

**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](http://www.hchealth.org)Facebook: [www.facebook.com/hocohealth](https://www.facebook.com/hocohealth)

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

RECEIPT DATE: 6/3/19**ONSITE SEWAGE DISPOSAL SYSTEM**P 565512-AAPPROVAL DATE: 07/02/2019**PERMIT: CONSTRUCTION**

A \_\_\_\_\_

PROPERTY ADDRESS: 1044 Thunderbird DriveSUBDIVISION: Fairlane FarmsLOT: 35

TAX ID: \_\_\_\_\_

CONTRACTOR: South Carroll BackhoeEMAIL: scbackhoe@comcast.comCONTRACTOR ADDRESS: 4410 Salem Bottom Road, Westminster, MD 21157PHONE: 410-596-3618PROPERTY OWNER: NV Homes

EMAIL: \_\_\_\_\_

OWNER ADDRESS: 9720 Patuxent Woods Drive, Columbia, MD 21046PHONE: 410-379-5956SEPTIC TANK SIZE (GALLONS): 2000TANK MANUFACTURER: Babylon Vault or equivalentPUMP MODEL: N/A

PUMP SIZE

N/APUMP TANK CAPACITY: N/A

DISTRIBUTION SYSTEM:



GRAVITY



PRESSURE DOSED

BEDROOMS: 6

APPLICATION RATE

1.2

TRENCHES:	LINEAR FEET REQUIRED: <u>125</u>	INLET DEPTH: <u>3</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>6</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>3</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:	<u>3x 42' TRENCHES</u>	

ISSUED BY: Hank OswaldISSUE DATE: 6/3/19EXPIRATION DATE: 6/3/20**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**

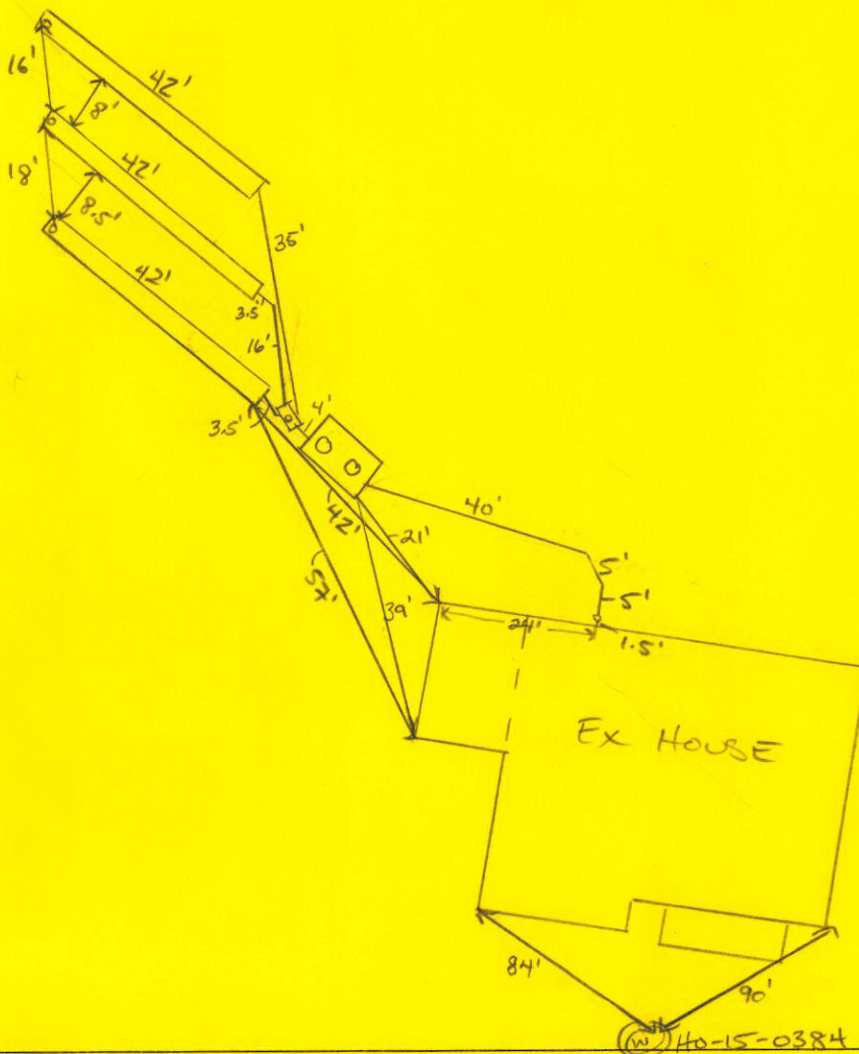
ELECTRICAL PERMIT ISSUED

E

N/A**NOTE: MDE RECOMMENDS SEPTIC TANKS, BAT, AND OTHER PRETREATMENT UNITS BE PUMPED AT A FREQUENCY ADEQUATE TO ENSURE THAT SOLIDS ARE NOT DISCHARGED TO THE DISPOSAL AREA****NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM.****PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT.****CALL 410-313-1771 TO SCHEDULE INSPECTIONS.**



NOT TO SCALE



#### TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	3'	6'
NUMBER OF TRENCHES		3
TOTAL LENGTH		126 F
ABSORPTION AREA		378 SF
DISTRIBUTION BOX LEVEL		SPEED
DISTRIBUTION BOX BAFFLE		YES
DISTRIBUTION BOX PORT		YES

#### SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL	YES
MANUFACTURER	BABYLON
CAPACITY	2000 GAL
SEAM LOC	TOP
TANK LID DEPTH	2.5'
BAFFLES	YES
BAFFLE FILTER	NO
MANHOLE LOC	FRONT/BACK
6" PORT LOC	-
WATERTIGHT TEST	-
SLOTTED	YES
DATE ON LID	5/10/19
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:

6/18/2019 SDA AND TANKS STAKED. CONTOUR OK 3 x 42' TRENCHES.  
OK TO START. (P)

#### INSTALLATION:

6/26/2019 TRENCHES COMPLETED. (P) 6/27/2019 D Box SET AND  
TIED IN WITH TRENCHES. (P) 7/2/2019 TANK SET AND SEWER LINE RAN TO  
THE HOUSE. D Box (LEVELED) WITH SPEED LEVELS. OK TO BACKFILL. (P)  
7/22/19 SHC made. Confirmed via email w/ photo. (P)

FINAL INSPECTOR

DATE OF APPROVAL

07/02/2019



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Twitter: HowardCoHealthDep

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

### SEWAGE DISPOSAL SYSTEM SPECIFICATIONS WORKSHEET

Address: \_\_\_\_\_

Subdivision: Fairlane Farm Lot: 35

Initial system: Application rate: 1.2 Effective area beginning depth: 3 Bottom maximum depth: 6

1<sup>st</sup> Replacement: Application rate: 0.8 Effective area beginning depth: 3 Bottom maximum depth: 6

2<sup>nd</sup> Replacement: Application rate: 0.8 Effective area beginning depth: 3 Bottom maximum depth: 6

Design Flow = 150 gallons per day per bedroom

Design flow ÷ application rate = square footage of drainfield required

Linear length of trench required = drainfield square footage x sidewall reduction percentage ÷ trench width

Sidewall reduction credit formula:

$$\frac{W + 2}{W + 1 + 2D} \times 100 = \text{Percent of length of standard trench where } W = \text{trench width and } D = \text{depth between effective area beginning depth and trench bottom.}$$

Standard design requirements:

- All trenches must be equal length unless low pressure dosed
- All trenches must be on contour
- Minimum trench spacing: 10' for all trenches utilizing sidewall reduction credit. Additional spacing may be necessary for any trench using over 3.5' of effective sidewall. In those cases, the spacing formula is  $2D + W$  up to a maximum spacing of 18'.
- Minimum trench spacing for trenches with no sidewall credit (bottom area only) is 6' for a 2' wide trench and 9' for a 3' wide trench (spacing is measured edge to edge)
- Maximum trench length is 100'
- Maximum pipe depth is 4'

Additional requirements:

Approved: Hank Oswald Date: 1/29/18



# Transmittal

Via: ☐ Fax ☐ Mail ☒ Messenger ☐ E-Mail ☐ To Be Picked Up  
☐ Fax (original to follow via U.S. Mail)

To: **Bureau of Environmental Health**  
**8930 Stanford Blvd.**  
**Columbia, Maryland 21046-4544**

Attn: **Hank**  
Fax:  
Phone: **410-313-2640**

From: **Tony Fertitta**

CC:

Re: **Fairlane Farms, Lot 35**

W.O.# **05106-3003**

Date: **Dec. 18, 2018**

Pages: **0** **Page(s) Including this cover**

We are forwarding: ☒ Prints ☐ Copy of Letter ☐ Specifications ☐ Shop drawings ☐ Other  
☐ Urgent ☐ For your use ☐ As requested ☒ For Review & Comment

Remarks:

**Re: Fairlane Farm, Lot 35, 1044 Thunderbird Drive.**

**Here are 3 new copies of the OSDS for Lot 35 for your review. Please let me know if you have any questions.**

**Thank You,**

**Tony.**

**Fisher, Collins, & Carter, Inc. Ph. 410-461-2855**

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## **CONFIDENTIALITY NOTICE**

This transmission contains confidential information which may be legally privileged, and is intended only for the use of the individual named above. If you are not the intended recipient, you are hereby notified that any distribution (except to the intended recipient), copying, or disclosure of this transmission is strictly prohibited.



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. ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
4. THE WELL HO-15-0304 HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
5. ALL 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.



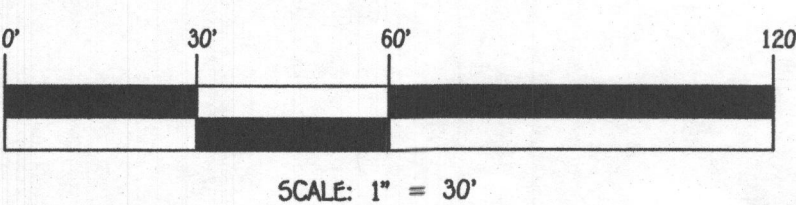
PLAN  
SCALE: 1" = 30'



**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. 20748, EXPIRATION DATE: 02/22/2019.

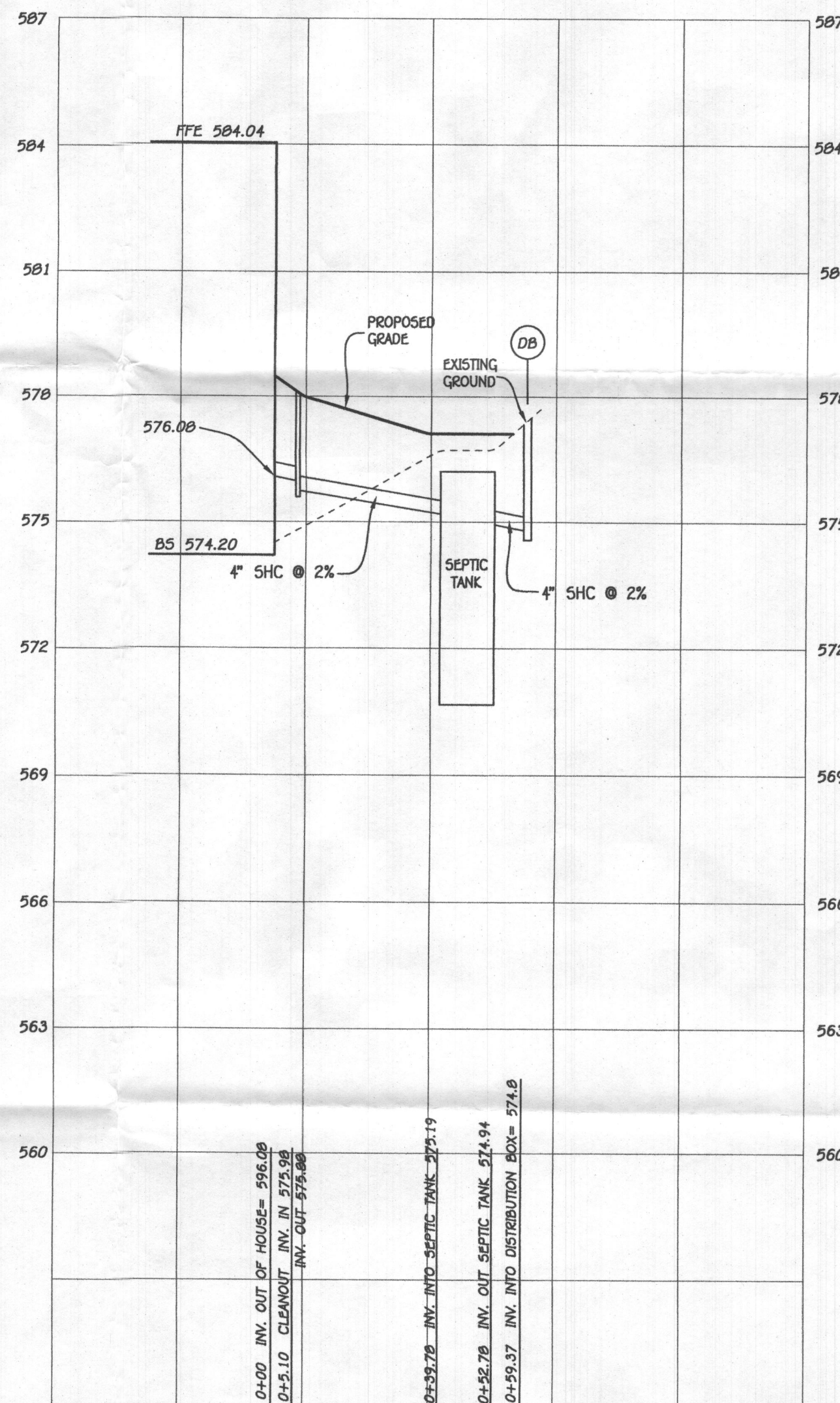
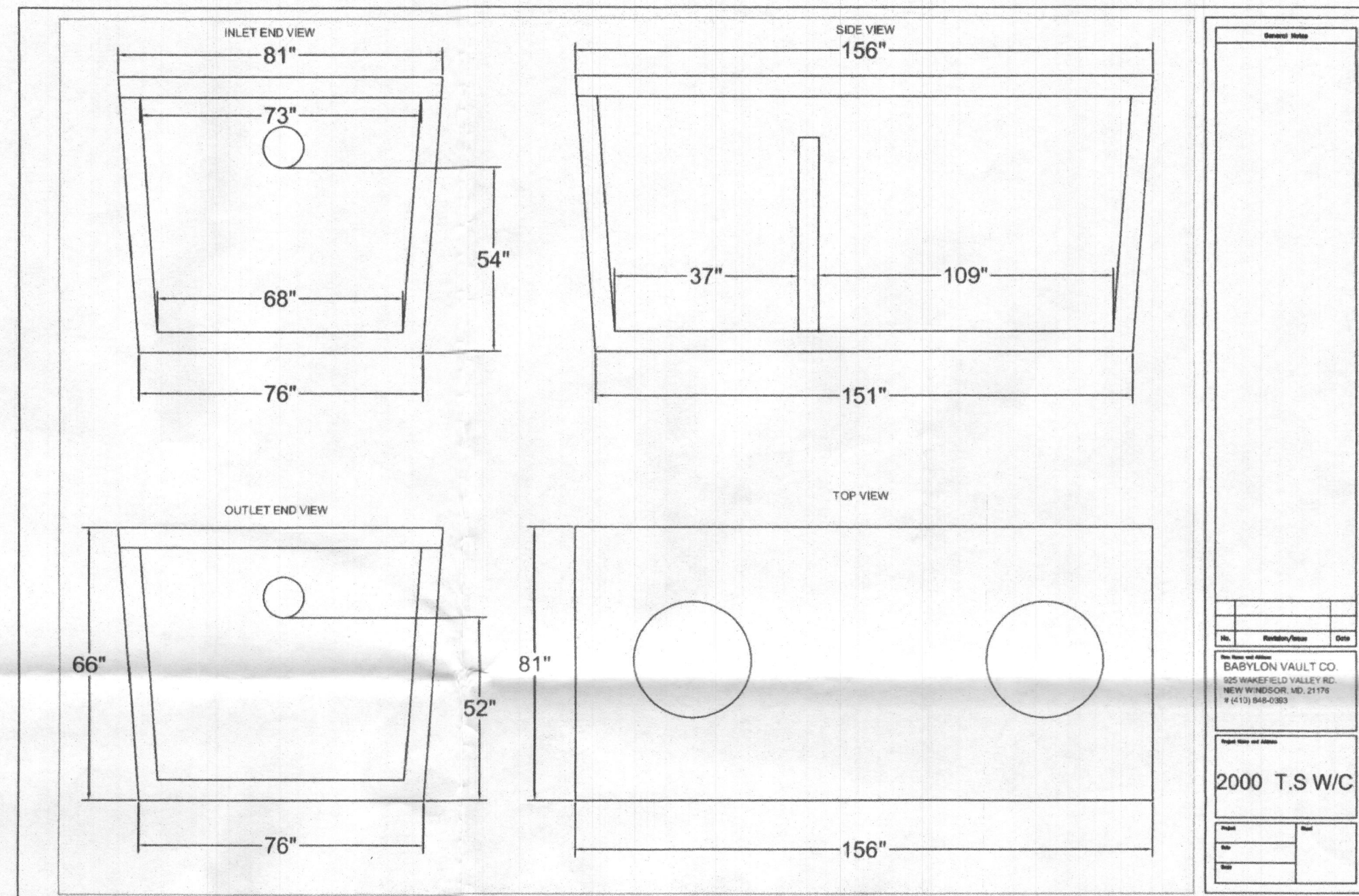
*Michael J. Fisher*  
Signature of Professional Engineer

3/1/19  
DATE

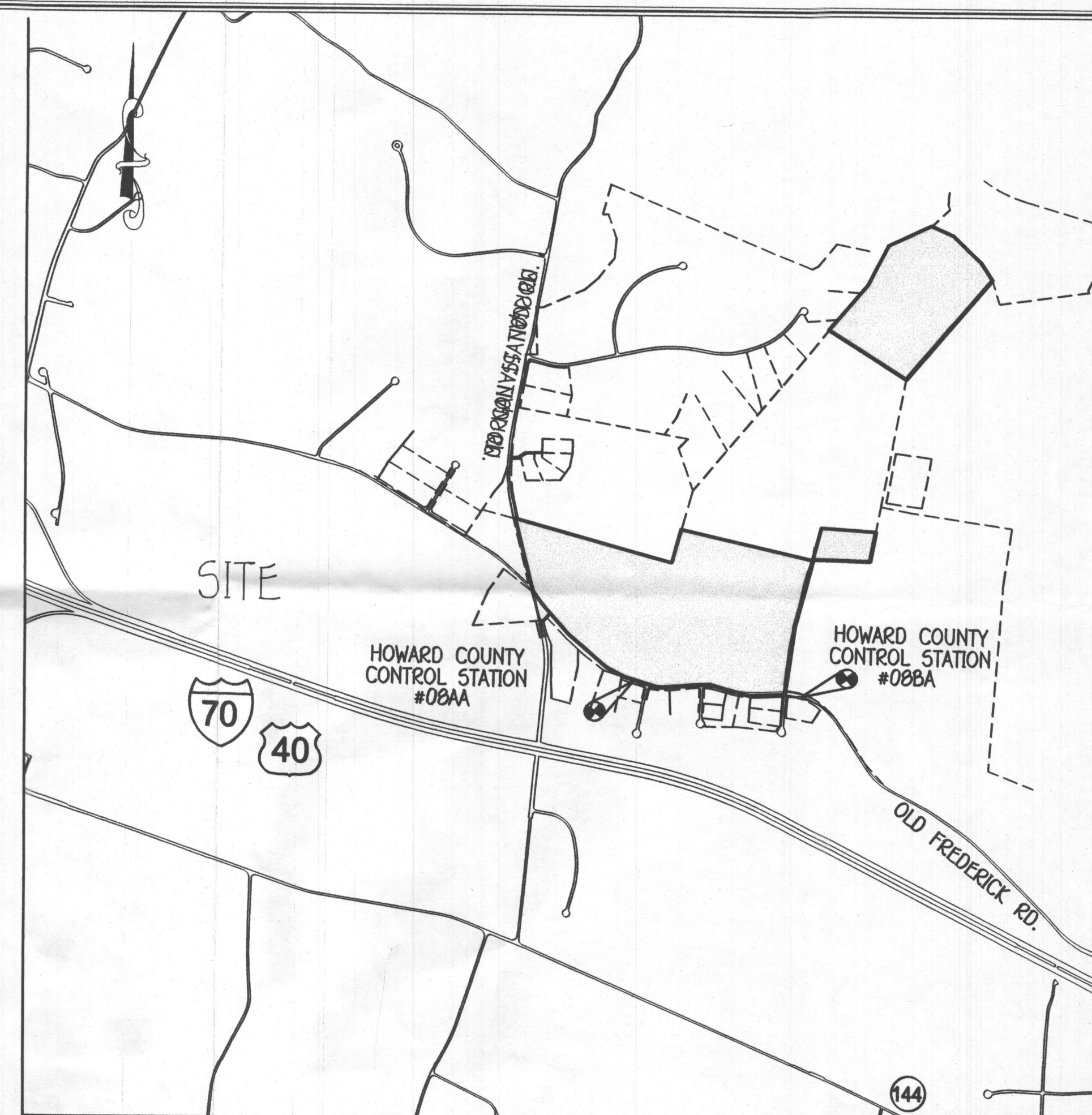


**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
10720 PATUXENT WOODS DRIVE  
COLUMBIA, MD 21046  
410-379-5956

**OWNER/DEVELOPER**  
10 HOMES  
9720 PATUXENT WOODS DRIVE  
COLUMBIA, MD 21046  
410-379-5956



**SEPTIC PROFILE**  
SCALE: 1" = 30'

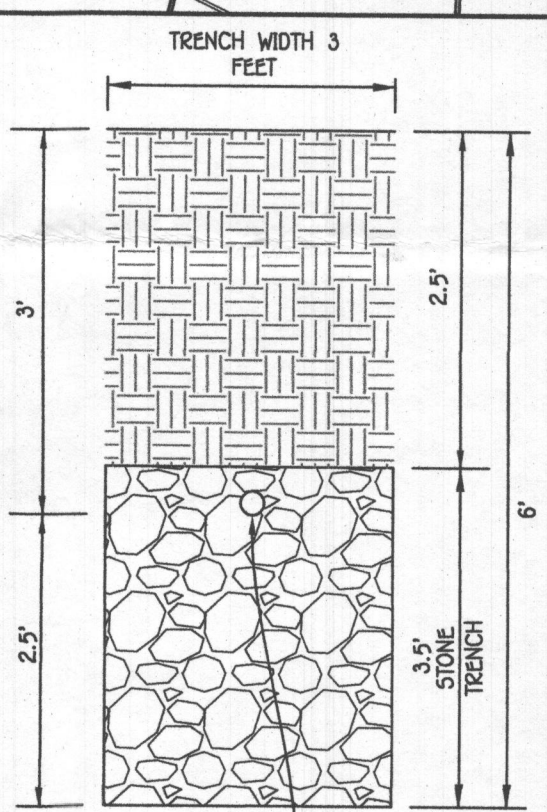


**VICINITY MAP**  
SCALE: 1" = 1200'

FFE 504.04  
BSE 574.20  
INV. OUT OF HOUSE = 576.00  
PROP. GROUND AT CLEANOUT #1 = 570.1  
INV. INTO CLEANOUT = 575.90  
INV. OUT OF CLEANOUT = 575.00  
EX. GROUND AT SEPTIC TANK = 576.7  
PROP. GRADE ABOVE SEPTIC TANK = 577.1  
TOP OF SEPTIC TANK = 576.19  
INV. INTO SEPTIC TANK = 575.19  
INV. OUT OF SEPTIC TANK = 574.94  
EX. GROUND AT DISTRIBUTION BOX = 577.0  
INV. INTO DISTRIBUTION BOX = 574.0  
INV. OUT OF DISTRIBUTION BOX = 574.7

Approved Septic System Plan  
Howard County Health Department  
Idenik Osweh  
Signature  
3.7.19  
Date

**TRENCH DATA:**  
**TRENCH 1:**  
EX. GROUND ABOVE = 577.0  
INV. IN = 574.7  
BOTTOM TRENCH = 571.0  
**TRENCH 2:**  
EX. GROUND ABOVE = 575.9  
INV. IN = 572.9  
BOTTOM TRENCH = 569.9  
**TRENCH 3:**  
EX. GROUND ABOVE = 574.2  
INV. IN = 571.2  
BOTTOM TRENCH = 568.2



**INITIAL TRENCH DETAIL**  
SCALE: 1" = 2'

**INITIAL SYSTEM**  
SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 4 BEDROOMS (PERMIT FOR 6 BEDROOMS)  
LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD  
APPLICATION RATE = 1.2  
EFFECTIVE SIDEWALL BEGINS AT 3 FEET  
TRENCH DEPTH = 6 FEET  
TRENCH WIDTH (W) = 3 FEET  
EFFECTIVE DEPTH (D) = 3 FEET  
SF OF DRAINFIELD = 750 GPD / 1.2 = 750 SF  
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x3)) = 0.5  
TRENCH LENGTH = 250 SF x 0.5 = 125.00 FEET  
(USE 3 TRENCHES AT 41.67 L.F.)  
TRENCH SPACING = 2D+W = ((2x2) + 3) = 7' USE 10'

**1ST REPLACEMENT SYSTEM**  
SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 4 BEDROOMS (PERMIT FOR 6 BEDROOMS)  
LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD  
APPLICATION RATE = 0.8  
EFFECTIVE SIDEWALL BEGINS AT 3 FEET  
TRENCH DEPTH = 6 FEET  
TRENCH WIDTH (W) = 3 FEET  
EFFECTIVE DEPTH (D) = 3 FEET  
SF OF DRAINFIELD = 900 GPD / 0.8 = 375 SF  
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x3)) = 0.5  
TRENCH LENGTH = 375 SF x 0.5 = 187.50 FEET  
(USE 2 TRENCHES AT 93.75 L.F.)  
TRENCH SPACING = 2D+W = ((2x2) + 3) = 7' USE 10'

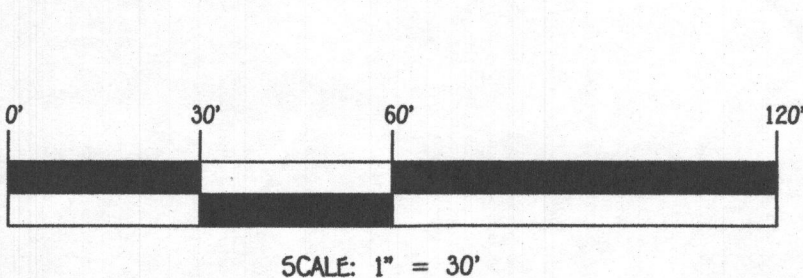
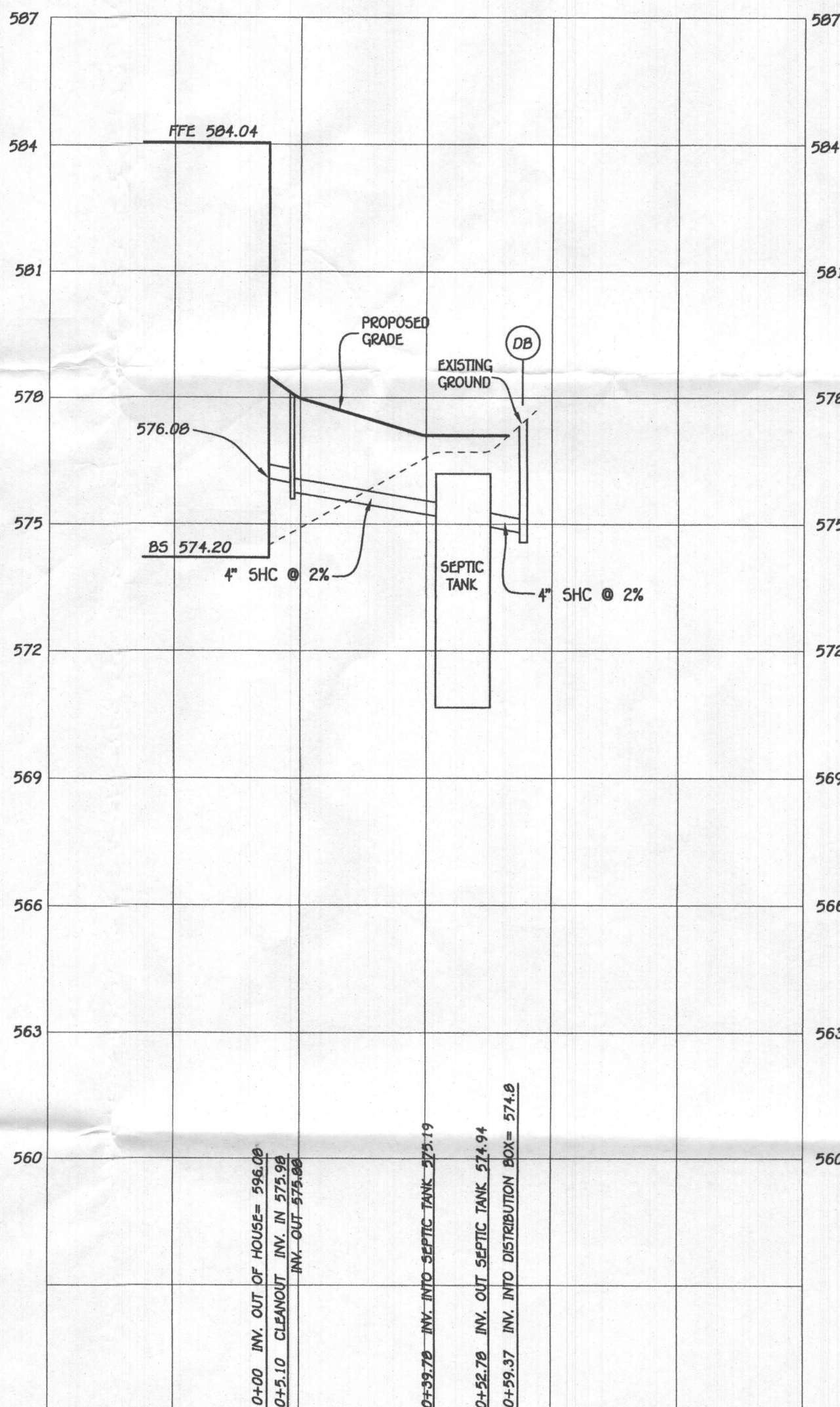
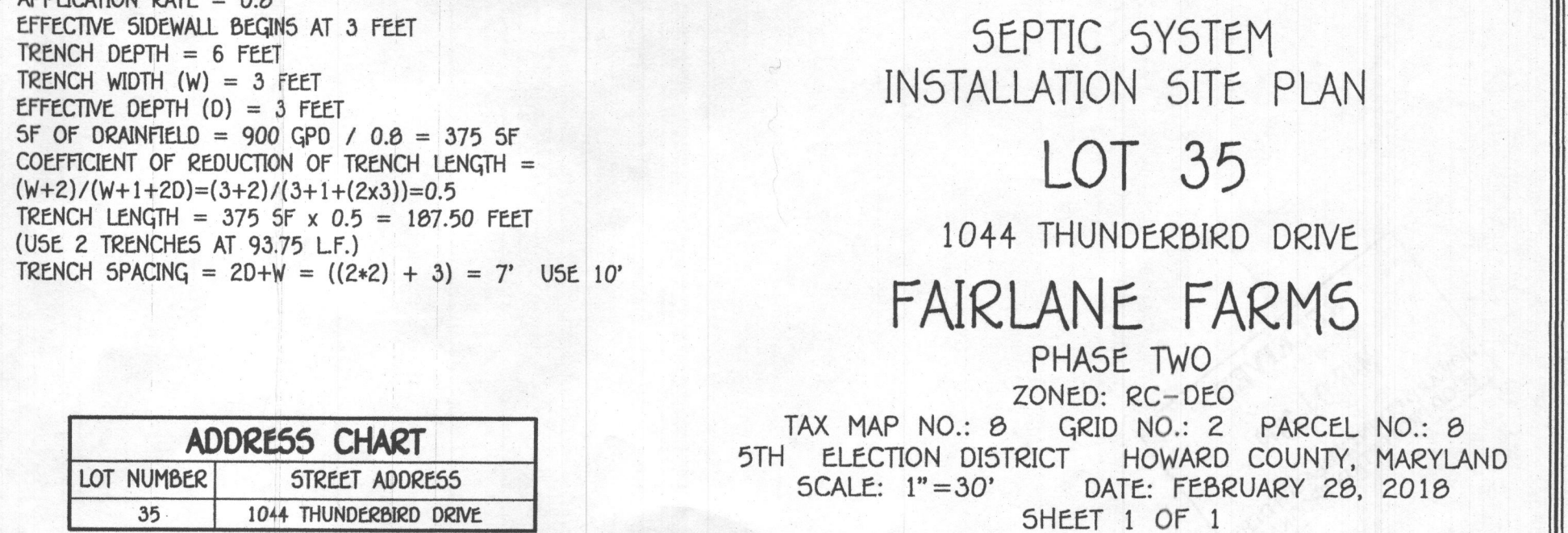
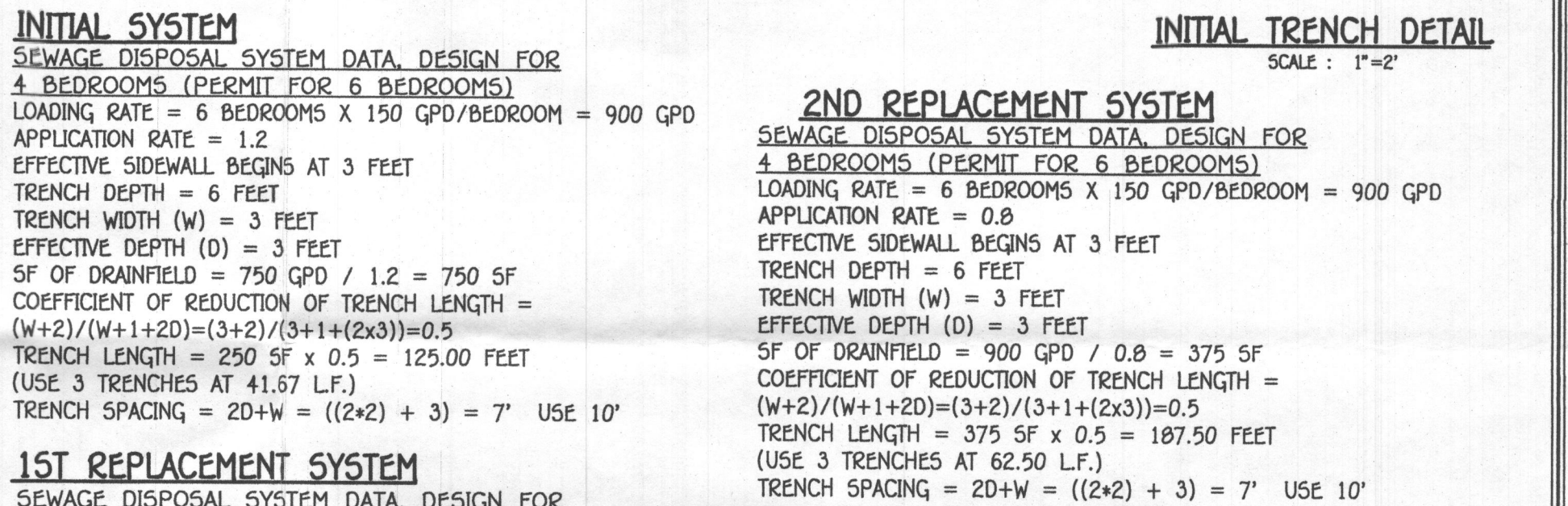
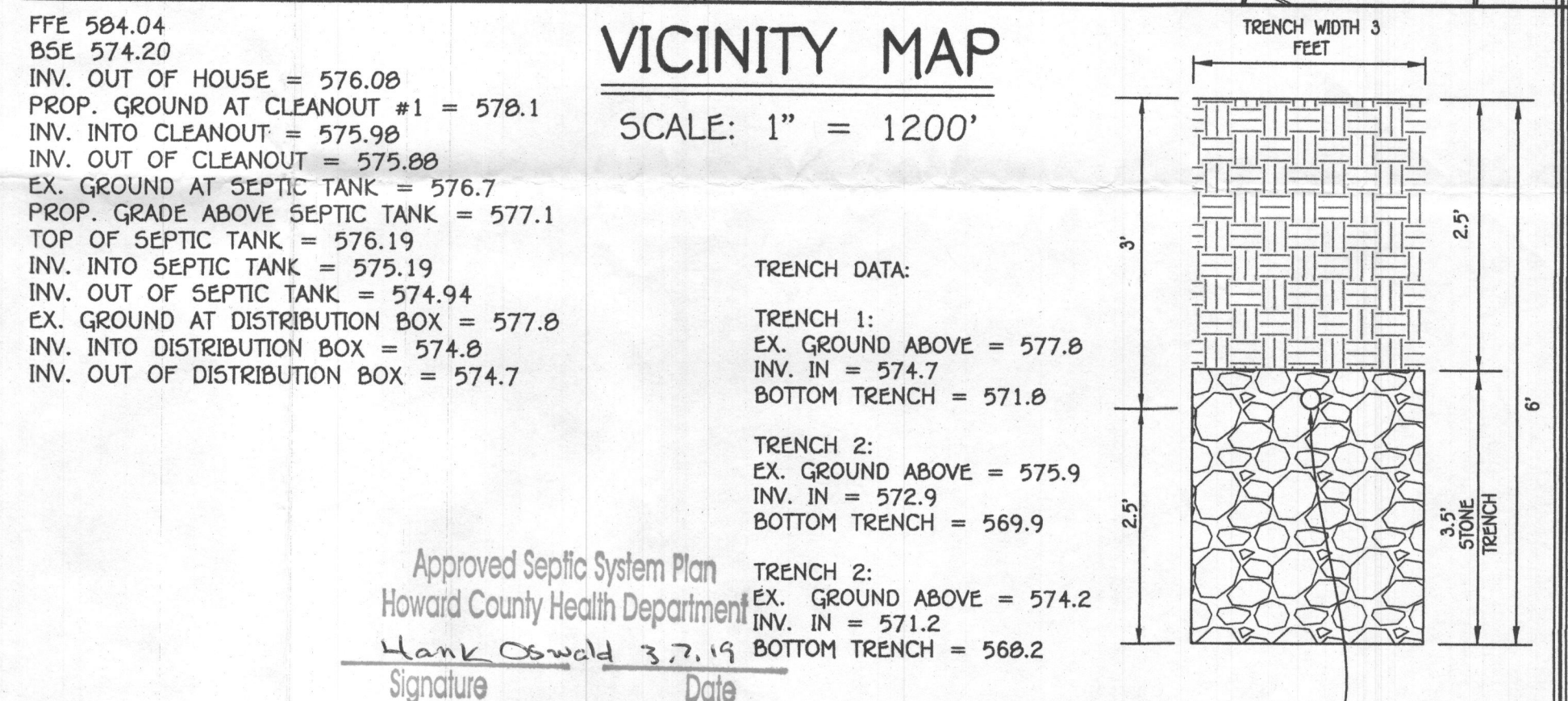
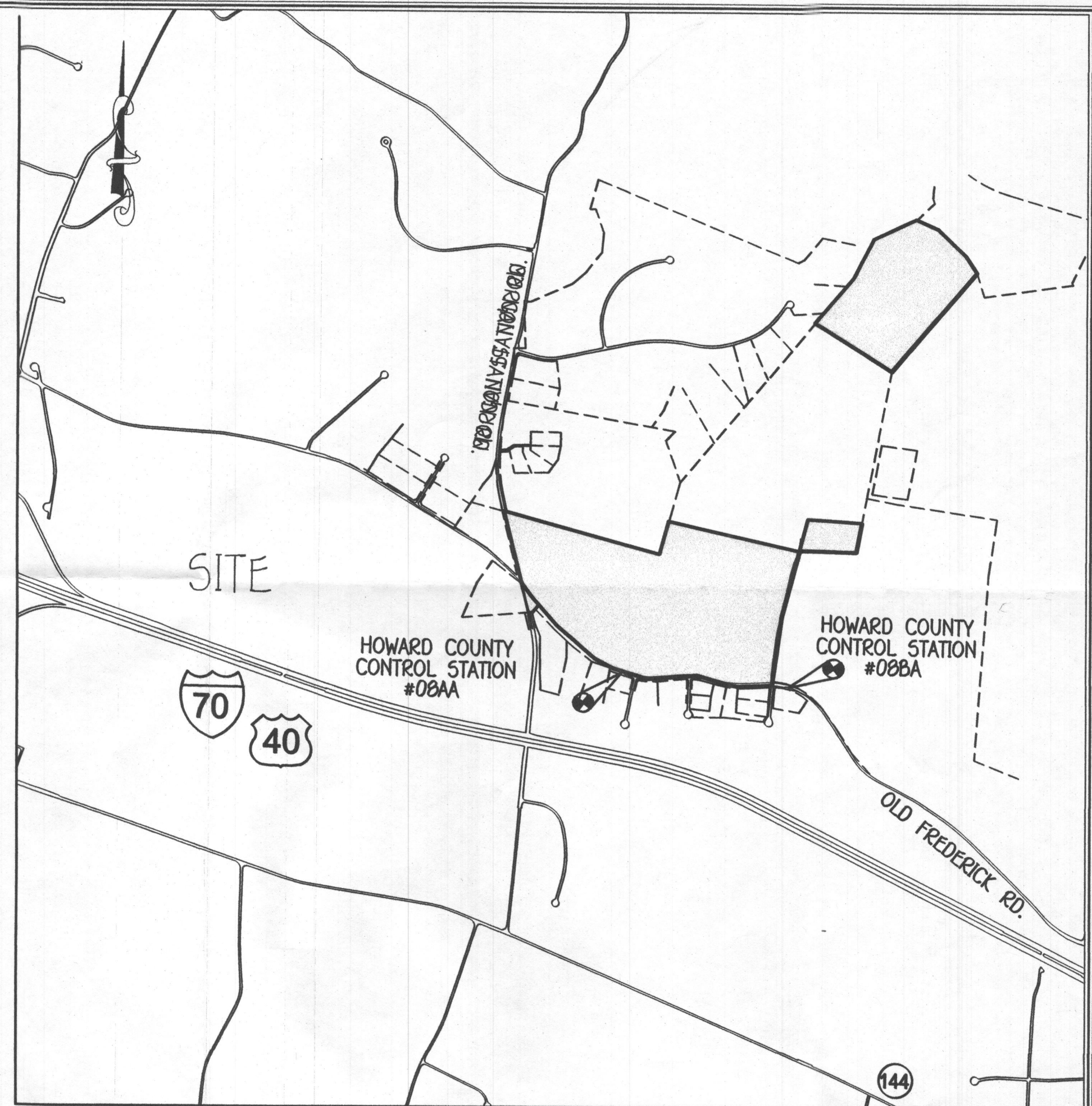
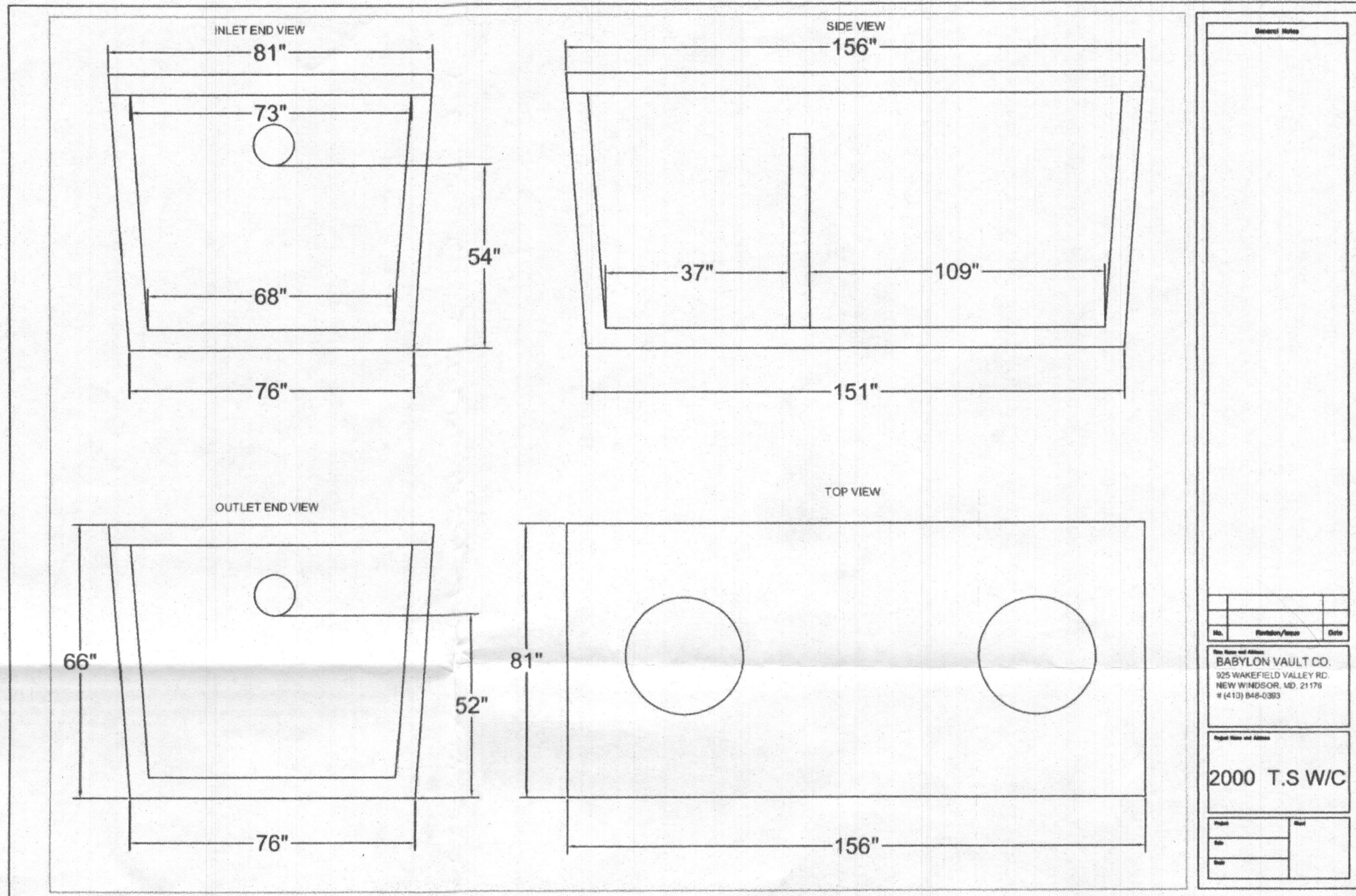
**2ND REPLACEMENT SYSTEM**  
SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 4 BEDROOMS (PERMIT FOR 6 BEDROOMS)  
LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD  
APPLICATION RATE = 0.8  
EFFECTIVE SIDEWALL BEGINS AT 3 FEET  
TRENCH DEPTH = 6 FEET  
TRENCH WIDTH (W) = 3 FEET  
EFFECTIVE DEPTH (D) = 3 FEET  
SF OF DRAINFIELD = 900 GPD / 0.8 = 375 SF  
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x3)) = 0.5  
TRENCH LENGTH = 375 SF x 0.5 = 187.50 FEET  
(USE 3 TRENCHES AT 62.50 L.F.)  
TRENCH SPACING = 2D+W = ((2x2) + 3) = 7' USE 10'

ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
35	1044 THUNDERBIRD DRIVE

**SEPTIC SYSTEM  
INSTALLATION SITE PLAN**  
**LOT 35**  
1044 THUNDERBIRD DRIVE  
**FAIRLANE FARMS**  
PHASE TWO  
ZONED: RC-DEO  
TAX MAP NO.: 0 GRID NO.: 2 PARCEL NO.: 0  
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
SCALE: 1" = 30' DATE: FEBRUARY 28, 2018  
SHEET 1 OF 1

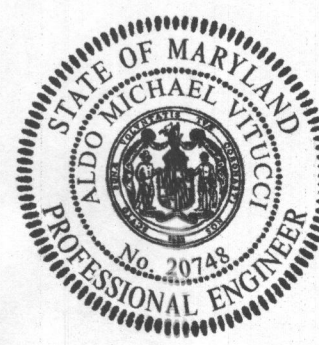


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CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
ELLSWORTH CITY, MARYLAND 21046  
(410) 461-2995

**OWNER/DEVELOPER**  
NY HOMES  
9720 PATUXENT WOODS DRIVE  
COLUMBIA, MD 21046  
410-379-9996



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*Michael J. Fisher*  
Signature of Professional Engineer  
3/1/19  
DATE

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