

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: 2/9/17 **ONSITE SEWAGE DISPOSAL SYSTEM** P 560533
 APPROVAL DATE: 2/22/17 (SE) **PERMIT: CONSTRUCTION** A _____
 PROPERTY ADDRESS: 5507 Green Bridge Road
 SUBDIVISION: Tall Trees LOT: 1 TAX ID: 05-414857
 CONTRACTOR: Chavis Enterprises EMAIL: _____
 CONTRACTOR ADDRESS: P.O. Box 451, Jarrettsville, MD 2084 PHONE: 410-557-2455
 PROPERTY OWNER: David Bradshaw EMAIL: mdnewhomebuilder@gmail.com
 OWNER ADDRESS: 9724 Summer Park Court, Columbia, MD 21046 PHONE: 410-340-0226

SEPTIC TANK SIZE (GALLONS): 1250gal TANK MANUFACTURER: _____
 PUMP MODEL: N/A PUMP SIZE: N/A PUMP TANK CAPACITY: N/A

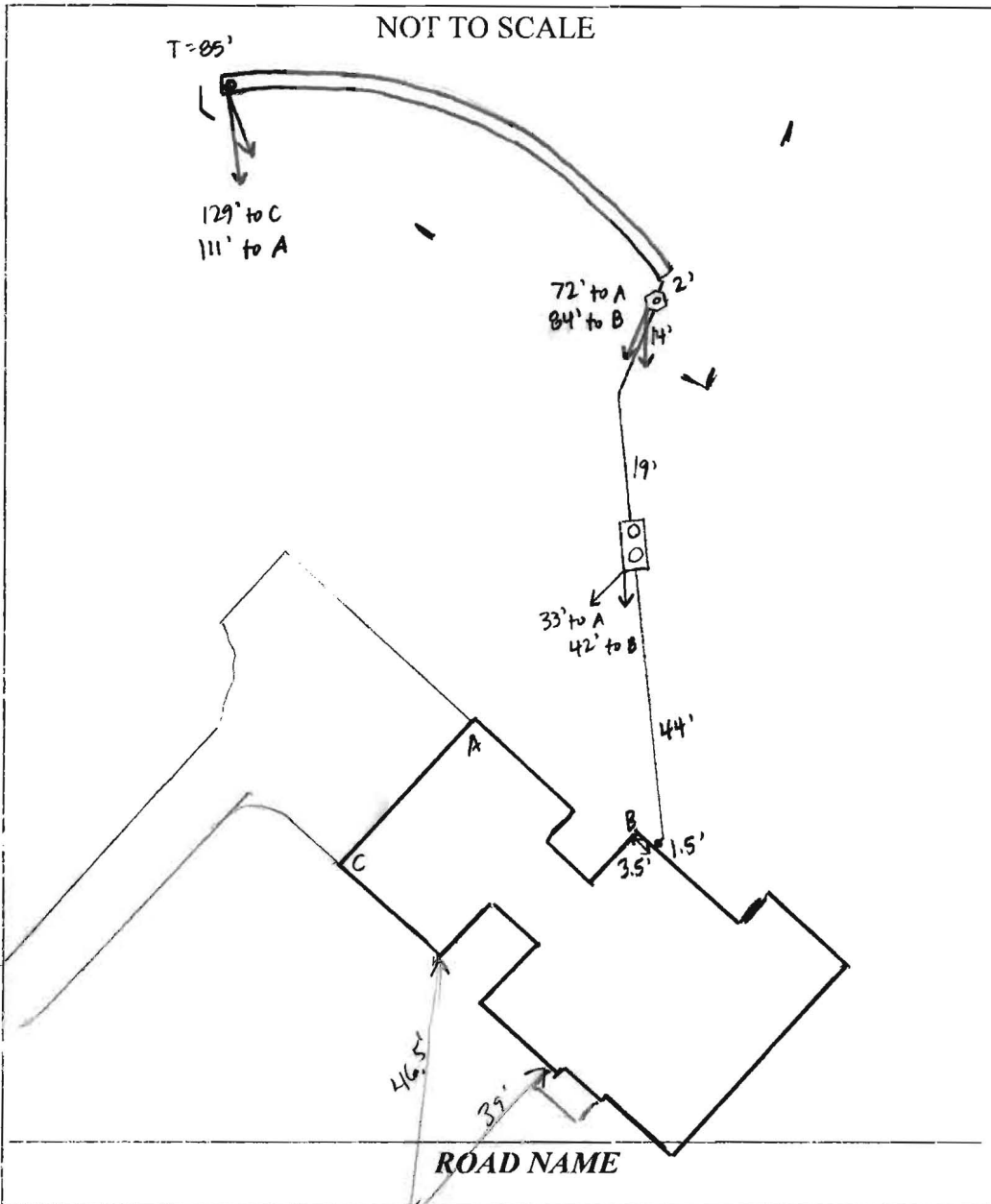
DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 4 APPLICATION RATE: _____

TRENCHES:	LINEAR FEET REQUIRED: <u>84</u>	INLET DEPTH: <u>4</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>7</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>4</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:		

ISSUED BY: Robert Freemon ISSUE DATE: 2/9/17 EXPIRATION DATE: 2/9/18

- 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 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: 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.**



TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
3'	4'	7'
NUMBER OF TRENCHES		1
TOTAL LENGTH		85'
ABSORPTION AREA		255' + SIDEWALL
DISTRIBUTION BOX LEVEL		YES
DISTRIBUTION BOX BAFFLE		YES
DISTRIBUTION BOX PORT		YES

SEPTIC TANK DATA	
SEPTIC TANK I LEVEL	YES
MANUFACTURER	MD Concrete
CAPACITY	1500 GAL
SEAM LOC	TDP
TANK LID DEPTH	2-3'
BAFFLES	
BAFFLE FILTER	NO
MANHOLE LOC	FRONT + REAR
6" PORT LOC	NONE
WATERTIGHT TEST	NO
SLOTTED	YES
DATE ON LID	4-28-13

PUMP/SEPTIC TANK LEVEL	
MANUFACTURER	
CAPACITY	GAL
SEAM LOC	
TANK LID DEPTH	
BAFFLES	
BAFFLE FILTER	
MANHOLE LOC	
6" PORT LOC	
WATERTIGHT TEST	
SLOTTED	
DATE ON LID	

PRE-CONSTRUCTION:

2/17/17
 2/17/17 OK to set S.T. Tank coming from MD Concrete 1500g.
 No SDA stakes. Will call in for layout when tank is to be set. (SC)
 2/21/17 SDA corners staked. Checked elevations of trench - on contour. OK to install. (SC)

INSTALLATION:

2/21/17 Tank set. House connection made + pipe laid. Need baffles in tank. (SC)
 2/22/17 Chavis adding stone + pipe to trench. D-box installed + connected to tank and trench. 3.5' to stone. (SC)

FINAL INSPECTOR Sarah Collins DATE OF APPROVAL 2/22/17



Bureau of Environmental Health

8930 Stanford Boulevard, Columbia, MD 21045

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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

MEMORANDUM

TO: David Bradshaw
5507 Green Bridge Rd.
Dayton, MD 21036

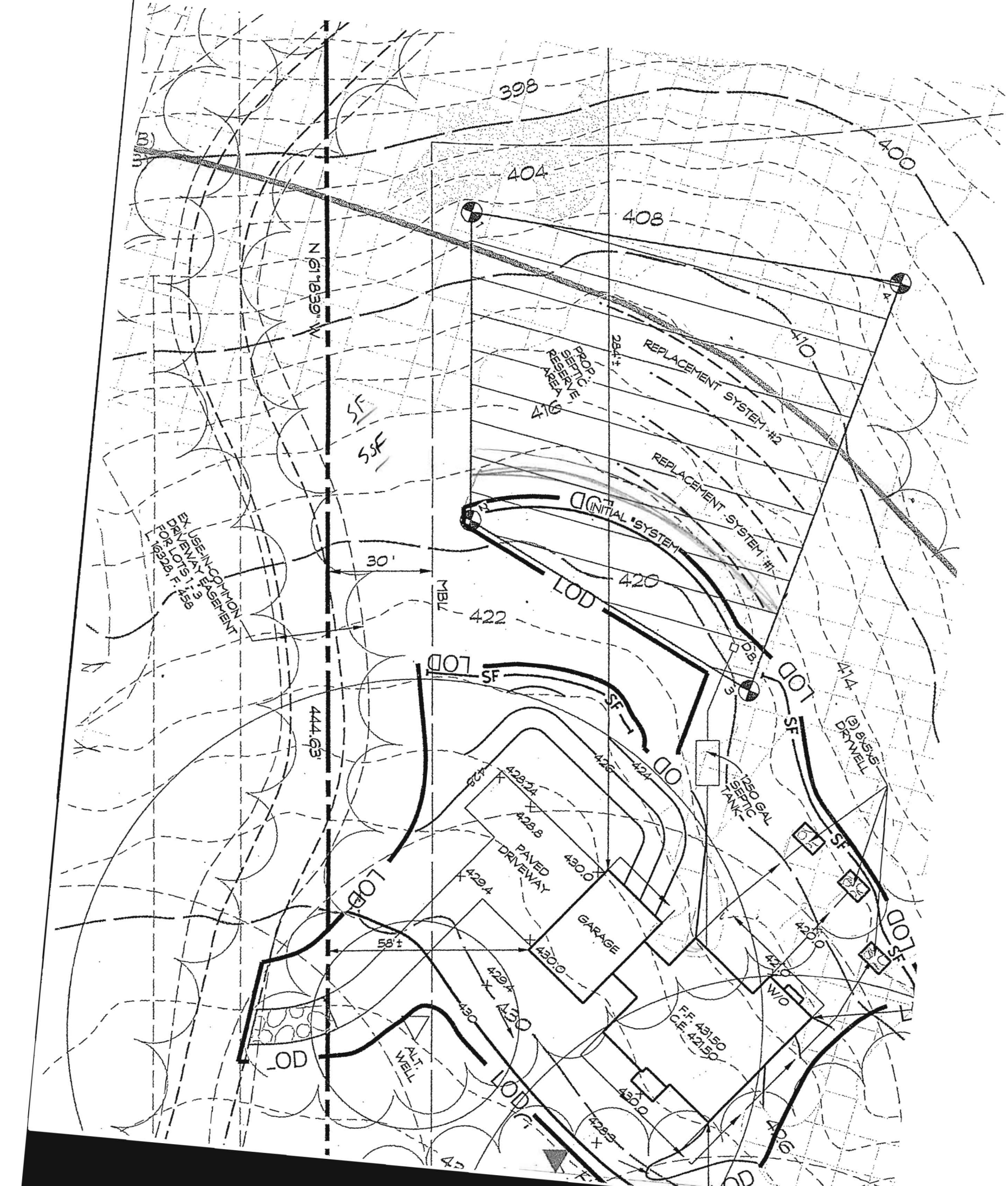
FROM: Robert Freemon *RIF*
Well & Septic Program

RE: 5507 Green Bridge Rd.
Dayton, MD 21036
"BAT Plan Comments"

DATE: 7/11/16

I am reviewing the BAT Plan for 5507 Green Bridge Rd. and I have some comments.

- The BAT Plan shows different well site locations than the approved Percolation Certification Plan of 6/13/2016. The Perc Cert shows a well box which contains well HO-95-2581. If the decision is to create two new alternate well sites instead of the well box a revised Perc Cert will need to be submitted to the Health Dept. If the decision is to keep the well box a new site plan will need to be submitted to DILP (Dept. of Licenses and Permits). The new site plan would need to show the well box as well as the location of the well and its tag number.
- Two full sized copies of the BAT Plan need to be sent to the Health Dept. The copy obtained through email cannot be reviewed due to scaling issues.



USE IN COMMON
FOR DRIVEWAY RAMP
FOR LOTS 1, 3
10/22/28, F. 458

PROP. SEPTIC
RESERVE
AREA

1250 GAL
SEPTIC
TANK

GARAGE

PAVED
DRIVEWAY

ALT.
WELL

DRYWELL

F.F. 431.50
C.F. 421.50

FTFinksburg Dispatch
410-833-4400Finksburg Sales
410-833-4400Laurel Sand & Gravel, Inc. T/A
S. W. Barrick & Sons
Finksburg Terminal

FINKSBURG, MARYLAND

Mailing Address: P.O. Box 1504 Laurel, Maryland 20725

CUSTOMER'S COPY

FAX
410-833-4909BILLING INQUIRIES
1-800-762-2294

TICKET #00390625

STATION FT

DATE 02/22/17 TIME 09:44:27

CUSTOMER CHALLC
CHAVIS ENTERPRISES, LLC
P.O. BOX 451
JARRETTSVILLE, MD 21084JOB GREENB : 5507 GREEN BRIDGE RD
P.O. # PROJECT #:TRUCK CH35 LICENSE 3 AXLES
DRIVER: CHAVIS ENTERPRISES

GROSS	SCALE A	68220 lb
TARE	IN (STORED)	28920 lb
NET		39300 lb
NET		19.65 t

	Loads	Tons
DAILY	2	38.66
TOTAL	2	38.66
TIME IN 09:44:27		TIME OUT 09:44:27

MAT'L 0022 : #2 STONE
HAUL ZONE 0000

WEIGHMASTER

Jim Cooke

RECEIVED BY

Melissa Barnes

FT

Finksburg Dispatch
410-833-4400

Finksburg Sales
410-833-4400

Laurel Sand & Gravel, Inc. T/A
S. W. Barrick & Sons
Finksburg Terminal

FINKSBURG, MARYLAND

Mailing Address: P.O. Box 1504 Laurel, Maryland 20725

CUSTOMER'S COPY

FAX
410-833-4909

BILLING INQUIRIES
1-800-762-2294

TICKET #00390636

STATION FT

DATE 02/22/17 TIME 11:19:50

CUSTOMER CHALLC
CHAVIS ENTERPRISES, LLC
P.O. BOX 451
JARRETTVILLE, MD 21084

JOB GREENB : 5507 GREEN BRIDGE RD
P.O. # PROJECT #:

TRUCK CH35 LICENSE
DRIVER: CHAVIS ENTERPRISES

3 AXLES

GROSS	SCALE A	55140 lb
TARE	IN (STORED)	28920 lb
NET		26220 lb
NET		13.11 t

	Loads	Tons
DAILY	3	51.77
TOTAL	3	51.77
TIME IN 11:19:50		TIME OUT 11:19:50

MAT'L 0022 : #2 STONE
HAUL ZONE 0000

WEIGHMASTER

Jim Cooke

RECEIVED BY

Melissa Barnes

FT

Finksburg Dispatch
410-833-4400

Finksburg Sales
410-833-4400

Laurel Sand & Gravel, Inc. T/A
S. W. Barrick & Sons
Finksburg Terminal

FINKSBURG, MARYLAND

Mailing Address: P.O. Box 1504 Laurel, Maryland 20725

CUSTOMER'S COPY

FAX
410-833-4909

BILLING INQUIRIES
1-800-762-2294

TICKET #00390616

STATION FT

DATE 02/22/17 TIME 07:55:51

CUSTOMER CHALLC
CHAVIS ENTERPRISES, LLC
P.O. BOX 451
ARRETTSVILLE, MD 21084

JOB GREENB : 5507 GREEN BRIDGE RD
P.O. # PROJECT #:

RUCK CH35 LICENSE
RIVER: CHAVIS ENTERPRISES

3 AXLES

ROSS	SCALE A	66940 lb
ARE IN	(STORED)	28920 lb
ET		38020 lb
ET		19.01 t

	Loads	Tons
DAILY	1	19.01
TOTAL	1	19.01
TIME IN	07:55:51	TIME OUT 07:55:51

AT'L 0022 : #2 STONE
AUL ZONE 0000

EIGHTMASTER

Jim Cooke

RECEIVED BY

W. Lisa Barnes

439 East Main Street
Westminster, MD 21157-5539



(410) 848-1790 • (301) 662-1799
Fax (410) 848-1791

July 12, 2016

Howard County Health Department
Bureau of Environmental Health
8930 Stanford Boulevard
Columbia Maryland 21045

Attn: Mr. Robert Freemon

Re: Tall Trees – Lot 1
5507 Green Bridge Road
Dayton, Maryland 21036
Potential Basement Bedroom
CLSI Job No. 2016079

Dear Mr. Freemon,

This letter is in response to your comment letter dated July 11, 2016. Comments have been addressed as follows:

- The septic system design shown on the enclosed BAT plan is for four bedrooms. It is understood that if the future finished basement building permit shows additional bedrooms that the septic system may need to be upgraded.

Should you have any additional questions or concerns, please feel free to contact our office.

Sincerely,

A handwritten signature in cursive script that reads "Linda D. Alexander".

Linda D. Alexander
Associate/ Senior Project Manager

Cc: David Bradshaw
5507 Green Bridge Road
Dayton Maryland 21036

439 East Main Street
Westminster, MD 21157-5539



(410) 848-1790 • (301) 662-1799
Fax (410) 848-1791

July 12, 2016

Howard County Health Department
Bureau of Environmental Health
8930 Stanford Boulevard
Columbia Maryland 21045

Attn: Mr. Robert Freemon

Re: Tall Trees – Lot 1
5507 Green Bridge Road
Dayton, Maryland 21036
BAT Plan Comments
CLSI Job No. 2016079

Dear Mr. Freemon,

This letter is in response to your comment letter dated July 11, 2016. Comments have been addressed as follows:

- A revised perc cert plan is included with this resubmittal showing two new alternate well sites.
- Two full sized copies of the BAT plan are also included with the resubmittal.

Should you have any additional questions or concerns, please feel free to contact our office.

Sincerely,

A handwritten signature in cursive script that reads "Linda D. Alexander".

Linda D. Alexander
Associate/ Senior Project Manager

Cc: David Bradshaw
5507 Green Bridge Road
Dayton Maryland 21036

439 East Main Street
Westminster, MD 21157-5539



(410) 848-1790 • (301) 662-1799
FAX (410) 848-1791

Transmit To:

Mr. Robert Freeman
Environmental Health Specialist
Development Coordination, Well & Septic
Program
Howard County Bureau of Environmental Health
8930 Stanford Boulevard
Columbia, MD 21045

Project Info:

TALL TREES LOT 1
GREEN BRIDGE ROAD
Green Bridge Road
Dayton, MD 21036

Project No: 2016079

Date: Jul 18, 2016

20 RAC

We are Transmitting:

- | | | | | | |
|---|--|---|--|---|--------------------------|
| <input checked="" type="checkbox"/> Here with | <input type="checkbox"/> Originals | <input type="checkbox"/> Computer Media | <input type="checkbox"/> Shop Drawings | <input checked="" type="checkbox"/> Via Overnight | <input type="checkbox"/> |
| <input type="checkbox"/> Our | <input checked="" type="checkbox"/> Prints | <input type="checkbox"/> Project Manuals | <input type="checkbox"/> Payment Cert. | <input type="checkbox"/> Express Mail | <input type="checkbox"/> |
| <input type="checkbox"/> Your | <input type="checkbox"/> Copies | <input type="checkbox"/> Product Literature | <input type="checkbox"/> Change Order | <input type="checkbox"/> 1st Class Mail | <input type="checkbox"/> |

Sets	Type	Dwg No	Dated	Description
<i>5</i>	D Size Bond Copies		5/17/16	BAT PLAN
<i>2.2</i> <i>RAC</i>	D Size Bond Copies		5/17/16	REVISED PERC CERTIFICATION PLAN

- | | | | | |
|---------------------------------------|---|--------------------------------------|--|--------------------------|
| <input type="checkbox"/> As Requested | <input type="checkbox"/> For Your Use | <input type="checkbox"/> For Filing | <input checked="" type="checkbox"/> For Approval | <input type="checkbox"/> |
| <input type="checkbox"/> As Required | <input checked="" type="checkbox"/> For Your Review | <input type="checkbox"/> For Bidding | <input type="checkbox"/> As Discussed | <input type="checkbox"/> |

Remarks:

REVISED PER HEALTH DEPT. EMAIL

If enclosures are not as noted,
please notify us immediately.

Copy To _____

_____ Linda D. Alexander

439 East Main Street
Westminster, MD 21157-5539



(410) 848-1790 • (301) 662-1799
Fax (410) 848-1791

January 13, 2017

Howard County Health Department
Bureau of Environmental Health
8930 Stanford Boulevard
Columbia Maryland 21045

Attn: Mr. Robert Freemon

Re: Tall Trees – Lot 1
5507 Green Bridge Road
Dayton, Maryland 21036
CLSI Job No. 2016079

Dear Mr. Freemon,

This letter is in response to your comment letter dated January 3, 2017. Comments have been addressed as follows:

- Comment has been addressed based on your redline of the approved Cloverfield OSDS plan.
- Comment has been addressed based on your redline of the approved Cloverfield OSDS plan.
- Comment has been addressed based on your redline of the approved Cloverfield OSDS plan.
- The plan scale has been added under the plan view.

Should you have any additional questions or concerns, please feel free to contact our office.

Sincerely,


Linda D. Alexander
Associate/ Senior Project Manager

Cc: David Bradshaw
5507 Green Bridge Road
Dayton Maryland 21036

MARYLAND COORDINATE SYSTEM
(NAD 83/91)

E 1312600
N 565900

E 1312600
N 565600

GENERAL NOTES

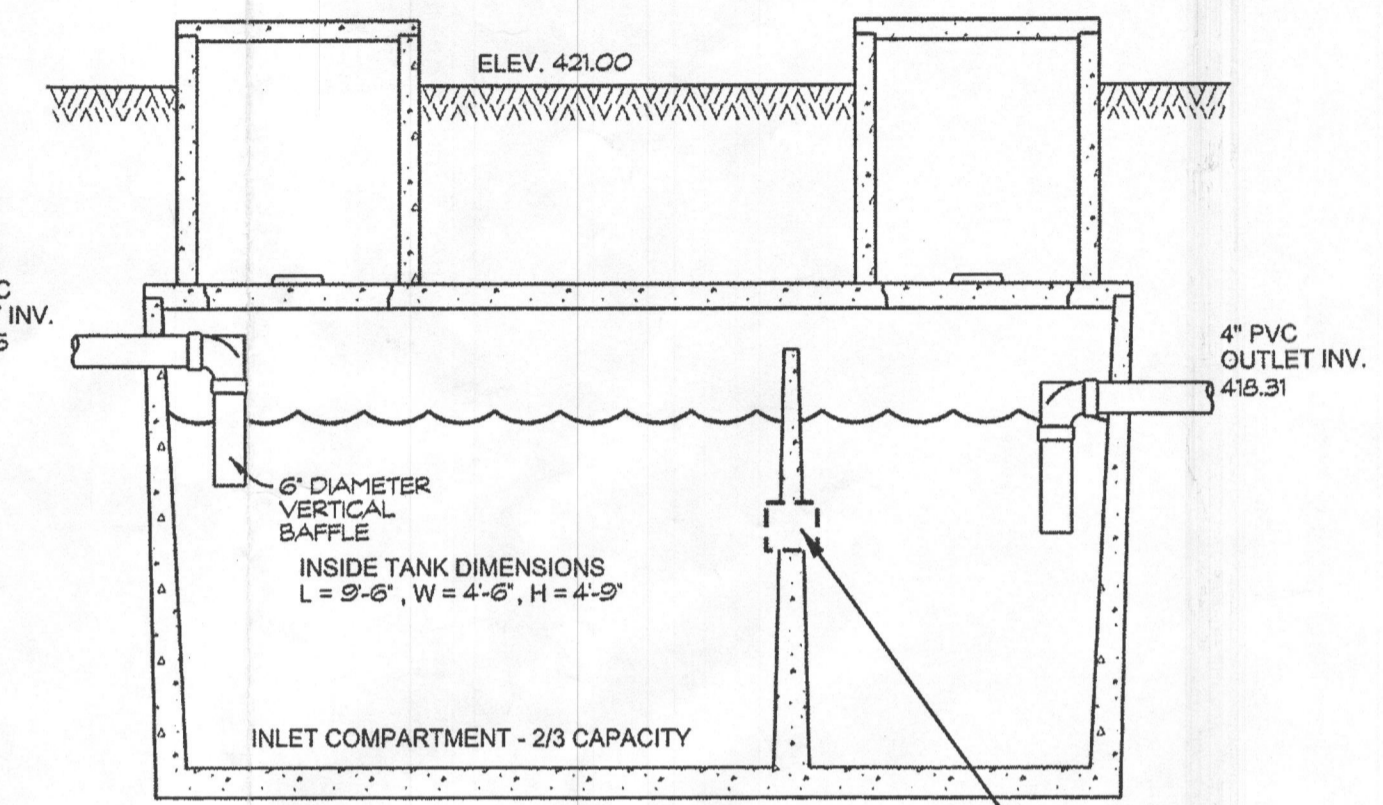
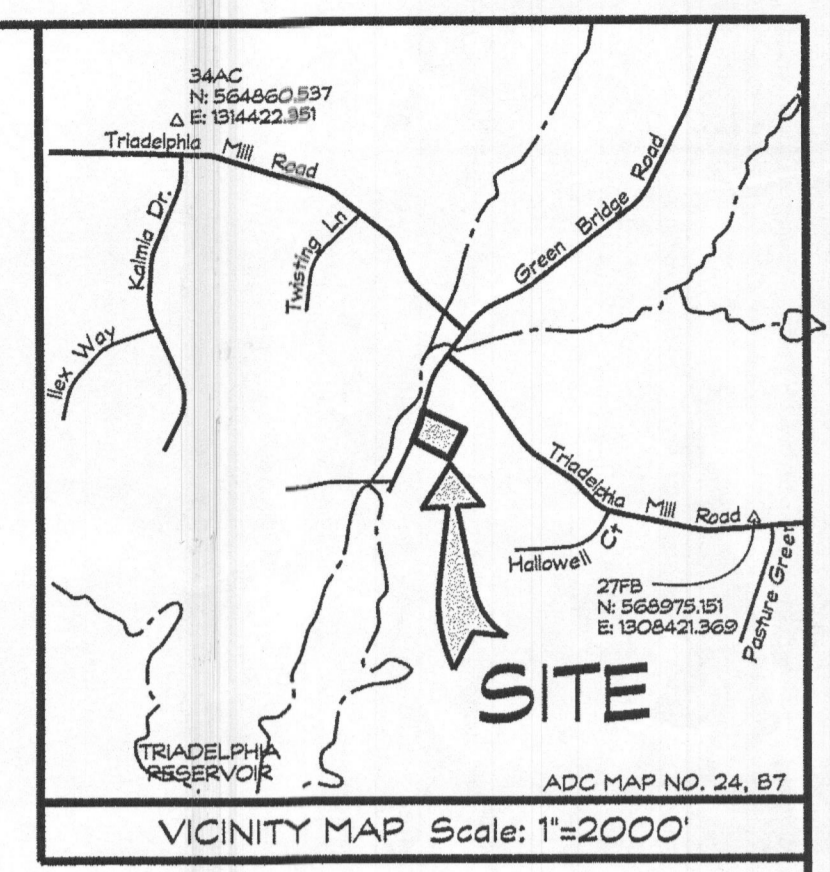
1. THE STORMWATER MANAGEMENT FOR THIS LOT IS PROVIDED BY (3) DRY WELLS.
2. THERE ARE NO STREAMS, PONDS, FLOODPLAINS, OR WETLANDS ON THIS LOT.
3. THERE ARE NO 20% OR GREATER SLOPES ON THIS LOT.

SEPTIC SYSTEM TRENCH DESIGN:

PROPOSED NUMBER OF BEDROOMS = 4
 APPLICATION RATE = 1.2
 DESIGN FLOW: 150 GALS x 4 BEDROOM = 600 GAL/DAY
 600 GAL/DAY / 1.2 GAL./DAY/SQ. FT. = 500 SQ. FT.
 500 SQ. FT. / 3 FT. = 166.6 USE 167 LF. OF TRENCH
 167 LF. x 0.50 = 83.5 LF.
 USE 1 - 84 LF. OF TRENCH FOR INITIAL SYSTEM
 USE 2 - 60 LF. OF TRENCH FOR EACH REPLACEMENT SYSTEM

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 SITE PLAN MAY BE REQUIRED.
2. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
3. THE WELL (TAG # HO-95-258 1) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
4. IF A BUILDING PERMIT IS SUBMITTED ANY TIME IN THE FUTURE, A SEPTIC SYSTEM UPGRADE WILL BE REQUIRED TO FINISH THE AREA CURRENTLY IDENTIFIED AS THE BASEMENT. AT THAT TIME A SEPTIC SYSTEM UPGRADE WILL BE REQUIRED AS FINISHING THE BASEMENT COULD POSSIBLY CREATE A FIFTH BEDROOM PER HOWARD COUNTY CODE 3.60.1(B).
5. TANK MEASUREMENTS AND ELEVATIONS ARE BASED ON SEPTIC TANKS AS MANUFACTURED BY HAYER BROS., ELKBRIDGE, MD 410-796-1434
6. ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100 FEET OF THE PROPERTY BOUNDARIES AND 200 FEET DOWN GRADIENT OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.



NOTE: THE SEPTIC TANK RISERS TO TERMINATE AT LEAST 6" ABOVE FINAL GRADE.

NOTE: SLOT IS 2" HIGH BY 4" LONG IN CENTER OF LIQUID DEPTH

Approved Septic System Plan
 Howard County Health Department
 Signature: [Signature] Date: 1/24/17

NOTE: SEPTIC DISPOSAL AREA AND PERCOLATION TEST LOCATIONS ARE FROM PERCOLATION CERTIFICATION DATED SEPTEMBER 24, 2013 AND SIGNED BY HOWARD COUNTY HEALTH DEPARTMENT OCTOBER 23, 2013.

ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN
 LOT 1 - 5507 GREEN BRIDGE RD.
TALL TREES LOT 1
 WAR PLAT NO.: 23533
 5th ELECTION DISTRICT * HOWARD COUNTY, MARYLAND
 TAX MAP: 27 * GRID: 24 * PARCEL: 26

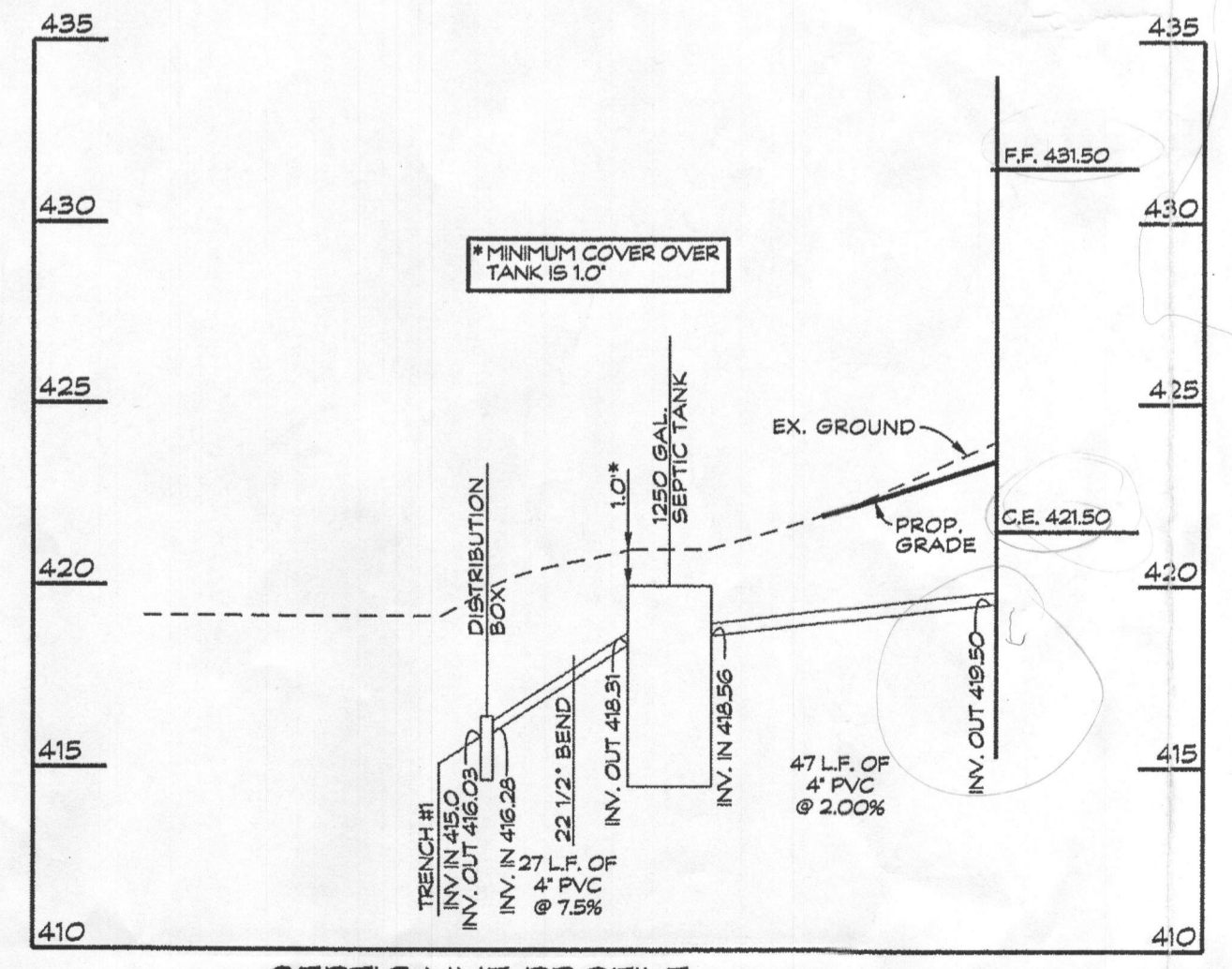


439 East Main Street Westminster, MD 21157-5539
 (410) 848-1790 FAX (410) 848-1791

[Signature]
 1-12-17
 Linda D. Alexander
 Qualified Professional

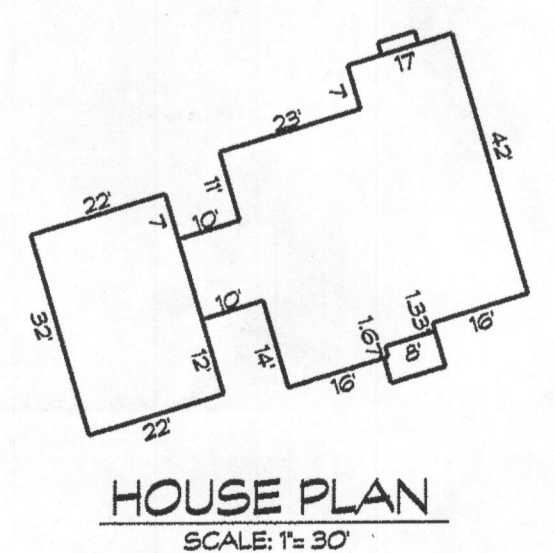
Date	Revisions	Drawn By:
07/14/16	REV'D PER HEALTH DEPT EMAIL DATE JULY 14, 2016	BM1
12/8/16	REV'D BAT TANK TO SEPTIC TANK	BM1
1/4/17	REV'D PER HEALTH DEPT EMAIL DATED 1/3/17	BM1
		Scale: 1" = 30'
		Job No.: 2016079
		Sheet: 1 OF 1

OWNER/DEVELOPER
 DAVID L. BRADSHAW &
 JULIA L. B. McDANIEL BRADSHAW
 9724 SUMMER PARK COURT
 COLUMBIA, MD 21046



TRENCH CHART

TRENCH	EX. GROUND	INV. ELEV.	BOTTOM OF TRENCH
1	419.0	415.0	412.0



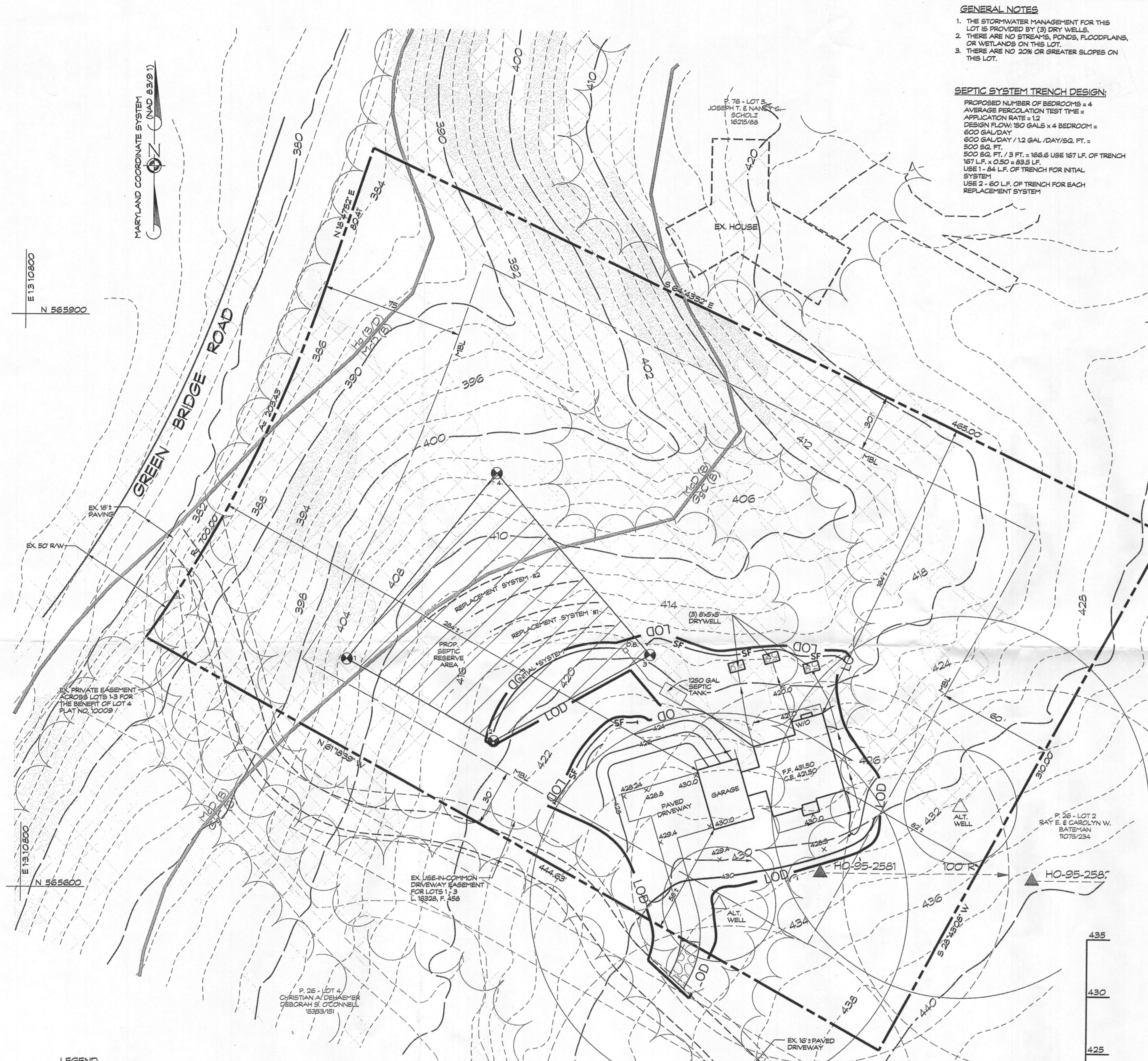
- LEGEND**
- ▲ EXISTING WELL LOCATION
 - GnS SOIL LINES
 - MCD SOIL LINES
 - ▨ DENOTES TOTAL PROPOSED SEPTIC RESERVE BASEMENT AREA = 11,272 S.F. FOR THE PURPOSE OF LOT 1 SINGLE FAMILY RESIDENCE
 - DENOTES FLOW DIRECTION
 - SF DENOTES SILT FENCE
 - LOD DENOTES LIMIT OF DISTURBANCE
 - EXISTING TREELINE
 - ~ PROPOSED TREELINE
 - NON-ROOFTOP DISCONNECT
 - ⊙ APPROVED PERCOLATION TESTS

CAD Drawing File Name: g:\2015\163 Prelim Sheet Perc. Plan.dgn

CAD Drawing File Name: s:\2015\15163 Prelim_Sheet\Perc_Plan.dgn

MARYLAND COORDINATE SYSTEM
NAD 83 (9)

E 1310800
N 565900



GENERAL NOTES

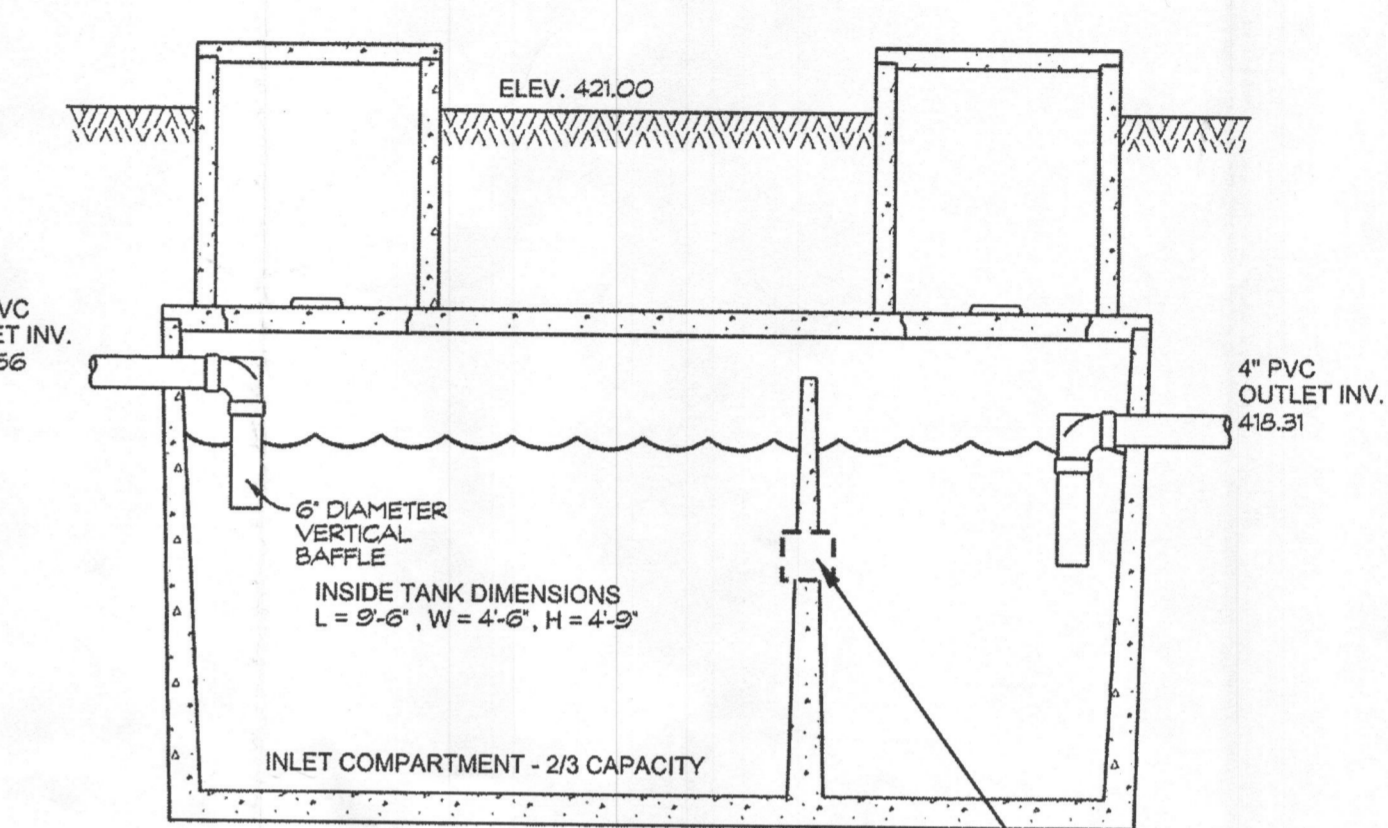
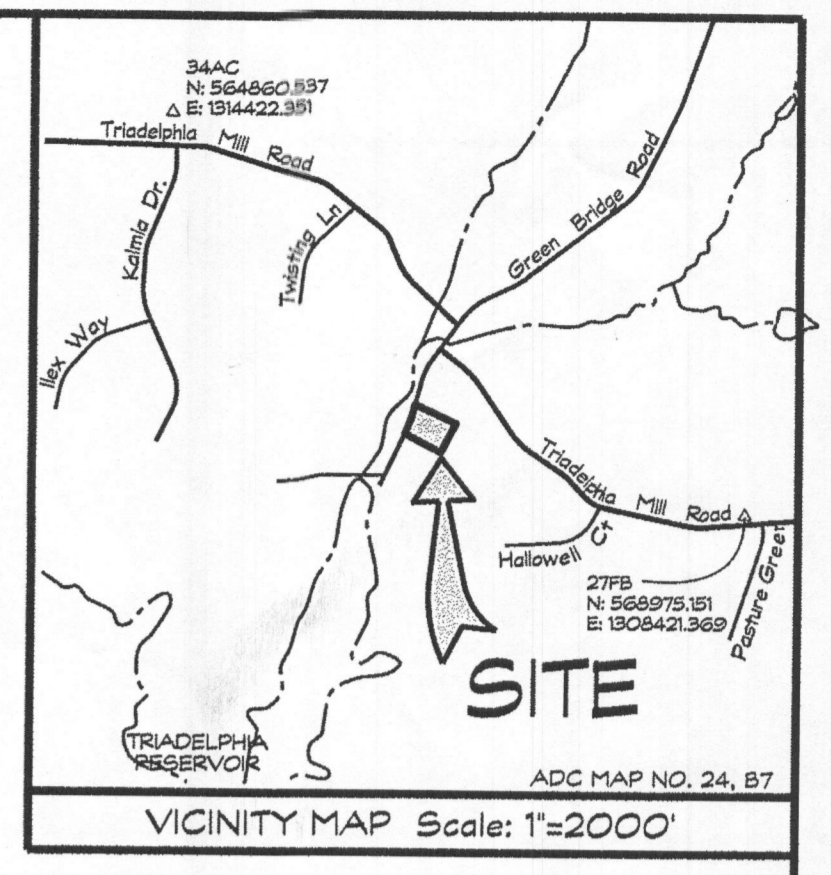
1. THE STORMWATER MANAGEMENT FOR THIS LOT IS PROVIDED BY (3) DRY WELLS.
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3. THERE ARE NO 20% OR GREATER SLOPES ON THIS LOT.

SEPTIC SYSTEM TRENCH DESIGN:

PROPOSED NUMBER OF BEDROOMS = 4
 AVERAGE PERCOLATION TEST TIME =
 APPLICATION RATE = 1.2
 DESIGN FLOW: 150 GALS x 4 BEDROOM =
 600 GAL/DAY
 600 GAL/DAY / 1.2 GAL./DAY/SQ. FT. =
 500 SQ. FT.
 500 SQ. FT. / 3 FT. = 166.6 USE 167 LF. OF TRENCH
 167 LF. x 0.50 = 83.5 LF.
 USE 1 - 84 LF. OF TRENCH FOR INITIAL SYSTEM
 USE 2 - 60 LF. OF TRENCH FOR EACH REPLACEMENT SYSTEM

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5. TANK MEASUREMENTS AND ELEVATIONS ARE BASED ON SEPTIC TANKS AS MANUFACTURED BY MAYER BROS., ELK RIDGE, MD 410-795-1434.
6. ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100 FEET OF THE PROPERTY BOUNDARIES AND 200 FEET DOWN GRADIENT OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.



NOTE:
THE SEPTIC TANK RISERS TO TERMINATE AT LEAST 6" ABOVE FINAL GRADE.

NOTE:
SLOT IS 2" HIGH BY 4" LONG IN CENTER OF LIQUID DEPTH

Approved Septic System Plan
 Howard County Health Department
 Signature: [Signature] Date: 1/24/17

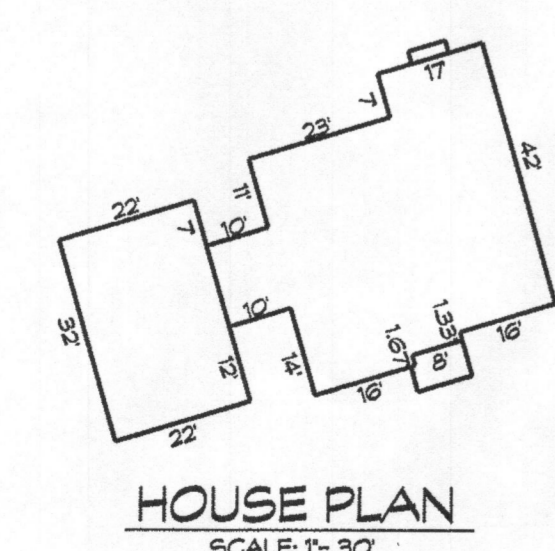
NOTE:
SEPTIC DISPOSAL AREA AND PERCOLATION TEST LOCATIONS ARE FROM PERCOLATION CERTIFICATION PLAT OF THE BATEMAN PROPERTY DATED SEPTEMBER 24, 2013 AND SIGNED BY HOWARD COUNTY HEALTH DEPARTMENT OCTOBER 23, 2013.

PLAN
1" = 30'

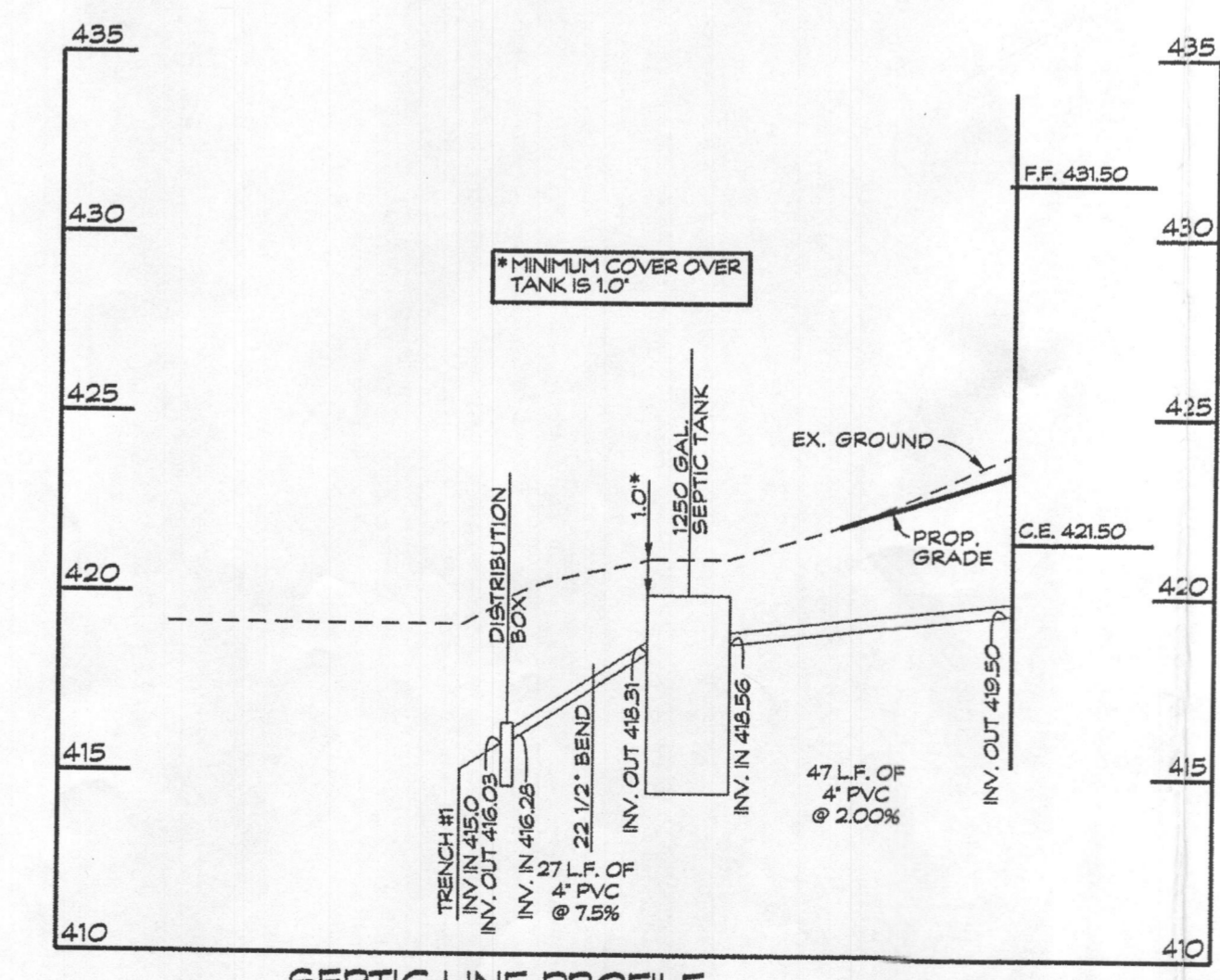
LOD DENOTES LIMIT OF DISTURBANCE
 TOTAL AREA = 19,600 S.F.

TRENCH CHART

TRENCH	EX. GROUND	INV. ELEV.	BOTTOM OF TRENCH
1	419.0	415.0	412.0



- LEGEND**
- ▲ EXISTING WELL LOCATION
 - GnB SOIL LINES
 - MCD DENOTES TOTAL PROPOSED SEPTIC RESERVE EASEMENT AREA = 11,272 S.F. FOR THE PURPOSE OF LOT 1 SINGLE FAMILY RESIDENCE
 - DENOTES FLOW DIRECTION
 - SF DENOTES SILT FENCE
 - LOD DENOTES LIMIT OF DISTURBANCE
 - EXISTING TREELINE
 - PROPOSED TREELINE
 - NON-ROOFTOP DISCONNECT
 - APPROVED PERCOLATION TESTS



SEPTIC LINE PROFILE
SCALE: HORIZ. 1"=30' VERT. 1"=5'

OWNER/DEVELOPER
 DAVID L. BRADSHAW &
 JULIA L. B. McDANIEL BRADSHAW
 9724 SUMMER PARK COURT
 COLUMBIA, MD 21046

ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN
 LOT 1 - 5507 GREEN BRIDGE RD.
 TAX ACCOUNT NO.: 414857

TALL TREES LOT 1

WAR PLAT NO.: 23533
 5th ELECTION DISTRICT - HOWARD COUNTY, MARYLAND
 TAX MAP: 27 GRID: 24 PARCEL: 26

CLSI
 www.clsi-ctvireg.com
 439 East Main Street Westminster, MD 21157-5539
 (410) 848-1730 FAX (410) 848-1731

Date	Revisions	Drawn By:
07/14/16	REVD PER HEALTH DEPT E-MAIL DATE JULY 14, 2016	BM1
12/8/16	REVD BAT TANK TO SEPTIC TANK	Designed By:
1/4/17	REVD PER HEALTH DEPT E-MAIL DATED 1/3/17	Reviewed By:
		Date: 5/17/16
		Scale: 1" = 30'
		Job No: 2016079
		Sheet: 1 OF 1

CAD Drawing File Name: g:\2015\163\Prelim\Sheet\Parc_Plan.dgn

MARYLAND COORDINATE SYSTEM (NAD 83/91)

E1310800
N 565900

E1310800
N 565600

GENERAL NOTES

1. THE STORMWATER MANAGEMENT FOR THIS LOT IS PROVIDED BY AN OVERLAND FLOW DISCONNECT.
2. THERE ARE NO STREAMS, PONDS, FLOODPLAINS, OR WETLANDS ON THIS LOT.
3. THERE ARE NO 20% OR GREATER SLOPES ON THIS LOT.

SEPTIC SYSTEM TRENCH DESIGN:

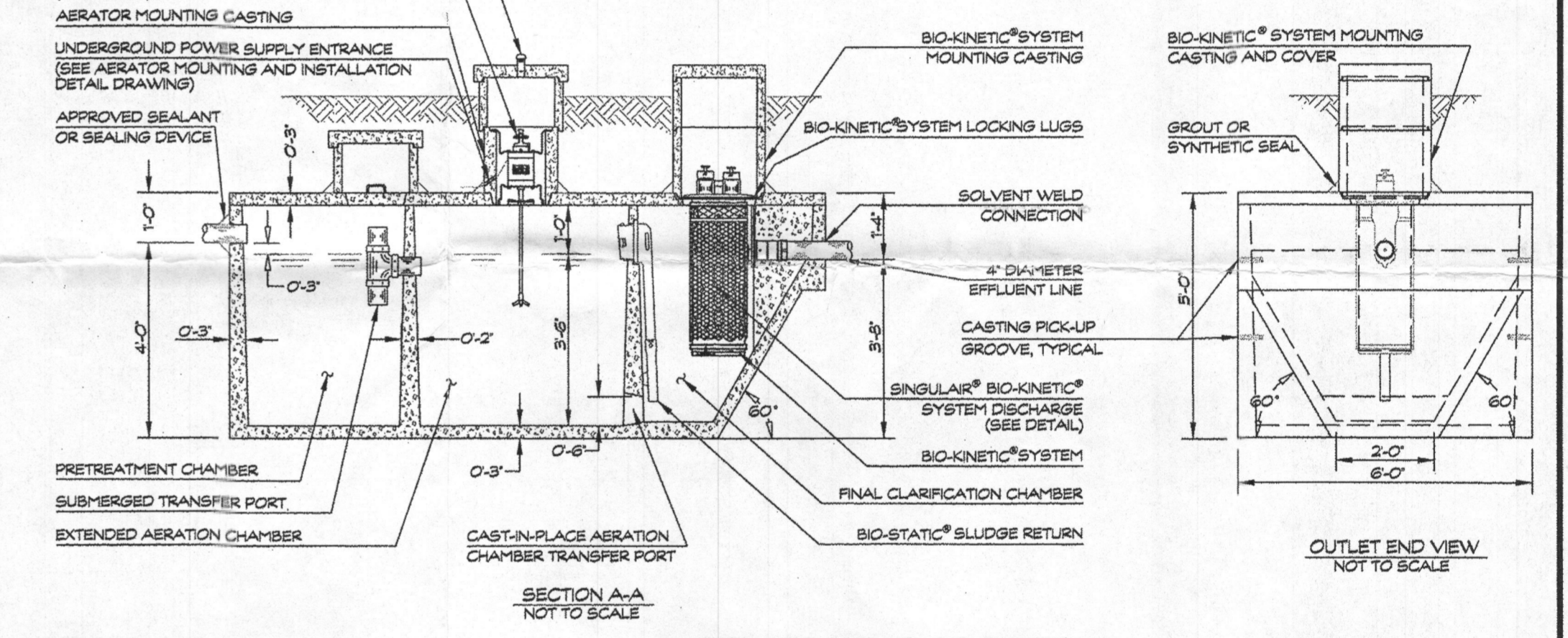
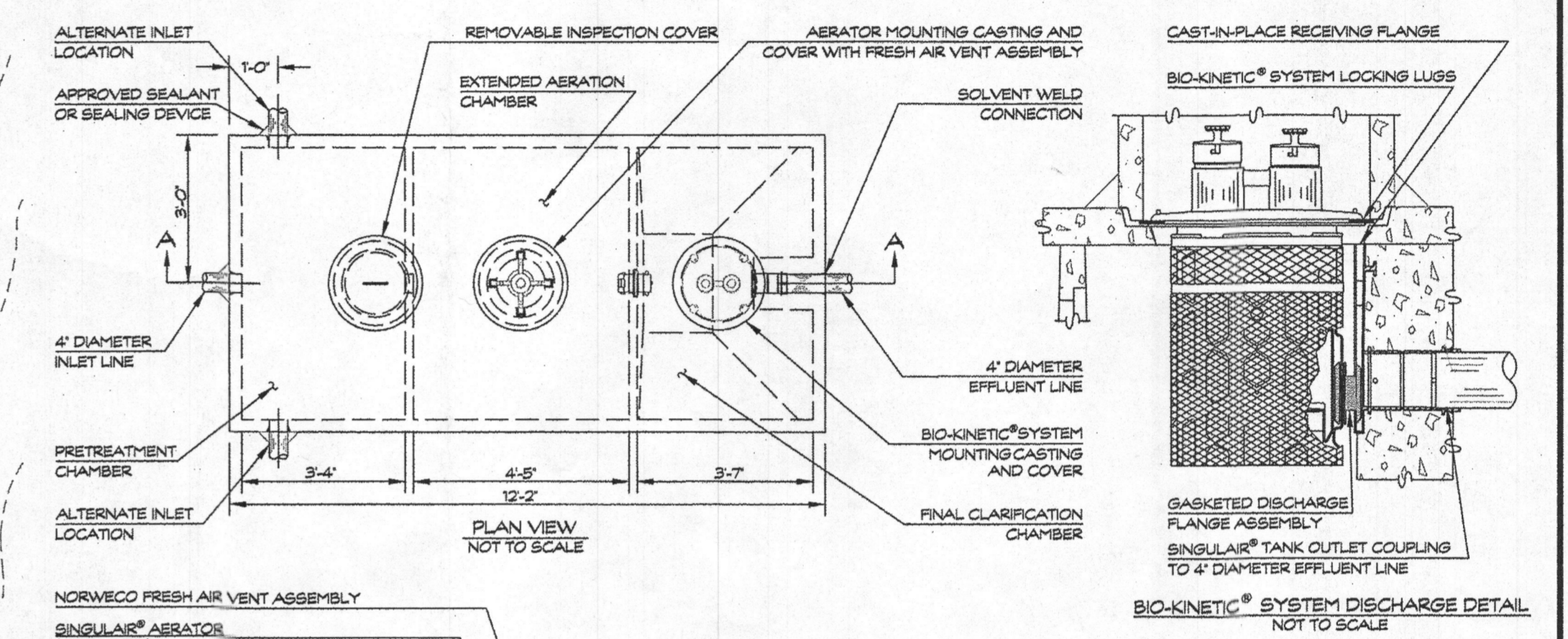
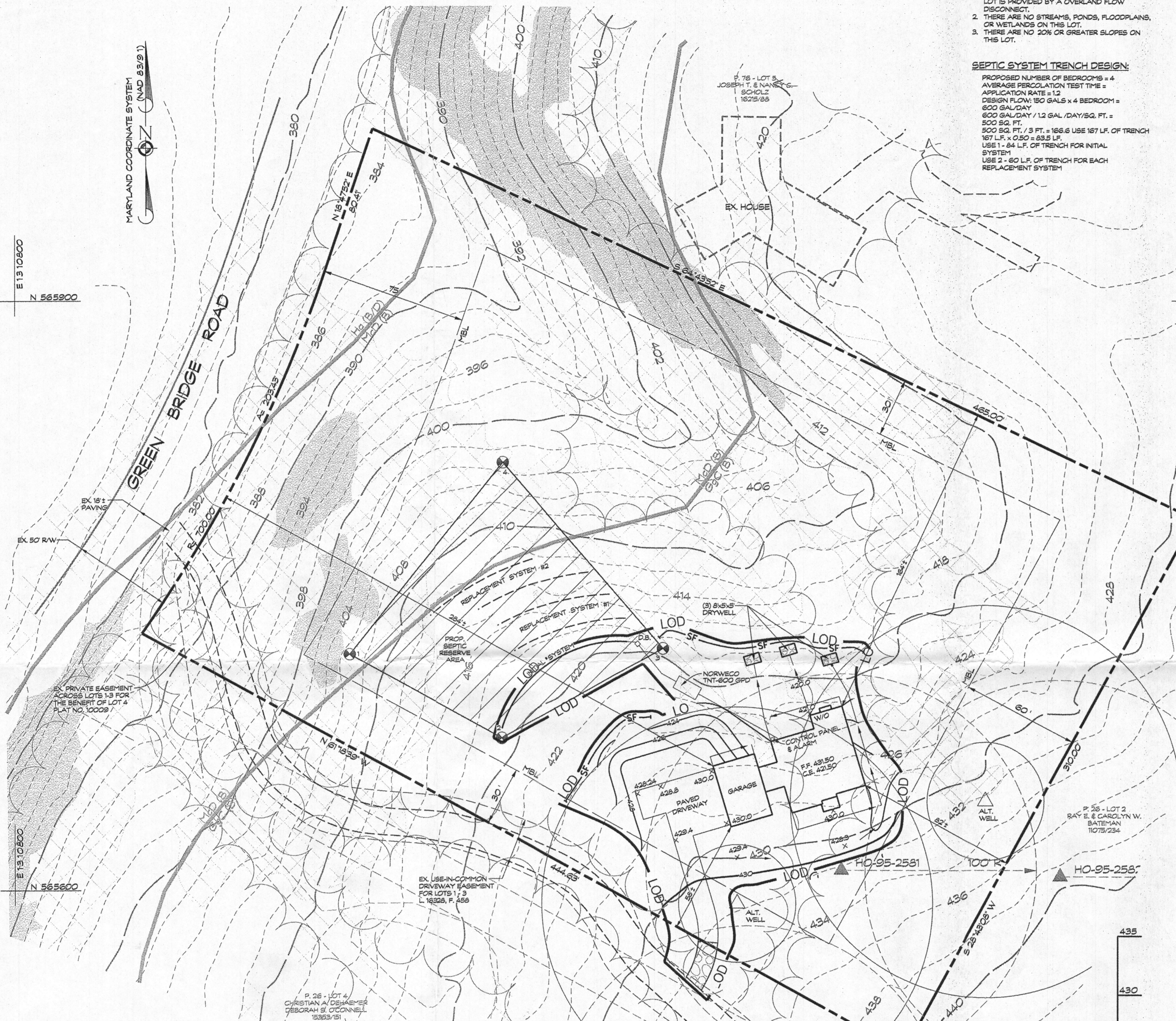
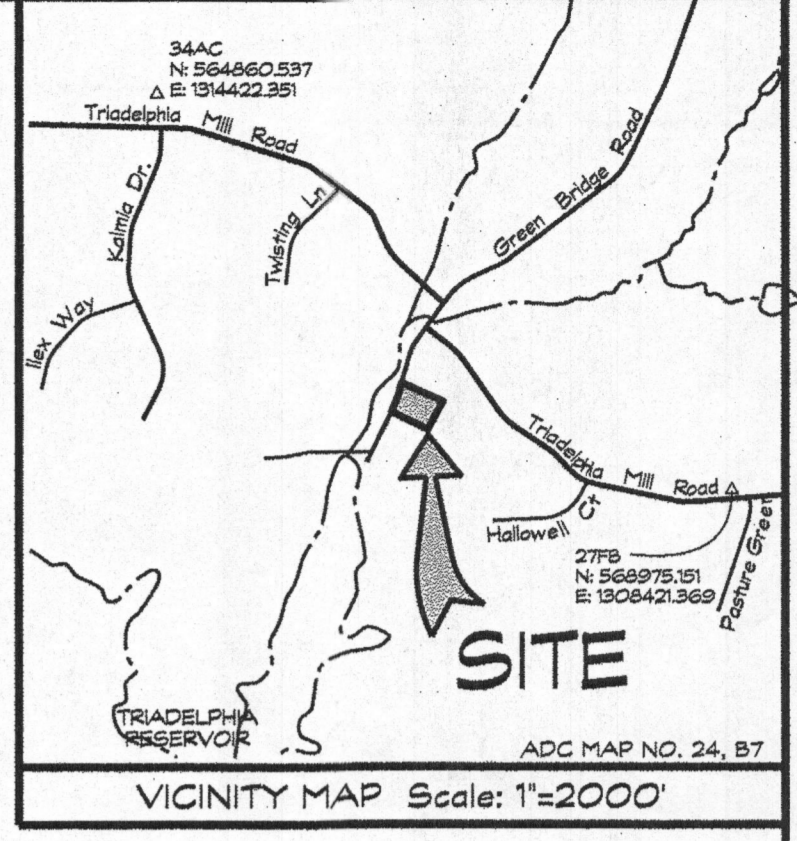
PROPOSED NUMBER OF BEDROOMS = 4
 AVERAGE PERCOLATION TEST TIME =
 APPLICATION RATE = 1.2
 DESIGN FLOW: 150 GALS x 4 BEDROOMS =
 600 GAL/DAY
 600 GAL/DAY / 12 GAL / DAY/SQ. FT. =
 500 SQ. FT.
 500 SQ. FT. / 3 FT. = 166.6 USE 167 LF. OF TRENCH
 167 LF. x 0.80 = 133.6 LF.
 USE 1 - 84 LF. OF TRENCH FOR INITIAL SYSTEM
 USE 2 - 80 LF. OF TRENCH FOR EACH REPLACEMENT SYSTEM

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 SITE PLAN MAY BE REQUIRED.
2. THE MAXIMUM DEPTH OF THE BAT PER THE MANUFACTURER'S SPECIFICATION IS 3 FEET.
3. THE BAT SYSTEM SHALL BE MAINTAINED AND OPERATED FOR THE LIFE OF THE SYSTEM.
4. THE BAT SHALL BE OPERATED BY AND MAINTAINED BY A CERTIFIED SERVICE PROVIDER.
5. 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.
6. ELECTRICAL WORK FOR THE BAT INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
7. AN AGREEMENT AND EASEMENT MUST BE COMPLETED AND SIGNED BY ALL APPLICABLE PARTIES, AND RECORDED IN LAND RECORDS OR HOWARD COUNTY.
8. THE HEALTH DEPARTMENT REQUIRES DOCUMENTATION FOR THE START-UP CERTIFICATION FROM THE MANUFACTURER PRIOR TO FINAL APPROVAL OF THE INSTALLATION.
9. THE BLOWER MAY NOT BE LOCATED MORE THAN 100 FEET FROM THE TANK BASED ON MANUFACTURER'S SPECIFICATIONS.
10. IF A BUILDING PERMIT IS SUBMITTED ANY TIME IN THE FUTURE, A SEPTIC SYSTEM UPGRADE WILL BE REQUIRED TO FINISH THE AREA CURRENTLY IDENTIFIED AS THE BASEMENT. AT THAT TIME A SEPTIC SYSTEM UPGRADE WILL BE REQUIRED AS FINISHING THE BASEMENT COULD POSSIBLY CREATE A FIFTH BEDROOM PER HOWARD COUNTY CODE 3.60.1(B).

SEPTIC TANK NOTES

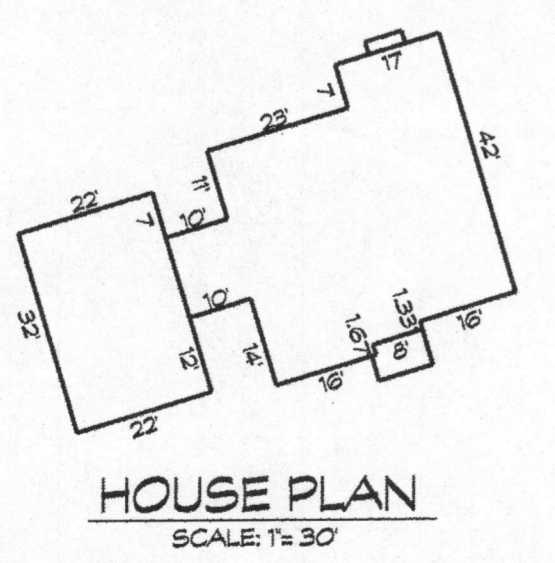
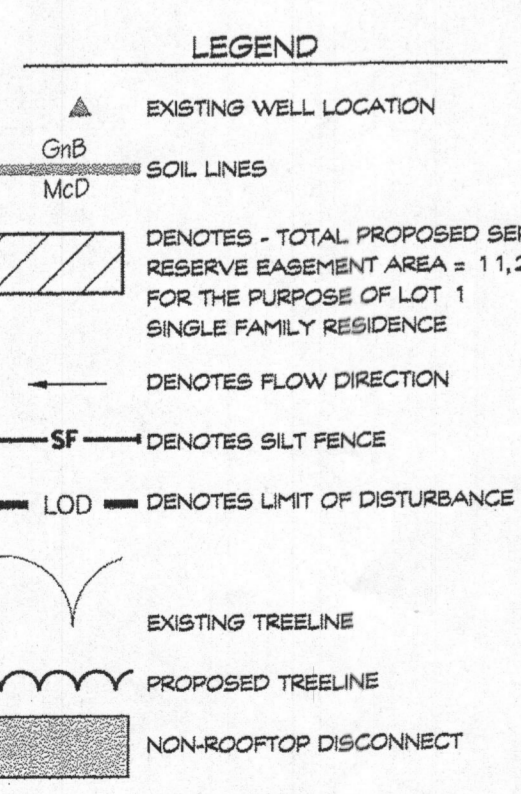
1. SINGULAR® AERATOR, AS TESTED AND ACCEPTED BY NSF, OPERATING 60 MINUTES ON / 60 MINUTES OFF.
2. FALL THROUGH SINGULAR® PLANT FROM INLET INVERT TO OUTLET INVERT IS FOUR INCHES. INLET INVERT IS TWELVE INCHES BELOW TANK TOP.
3. ON DEEPER INSTALLATIONS, PRECAST RISERS MUST BE USED TO EXTEND AERATOR MOUNTING CASTINGS 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 SINGULAR® DISTRIBUTOR FOR ELECTRICAL REQUIREMENTS.



NORWECO TNT-600 DETAIL
NOT TO SCALE

Approved Septic System Plan
 Howard County Health Department
 Signature: [Signature] Date: 7/20/16

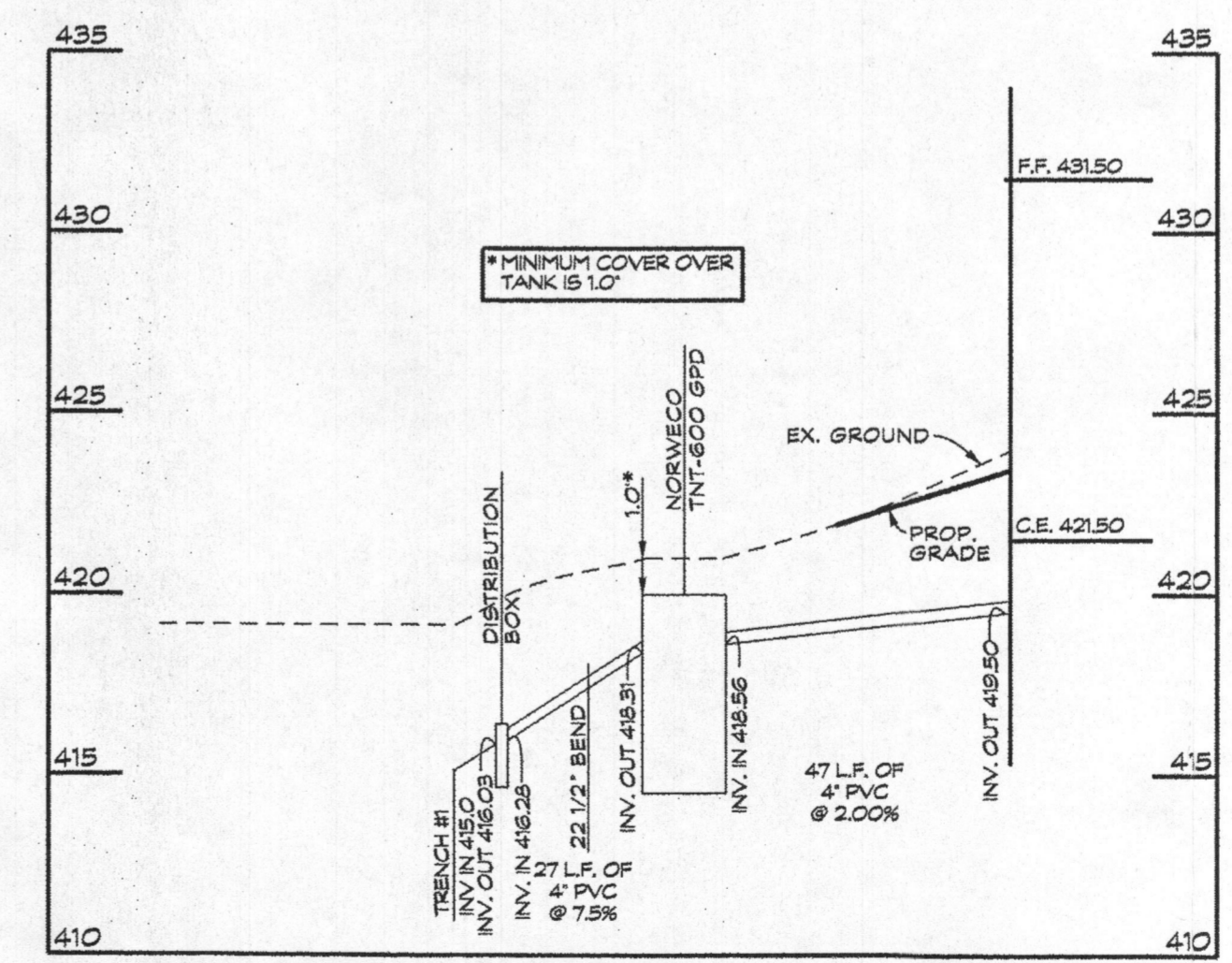
NOTE:
 SEPTIC DISPOSAL AREA AND PERCOLATION TEST LOCATIONS ARE FROM PERCOLATION CERTIFICATION PLAN OF THE BATEMAN PROPERTY DATED SEPTEMBER 24, 2013 AND SIGNED BY HOWARD COUNTY HEALTH DEPARTMENT OCTOBER 23, 2013.



LOD DENOTES LIMIT OF DISTURBANCE
 TOTAL AREA = 19,600 S.F.

TRENCH CHART

TRENCH	EX. GROUND	INV. ELEV.	BOTTOM OF TRENCH
1	419.0	415.0	412.0



SEPTIC LINE PROFILE
 SCALE: HORIZ. 1/8"=1'-0"
 VERT. 1/8"=1'-0"

OWNER/DEVELOPER
 DAVID L. BRADSHAW &
 JULIA L. B. McDANIEL BRADSHAW
 9724 SUMMER PARK COURT
 COLUMBIA, MD 21046

SITE PLAN FOR BAT INSTALLATION
 LOT 1 - 5507 GREEN BRIDGE RD.
 TAX ACCOUNT NO.: 414857

TALL TREES LOT 1

WAR PLAT NO.: 23593
 5th ELECTION DISTRICT * HOWARD COUNTY, MARYLAND
 TAX MAP: 27 * GRID: 24 * PARCEL: 26

[Signature]
 Linda D. Alexander
 Qualified Professional

CLSI
 Civil Engineering & Environmental Consultants
 www.clsi-civileng.com
 439 East Main Street Wauwaminster, MD 21157-5539
 (410) 648-1790 FAX (410) 648-1791

Date	Revisions	Drawn By: BM1
07/14/16	REVD PER HEALTH DEPT EMAIL DATE JULY 14, 2016	Designed By:
		Reviewed By:
		Date: 5/17/16
		Scale: 1" = 30'
		Job No: 2016078
		Sheet: 1 OF 1

MARYLAND COORDINATE SYSTEM (NAD 83)

E 1310500
N 565200

E 1310500
N 565600

GENERAL NOTES

1. THE STORMWATER MANAGEMENT FOR THIS LOT IS PROVIDED BY AN OVERLAND FLOW DISCONNECT.
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SEPTIC SYSTEM TRENCH DESIGN:

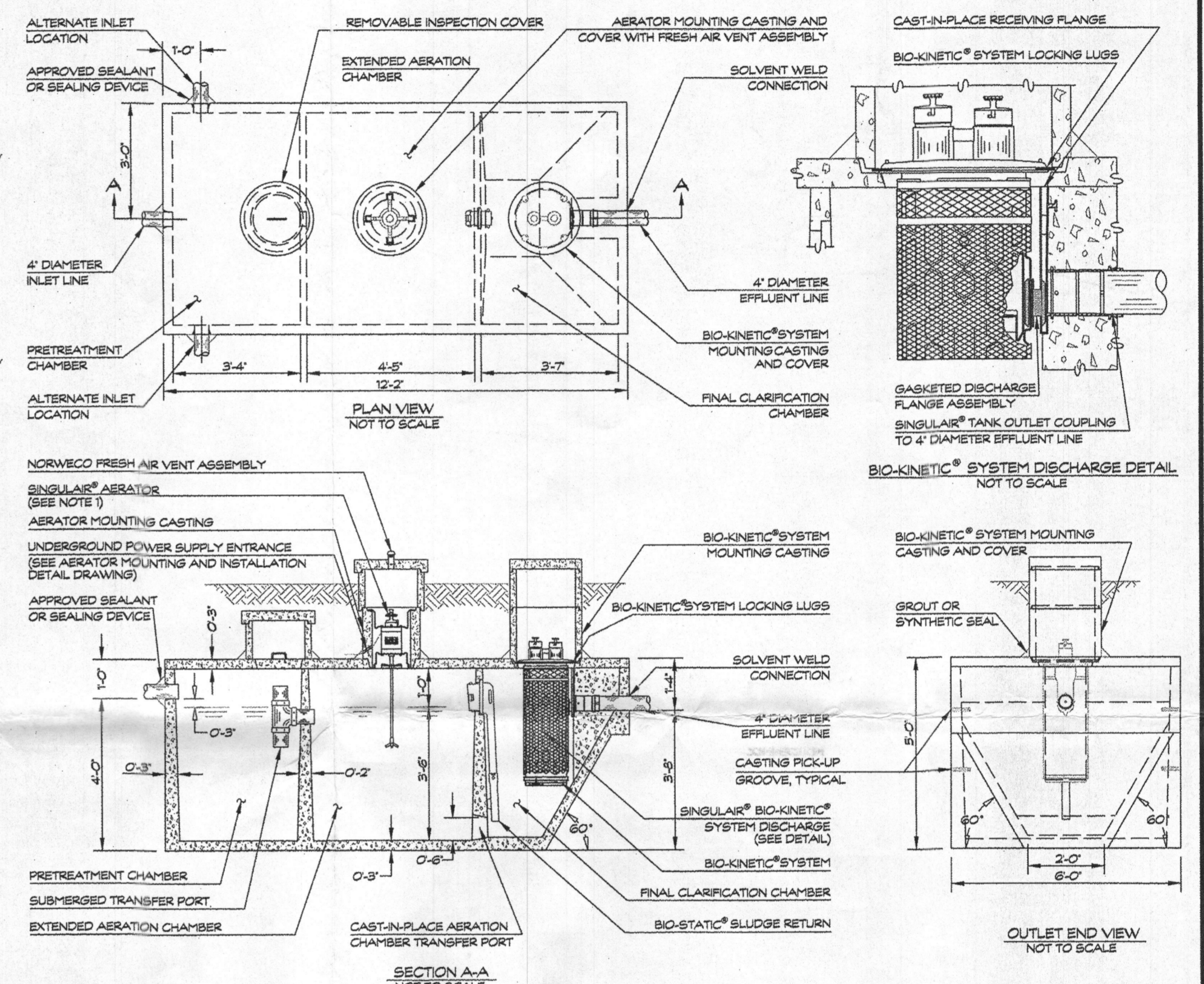
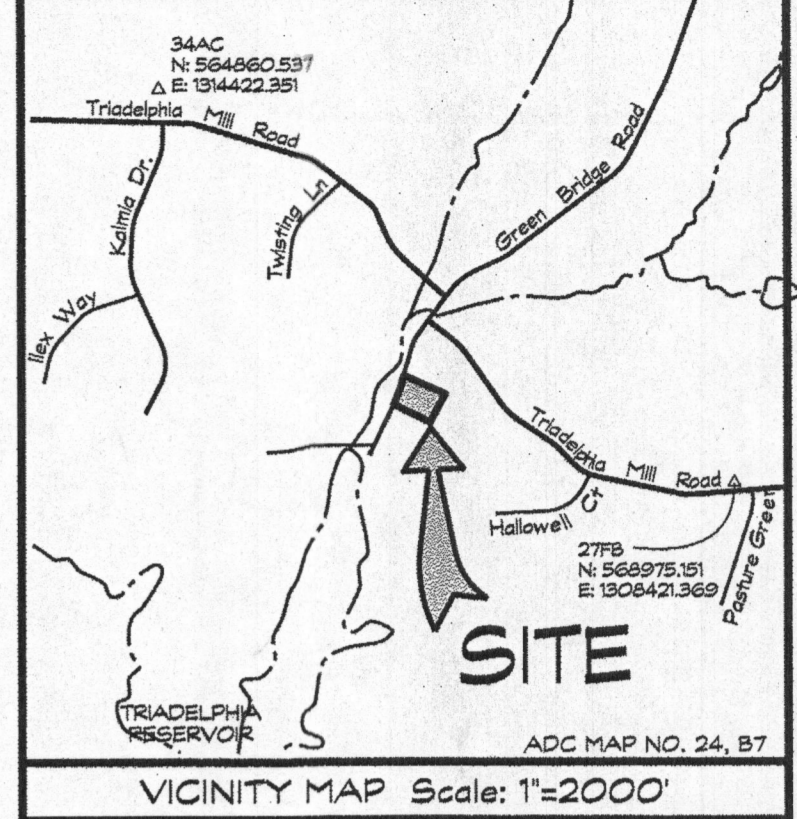
PROPOSED NUMBER OF BEDROOMS = 4
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 600 GAL/DAY / 12 GAL./DAY/SQ. FT. = 500 SQ. FT.
 500 SQ. FT. / 3 FT. = 166.6 USE 167 LF. OF TRENCH
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SEPTIC TANK NOTES

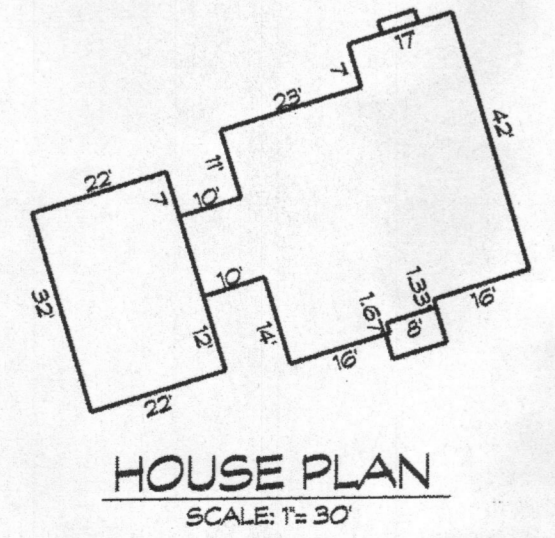
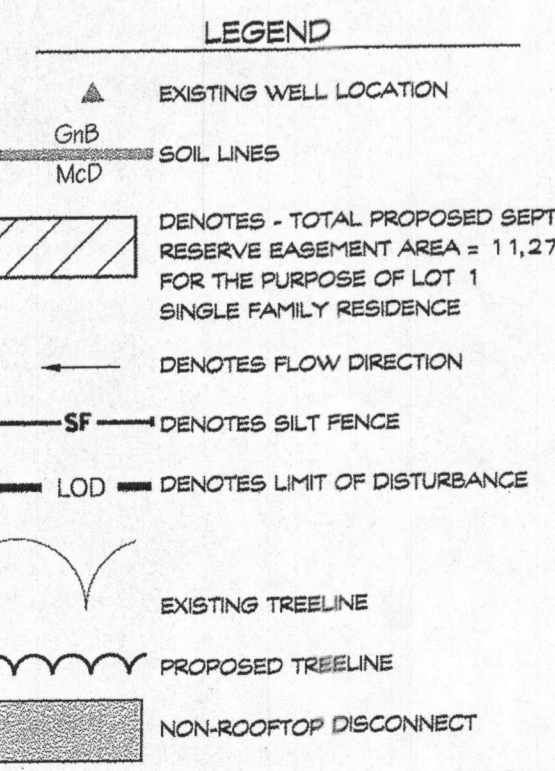
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Approved Septic System Plan
 Howard County Health Department
 Signature: [Signature] Date: 7/22/16

NORWECO TNT-600 DETAIL
NOT TO SCALE

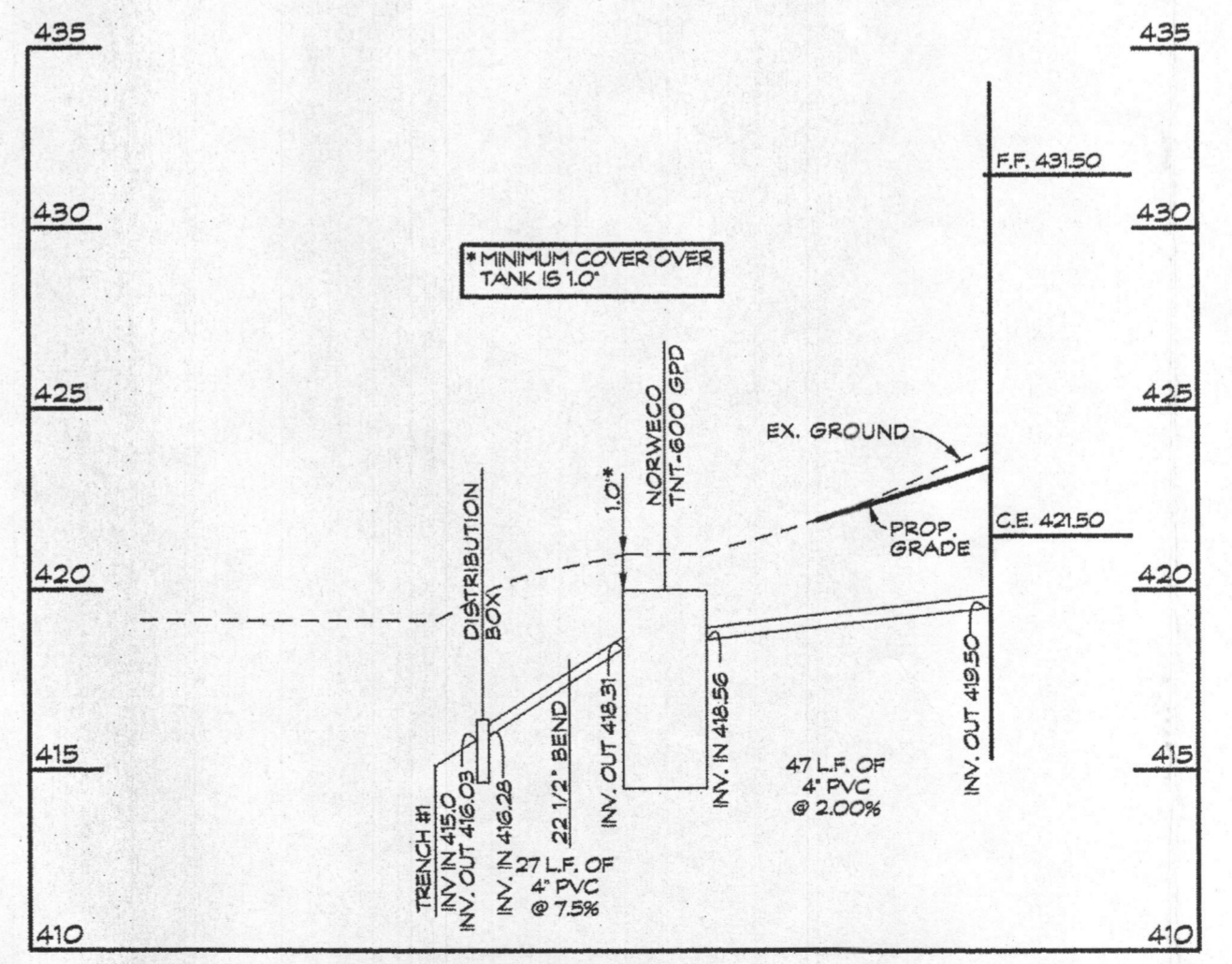
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SCALE: HORIZ. 1"=30' VERT. 1"=5'

OWNER/DEVELOPER
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439 East Main Street Westminster, MD 21157-5539
 (410) 848-1790 FAX (410) 848-1791

Ullrich D. Alexander
 Qualified Professional
 9/15/16

Date	Revisions	Drawn By:
07/14/16	REV'D PER HEALTH DEPT EMAIL DATE JULY 14, 2016	SH1
		Designed By:
		Reviewed By:
		Date: 5/17/16
		Scale: 1"=30'
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		Sheet: 1 OF 1