

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: 5-8-18 **ONSITE SEWAGE DISPOSAL SYSTEM** P 512997
 APPROVAL DATE: 07/26/2018 **PERMIT: CONSTRUCTION** A _____
 PROPERTY ADDRESS: 15328 Galaxy Drive
 SUBDIVISION: Fairlane Farms LOT: 9 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 or equivalent
 PUMP MODEL: N/A PUMP SIZE N/A PUMP TANK CAPACITY: N/A

DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 6 APPLICATION RATE 0.8

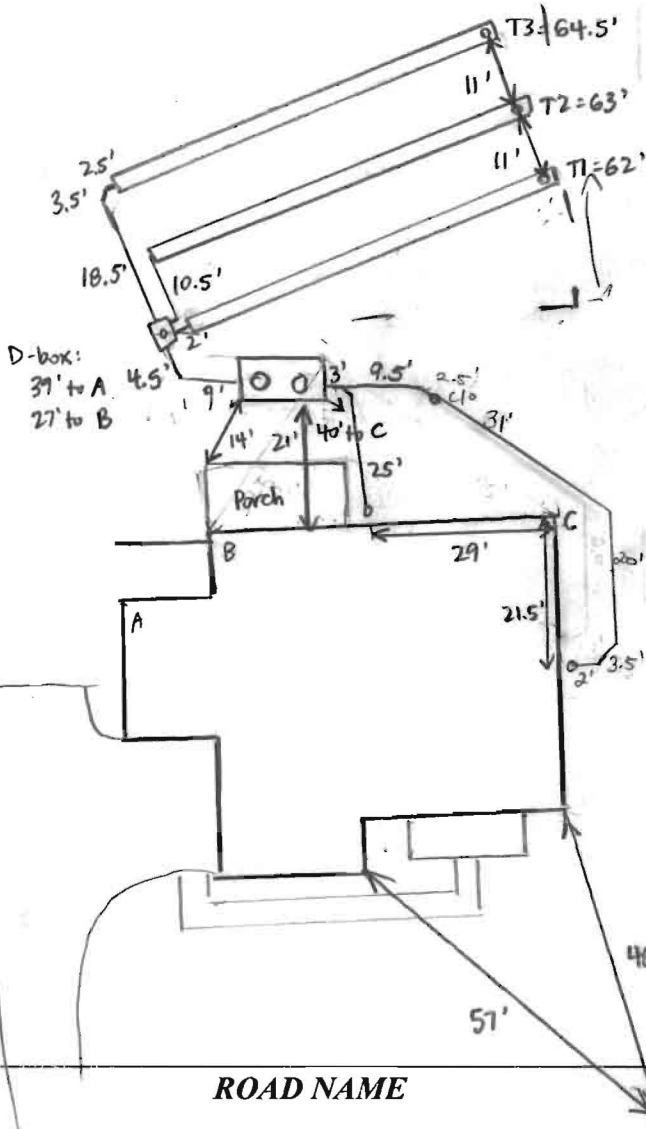
TRENCHES:	LINEAR FEET REQUIRED: <u>187.50</u>	INLET DEPTH: <u>4</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>7</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>4</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:	Use 3 x 62.50 LF of trench	

ISSUED BY: Hank Oswald ISSUE DATE: 5-18-18 EXPIRATION DATE: 5-18-19

- 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.**

NOT TO SCALE



TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	4'	7'
NUMBER OF TRENCHES	3	
TOTAL LENGTH	189.5'	
ABSORPTION AREA	568.5' + SIDEWALL	
DISTRIBUTION BOX LEVEL	YES	
DISTRIBUTION BOX BAFFLE	YES	
DISTRIBUTION BOX PORT	YES	

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL	
MANUFACTURER	BAYLON
CAPACITY	2000 GAL
SEAM LOC	TOP
TANK LID DEPTH	2.41 - 1.5 (to)
BAFFLES	YES
BAFFLE FILTER	NO
MANHOLE LOC	FRONT - REAR
6" PORT LOC	NONE
WATERTIGHT TEST	NO
SLOTTED	YES
DATE ON LID	4/12/2018

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:

6/11/18 layout given. Install system per approved OSDS plan. Landmark shot in field. Trenches run more straight than curved. Tank stake OK. Builder explained powder room in basement will be added plumbing on outside of house, which is to be tied in to main sewer. (Kno)

INSTALLATION:

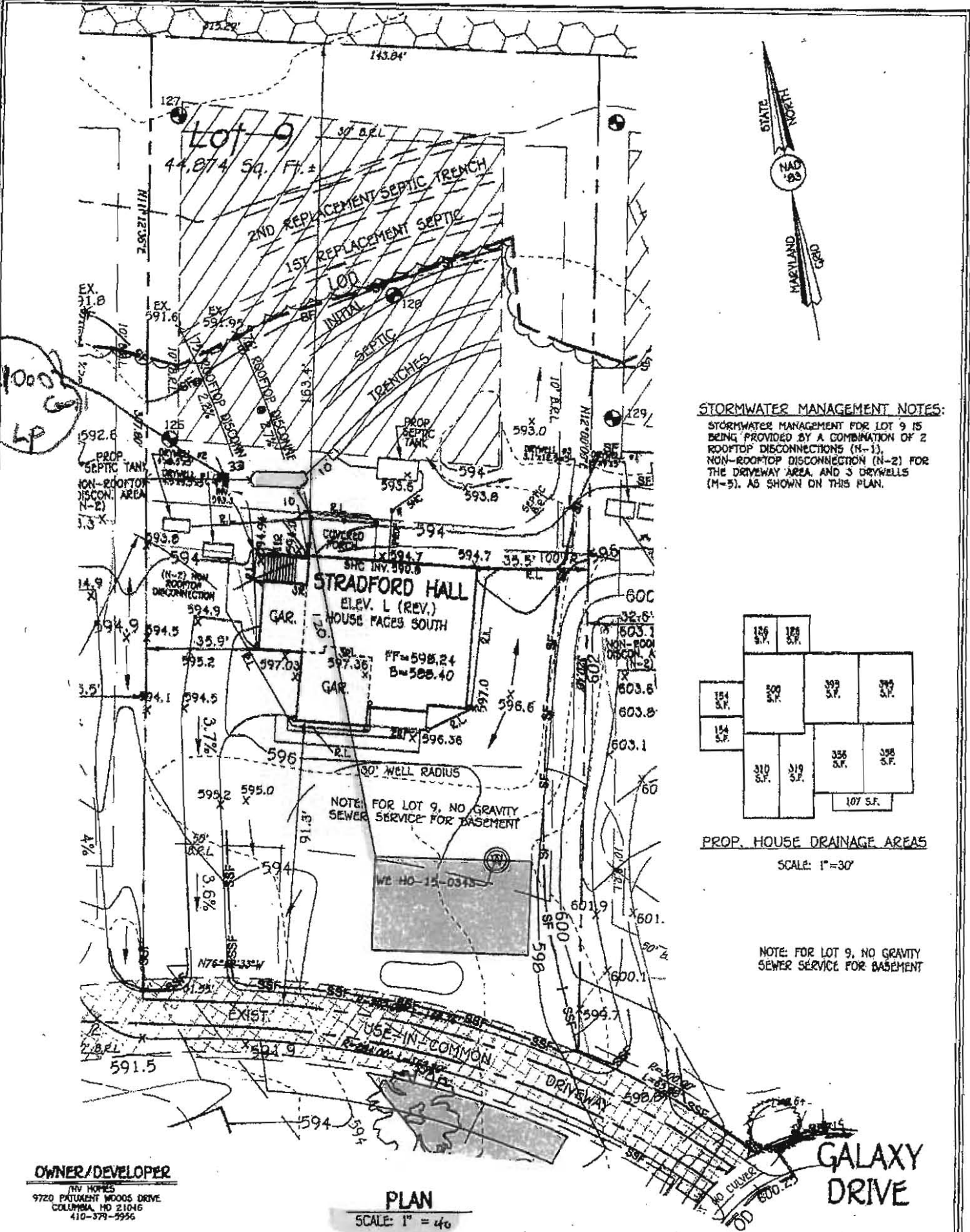
6/13/2018 Reinspect SHC. Sewer line installed from House to Septic tank. Tee in from Second Sewer line 3' from ST inlet. Reinsp. Second Sewer line, D Box, Trenches. (K) 6/14/18 Pipe laid from house connection near porch. D-box installed + connected, T1 complete + left open @ ends for inspection. T2 dug + partially filled w/ stone. 3' wide, 7' bottom, 3.5-4' to stone. (SC) 6/15/2018 Construction of TRENCH 3 COMPLETED. DIBOX LEVELED. (K) 7/26/2018 SHC CONFIRMED VIA PHONE. (K) (K)

FINAL INSPECTOR

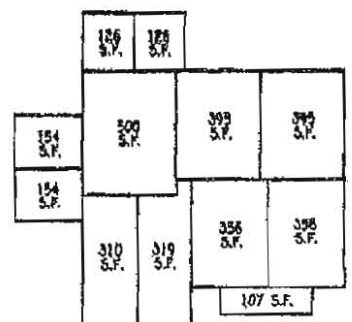
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DATE OF APPROVAL

07/26/2018



STORMWATER MANAGEMENT NOTES:
 STORMWATER MANAGEMENT FOR LOT 9 IS BEING PROVIDED BY A COMBINATION OF 2 ROOFTOP DISCONNECTIONS (N-1), NON-ROOFTOP DISCONNECTION (N-2) FOR THE DRIVEWAY AREA, AND 3 DRYWELLS (M-5), AS SHOWN ON THIS PLAN.



PROP. HOUSE DRAINAGE AREAS
 SCALE: 1"=30'

NOTE: FOR LOT 9, NO GRAVITY SEWER SERVICE FOR BASEMENT

OWNER/DEVELOPER
 INV HOMES
 9720 PATRICK WOODS DRIVE
 COLUMBIA, MD 21046
 410-379-5956

PLAN
 SCALE: 1" = 40'

NOTE: THE EXISTING WELL SHOWN ON THIS PLAN, HO-15-0343, HAS BEEN FIELD LOCATED BY FISHER, COLLINS & CARTER, INC., PROFESSIONAL LAND SURVEYORS AND IS ACCURATELY SHOWN.

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 1000 W. BALTIMORE AVENUE, SUITE 200
 ELICOTT CITY, MARYLAND 21043
 (410) 481-1200

PERMIT SITE PLAN
 LOT 9
 15328 GALAXY DRIVE
 FAIRLANE FARMS

PHASE ONE
 ZONED: RC-DEO
 TAX MAP NO.: B GRID NO.: 2 PARCEL NO.: B
 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: 1"=40' DATE: MARCH 8, 2018
 SHEET 1 OF 1

SHEET 3 of 3



HOWARD COUNTY HEALTH DEPARTMENT

P5-62997

DATE 5/18/18

South Carroll Beehive

PHONE # 410-596-3618

CASH CHECK

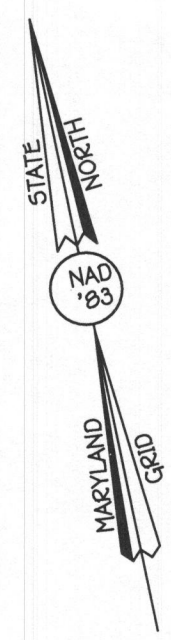
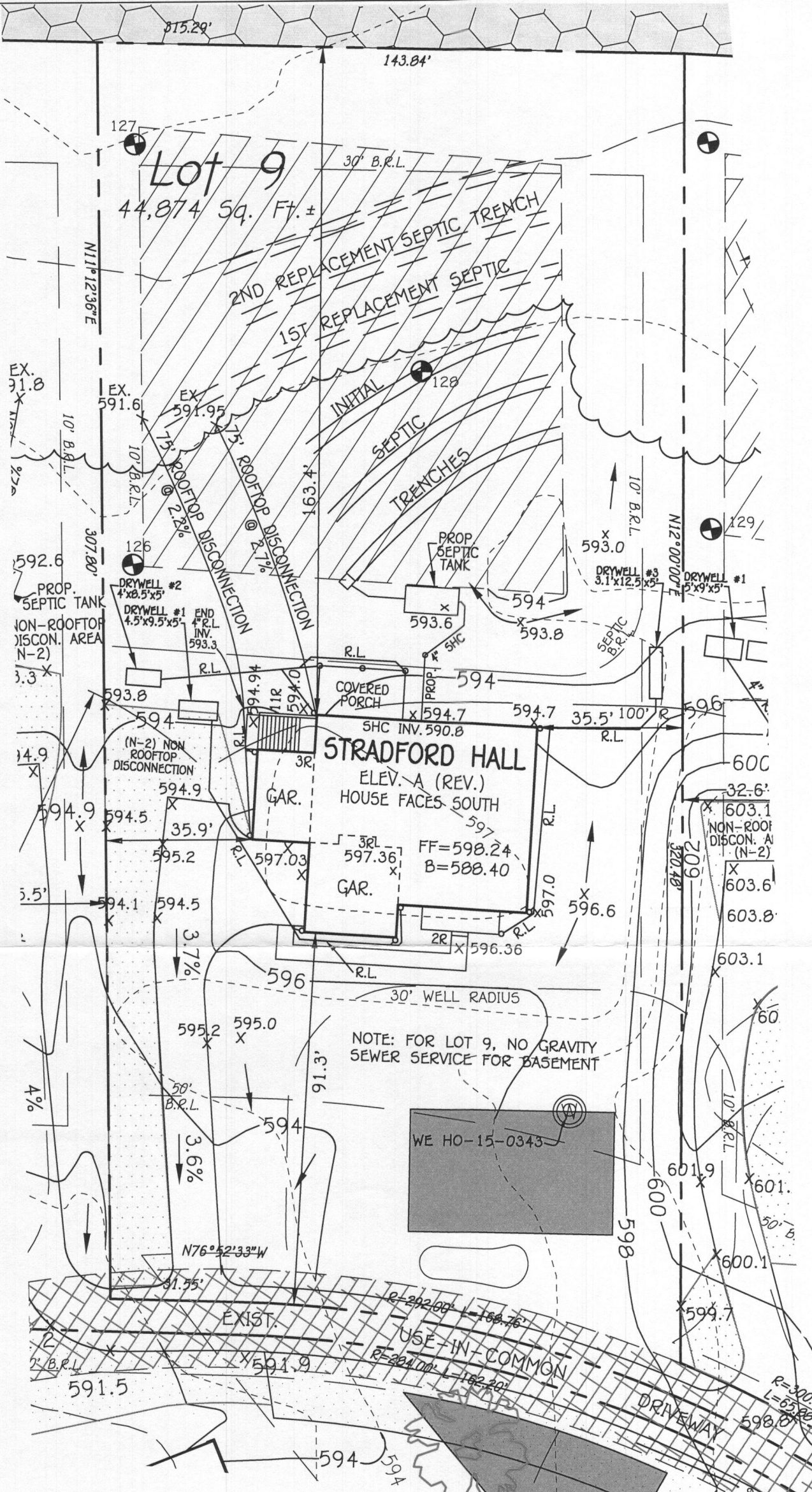
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For 1030 Fairlane Road, 1041 Fairlane Road,
1045 Fairlane Road, 15328 Galaxy Drive,
12410-Hillcrest (Septic Permits)

One thousand nine hundred & eighty - Dollars

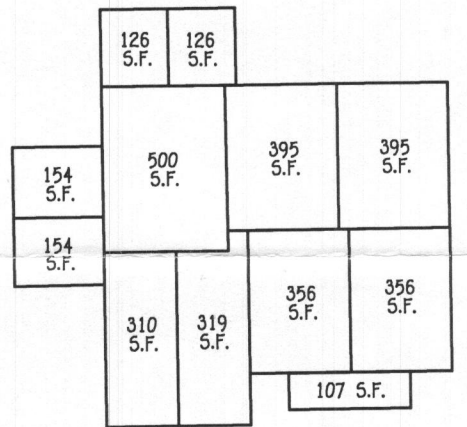
1900 00

Received By V. Delaney



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PROP. HOUSE DRAINAGE AREAS
SCALE: 1"=30'

NOTE: FOR LOT 9, NO GRAVITY SEWER SERVICE FOR BASEMENT

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

PLAN
 SCALE: 1" = 30'

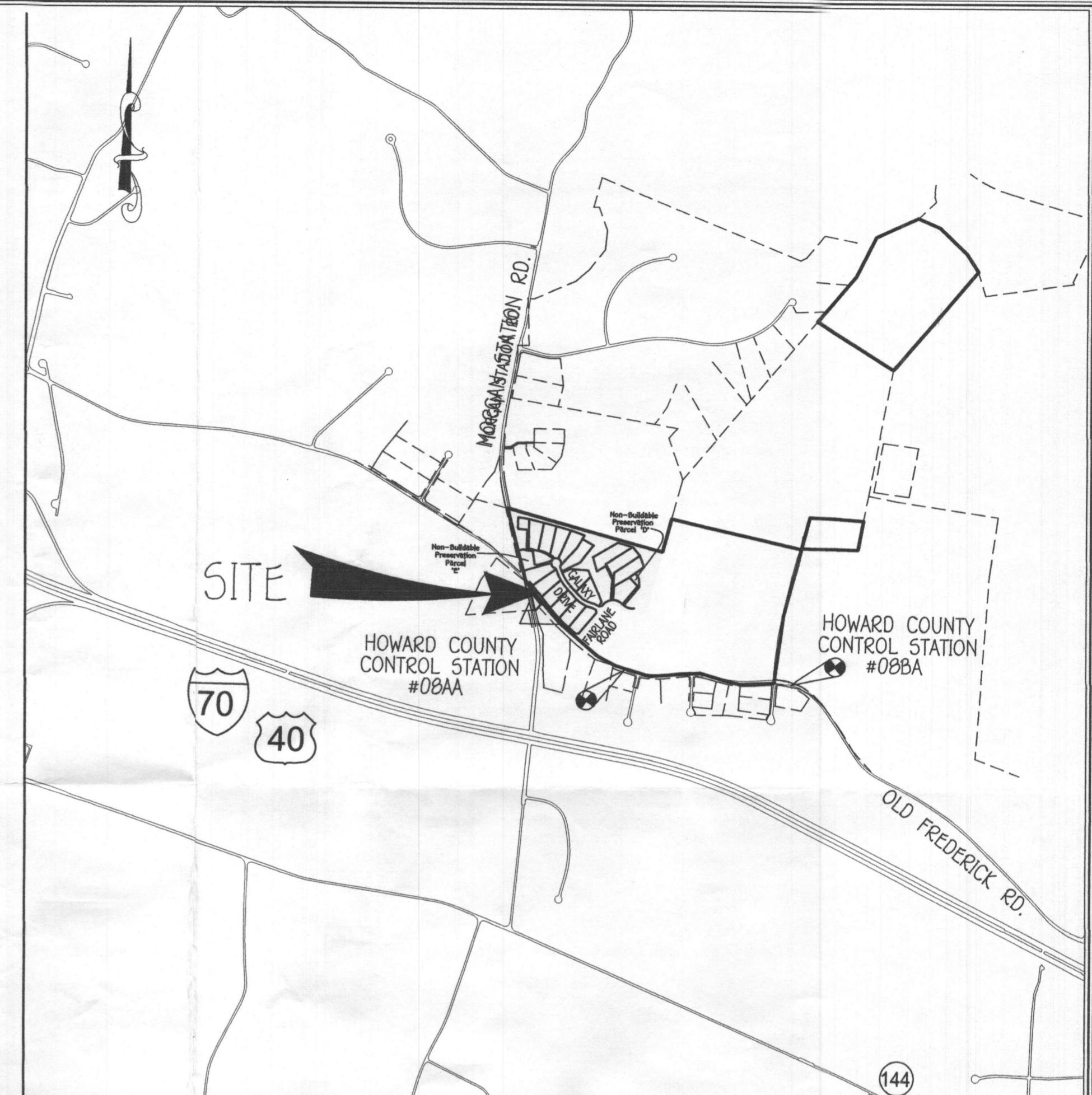
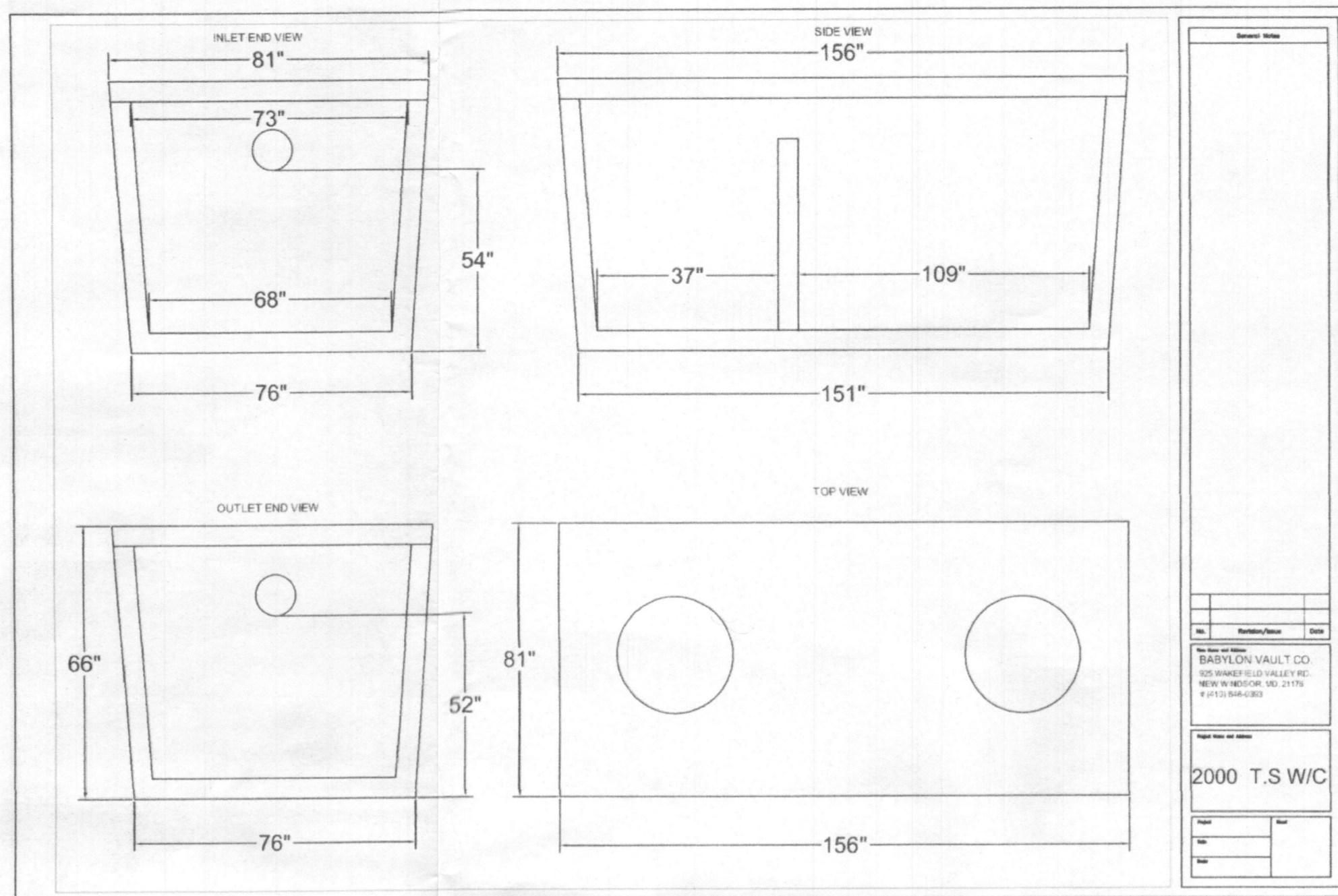
NOTE: THE EXISTING WELL SHOWN ON THIS PLAN, HO-15-0343, HAS BEEN FIELD LOCATED BY FISHER, COLLINS & CARTER, INC., PROFESSIONAL LAND SURVEYORS AND IS ACCURATELY SHOWN.

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

PERMIT SITE PLAN
LOT 9
 15328 GALAXY DRIVE
FAIRLANE FARMS

PHASE ONE
 ZONED: RC-DEO
 TAX MAP NO.: 8 GRID NO.: 2 PARCEL NO.: 8
 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: 1"=30' DATE: FEBRUARY 23, 2018
 SHEET 1 OF 1

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-15-0343 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.



FFE 598.24
 BSE 598.40
 INV. OUT OF HOUSE = 590.8
 PROP. GROUND AT CLEANOUT = 593.9
 INV. INTO CLEANOUT = 590.32
 INV. OUT OF CLEANOUT = 590.22
 EX. GROUND AT SEPTIC TANK = 593.8
 PROP. GRADE ABOVE SEPTIC TANK = 593.6
 TOP OF SEPTIC TANK = 590.82
 INV. INTO SEPTIC TANK = 589.82
 INV. OUT OF SEPTIC TANK = 589.57
 GROUND AT DISTRIBUTION BOX = 593.2
 INV. INTO DISTRIBUTION BOX = 589.2
 INV. OUT OF DISTRIBUTION BOX = 589.1

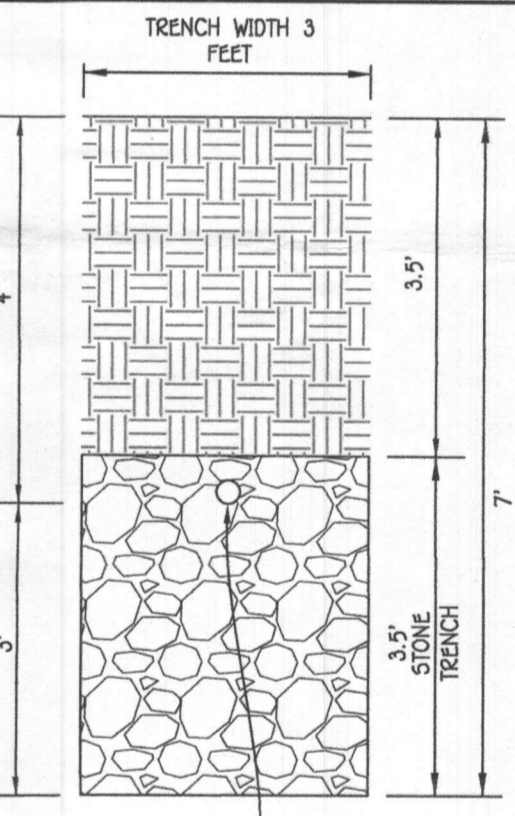
VICINITY MAP
 SCALE: 1" = 1200'

TRENCH DATA:

TRENCH 1:
 EX. GROUND ABOVE = 593.2
 INV. IN = 589.8
 BOTTOM TRENCH = 586.2

TRENCH 2:
 EX. GROUND ABOVE = 593
 INV. IN = 589
 BOTTOM TRENCH = 585

TRENCH 3:
 EX. GROUND ABOVE = 592.1
 INV. IN = 588.1
 BOTTOM TRENCH = 584.1



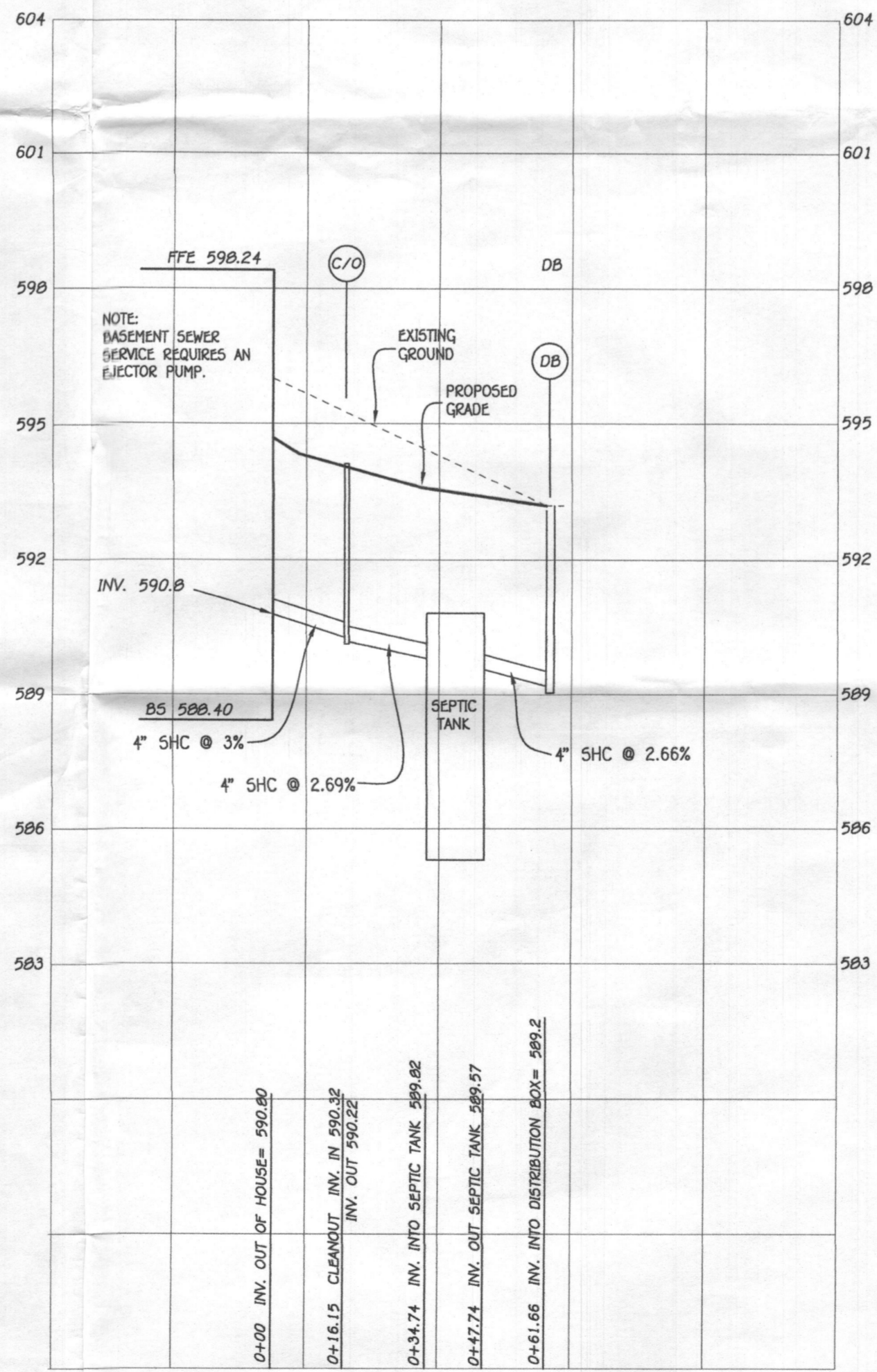
INITIAL SYSTEM
 SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 6 BEDROOMS
 LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD
 APPLICATION RATE = 0.8
 EFFECTIVE SIDEWALL BEGINS AT 4 FEET
 TRENCH DEPTH = 7 FEET
 TRENCH WIDTH (W) = 3 FEET
 EFFECTIVE DEPTH (D) = 3 FEET
 SF OF DRAINFIELD = 900 GPD / 0.8 = 1125 SF
 COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2*3)) = 0.5
 TRENCH LENGTH = 375.00 SF X 0.5 = 187.50 FEET
 (USE 3 TRENCHES AT 62.50 L.F.)
 TRENCH SPACING = 2W + ((2*2.5) + 3) = 8' USE 10'

1ST REPLACEMENT SYSTEM
 SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 6 BEDROOMS
 LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD
 APPLICATION RATE = 2
 EFFECTIVE SIDEWALL BEGINS AT 4 FEET
 TRENCH DEPTH = 8 FEET
 TRENCH WIDTH (W) = 3 FEET
 EFFECTIVE DEPTH (D) = 4 FEET
 SF OF DRAINFIELD = 900 GPD / 1.2 = 750.00 SF
 COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2*4)) = 0.416
 TRENCH LENGTH = 225 SF X 0.416 = 104 FEET
 (USE 5 TRENCHES AT 52 L.F.)
 TRENCH SPACING = 2W + ((2*1) + 3) = 5' USE 10'

2ND REPLACEMENT SYSTEM
 SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 6 BEDROOMS
 LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD
 APPLICATION RATE = 12
 EFFECTIVE SIDEWALL BEGINS AT 4 FEET
 TRENCH DEPTH = 8 FEET
 TRENCH WIDTH (W) = 3 FEET
 EFFECTIVE DEPTH (D) = 4 FEET
 SF OF DRAINFIELD = 900 GPD / 0.8 = 750.00 SF
 COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2*4)) = 0.416
 TRENCH LENGTH = 375 SF X 0.416 = 156 FEET
 (USE 2 TRENCHES AT 78 L.F.)
 TRENCH SPACING = 2W + ((2*1) + 3) = 5' USE 10'

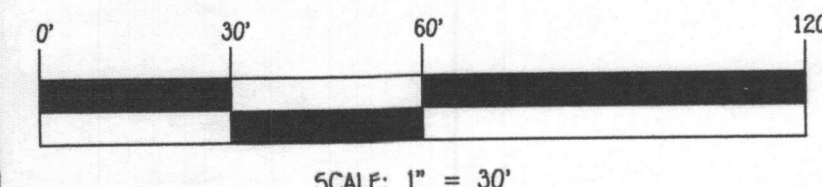
ADDRESS CHART

LOT NUMBER	STREET ADDRESS
9	15328 GALAXY DRIVE



SEPTIC PROFILE
 SCALE: 1" = 30'

NOTE:
 FOR LOT 9, NO GRAVITY SEWER SERVICE FOR BASEMENT



FISHER, COLLINS & CARTER, INC.
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 (410) 461-2995

OWNER/DEVELOPER
 INV HOMES
 9720 PATUXENT 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. 12043, EXPIRATION DATE: 07/16/2018.

Paul W. Kriebel 02/27/18
 PAUL W. KRIEBEL DATE

SEPTIC SYSTEM
 INSTALLATION SITE PLAN
 LOT 9
 15328 GALAXY DRIVE
 FAIRLANE FARMS
 PHASE ONE
 ZONED: RC-DEO
 TAX MAP NO.: 8 GRID NO.: 2 PARCEL NO.: 8
 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: 1" = 30' DATE: FEBRUARY 27, 2018
 SHEET 1 OF 1

Approved Septic System Plan
 Howard County Health Department
 Hans Oswald 3/18/18
 Signature Date