

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: 9-12-19 **ONSITE SEWAGE DISPOSAL SYSTEM** P 566369

APPROVAL DATE: 11-5-19 **PERMIT: CONSTRUCTION** A _____

PROPERTY ADDRESS: 12251 Blue Sky Evening Way

SUBDIVISION: Fulton Woods LOT: 3 TAX ID: _____

CONTRACTOR: Fogles Septic Clean Inc. EMAIL: Kim@foglesinc.com

CONTRACTOR ADDRESS: 580 Obercht Rd, Sykesville, MD 21784 PHONE: 410-795-5670

PROPERTY OWNER: BH BC EMAIL: _____

OWNER ADDRESS: 6030 Daybreak Circle, Clarksville, MD 21029 PHONE: 443-310-1553

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

PUMP MODEL: _____ PUMP SIZE _____ PUMP TANK CAPACITY: _____

DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 4 APPLICATION RATE: 0.8

| | | |
|-----------|---|--|
| TRENCHES: | LINEAR FEET REQUIRED: <u>125</u> | INLET DEPTH: <u>4' 2"</u> |
| | TRENCH WIDTH: <u>3</u> | MAXIMUM BOTTOM DEPTH: <u>8</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: | <u>Install 3 trenches at #1.67.</u> | |

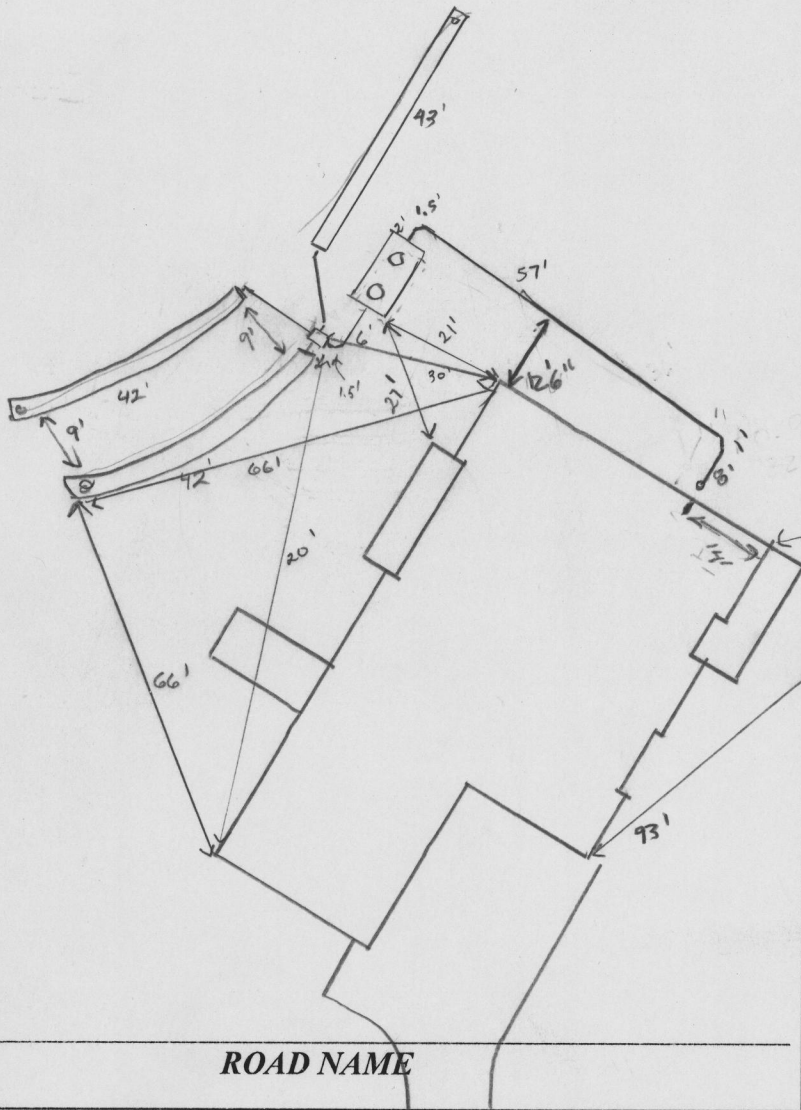
ISSUED BY: Hank Oswald ISSUE DATE: _____ EXPIRATION DATE: 9-12-20

- 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 DOWNGRADE 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 19003950
- 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.

1" = 30'

NOT TO SCALE



TRENCH/DRAINFIELD DATA

| WIDTH | INLET | BOTTOM |
|-------|-------|--------|
| 3' | 2' | 8' |

NUMBER OF TRENCHES 3
 TOTAL LENGTH 127'
 ABSORPTION AREA 381' + sidewalk
 DISTRIBUTION BOX LEVEL yes
 DISTRIBUTION BOX BAFFLE —
 DISTRIBUTION BOX PORT —

SEPTIC TANK DATA

SEPTIC TANK I LEVEL yes
 MANUFACTURER Babylon
 CAPACITY 2000 GAL
 SEAM LOC top
 TANK LID DEPTH 1'
 BAFFLES front + back
 BAFFLE FILTER —
 MANHOLE LOC front + back
 6" PORT LOC —
 WATERTIGHT TEST —
 SLOTTED yes
 DATE ON LID 9-13-19

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 —

ROAD NAME

PRE-CONSTRUCTION:

10/24/2019 STAKED TO OLD PLAN. MUST RE-STAKE TO CURRENT SDA AND TANK LOCATION. (SI)

10/25/19 SDA staked per plan. shot elevations on trenches. Adjusted lower trenches some and single 42' trench as needed. Sewer line staked @ house (SI)

INSTALLATION: 10/30/19 Sewer line complete and tank set. (SI) 11/5/19 D-box and 3 trenches installed (SI)

FINAL INSPECTOR

Susan Thomas

DATE OF APPROVAL

11/5/19

**FISHER, COLLINS
& CARTER, INC.**

**CIVIL ENGINEERING CONSULTANTS
and LAND SURVEYORS**

Terrell A. Fisher, P.E., L.S.
Earl D. Collins, P.E.
Charles J. Crovo, Sr., P.E., L.S.

Paul W. Kriebel, P.E.
Mark L. Robel, P.L.S.
Aldo M. Vitucci, P.E.
Frank Manalansan II, L.S.
Stephanie Tuite, RLA, P.E., LEED AP BD&C

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, MD 21046-4544 | Attn: Hank Fax: (410) 313-2648 Phone: (410) 313-2640 |
|--|---|

| | |
|------------------------------|------------|
| From: Stephanie Tuite | CC: |
|------------------------------|------------|

| | |
|--|--|
| Re: Fulton Woods, Lot 3 - Septic Plan | W.O.# 18025-3001 |
| Date: 10/9/19 | Pages: Page(s) Including this cover |

| | | | | | |
|--------------------|--|---|---|---|---|
| We are forwarding: | <input checked="" type="checkbox"/> Prints | <input type="checkbox"/> Copy of Letter | <input type="checkbox"/> Specifications | <input type="checkbox"/> Shop drawings | <input checked="" type="checkbox"/> Other |
| | <input type="checkbox"/> Urgent | <input type="checkbox"/> For your use | <input type="checkbox"/> As requested | <input type="checkbox"/> For Review & Comment | |

Remarks:

Attached please find three copies of the Septic Plan And Septic Recertification Plan for 12251 Blue Sky Evening Way, Fulton Woods Lot 3. Building Permit #B18004038.

Please call with any questions.

Stephanie Tuite, RLA, PE, LEED AP BD&C
Fisher, Collins & Carter, Inc.

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September 26, 2019

Mr. Mike Davis
Howard County Health Department
Bureau of Environmental Health
8930 Stanford Blvd.
Columbia, MD 21045

Re: Fulton Woods
Lot 3
Waiver Request

Dear Mr. Davis:

We are requesting a variance for the proposed Septic Tank to areaway on Lot 3
Fulton Woods. The variance is a reduction from 20 feet to 18.5 feet off the Areaway to the
septic tank.

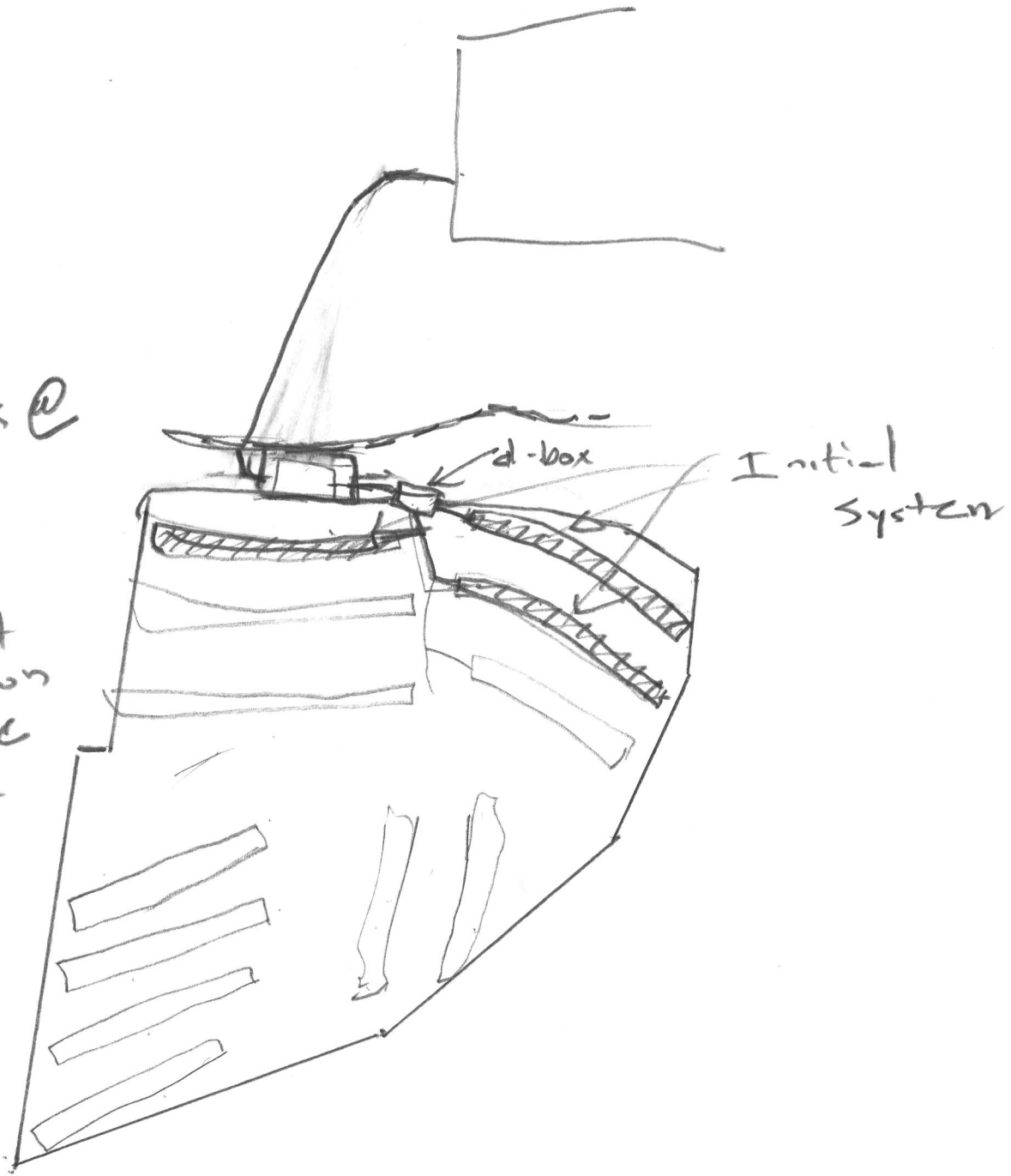
Thank you for your consideration of this request.

Sincerely,

Donald W. Carter

I + 1st = 3 trenches @
4 1/2"

2nd - keep the
same but
bump down
and more
on angle



Oswald, Hank

From: Oswald, Hank
Sent: Monday, October 07, 2019 10:59 AM
To: 'Tony Fertitta'
Cc: Williams, Jeffrey
Subject: OSDS Plan_12251 Blue Shy Evening Way

Hi Tony:

Did you have the owner submit the waiver request to reduce the setback from tank to foundation? I met with Jeff this morning and we plan on meeting with Mike to discuss as well.

Thanks,

Hank

Hank Oswald
Licensed Environmental Health Specialist
Howard County Health Department
Bureau of Environmental Health
Well & Septic Program
8930 Stanford Boulevard
Columbia, MD 21045
410.313.1786 (Office)
hoswald@howardcountymd.gov



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Oswald, Hank

From: Oswald, Hank
Sent: Monday, October 07, 2019 2:03 PM
To: Tony Fertitta
Cc: Donald Carter
Subject: RE: Lot 3 Waiver Request

Hi Tony:

The waiver request is written for a reduction from 20 ft. to 18.5 ft., but this doesn't match up with your latest plan. The latest plan shows the tank 10 feet off the basement walk up. In any case, Mike Davis isn't opposed to the 10 ft. setback, but the letter must match up and Mike needs to sign it. Once signed, the wall check must match the perc cert and OSDS Plan.

Call me if you wish to discuss.

Thanks,

Hank

From: Tony Fertitta <tonyf@fcc-eng.com>
Sent: Monday, October 07, 2019 11:06 AM
To: Oswald, Hank <hoswald@howardcountymd.gov>
Subject: Lot 3 Waiver Request

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

With Much Respect,

Donald Carter
BHBC
443-681-2400

On Thu, Sep 26, 2019 at 9:53 AM Stephanie Tuite <Stephanie@fcc-eng.com> wrote:

Please sign this one, send back to me as soon as you can, and we will get it to the county.

Stephanie Tuite, RLA, PE, LEED AP BD&C

FISHER, COLLINS & CARTER, INC.

Oswald, Hank

From: Oswald, Hank
Sent: Wednesday, December 12, 2018 7:27 AM
To: Stephanie Tuite (Stephanie@fcc-eng.com)
Subject: OSDS/PC_12251 Blue Sky Evening Way_Fulton Woods_Lot 3
Attachments: OSDS Memo To FCC__Fulton Woods_Lot 3_2018.pdf

Hi Stephanie:

Good morning. Attached, please find comments to the OSDS Plan for Fulton Woods Lot 3.

Should you have any questions, please don't hesitate to ask.

Respectfully,

Hank

Hank Oswald
Licensed Environmental Health Specialist
Howard County Health Department
Bureau of Environmental Health
Well & Septic Program
8930 Stanford Boulevard
Columbia, MD 21045
410.313.1786 (Office)
hoswald@howardcountymd.gov

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FISHER, COLLINS & CARTER, INC.

CIVIL ENGINEERING CONSULTANTS
and LAND SURVEYORS

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Stephanie Tuite, RLA, P.E., LEED AP BD&C

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, MD 21046-4544

Attn: **Jeff Williams**
Fax: **(410) 313-2648**
Phone: **(410) 313-2640**

From: **Stephanie Tuite**

CC:

Re: **Fulton Woods, Lot 3 - Septic Plan**

W.O.# **18025-3001**

Date: **12/18/18**

Pages: **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:

Attached please find three copies of the Septic Plan And Septic Recertification Plan for 12251 Blue Sky Evening Way, Fulton Woods Lot 3. Building Permit #B18004038.

Please call with any questions.

Stephanie Tuite, RLA, PE, LEED AP BD&C
Fisher, Collins & Carter, Inc.

CONFIDENTIALITY NOTICE

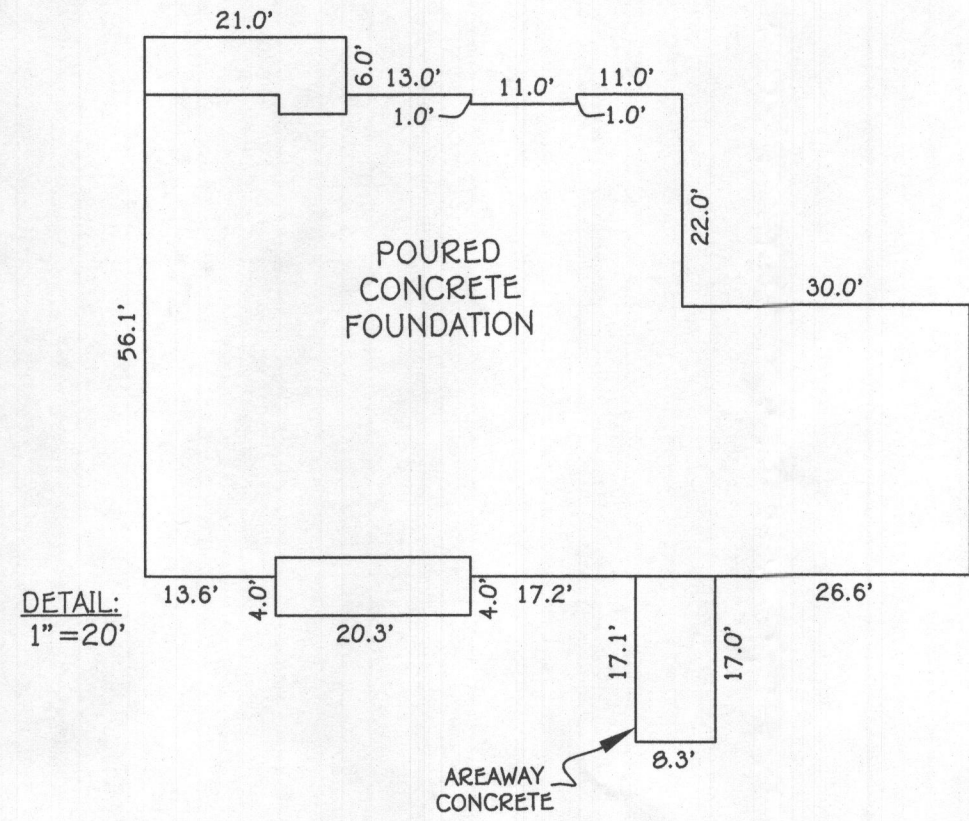
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GENERAL NOTES:

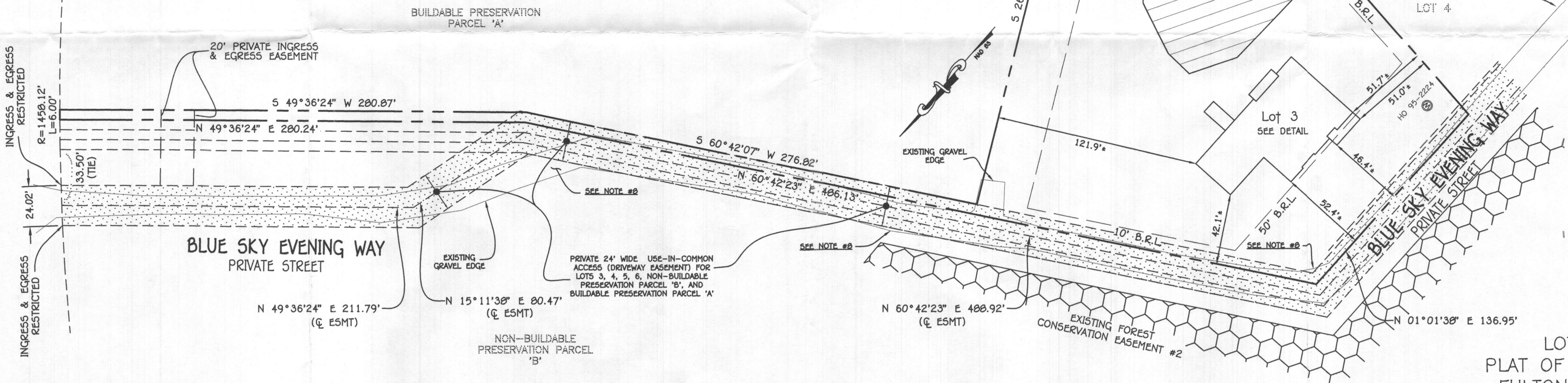
- 1) THIS LOCATION DRAWING IS PREPARED FOR THE BENEFIT OF THE CLIENT SIGNING THE HOUSE LOCATION SURVEY APPROVAL FORM INsofar AS IT IS REQUIRED BY A LENDER OR TITLE INSURANCE COMPANY OR ITS AGENTS IN CONNECTION WITH THE CONTEMPLATED TRANSFER, FINANCING OR REFINANCING OF THE PROPERTY SHOWN HEREON. UNLESS 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. 24027C01400 EFFECTIVE 11/6/2013.
- 3) THE OFFSETS FROM BUILDING LINE TO PROPERTY LINE AS SHOWN ON THE PLAT HEREON ARE TO AN ACCURACY OF PLUS OR MINUS 0.5' (+)
- 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-95-2224 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 10/04/2020.
- 7) BUILDING PERMIT #B-18004038
- 8) EXISTING EDGE OF DRIVEWAY APPEARS TO BE OUTSIDE THE USE-IN-COMMON DRIVEWAY EASEMENT.

Legend

- EXISTING FOREST CONSERVATION EASEMENT
- PRIVATE SEPTIC AREA
- PRIVATE 24' WIDE USE-IN-COMMON ACCESS (DRIVEWAY EASEMENT) FOR LOTS 3, 4, 5, 6, NON-BUILDABLE PRESERVATION PARCEL 'B', AND BUILDABLE PRESERVATION PARCEL 'A'



SCAGGSVILLE ROAD - MD ROUTE 216
(PUBLIC ROAD - MINOR ARTERIAL - 80' R/W)



10/15/19 - wall check approved u.o.

LOT 3
PLAT OF REVISION
FULTON WOODS
LOTS 3 THRU 6
BUILDABLE PRESERVATION PARCEL "A"
& NON-BUILDABLE PRESERVATION "B"
PLAT NOS. "22069 THRU 22071"
PLATS NOS. "23204 THRU 23206"
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
(410) 461 - 2995

#12251 BLUE SKY EVENING WAY
B.R.L. BUILDING RESTRICTION LINE
TOP OF FOUNDATION ELEVATION = 452.5'

Mark L. Hixel
PROPERTY LINE SURVEYOR
REG. #339

10/08/19
DATE

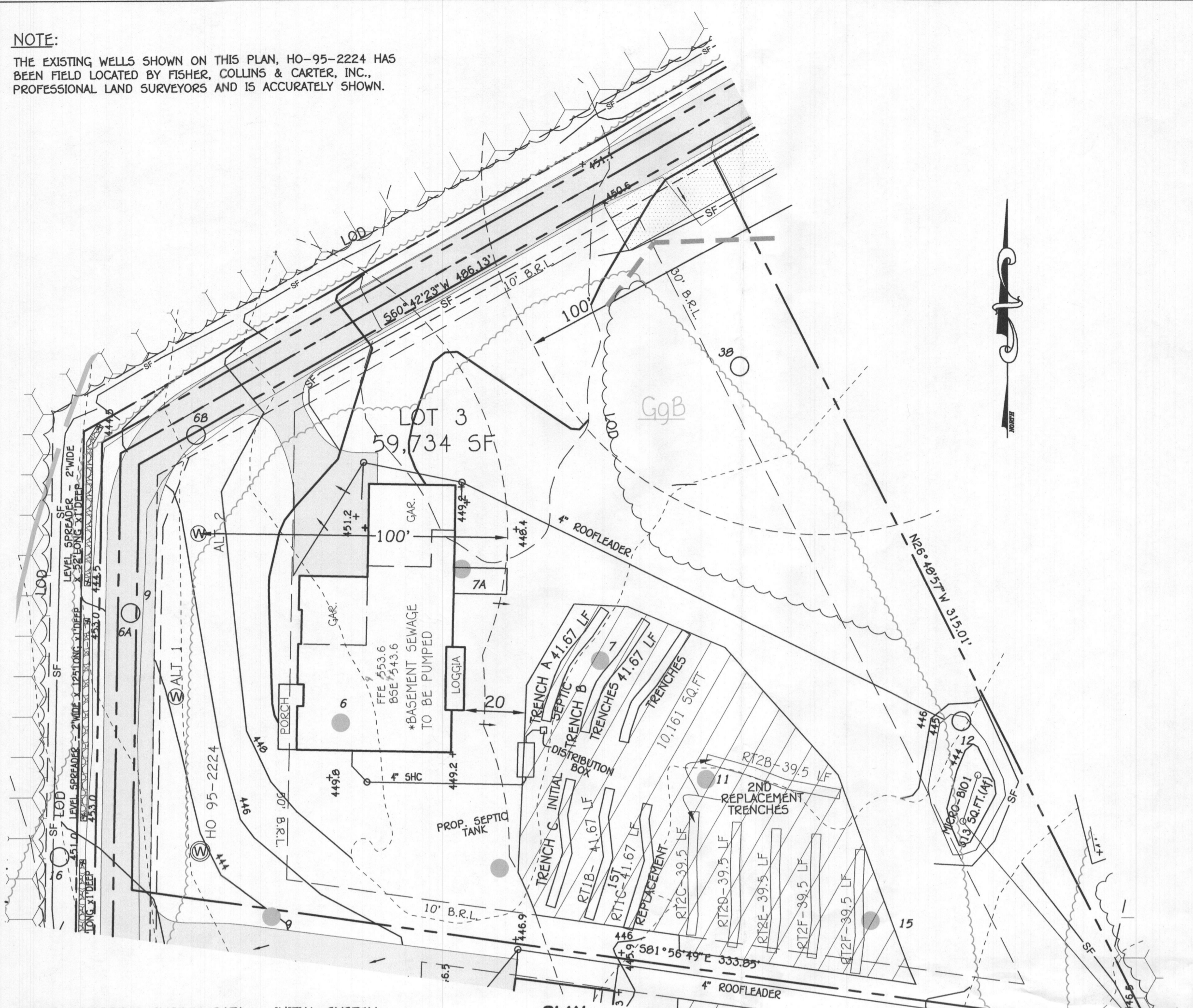
HOUSE LOCATION DRAWING

FOUNDATION LOCATION: 5/2/19
FINAL LOCATION:
BOUNDARY SURVEY:

SCALE: 1"=50'
DATE: 5/13/19
DRAWN BY: MD
CHECKED BY: MLR
PROJECT No.: 18025-3001

I:\2018\18025\dwg\House Locations\18025-3001 Lot 3 Location.dwg Layout1 11

NOTE:
THE EXISTING WELLS SHOWN ON THIS PLAN, HO-95-2224 HAS BEEN FIELD LOCATED BY FISHER, COLLINS & CARTER, INC., PROFESSIONAL LAND SURVEYORS AND IS ACCURATELY SHOWN.

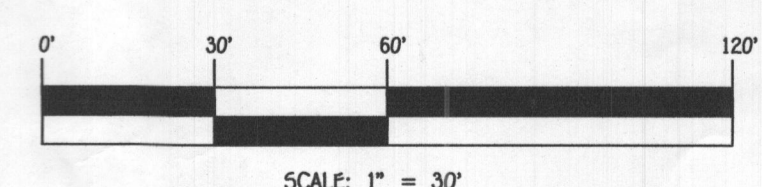


SEWAGE DISPOSAL SYSTEM DATA - INITIAL SYSTEM
4 BEDROOMS
LOADING RATE = 4 BEDROOMS X 150 GPD/BEDROOM = 600 GPD
APPLICATION RATE = 0.8
EFFECTIVE SIDEWALL BEGINS AT 5 FEET
TRENCH DEPTH = 8 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 3 FEET
5F OF DRAINFIELD = 600 GPD / 0.8 = 750 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = $(W+2)/(W+1+2D) = (3+2)/(3+1+(2*3)) = 0.50$
TRENCH LENGTH = 750 SF x 0.50 / 3 = 125 FEET
(3 TRENCHES AT 41.67)
TRENCH SPACING = 2D+W = ((2*3) + 3) = 9' USE 10'

SEWAGE DISPOSAL SYSTEM DATA - REPLACEMENT SYSTEM
4 BEDROOMS
LOADING RATE = 4 BEDROOMS X 150 GPD/BEDROOM = 600 GPD
APPLICATION RATE = 0.8
EFFECTIVE SIDEWALL BEGINS AT 5 FEET
TRENCH DEPTH = 8 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 3 FEET
5F OF DRAINFIELD = 600 GPD / 0.8 = 750 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = $(W+2)/(W+1+2D) = (3+2)/(3+1+(2*3)) = 0.50$
TRENCH LENGTH = 750 SF x 0.50 / 3 = 125 FEET
(3 TRENCHES AT 41.67)
TRENCH SPACING = 2D+W = ((2*3) + 3) = 9' USE 10'

SEWAGE DISPOSAL SYSTEM DATA - 2nd REPLACEMENT SYSTEM
4 BEDROOMS
LOADING RATE = 4 BEDROOMS X 150 GPD/BEDROOM = 600 GPD
APPLICATION RATE = 0.6
EFFECTIVE SIDEWALL BEGINS AT 5.5 FEET
TRENCH DEPTH = 7 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 1.5 FEET
5F OF DRAINFIELD = 600 GPD / 0.6 = 1,000 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = $(W+2)/(W+1+2D) = (3+2)/(3+1+(2*1.5)) = 0.71$
TRENCH LENGTH = 1,000 SF x 0.71 = 710 FEET / 3 = 236.67 FEET
(6 TRENCHES AT 39.5)
TRENCH SPACING = 2D+W = ((2*1.5) + 3) = 6' USE 10'

FFE 553.6
BSE 443.6
INV. OUT OF HOUSE = 440.31
PROP. GROUND AT CLEANOUT = 449.06
INV. INTO CLEANOUT = 447.96
EX. GROUND AT SEPTIC TANK = 440.5
COVER OVER TANK = 6"
TOP OF SEPTIC TANK = 447.9
INV. INTO SEPTIC TANK = 446.9
INV. OUT OF SEPTIC TANK = 446.65
EX. GROUND AT DISTRIBUTION BOX = 440.2
INV. INTO DISTRIBUTION BOX = 446.5
INV. OUT OF DISTRIBUTION BOX = 446.4
* BASEMENT SEWAGE TO BE PUMPED



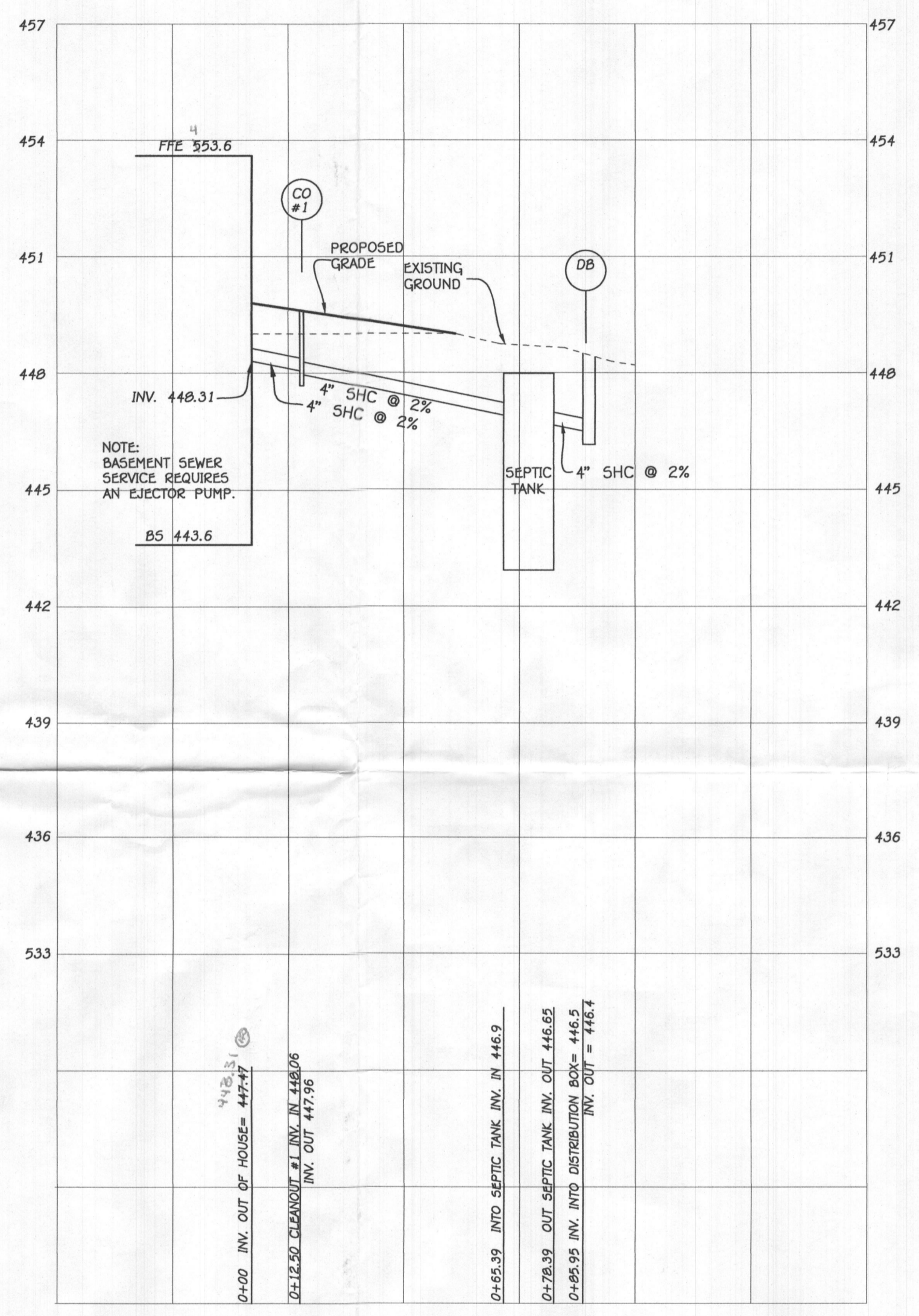
PROFESSIONAL CERTIFICATION

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. 30306, EXPIRATION DATE: 01/12/2020.
Signature of Professional Engineer DATE: 10/9/19



FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALDWIN NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
(410) 461-2295

OWNER / DEVELOPER
8HBC 6030 DAYBREAK CIRCLE
SUITE 150-103
CLARKSVILLE, MARYLAND 21029
443-310-1553

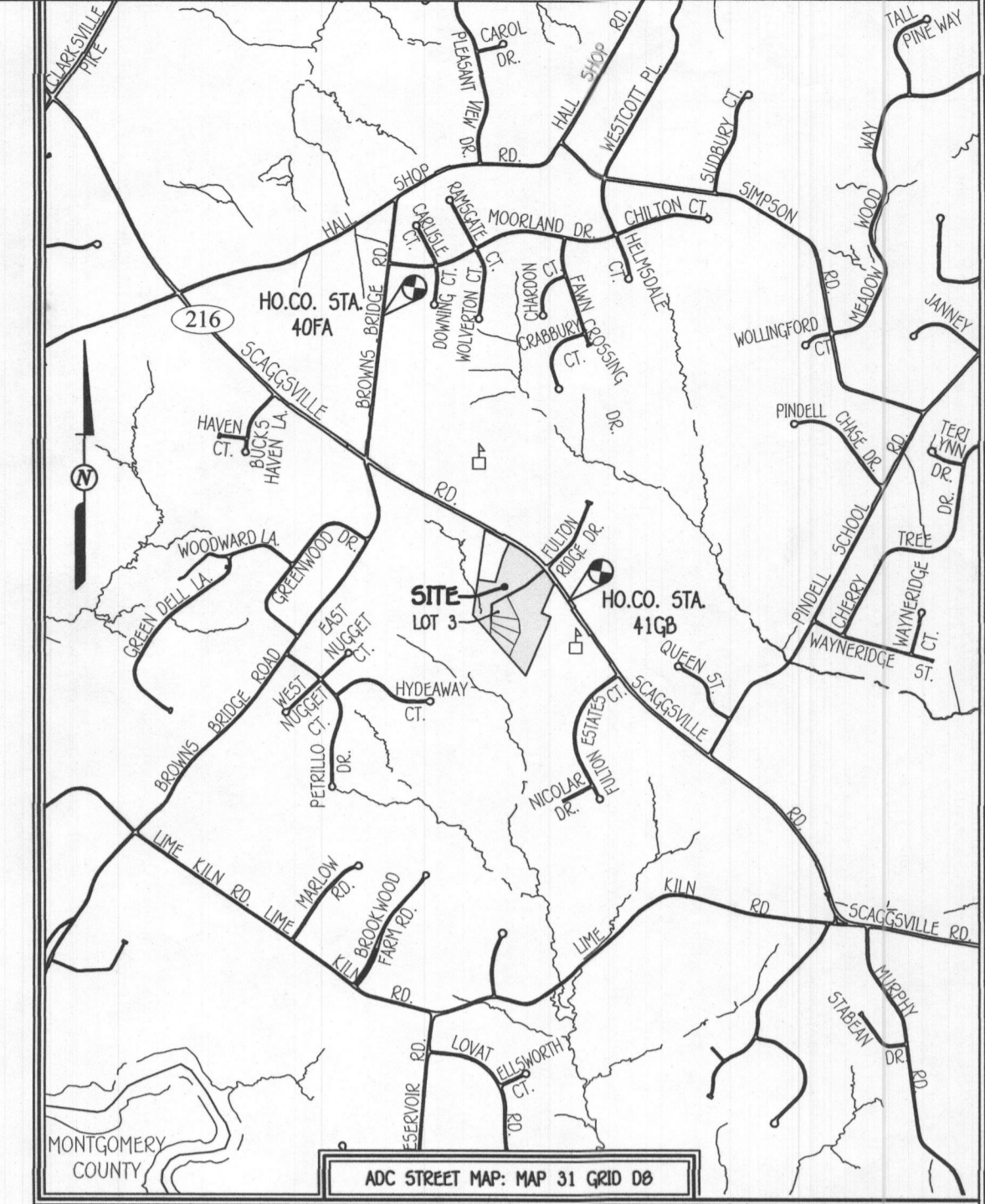


SEPTIC PROFILE
SCALE: 1" = 30'

| TRENCH | GROUND ELEV. | TOP OF STONE ELEV. | PIPE INVERT ELEV. | DEPTH TO STONE FROM GROUND, STONE (FT) | DEPTH OF TRENCH, ELEV. | BOTTOM OF TRENCH, ELEV. | EFFECTIVE DEPTH STARTS AT | EFFECTIVE DEPTH (D) | WIDTH OF TRENCHES (W) | TRENCH SPACING |
|--------|--------------|--------------------|-------------------|--|------------------------|-------------------------|---------------------------|---------------------|-----------------------|----------------|
| A | 440.2 | 446.7 | 446.3 | 1.5' | 6.5' | 440.2 | 5.0' | 3.0' | 3.0' | 10' |
| B | 447.5 | 446.0 | 445.6 | 1.5' | 6.5' | 439.5 | 5.0' | 3.0' | 3.0' | 10' |
| C | 447.5 | 446.0 | 445.6 | 1.5' | 6.5' | 439.5 | 5.0' | 3.0' | 3.0' | 10' |

LEGEND

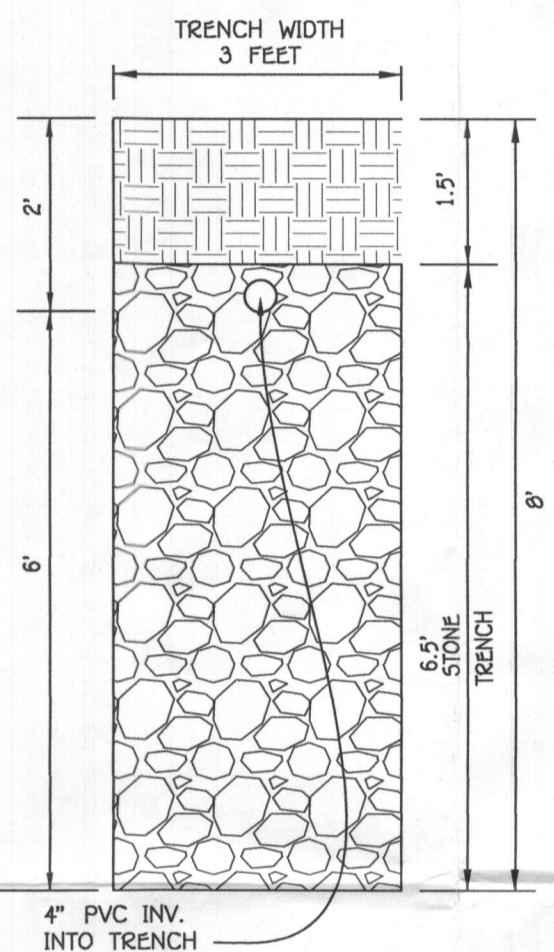
- - - - - EXISTING 2' CONTOURS
- - - - - EXISTING 10' CONTOURS
- - - - - EXISTING TREE LINE
- - - - - SOIL LINES AND TYPES
- ⊙ DENOTES EXISTING WELL
- ⊙ DENOTES PROPOSED TREELINE
- ⊠ DENOTES 1500 Sq.Ft. ALTERNATE BOX
- ⊙ 15 PASSED PERC HOLES
- ⊙ 30 FAILED PERC HOLES



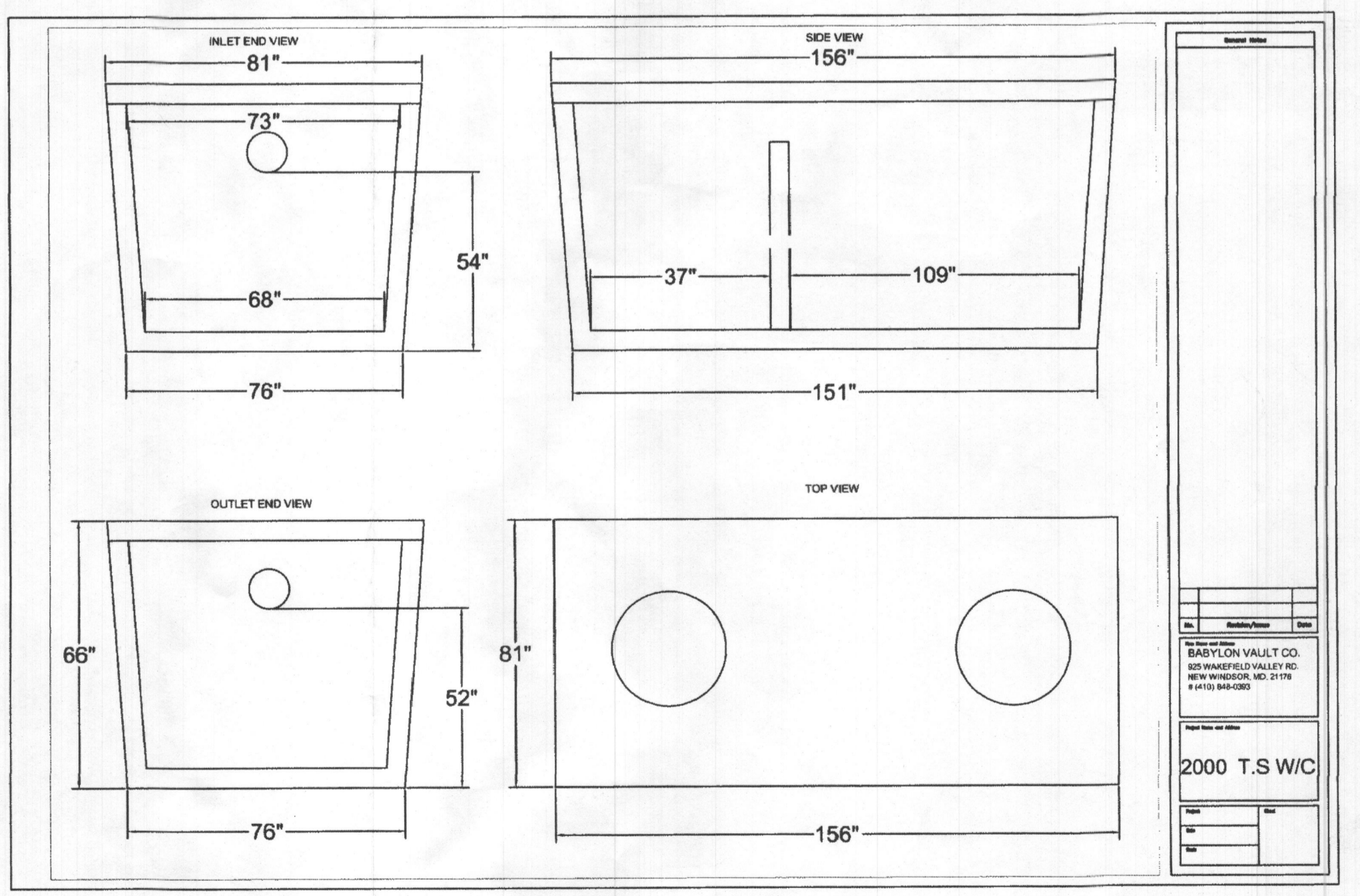
VICINITY MAP
SCALE: 1" = 2,000'

GENERAL NOTES:

1. THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED SEWERAGE EASEMENT SHALL NOT BE NECESSARY.
2. ADJUSTMENTS TO SEPTIC EASEMENT AREA IS NOT PERMITTED WITHOUT ADDITIONAL TESTING.
3. THE LOT SHOWN HEREON COMPLEES WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
4. ALL WELLS AND SEPTIC SYSTEMS WITHIN 100 FEET OF THE PROPERTY BOUNDARIES AND 200 FEET DOWN GRADIENT OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.
5. BOUNDARY SHOWN HEREON IS BASED ON BOUNDARY SURVEY CONDUCTED BY JACK C. MELLEMA SR. INC. IN MARCH 2005.
6. TOPOGRAPHY SHOWN HEREON IS FIELD RUN SURVEY CONDUCTED BY FISHER, COLLINS & CARTER, INC. IN AUGUST 2010 AND SUPPLEMENTED WITH HOWARD COUNTY GIS TOPOGRAPHY.
7. DEED REFERENCE: LIBER 13069, FOLIO 298
8. PLAT REFERENCE: 23204 THRU 23226.
9. SUBJECT PROPERTY ZONED: RR-DEO
10. TOTAL AREA OF PROPERTY: 59,734 SQ.FT.
11. WETLANDS, STREAMS, THESE BUFFERS, FLOODPLAIN, AND STEEP SLOPES DO NOT EXIST ON THIS LOT.
12. SOILS SHOWN HEREON ARE BASED ON NRCS WEB SOIL SURVEY AND HOWARD COUNTY SOILS MAP 23.
13. 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.
14. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET.
15. LOTS 3 AND 6 ON THIS PLAN HAVE A LIMITATION OF 4 BEDROOMS UNLESS AN EXHIBIT PRESENTED BY A CERTIFIED PROFESSIONAL DEMONSTRATES THAT THE SEPTIC EASEMENT WILL ACCOMMODATE 5 DRAINFIELDS FOR A RESIDENCE HAVING MORE THAN 4 BEDROOMS.



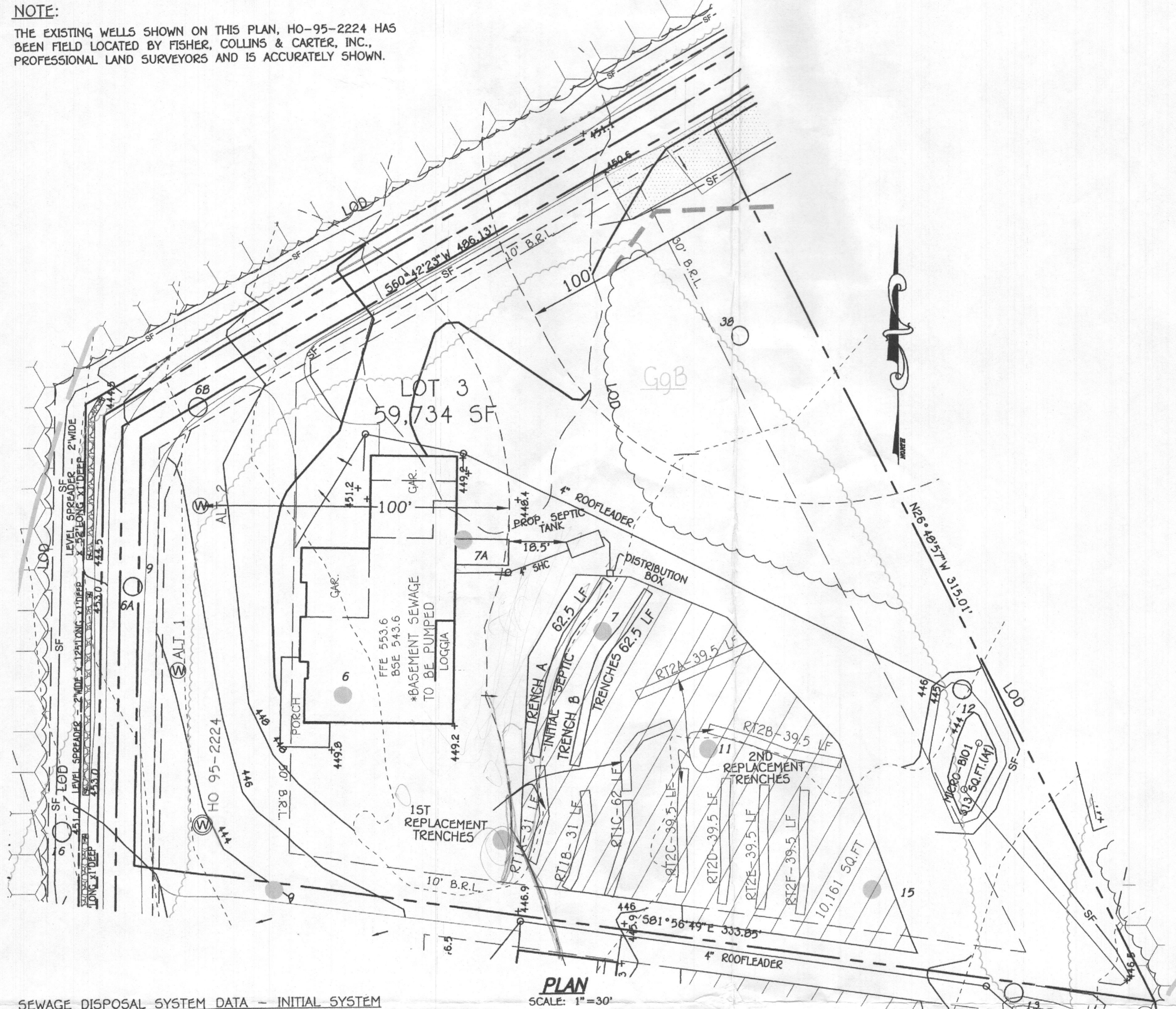
INITIAL TRENCH DETAIL
SCALE: 1" = 2'



SEPTIC PLAN
FULTON WOODS
LOT 3

Approved Septic System Plan
Howard County Health Department
Hank Oswalt 10/15/19
Signature Date
2000 T.S.W.C.
TAX MAP No. 41 GRID No. 13 PARCEL No. 199
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: OCTOBER, 2019

NOTE:
THE EXISTING WELLS SHOWN ON THIS PLAN, HO-95-2224 HAS BEEN FIELD LOCATED BY FISHER, COLLINS & CARTER, INC., PROFESSIONAL LAND SURVEYORS AND IS ACCURATELY SHOWN.



SEWAGE DISPOSAL SYSTEM DATA - INITIAL SYSTEM

4 BEDROOMS
LOADING RATE = 4 BEDROOMS X 150 GPD/BEDROOM = 600 GPD
APPLICATION RATE = 0.8
EFFECTIVE SIDEWALL BEGINS AT 5 FEET
TRENCH DEPTH = 8 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 3 FEET
SF OF DRAINFIELD = 600 GPD / 0.8 = 750 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = $(W+2)/(W+1+2D) = (3+2)/(3+1+(2x3)) = 0.50$
TRENCH LENGTH = 750 SF x 0.50 / 3 = 125 FEET
TRENCH SPACING = 2D+W = ((2x3) + 3) = 9' USE 10'

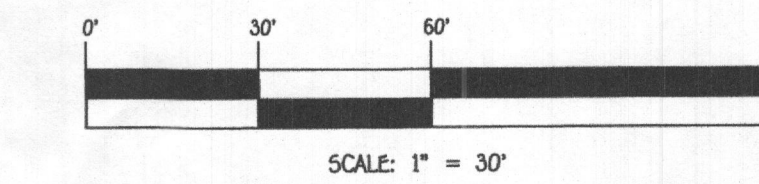
SEWAGE DISPOSAL SYSTEM DATA - REPLACEMENT SYSTEM

4 BEDROOMS
LOADING RATE = 4 BEDROOMS X 150 GPD/BEDROOM = 600 GPD
APPLICATION RATE = 0.8
EFFECTIVE SIDEWALL BEGINS AT 5 FEET
TRENCH DEPTH = 9 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 3 FEET
SF OF DRAINFIELD = 600 GPD / 0.8 = 750 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = $(W+2)/(W+1+2D) = (3+2)/(3+1+(2x3)) = 0.50$
TRENCH LENGTH = 750 SF x 0.50 / 3 = 125 FEET
TRENCH SPACING = 2D+W = ((2x3) + 3) = 9' USE 10'

SEWAGE DISPOSAL SYSTEM DATA - 2nd REPLACEMENT SYSTEM

4 BEDROOMS
LOADING RATE = 4 BEDROOMS X 150 GPD/BEDROOM = 600 GPD
APPLICATION RATE = 0.6
EFFECTIVE SIDEWALL BEGINS AT 5.5 FEET
TRENCH DEPTH = 7 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 1.5 FEET
SF OF DRAINFIELD = 600 GPD / 0.6 = 1,000 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = $(W+2)/(W+1+2D) = (3+2)/(3+1+(2x1.5)) = 0.71$
TRENCH LENGTH = 1,000 SF x 0.71 / 3 = 236.67 FEET
TRENCH SPACING = 2D+W = ((2x1.5) + 3) = 6' USE 10'

FFE 553.6
BSE 443.6
INV. OUT OF HOUSE = 447.75
PROP. GROUND AT CLEANOUT = 449.1
INV. INTO CLEANOUT = 447.53
INV. OUT OF CLEANOUT = 447.43
EX. GROUND AT SEPTIC TANK = 448.57
COVER OVER TANK = 6 INCHES
TOP OF SEPTIC TANK = 448.0
INV. INTO SEPTIC TANK = 447.0
INV. OUT OF SEPTIC TANK = 446.75
EX. GROUND AT DISTRIBUTION BOX = 448.2
INV. INTO DISTRIBUTION BOX = 446.5
INV. OUT OF DISTRIBUTION BOX = 446.4
* BASEMENT SEWAGE TO BE PUMPED



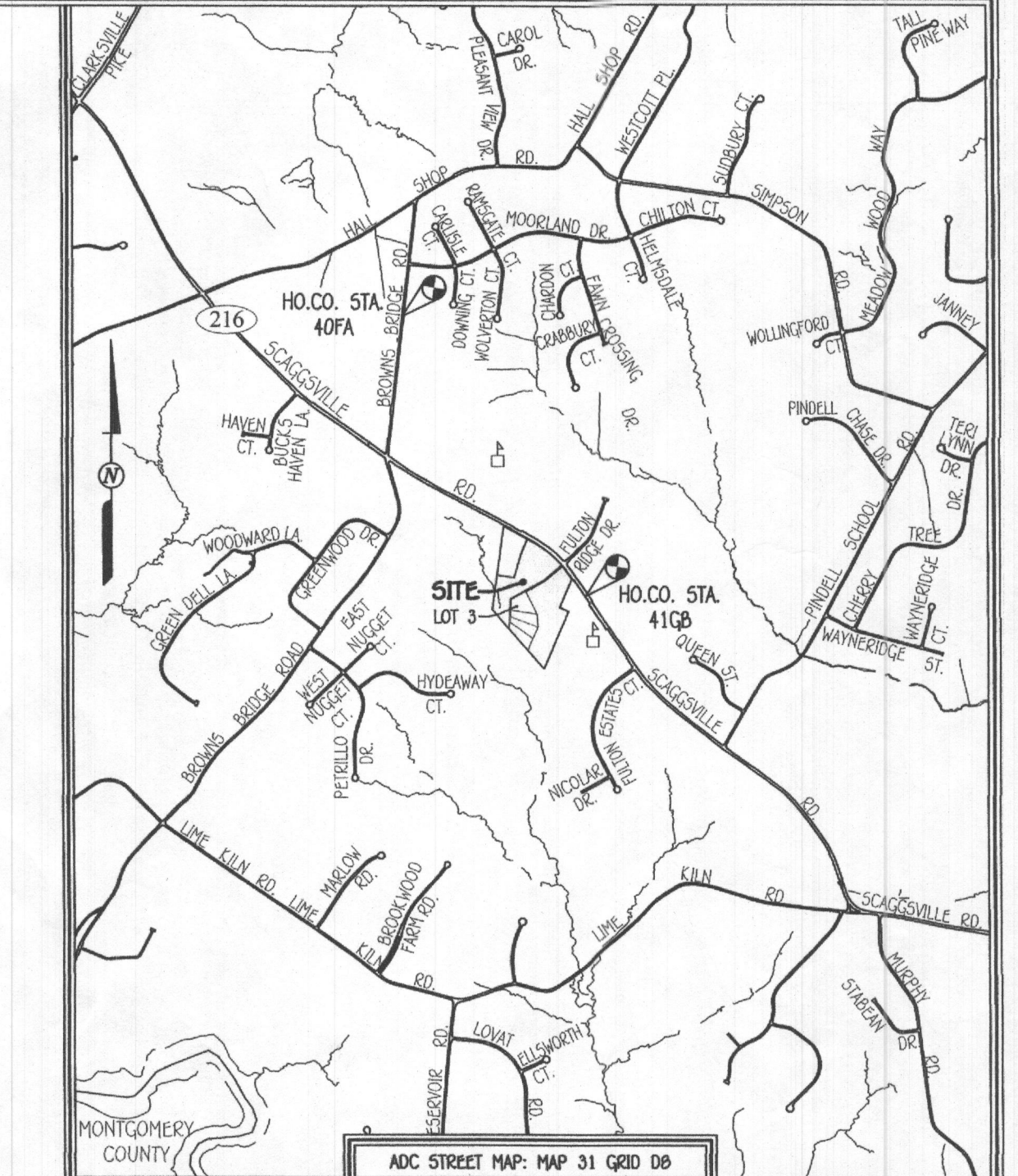
PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 38386, EXPIRATION DATE: 01/12/2020.
Signature 9/26/19
DATE

OWNER / DEVELOPER
BHBC 6030 DAYBREAK CIRCLE
SUITE 150-103
CLARKSVILLE, MARYLAND 21029
443-310-1553

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTONAL SQUARE OFFICE PARK - 10872 BALTIMORE NATIONAL PIKE
ELKOTT CITY, MARYLAND 21042
(410) 461-2895

LEGEND

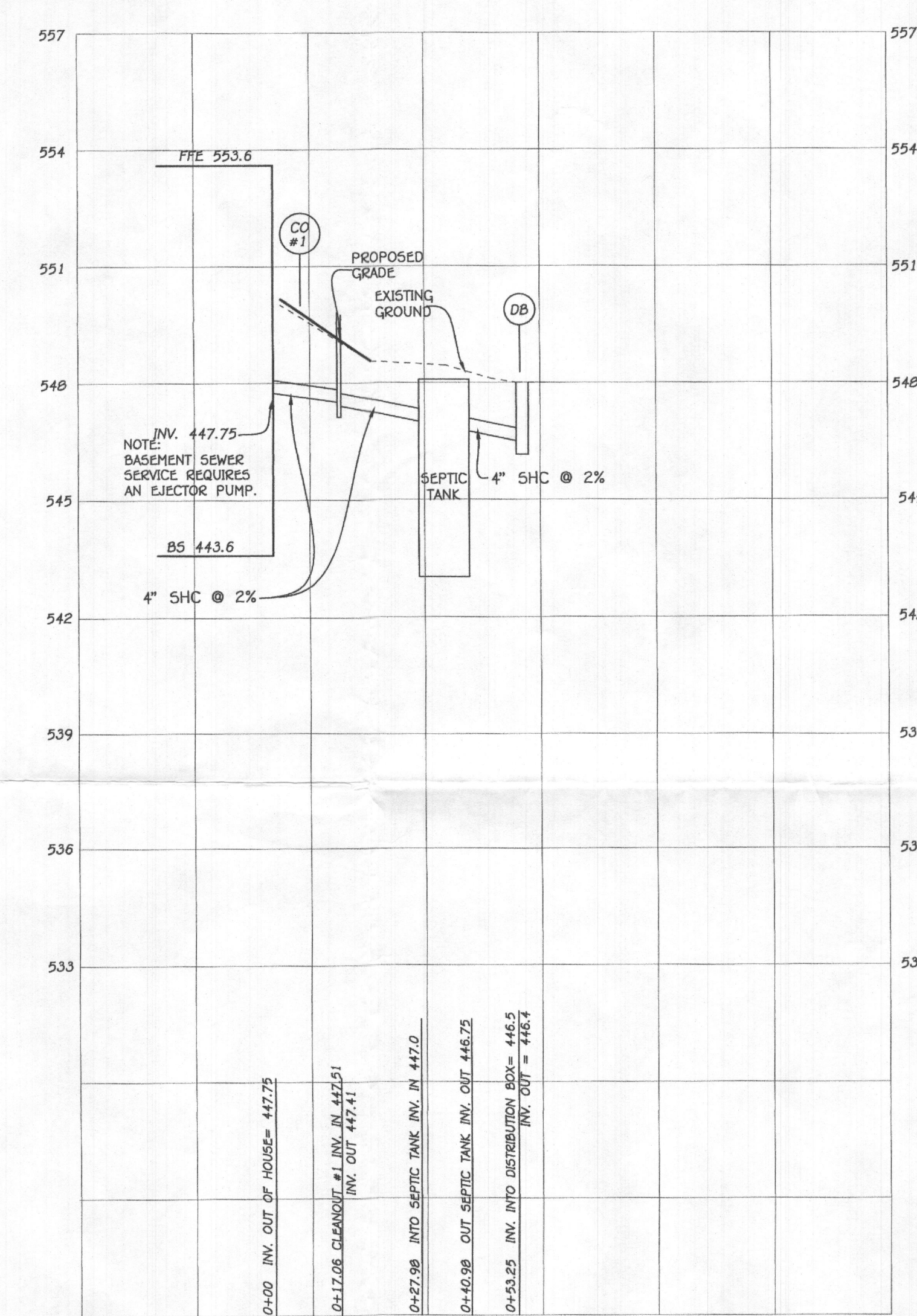
- - - - - EXISTING 2' CONTOURS
- - - - - EXISTING 10' CONTOURS
- ~ ~ ~ ~ ~ EXISTING TREE LINE
- SOIL LINES AND TYPES
- ⊙ DENOTES EXISTING WELL
- ⊕ DENOTES PROPOSED TREELINE
- DENOTES 1500 Sq.Ft. ALTERNATE BOX
- 15 PASSED PERC HOLES
- 30 FAILED PERC HOLES



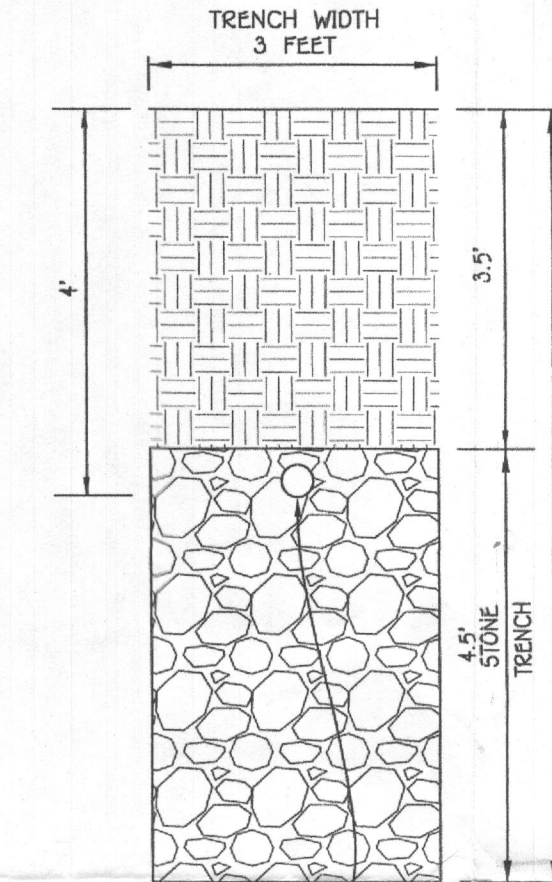
VICINITY MAP
SCALE: 1" = 2,000'

GENERAL NOTES:

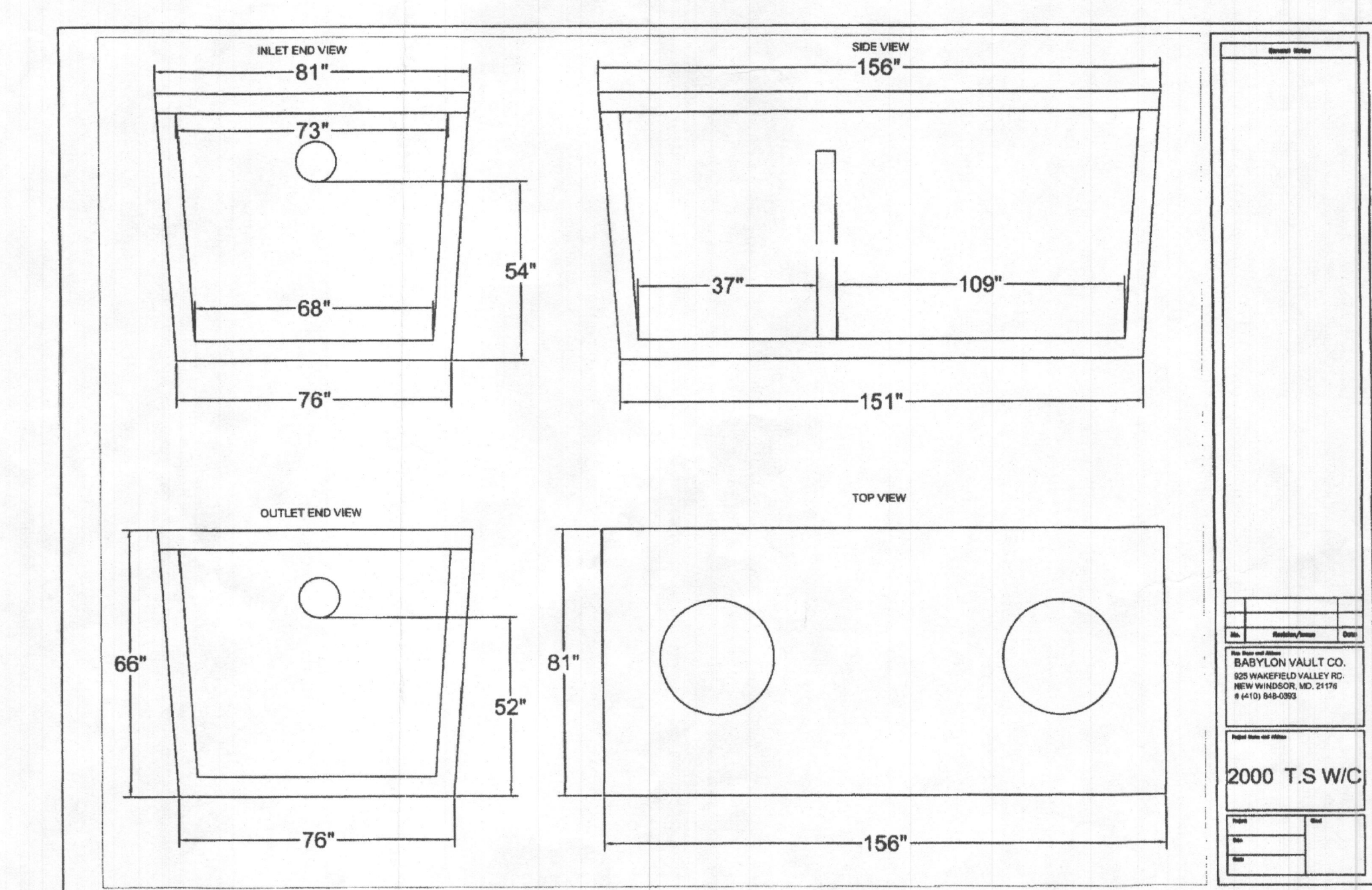
1. THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED SEWERAGE EASEMENT SHALL NOT BE NECESSARY.
2. ADJUSTMENTS TO SEPTIC EASEMENT AREA IS NOT PERMITTED WITHOUT ADDITIONAL TESTING.
3. THE LOT SHOWN HEREON COMPLIES WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
4. ALL WELLS AND SEPTIC SYSTEMS WITHIN 100 FEET OF THE PROPERTY BOUNDARIES AND 200 FEET DOWN GRADIENT OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.
5. BOUNDARY SHOWN HEREON IS BASED ON BOUNDARY SURVEY CONDUCTED BY JACK C. HELLEMA SR. INC. IN MARCH 2009.
6. TOPOGRAPHY SHOWN HEREON IS FIELD RUN SURVEY CONDUCTED BY FISHER, COLLINS & CARTER, INC. IN AUGUST 2018 AND SUPPLEMENTED WITH HOWARD COUNTY QS TOPOGRAPHY.
7. DEED REFERENCE LIBER 13669, FOLD 298
8. PLAT REFERENCE: 23204 THRU 23206.
9. SUBJECT PROPERTY ZONED: RR-DEO
10. TOTAL AREA OF PROPERTY: 59,734 SQ.FT.
11. WETLANDS, STREAMS, TREE BUFFERS, FLOODPLAIN, AND STEEP SLOPES DO NOT EXIST ON THIS LOT.
12. SOILS SHOWN HEREON ARE BASED ON NRCS WEB SOIL SURVEY AND HOWARD COUNTY SOILS MAP 23.
13. 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.
14. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET.
15. LOTS 3 AND 6 ON THIS PLAN HAVE A LIMITATION OF 4 BEDROOMS UNLESS AN EXHIBIT PRESENTED BY A CERTIFIED PROFESSIONAL DEMONSTRATES THAT THE SEPTIC EASEMENT WILL ACCOMMODATE 3 DRAINFIELDS FOR A RESIDENCE HAVING MORE THAN 4 BEDROOMS.



SEPTIC PROFILE
SCALE: 1" = 30'



INITIAL TRENCH DETAIL
SCALE: 1" = 2'



SEPTIC PLAN
FULTON WOODS
LOT 3

Approved Septic System Plan
Howard County Health Department
Signature 10/2/19
Date
2000 T.S/W/C
TAX MAP No. 41 GRID No. 13 PARCEL No. 199

TRENCH DESIGN

| TRENCH | GROUND ELEV. | TOP OF STONE ELEV. | PIPE INVERT ELEV. | DEPTH TO STONE FROM GROUND | DEPTH OF TRENCH (FT) | BOTTOM OF TRENCH ELEV. | EFFECTIVE DEPTH STARTS AT | EFFECTIVE DEPTH (D) | WIDTH OF TRENCHES (W) | TRENCH SPACING |
|--------|--------------|--------------------|-------------------|----------------------------|----------------------|------------------------|---------------------------|---------------------|-----------------------|----------------|
| A | 448.2 | 446.7 | 446.3 | 1.5' | 6.5' | 440.2 | 5.0' | 3.0' | 3.0' | 10' |
| B | 447.5 | 446.0 | 445.6 | 1.5' | 6.5' | 439.5 | 5.0' | 3.0' | 3.0' | 10' |

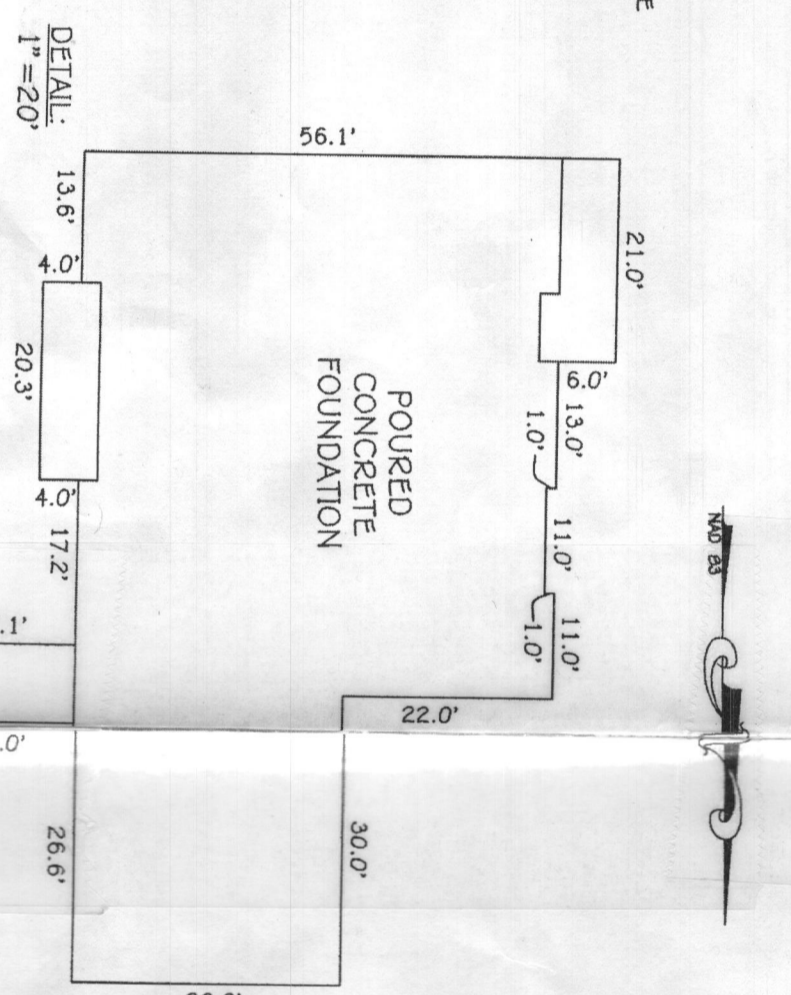
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: SEPTEMBER, 2019

GENERAL NOTES:

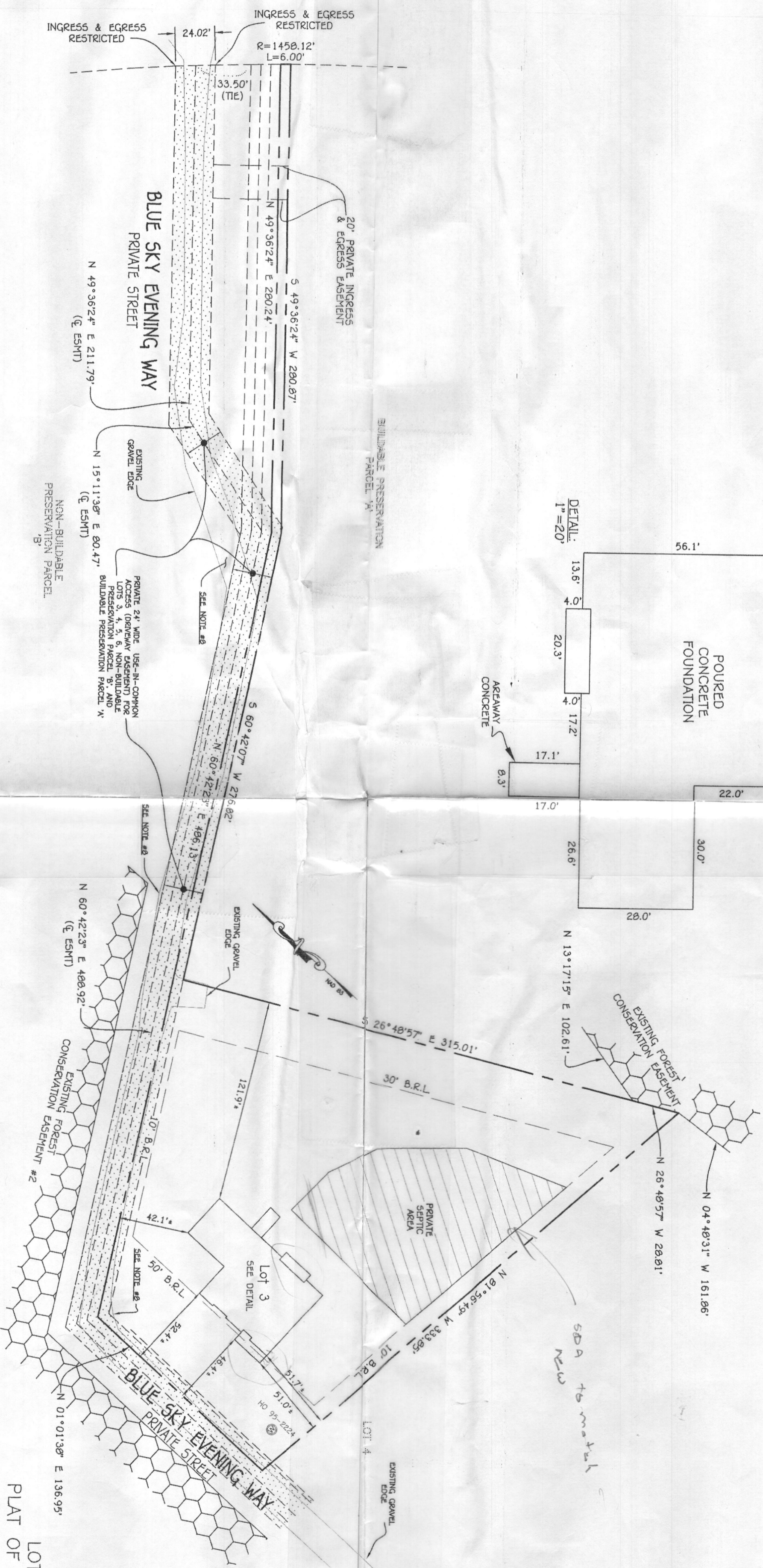
- 1) THIS LOCATION DRAWING IS PREPARED FOR THE BENEFIT OF THE CLIENT SIGNING THE HOUSE LOCATION SURVEY APPROVAL FORM INsofar AS IT IS REQUIRED BY A LENDER OR TITLE INSURANCE COMPANY OR ITS AGENTS IN CONNECTION WITH THE CONTINGENT TRANSFER, FINANCING OR REFUNDING OF THE PROPERTY SHOWN HEREON. UNLESS INDICATED 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. MAP OF HOWARD COUNTY, MARYLAND, COMMUNITY PANEL No. 24027201401, EFFECTIVE 11/6/2013.
- 2) THE OFFSETS FROM BUILDING LINE TO PROPERTY LINE AS SHOWN ON THE PLAN HEREON ARE TO AN ACCURACY OF PLUS OR MINUS 0.5' (1').
- 3) NO TITLE REPORT FURNISHED. SUBJECT TO ALL EASEMENTS, RIGHTS OF WAY AND CONDITIONS OF RECORD.
- 4) THE EXISTING WELLS(S) SHOWN ON THIS PLAN (IDENTIFIED WITH THE ATTACHED WELL TAG NUMBER HO-95-2224 HAS BEEN FIELD LOCATED) BY FISHER, COLLINS AND CARTER, INC. PROFESSIONAL LAND SURVEYORS AND IS ACCURATELY SHOWN.
- 5) PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 339, EXPIRATION DATE 10/04/2020.
- 6) BUILDING PERMIT #B-180024038
- 7) EXISTING EDGE OF DRIVEWAY APPEARS TO BE OUTSIDE THE USE-IN-COMMON DRIVEWAY EASEMENT.

Legend

- EXISTING FOREST CONSERVATION EASEMENT
- PRIVATE SEPTIC AREA
- PRIVATE 24' WIDE USE-IN-COMMON ACCESS (EASEMENT) FOR LOTS 3, 4, 5, 6, AND BUILDABLE PRESERVATION PARCEL 'B' AND BUILDABLE PRESERVATION PARCEL 'A'



SCAGGSVILLE ROAD - MD ROUTE 215
(PUBLIC ROAD - MINOR ARTERIAL - 80' R/W)



Old wall check

Old wall check

LOT 3
PLAT OF REVISION
FULTON WOODS
LOTS 3 THRU 6
BUILDABLE PRESERVATION PARCEL "A"
& NON-BUILDABLE PRESERVATION "B"
PLAT NOS. "22069 THRU 22071"
PLATS NOS. "23204 THRU 23206"
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

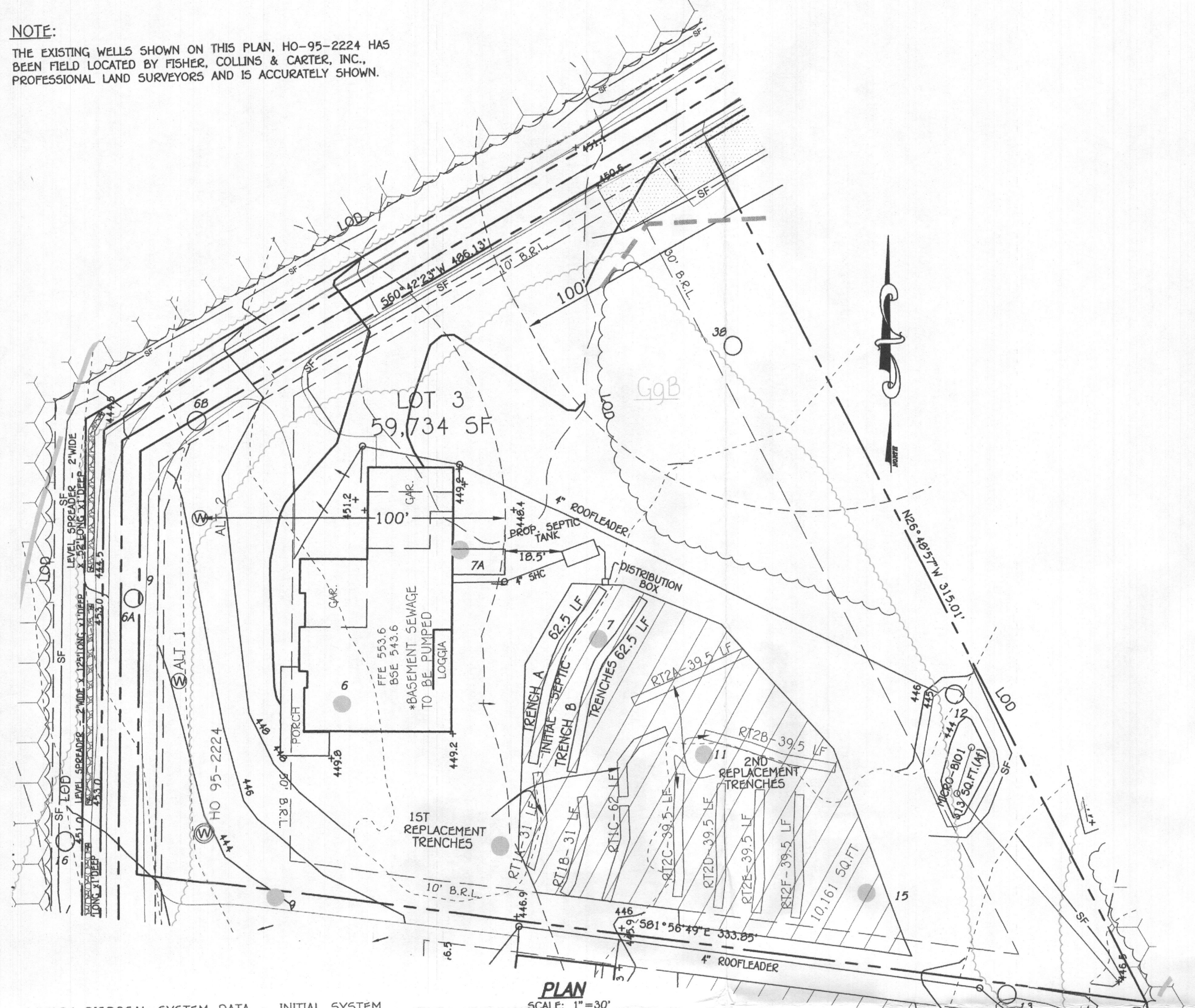
HOUSE LOCATION DRAWING

STATE OF MARYLAND
MARK CROSS
PROPERTY LINE SURVEYOR
No. 339
DATE: 5/13/19
SCALE: 1"=50'
FINAL LOCATION: 3/2/19
FOUNDATION LOCATION: 3/2/19
BOUNDARY SURVEY:
DRAWN BY: JAD
CHECKED BY: JLE
PROJECT No.: 18022-3001

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
10772 BATHING NATIONAL PKC
DUBLIN, VA 22029
(410) 451-2995

#12251 BLUE SKY EVENING WAY
B.R.L. BUILDING RESTRICTION LINE
TOP OF FOUNDATION ELEVATION = 452.5'

NOTE:
THE EXISTING WELLS SHOWN ON THIS PLAN, HO-95-2224 HAS BEEN FIELD LOCATED BY FISHER, COLLINS & CARTER, INC., PROFESSIONAL LAND SURVEYORS AND IS ACCURATELY SHOWN.

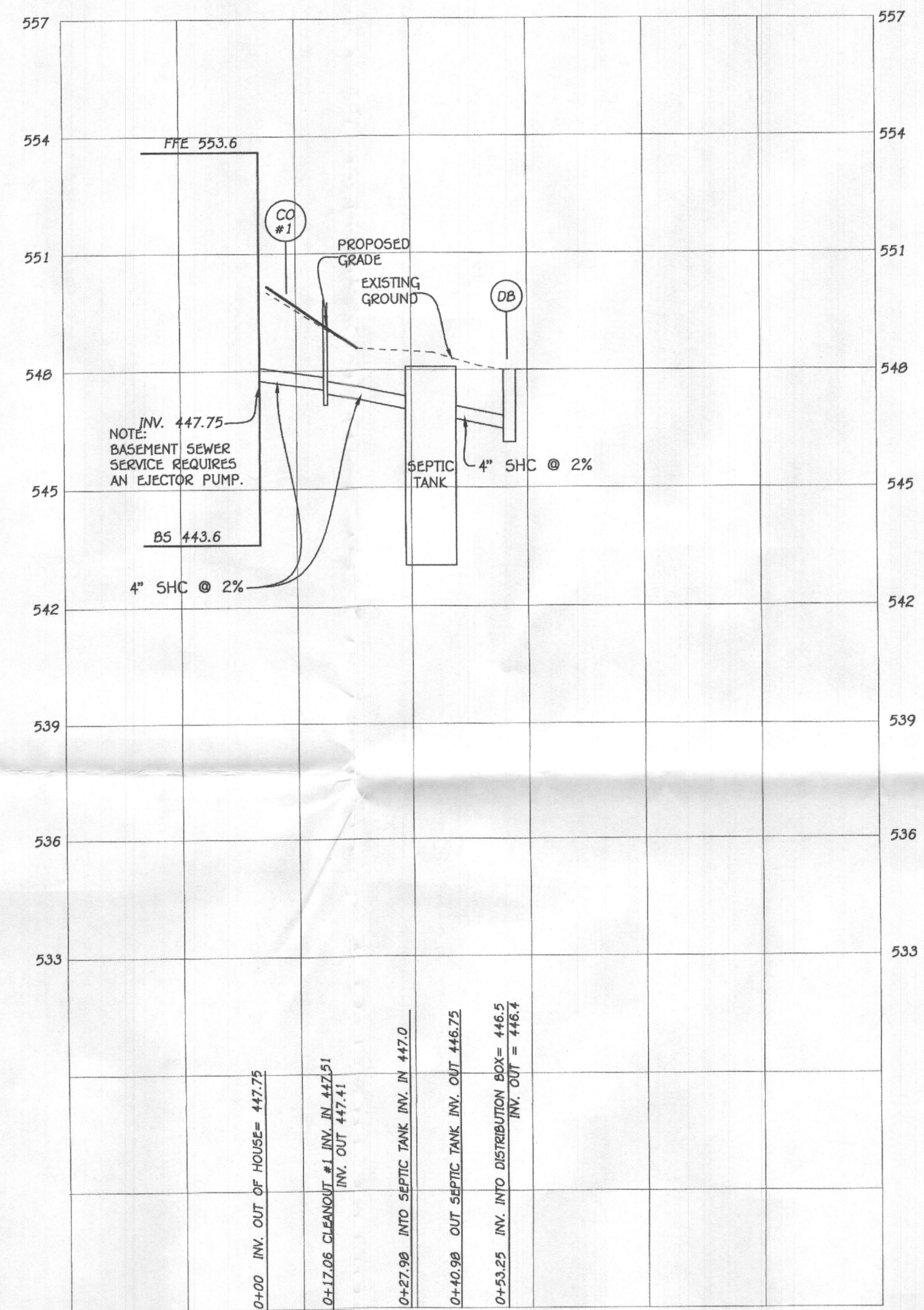


SEWAGE DISPOSAL SYSTEM DATA - INITIAL SYSTEM
4 BEDROOMS
LOADING RATE = 4 BEDROOMS X 150 GPD/BEDROOM = 600 GPD
APPLICATION RATE = 0.8
EFFECTIVE SIDEWALL BEGINS AT 5 FEET
TRENCH DEPTH = 8 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 3 FEET
SF OF DRAINFIELD = 600 GPD / 0.8 = 750 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = $(W+2)/(W+1+2D) = (3+2)/(3+1+(2 \times 3)) = 0.50$
TRENCH LENGTH = 750 SF x 0.50 / 3 = 125 FEET
TRENCH SPACING = 2D+W = ((2x3) + 3) = 9' USE 10'

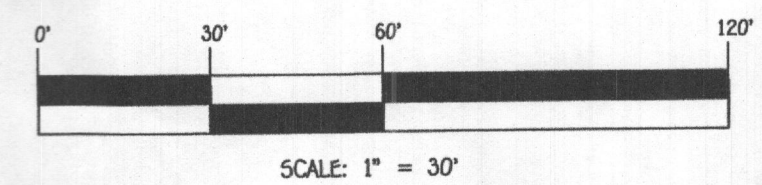
SEWAGE DISPOSAL SYSTEM DATA - REPLACEMENT SYSTEM
4 BEDROOMS
LOADING RATE = 4 BEDROOMS X 150 GPD/BEDROOM = 600 GPD
APPLICATION RATE = 0.8
EFFECTIVE SIDEWALL BEGINS AT 5 FEET
TRENCH DEPTH = 8 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 3 FEET
SF OF DRAINFIELD = 600 GPD / 0.8 = 750 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = $(W+2)/(W+1+2D) = (3+2)/(3+1+(2 \times 3)) = 0.50$
TRENCH LENGTH = 750 SF x 0.50 / 3 = 125 FEET
TRENCH SPACING = 2D+W = ((2x3) + 3) = 9' USE 10'

SEWAGE DISPOSAL SYSTEM DATA - 2nd REPLACEMENT SYSTEM
4 BEDROOMS
LOADING RATE = 4 BEDROOMS X 150 GPD/BEDROOM = 600 GPD
APPLICATION RATE = 0.6
EFFECTIVE SIDEWALL BEGINS AT 5.5 FEET
TRENCH DEPTH = 7 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 1.5 FEET
SF OF DRAINFIELD = 600 GPD / 0.6 = 1,000 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = $(W+2)/(W+1+2D) = (3+2)/(3+1+(2 \times 1.5)) = 0.71$
TRENCH LENGTH = 1,000 SF x 0.71 = 710 FEET / 3 = 236.67 FEET
TRENCH SPACING = 2D+W = ((2x1.5) + 3) = 6' USE 10'

FFE 553.6
BSE 443.6
INV. OUT OF HOUSE = 447.75
PROP. GROUND AT CLEANOUT = 449.1
INV. INTO CLEANOUT = 447.53
INV. OUT OF CLEANOUT = 447.43
EX. GROUND AT SEPTIC TANK = 448.57
COVER OVER TANK = 6 INCHES
TOP OF SEPTIC TANK = 448.0
INV. INTO SEPTIC TANK = 447.0
INV. OUT OF SEPTIC TANK = 446.75
EX. GROUND AT DISTRIBUTION BOX = 448.2
INV. INTO DISTRIBUTION BOX = 446.5
INV. OUT OF DISTRIBUTION BOX = 446.4
* BASEMENT SEWAGE TO BE PUMPED



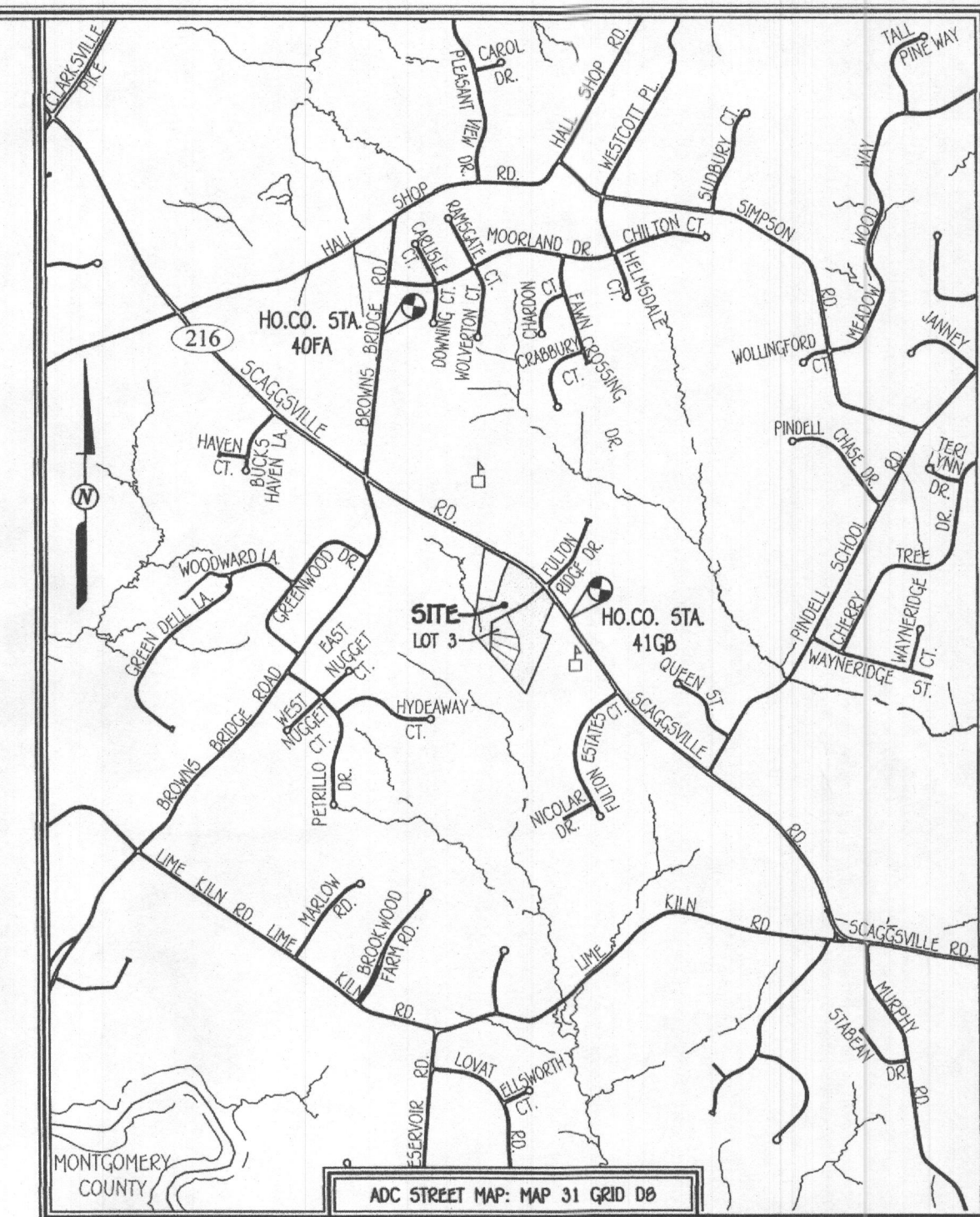
SEPTIC PROFILE
SCALE: 1" = 30'



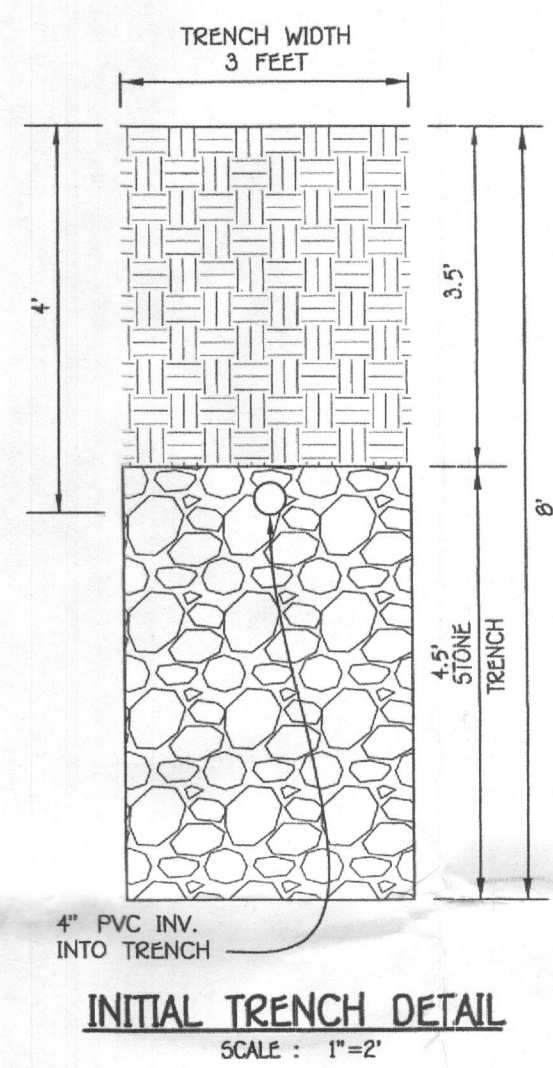
PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 36386, EXPIRATION DATE: 01/12/2020.
Stephen J. Smith 9/26/19
Signature Of Professional Engineer DATE

| TRENCH | GROUND ELEV. | TOP OF STONE ELEV. | PIPE INVERT ELEV. | DEPTH TO STONE FROM GROUND | DEPTH OF TRENCH (FT) | BOTTOM OF TRENCH ELEV. | EFFECTIVE DEPTH STARTS AT | EFFECTIVE DEPTH (D) | WIDTH OF TRENCHES (W) | TRENCH SPACING |
|--------|--------------|--------------------|-------------------|----------------------------|----------------------|------------------------|---------------------------|---------------------|-----------------------|----------------|
| A | 448.2 | 446.7 | 446.3 | 1.5' | 6.5' | 440.2 | 5.0' | 3.0' | 3.0' | 10' |
| B | 447.5 | 446.0 | 445.6 | 1.5' | 6.5' | 439.5 | 5.0' | 3.0' | 3.0' | 10' |

- LEGEND**
- EXISTING 2' CONTOURS
 - EXISTING 10' CONTOURS
 - EXISTING TREE LINE
 - SOIL LINES AND TYPES
 - ⊙ DENOTES EXISTING WELL
 - ⊙ DENOTES PROPOSED TRENCHLINE
 - DENOTES 1500 Sq.Ft. ALTERNATE BOX
 - 15 PASSED PERC HOLES
 - 30 FAILED PERC HOLES

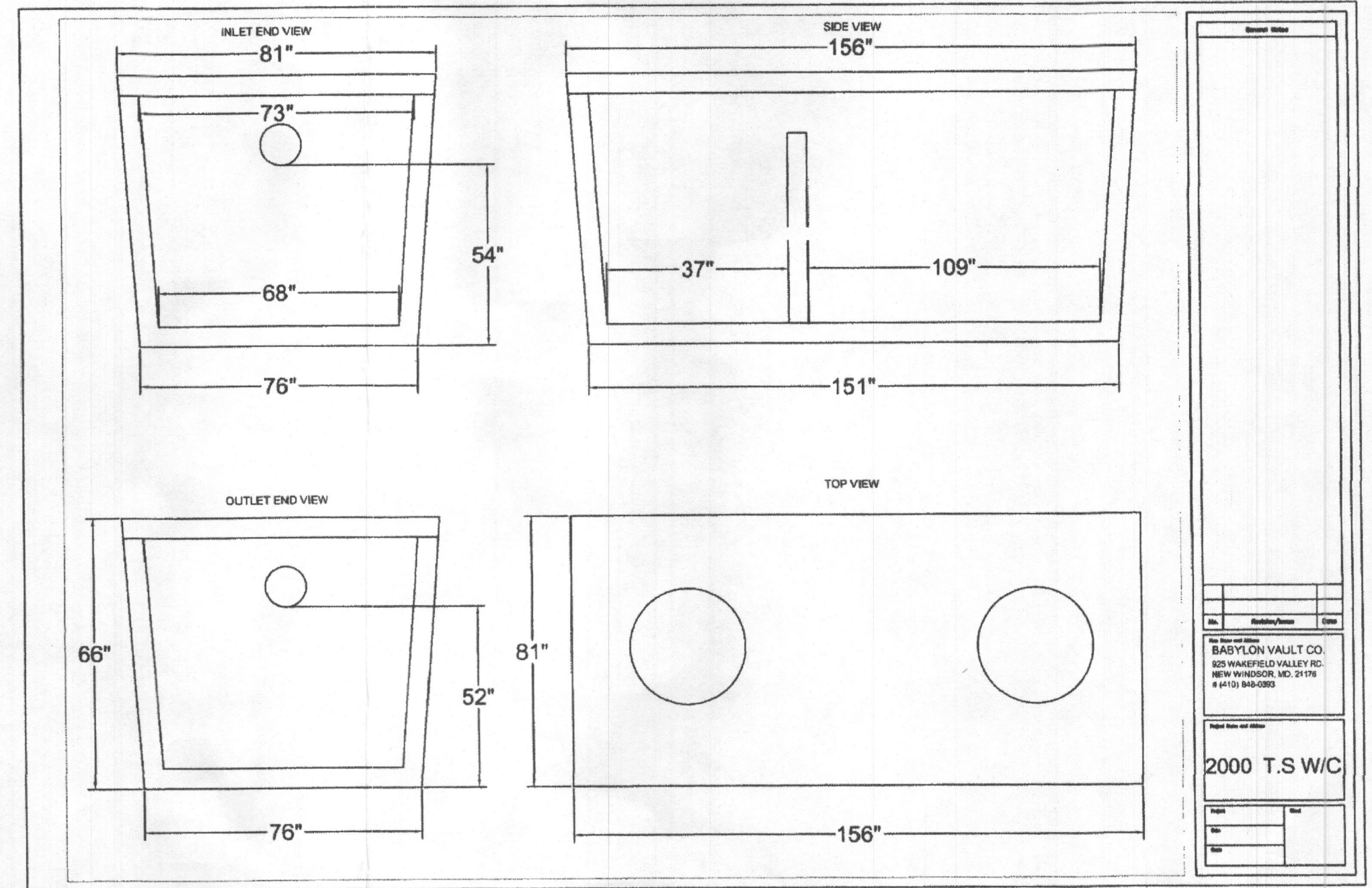


VICINITY MAP
SCALE: 1" = 2,000'



INITIAL TRENCH DETAIL
SCALE: 1" = 2'

- GENERAL NOTES:**
- THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED SEWERAGE EASEMENT SHALL NOT BE NECESSARY.
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 - ALL WELLS AND SEPTIC SYSTEMS WITHIN 100 FEET OF THE PROPERTY BOUNDARIES AND 200 FEET DOWN GRADIENT OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.
 - BOUNDARY SHOWN HEREON IS BASED ON BOUNDARY SURVEY CONDUCTED BY JACK C. MELLEMA SR., INC. IN MARCH 2005.
 - TOPOGRAPHY SHOWN HEREON IS FIELD RUN SURVEY CONDUCTED BY FISHER, COLLINS & CARTER, INC. IN AUGUST 2018 AND SUPPLEMENTED WITH HOWARD COUNTY GIS TOPOGRAPHY.
 - DEED REFERENCE: LIBER 13869, FOLD 599
 - PLAT REFERENCE: 23204 THRU 23206
 - SUBJECT PROPERTY ZONED: RR-DEO
 - TOTAL AREA OF PROPERTY: 59,734 SQ.FT.
 - WETLANDS, STREAMS, THEIR BUFFERS, FLOODPLAIN, AND STEEP SLOPES DO NOT EXIST ON THIS LOT.
 - SOILS SHOWN HEREON ARE BASED ON NRCS WEB SOIL SURVEY AND HOWARD COUNTY SOILS MAP 23.
 - 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.
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 - LOTS 3 AND 6 ON THIS PLAN HAVE A LIMITATION OF 4 BEDROOMS UNLESS AN EXHIBIT PRESENTED BY A CERTIFIED PROFESSIONAL ENGINEER DEMONSTRATES THAT THE SEPTIC EASEMENT WILL ACCOMMODATE 3 DRAINFIELDS FOR A RESIDENCE HAVING MORE THAN 4 BEDROOMS.



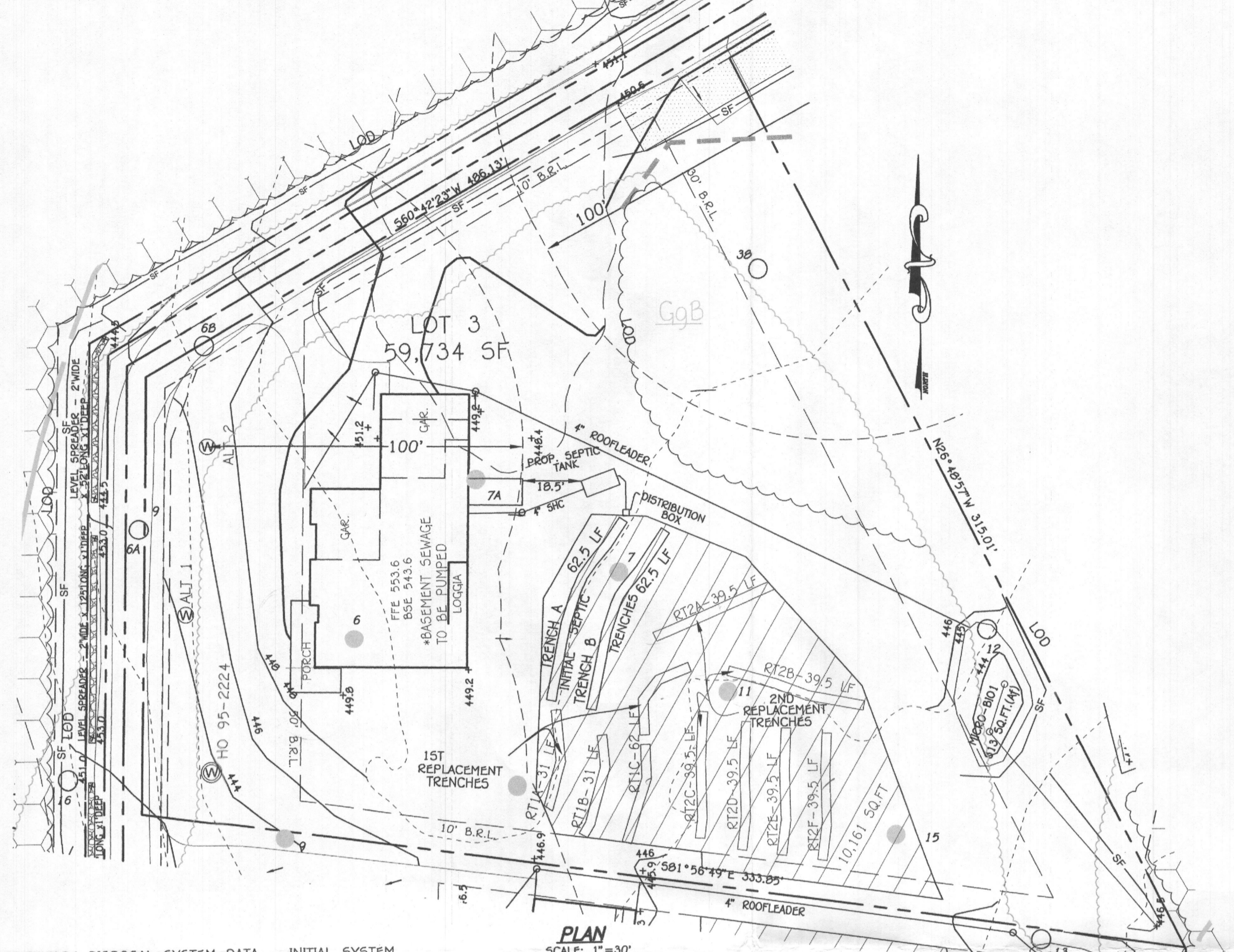
SEPTIC PLAN
FULTON WOODS
LOT 3
12251 BLUE SKY EVENING WAY
ZONED RR-DEO

Approved Septic System Plan
Howard County Health Department
Hank Oswald 10/8/19
Signature Date

TAX MAP No. 41 GRID No. 13 PARCEL No. 199

FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: SEPTEMBER, 2019

NOTE:
THE EXISTING WELLS SHOWN ON THIS PLAN, HO-95-2224 HAS BEEN FIELD LOCATED BY FISHER, COLLINS & CARTER, INC., PROFESSIONAL LAND SURVEYORS AND IS ACCURATELY SHOWN.

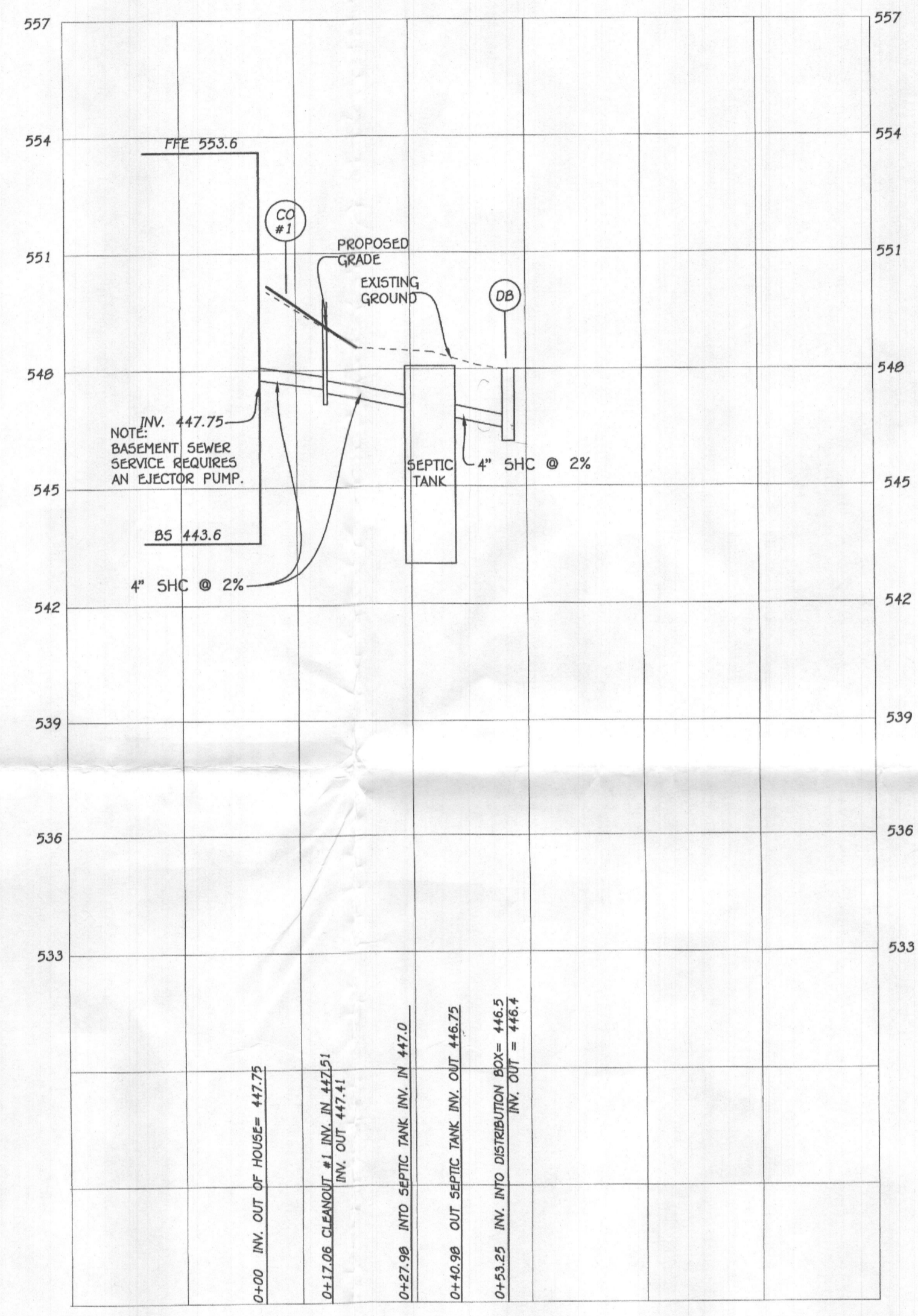


SEWAGE DISPOSAL SYSTEM DATA - INITIAL SYSTEM
4 BEDROOMS
LOADING RATE = 4 BEDROOMS X 150 GPD/BEDROOM = 600 GPD
APPLICATION RATE = 0.8
EFFECTIVE SIDEWALL BEGINS AT 5 FEET
TRENCH DEPTH = 0 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 3 FEET
SF OF DRAINFIELD = 600 GPD / 0.8 = 750 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = $(W+2)/(W+1+2D) = (3+2)/(3+1+(2x3)) = 0.50$
TRENCH LENGTH = 750 SF x 0.50 / 3 = 125 FEET
TRENCH SPACING = 2D+W = ((2x3) + 3) = 9' USE 10'

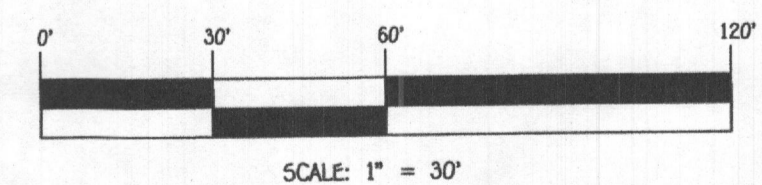
SEWAGE DISPOSAL SYSTEM DATA - REPLACEMENT SYSTEM
4 BEDROOMS
LOADING RATE = 4 BEDROOMS X 150 GPD/BEDROOM = 600 GPD
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TRENCH SPACING = 2D+W = ((2x3) + 3) = 9' USE 10'

SEWAGE DISPOSAL SYSTEM DATA - 2nd REPLACEMENT SYSTEM
4 BEDROOMS
LOADING RATE = 4 BEDROOMS X 150 GPD/BEDROOM = 600 GPD
APPLICATION RATE = 0.6
EFFECTIVE SIDEWALL BEGINS AT 5.5 FEET
TRENCH DEPTH = 7 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 1.5 FEET
SF OF DRAINFIELD = 600 GPD / 0.6 = 1,000 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = $(W+2)/(W+1+2D) = (3+2)/(3+1+(2x1.5)) = 0.71$
TRENCH LENGTH = 1,000 SF x 0.71 = 710 FEET / 3 = 236.67 FEET
TRENCH SPACING = 2D+W = ((2x1.5) + 3) = 6' USE 10'

FFE 553.6
BSE 443.6
INV. OUT OF HOUSE = 447.75
PROP. GROUND AT CLEANOUT = 449.1
INV. INTO CLEANOUT = 447.53
EX. GROUND AT SEPTIC TANK = 448.57
COVER OVER TANK = 6 INCHES
TOP OF SEPTIC TANK = 448.0
INV. INTO SEPTIC TANK = 447.0
INV. OUT OF SEPTIC TANK = 446.75
EX. GROUND AT DISTRIBUTION BOX = 448.2
INV. INTO DISTRIBUTION BOX = 446.5
INV. OUT OF DISTRIBUTION BOX = 446.4
* BASEMENT SEWAGE TO BE PUMPED



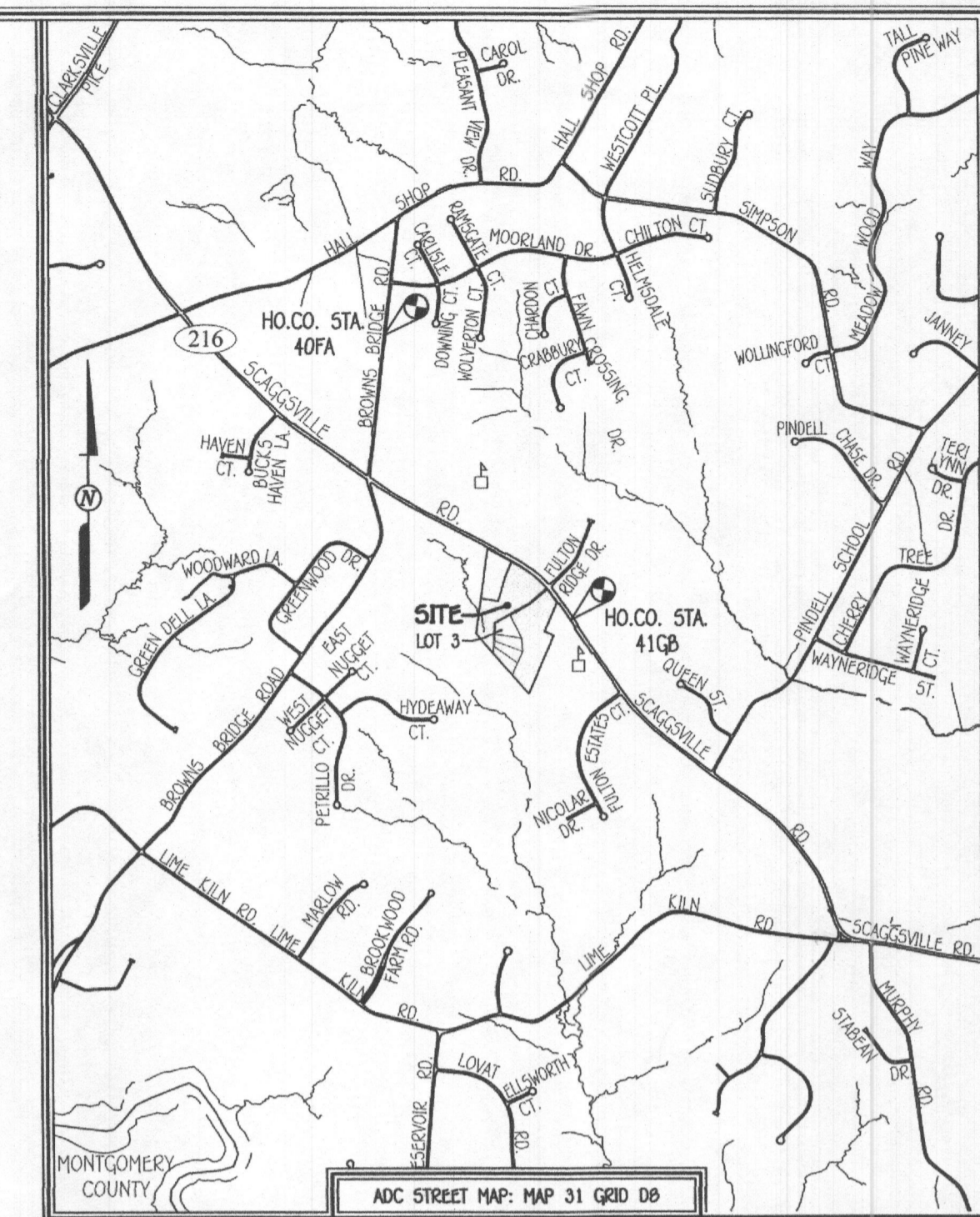
SEPTIC PROFILE
SCALE: 1" = 30'



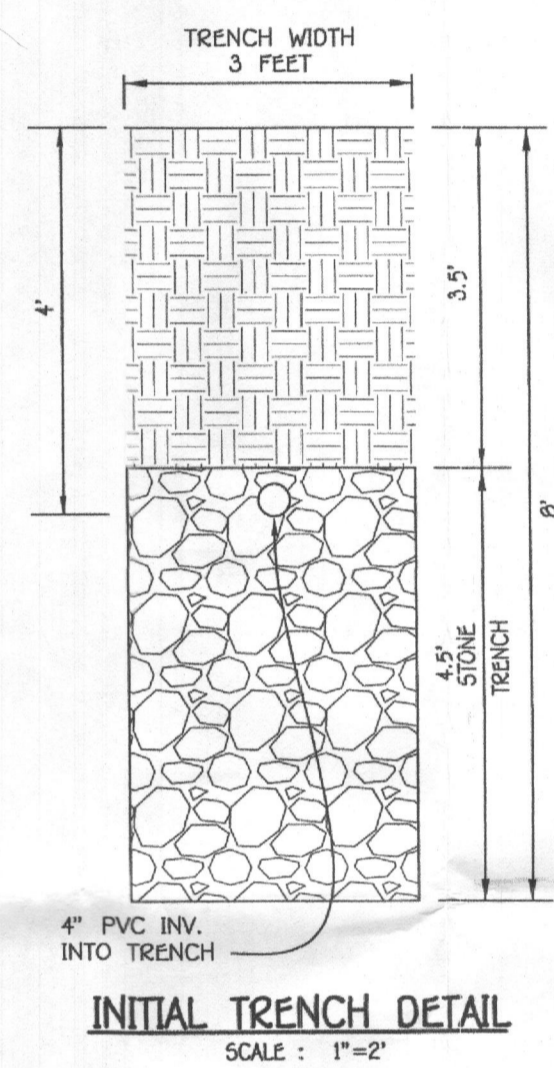
PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 38386, EXPIRATION DATE: 01/12/2020.
Signature 9/26/19
Signature Of Professional Engineer DATE

| TRENCH | GROUND ELEV. | TOP OF STONE ELEV. | PIPE INVERT ELEV. | DEPTH TO STONE FROM GROUND | DEPTH OF TRENCH (FT) | BOTTOM OF TRENCH ELEV. | EFFECTIVE DEPTH STARTS AT | EFFECTIVE DEPTH (D) | WIDTH OF TRENCHES (W) | TRENCH SPACING |
|--------|--------------|--------------------|-------------------|----------------------------|----------------------|------------------------|---------------------------|---------------------|-----------------------|----------------|
| A | 448.2 | 446.7 | 446.3 | 1.5' | 6.5' | 440.2 | 5.0' | 3.0' | 3.0' | 10' |
| B | 447.5 | 446.0 | 445.6 | 1.5' | 6.5' | 439.5 | 5.0' | 3.0' | 3.0' | 10' |

- LEGEND**
- EXISTING 2' CONTOURS
 - EXISTING 10' CONTOURS
 - EXISTING TREE LINE
 - SOIL LINES AND TYPES
 - ⊙ DENOTES EXISTING WELL
 - ⊙ DENOTES PROPOSED TREELINE
 - DENOTES 1500 SQ.FT. ALTERNATE BOX
 - 15 PASSED PERC HOLES
 - 38 FAILED PERC HOLES

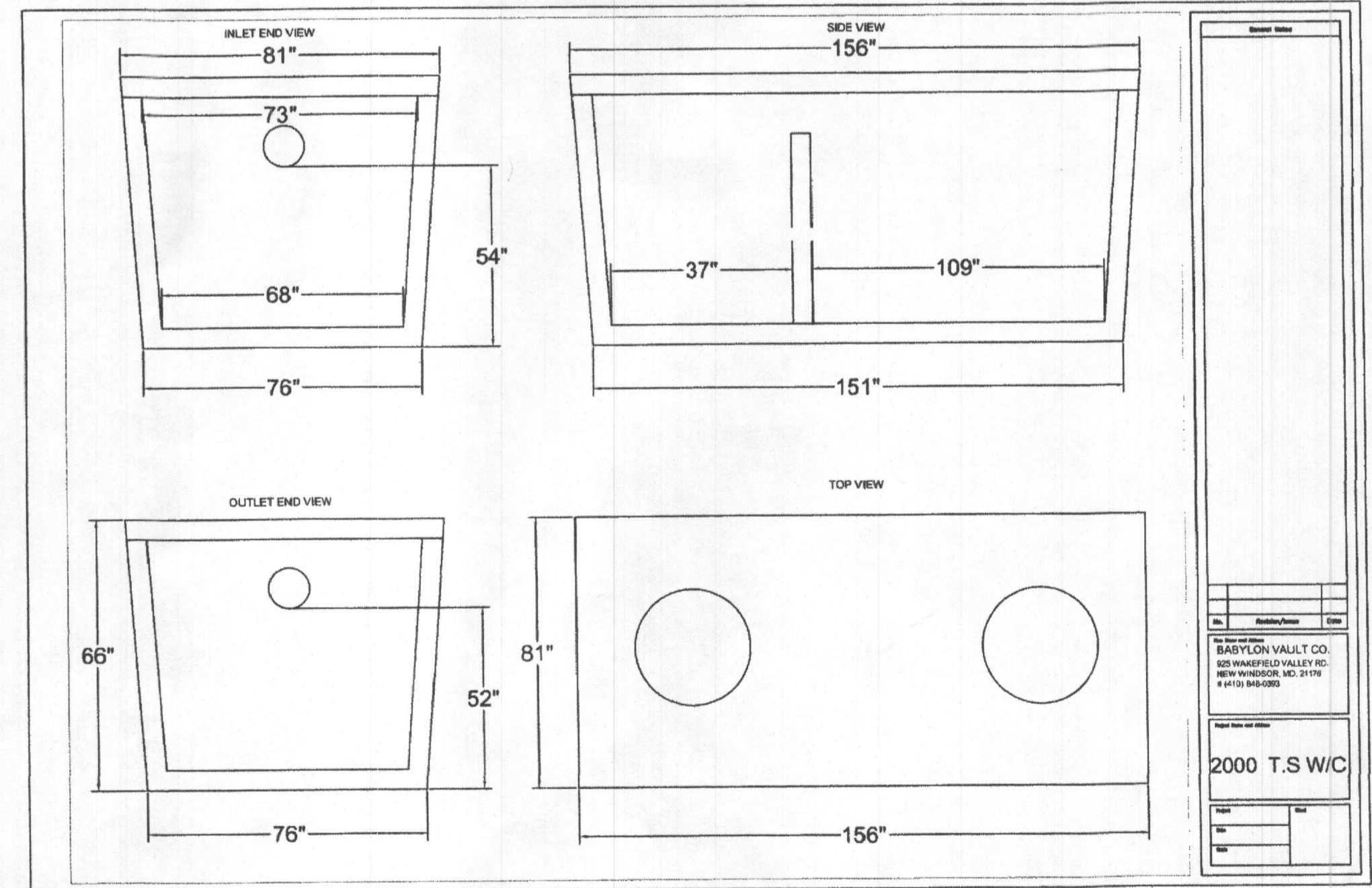


VICINITY MAP
SCALE: 1" = 2,000'



INITIAL TRENCH DETAIL
SCALE: 1" = 2'

- GENERAL NOTES:**
- THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED SEWERAGE EASEMENT SHALL NOT BE NECESSARY.
 - ADJUSTMENTS TO SEPTIC EASEMENT AREA IS NOT PERMITTED WITHOUT ADDITIONAL TESTING.
 - THE LOT SHOWN HEREON COMPLIES WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
 - ALL WELLS AND SEPTIC SYSTEMS WITHIN 100 FEET OF THE PROPERTY BOUNDARIES AND 200 FEET DOWN GRADIENT OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.
 - BOUNDARY SHOWN HEREON IS BASED ON BOUNDARY SURVEY CONDUCTED BY JACK C. HELLEMA SR, INC. IN MARCH 2005.
 - TOPOGRAPHY SHOWN HEREON IS FIELD RUN SURVEY CONDUCTED BY FISHER, COLLINS & CARTER, INC. IN AUGUST 2018 AND SUPPLEMENTED WITH HOWARD COUNTY GIS TOPOGRAPHY.
 - DEED REFERENCE: LIBR 13689, FOLIO 299
 - PLAT REFERENCE: 23204 THRU 23206
 - SUBJECT PROPERTY ZONED: RR-DEO
 - TOTAL AREA OF PROPERTY: 59,734 SQ.FT.
 - WETLANDS, STREAMS, THEIR BUFFERS, FLOODPLAIN, AND STEEP SLOPES DO NOT EXIST ON THIS LOT.
 - SOILS SHOWN HEREON ARE BASED ON NRCS WEB SOIL SURVEY AND HOWARD COUNTY SOILS MAP 23.
 - 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.
 - THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET.
 - LOTS 3 AND 6 ON THIS PLAN HAVE A LIMITATION OF 4 BEDROOMS UNLESS AN EXHIBIT PRESENTED BY A CERTIFIED PROFESSIONAL ENGINEER DEMONSTRATES THAT THE SEPTIC EASEMENT WILL ACCOMMODATE 3 DRAINFIELDS FOR A RESIDENCE HAVING MORE THAN 4 BEDROOMS.



SEPTIC PLAN
FULTON WOODS
LOT 3
12251 BLUE SKY EVENING WAY
ZONED RR-DEO

Approved Septic System Plan
Howard County Health Department
Mark Oswald 10/8/19
Signature Date

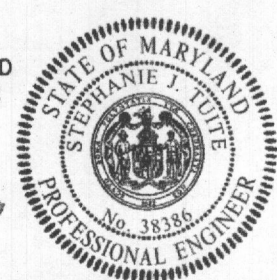
TAX MAP No. 41 GRID No. 13 PARCEL No. 199

FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: SEPTEMBER, 2019

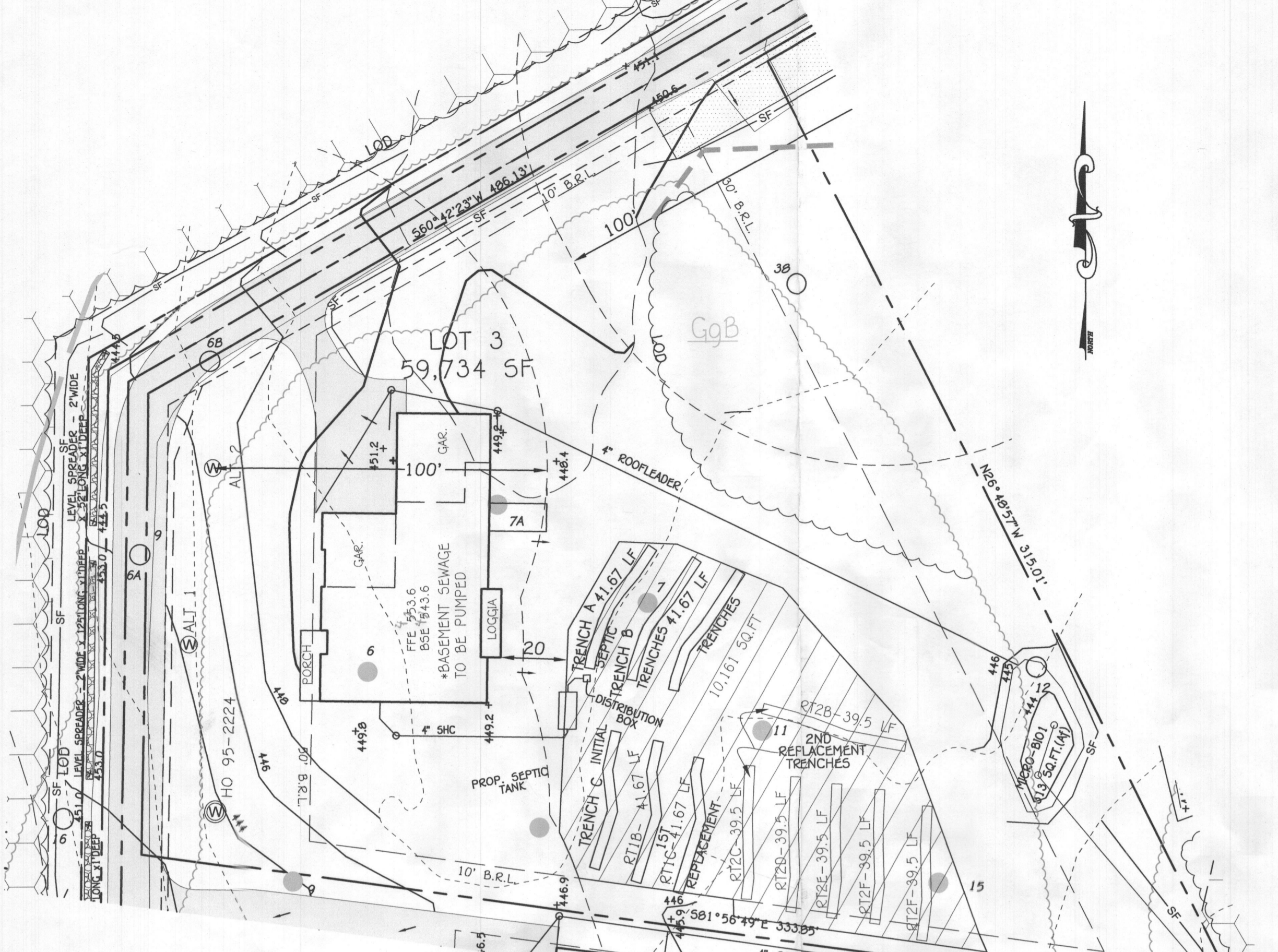
2018/10/25 Engineering\Drawings\SEPTIC\18025-3001 LOT 3 SEPTIC Revised.dwg, Layout1, 11

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SOURCE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
ELKROTT CITY, MARYLAND 21042
(410) 461-2255

OWNER / DEVELOPER
BHBC 6030 DAYBREAK CIRCLE
SUITE 150-103
CLARKSVILLE, MARYLAND 21029
443-310-1553



NOTE:
THE EXISTING WELLS SHOWN ON THIS PLAN, HO-95-2224 HAS BEEN FIELD LOCATED BY FISHER, COLLINS & CARTER, INC., PROFESSIONAL LAND SURVEYORS AND IS ACCURATELY SHOWN.



SEWAGE DISPOSAL SYSTEM DATA - INITIAL SYSTEM

4 BEDROOMS
LOADING RATE = 4 BEDROOMS X 150 GPD/BEDROOM = 600 GPD
APPLICATION RATE = 0.8
EFFECTIVE SIDEWALL BEGINS AT 5 FEET
TRENCH DEPTH = 8 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 3 FEET
SF OF DRAINFIELD = 600 GPD / 0.8 = 750 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = $(W+2)/(W+1+2D) = (3+2)/(3+1+(2x3)) = 0.50$
TRENCH LENGTH = 750 SF x 0.50 / 3 = 125 FEET
(3 TRENCHES AT 41.67)
TRENCH SPACING = 2D+W = ((2x3) + 3) = 9' USE 10'

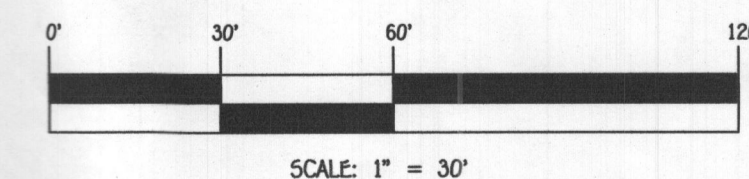
SEWAGE DISPOSAL SYSTEM DATA - REPLACEMENT SYSTEM

4 BEDROOMS
LOADING RATE = 4 BEDROOMS X 150 GPD/BEDROOM = 600 GPD
APPLICATION RATE = 0.8
EFFECTIVE SIDEWALL BEGINS AT 5 FEET
TRENCH DEPTH = 8 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 3 FEET
SF OF DRAINFIELD = 600 GPD / 0.8 = 750 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = $(W+2)/(W+1+2D) = (3+2)/(3+1+(2x3)) = 0.50$
TRENCH LENGTH = 750 SF x 0.50 / 3 = 125 FEET
(3 TRENCHES AT 41.67)
TRENCH SPACING = 2D+W = ((2x3) + 3) = 9' USE 10'

SEWAGE DISPOSAL SYSTEM DATA - 2nd REPLACEMENT SYSTEM

4 BEDROOMS
LOADING RATE = 4 BEDROOMS X 150 GPD/BEDROOM = 600 GPD
APPLICATION RATE = 0.6
EFFECTIVE SIDEWALL BEGINS AT 5.5 FEET
TRENCH DEPTH = 7 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 1.5 FEET
SF OF DRAINFIELD = 600 GPD / 0.6 = 1,000 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = $(W+2)/(W+1+2D) = (3+2)/(3+1+(2x1.5)) = 0.71$
TRENCH LENGTH = 1,000 SF x 0.71 / 3 = 236.67 FEET
(6 TRENCHES AT 39.5)
TRENCH SPACING = 2D+W = ((2x1.5) + 3) = 6' USE 10'

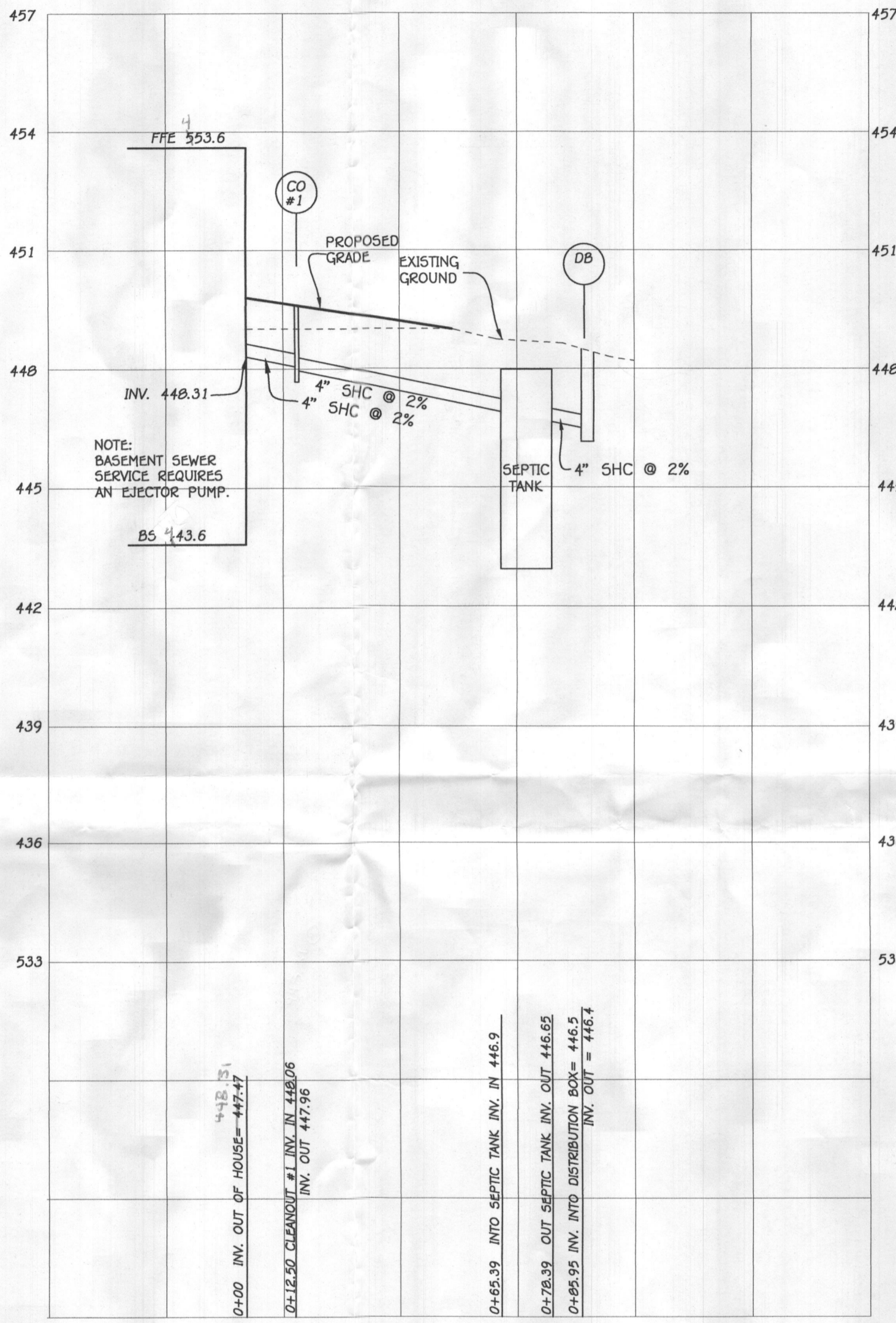
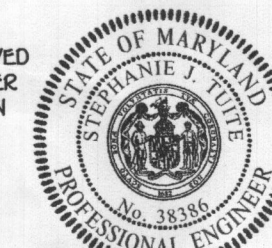
FFE 553.6
BSE 443.6
INV. OUT OF HOUSE = 448.31
PROP. GROUND AT CLEANOUT = 449.6
INV. INTO CLEANOUT = 448.06
INV. OUT OF CLEANOUT = 447.96
EX. GROUND AT SEPTIC TANK = 448.5
COVER OVER TANK = 6"
TOP OF SEPTIC TANK = 447.9
INV. INTO SEPTIC TANK = 446.9
INV. OUT OF SEPTIC TANK = 446.65
EX. GROUND AT DISTRIBUTION BOX = 448.2
INV. INTO DISTRIBUTION BOX = 446.5
INV. OUT OF DISTRIBUTION BOX = 446.4
* BASEMENT SEWAGE TO BE PUMPED



FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLCOTT CITY, MARYLAND 21042
(410) 461-2225

OWNER / DEVELOPER
BHC 6030 DAYBREAK CIRCLE
SUITE 150-103
CLARKSVILLE, MARYLAND 21029
443-310-1553

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. 36306, EXPIRATION DATE: 01/12/2020.
Stephen J. Suter 10/9/19
Signature Of Professional Engineer DATE

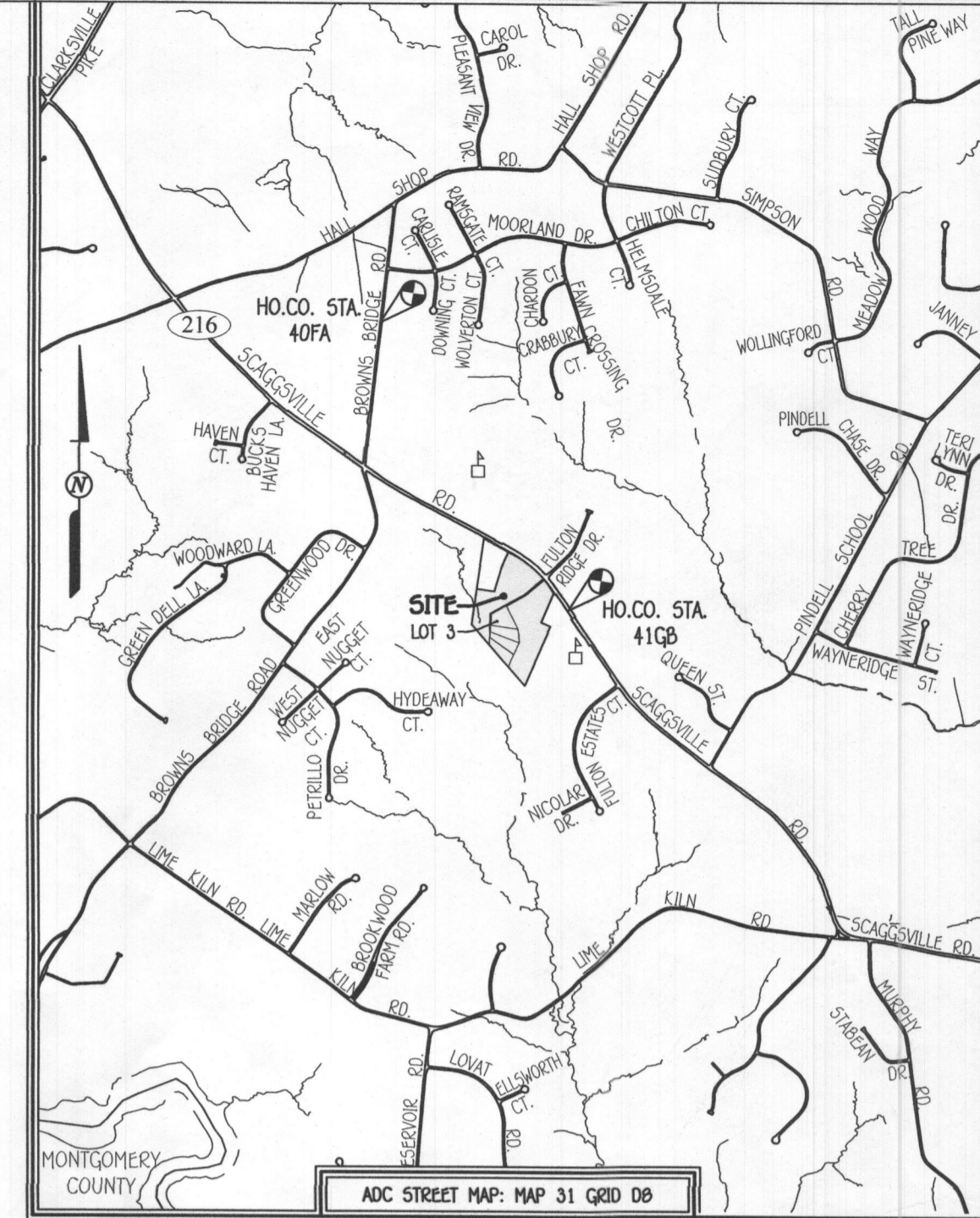


SEPTIC PROFILE
SCALE: 1" = 30"

TRENCH DESIGN

| TRENCH | GROUND ELEV. | TOP OF STONE ELEV. | PIPE INVERT ELEV. | DEPTH TO STONE FROM GROUND | DEPTH OF STONE (FT) | BOTTOM OF TRENCH ELEV. | EFFECTIVE DEPTH STARTS AT | EFFECTIVE DEPTH (D) | WIDTH OF TRENCHES (W) | TRENCH SPACING |
|--------|--------------|--------------------|-------------------|----------------------------|---------------------|------------------------|---------------------------|---------------------|-----------------------|----------------|
| A | 448.2 | 446.7 | 446.3 | 1.5' | 6.5' | 440.2 | 5.0' | 3.0' | 3.0' | 10' |
| B | 447.5 | 446.0 | 445.6 | 1.5' | 6.5' | 439.5 | 5.0' | 3.0' | 3.0' | 10' |
| C | 447.5 | 446.0 | 445.6 | 1.5' | 6.5' | 439.5 | 5.0' | 3.0' | 3.0' | 10' |

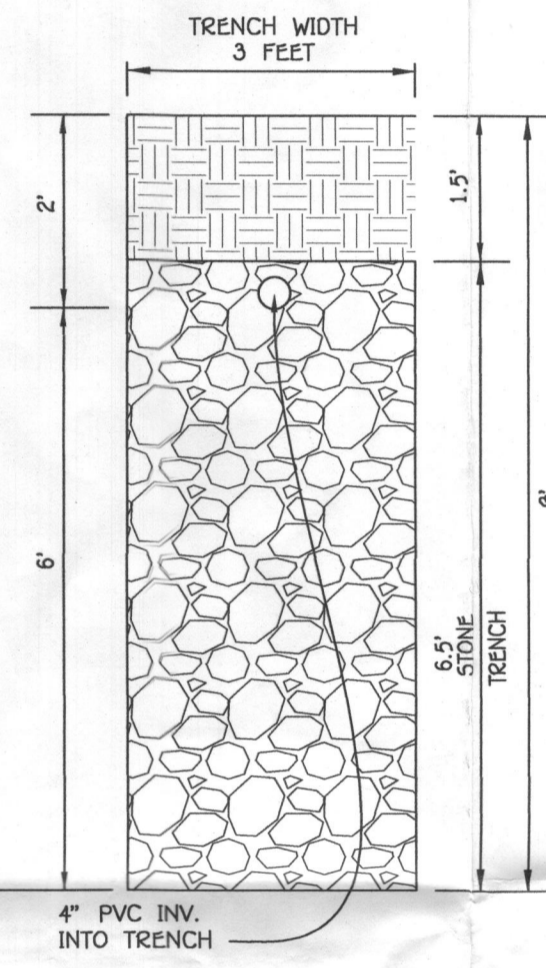
- LEGEND**
- EXISTING 2' CONTOURS
 - EXISTING 10' CONTOURS
 - EXISTING TREE LINE
 - SOIL LINES AND TYPES
 - ⊙ DENOTES EXISTING WELL
 - ⊙ DENOTES PROPOSED TREELINE
 - ⊙ DENOTES 1500 Sq.Ft. ALTERNATE BOX
 - 15 PASSED PERC HOLES
 - 38 FAILED PERC HOLES



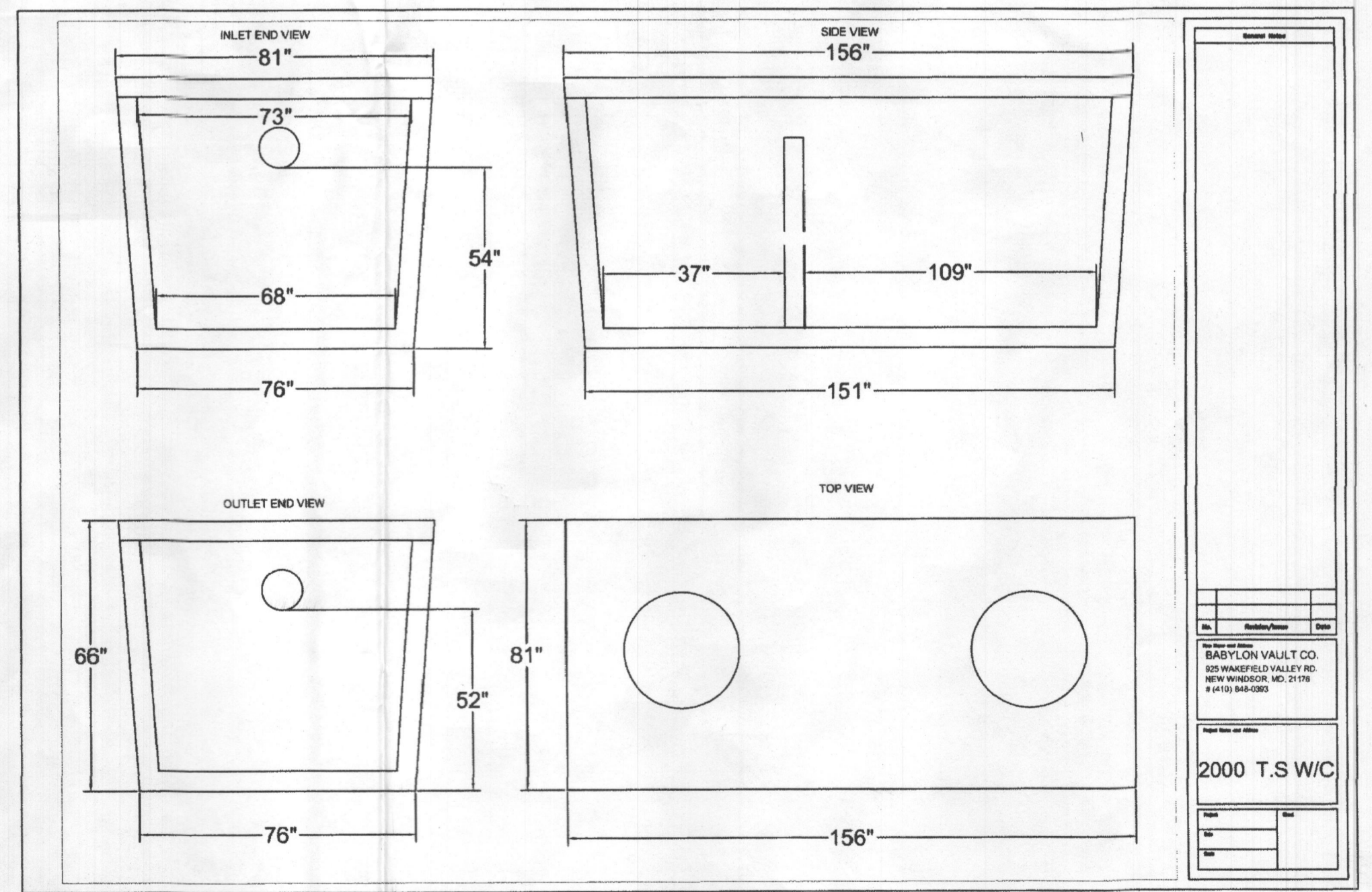
VICINITY MAP
SCALE: 1" = 2,000'

GENERAL NOTES:

- THIS AREA DESIGNATES A PRIVATE SEWAGE EASEMENT OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL IMPROVEMENTS OF ANY NATURE. IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWAGE IS AVAILABLE. THESE EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE EASEMENT. RECORDED OF A MODIFIED SEWAGE EASEMENT SHALL NOT BE NECESSARY.
- ADJUSTMENTS TO SEPTIC EASEMENT AREA IS NOT PERMITTED WITHOUT ADDITIONAL TESTING.
- THE LOT SHOWN HEREON COMPLIES WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
- ALL WELLS AND SEPTIC SYSTEMS WITHIN 100 FEET OF THE PROPERTY BOUNDARIES AND 200 FEET DOWN GRADIENT OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.
- BOUNDARY SHOWN HEREON IS BASED ON BOUNDARY SURVEY CONDUCTED BY JACK C. MELLEMA SR. INC. IN MARCH 2005.
- TOPOGRAPHY SHOWN HEREON IS FIELD RUN SURVEY CONDUCTED BY FISHER, COLLINS & CARTER, INC. IN AUGUST 2018 AND SUPPLEMENTED WITH HOWARD COUNTY G5 TOPOGRAPHY.
- DEED REFERENCE: LIBER 13669, FOLIO 29B
- PLAT REFERENCE: 23204 THRU 23206.
- SUBJECT PROPERTY ZONED: RR-DEO
- TOTAL AREA OF PROPERTY: 59,734 SQ.FT.
- WETLANDS, STREAMS, THEIR BUFFERS, FLOODPLAIN, AND STEEP SLOPES DO NOT EXIST ON THIS LOT.
- SOILS SHOWN HEREON ARE BASED ON NRCS WEB SOIL SURVEY AND HOWARD COUNTY SOILS MAP 21.
- 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.
- THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET.
- LOTS 3 AND 6 ON THIS PLAN HAVE A LIMITATION OF 4 BEDROOMS UNLESS AN EXHIBIT PRESENTED BY A CERTIFIED PROFESSIONAL ENGINEER DEMONSTRATES THAT THE SEPTIC EASEMENT WILL ACCOMMODATE 3 DRAINFIELDS FOR A RESIDENCE HAVING MORE THAN 4 BEDROOMS.



INITIAL TRENCH DETAIL
SCALE: 1" = 2'



SEPTIC PLAN
FULTON WOODS
LOT 3

Approved Septic System Plan
Howard County Health Department 12251 BLUE SKY EVENING WAY
ZONED RR-DEO
Hank Oswald 10/15/19
Signature

TAX MAP No. 41 GRID No. 13 PARCEL No. 199

FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: OCTOBER, 2019