



**Howard County  
Health Department**

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

**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)

RECEIPT DATE: 10-1-20 **ONSITE SEWAGE DISPOSAL SYSTEM** P 572801

APPROVAL DATE: 10/9/2020 **PERMIT: CONSTRUCTION** A \_\_\_\_\_

PROPERTY ADDRESS: 4898 CASTLE BRIDGE ROAD

SUBDIVISION: CARROLL/ ZIEGLER PROPERTY LOT: 3 TAX ID: 03355152

CONTRACTOR: HATFIELDS EQUIPMENT EMAIL: ken@hatfieldsequipment.com

CONTRACTOR ADDRESS: P.O. BOX 519, ANNAPOLIS JUNCTION, MD 20701 PHONE: (301)490-4289

PROPERTY OWNER: KEN MORELAND EMAIL: \_\_\_\_\_

OWNER ADDRESS: 6420 AUTUMN SKY WAY PHONE: 410-324-4732

SEPTIC TANK SIZE (GALLONS): 2000 TANK MANUFACTURER: BABYLON

PUMP MODEL: N/A PUMP SIZE N/A PUMP TANK CAPACITY: N/A

DISTRIBUTION SYSTEM:  GRAVITY  PRESSURE DOSED BEDROOMS: 6 APPLICATION RATE: 1.2

TRENCHES:	LINEAR FEET REQUIRED: <u>313</u>	INLET DEPTH: <u>4.5</u>
	TRENCH WIDTH: <u>3.0</u>	MAXIMUM BOTTOM DEPTH: <u>8</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>6.5</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:	ALL septic system and stormwater management components must be staked prior to installation. Lot development will be a tight fit.	

ISSUED BY: Robert Freemon ISSUE DATE: \_\_\_\_\_ EXPIRATION DATE: 10-1-21

**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

\* see attached diagram

ROAD NAME

**TRENCH/DRAINFIELD DATA**

WIDTH 3' INLET 4.5' BOTTOM 8'

NUMBER OF TRENCHES 4  
TOTAL LENGTH 313'  
ABSORPTION AREA 939 sq ft  
DISTRIBUTION BOX LEVEL yes  
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 1.5  
BAFFLES front + back  
BAFFLE FILTER -  
MANHOLE LOC front + back  
6" PORT LOC -  
WATERTIGHT TEST -  
SLOTTED yes  
DATE ON LID 8-24-20

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:**

9/16/2020 SHC was installed prior to porch (ST) 10/7/2020 Laid out 4x7x' trenches on contour according to plan. Contractor plans to ask builder to install stormwater pipe to drywell during construction of septic system. (ST)

INSTALLATION: 10/9/2020 Tank set and connected to SHC. D-box set and leveled. 4x7x' trenches installed. Drywell piping will be installed over trenches using a small backhoe, only 1' deep. (ST)

FINAL INSPECTOR Susan Thomas DATE OF APPROVAL 10/9/2020



000180  
X

**SHARED MAINTENANCE, REPAIR AND  
GRANT OF EASEMENT AGREEMENT**

HOWARD COUNTY CIRCUIT COURT (Land Records) MDR 12405, p. 0352, MSA\_CE53\_12396. Date available 04/20/2010. Printed 01/06/2016.

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30  
in

AGREEMENT, made this 26<sup>th</sup> day of March, 2010, by and between the undersigned, **MARY CARTER CARROLL ZIEGLER; JOHN LEE CARROLL, JR.; THOMAS T. CARROLL; GENEVIEVE ANNE CARROLL; SOPHIE A. ZIEGLER; NATALIE C. ZIEGLER, TRUSTEE OF THE JESSICA ZIEGLER TRUST-2000; JESSICA M. ZIEGLER; NATALIE C. ZIEGLER** also known as **NATALIE ZIEGLER ZIRSCHKY; JONATHAN IAN SCHWARTZ, TRUSTEE OF THE REED E. ZIEGLER TRUST - 2000; NATALIE C. ZIEGLER, TRUSTEE OF THE REED E. ZIEGLER SCHWARTZ TRUST - 2000; SOPHIE A. ZIEGLER, TRUSTEE OF THE REED E. ZIEGLER SCHWARTZ TRUST- 2000; JESSICA ZIEGLER, SUCCESSOR TRUSTEE OF THE ZIEGLER FAMILY IRREVOCABLE TRUST FOR THE BENEFIT OF ALEXANDRA N. ZIRSCHKY and J. CHRISTIAN ZIRSCHKY; JONATHAN IAN SCHWARTZ, TRUSTEE OF THE SIMON RAY ZIEGLER SCHWARTZ TRUST - 2002; NATALIE C. ZIEGLER, TRUSTEE OF THE SIMON RAY ZIEGLER SCHWARTZ TRUST - 2002; SOPHIE A. ZIEGLER, TRUSTEE OF THE SIMON RAY ZIEGLER SCHWARTZ TRUST - 2002; JOHN H. ZIRSCHKY; ELIOAK, LLC, and **CHRISTOPHER C. GERARD, AS TRUSTEE OF THE JOHN LEE CARROLL, JR., TRUST U/A DATED 4/30/01, THE THOMAS T. CARROLL TRUST U/A DATED 4/30/01, AND THE GENEVIEVE A. CARROLL TRUST U/A DATED 4/30/01**, who are the owners of various adjacent and adjoining properties in Howard County, Maryland as which are shown and/or referred to on various Plats entitled "Carroll-Ziegler Property Lots 2-7, Buildable Preservation Parcel 'L', Non-buildable Preservation Parcels 'M' and 'N', a Resubdivision of Bulk Parcel 'F' as recorded among the Plat Records of Howard County at Plat Nos. 19789-19792," (the "Plats").**

WHEREAS, the owners have resubdivided the properties shown on the Plats with a thirty (30) foot wide private easement for ingress, egress, maintenance, storm water management and utilities (the "uses") to benefit Lots 2, 3, 4 & 5; and Parcel 'L', Riverwood Parcels 'II' and 'Q' and Fox's Farm, Lot 1 as shown on the Plats.





WHEREAS, the owners wish to grant easements to each other for the above enumerated uses and to establish their rights and obligations with regard to repair and maintenance of easement.

NOW THEREFORE, in consideration of their mutual promises and other valuable consideration, the receipt of which is hereby acknowledged and intending to be legally bound on behalf of themselves, their heirs and assigns, the parties agree as follows:

1. Grant of Easement.

The owners grant to each other a perpetual and permanent thirty (30) foot wide private easement over and across their respective properties for ingress, egress, farm equipment access, maintenance, storm water management and utilities to benefit Lots 2, 3, 4 & 5; Parcel 'L', Riverwood Parcels 'II', 'Q' and Fox's Farm, Lot 1 and more particularly shown on the Plats ( the "easement"). The owners agree the easement is confined to that area marked on the Plats and does not extend any rights to Lots 2, 3, 4 and 5; Parcel 'L', Riverwood Parcels 'II' and 'Q' for ingress and egress over adjoining properties to access Manor Lane.

2. Maintenance.

The owners are responsible for the maintenance and repair of the easement. No expense shall be incurred by the owners without unanimous consent of the other owners, which consent shall not be unreasonably withheld. Such consent shall be in writing, signed by all the owners, with a copy delivered to each.

3. Payment.

The cost for agreed upon maintenance and repair shall be borne and shared equally by the owners, i.e., an equal share for each separate property shown on the Plats regardless of its size, use, number of owners, occupancy, improvements, zoning or relative values. In the consent to repair, the Parties shall designate a party to be the agent for contracting or undertaking the agreed upon repair or maintenance and to collect each owners' share of the cost thereof. The obligation to pay such costs shall apply only to those owners whose lots are improved by residential construction or where such construction has commenced.

4. Successor in Interest.

This Agreement is binding on the heirs, assigns and successors in interest of the parties.



5. Underground Utility Repairs.

Whenever changes to or emergency repairs are required to the underground servicing systems (gas, water, electricity, sewer, cable and phone) that require breaking the surface of the right-of-way to conduct repair or change, the owners and other parties having service systems within the right-of-way area shall be notified immediately. The method used to expose the service system for change or repair shall be agreed to by the owners prior to initiation.

6. Damage.

It is also understood and agreed that if the owners of a particular lot or parcel having access over this right-of-way damages or disturbs the surface of the roadway over this easement, (other than normal automobile and service ingress and egress) then he, she or they shall be responsible to immediately restore the road surface to as nearly as possible the condition in which it existed prior to being disturbed.

7. Unpaid Costs or Unrepaired Damage to be a Lien on Land.

In the event the owners do not pay his, her or their pro rata share of costs within thirty (30) days after it is requested or the owners responsible for damage to the roadway do not immediately correct the damage, then the remaining owners shall be entitled to claim a lien against the non-paying or non-performing party's lot or parcel and to bring suit for such costs incurred thereby. Said lien shall be foreclosable as a mortgage pursuant to the laws of the State of Maryland.

8. Binding Effect.

This Shared Maintenance and Repair Grant of Easement Agreement shall not be modified except in writing signed by the owners, their successors or assigns. This Agreement and its obligations and benefits shall run with the land and shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

9. Counterparts.

This Agreement may be signed in counterparts.

10. Applicable Law.

This Agreement shall be interpreted in accordance with the laws of the State of Maryland.



IN WITNESS WHEREOF, the Parties have executed this Agreement and make it effective on the date first written above.

Mary Carter Carroll Ziegler (SEAL)  
MARY CARTER CARROLL ZIEGLER

John Lee Carroll, Jr. (SEAL)  
JOHN LEE CARROLL, JR.

Thomas T. Carroll (SEAL)  
THOMAS T. CARROLL

Genevieve Anne Carroll (SEAL)  
GENEVIEVE ANNE CARROLL

Sophie A. Ziegler (SEAL)  
SOPHIE A. ZIEGLER

Natalie C. Ziegler (SEAL)  
NATALIE C. ZIEGLER  
TRUSTEE OF THE JESSICA  
ZIEGLER TRUST - 2000

Jessica M. Ziegler (SEAL)  
JESSICA M. ZIEGLER

Natalie C. Ziegler, a/k/a (SEAL)  
NATALIE C. ZIEGLER, a/k/a  
NATALIE ZIEGLER ZIRSCHKY

Jonathan Ian Schwartz (SEAL)  
JONATHAN IAN SCHWARTZ  
TRUSTEE OF THE REED E. ZIEGLER  
TRUST - 2000

Natalie C. Ziegler (SEAL)  
NATALIE C. ZIEGLER  
TRUSTEE OF THE REED E.  
ZIEGLER SCHWARTZ TRUST- 2000

Sophie A. Ziegler (SEAL)  
SOPHIE A. ZIEGLER  
TRUSTEE OF THE REED E.  
ZIEGLER SCHWARTZ TRUST - 2000



HOWARD COUNTY CIRCUIT COURT (Land Records) MDR 12405, p. 0356, MSA\_CE53\_12396. Date available 04/20/2010. Printed 01/06/2016.

Jessica Ziegler (SEAL)  
JESSICA ZIEGLER  
SUCCESSOR TRUSTEE OF THE  
ZIEGLER FAMILY IRREVOCABLE  
TRUST FOR THE BENEFIT OF  
ALEXANDRA N. ZIRSCHKY and  
J. CHRISTIAN ZIRSCHKY

Natalie C. Ziegler (SEAL)  
NATALIE C. ZIEGLER  
TRUSTEE OF THE SIMON RAY  
ZIEGLER SCHWARTZ TRUST-  
2002

Sophie A. Ziegler (SEAL)  
SOPHIE A. ZIEGLER  
TRUSTEE OF THE SIMON  
SIMON RAY ZIEGLER SCHWARTZ  
TRUST - 2002

Jonathan Ian Schwartz (SEAL)  
JONATHAN IAN SCHWARTZ  
TRUSTEE OF THE SIMON RAY  
ZIEGLER SCHWARTZ TRUST-  
2002

ELIOAK, LLC  
By: Security Development LLC

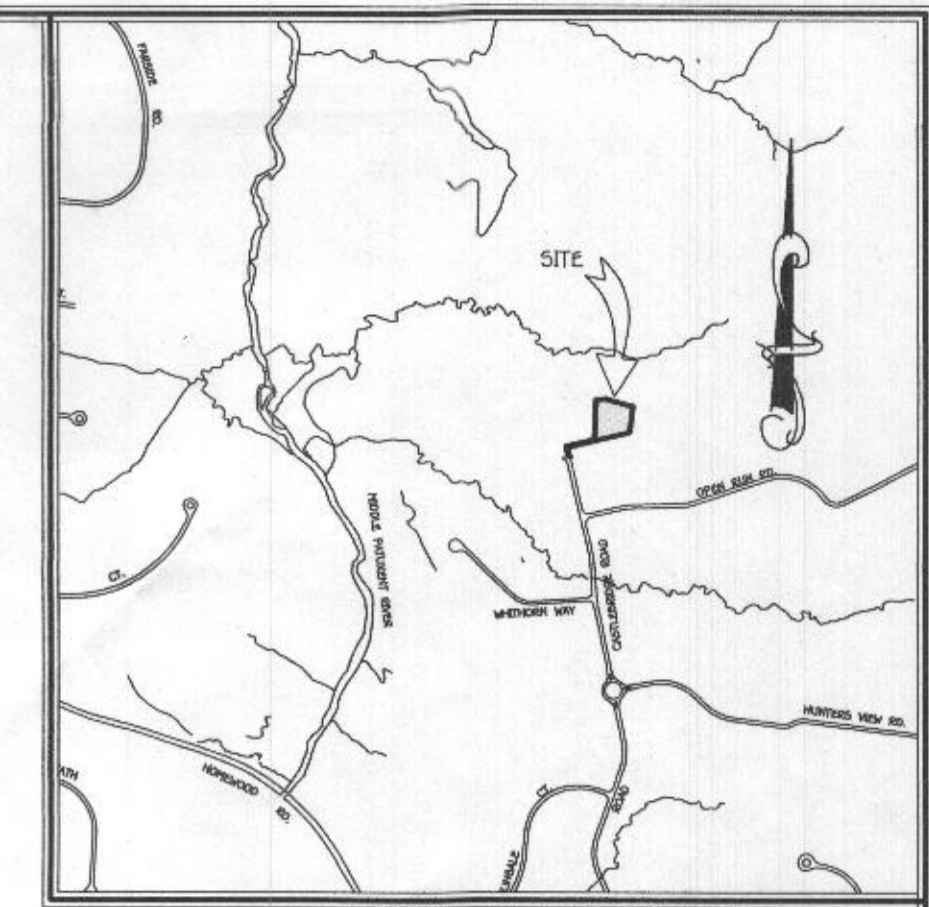
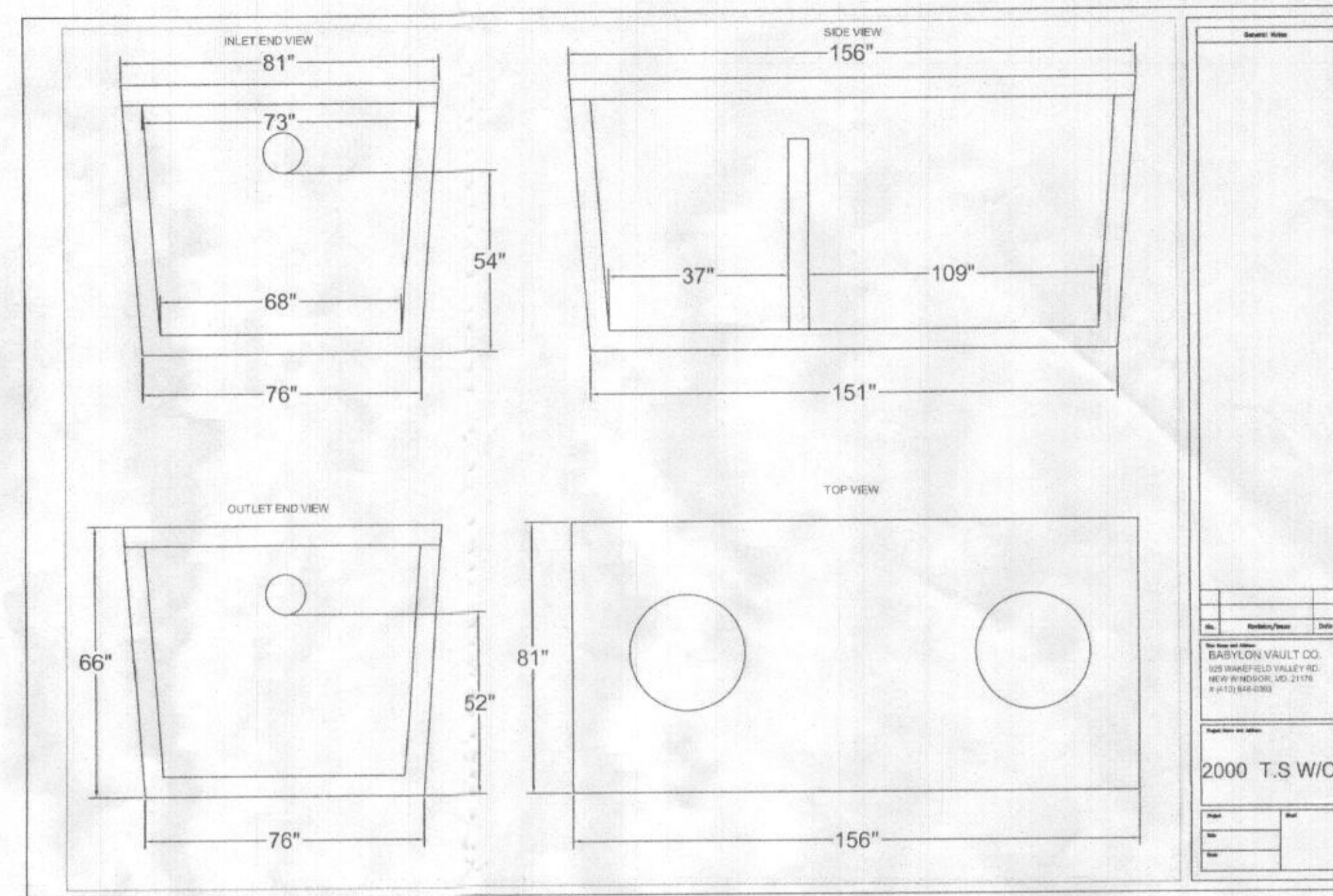
John H. Zirschky (SEAL)  
JOHN H. ZIRSCHKY

By: James R. Mosley, III (SEAL)  
James R. Mosley, III  
By: STEVEN K. BREEDEN mEMAN  
Authorized Agent

Christopher C. Gerard (SEAL)  
CHRISTOPHER C. GERARD,  
AS TRUSTEE OF THE JOHN LEE  
CARROLL, JR., TRUST U/A DATED  
4/30/01, THE THOMAS T. CARROLL  
TRUST U/A DATED 4/30/01, AND THE  
GENEVIEVE A. CARROLL TRUST U/A  
DATED 4/30/01

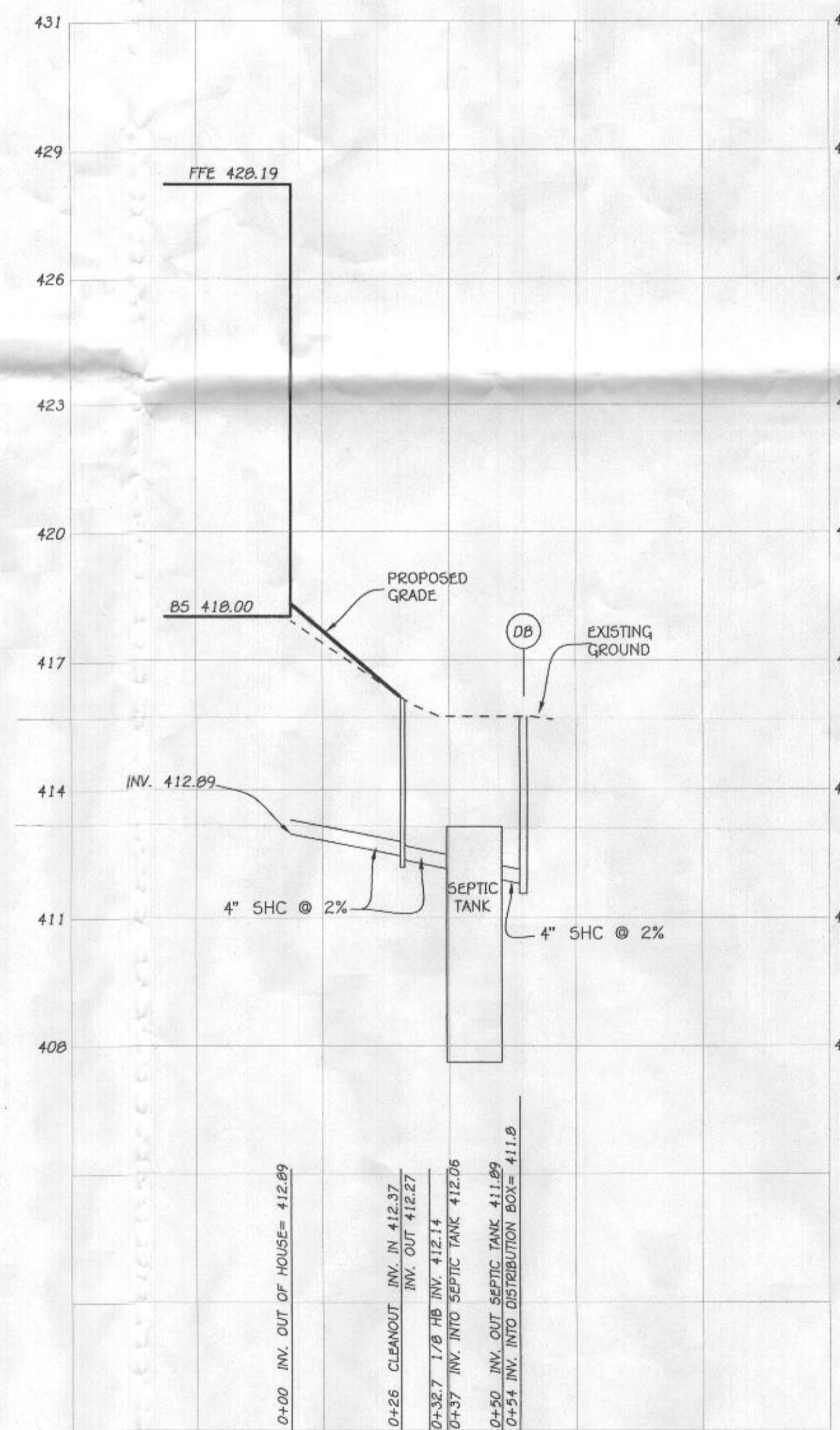
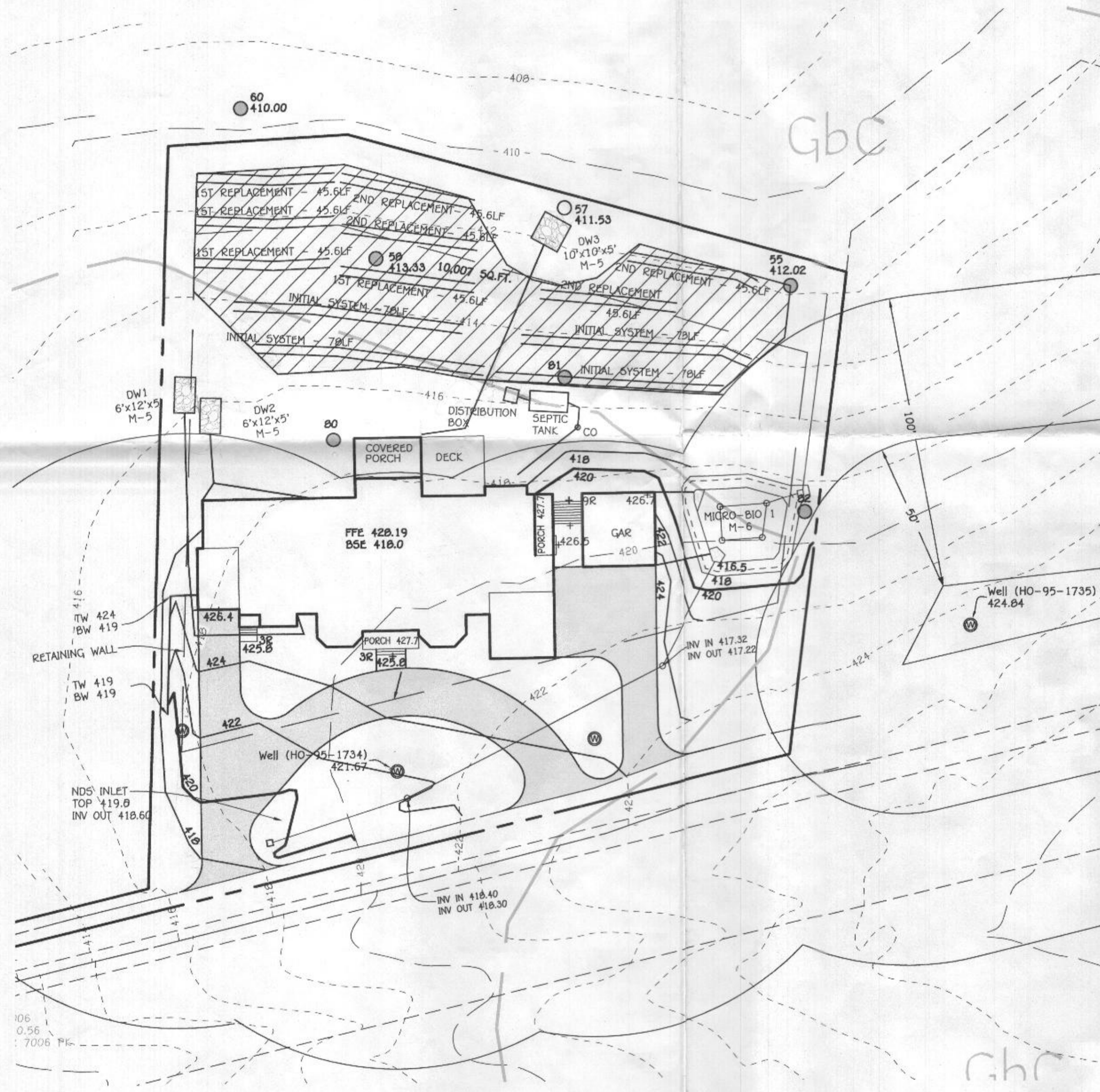
4711.RRH  
Agreement (2)

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-95-1734 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.
6. MICRO-BIO 1 HAS AN IMPERMEABLE LINER UNDER THE GRAVEL LAYER SINCE IT IS LOCATED WITHIN THE 100' WELL RADIUS.
7. NOTE THAT THE DRYWELL ROOFLEADER WILL BE 1 FOOT BELOW EXISTING GRADE ELEVATION AND WILL BE APPROXIMATELY 3 FOOT ABOVE THE LATERALS FROM THE DISTRIBUTION INTO THE TRENCHES.
8. Prior to septic system installation all stormwater management and septic components must be professionally staked by a licensed surveyor.



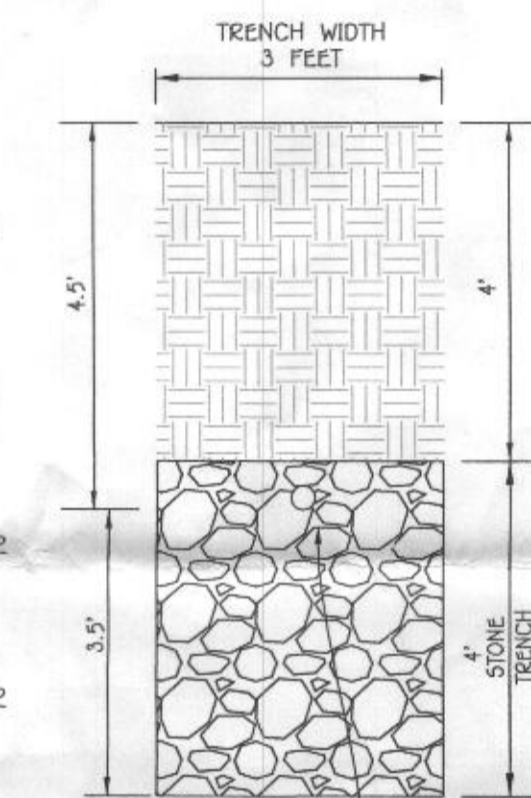
VICINITY MAP  
SCALE: 1" = 1200'

FFE 428.19  
BSE 418.00  
INV. OUT OF HOUSE = 412.89  
PROP. GROUND AT CLEANOUT #1 = 417.0  
INV. INTO CLEANOUT = 412.37  
INV. OUT OF CLEANOUT = 412.27  
EX. GROUND AT SEPTIC TANK = 416.0  
PROP. GRADE ABOVE SEPTIC TANK = 416.0  
TOP OF SEPTIC TANK = 413.06  
INV. INTO SEPTIC TANK = 412.06  
INV. OUT OF SEPTIC TANK = 411.89  
EX. GROUND AT DISTRIBUTION BOX = 415.7  
INV. INTO DISTRIBUTION BOX = 411.8  
INV. OUT OF DISTRIBUTION BOX = 411.7



TRENCH DATA:

- TRENCH 1:  
EX. GROUND ABOVE = 415.3  
INV. IN = 411.3  
BOTTOM TRENCH = 407.3
- TRENCH 2:  
EX. GROUND ABOVE = 415.3  
INV. IN = 411.3  
BOTTOM TRENCH = 407.3
- TRENCH 3:  
EX. GROUND ABOVE = 414.2  
INV. IN = 410.2  
BOTTOM TRENCH = 406.2
- TRENCH 4:  
EX. GROUND ABOVE = 414.2  
INV. IN = 400.2  
BOTTOM TRENCH = 406.2



INITIAL SYSTEM

SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 7 BEDROOMS  
LOADING RATE = 7 BEDROOMS X 150 GPD/BEDROOM = 1,050 GPD  
APPLICATION RATE = 0.8  
EFFECTIVE SIDEWALL BEGINS AT 6.5 FEET  
TRENCH DEPTH (D) = 8 FEET  
TRENCH WIDTH (W) = 4 FEET  
EFFECTIVE DEPTH (D) = 1.5 FEET  
SF OF DRAINFIELD = 1050 GPD / 0.8 = 1,312.5 SF  
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x1.5)) = 0.714  
TRENCH LENGTH = 1,312.5 SF x 0.714 / 3 = 312.38 FEET (USE 4 TRENCHES AT 78 LF.)  
TRENCH SPACING = 2D+W = ((2x1.5) + 3) = 6' USE 10'

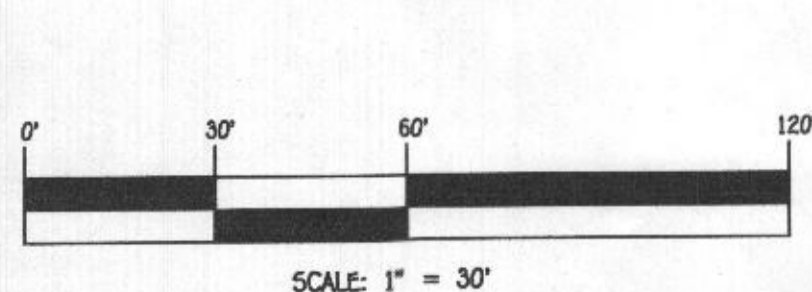
2ND REPLACEMENT SYSTEM

SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 7 BEDROOMS  
LOADING RATE = 7 BEDROOMS X 150 GPD/BEDROOM = 1,050 GPD  
APPLICATION RATE = 0.8  
EFFECTIVE SIDEWALL BEGINS AT 4 FEET  
TRENCH DEPTH (D) = 4 FEET  
EFFECTIVE DEPTH (D) = 4 FEET  
SF OF DRAINFIELD = 1050 GPD / 0.8 = 1,312.5 SF  
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x4)) = 0.417  
TRENCH LENGTH = 1,312.5 SF x 0.417 / 3 = 182.44 FEET (USE 4 TRENCHES AT 45.6 LF.)  
TRENCH SPACING = 2D+W = ((2x4) + 3) = 11' USE 11'

1ST REPLACEMENT SYSTEM

SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 7 BEDROOMS  
LOADING RATE = 7 BEDROOMS X 150 GPD/BEDROOM = 1,050 GPD  
APPLICATION RATE = 0.8  
EFFECTIVE SIDEWALL BEGINS AT 4 FEET  
TRENCH DEPTH (D) = 8 FEET  
TRENCH WIDTH (W) = 3 FEET  
EFFECTIVE DEPTH (D) = 4 FEET  
SF OF DRAINFIELD = 1050 GPD / 0.8 = 1,312.5 SF  
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x4)) = 0.417  
TRENCH LENGTH = 1,312.5 SF x 0.417 / 3 = 182.44 FEET (USE 4 TRENCHES AT 45.6 LF.)  
TRENCH SPACING = 2D+W = ((2x4) + 3) = 11' USE 11'

Approved Septic System Plan  
Howard County Health Department  
Signature: [Signature] 8/22/2019  
Date  
(Approved for 7 BRs)



OWNER/DEVELOPER

KEN MORELAND  
c/o GREENFIELD FAMILY HOMES, LLC  
6420 AUTUMN SKY WAY  
COLUMBIA, MARYLAND 21044  
410-324-4732



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. 38386, EXPIRATION DATE: 01/12/2020.

Signature: [Signature] 8/17/19  
DATE

SEPTIC SYSTEM  
INSTALLATION SITE PLAN  
CARROLL-ZIEGLER PROPERTY, LOT 3  
4898 CASTLEBRIDGE ROAD

ZONED: RC-DEO  
TAX MAP NOS.: 23 & 29 GRID NOS.: 21, 22 & 3, 4 PARCEL NO: 29  
THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
SCALE: AS SHOWN DATE: JULY, 2019  
SHEET 1 OF 1

ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
3	4898 CASTLEBRIDGE ROAD