06	9:06	9:09	3 min 1.2
	(27)	5' S	8:51	8:53	8:53	8:55	2 min 1.2
	(45)	4 1/2' S	9:15	9:22	9:22	9:34	12 min 0.8
	(25)	3 1/2' S	8:42	8:56	8:56	9:12	16 min 0.6
	(24)	5' S	8:45	8:56	8:56	9:11	15 min 0.8

REMARKS _____
 TYPE OF SOIL _____
 TESTED BY Racie Noonan ALSO PRESENT Fyock & McAlister
 TRENCH DESIGN DATA: AVERAGE PERCOLATION TIME _____ TRENCH WIDTH _____
 INLET DEPTH _____ MAXIMUM BOTTOM DEPTH _____ SQ. FT./BEDROOM _____



- GENERAL NOTES:
- OWNER: GERALD R. BAKER, SHERLEY A. BAKER
DEED REFERENCE: MAP 3359 FOLD 296
HAWKINS COUNTY, MISSISSIPPI
OWNER: GERALD R. BAKER
 - TAX MAP: 6 GRID 24 PARCEL 151
DISTANCE: 2 AILE #
 - HOUSEHOLD WATER SUPPLY: MT. ARY
 - THERE IS NO FLOOD HAZARD (NO FEMA FLOOD MAP) LOCATED ON THIS PROPERTY ACCORDING TO FEMA FLOOD INSURANCE RATE MAP COMMUNITY PANEL # 24044 0600 B. REVISED DECEMBER 4, 1986
 - TOPOGRAPHY: HAWKINS COUNTY DATUM
CONTOUR INTERVALS ARE AT 5 FEET.
 - THERE ARE NO WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THE PROPERTY BOUNDARY SALES CONTRACT SHOWS THIS.
 - SOIL TYPE: MT. ARY CHANNERY LOAM
CLAY (GIC2, G1B2, 1)
HAWKINS COUNTY SOILS MAP No. 5.
 - ZONING DISTRICT: R0303
 - ALL WELLS TO BE DRILLED PRIOR TO SUBMITTAL OF PERMITS TO THE DEVELOPER'S RESPONSIBILITY TO SUBMITTAL. THIS PERMITS SHALL BE CONSIDERED "CONTRACTUAL" IF THE WELL DRILLING HELD UP BY THE HEALTH DEPARTMENT.
 - THE SITE SHALL BE SUBJECT TO THE HAWKINS COUNTY HEALTH DEPARTMENT WITH ADDITIONAL REVIEW BY THE HAWKINS DEPARTMENT OF THE ENVIRONMENT.
 - LOT 3 SEPTIC INSTALLATION REQUIRED PRIOR TO BUILDING PERMIT. SUBMITTAL ARE TO HAWKINS EXCLUSIVE AND PERMITS.

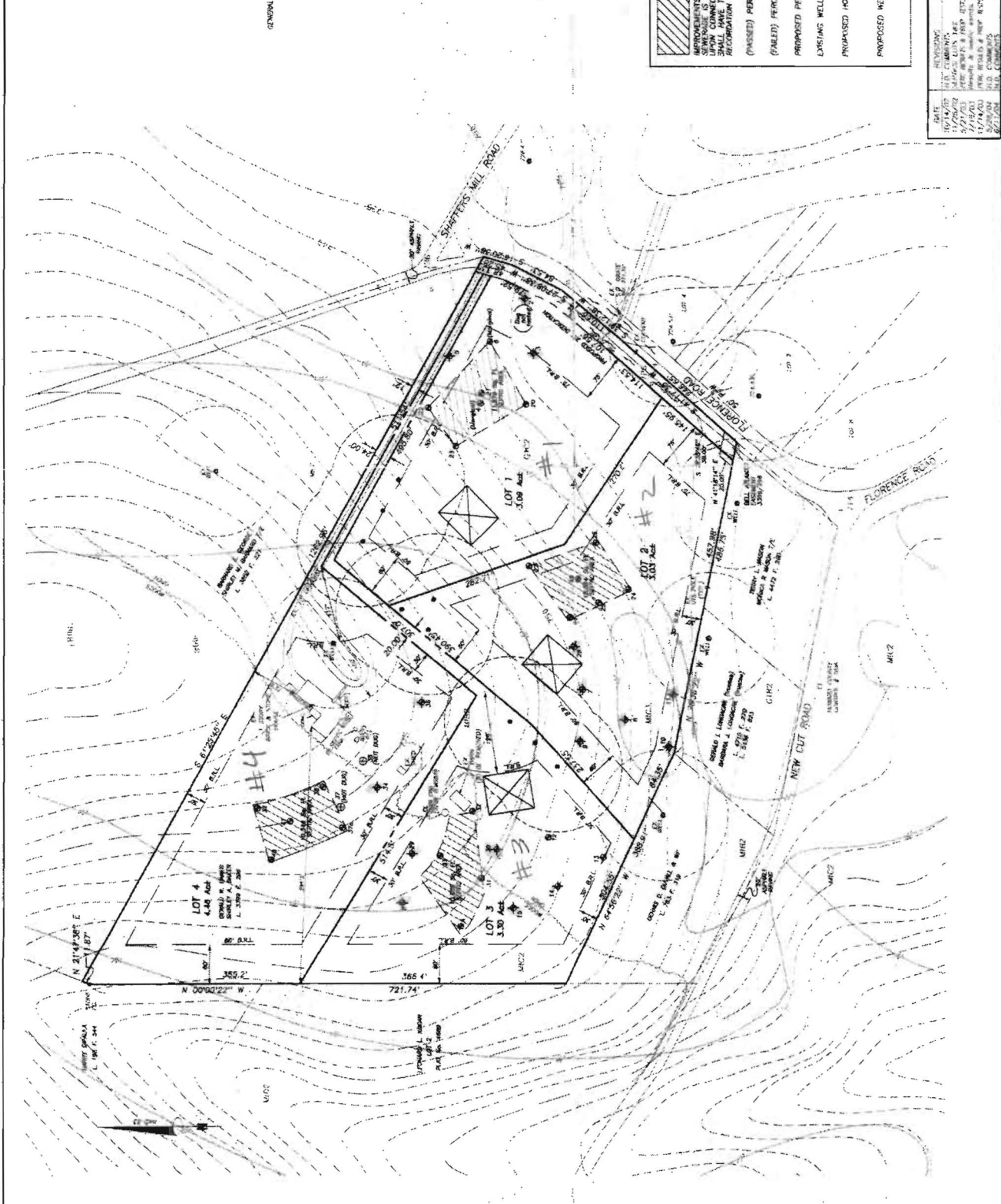
THIS AREA REPRESENTS A PRIVATE SEWERAGE SYSTEM OF AT LEAST 1000' EQUIVALENT AS REQUIRED BY MISSISSIPPI STATE DEPARTMENT OF ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL.

APPROXIMATE LOCATION OF SEWERAGE SYSTEM SHALL BE SHOWN ON THIS MAP. THESE SEWERAGE SHALL BE CONNECTED TO PUBLIC SEWERAGE SYSTEM THE COUNTY HEALTH OFFICER RECOMMENDATION OF A MANDATED SEWERAGE TREATMENT SHALL NOT BE NECESSARY.

(HATCHED) PERCOLATION TEST SITE
 (CROSS) PERCOLATION TEST SITE
 PROPOSED PERCOLATION TEST SITE
 EXISTING WELL
 PROPOSED HOUSE SITE
 PROPOSED WELL SITE

PERCOLATION CERTIFICATION PLAN
BAKER PROPERTY
 LIBER 3359 FOLD 296
 SITUATED ON FLORENCE ROAD
 ELECTION DISTRICT NO. 4
 HAWKINS COUNTY, MISSISSIPPI
 SCALE: 1" = 100', OCTOBER, 2002

YANNAKIS ASSOCIATES, INC.
 1801 WEST 10TH STREET, SUITE 100
 HOUSTON, TEXAS 77058-1000
 (713) 782-1000 (FAX) (713) 782-1111

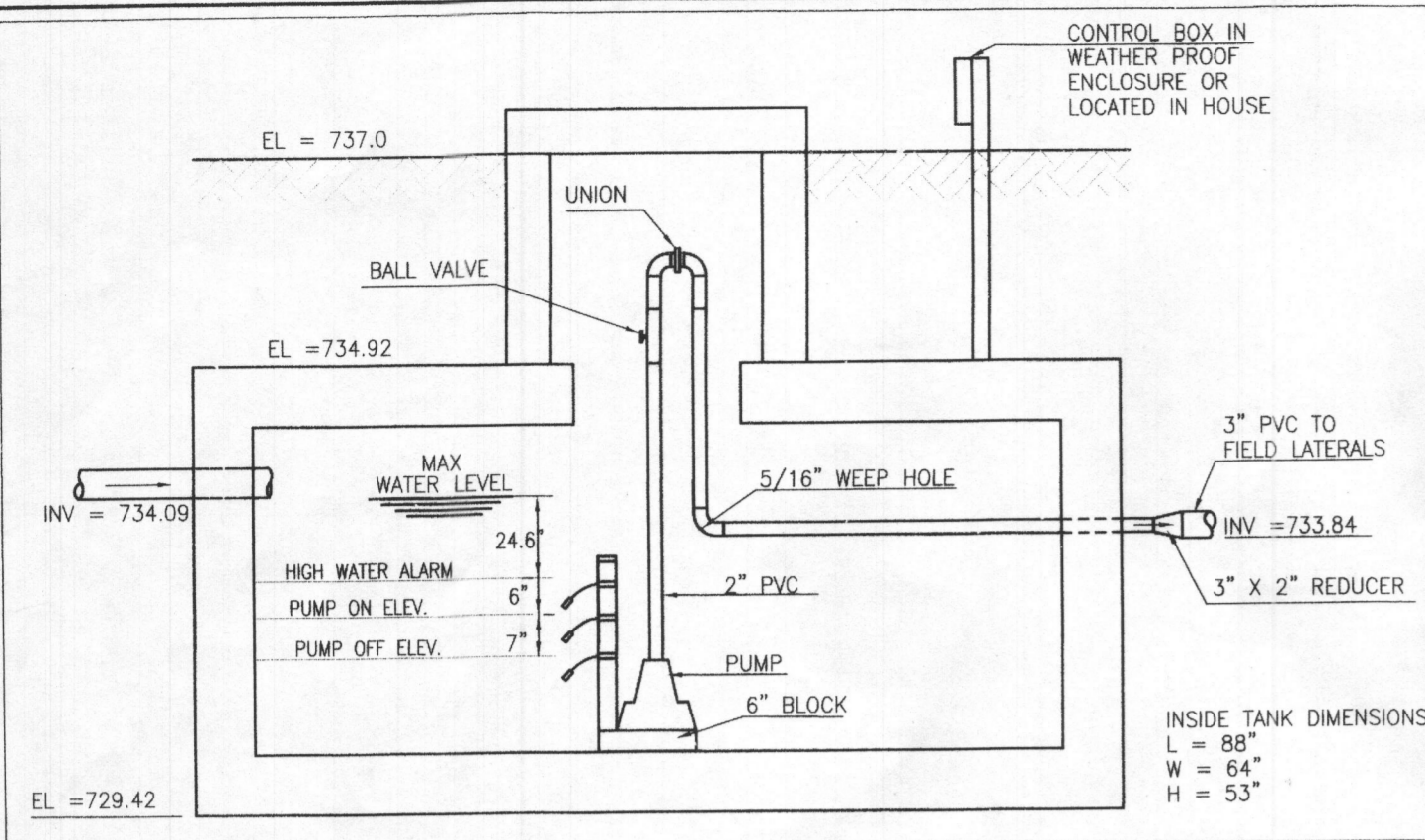


I HEREBY CERTIFY THERE ARE NO WELLS OR SEPTIC SYSTEMS WITHIN 100' FEET OF THE PROPERTY BOUNDARY UNLESS OTHERWISE SHOWN HEREON
 I FURTHER CERTIFY THAT THE PERCOLATION TEST HOLES HAVE BEEN FIELD LOCATED IF EXISTING AND ACCURATELY STAKED
 I PROPOSED ARE SHOWN HEREON.

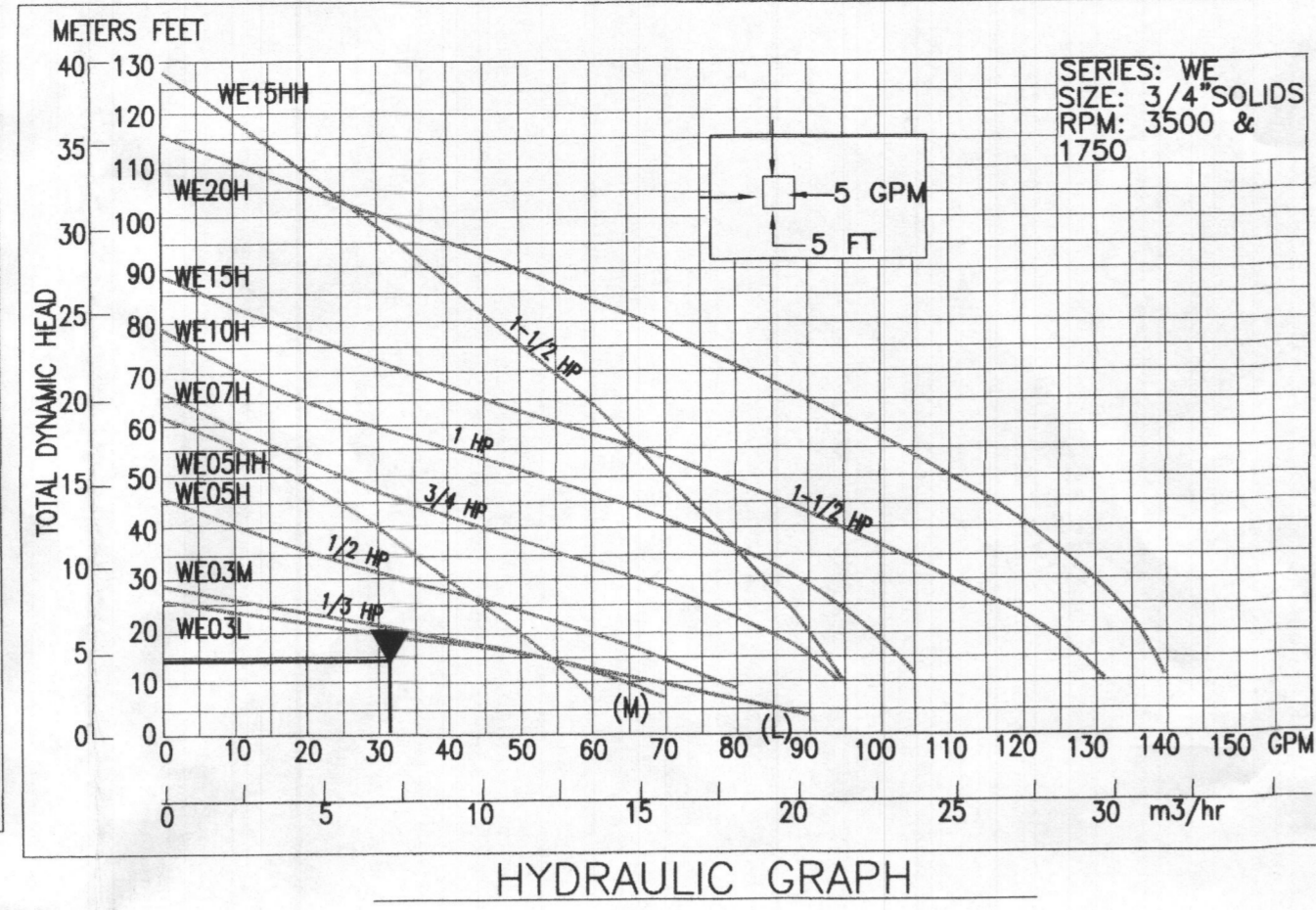
Gerald R. Baker
 7/29/04
 SHERLEY A. Baker, State of Miss. License # 11151

OWNER:
 GERALD R. BAKER, 444K
 C/O JEFF MEAL/D/ER
 2610 MALLINCK MEI, RD30
 MT. ARY, MS. 38177

APPROVED:
 FOR PRIVATE WATER AND SEWERAGE SYSTEMS
 HAWKINS COUNTY HEALTH DEPARTMENT
 HAWKINS COUNTY HEALTH OFFICER K.N. DAVIS



TOP SEAM 1250 GAL. PUMP CHAMBER
NOT TO SCALE



LOW PRESSURE DOSING SYSTEM

TRENCH	GROUND ELEV.	PIPE INVERT ELEV.	TRENCH LENGTH (FT)	2" LATERAL PIPE LENGTH (FT)	PERFORATION DIAMETER (IN)	HEAD (FT)	PERFORATION FLOW RATE (GPM)	PERFORATION SPACING (FT)	NUMBER OF ORIFICES	TRENCH FLOW RATE (GPM)
T1-L1	743.2	739.2	31.5'	28.0'	5/16"	3.0	1.99	7.0'	4	7.96
T1-L2	743.2	739.2	31.5'	28.0'	5/16"	3.0	1.99	7.0'	4	7.96
T2-L3	741.2	739.2	31.5'	28.0'	5/16"	3.0	1.99	7.0'	4	7.96
T2-L4	741.2	739.2	31.5'	28.0'	5/16"	3.0	1.99	7.0'	4	7.96
TRENCH FLOW RATE										31.84

TRENCH DESIGN

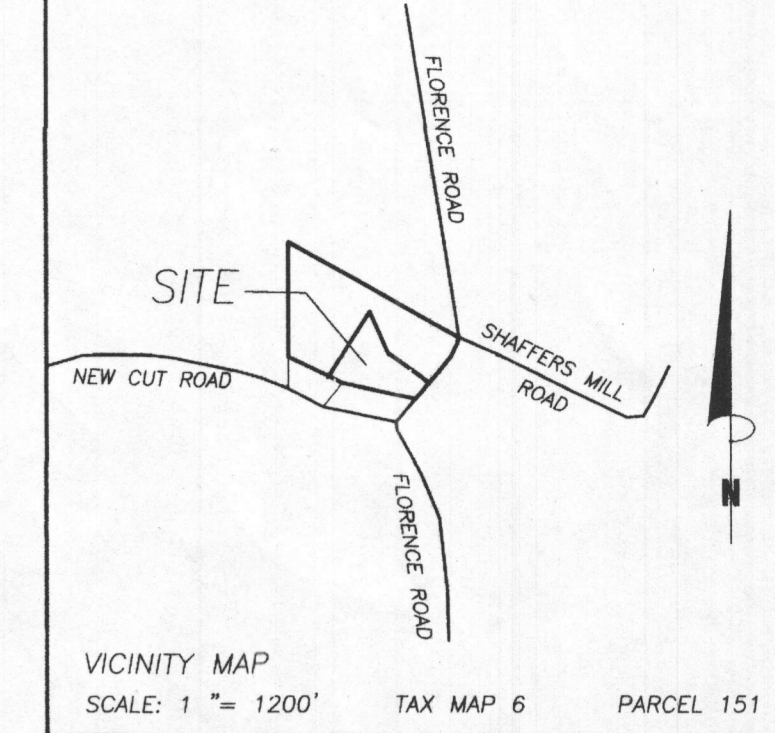
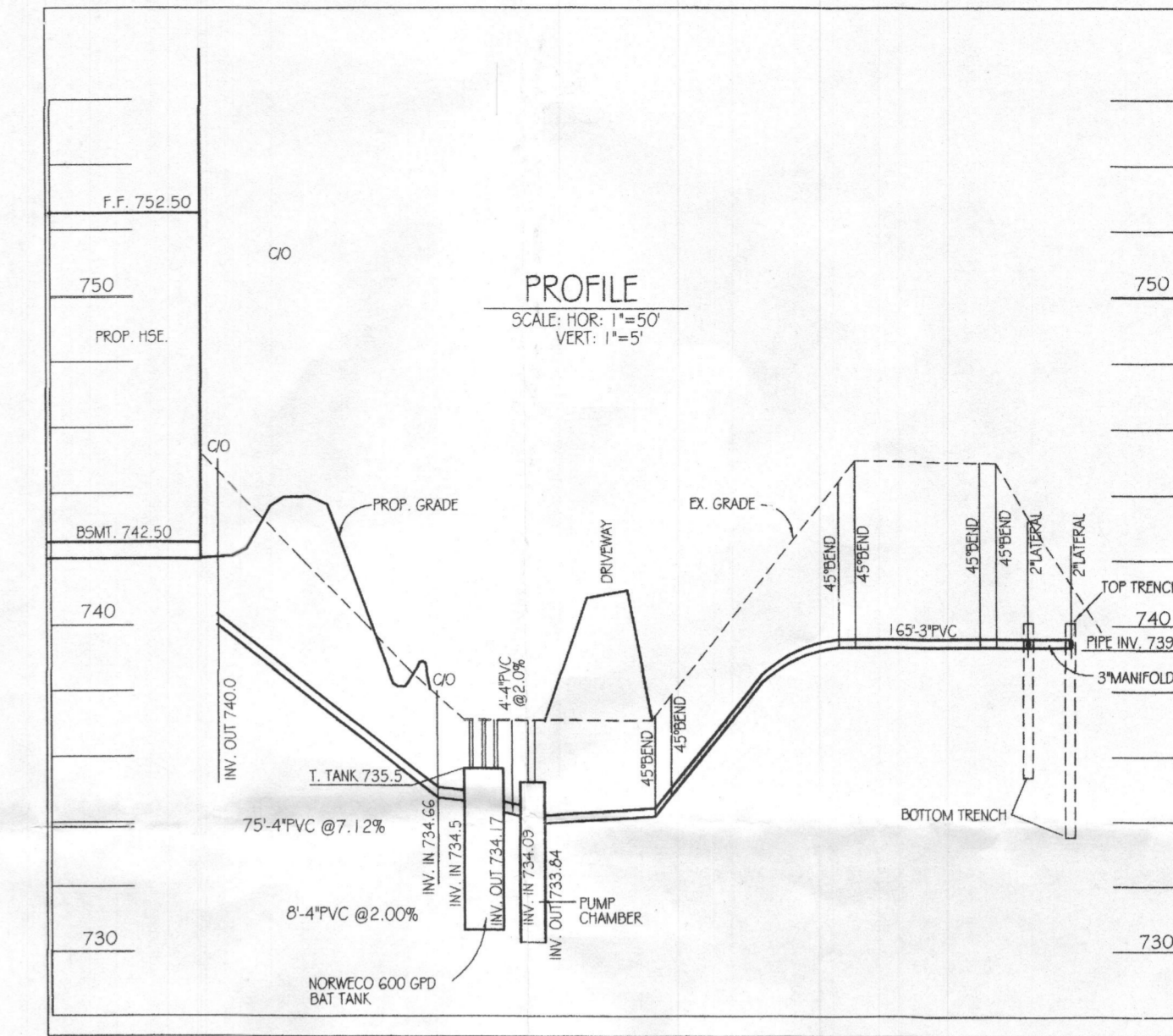
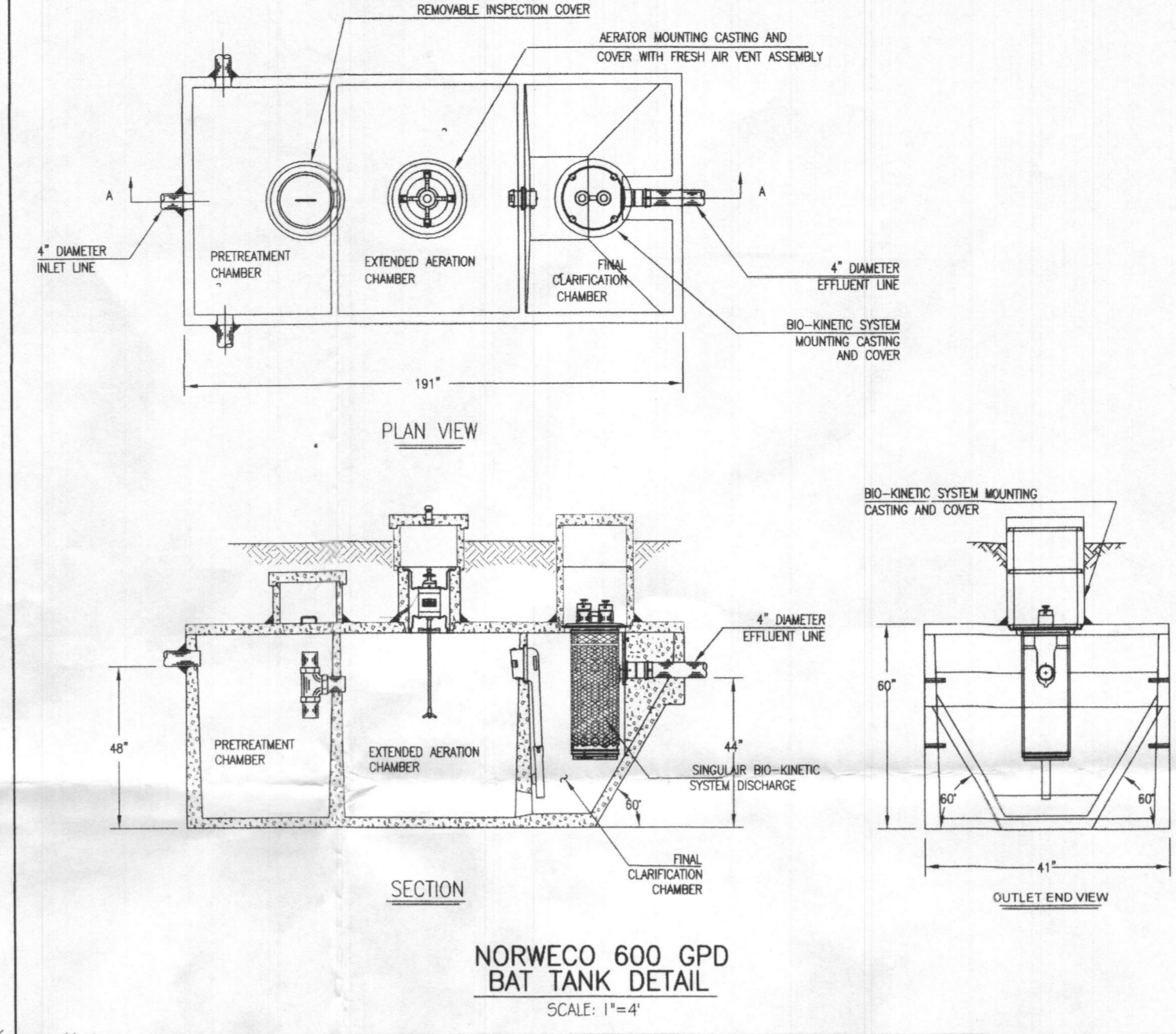
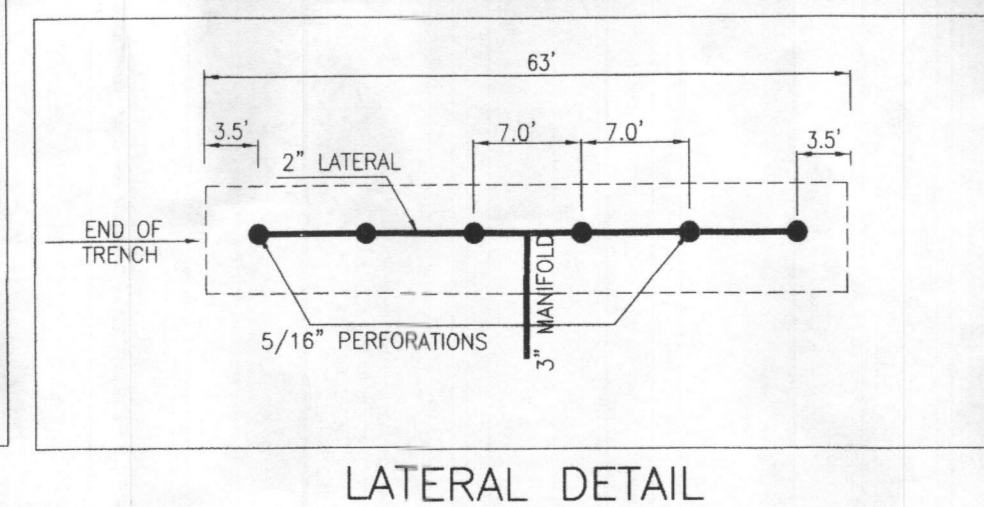
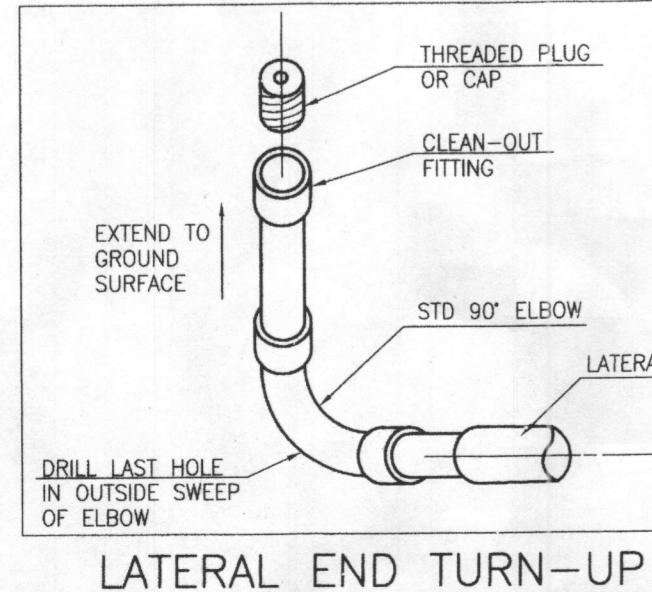
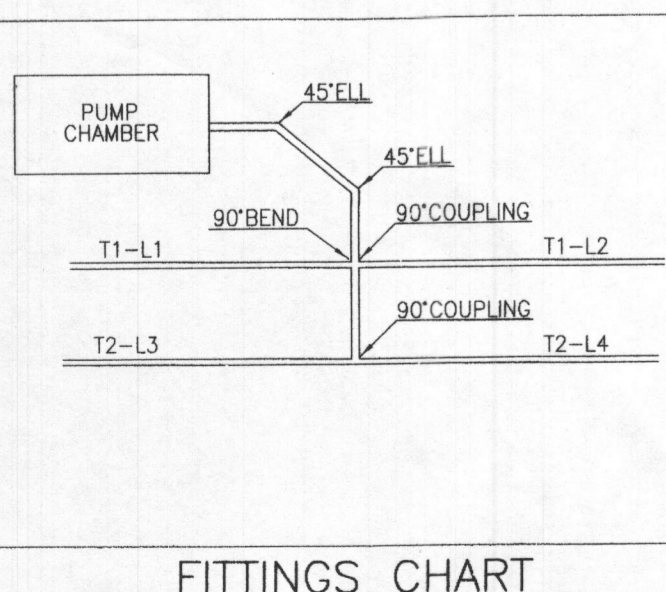
TRENCH	GROUND ELEV.	TOP OF STONE ELEV.	PIPE INVERT ELEV.	DEPTH OF STONE FROM GROUND	DEPTH OF STONE (FT)	BOTTOM OF TRENCH ELEV.	EFFECTIVE DEPTH BEGINS AT	EFFECTIVE DEPTH (D)	WIDTH OF TRENCHES (W)	TRENCH SPACING (FT)
T1-L1	743.2	740.0	739.2	3.2'	4.8'	735.2	738.2	3.0'	3.0'	10
T1-L2	743.2	740.0	739.2	3.2'	4.8'	735.2	738.2	3.0'	3.0'	10
T2-L3	741.2	740.0	739.2	1.2'	6.8'	733.2	736.2	3.0'	3.0'	10
T2-L4	741.2	740.0	739.2	1.2'	6.8'	733.2	736.2	3.0'	3.0'	10

LOW PRESSURED DOSE SYSTEM SPECIFICATIONS

- ALL PIPING TO BE SCHEDULE 40 PVC OF SIZES SHOWN.
- A SUBMERSIBLE PUMP TO REMOVE 31.8 GPM AGAINST 14.6 TDH TO BE PROVIDED. PUMP TO BE A GOULDS MODEL 3885-WE03L OR EQUAL.
- A TEST OF THE PUMP SYSTEM AND DISTRIBUTION PIPING IS REQUIRED PRIOR TO COVERING THE SYSTEM.
- THE HIGH WATER ALARM IS TO BE ON A SEPARATE CIRCUIT ALARM TO BE LOCATED IN THE HOUSE.

LOW PRESSURE DOSE SYSTEM DESIGN CRITERIA

- DOSE VOLUME**
- MINIMUM DOSE = (5 X LATERAL PIPE VOLUME) + (FORCE MAIN 4 MANIFOLD)
= (5 X 19.49) + 63.36
= 160.8 GALLONS
 - 160.8 GALLONS IS MORE THAN 1/6 DESIGN FLOW (4 BDRMS X 150 GALLONS/DAY = 100 GALLONS)
USE 160.8 GALLONS DOSE (5.7 MIN RUN TIME X 31.8 GPM FLOW)
- PIPE VOLUMES**
- 165 LF (3" PIPE) X 38.4 GALLONS PER 100 LF = 63.36 GALLONS
 - 112 LF (2" PIPE) X 17.4 GALLONS PER 100 LF = 19.49 GALLONS
- FRICTION LOSS IN 3" PIPE FITTINGS**
- 2 - COUPLING X 3 FT PER FITTING = 6 EQUIVALENT FT OF PIPE
 - 1 - 90° X 1.5 FT PER FITTING = 15 EQUIVALENT FT OF PIPE
 - 1 - 45° X 6 FT PER FITTING = 36 EQUIVALENT FT OF PIPE
- TOTAL EQUIVALENT FEET OF PIPE = 57 FEET
TOTAL LINEAR FEET OF 3" PVC = 165 LF + 57 LF = 222 LF
- DYNAMIC HEAD**
- 222 LF X 2.09 PER 100 LF OF PIPE = 4.64 FT OF FRICTION HEAD
DISTAL HEAD = 3.0 FT
VERTICAL FROM PUMP OFF TO UPPER TRENCH = 9.26 FT
TOTAL DYNAMIC HEAD = 19.90 FT (USE 19.8 FT)



- GENERAL NOTES:**
- TOPOGRAPHY & PLANIMETRY FEATURES SHOWN HEREON TAKEN FROM COPYRIGHTED GIS DATA FROM HOWARD COUNTY, SUPPLEMENTED WITH FIELD LOCATIONS BY VANMAR ASSOCIATES, INC. CONTOUR INTERVAL IS 2 FEET. VERTICAL DATUM IS NAVD83.
 - THE EXISTING WELLS SHOWN ON THIS PLAN HAVE BEEN FIELD RECORDED AND ACCURATELY SHOWN.
 - ZONING DISTRICT: RC-DEO
 - LIMIT OF DISTURBANCE (LOD) = 37,500 SQ. FT.
 - THERE ARE NO STREAMS, PONDS, FLOODPLAINS OR WETLANDS ON THIS LOT.
 - STORMWATER MANAGEMENT REQUIREMENTS WILL BE ADDRESSED USING (N-1) ROOFTOP AND (N-2) NON-ROOFTOP DISCONNECTION (M-6) MICRO-BIOTENTION AND M-9 GRASS SWALE. SWM IS IN ACCORDANCE WITH THE 2009 REVISIONS OF THE 2000 MD STORMWATER DESIGN MANUAL AND ADDRESSES ESD TO THE MEP.

SEQUENCE OF CONSTRUCTION

- OBTAIN ALL REQUIRED GRADING, MDE PERMITS, APPROVALS AND LICENSES FROM APPROPRIATE AGENCIES.
- NOTIFY SEDIMENT CONTROL INSPECTOR AT LEAST THREE (3) WORKING DAYS PRIOR TO STARTING WORK.
- INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE AND OTHER SEDIMENT CONTROL DEVICES AS SHOWN IN THE SEDIMENT CONTROL PLAN.
- STABILIZE ALL THE GRADED AREAS UP TO 20' OUTSIDE OF THE LIMIT OF GRADING AS PER PERMANENT SEEDING NOTES.
- EXCAVATE HOUSE FOUNDATION, HOUSE CONSTRUCTION, UTILITIES AND INSTALL SEPTIC.
- ANY AREAS THAT CAN BE TEMPORARILY SEEDED DURING CONSTRUCTION MUST BE TEMPORARILY STABILIZED PER SEEDING NOTES.
- INSTALL DRIVEWAY.
- STABILIZE DISTURBED AREAS PER PERMANENT SEEDING NOTES.
- UPON APPROVAL OF SEDIMENT CONTROL INSPECTOR, REMOVE ALL TEMPORARY SEDIMENT CONTROL DEVICES FOR HOUSE CONSTRUCTION.
- NOTIFY INSPECTOR FOR FINAL INSPECTION.

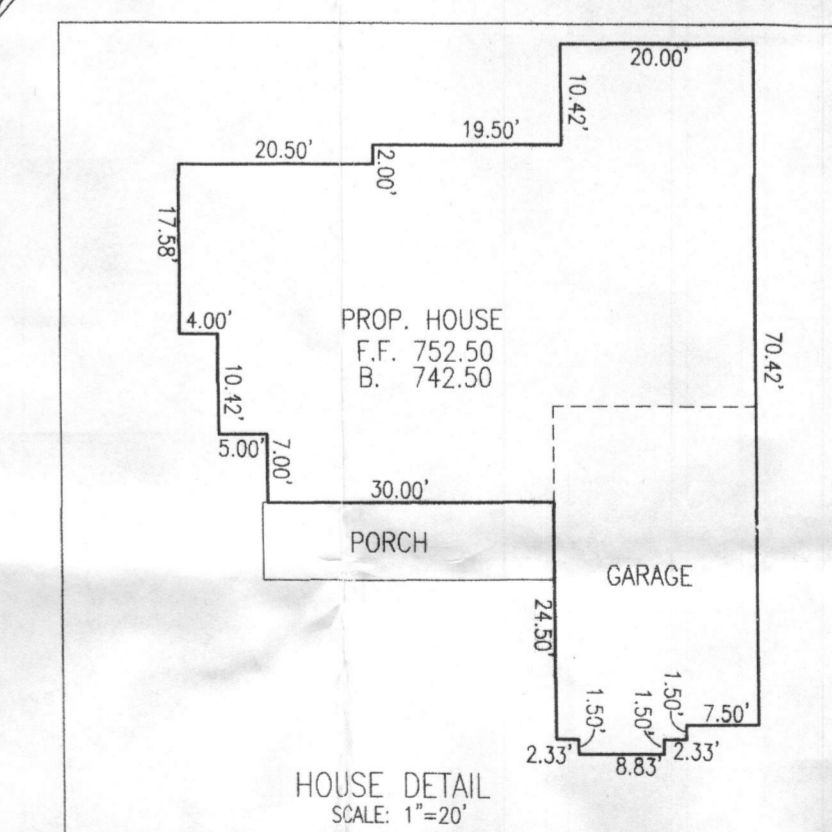
SEPTIC SYSTEM TRENCH DESIGN

- INITIAL NUMBER OF BEDROOMS = 4
APPLICATION RATE = 0.8 GPD / sq.ft.
DESIGN FLOW: 150 GPD X 4 BEDROOMS = 600 GPD
600 GPD / 0.8 GPD/sq.ft. = 750 sq.ft.
750 sq.ft. / 3 ft. WIDE TRENCH = 250 LF TRENCH
250 LF TRENCH X 0.50 REDUCTION CREDIT = 125 LF TRENCH
TRENCH 1 (T1) EX. GRD=743.2 - INV. TRENCH=739.2 - B. TRENCH=735.2
TRENCH 2 (T2) EX. GRD=741.2 - INV. TRENCH=739.2 - B. TRENCH=733.2
- 1st REPLACEMENT**
APPLICATION RATE = 0.8 GPD / sq.ft.
DESIGN FLOW: 150 GPD X 4 BEDROOMS = 600 GPD
600 GPD / 0.8 GPD/sq.ft. = 750 sq.ft.
750 sq.ft. / 3 ft. WIDE TRENCH = 250 LF TRENCH
250 LF TRENCH X 0.50 REDUCTION CREDIT = 125 LF TRENCH
- 2nd REPLACEMENT**
APPLICATION RATE = 0.8 GPD / sq.ft.
DESIGN FLOW: 150 GPD X 4 BEDROOMS = 600 GPD
600 GPD / 0.8 GPD/sq.ft. = 750 sq.ft.
750 sq.ft. / 3 ft. WIDE TRENCH = 250 LF TRENCH
250 LF TRENCH X 0.625 REDUCTION CREDIT = 156 LF TRENCH

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 SITE PLAN MAY BE REQUIRED.
- MAXIMUM COVER OVER THE BAT PER MANUFACTURERS SPECIFICATION IS 3 FEET.
- THE BLOWER MAY NOT BE LOCATED MORE THAN 100 FEET FROM THE TANK BASED ON MANUFACTURERS SPECIFICATIONS.
- THE BAT SYSTEM SHALL BE MAINTAINED AND OPERATED FOR THE LIFE OF THE SYSTEM.
- THE BAT SHALL BE OPERATED AND MAINTAINED BY A CERTIFIED SERVICE PROVIDER.
- WITHIN ONE MONTH OF INSTALLATION, A PERSON INSTALLING THE BAT SYSTEM SHALL REPORT TO THE MANAGER AND DEPARTMENT OF THE ENVIRONMENT AND IN A MANNER ACCEPTABLE TO MDE, THE ADDRESS AND DATE OF COMPLETION OF THE BAT INSTALLATION AND 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 INSTALLATION.

Approved Septic System Plan
Howard County Health Department
Signature: *Mark Smith* Date: 9/20/16



DEVELOPER'S CERTIFICATE:

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT FOR SEDIMENT AND EROSION CONTROL, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Ray Cumberland 9/20/16
DEVELOPER DATE

ENGINEER'S CERTIFICATE:

I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT AND THE 2011 MARYLAND STANDARDS & SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

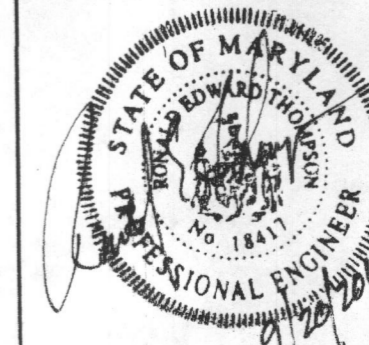
Ronald E. Thompson, P.E. 9/20/16
RONALD E. THOMPSON, P.E. DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT DATE

OWNER:
JOHN D. AND JILL O. SADOWSKI
2655 LESLIE ROAD
MOUNT AIRY, MD 21771

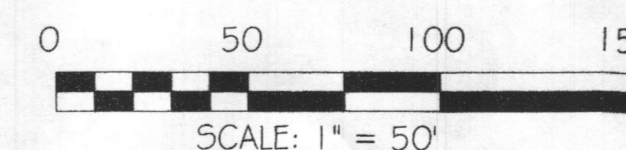
PROFESSIONAL CERTIFICATION
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 18417, Expiration Date: 9-18-17.

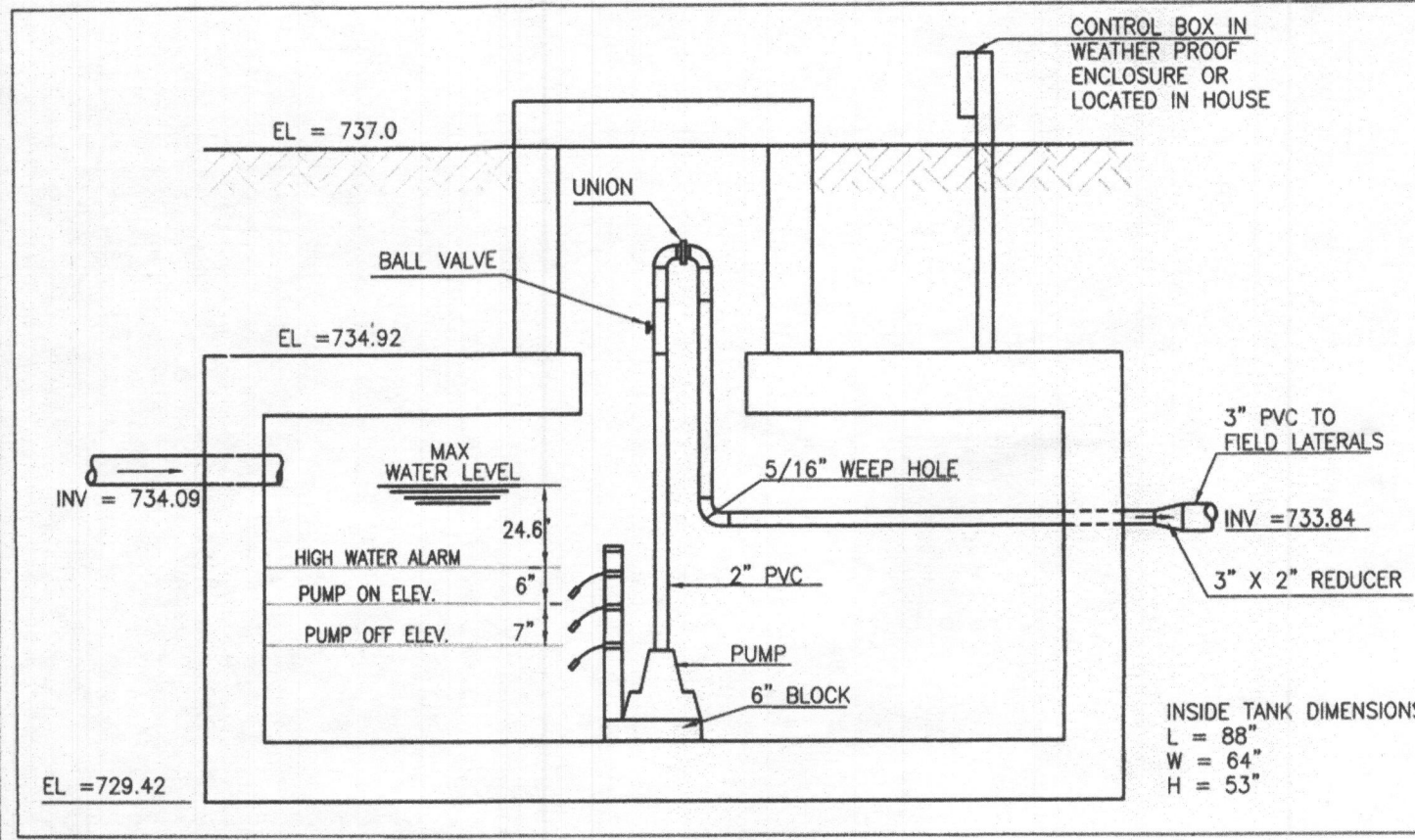


PLOT PLAN SITE PLAN FOR BAT TECHNOLOGY
LOT 2
MOCKINGBIRD FOREST
PLAT No. 18776

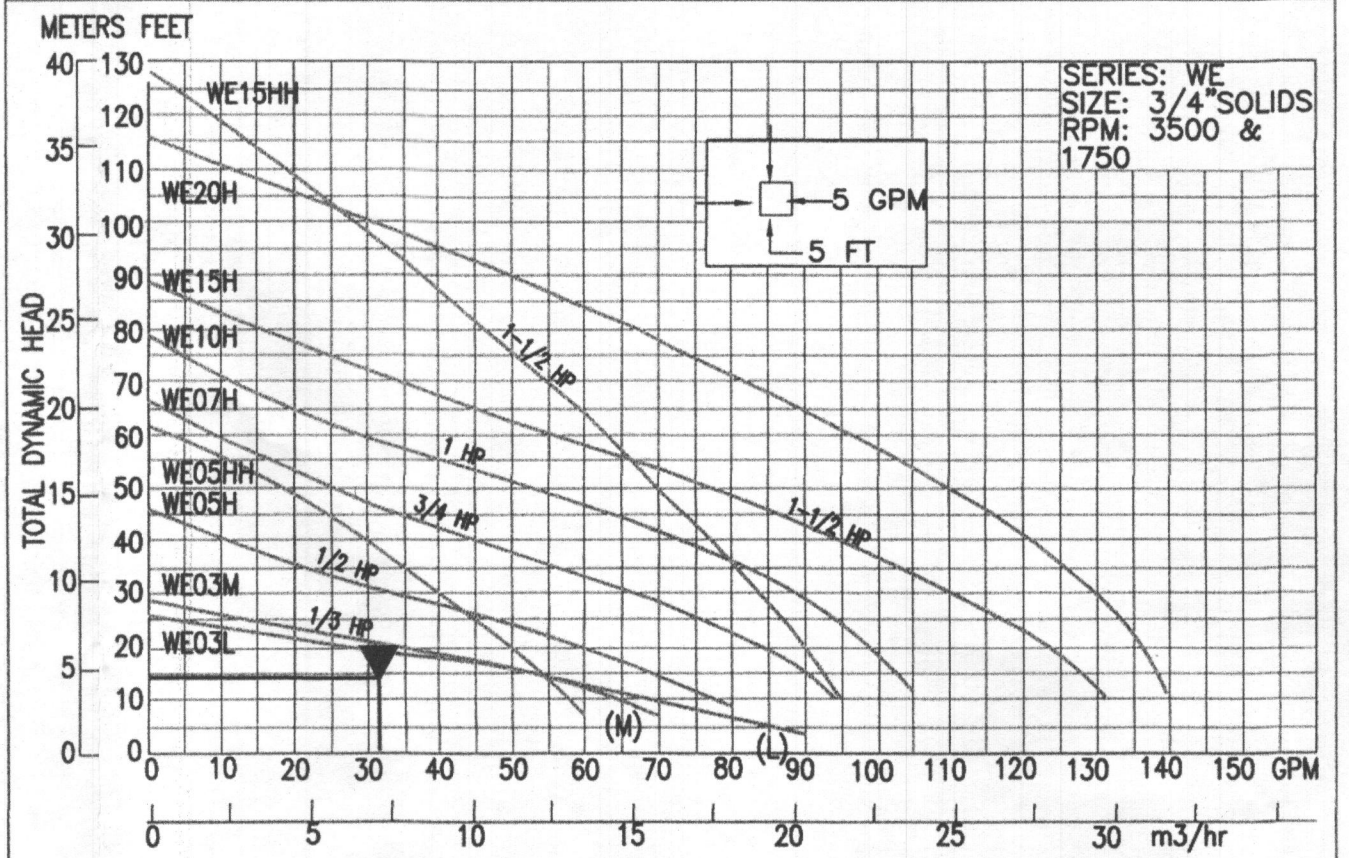
TAX MAP: 6 ELECTION DISTRICT: FOURTH SCALE: 1"=50'
GRID NO: 24 HOWARD COUNTY, MARYLAND DATE: SEPTEMBER, 2016
PARCEL NO: 151 EX. ZONING: RCDEO SHEET 1 OF 3

VANMAR ASSOCIATES, INC.
Engineers Surveyors Planners
310 South Main Street Mount Airy, Maryland 21771
(301) 829-2880 (501) 831-5015 (410) 549-2751
Vanmar.com Fax (301) 831-5603 ©Copyright, Latest Date Shown





TOP SEAM
1250 GAL. PUMP CHAMBER
NOT TO SCALE



HYDRAULIC GRAPH

LOW PRESSURE DOSING SYSTEM

TRENCH	GROUND ELEV.	PIPE INVERT ELEV.	TRENCH LENGTH (FT)	2" LATERAL PIPE LENGTH (FT)	PERFORATION DIAMETER (IN)	HEAD (FT)	PERFORATION FLOW RATE (GPM)	PERFORATION SPACING (FT)	NUMBER OF ORIFICES	TRENCH FLOW RATE (GPM)
T1-L1	743.2	739.2	31.5'	28.0'	5/16	3.0	1.99	7.0'	4	7.96
T1-L2	743.2	739.2	31.5'	28.0'	5/16	3.0	1.99	7.0'	4	7.96
T2-L3	741.2	739.2	31.5'	28.0'	5/16	3.0	1.99	7.0'	4	7.96
T2-L4	741.2	739.2	31.5'	28.0'	5/16	3.0	1.99	7.0'	4	7.96
TRENCH FLOW RATE										31.84

TRENCH DESIGN

TRENCH	GROUND ELEV.	TOP OF STONE ELEV.	PIPE INVERT ELEV.	DEPTH OF STONE FROM GROUND	DEPTH OF TRENCH (FT)	EFFECTIVE DEPTH BEGINS AT	EFFECTIVE DEPTH (FT)	WIDTH OF TRENCHES (W)	TRENCH SPACING (FT)
T1-L1	743.2	740.0	739.2	3.2'	4.8'	735.2	738.2	3.0'	10
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T2-L4	741.2	740.0	739.2	1.2'	6.8'	733.2	736.2	3.0'	10

LOW PRESSURED DOSE SYSTEM SPECIFICATIONS

- ALL PIPING TO BE SCHEDULE 40 PVC OF SIZES SHOWN.
- A SUBMERSIBLE PUMP TO REMOVE 31.8 GPM AGAINST 14.6 TDH TO BE PROVIDED. PUMP TO BE A COULDS MODEL 3885-WE03L OR EQUAL.
- A TEST OF THE PUMP SYSTEM AND DISTRIBUTION PIPING IS REQUIRED PRIOR TO COVERING THE SYSTEM.
- THE HIGH WATER ALARM IS TO BE ON A SEPARATE CIRCUIT ALARM TO BE LOCATED IN THE HOUSE.

LOW PRESSURE DOSE SYSTEM DESIGN CRITERIA

DOSE VOLUME

- MINIMUM DOSE = (5 X LATERAL PIPE VOLUME) + (FORCE MAIN + MAINFOLD) = (5 X 19.49) + 63.36 = 160.8 GALLONS
- 160.8 GALLONS IS MORE THAN 1/6 DESIGN FLOW (4 BDRMS X 150 GALLONS/6 = 100 GALLONS USE 160.8 GALLONS DOSE (5.7 MIN RUN TIME X 31.8 GPM FLOW)

PIPE VOLUMES

- 1.65 LF (3" PIPE) X 39.4 GALLONS PER 100 LF = 63.36 GALLONS
- 1.12 LF (2" PIPE) X 17.4 GALLONS PER 100 LF = 19.49 GALLONS

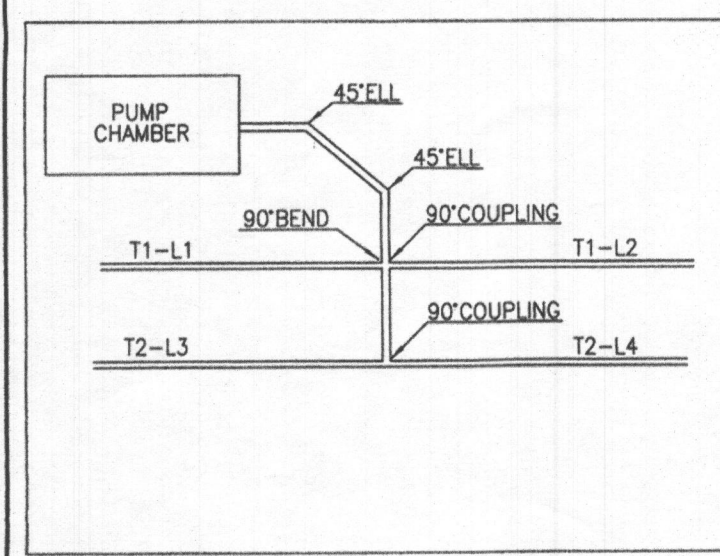
FRICITION LOSS IN 3" PIPE FITTINGS

- 2 - COUPLING X 3 FT PER FITTING = 6 EQUIVALENT FT OF PIPE
- 1 - 90° X 1.5 FT PER FITTING = 15 EQUIVALENT FT OF PIPE
- 6 - 45° X 6 FT PER FITTING = 36 EQUIVALENT FT OF PIPE

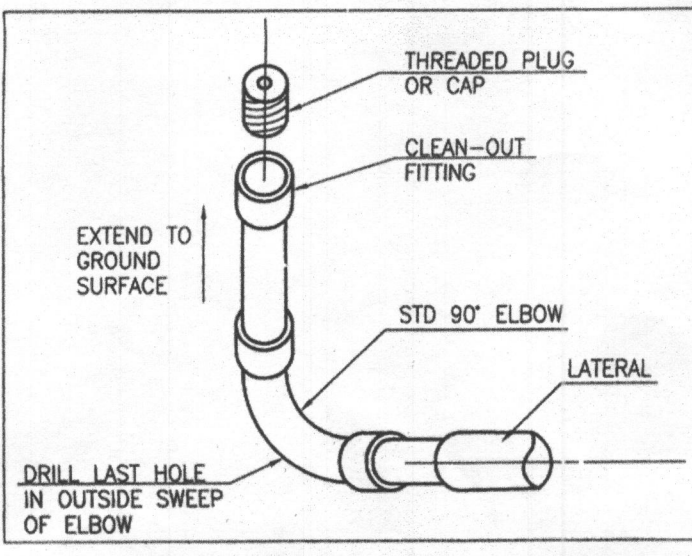
TOTAL EQUIVALENT FEET OF PIPE = 57 FEET
TOTAL LINEAR FEET OF 3" PVC = 165 LF + 57 LF = 222 LF

DYNAMIC HEAD

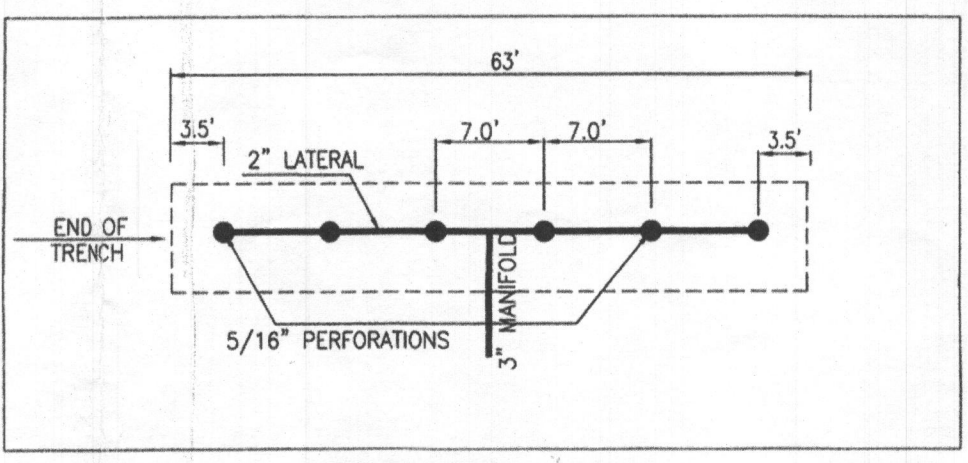
222 LF X 2.09 PER 100 LF OF PIPE = 4.64 FT OF FRICTION HEAD
DISTAL HEAD = 3.0 FT
VERTICAL FROM PUMP OFF TO UPPER TRENCH = 9.28 FT
TOTAL DYNAMIC HEAD = 19.80 FT (USE 19.8 FT)



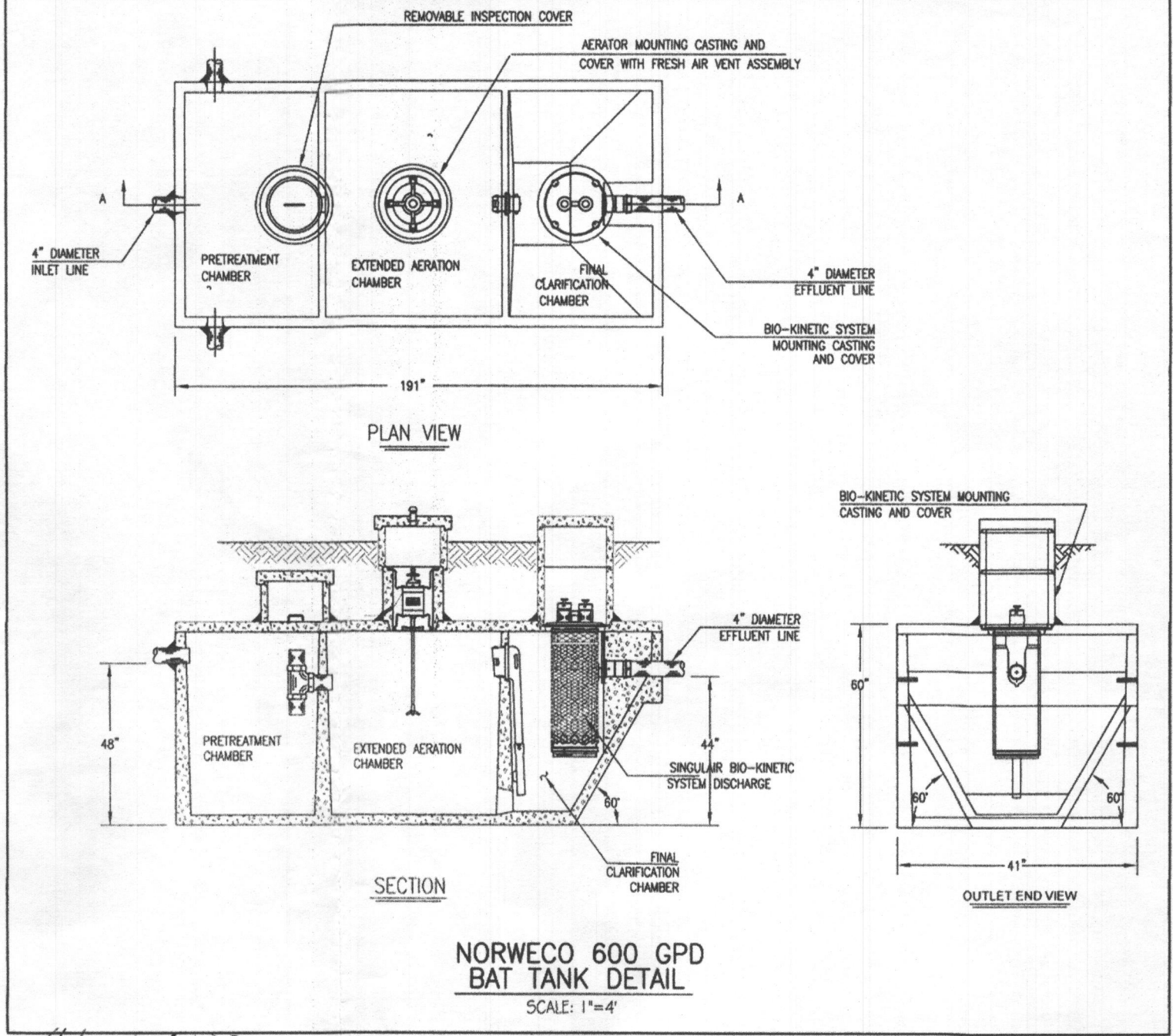
FITTINGS CHART



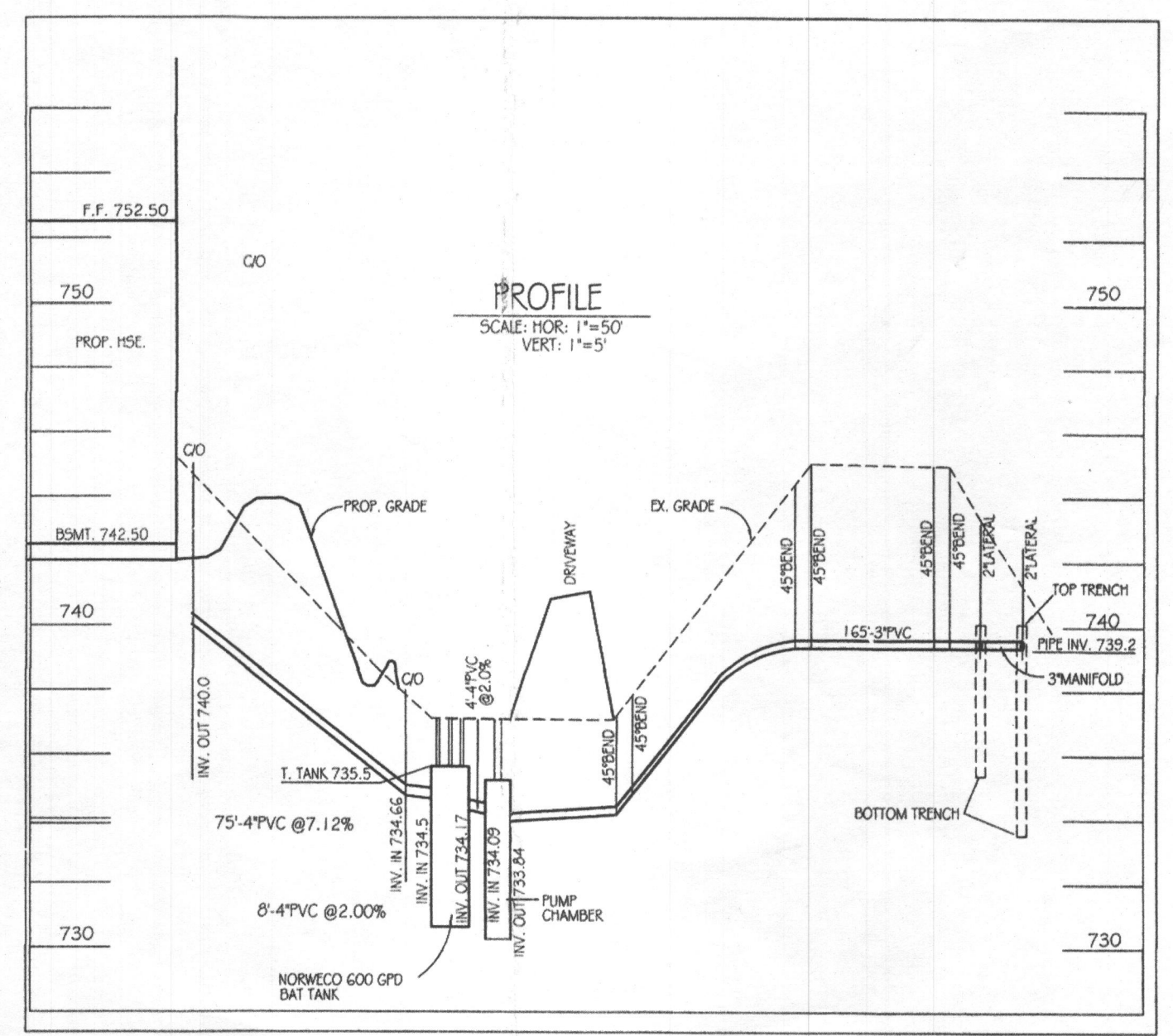
LATERAL END TURN-UP



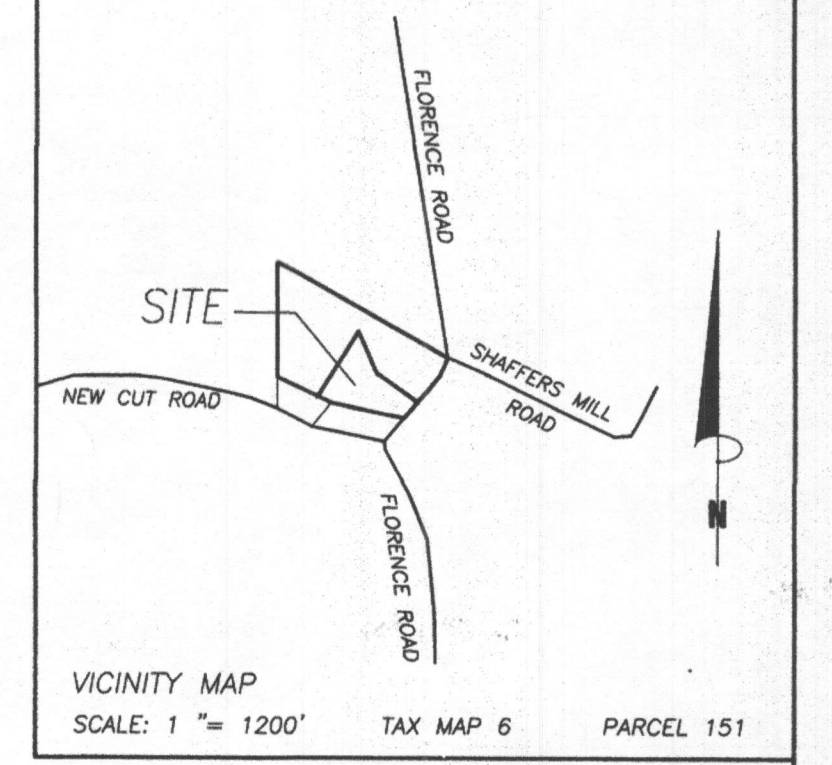
LATERAL DETAIL



NORWECO 600 GPD
BAT TANK DETAIL
SCALE: 1"=4'



PROFILE
SCALE: HORIZ. 1"=50'
VERT. 1"=5'



VICINITY MAP
SCALE: 1" = 1200' TAX MAP 6 PARCEL 151

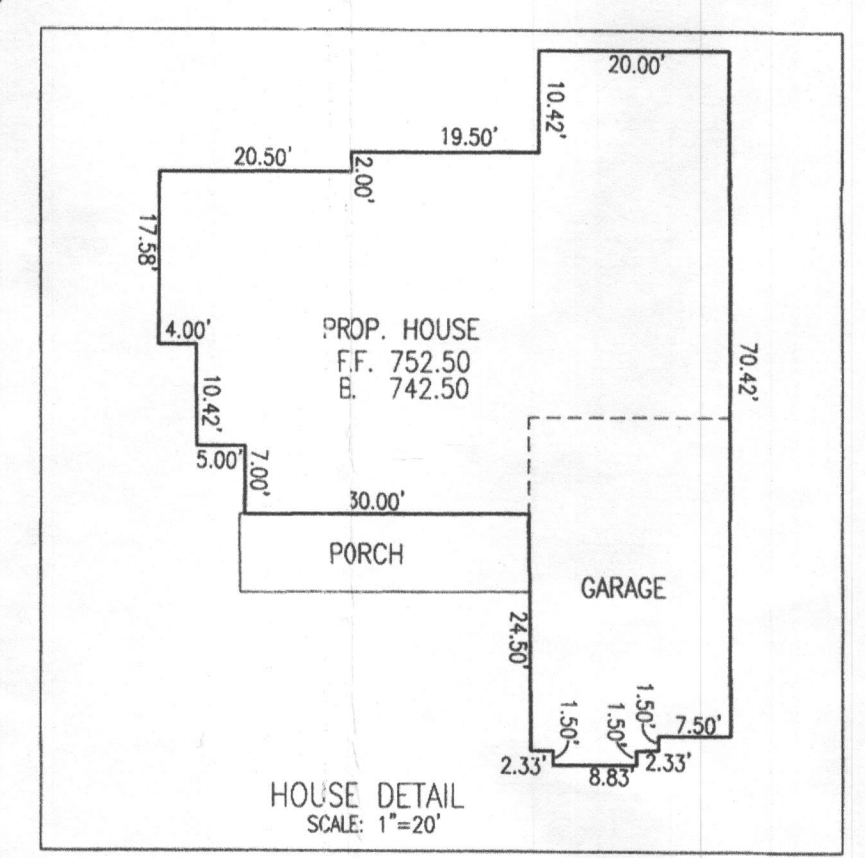
- GENERAL NOTES:
- TOPOGRAPHY & PLANIMETRIC FEATURES SHOWN HEREON TAKEN FROM COPYRIGHTED GIS DATA FROM HOWARD COUNTY SUPPLEMENTED WITH FIELD LOCATIONS BY VANMAR ASSOCIATES, INC. CONTOUR INTERVAL IS 2 FEET. VERTICAL DATUM IS NAVD83.
 - THE EXISTING WELLS SHOWN ON THIS PLAN HAVE BEEN FIELD LOCATED BY VANMAR ASSOCIATES OR TAKEN FROM AVAILABLE RECORDS AND ACCURATELY SHOWN.
 - ZONING DISTRICT: RC-DEO
 - LIMIT OF DISTURBANCE (LOD) = 37,500 SQ. FT.
 - THERE ARE NO STREAMS, PONDS, FLOODPLAINS OR WETLANDS ON THIS LOT.
 - STORMWATER MANAGEMENT REQUIREMENTS WILL BE ADDRESSED USING (N-1) ROOFTOP AND (N-2) NON-ROOFTOP DISCONNECT (M-6) MICRO-BIORETENTION AND M-8 GRASS SWALE. SWM IS IN ACCORDANCE WITH THE 2009 REVISIONS OF THE 2000 MD STORMWATER DESIGN MANUAL AND ADDRESSES ESD TO THE MEP.



- SEQUENCE OF CONSTRUCTION
- OBTAIN ALL REQUIRED GRADING, MDE PERMITS, APPROVALS AND LICENSES FROM APPROPRIATE AGENCIES.
 - NOTIFY SEDIMENT CONTROL INSPECTOR AT LEAST THREE (3) WORKING DAYS PRIOR TO STARTING WORK.
 - INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE AND OTHER SEDIMENT CONTROL DEVICES AS SHOWN IN THE SEDIMENT CONTROL PLAN.
 - STABILIZE ALL THE GRADED AREAS UP TO 20' OUTSIDE OF THE LIMIT OF GRADING AS PER PERMANENT SEEDING NOTES.
 - EXCAVATE HOUSE FOUNDATION, HOUSE CONSTRUCTION, UTILITIES AND INSTALL SEPTIC.
 - ANY AREAS THAT CAN BE TEMPORARILY SEEDED DURING CONSTRUCTION MUST BE TEMPORARILY STABILIZED PER SEEDING NOTES.
 - INSTALL DRIVEWAY.
 - STABILIZE DISTURBED AREAS PER PERMANENT SEEDING NOTES.
 - UPON APPROVAL OF SEDIMENT CONTROL INSPECTOR, REMOVE ALL TEMPORARY SEDIMENT CONTROL DEVICES FOR HOUSE CONSTRUCTION.
 - NOTIFY INSPECTOR FOR FINAL INSPECTION.

- SEPTIC SYSTEM TRENCH DESIGN
- INITIAL NUMBER OF BEDROOMS = 4
APPLICATION RATE = 0.8 GPD / sq. ft.
DESIGN FLOW: 150 GPD X 4 BEDROOMS = 600 GPD
600 GPD / 0.8 GPD/sq. ft. = 750 sq. ft.
750 sq. ft. / 3 ft. WIDE TRENCH = 250 LF TRENCH
250 LF TRENCH X 0.50 REDUCTION CREDIT = 125 LF TRENCH
- 1st REPLACEMENT
APPLICATION RATE = 0.8 GPD / sq. ft.
DESIGN FLOW: 150 GPD X 4 BEDROOMS = 600 GPD
600 GPD / 0.8 GPD/sq. ft. = 750 sq. ft.
750 sq. ft. / 3 ft. WIDE TRENCH = 250 LF TRENCH
250 LF TRENCH X 0.50 REDUCTION CREDIT = 125 LF TRENCH
- 2nd REPLACEMENT
APPLICATION RATE = 0.8 GPD / sq. ft.
DESIGN FLOW: 150 GPD X 4 BEDROOMS = 600 GPD
600 GPD / 0.8 GPD/sq. ft. = 750 sq. ft.
750 sq. ft. / 3 ft. WIDE TRENCH = 250 LF TRENCH
250 LF TRENCH X 0.625 REDUCTION CREDIT = 156 LF TRENCH

- 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 SITE PLAN MAY BE REQUIRED.
 - MAXIMUM COVER OVER THE BAT PER MANUFACTURERS SPECIFICATION IS 3 FEET.
 - THE BLOWER MAY NOT BE LOCATED MORE THAN 100 FEET FROM THE TANK BASED ON MANUFACTURERS SPECIFICATIONS.
 - THE BAT SYSTEM SHALL BE MAINTAINED AND OPERATED FOR THE LIFE OF THE SYSTEM.
 - THE BAT SHALL BE OPERATED 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 OF AND DATE OF COMPLETION OF THE BAT INSTALLATION AND 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 INSTALLATION.



HOUSE DETAIL
SCALE: 1"=20'

DEVELOPER'S CERTIFICATE:

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT FOR SEDIMENT AND EROSION CONTROL, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Cary Cumberland 9/20/16
DEVELOPER DATE

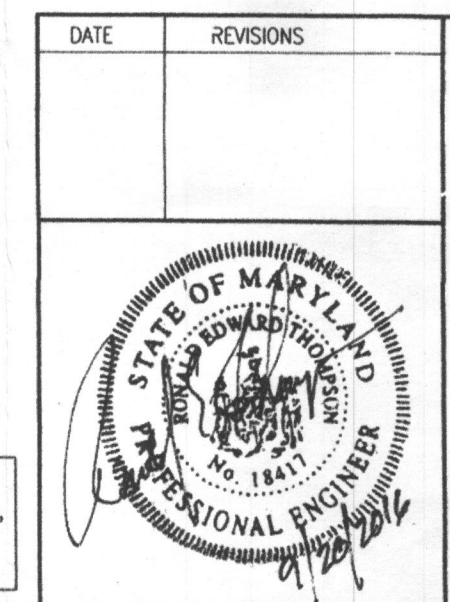
ENGINEER'S CERTIFICATE:

I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT AND THE 2011 MARYLAND STANDARDS & SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

Ronald E. Thompson, P.E. 9/20/2016
RONALD E. THOMPSON, P.E. DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT DATE



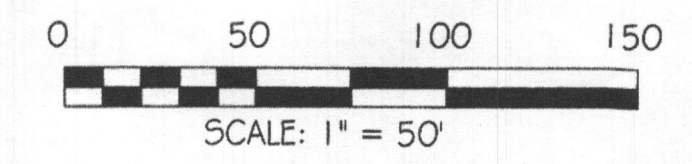
DATE REVISIONS

OWNER:
JOHN D. AND JILL O. SADOWSKI
2655 LESLIE ROAD
MOUNT AIRY, MD 21771

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. 18417, Expiration Date: 9-18-17.

TAX MAP: 6 ELECTION DISTRICT: FOURTH SCALE: 1"=50'
GRID NO: 24 HOWARD COUNTY, MARYLAND DATE: SEPTEMBER, 2016
PARCEL NO: 151 EX. ZONING: RCDEO SHEET 1 OF 3

VANMAR ASSOCIATES, INC.
Engineers Surveyors Planners
310 South Main Street Mount Airy, Maryland 21771
(301) 829-2890 (301) 831-5015 (410) 549-2751
Fax (301) 831-5603 ©Copyright, Latest Date Shown



SCALE: 1" = 50'