

Bureau of Environmental Health
 7178 Gateway Drive Columbia, MD 21046
 (410) 313-2640 Fax (410) 313-2648
 TDD (410) 313-2323 Toll Free 1-866-313-6300
 website: www.hchealth.org

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

APPLICATION FOR PERCOLATION TESTING AND SITE EVALUATION

PROPERTY LOCATION

SUBDIVISION/PROPERTY NAME _____ LOT # _____

PROPERTY ADDRESS 1243.9 Barnard Way W. Friendship 21794
STREET TOWN ZIP

TAX ACCOUNT # _____ TAX MAP _____ GRID _____ PARCEL _____ ZONING DESIGNATION _____

PROPERTY OWNER(S) Irvin Young

DAYTIME PHONE 4104590944 CELL _____ EMAIL _____

MAILING ADDRESS 1243.9 Barnard Way W. Friendship 21794
STREET CITY, STATE ZIP

APPLICANT Fogles Septic RELATIONSHIP TO OWNER: Consultant

DAYTIME PHONE 410795-5670 CELL _____ EMAIL _____

MAILING ADDRESS 580 Obrecht Rd
STREET CITY, STATE ZIP

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

- BUILDING:**
- RESIDENTIAL WITH 4 EXISTING OR PROPOSED BEDROOMS IN THE COMPLETED STRUCTURE
 - COMMERCIAL (PROVIDE DETAIL OF TYPE OF USE AND NUMBERS OF EMPLOYEES/CUSTOMERS ON ACCOMPANYING PLAN)
- PROPERTY:**
- SUBDIVISION: NUMBER OF LOTS INCLUDING RESIDUE: _____
 - CONSTRUCT NEW OSDS ON UNDEVELOPED LOT
 - REPAIR OR REPLACE FAILING OSDS
 - UPGRADE EXISTING OSDS
- IS THE PROPERTY WITHIN 2500 FEET OF ANY RESERVOIR?
- YES
 - NO

AS APPLICANT, I UNDERSTAND THE FOLLOWING:

- THIS APPLICATION IS VALID FOR TWO(2) YEARS FROM DATE OF FEE PAYMENT AND APPROVAL IS BASED UPON HEALTH OFFICER SIGNATURE OF A PERC CERTIFICATION PLAN PRIOR TO EXPIRATION OF THIS PERMIT.
- THE APPLICATION FEE IS NON-REFUNDABLE
- THIS APPLICATION MUST BE ACCOMPANIED BY ALL APPLICABLE FEES AND A SUITABLE SITE PLAN IN ORDER TO BE PROCESSED
- THIS IS A PUBLIC DOCUMENT

I declare and affirm that to the best of my knowledge, the information contained herein is correct. I declare that I am the owner of the property or duly authorized to make this application on behalf of the owner. I agree to comply with all applicable state and county regulations.

By signature of this application, I hereby grant Howard County Health Department officials the right to enter onto the property for the purpose of inspecting the property as directly related to the requested permit/service.

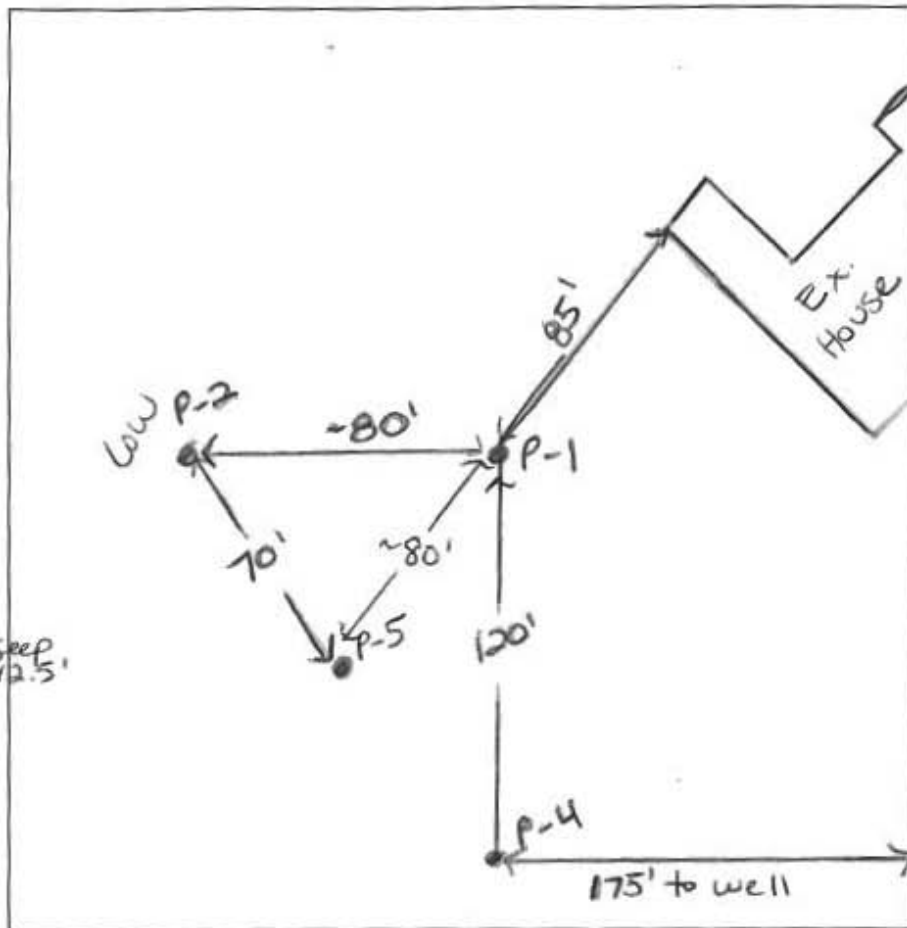
Karla Cassell 3/12/13
SIGNATURE OF APPLICANT DATE

NOT TO SCALE

AP 544569

P5

- P4**
- 8" brn l sbk
 - red brn scl lmsbk
 - 4.5' red-ylw sl saprolite few mica
 - 6' ylw fsl many mica Mn deposits
 - 8' ylw fsl w/ mica schist moist - H₂O seep @ 12.5'
 - 15' brn fsl 15% orx H₂O
- P1**
- 1' brn l
 - red brn chscl dense
 - 5' yellow sl saprolite
 - 7-8' gray mottled micaceous sil H₂O @ 11' Mn deposits brasil
- P2**
- 10" brn l lfsbk
 - yellow brn scl lfsbk
 - 4' yellow sl common mica
 - cave in @ 6'
 - gray micaceous sil H₂O sup @ 7'
 - H₂O @ 10.5'
 - 12' bottom



- brn l lfsbk 10"
- ylw brn scl 2msbk 4'
- ylw org sl saprolite many mica 7-8'
- yellow brn sil w/ Mn moist 10'
- gray sil common mica H₂O @ 10'

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
4-15-13	P1	6' 14"	10:32	10:33	10:36	3+	P
	P2	12'	VISUAL				F
	P4	5' 15"	10:12	slow pulled	< 1" in 45 min.		F
	P4	6' 15"	11:07	11:42	~ 1/2" @ 12:00 pulled		F
	P5	5' 12"	11:02	pulled < 1"	@ 11:40		F

REMARKS perc locations dug per plan. P-3 not dug. H₂O in bottom of all holes.

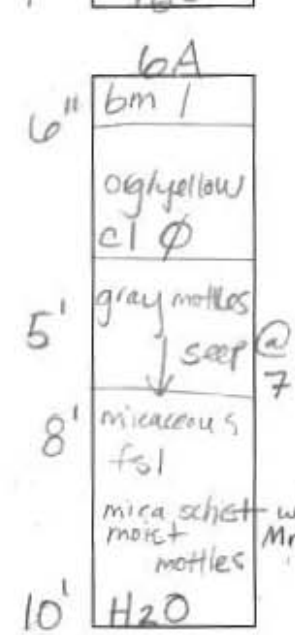
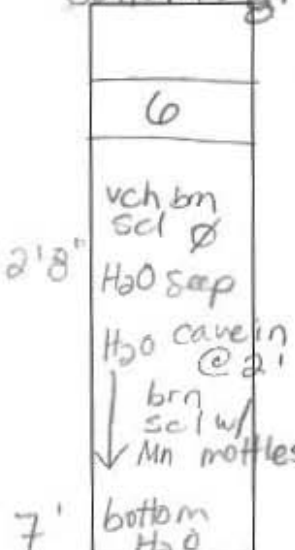
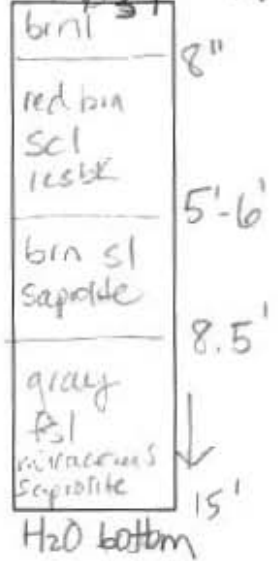
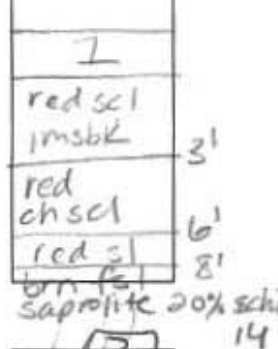
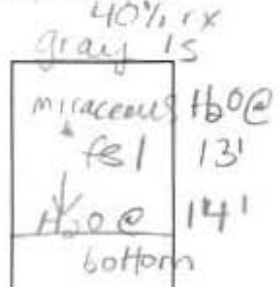
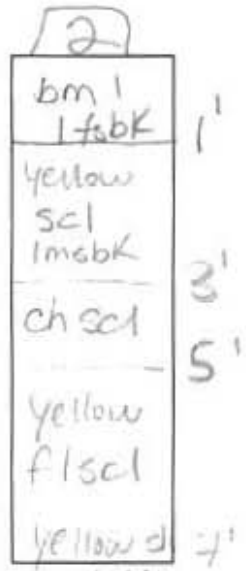
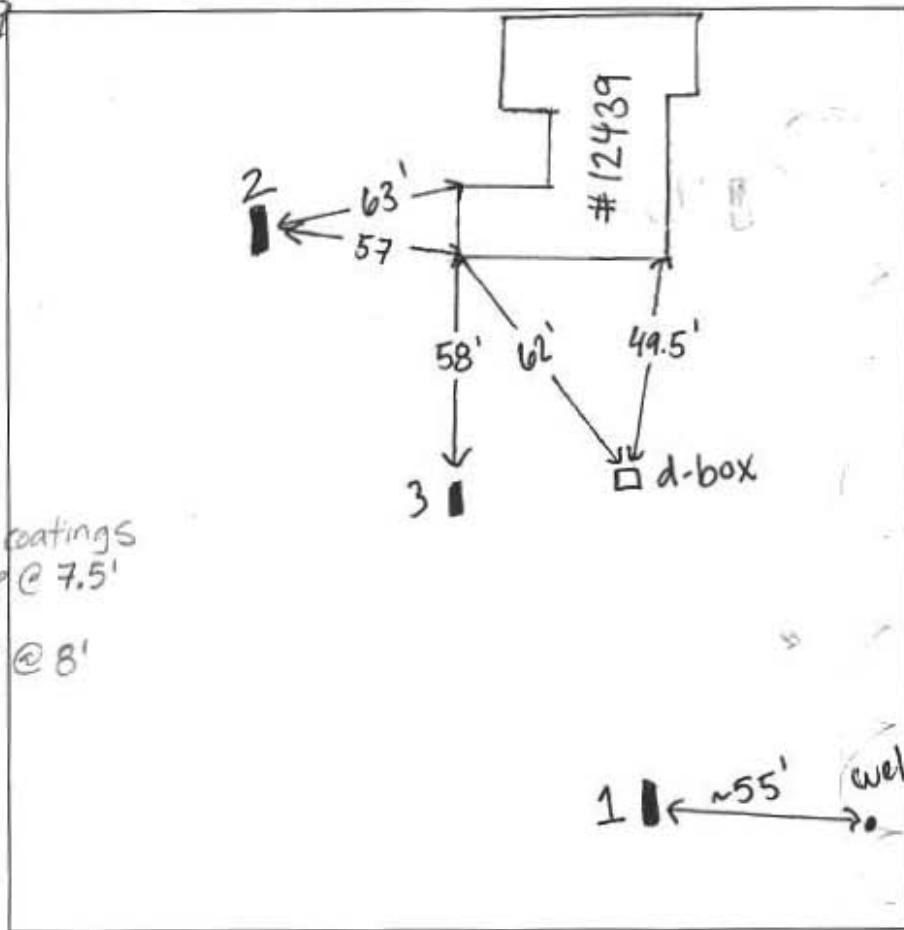
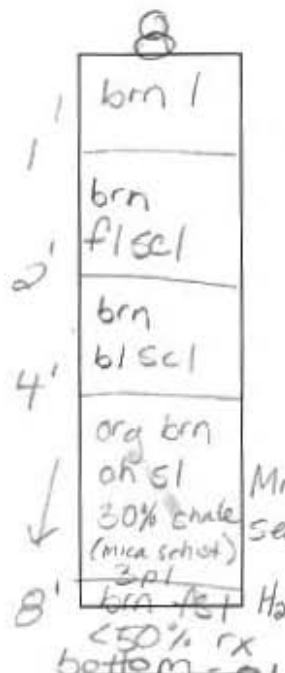
SANITARIAN HS BACKHOE Fogles OTHERS owner

TEST HOLES USED IN SDA _____ AVG. PERC TIME _____ SQ. FT/BR _____

TRENCH WIDTH _____ INLET DEPTH _____ MAX. BOT DEPTH _____ EFFECTIVE SW _____

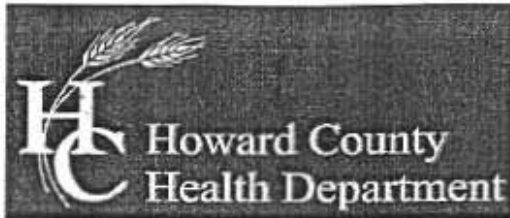
NOT TO SCALE

AP 544569



DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
5/28/13	8	3' / 8'	9:53 ³⁰	9:55	9:56 ³⁰	repour < 2 min.	
			9:57 ⁴⁰	10:00	10:02 ⁵⁸	2+	P
	6	7'	VISUAL				F
	6A	10'	VISUAL				F
	2	6'9" / 14'	10:54	slow	pulled	reshelfed	
	3	7' / 15'	11:17	11:22	11:29	7	P
	2	7.5' / 14'	11:34	11:38	11:42	4	P
	1	7' / 14'	12:42	12:52	12:57	5	P

REMARKS follow up testing / wet season
 SANITARIAN HS BACKHOE Fogles OTHERS owner
 TEST HOLES USED IN SDA _____ AVG. PERC TIME 5.3 SQ. FT/BR _____
 TRENCH WIDTH 2 INLET DEPTH 4 MAX. BOT DEPTH 8 EFFECTIVE SW 1'-1.5'



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

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

INFORMATION FORM – SEPTIC SYSTEM REPAIR/UPGRADE

Reason for Request:

- Failing System
- System relocation for proposed addition
- System upgrade for proposed addition
- Inadequate treatment zone
- Collapsed septic tank
- Collapsed drywell

Existing system design

- Drywell
- Trench
- Mound
- Unknown
- Other: _____

Is discharge surfacing on the ground?

- Yes
- No

Has the septic tank been pumped within the last month?

- Yes Date pumped: _____
- No

Was a visual inspection of the septic tank and/or drain fields conducted?

- Yes Explain observations: _____
- No

Was a visual inspection of the sewage line conducted?

- Yes
 - Blockage leading to the tank
 - Yes Explain: _____
 - No _____
 - Blockage leading to the field
 - Yes Explain: _____
 - No _____

No
 Additional Comments: Tank replacement → BAT.
EXTEND TRENCHES

*For REPAIRS, are the owners proposing, or do they plan to add in the future, any additions or modifications to the property, i.e. pools, living space additions, garages, etc? This information must be disclosed at the time of this application. The Health Department will not be able to accommodate requests in the field for property modifications unrelated to the repair request. Such requests may require an additional fee, testing, and submittal of a Percolation Certification Plan, if the property does not meet current Code and Regulation.

Map-15
 Grid-12
 Parcel-15

Septic Contractor: FOGLE'S SEPTIC Contractor's Phone: 410-795-5670
 Contractor's Address: 580 OBRECHT RD SYKESVILLE MD
 Property Address: 12439 Bernard way County file: _____
 Subdivision: _____ Lot: 16 Year Built: 1990
 Owner's Name: Robin/Robert DAVIS Owner's Phone: 410-459-0944
 Name of previous owners: _____ Existing bedrooms: _____
 Proposed bedrooms: _____

Has this request been previously discussed with a Sanitarian? (Name): _____
 Public Sewer available/nearby: _____

*A Sanitarian will be in contact within three business days, depending upon the urgency of the situation, to coordinate the scheduling/review of the repair or upgrade.

Prior to scheduling inspections, scaled plans should be submitted to clarify the nature of the addition.

Print out a copy of Real Property Data via Dept. of Taxation website _____ Indexed file found _____

If public sewer may be nearby, verify whether sewer is technically "available" through the Bureau of Engineering.

If sewer is available and the property is within the Metropolitan District, connection to sewer is required. If the owner believes reason for exemption exists, the owner should justify the request in writing.

If soil/site conditions are limited and sewer and/or Metro District status is not conducive to connection, the Sanitarian may recommend pursuit of Emergency Sewer Extension or Emergency Metro District Inclusion. The Owner should contact the Bureau of Utilities for details.

No permit is to be issued nor inspection to be scheduled without prior fee collection at the office unless an emergency situation exists. The contractor is to notify office of the emergency situation as soon as possible.



Bureau of Environmental Health

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www.hchealth.org

Facebook: www.facebook.com/hocohealth

Twitter: HowardCoHealthDep

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

April 18, 2013

To: Robert Davis
Owner

RE: **Percolation Test Report -**
12439 Barnard Way
West Friendship, MD 21794
Receipt # - A544569

Percolation testing was conducted at the referenced property on April 15, 2013. The purpose for conducting these percolation tests was to delineate a new septic reserve area to accommodate a proposed addition and in-ground pool.

All percolation tests conducted were standard tests, measuring rate of fall for a pre-wet period followed by measurement and recordation of the time required for the water level to drop 1 inch. Soil conditions either satisfactory or unsatisfactory for onsite wastewater disposal were observed at the specified test locations. Areas that may be included in a septic reserve are represented by test locations having satisfactory soil conditions. The area of the septic reserve must be at least 10,000 square feet, though Howard County Code [3.805.A.2.X] requires that the area be large enough to accommodate an initial drainfield and two repair drainfields for the planned residence.

Test locations were dug per the locations shown on the site plan prepared by Frederick Ward Associates on 4/3/2013. Soil conditions observed were unsatisfactory for conventional onsite wastewater treatment and disposal at test holes P-2, P-4 and P-5. Limiting conditions include an insufficient buffer to the water table levels and deep clays and saturated soil material having inadequate percolation rates. Test P-1 had a passing percolation rate. Test P-3 was not dug due to the elevation and surrounding test results.

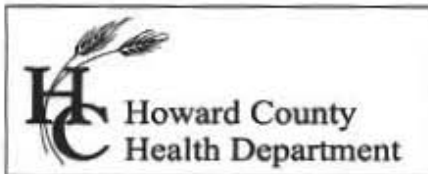
Field data collected are shown on Percolation Test Worksheets enclosed with this letter. Further review of this project is contingent on additional testing and a new plan proposal based on the aforementioned percolation testing. Additional percolation tests or infiltrometer tests for sand mounds on this property must be performed during a declared wet season.

Additional field review of well or septic system conditions may be required at any time during this process. If you have any questions regarding this evaluation or requirements for the Percolation Certification Plan, please contact me at the above address or by calling (410) 313-6287.

Respectfully,

Heidi Scott, R.S.
Environmental Sanitarian
Well and Septic Program

Cc:
Frederick Ward Associates



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TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

Maura J. Rossman, M.D. Health Officer

MEMORANDUM

TO: Frederick Ward Associates

FROM: Heidi Scott
Well and Septic Program
Development Coordination Section

RE: Percolation Test Site Plan
12439 Barnard Way
West Friendship, MD 21794

DATE: March 20, 2013

The following comments apply to the above referenced plan. These comments must be addressed prior to scheduling of percolation testing:

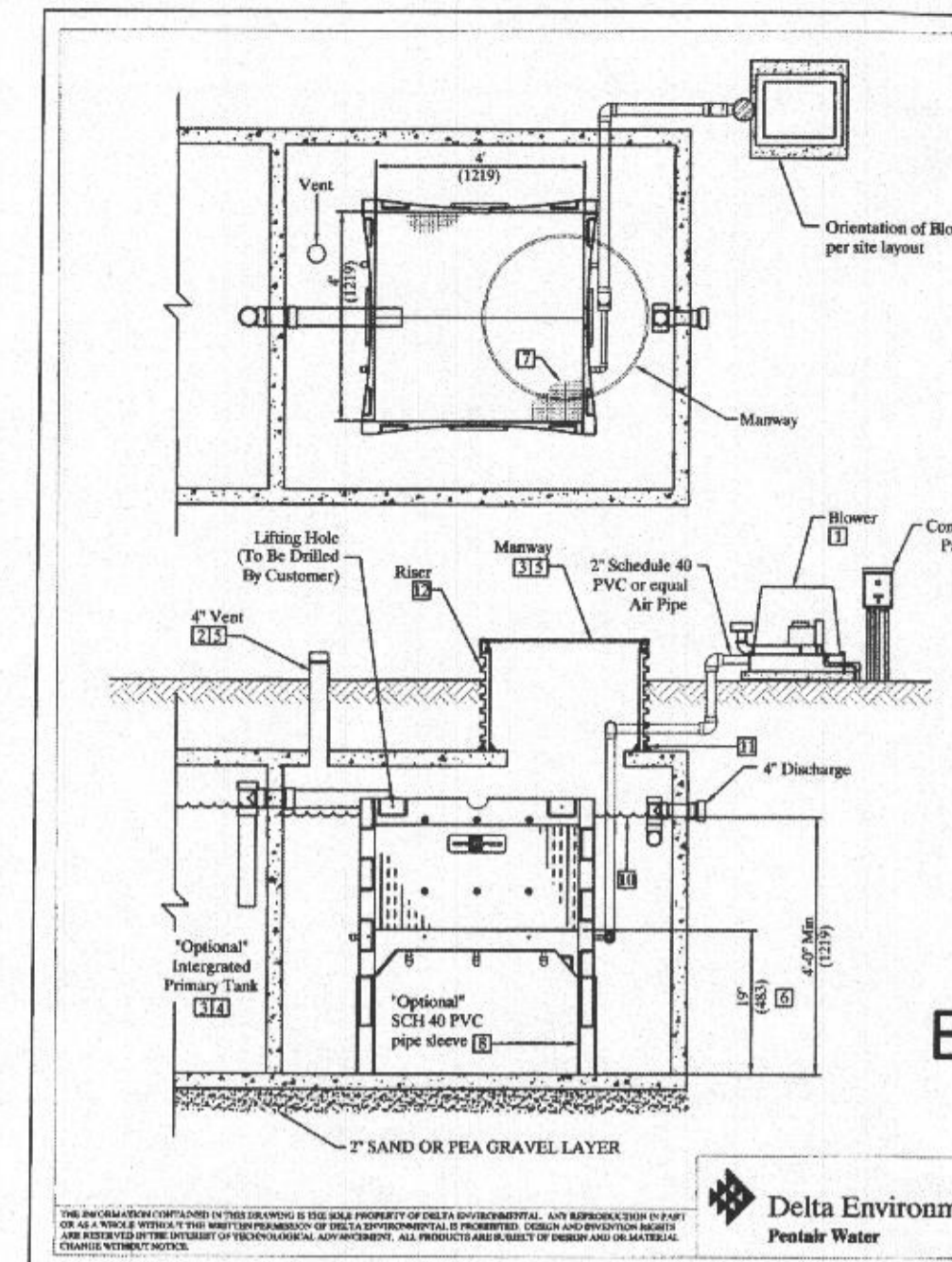
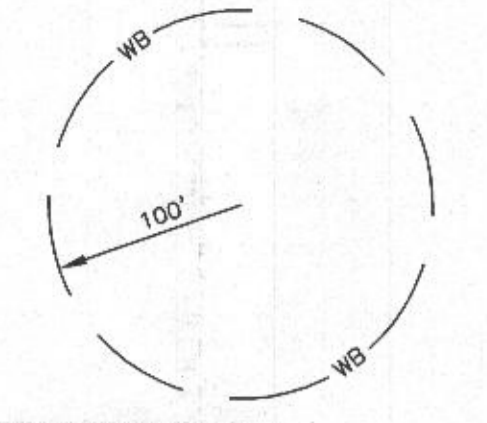
- Show the existing drainage and utility easement.
- Revise the proposed septic area to stay 10' from the drainage easement.
- Show the neighboring wells/ septic reserve areas within 100' of the property. See attached location drawings.
- Two additional well locations must be proposed or a 1,500 sq. ft. wellbox must be shown.
- Show a proposed center perc test.

Cc:
File

Perc Cert Approved 4-8-14 DB

LEGEND

- EXISTING CONTOUR 90
- EXISTING SHADE TREE
- EXISTING EVERGREEN TREE
- EXISTING SEPTIC TANK ST (TO BE ABANDONED)
- EXISTING DISTRIBUTION BOX DB
- EXISTING CLEANOUT CO
- EXISTING SEPTIC TRENCH
- EXISTING SOIL BOUNDARIES GgB GgA
- EXISTING TREE LINE
- EXISTING BRUSH LINE
- EXISTING WELL EX. WELL
- EXISTING SPRING STREAM
- EXISTING SEPTIC EASEMENT
- EXISTING 100' WELL BUFFER
- PROPOSED NEW SEPTIC EASEMENT
- PROPOSED SEPTIC TRENCH
- PROPOSED FUTURE WELL LOCATION
- PROPOSED BAT UNIT BLOWER AND CONTROL PANEL
- EX. PERC LOCATION - FAIL
- EX. PERC LOCATION - PASS

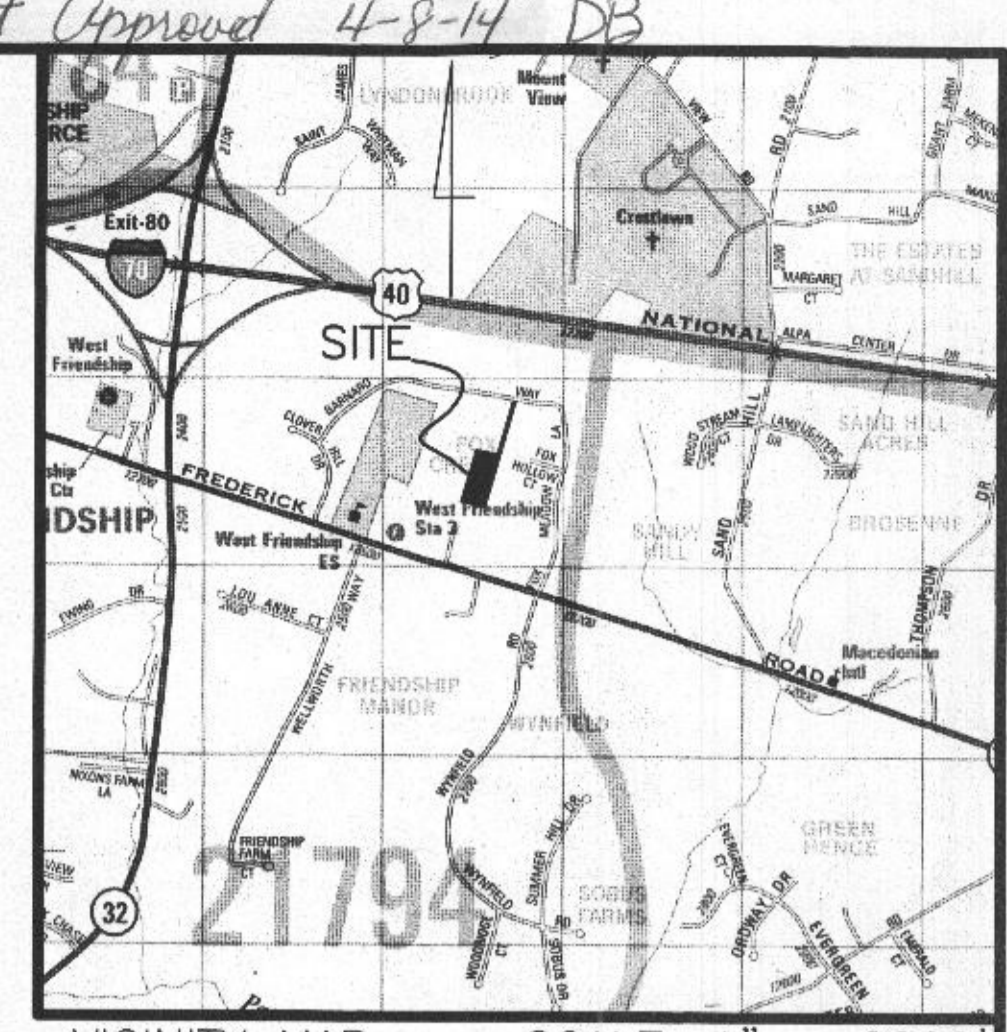


- NOTES:
- Blower piping to ECOPOD not to exceed 100 FT total length in the piping system. For distances greater than 100 FT, consult factory. Blower must be located above flood levels on a solid base.
 - Vent to be located above finish grade or higher to avoid infiltration. Cap on vent must be secured with a stainless steel screw.
 - All other tanks w/ from ECOPOD must conform to applicable country, state, province, and local plumbing and electrical codes.
 - The primary tank compartment volume must be 1 to 2 times the rated ECOPOD GPD. Primary and reactor tank volumes are listed in the ECOPOD Design Manual. The primary tank may be integrated with the reactor tank or stand alone in a separate tank.
 - All manways, pump out ports, and vents must be secured to prevent accidental or unauthorized access.
 - ECOPOD model EV18PVC224
 - Tanks with high inlets, install SCH 40 PVC pipe over legs to elevate reactor to correct height.
 - Air supply line should be secured with non-corrosive clamps where required to prevent vibration damage.
 - Effluent discharge level must be at a height no more, or no less than 2" above vertical tube PVC made.
 - Use epoxy, or use another approved method or substance, to create strong connection & watertight seal (TYP.)
 - Risers must conform to country, state, province, and local acceptable codes. Fiberglass riser shown.

BAT UNIT

1000 GPD TREATMENT UNIT	
Discharge From Tank	4"r
Reactor Volume	1400 Gallons
Recommended Distance Under Reactor Box	18"

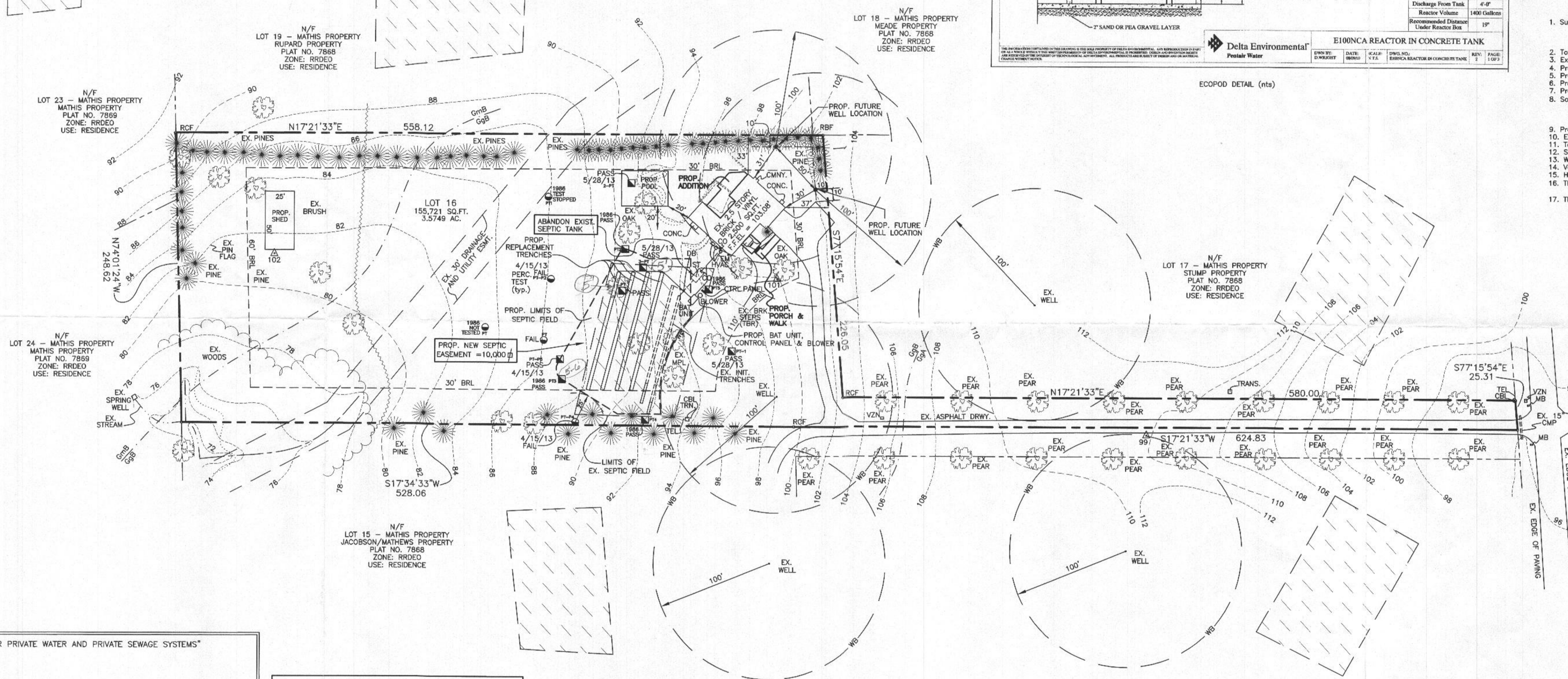
Delta Environmental
E100NCA REACTOR IN CONCRETE TANK



VICINITY MAP SCALE: 1" = 2000'

GENERAL NOTES

- Subject Site Description: Lot 16 - Mathis Property, Plot No.: 2868, 12439 Barnard Way West Friendship, Maryland 21794-9527
- Total Site Area: 155,721 sq.ft. or 3.5749 acres
- Existing Site Use: residence
- Proposed Site Use: residence w/ additions
- Property Zoned: RRDEO
- Property located on Howard County Tax Map: 15, Grid: 12
- Property located on Howard County ADC Map: 5412, Grid: E-3
- Soil Types (Per NRCS Web Soil Survey): 70% GgB: Glenelg loam, 3-8% slopes; 20% GmB: Glenelg silt loam, 3-8% slopes; 10% GkA: Glenelg loam, 0-3%
- Property located on U.S.G.S. Map: Sykesville Quadrangle
- Electric Service: BOE
- Telephone Service: Verizon
- Sewage Disposal: private septic
- Water Supply: private well
- Vertical Datum: assumed
- Horizontal Datum: Plot No. 2868
- The subject property is located in Zone 'X' of the Flood Insurance Program's Flood Insurance Rate Map on Community Panel #24027C 0070 C
- The source of the topography is a survey performed by Landesign, Inc. in November, 2013, with elevations assumed. The existing contours shown are at 2 foot intervals.



BARNARD (50' R/W) WAY

"APPROVED FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS"

Signature of Health Officer: *Maureen Rossman*
 HEALTH OFFICER, HOWARD COUNTY HEALTH DEPT.
 DATE: 4/8/2014

TRENCH SIZING:
 150 GAL. x 7 Bedrooms = 1,050 GPD
 PERC RATE: 2 to 5 MIN.
 1,050 GPD / 1.2 = 875 Sq.Ft. TRENCH REQUIRED
 USING 3' WIDE TRENCHES: 875 Sq.Ft. / 3 Ft. = 292 Ft.
 292 Ft. x 0.71 = 207 Ft. REQ'D
 USE: 2 - 3 FT WIDE TRENCHES, EACH 105 Ft. LONG = 210 Ft. Provided
 SPACING BETWEEN TRENCHES = 9 Ft.

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THE INFORMATION SHOWN HEREON IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AND IS CORRECT, TO THE BEST OF MY KNOWLEDGE AND BELIEF.
 Signature of Engineer: *Robert C. Etel*
 DATE: 03-28-2014
 ROBERT C. ETEL, P.E.
 MD LICENSE NUMBER: 16108
 EXPIRATION DATE: 07-17-2014
 LANDESIGN, INC.
 2905 MITCHELLVILLE ROAD, SUITE 111
 BOWIE, MD 20716
 (301) 249-8802, landesigninc@comcast.net

These drawings are the property of Landesign, Inc. Unauthorized reproduction for any purpose is an infringement upon copyright laws. Violators will be subject to prosecution to the fullest extent of the law.

CONTACT "MISS UTILITY"
 48 HOURS PRIOR TO TRENCHING
 1-800-257-7777

THE LOCATION OF ALL UTILITIES SHOWN HEREON IS FROM FIELD INVESTIGATION AND AVAILABLE RECORDS AND CANNOT BE GUARANTEED. CONTRACTOR SHOULD DIG TEST PITS BY HAND AT ALL UTILITY CROSSINGS TO VERIFY EXACT LOCATIONS.

PERCOLATION CERTIFICATION NOTES

- Any changes to a private sewage easement shall require a revised percolation certification plan.
- The topography of this plot is taken from field observations (Nov., 2013) and is verified to accurately represent the relative changes on the subject property.
- Any wells and septic systems located within 100' of the property boundaries and 200' down gradient of any wells and/or septic systems have been shown.
- The purpose of this plan is to obtain approval from Howard County Environmental Health for an updated septic system for the existing house and proposed additions shown hereon.
- The lot shown herein complies with the minimum ownership and lot area as required by the Maryland Department of the Environment.
- This area designates a private sewage disposal area of at least 10,000 sq.ft., as required by the Maryland Department of the Environment for individual sewage disposal. Improvements of any nature are restricted. This sewage disposal area shall become null and void upon connection to a public sewerage system. The County Health Officer shall have authority to grant adjustments to the private sewage area. Recordation of a revised sewage easement shall not be necessary.

DATE	REVISION

Landesign
 ENGINEERS * SURVEYORS * PLANNERS
 2905 MITCHELLVILLE ROAD SUITE NO. 111
 BOWIE, MARYLAND 20716
 (301) 249-8802

OWNER/DEVELOPER
 ROBERT JR. & ROBIN DAVIS
 12439 BARNARD WAY
 WEST FRIENDSHIP, MD. 21794-9527

PERCOLATION CERTIFICATION PLAN
 P# 544569

LOT 16
 MATHIS PROPERTY
 PLAT NUMBER: 2868
 THIRD ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

DATE: MAR. 28, 2014	SCALE: 1"=50'
DESIGN BY: B.E.	DRAWN BY: D.H.
CHECKED BY: B.E.	SHEET No: 1 OF 1
FIELD BOOK: 214	JOB No: 13-026
COMPUTER: E	