

**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](http://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: 15316 Galaxy Drive  
 SUBDIVISION: Fairlane Farms LOT: 12 TAX ID: \_\_\_\_\_  
 CONTRACTOR: South Carroll Backhoe EMAIL: scbackhoe@comcast.com  
 CONTRACTOR ADDRESS: 4410 Salem Bottom Road, Westminster, MD 21157 PHONE: 410-596-3618  
 PROPERTY OWNER: NV Homes EMAIL: \_\_\_\_\_  
 OWNER ADDRESS: 9720 Patuxent Woods Drive, Columbia, MD 21046 PHONE: 410-379-5956  
 SEPTIC TANK SIZE (GALLONS): 2000 TANK MANUFACTURER: Babylon Vault  
 PUMP MODEL: N/A PUMP SIZE N/A PUMP TANK CAPACITY: N/A

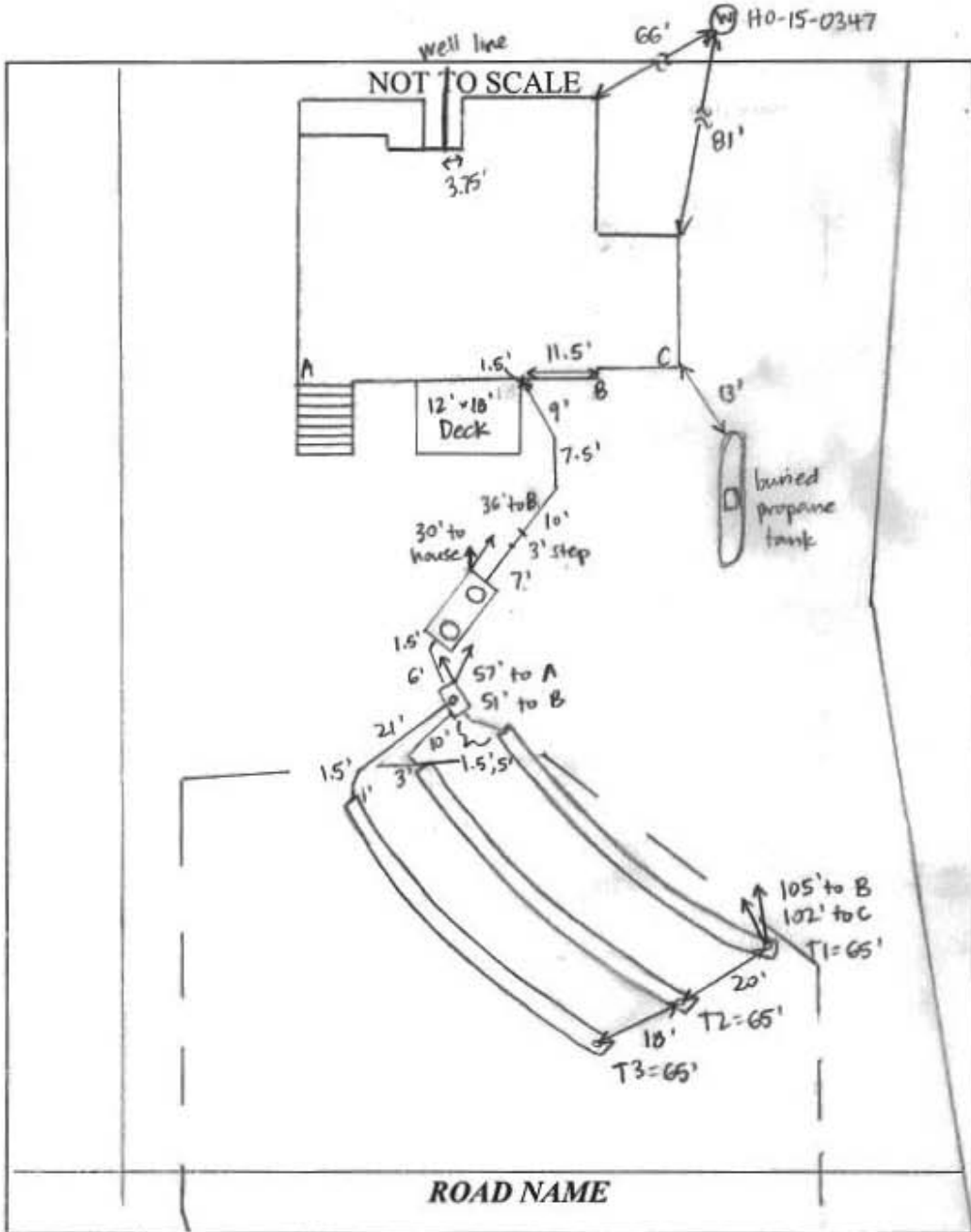
DISTRIBUTION SYSTEM:  GRAVITY  PRESSURE DOSED BEDROOMS: 5 APPLICATION RATE: 0.8

TRENCHES:	LINEAR FEET REQUIRED: <u>195.3</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>5</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: Jeff Williams 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 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		3
TOTAL LENGTH		195'
ABSORPTION AREA		585' + SIDEWALL
DISTRIBUTION BOX LEVEL		YES
DISTRIBUTION BOX BAFFLE		YES
DISTRIBUTION BOX PORT		YES

SEPTIC TANK DATA	
SEPTIC TANK I LEVEL	YES
MANUFACTURER	BABYLON
CAPACITY	2000 GAL
SEAM LOC	TDP
TANK LID DEPTH	1.5'
BAFFLES	YES
BAFFLE FILTER	NO
MANHOLE LOC	FRONT + REAR
6" PORT LOC	NONE
WATERTIGHT TEST	NO
SLOTTED	YES
DATE ON LID	10-23-17

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:**

11/27/17 Met S. Carroll on site for layout. Tank + SDA cameras staked. Shot contour + laid out 3 x 66' trenches. Some fill over SDA - S. Carroll will scratch off prior to install. (SC)

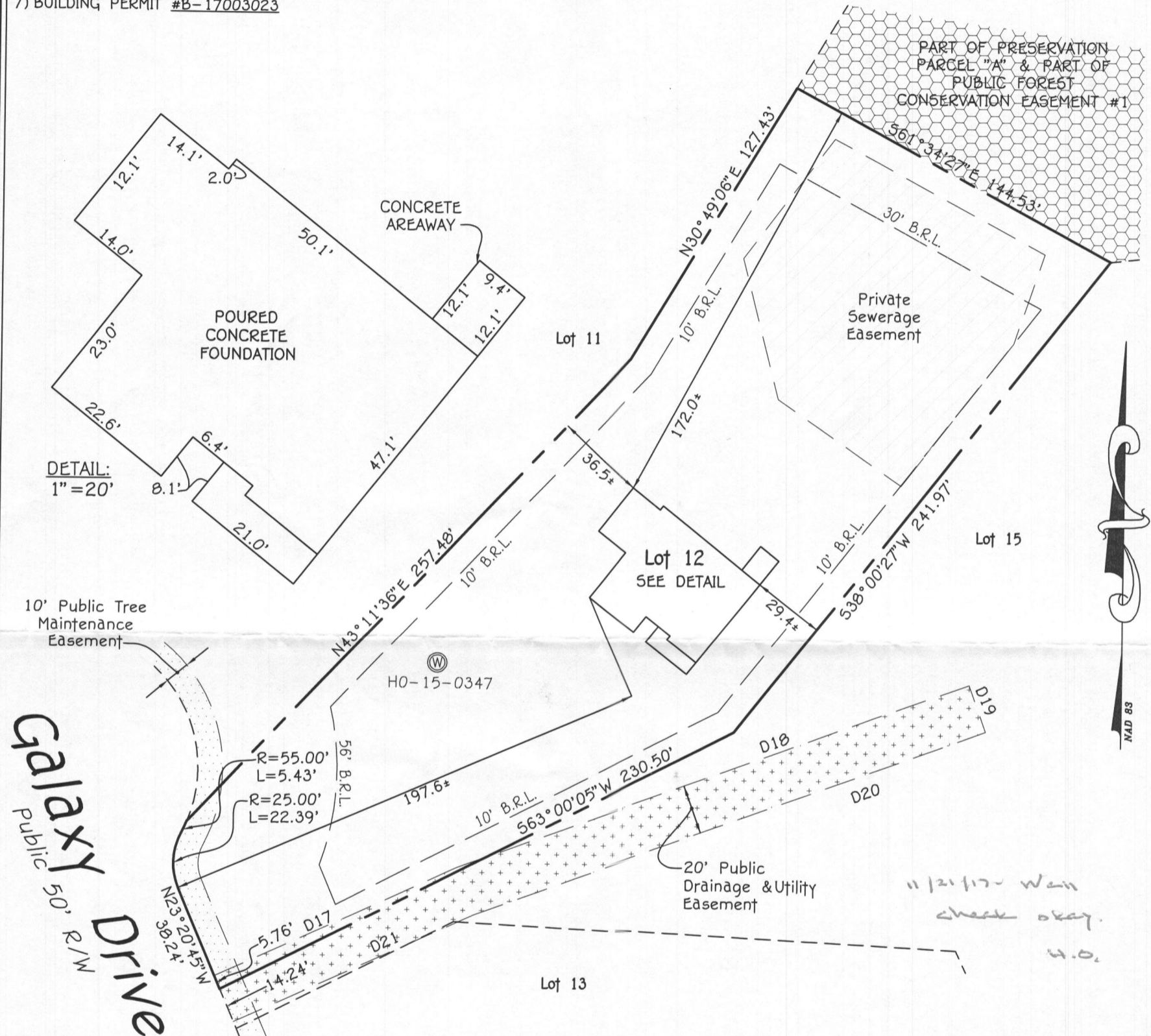
**INSTALLATION:** 11/29/17 House connection made. Tank set + pipe laid from house to tank. (SC)

11/30/17 Trenches complete. T1 left open for inspection. T2 + T3 left open at ends. 3.5' to stone, 3' wide. S. Carroll connecting D-box to trenches. Levelled speed levelers in D-box. (SC)

FINAL INSPECTOR Sarah Collins DATE OF APPROVAL 11/30/17

**GENERAL NOTES:**

- 1) THIS LOCATION DRAWING IS PREPARED FOR THE BENEFIT OF THE CLIENT SIGNING THE HOUSE LOCATION SURVEY APPROVAL FORM INsofar AS IT IS REQUIRED BY A LENDER OR TITLE INSURANCE COMPANY OR ITS AGENTS IN CONNECTION WITH THE CONTEMPLATED TRANSFER, FINANCING OR REFINANCING OF THE PROPERTY SHOWN HEREON. UNLESS INDICATED AS BEING A BOUNDARY SURVEY, THIS LOCATION DRAWING IS NOT INTENDED FOR USE IN THE ESTABLISHMENT OF PROPERTY LINES AND IS NOT TO BE RELIED UPON FOR THE ESTABLISHMENT OR LOCATIONS OF FENCES, GARAGES, BUILDINGS OR OTHER EXISTING OR FUTURE IMPROVEMENTS. AS A RESULT, THIS LOCATION DRAWING DOES NOT PROVIDE FOR ACCURATE IDENTIFICATION OF PROPERTY LINES, BUT SUCH IDENTIFICATION MAY NOT BE REQUIRED FOR THE TRANSFER OF TITLE OR SECURING FINANCING FOR RE-FINANCING.
- 2) SUBJECT PROPERTY IS SHOWN IN ZONE X ON THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP OF HOWARD COUNTY, MARYLAND, COMMUNITY PANEL No. 24027C0035D EFFECTIVE 11-06-2013.
- 3) THE OFFSETS FROM BUILDING LINE TO PROPERTY LINE AS SHOWN ON THE PLAT HEREON ARE TO AN ACCURACY OF PLUS OR MINUS 1'.
- 4) NO TITLE REPORT FURNISHED. SUBJECT TO ALL EASEMENTS, RIGHTS OF WAY AND CONDITIONS OF RECORD.
- 5) THE EXISTING WELL(S) SHOWN ON THIS PLAN (IDENTIFIED WITH THE ATTACHED WELL TAG NUMBER HO-15-0347 HAS BEEN FIELD LOCATED BY FISHER, COLLINS AND CARTER, INC. PROFESSIONAL LAND SURVEYORS AND IS ACCURATELY SHOWN.
- 6) PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROPERTY LINE SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 339, EXPIRATION DATE 10/04/2018.
- 7) BUILDING PERMIT #B-17003023



**Legend**

- Public Forest Conservation Easement
- Public Stormwater Management, Access, Drainage & Utility Easement

**Public And Private Drainage & Utility Easement Line Table**

LINE	BEARING	LENGTH
D17	N65°15'54"E	106.60'
D18	N69°59'08"E	218.48'
D19	S20°00'52"E	20.00'
D20	S69°59'18"W	217.65'
D21	S65°15'54"W	106.27'

LOT 12  
FAIRLANE FARMS  
PHASE ONE  
LOTS 1 THRU 18, BUILDABLE PRESERVATION PARCEL 'A', NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'E', PARCEL 'F', NON-BUILDABLE BULK PARCELS 'G' AND 'H' AND FOREST MITIGATION BANK  
PLAT NOS. 24251 THRU 24259  
FOURTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

#15316 GALAXY DRIVE  
B.R.L. = BUILDING RESTRICTION LINE  
TOP OF FOUNDATION ELEVATION = 605.7±

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
ELLCOTT CITY, MARYLAND 21042  
(410) 461 - 2855

Drawing Name:



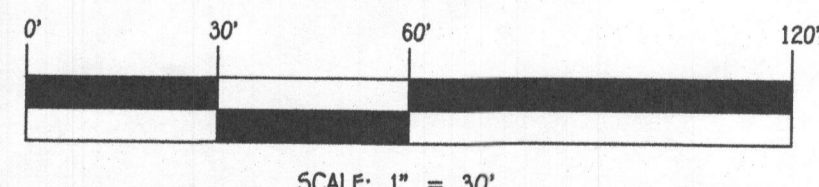
*Mark L. Robel*  
PROPERTY LINE SURVEYOR  
REG. #339  
DATE: 10/24/17

**HOUSE LOCATION DRAWING**

FOUNDATION LOCATION: 10/20/17  
FINAL LOCATION: \_\_\_\_\_  
BOUNDARY SURVEY: \_\_\_\_\_

SCALE: 1"=50'  
DATE: 10/24/17  
DRAWN BY: MSD  
CHECKED BY: MLR  
PROJECT No.: 05106-3003

**NOTE:**  
THE EXISTING WELLS SHOWN ON THIS PLAN, HO-15-0213 HAS BEEN FIELD LOCATED BY FISHER, COLLINS & CARTER, INC., PROFESSIONAL LAND SURVEYORS AND IS ACCURATELY SHOWN.

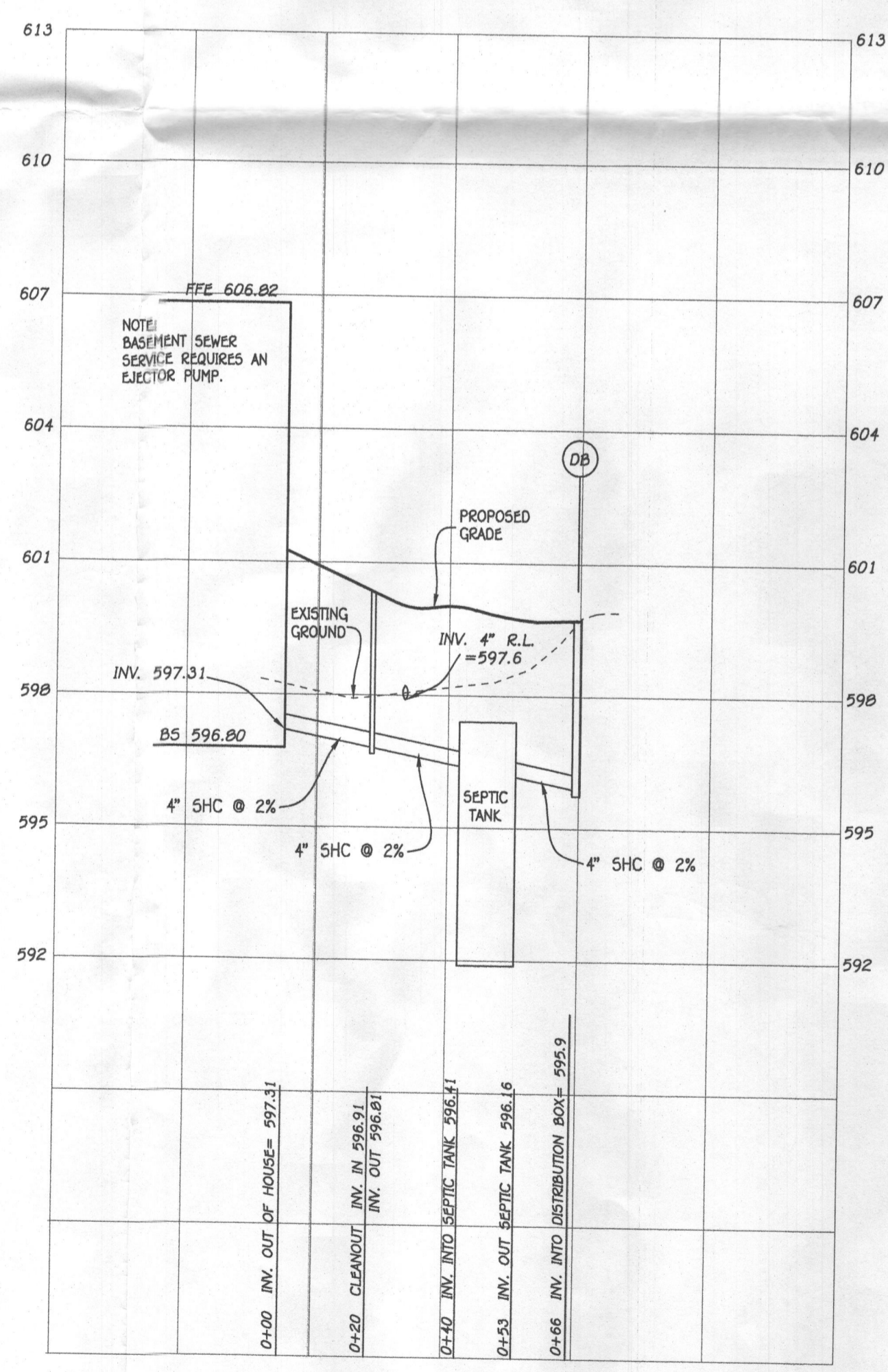
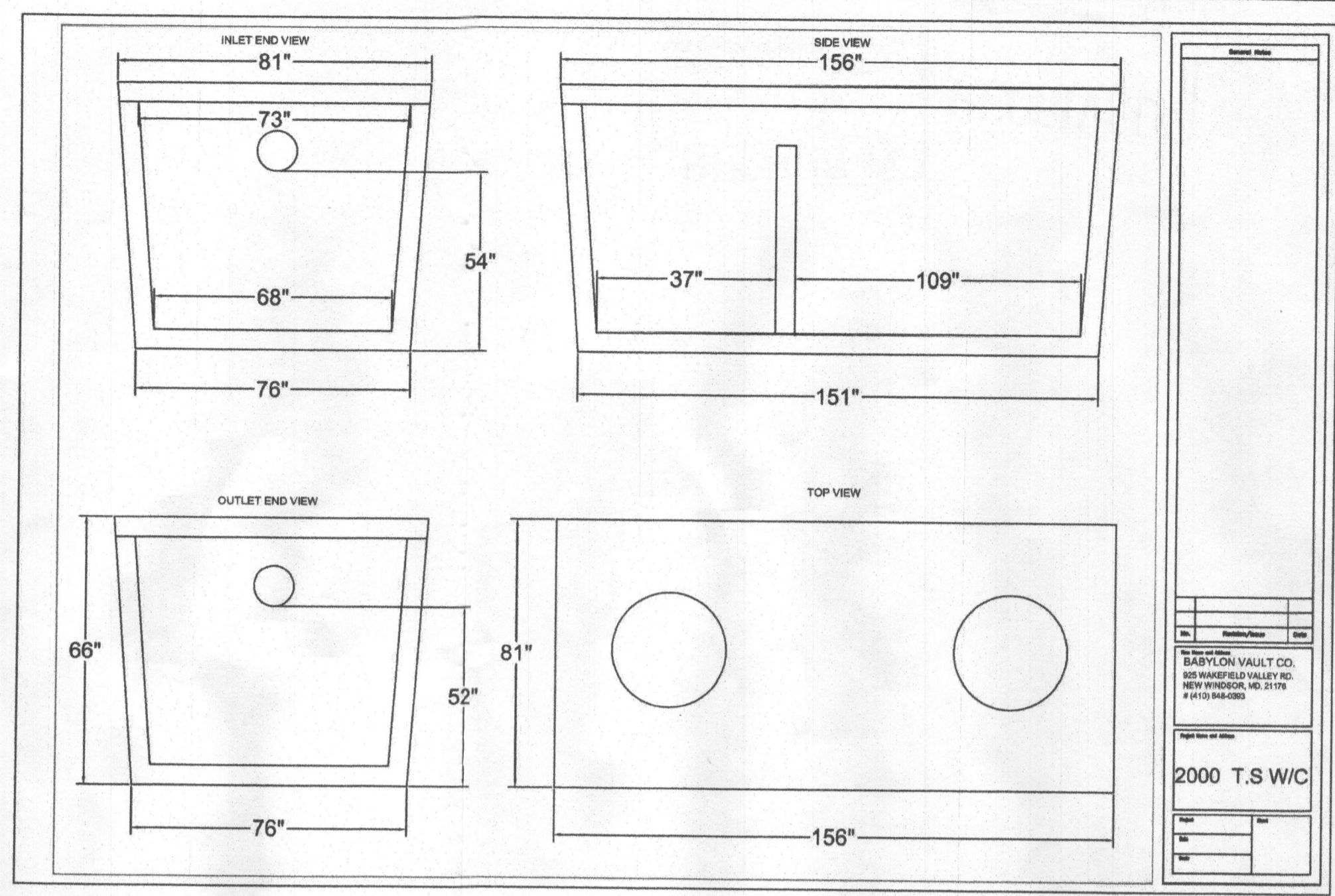


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CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SQUARE OFFICE PARK - 10272 BALDWIN NATIONAL PIKE  
ELICOTT CITY, MARYLAND 21042  
4101 461 - 3299

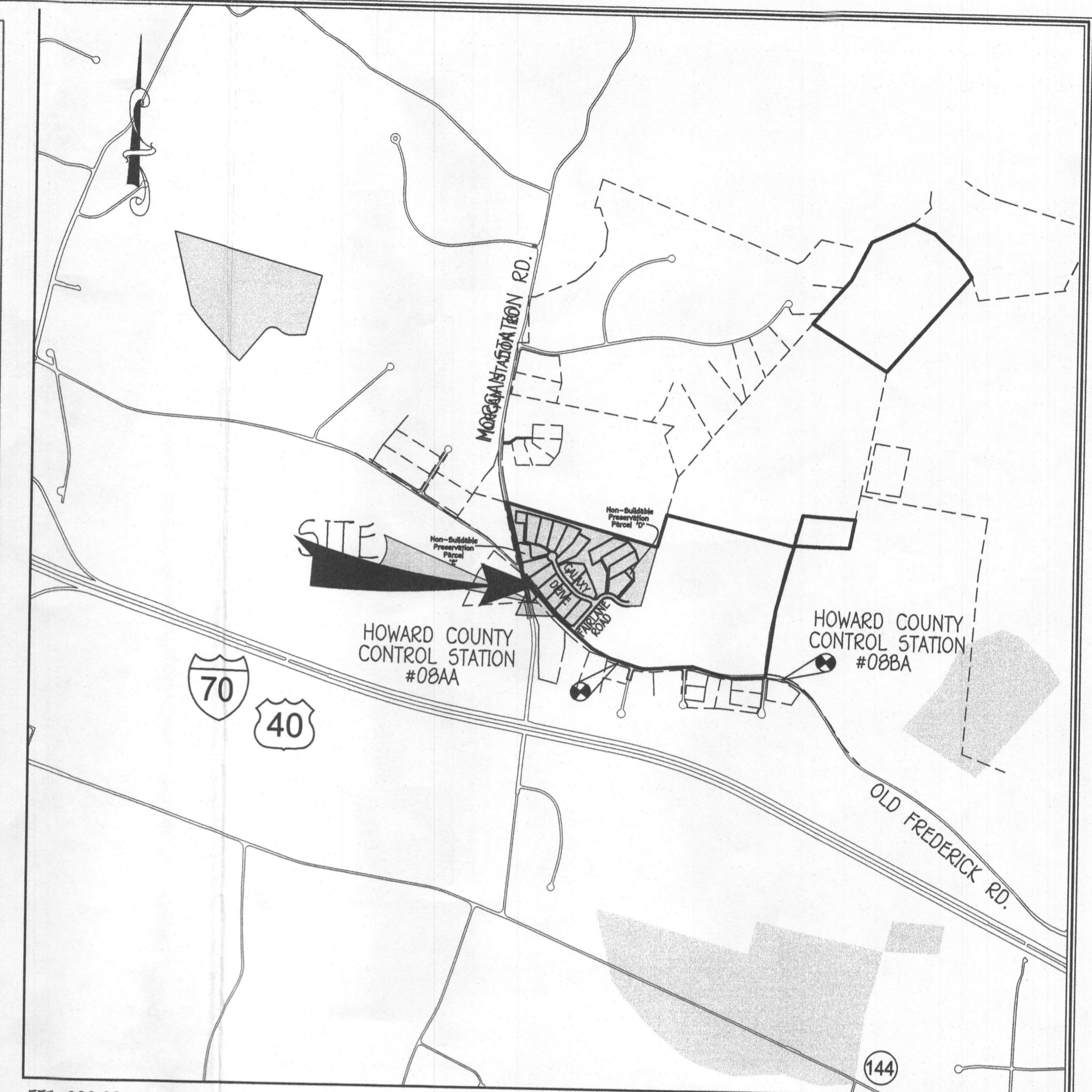
**OWNER/DEVELOPER**  
BY FORMER  
9720 PATENTWOOD WOODS DRIVE  
COLUMBIA, MD 21046  
410-379-5956



**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. D'Amico*  
Signature Of Professional Engineer  
9/17/17  
DATE



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



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

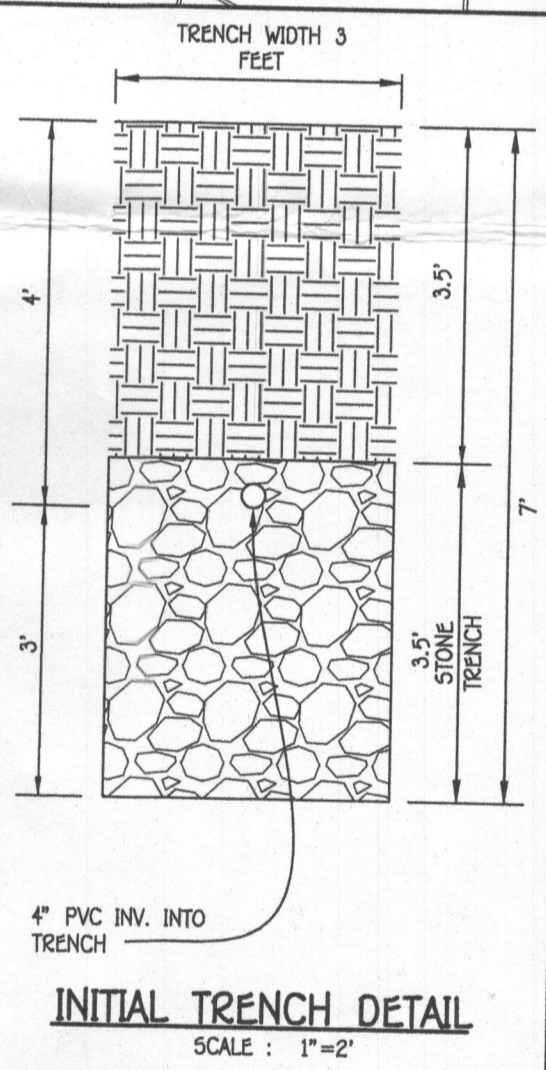
FFE 606.82  
BSE 596.80  
INV. OUT OF HOUSE = 597.31  
PROP. GROUND AT CLEANOUT #1 = 600.8  
INV. INTO CLEANOUT = 596.81  
INV. OUT OF CLEANOUT = 596.81  
EX. GROUND AT SEPTIC TANK = 598.3  
PROP. GRADE ABOVE SEPTIC TANK = 599.8  
TOP OF SEPTIC TANK = 597.41  
INV. INTO SEPTIC TANK = 596.41  
INV. OUT OF SEPTIC TANK = 596.16  
EX. GROUND AT DISTRIBUTION BOX = 599.8  
INV. INTO DISTRIBUTION BOX = 595.9  
INV. OUT OF DISTRIBUTION BOX = 599.8

**INITIAL SYSTEM**  
SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 5 BEDROOMS (PERMIT FOR 4 BEDROOMS)  
LOADING RATE = 5 BEDROOMS X 150 GPD/BEDROOM = 750 GPD  
APPLICATION RATE = 0.8  
EFFECTIVE SIDEWALL BEGINS AT 5 FEET  
TRENCH DEPTH = 7 FEET  
TRENCH WIDTH (W) = 3 FEET  
EFFECTIVE DEPTH (D) = 2 FEET  
SF OF DRAINFIELD = 750 GPD / 0.8 = 937.5 SF  
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x2)) = 0.625  
TRENCH LENGTH = 312.5 SF x 0.625 = 195.3 FEET  
(USE 2 TRENCHES AT 97.1 L.F.)  
TRENCH SPACING = 2D+W = ((2x2) + 3) = 7' USE 10'

**1ST REPLACEMENT SYSTEM**  
SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 5 BEDROOMS (PERMIT FOR 4 BEDROOMS)  
LOADING RATE = 5 BEDROOMS X 150 GPD/BEDROOM = 750 GPD  
APPLICATION RATE = 0.8  
EFFECTIVE SIDEWALL BEGINS AT 4 FEET  
TRENCH DEPTH = 7 FEET  
TRENCH WIDTH (W) = 3 FEET  
EFFECTIVE DEPTH (D) = 3 FEET  
SF OF DRAINFIELD = 750 GPD / 0.8 = 937.5 SF  
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x3)) = 0.50  
TRENCH LENGTH = 312.5 SF x 0.50 = 156.3 FEET  
(USE 2 TRENCHES AT 78.2 L.F.)  
TRENCH SPACING = 2D+W = ((2x3) + 3) = 9' USE 10'

**2ND REPLACEMENT SYSTEM**  
SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 5 BEDROOMS (PERMIT FOR 4 BEDROOMS)  
LOADING RATE = 5 BEDROOMS X 150 GPD/BEDROOM = 750 GPD  
APPLICATION RATE = 0.8  
EFFECTIVE SIDEWALL BEGINS AT 3.5 FEET  
TRENCH DEPTH = 7 FEET  
TRENCH WIDTH (W) = 3 FEET  
EFFECTIVE DEPTH (D) = 3.5 FEET  
SF OF DRAINFIELD = 750 GPD / 0.8 = 937.5 SF  
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x3.5)) = 0.455  
TRENCH LENGTH = 312.5 SF x 0.455 = 142.2 FEET  
(USE 2 TRENCHES AT 71.1 L.F.)  
TRENCH SPACING = 2D+W = ((2x3.5) + 3) = 10' USE 10'

- TRENCH DATA:**
- TRENCH 1:**  
EX. GROUND ABOVE = 599.8  
INV. IN = 599.8  
BOTTOM TRENCH = 592.8
  - TRENCH 2:**  
EX. GROUND ABOVE = 597.9  
INV. IN = 593.9  
BOTTOM TRENCH = 590.9
  - TRENCH 3:**  
EX. GROUND ABOVE = 596.4  
INV. IN = 592.4  
BOTTOM TRENCH = 589.4
  - TRENCH 4:**  
EX. GROUND ABOVE = 594.9  
INV. IN = 590.9  
BOTTOM TRENCH = 587.9



Approved Septic System Plan  
Howard County Health Department  
*[Signature]*  
9/5/17  
Date

**SEPTIC SYSTEM INSTALLATION SITE PLAN**  
**LOT 12**  
15316 GALAXY DRIVE  
**FAIRLANE FARMS**  
PHASE ONE  
ZONED: RC-DEO

**ADDRESS CHART**

LOT NUMBER	STREET ADDRESS
1	15301 GALAXY DRIVE

TAX MAP NO.: 8 GRID NO.: 2 PARCEL NO.: 8  
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
SCALE: 1" = 30' DATE: AUG. 16, 2017  
SHEET 1 OF 1