

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: 2/9/23 **ONSITE SEWAGE DISPOSAL SYSTEM** P 572780
 APPROVAL DATE: 2/22/2023 **PERMIT: CONSTRUCTION** A _____
 PROPERTY ADDRESS: 12405 Kondrup Drive
 SUBDIVISION: Beaufort Park LOT: 12 TAX ID: _____
 CONTRACTOR: Kenphofield Equipment EMAIL: kenphofieldsewage.com
 CONTRACTOR ADDRESS: P.O. Box 517 Annapolis Junction, MD 20701 PHONE: 301-290-4289
 PROPERTY OWNER: Nichaolas Kennedy EMAIL: _____
 OWNER ADDRESS: 12405 Kondrup Drive PHONE: 443-250-5483

SEPTIC TANK SIZE (GALLONS): 1500 TANK MANUFACTURER: Mayor Bros.
 PUMP MODEL: _____ PUMP SIZE _____ PUMP TANK CAPACITY: _____

DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: _____ APPLICATION RATE: _____

TRENCHES:	LINEAR FEET REQUIRED: <u>125 (2 @ 63')</u>	INLET DEPTH: <u>3</u> ✓
	TRENCH WIDTH: <u>22</u>	MAXIMUM BOTTOM DEPTH: <u>8.0</u> ✓
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>4.5</u> 3

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: Dana Bernard DB ISSUE DATE: 2/9/23 EXPIRATION DATE: 2/9/24
~~10/11/2022~~ ~~10/11/23~~

- 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 2201241
- 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.**

A1+2

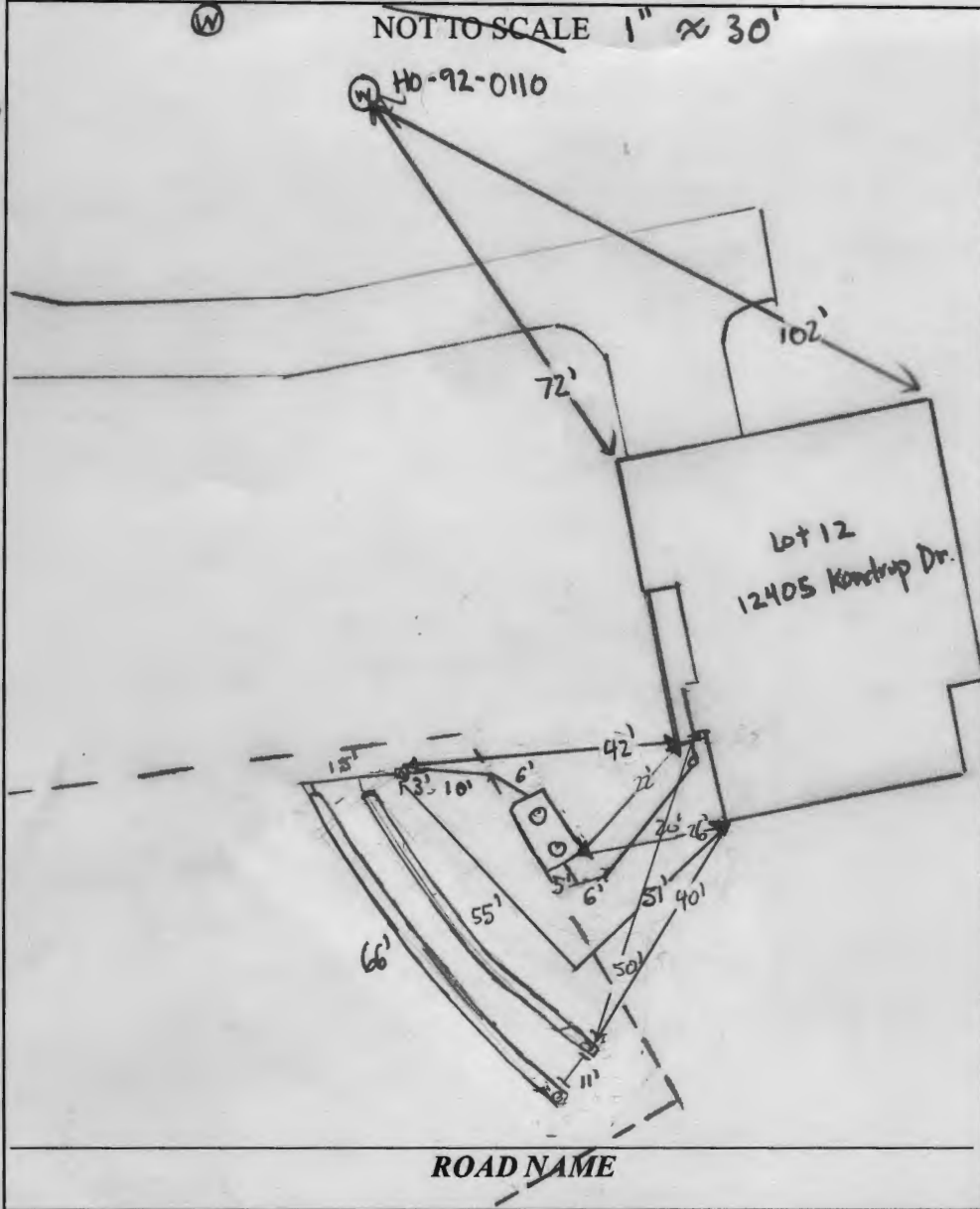
(W)

AH1

(W)

NOT TO SCALE 1" = 30'

H0-92-0110



TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
2'	3'	8'
NUMBER OF TRENCHES		2'
TOTAL LENGTH		121'
ABSORPTION AREA		363 sq'
DISTRIBUTION BOX LEVEL		yes
DISTRIBUTION BOX BAFFLE		yes
DISTRIBUTION BOX PORT		yes

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL	yes
MANUFACTURER	R. by on
CAPACITY	2000 GAL
SEAM LOC	top
TANK LID DEPTH	1'
BAFFLES	6" front + 4" 2
BAFFLE FILTER	
MANHOLE LOC	front v
6" PORT LOC	
WATERTIGHT TEST	
SLOTTED	yes
DATE ON LID	1/6/2023

PUMP/SEPTIC TANK LEVEL N/A

MANUFACTURER	
CAPACITY	GAL
SEAM LOC	
TANK LID DEPTH	
BAFFLES	
BAFFLE FILTER	
MANHOLE LOC	
6" PORT LOC	
WATERTIGHT TEST	
SLOTTED	
DATE ON LID	

PRE-CONSTRUCTION:

2/22/2023 onsite for pre-con. Contractor had to remove stream 3'-8" of fill over SOA. SOA and trenches staked per plan. Contractor shot in field. Adjusted trench ends slightly up hills. stream water looks good.

INSTALLATION:

2/22/2023 tank set. Baffles good, 527m on top, 52m slots, 52m tank to D box. D box was leveled. D box to trench used SCH 40. Trenches width @ 2' + inlet @ 3'. Space between trenches 10'. Contractor backfilled white concrete. (SP)

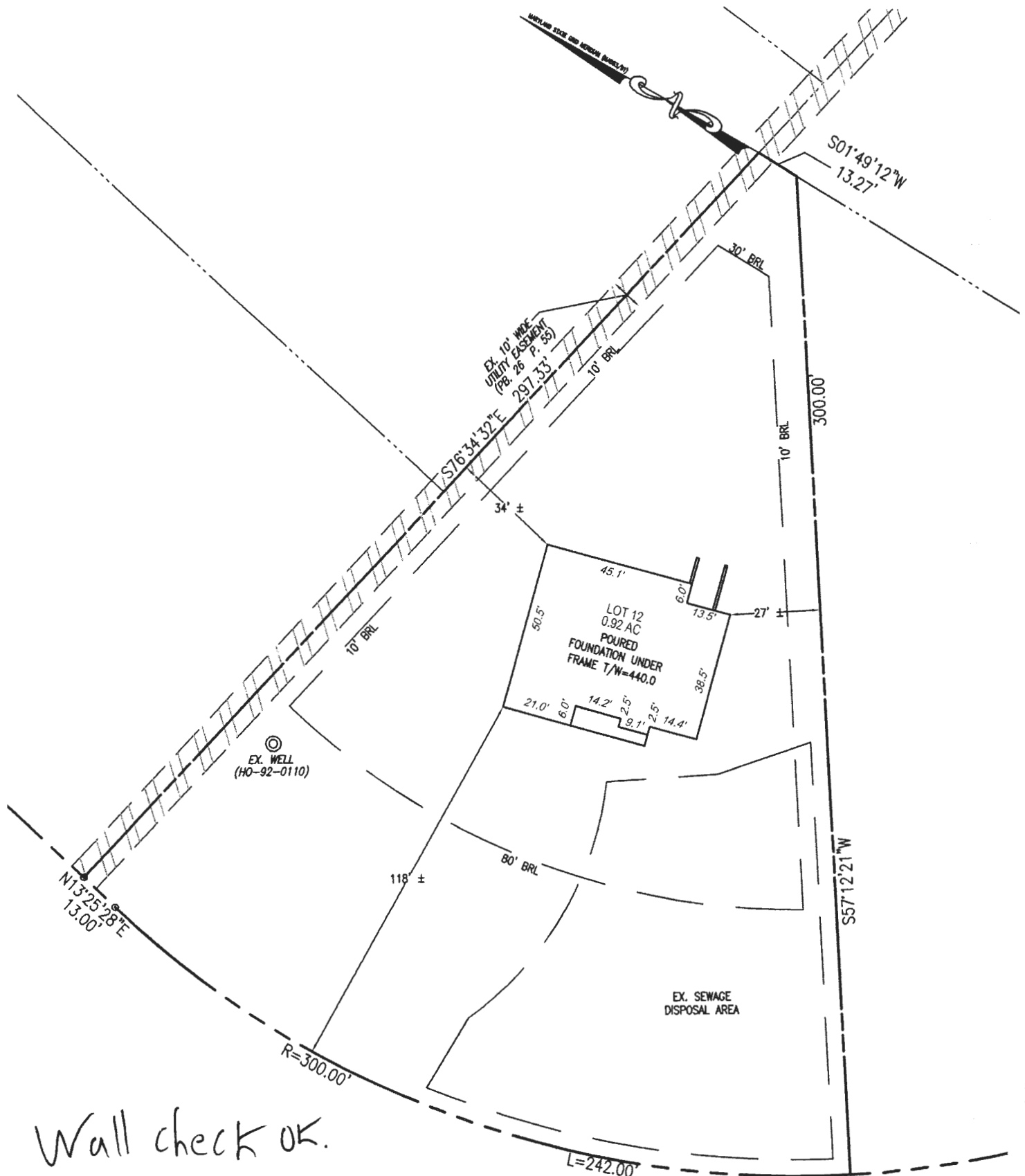
FINAL INSPECTOR

Shepsura Page

DATE OF APPROVAL

2/22/2023

THIS WALL CHECK DRAWING CONTAINS A HORIZONTAL TOLERANCE IN ACCURACY OF 0.1' AND A VERTICAL TOLERANCE IN ACCURACY OF 0.2'



Wall check OK.
 g & 2/9/23

I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF THAT THE IMPROVEMENTS ARE LOCATED AS SHOWN AND THAT THERE ARE NO ENCROACHMENTS EXCEPT AS SHOWN; THAT THIS DOCUMENT WAS 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.

Thomas M. Hoffman Jr. 2/9/23
 THOMAS M. HOFFMAN JR.,
 PROPERTY LINE SURVEYOR
 LICENSE NO. 267
 EXP. DATE: JULY 28, 2024



SCALE 1" = 40'	DATE 11/21/22
DRAWN BY J.T.F.	CHECKED BY T.M.H.
PLAT NUMBER 25256-25269	JOB NUMBER 52714

VOGEL ENGINEERING

TIMMONS GROUP
 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
 P: 410.461.7666 F: 410.461.8961 www.timmons.com

WALL CHECK DRAWING
 12405 KONDRUP DRIVE
 LOT 12
 BEAUFORT PARK
 BK. 26 FOLIO 55
 FIFTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING + TIMMONS GROUP

3300 North Ridge Road, Suite 110, Ellicott City, MD 21043
P 410.461.7666 F 410.461.8961 www.timmons.com

Date: July 7, 2022
To: Howard County Health Department
Attn: Hank Oswald
Subject: Beaufort Park-Lot 12
Project Number: 52714

ATTACHED:

# Copies	Description
3	OSDS Plan

Remarks:

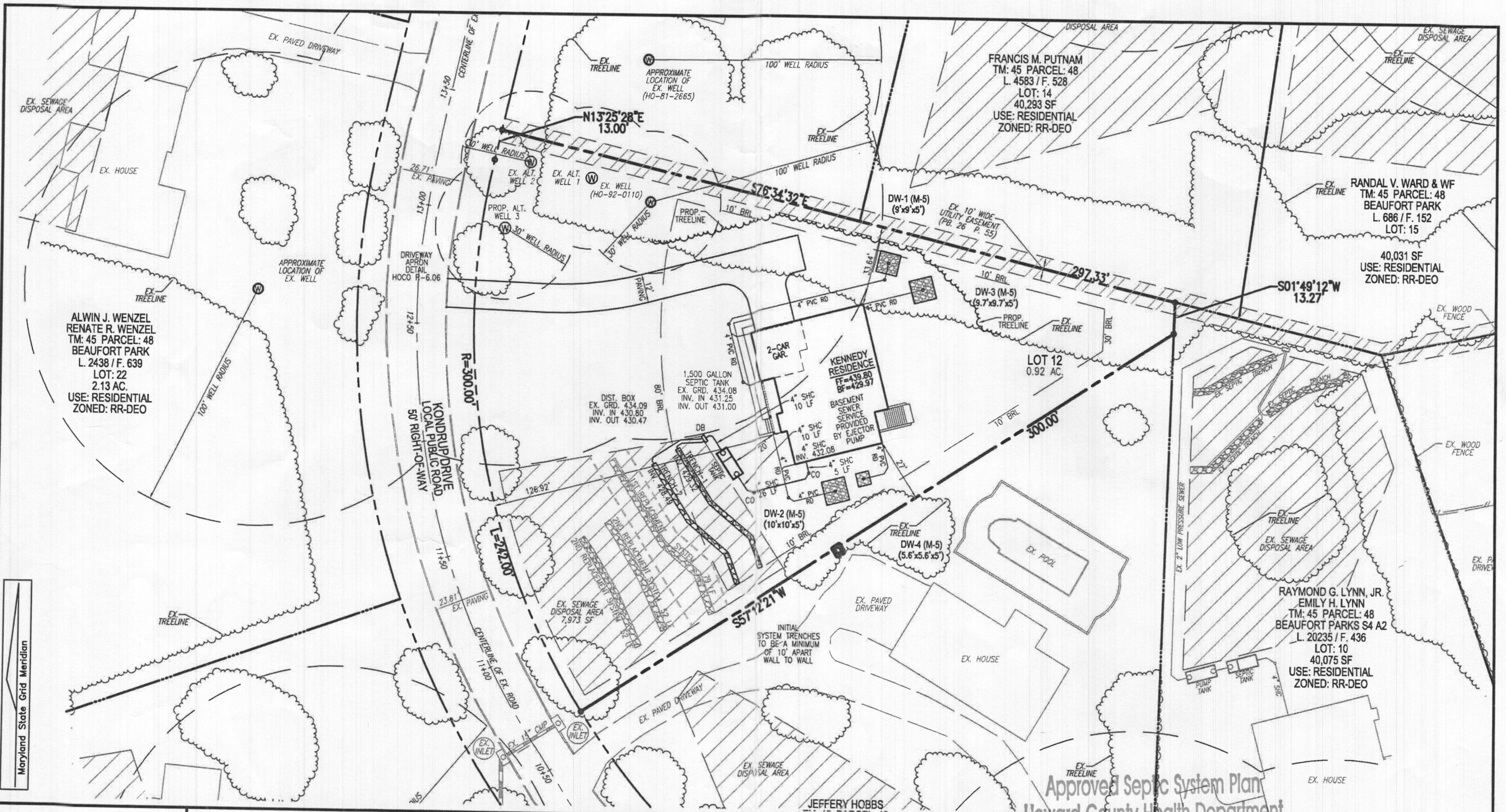
Please call 410-461-7666 with any questions.

Thank you

Kathleen Makusky

Transmitted by:

Received by:



ALWIN J. WENZEL
 RENATE R. WENZEL
 TM: 45 PARCEL: 48
 BEAUFORT PARK
 L. 2438 / F. 639
 LOT: 22
 2.13 AC.
 USE: RESIDENTIAL
 ZONED: RR-DEO

FRANCIS M. PUTNAM
 TM: 45 PARCEL: 48
 L. 4583 / F. 528
 LOT: 14
 40,293 SF
 USE: RESIDENTIAL
 ZONED: RR-DEO

RANDAL V. WARD & WF
 TM: 45 PARCEL: 48
 BEAUFORT PARK
 L. 686 / F. 152
 LOT: 15

40,031 SF
 USE: RESIDENTIAL
 ZONED: RR-DEO

S01°49'12"W
 13.27'

LOT 12
 0.92 AC.

RAYMOND G. LYNN, JR.
 EMILY H. LYNN
 TM: 45 PARCEL: 48
 BEAUFORT PARKS S4 A2
 L. 20235 / F. 436
 LOT: 10
 40,075 SF
 USE: RESIDENTIAL
 ZONED: RR-DEO

PLOT PLAN
BEAUFORT PARK
LOT 12
 12405 KONDRUP DRIVE
 FULTON, MD 20759

Approved Septic System Plan
 Howard County Health Department

Dana Beard 10-11-22
 Signature Date

VOGEL ENGINEERING

TIMMONS GROUP

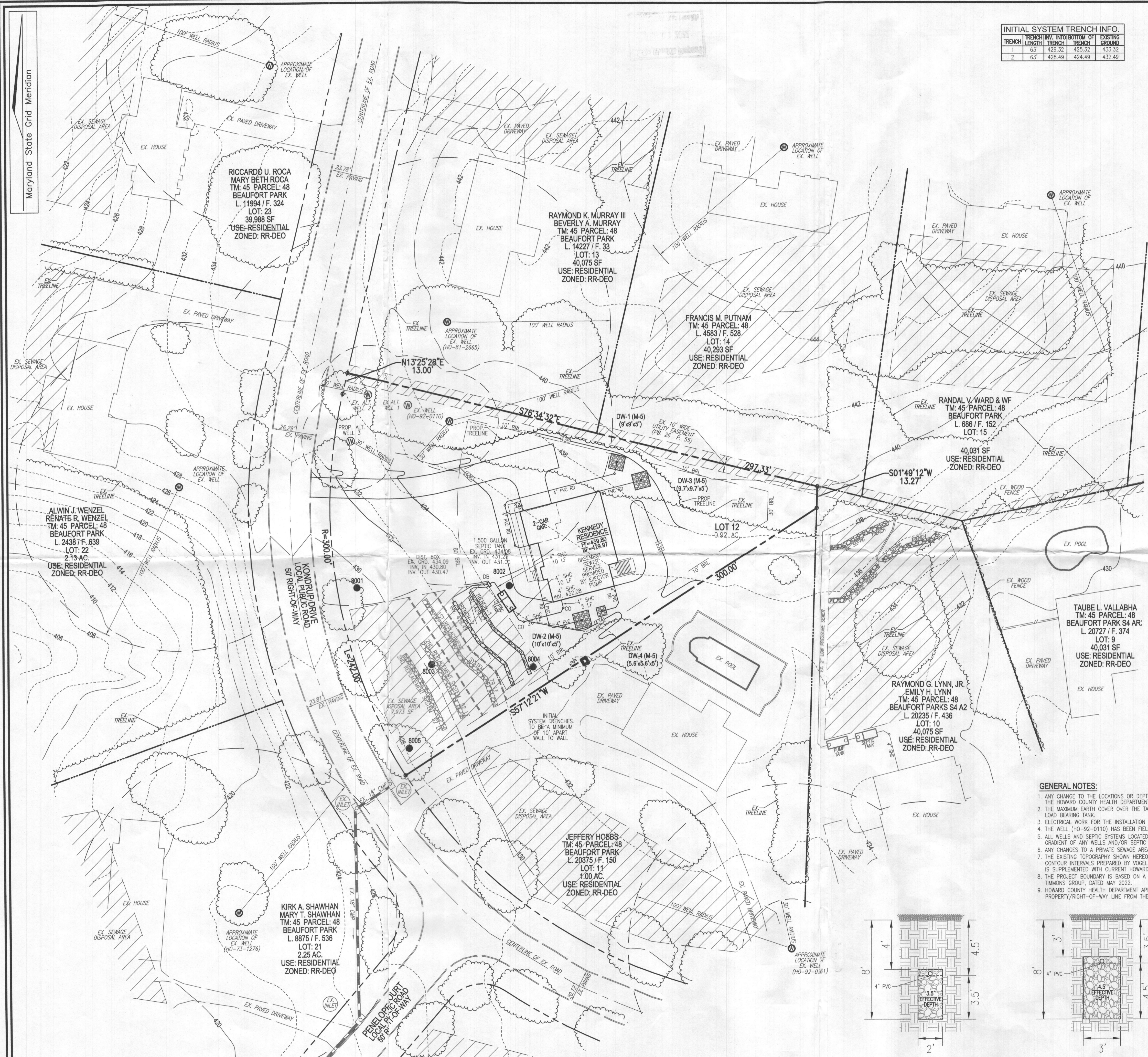
3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
 P: 410.461.7666 F: 410.461.8961 www.timmons.com

SCALE 1"=40'
 DRAWN BY JMR
 CHECKED BY RHV
 DATE 8/26/22
 W. O. # 52714
 SHEET# 1 OF 4

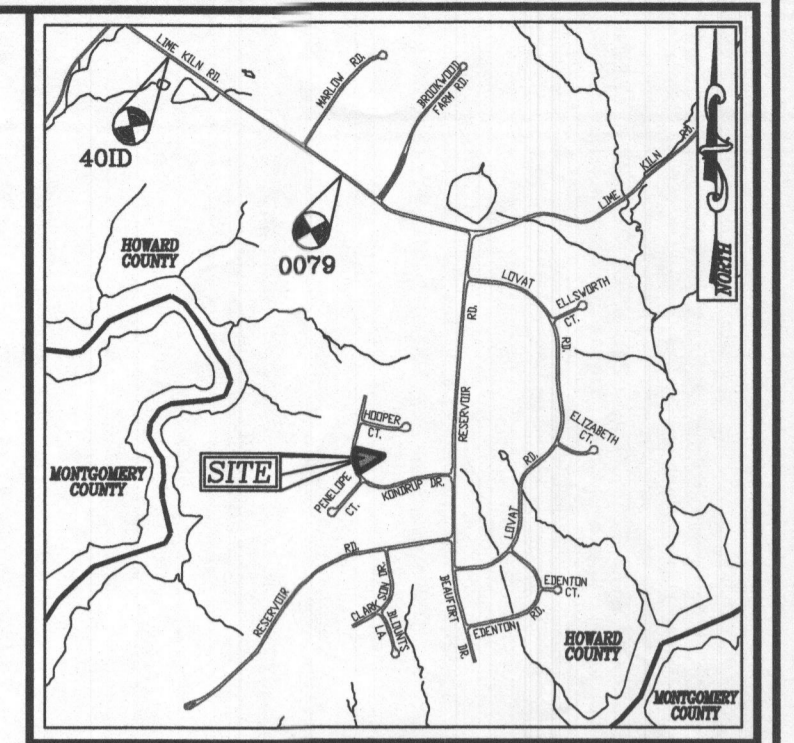
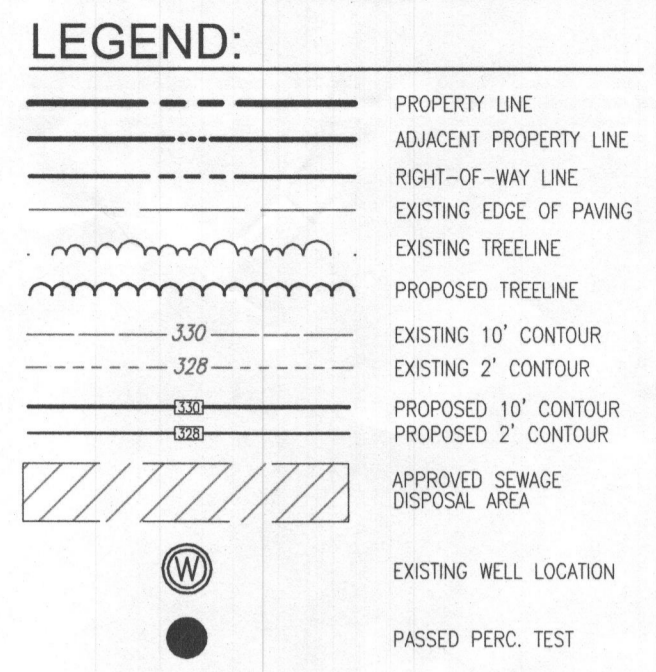
PARCEL: 48
 TAX MAP: 45 GRID: 12
 5TH ELECTION DISTRICT

ZONED: RR-DEO
 L. 21467 / F. 40
 HOWARD COUNTY, MARYLAND

Maryland State Grid Meridian



TRENCH	LENGTH	INTO TRENCH	INTO BOTTOM OF EXISTING GROUND
1	63'	429.32'	425.32'
2	63'	428.49'	424.49'



VICINITY MAP
SCALE: 1"=2000'
ADC MAP: PAGE: 5051 BLOCK: JB

BENCHMARKS
HOWARD COUNTY BENCHMARK 40ID (CONC. MON.)
N 541312.56 E 1325896.28 ELEV. 367.00
LOCATION: BY #12639 LIME KILN ROAD

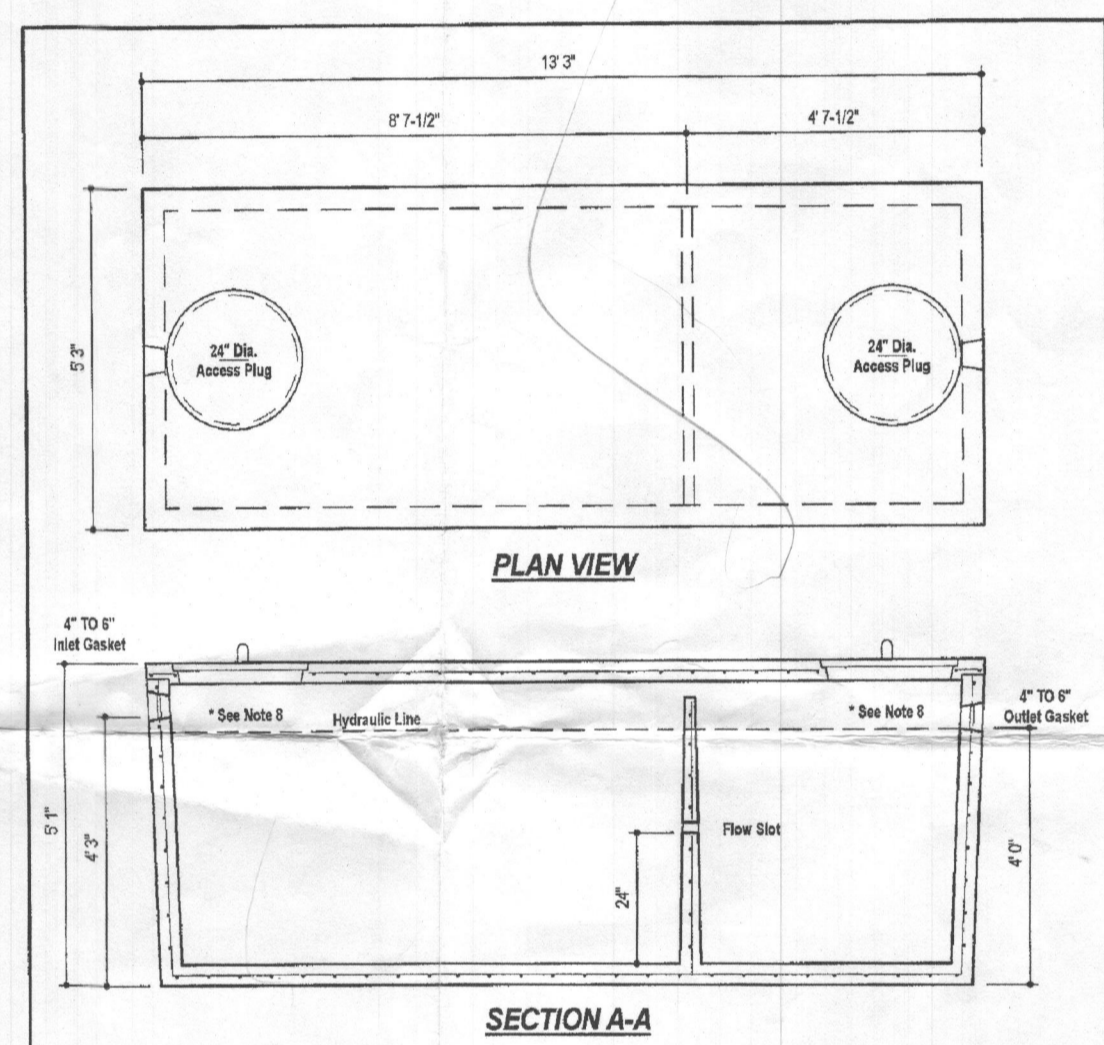
HOWARD COUNTY BENCHMARK 0079 (CONC. MON.)
N 540070.96 E 1327702.79 ELEV. 426.13
LOCATION: LIME KILN ROAD EAST OF BROWNS BRIDGE ROAD

SYSTEM CALCULATIONS:

INITIAL SYSTEM:
5 BEDROOMS AT 750gpd / 1.2 ABSORPTION RATE = 625 SQ. FT.
625 SQ. FT. / 2 (TRENCH WIDTH) x 40 (SIDEWALL REDUCTION) = 125 LINEAR FEET
126 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE INITIAL SYSTEM.
(2 TRENCHES OF 63 FEET IN LENGTH)

FIRST REPLACEMENT SYSTEM:
5 BEDROOMS AT 750gpd / 1.2 ABSORPTION RATE = 625 SQ. FT.
625 SQ. FT. / 3 (TRENCH WIDTH) x 38 (SIDEWALL REDUCTION) = 79 LINEAR FEET
79 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE FIRST REPLACEMENT SYSTEM.
(1 TRENCHES OF 79 FEET IN LENGTH)

SECOND REPLACEMENT SYSTEM:
5 BEDROOMS AT 750gpd / 1.2 ABSORPTION RATE = 625 SQ. FT.
625 SQ. FT. / 3 (TRENCH WIDTH) x 50 (SIDEWALL REDUCTION) = 104 LINEAR FEET
104 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE SECOND REPLACEMENT SYSTEM.
(2 TRENCHES OF 52 FEET IN LENGTH)



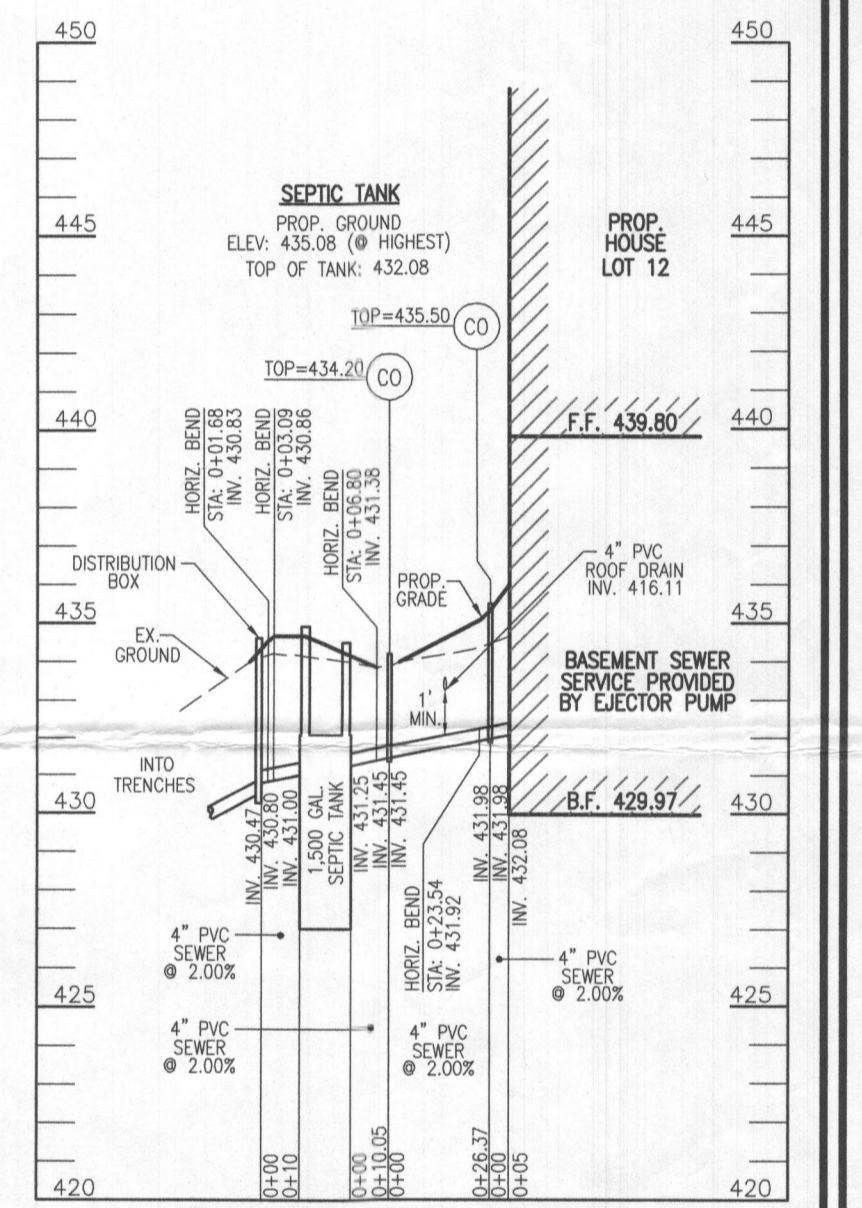
DESIGN DATA & GENERAL NOTES:

- Concrete strength 4000 psi, 48 days cure.
- Concrete minimum 10 per cent air.
- Admixtures & plasticizers per ASTM C 494 or C 684-02.
- Reinforcing per ASTM A 618, Min. 50% cover.
- Use cast in place with 3/4" rebar.
- 1" min. sand, 1/2" max. gravel.
- 1/2" min. 2" of cover.
- 1/2" min. 2" of cover.

WEIGHT = 16,750 lbs.

MBI
Mayer Bros., Inc.
www.mayerbros.com

1,500 GALLON TANK (Non-Traffic) 2-Compartment
Stock Item
Dwg No. 1500-2C No Scale Aug. 11, 2008



SEPTIC SYSTEM PROFILE
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'

Approved Septic System Plan
Howard County Health Department
Dana Buzaid 10-11-22
Signature Date

OWNER: NICHOLAUS B. KENNEDY
3094 KENNEDY
12405 KONDRUP DRIVE
FULTON, MD 20759
(443) 250-5483

DEVELOPER: GREENLEAF BUILDERS
C/O STEPHEN C. FORNEY
1601 JACKSON STREET
BALTIMORE, MD 21230
(443) 250-5483

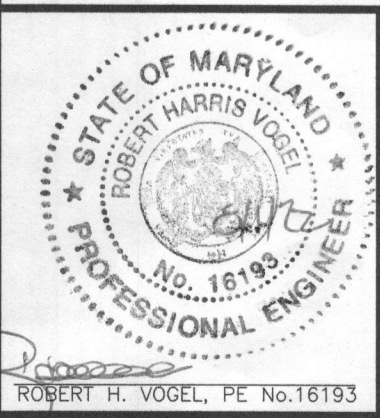
ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN

BEAUFORT PARK - LOT 12
12405 KONDRUP DRIVE
FULTON, MD 20759

PARCEL: 48
TAX MAP: 45
L 21467 / F. 40
5TH ELECTION DISTRICT

LOT: 12
BLOCK: 12
ZONED: RR-DEO
HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING
TIMMONS GROUP
3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
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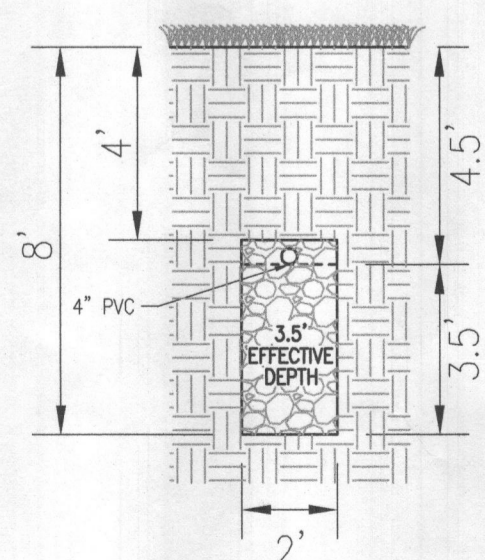


PROFESSIONAL CERTIFICATE
DESIGN BY: RHW
DRAWN BY: JMR
CHECKED BY: RHW
DATE: JULY 2022
SCALE: AS SHOWN
W.O. NO.: 52714

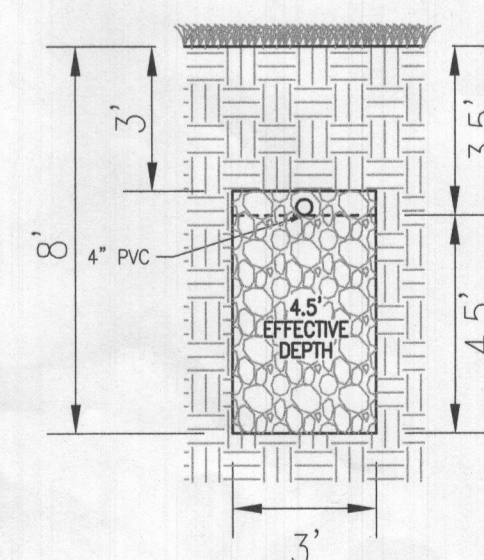
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193, EXPIRATION DATE: 09-27-2022

GENERAL NOTES:

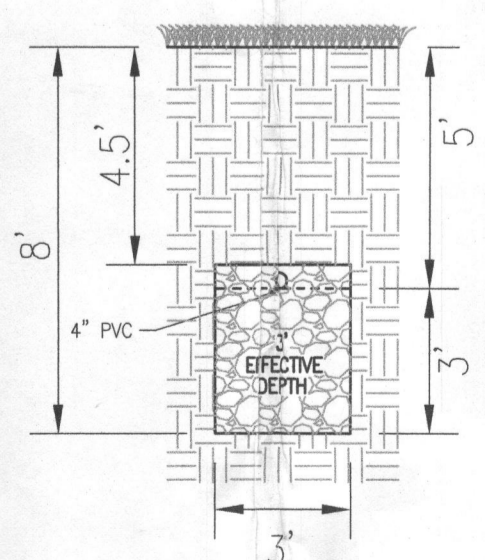
- ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
- THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
- ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
- THE WELL (HO-92-0110) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
- 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.
- ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
- THE EXISTING TOPOGRAPHY SHOWN HEREON IS TAKEN FROM A FIELD RUN TOPOGRAPHICAL SURVEY WITH 2' CONTOUR INTERVALS PREPARED BY VOGEL ENGINEERING & TIMMONS GROUP, DATED APRIL 2022. INFORMATION IS SUPPLEMENTED WITH CURRENT HOWARD COUNTY GIS DATA.
- THE PROJECT BOUNDARY IS BASED ON A FIELD RUN BOUNDARY SURVEY PREPARED BY VOGEL ENGINEERING & TIMMONS GROUP, DATED MAY 2022.
- HOWARD COUNTY HEALTH DEPARTMENT APPROVED A WARNER ON DECEMBER 2, 2013 TO REDUCE THE SDA SETBACK TO PROPERTY/RIGHT-OF-WAY LINE FROM THE REQUIRED 10' TO 5'.



INITIAL SYSTEM TRENCH DETAIL
SCALE: 1"=4'



1ST REPLACEMENT SYSTEM TRENCH DETAIL
SCALE: 1"=4'



2ND REPLACEMENT SYSTEM TRENCH DETAIL
SCALE: 1"=4'

WELL LOCATION CERTIFICATION:
THE EXISTING WELL SHOWN FOR LOT 12 (TAG #HO-92-0110) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN

SCALE 1"=30'

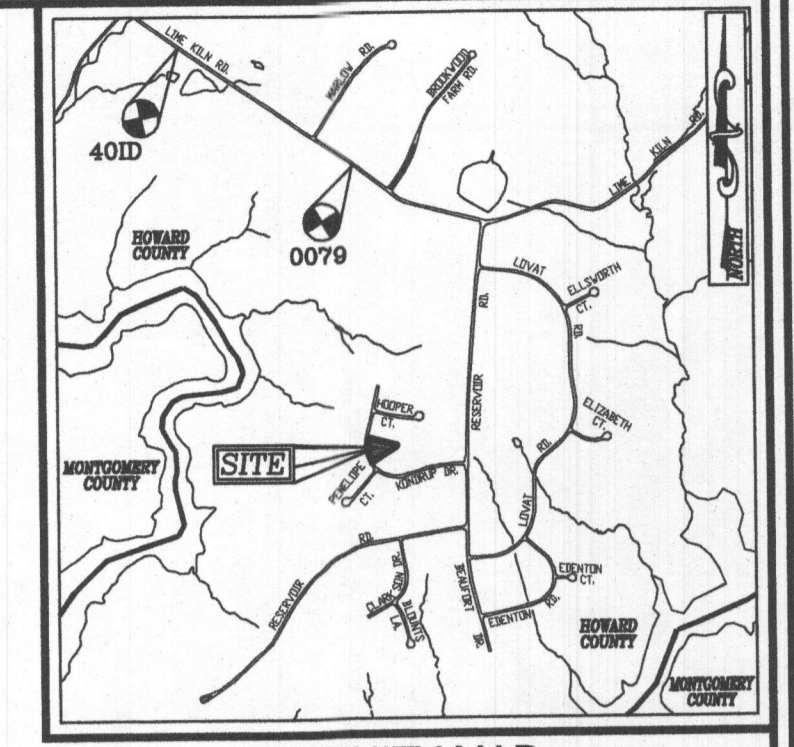
PLAN VIEW
SCALE: 1"=30'

Maryland State Grid Meridian

INITIAL SYSTEM TRENCH INFO.			
TRENCH LENGTH	TRENCH WIDTH	TRENCH DEPTH	EXISTING GROUND
63'	428.32'	425.32'	433.32'
2	63'	428.49'	424.49'
			432.49'

LEGEND:

- PROPERTY LINE
- - - ADJACENT PROPERTY LINE
- RIGHT-OF-WAY LINE
- - - EXISTING EDGE OF PAVING
- - - EXISTING TREE LINE
- - - PROPOSED TREE LINE
- - - EXISTING 10' CONTOUR
- - - EXISTING 2' CONTOUR
- - - PROPOSED 10' CONTOUR
- - - PROPOSED 2' CONTOUR
- ▨ APPROVED SEWAGE DISPOSAL AREA
- EXISTING WELL LOCATION
- PASSED PERC. TEST



VICINITY MAP

SCALE: 1"=2000'
ADC MAP: PAGE: 5051 BLOCK: J8

BENCHMARKS

HOWARD COUNTY BENCHMARK 40ID (CONC. MON.)
N 541312.56 E 1325896.28 ELEV. 367.00
LOCATION: BY #12639 LIME KILN ROAD

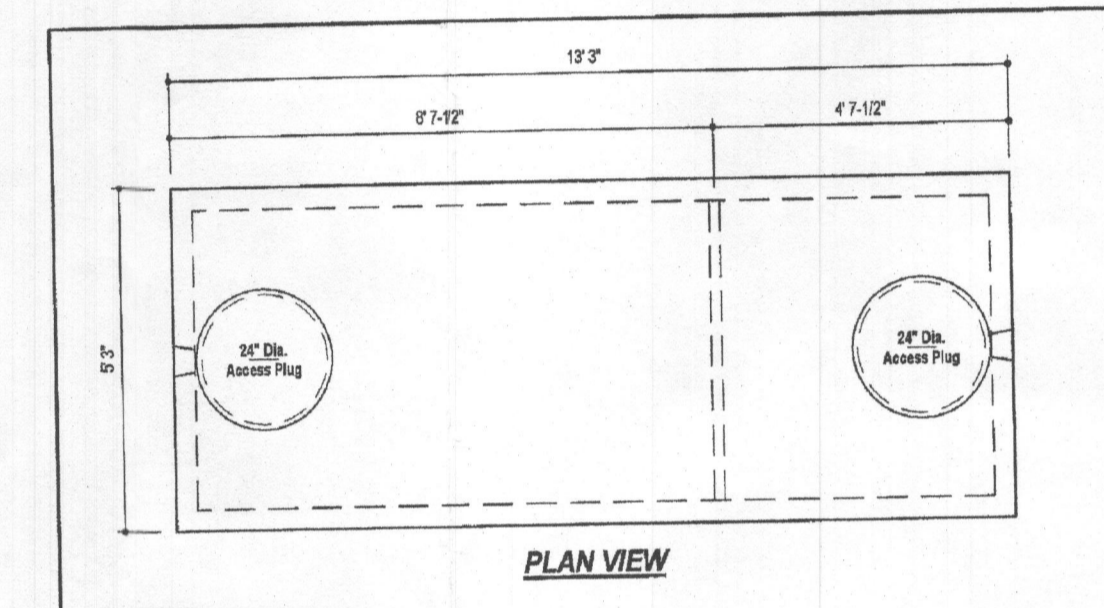
HOWARD COUNTY BENCHMARK 0079 (CONC. MON.)
N 540070.96 E 1327702.79 ELEV. 426.13
LOCATION: LIME KILN ROAD EAST OF BROWNS BRIDGE ROAD

SYSTEM CALCULATIONS:

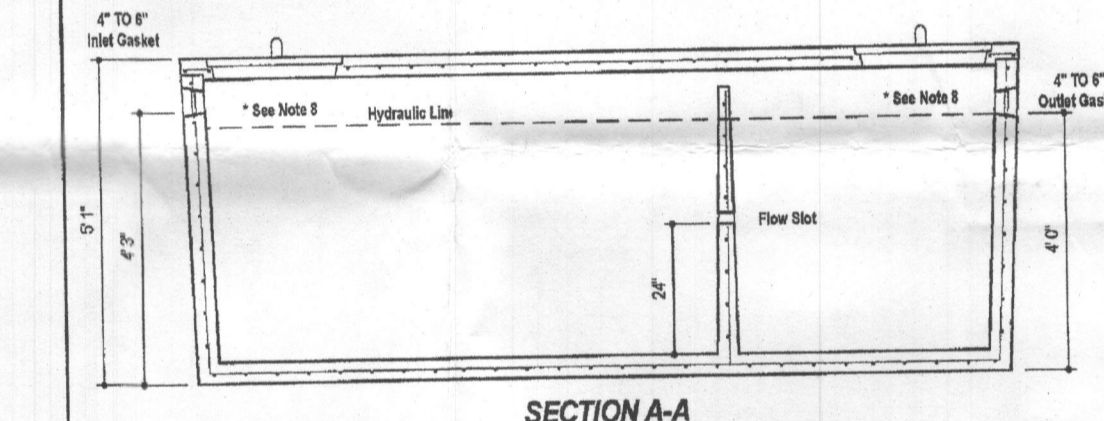
INITIAL SYSTEM:
5 BEDROOMS AT 750gpd / 12 ABSORPTION RATE = 625 SQ. FT.
625 SQ. FT. / 2 (TRENCH WIDTH) x .40 (SIDEWALL REDUCTION) = 125 LINEAR FEET
128 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE INITIAL SYSTEM.
(2 TRENCHES OF 63 FEET IN LENGTH)

FIRST REPLACEMENT SYSTEM:
5 BEDROOMS AT 750gpd / 12 ABSORPTION RATE = 625 SQ. FT.
625 SQ. FT. / 3 (TRENCH WIDTH) x .38 (SIDEWALL REDUCTION) = 79 LINEAR FEET
79 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE FIRST REPLACEMENT SYSTEM.
(1 TRENCHES OF 79 FEET IN LENGTH)

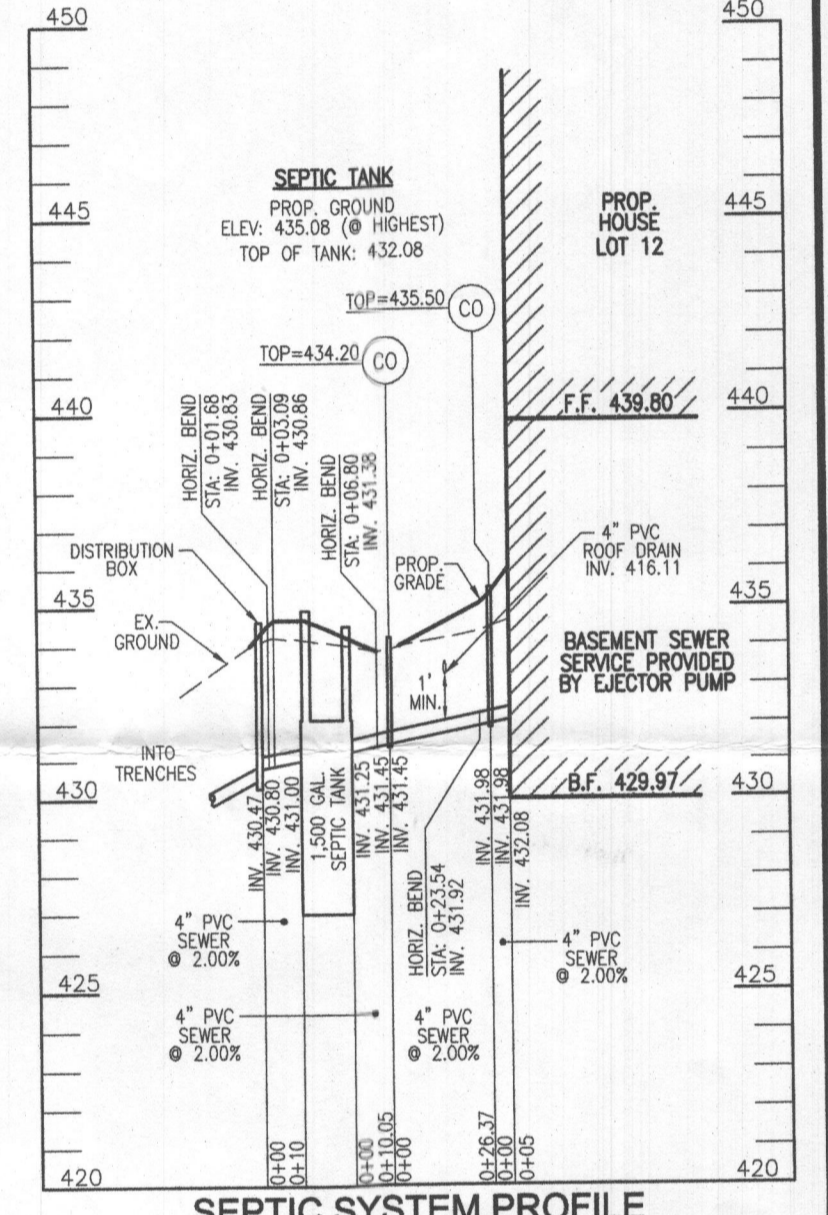
SECOND REPLACEMENT SYSTEM:
5 BEDROOMS AT 750gpd / 12 ABSORPTION RATE = 625 SQ. FT.
625 SQ. FT. / 3 (TRENCH WIDTH) x .50 (SIDEWALL REDUCTION) = 104 LINEAR FEET
104 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE SECOND REPLACEMENT SYSTEM.
(2 TRENCHES OF 52 FEET IN LENGTH)



PLAN VIEW



SECTION A-A



SEPTIC SYSTEM PROFILE

SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'

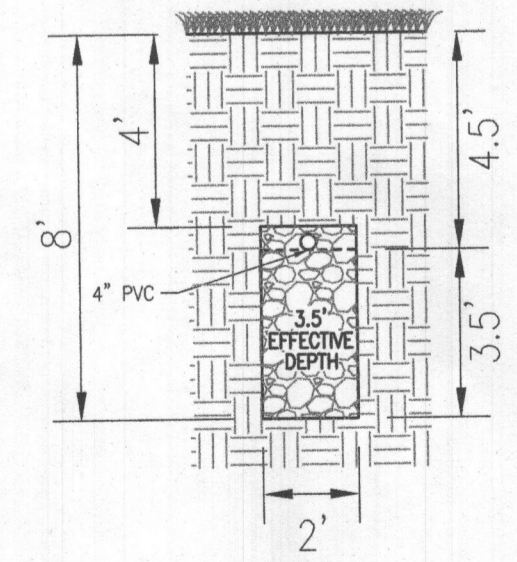
DESIGN DATA & GENERAL NOTES:
 1) Concrete strength Fc=3,000 p.s.i. G.C. 28 Days. Density = 150 p.c.f.
 2) Concrete Reinforcement Type: #4 per ASTM C 108.
 3) All dimensions & quantities per ASTM C 260 & C 104-03.
 4) Reinforcing per ASTM A 618, Grade 60, 100% cover.
 5) All work shall conform with local codes.
 6) All work shall be done in accordance with the approved plans.
 7) Depending on use of tank, field & outlet tanks may be required by code.

1,500 GALLON TANK (Non-Traffic)
2-Compartment
 Stock Item
 MBI
 Mayer Bros, Inc.
 8306 River Road
 Elkridge, Maryland 21025
 Tel. 410.796.1408
 Fax. 410.796.1409
 www.maybroscorp.com



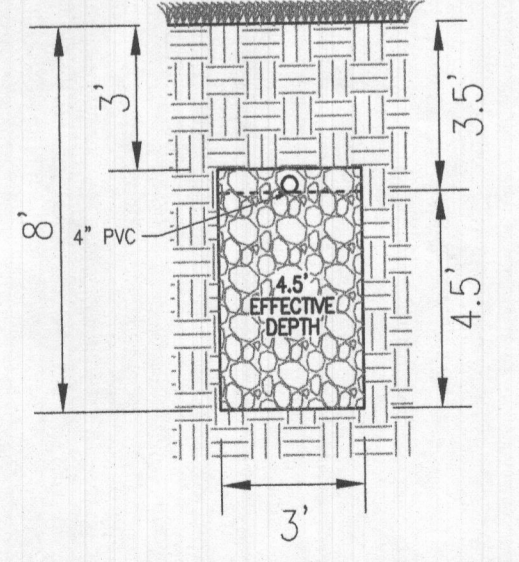
GENERAL NOTES:

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-92-0110) 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. ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
7. THE EXISTING TOPOGRAPHY SHOWN HEREON IS TAKEN FROM A FIELD RUN TOPOGRAPHICAL SURVEY WITH 2' CONTOUR INTERVALS PREPARED BY VOGEL ENGINEERING & TIMMONS GROUP, DATED APRIL 2022. INFORMATION IS SUPPLEMENTED WITH CURRENT HOWARD COUNTY GIS DATA.
8. THE PROJECT BOUNDARY IS BASED ON A FIELD RUN BOUNDARY SURVEY PREPARED BY VOGEL ENGINEERING & TIMMONS GROUP, DATED MAY 2022.



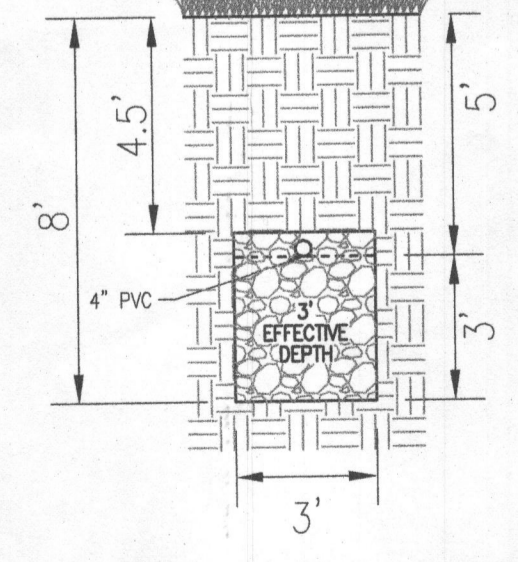
INITIAL SYSTEM TRENCH DETAIL

SCALE: 1"=4'



1ST REPLACEMENT SYSTEM TRENCH DETAIL

SCALE: 1"=4'



2ND REPLACEMENT SYSTEM TRENCH DETAIL

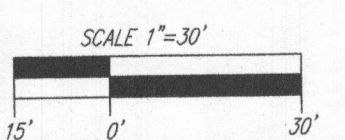
SCALE: 1"=4'

WELL LOCATION CERTIFICATION:

THE EXISTING WELL SHOWN FOR LOT 12 (TAG #HO-92-0110) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN

PLAN VIEW

SCALE: 1"=30'



ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN

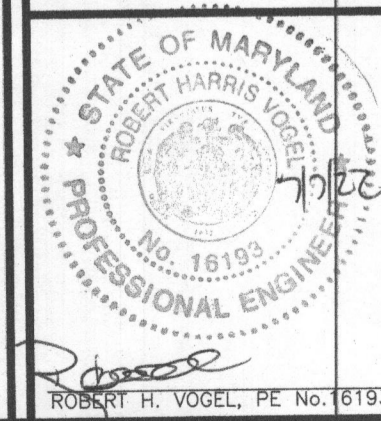
BEAUFORT PARK - LOT 12
 12405 KONDROUP DRIVE
 FULTON, MD 20759

PARCEL: 48
 TAX MAP: 45
 L. 21467 F. 40
 5TH ELECTION DISTRICT

VOGEL ENGINEERING

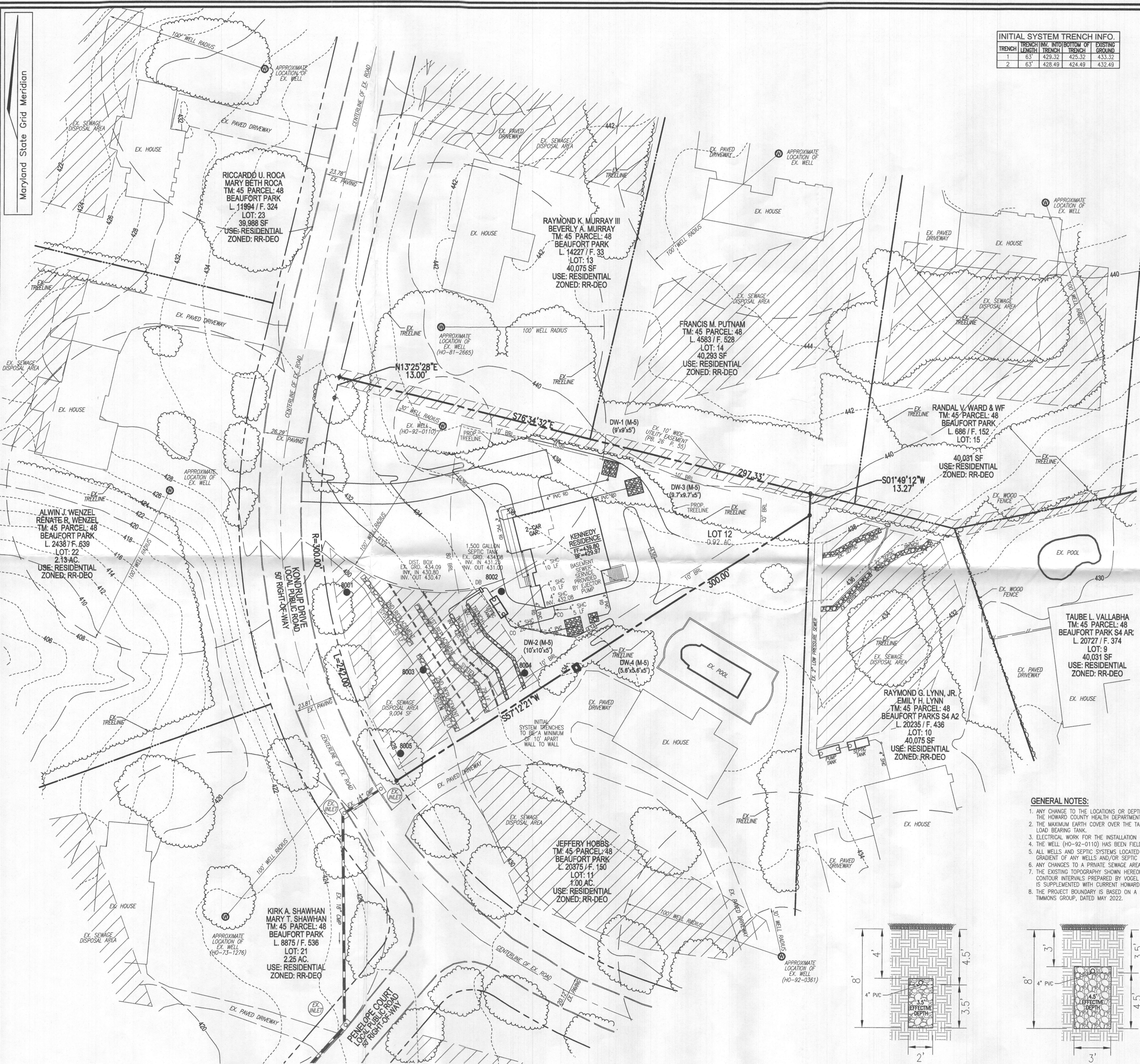
TIMMONS GROUP

3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
 P: 410.461.7666 F: 410.461.8961 www.timmons.com



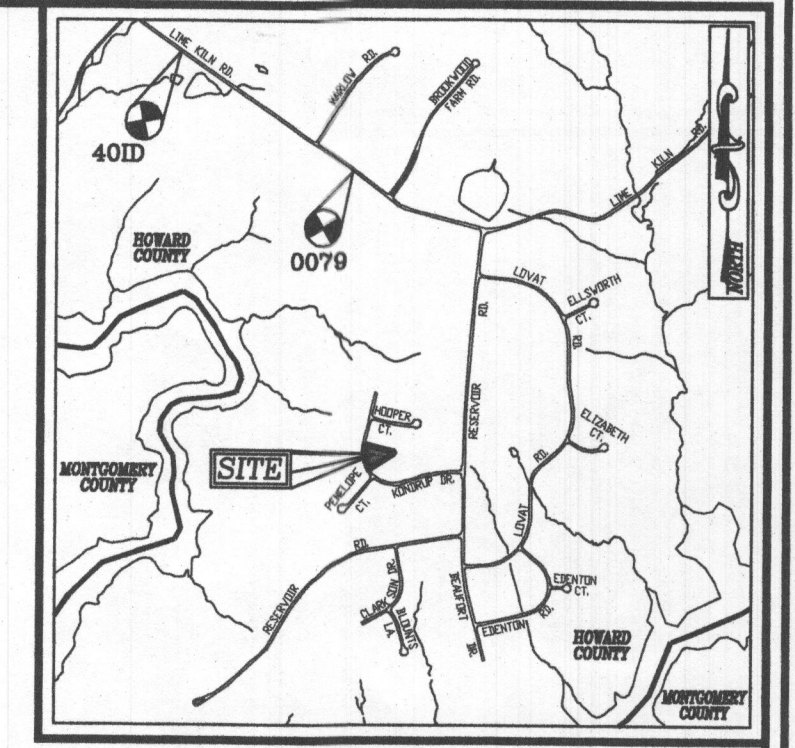
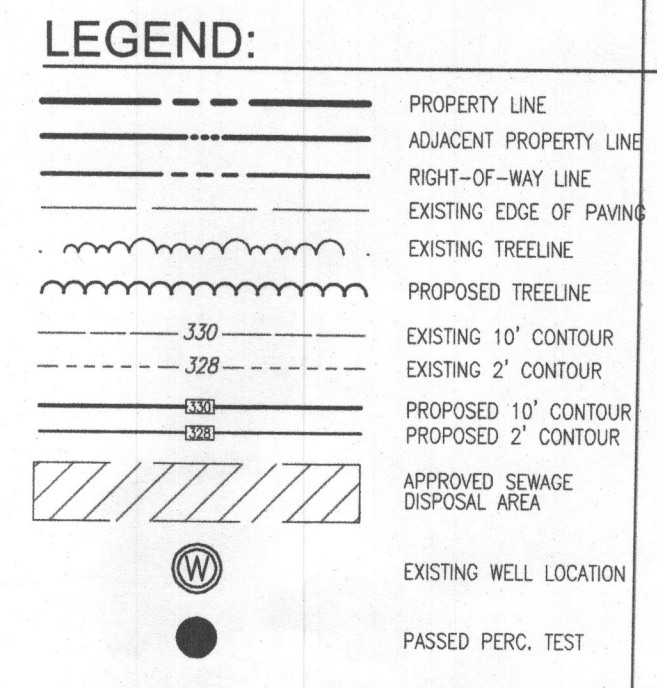
PROFESSIONAL CERTIFICATE
 DESIGN BY: RHV
 DRAWN BY: JMR
 CHECKED BY: RHV
 DATE: JULY 2022
 SCALE: AS SHOWN
 W.O. NO.: 52714

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 6193, EXPIRATION DATE 09-27-2022.



INITIAL SYSTEM TRENCH INFO.

TRENCH	INVERT	BOTTOM OF EXISTING TRENCH	EXISTING GROUND	
1	63'	429.32	425.32	433.32
2	63'	428.49	424.49	432.49

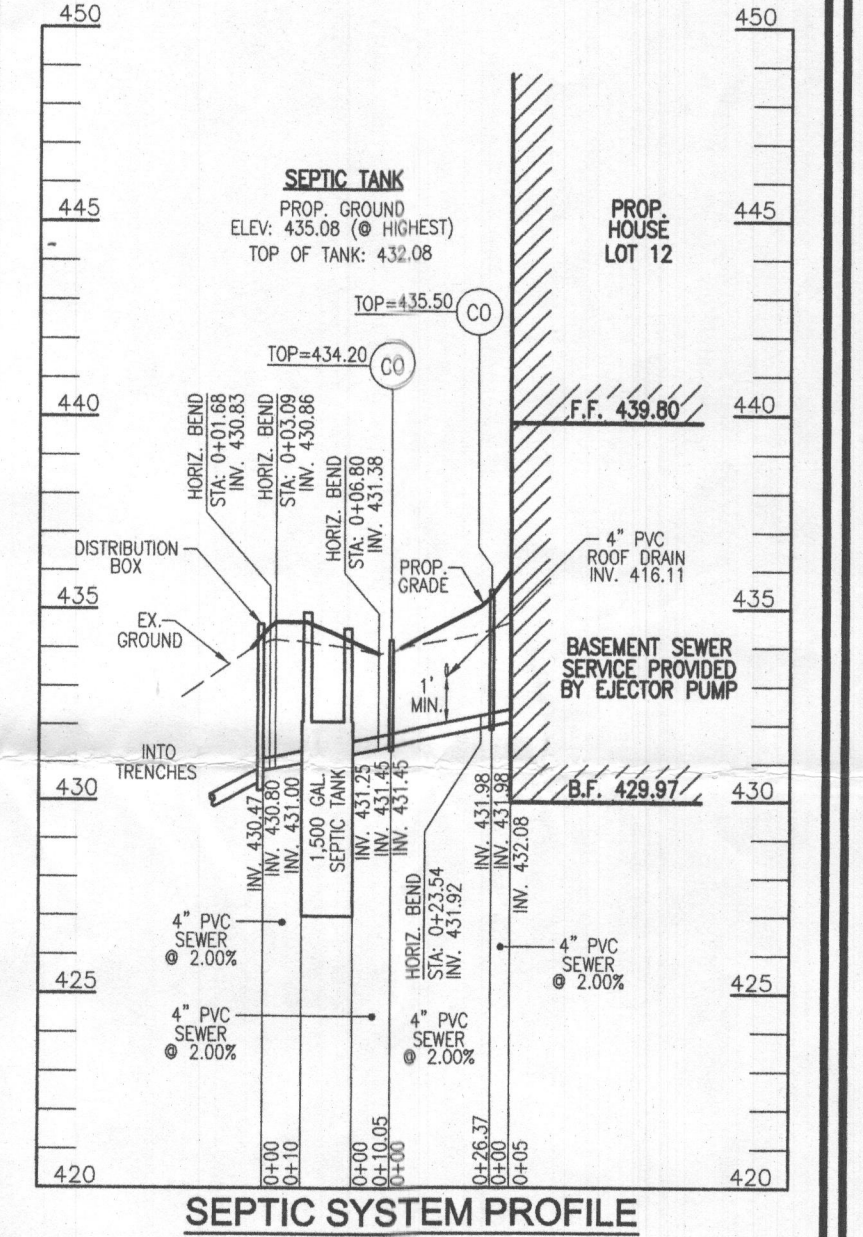
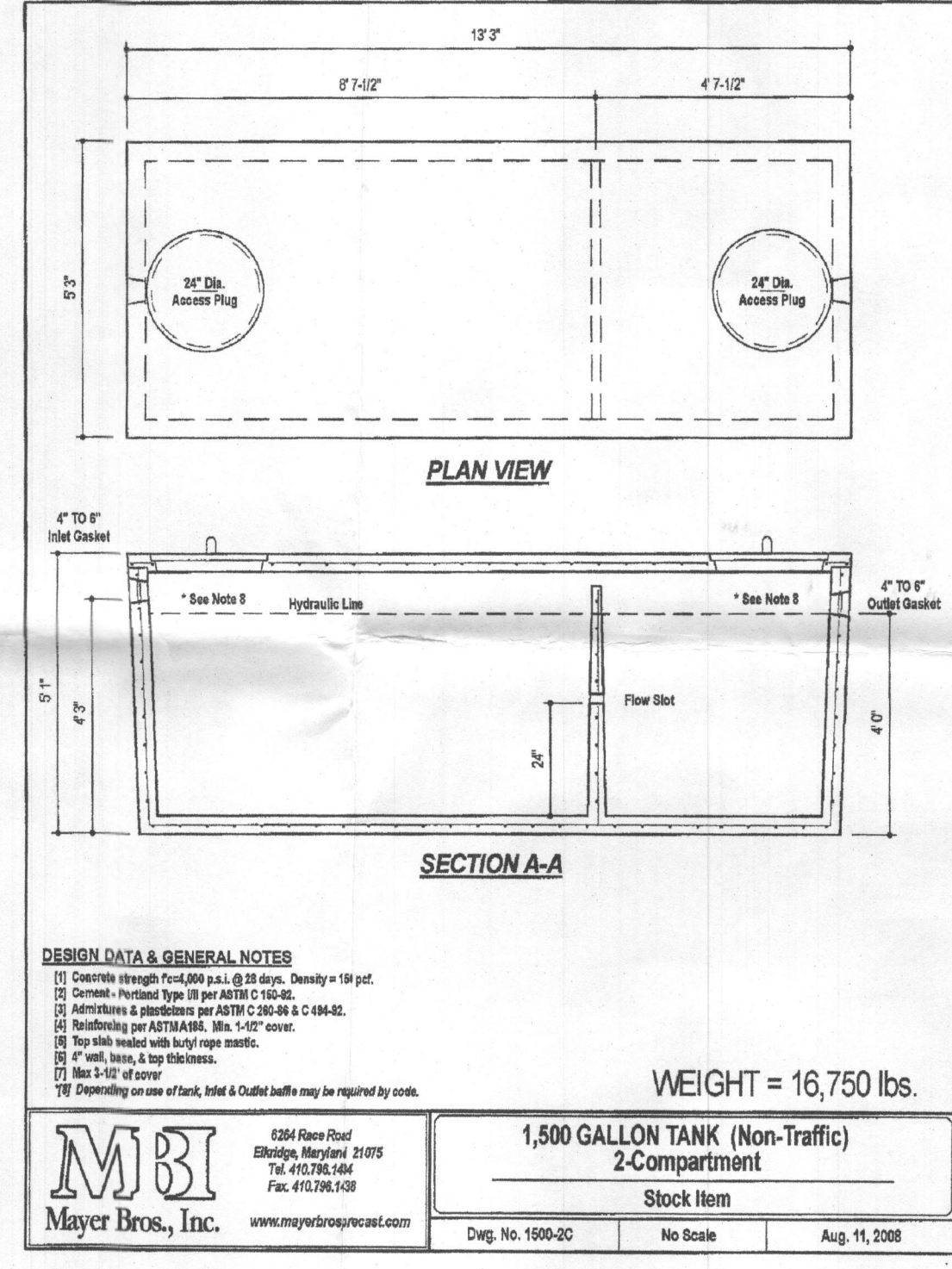


SYSTEM CALCULATIONS:

INITIAL SYSTEM:
5 BEDROOMS AT 750gpd / 1/2 ABSORPTION RATE = 625 SQ. FT.
625 SQ. FT. / 2 (TRENCH WIDTH) x .40 (SIDEWALL REDUCTION) = 125 LINEAR FEET
125 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE INITIAL SYSTEM.
(2 TRENCHES OF 63 FEET IN LENGTH)

FIRST REPLACEMENT SYSTEM:
5 BEDROOMS AT 750gpd / 1/2 ABSORPTION RATE = 625 SQ. FT.
625 SQ. FT. / 3 (TRENCH WIDTH) x .38 (SIDEWALL REDUCTION) = 79 LINEAR FEET
79 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE FIRST REPLACEMENT SYSTEM.
(1 TRENCHES OF 79 FEET IN LENGTH)

SECOND REPLACEMENT SYSTEM:
5 BEDROOMS AT 750gpd / 1/2 ABSORPTION RATE = 625 SQ. FT.
625 SQ. FT. / 3 (TRENCH WIDTH) x .50 (SIDEWALL REDUCTION) = 104 LINEAR FEET
104 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE SECOND REPLACEMENT SYSTEM.
(2 TRENCHES OF 52 FEET IN LENGTH)



- GENERAL NOTES:**
- 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. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
 - ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
 - THE WELL (HO-92-0110) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
 - 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.
 - ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
 - THE EXISTING TOPOGRAPHY SHOWN HEREON IS TAKEN FROM A FIELD RUN TOPOGRAPHICAL SURVEY WITH 2' CONTOUR INTERVALS PREPARED BY VOGEL ENGINEERING & TIMMONS GROUP, DATED APRIL 2022. INFORMATION IS SUPPLEMENTED WITH CURRENT HOWARD COUNTY GIS DATA.
 - THE PROJECT BOUNDARY IS BASED ON A FIELD RUN BOUNDARY SURVEY PREPARED BY VOGEL ENGINEERING & TIMMONS GROUP, DATED MAY 2022.

OWNER
NICHOLAS B. KENNEDY
STEPHAN C. FORNEY
12405 KONDRUP DRIVE
FULTON, MD 20759
(443) 250-5483

DEVELOPER
GREENLEAF BUILDERS
C/O STEPHEN C. FORNEY
1601 JACKSON STREET
BALTIMORE, MD 21230
(443) 250-5483

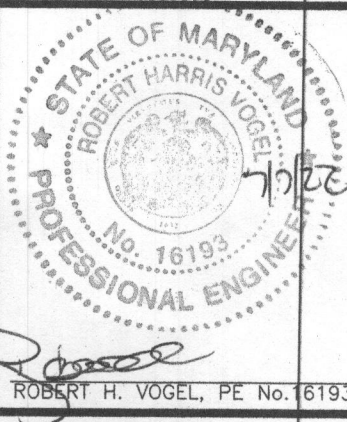
ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN

BEAUFORT PARK - LOT 12
12405 KONDRUP DRIVE
FULTON, MD 20759

PARCEL: 48
TAX MAP: 45
L 21487 / F. 40
5TH ELECTION DISTRICT

LOT: 12
BLOCK: 12
ZONED: RR-DEO
HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING
TIMMONS GROUP
3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
P: 410.461.7666 F: 410.461.8961 www.timmons.com

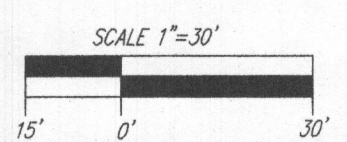


PROFESSIONAL CERTIFICATE

DESIGN BY: RHV
DRAWN BY: JMR
CHECKED BY: RHV
DATE: JULY 2022
SCALE: AS SHOWN
W.O. NO.: 52714

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. 16193, EXPIRATION DATE 09-27-2022.

1 SHEET OF 1



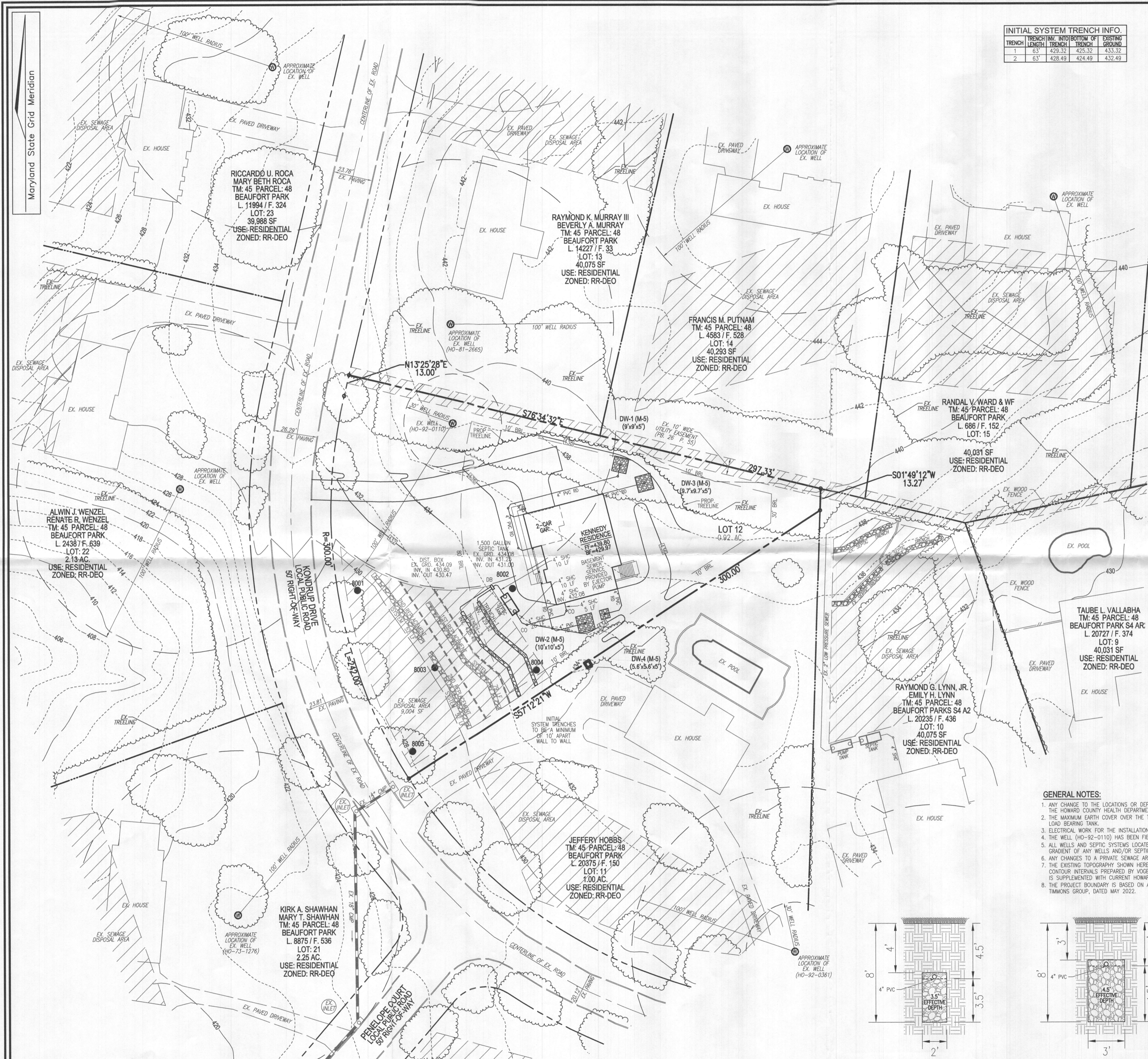
PLAN VIEW
SCALE: 1"=30'

WELL LOCATION CERTIFICATION:
THE EXISTING WELL SHOWN FOR LOT 12 (TAG #HO-92-0110) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN

INITIAL SYSTEM TRENCH DETAIL
SCALE: 1"=4'

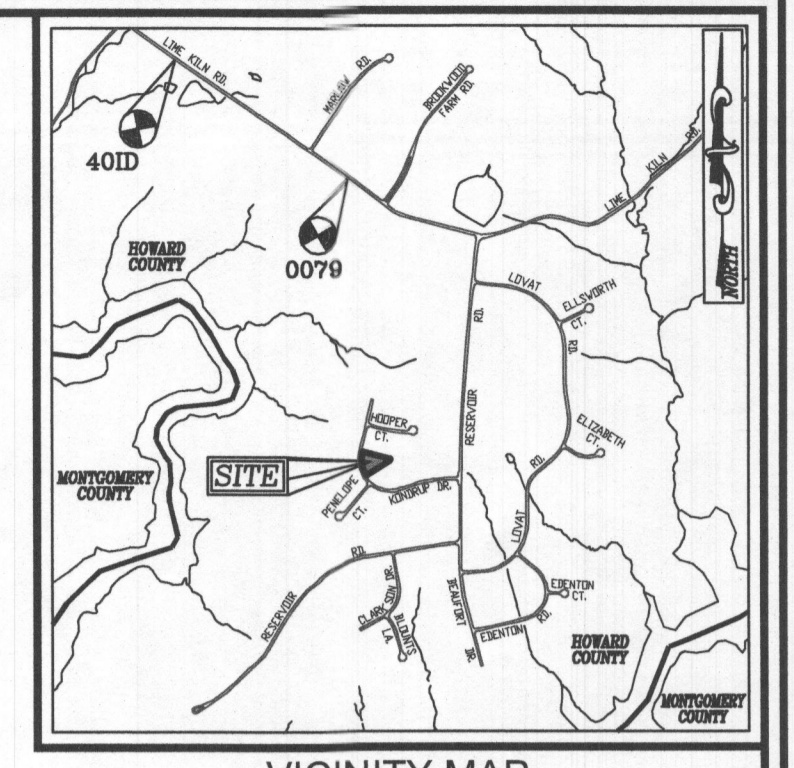
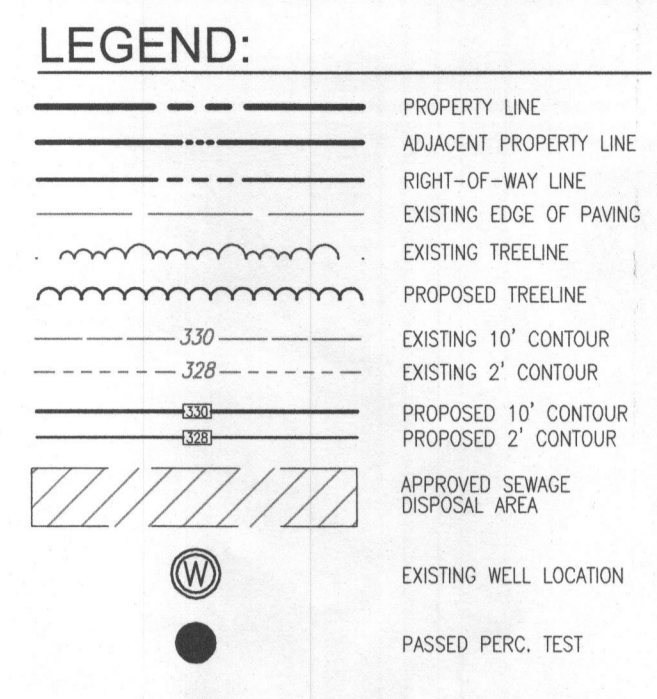
1ST REPLACEMENT SYSTEM TRENCH DETAIL
SCALE: 1"=4'

2ND REPLACEMENT SYSTEM TRENCH DETAIL
SCALE: 1"=4'



INITIAL SYSTEM TRENCH INFO.

TRENCH	TRENCH LENGTH	TRENCH WIDTH	TRENCH DEPTH	EXISTING GROUND
1	63'	42x32	42x32	433.32
2	63'	42x49	42x49	432.49

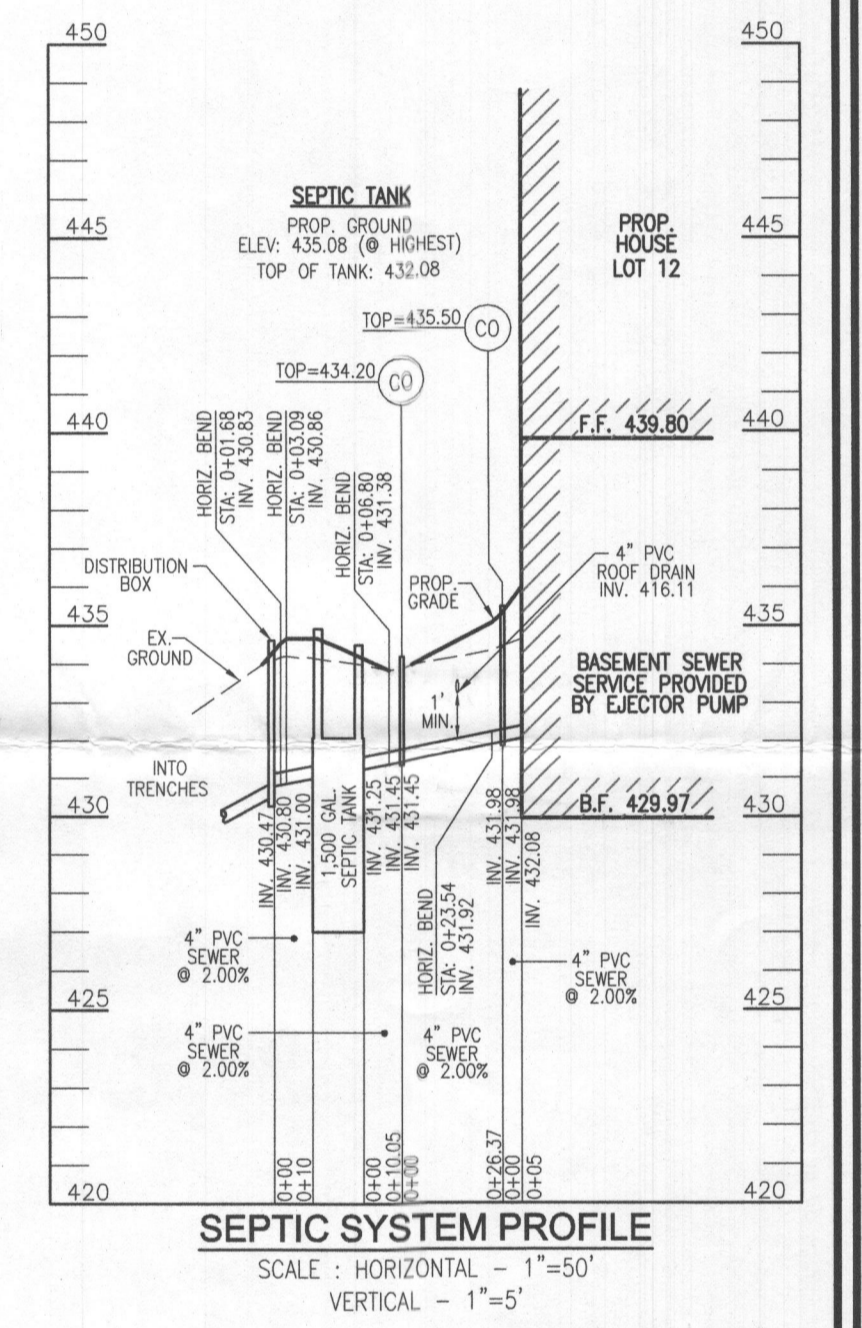
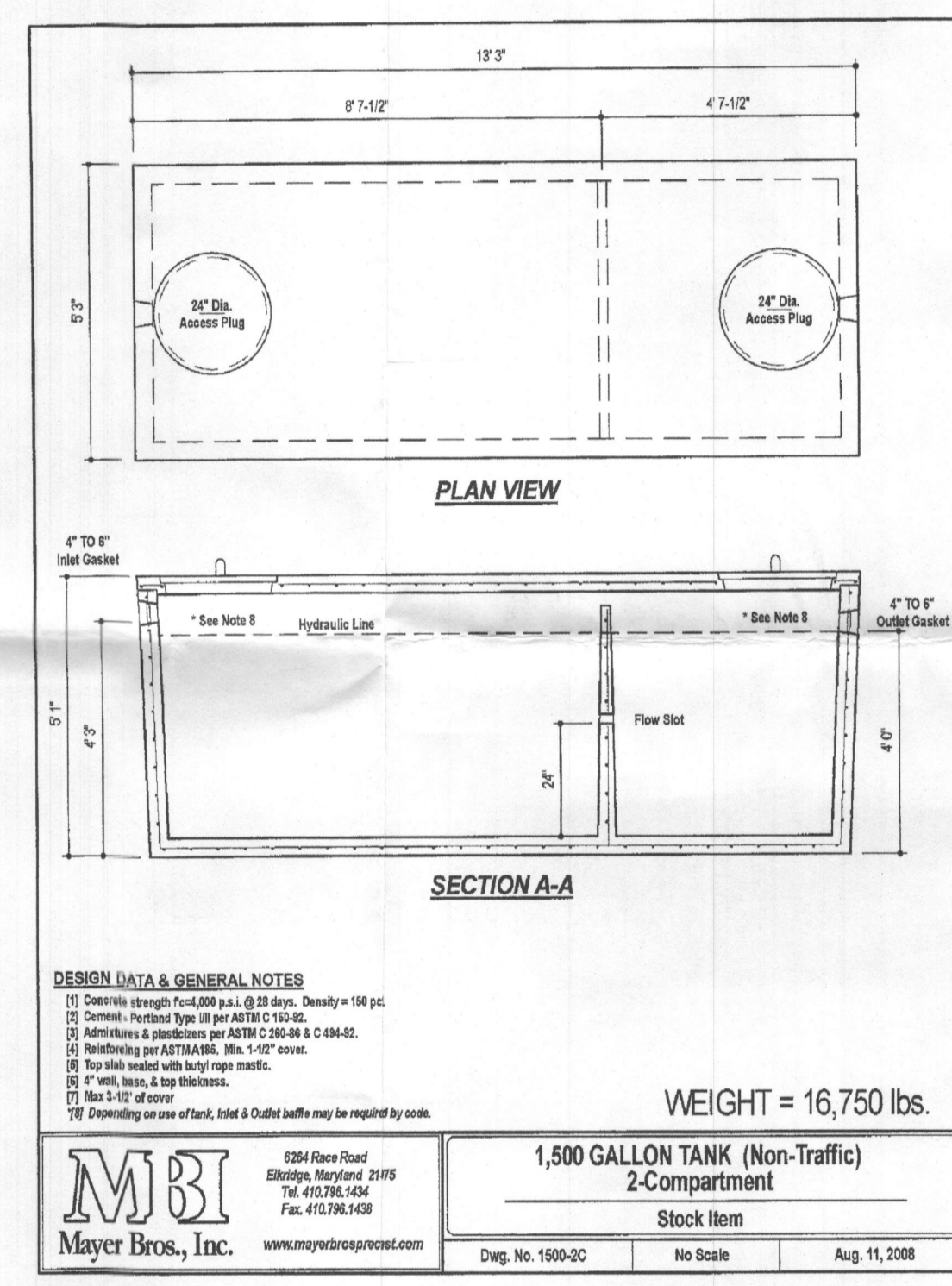


SYSTEM CALCULATIONS:

INITIAL SYSTEM:
5 BEDROOMS AT 750gpd / 1.2 ABSORPTION RATE = 625 SQ. FT.
625 SQ. FT. / 2 (TRENCH WIDTH) x .40 (SIDEWALL REDUCTION) = 125 LINEAR FEET
126 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE INITIAL SYSTEM.
(2 TRENCHES OF 63 FEET IN LENGTH)

FIRST REPLACEMENT SYSTEM:
5 BEDROOMS AT 750gpd / 1.2 ABSORPTION RATE = 625 SQ. FT.
625 SQ. FT. / 3 (TRENCH WIDTH) x .38 (SIDEWALL REDUCTION) = 79 LINEAR FEET
79 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE FIRST REPLACEMENT SYSTEM.
(1 TRENCHES OF 79 FEET IN LENGTH)

SECOND REPLACEMENT SYSTEM:
5 BEDROOMS AT 750gpd / 1.2 ABSORPTION RATE = 625 SQ. FT.
625 SQ. FT. / 3 (TRENCH WIDTH) x .50 (SIDEWALL REDUCTION) = 104 LINEAR FEET
104 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE SECOND REPLACEMENT SYSTEM.
(2 TRENCHES OF 52 FEET IN LENGTH)



- GENERAL NOTES:**
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 ELECTRICAL.
 4. THE WELL (HO-92-0110) 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. ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
 7. THE EXISTING TOPOGRAPHY SHOWN HEREIN IS TAKEN FROM A FIELD RUN TOPOGRAPHICAL SURVEY WITH 2' CONTOUR INTERVALS PREPARED BY VOGEL ENGINEERING & TIMMONS GROUP, DATED APRIL 2022. INFORMATION IS SUPPLEMENTED WITH CURRENT HOWARD COUNTY GIS DATA.
 8. THE PROJECT BOUNDARY IS BASED ON A FIELD RUN BOUNDARY SURVEY PREPARED BY VOGEL ENGINEERING & TIMMONS GROUP, DATED MAY 2022.

OWNER
NICHOLAUS B. KENNEDY
SOPHIA KENNEDY
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FULTON, MD 20759
(443) 250-5483

DEVELOPER
GREENLEAF BUILDERS
C/O STEPHEN C. FORNEY
1801 JACKSON STREET
BALTIMORE, MD 21230
(443) 250-5483

ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN

BEAUFORT PARK - LOT 12
12405 KONDRUP DRIVE
FULTON, MD 20759

PARCEL: 48
TAX MAP: 45
L. 21487 / F. 40
5TH ELECTION DISTRICT

LOT: 12
BLOCK: 12
ZONED: RR-DEO
HOWARD COUNTY, MARYLAND

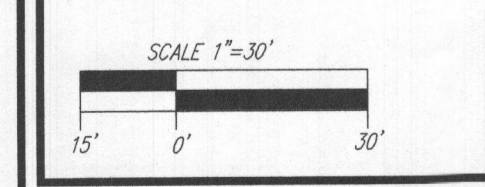
VOGEL ENGINEERING
TIMMONS GROUP
3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
P: 410.461.7666 F: 410.461.8961 www.timmons.com

PROFESSIONAL CERTIFICATE

DESIGN BY: RHM
DRAWN BY: JMR
CHECKED BY: RHM
DATE: JULY 2022
SCALE: AS SHOWN
W.O. NO.: 52714

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. 16183, EXPIRATION DATE: 08-27-2022

1 SHEET OF 1



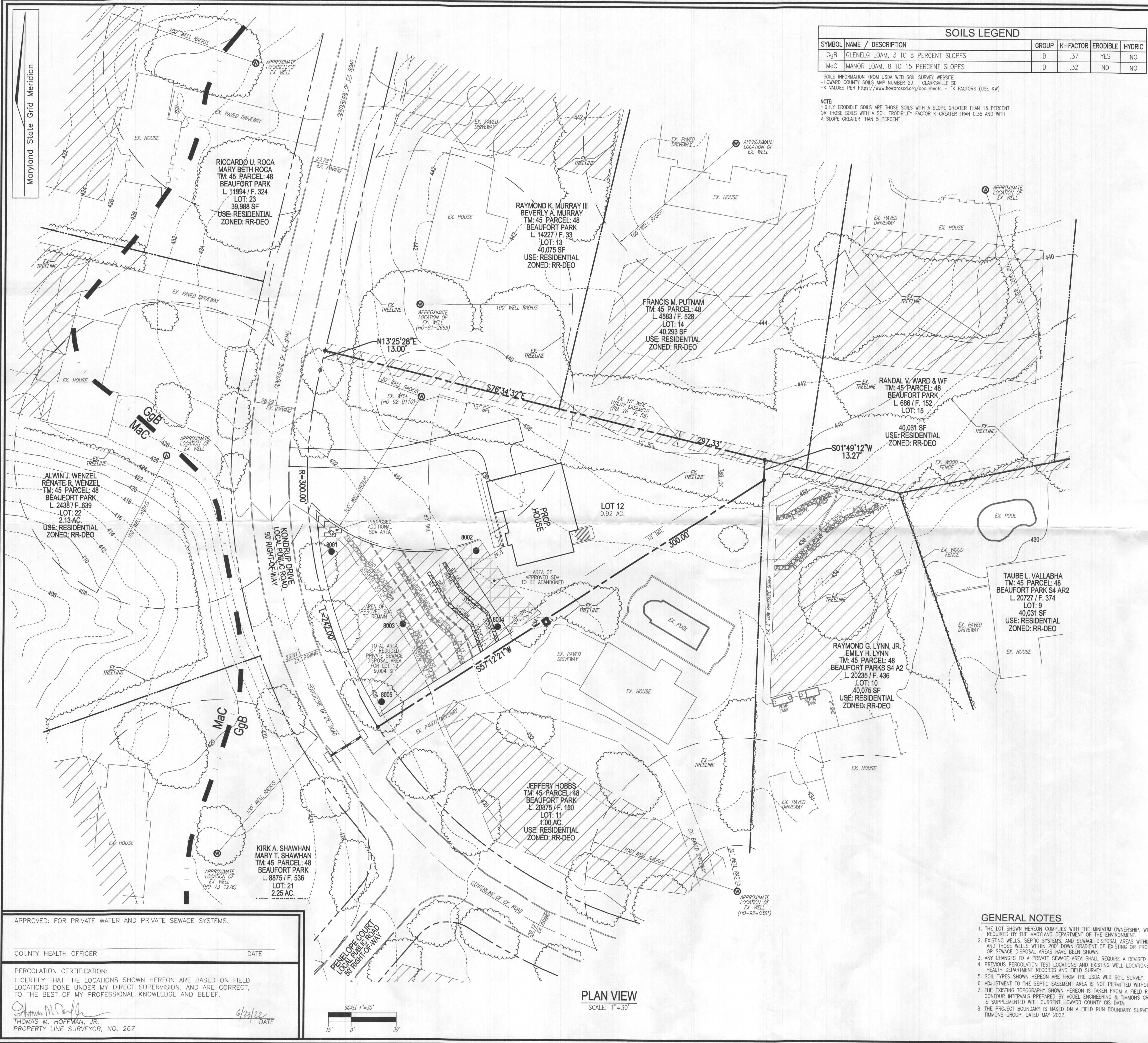
PLAN VIEW
SCALE: 1"=30'

WELL LOCATION CERTIFICATION:
THE EXISTING WELL SHOWN FOR LOT 12 (TAG #HO-92-0110) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN

INITIAL SYSTEM TRENCH DETAIL
SCALE: 1"=4'

1ST REPLACEMENT SYSTEM TRENCH DETAIL
SCALE: 1"=4'

2ND REPLACEMENT SYSTEM TRENCH DETAIL
SCALE: 1"=4'



SOILS LEGEND					
SYMBOL	NAME / DESCRIPTION	GROUP	K-FACTOR	ERODIBLE	HYDRIC
GgB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	B	.37	YES	NO
MaC	MANOR LOAM, 8 TO 15 PERCENT SLOPES	B	.32	NO	NO

NOTE:
HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR K GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT.

LEGEND:

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- RIGHT-OF-WAY LINE
- EXISTING EDGE OF PAVING
- EXISTING TREELINE
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- EXISTING WELL LOCATION
- PASSED PERC. TEST
- SOILS
- APPROVED SEWAGE DISPOSAL AREA TO REMAIN
- APPROVED SEWAGE DISPOSAL AREA TO BE ABANDONED
- PROPOSED ADDITIONAL SEWAGE DISPOSAL AREA

VICINITY MAP
SCALE: 1"=200'
ADC MAP: PAGE: 5051 BLOCK: JB

BENCHMARKS
HOWARD COUNTY BENCHMARK 401D (CONC. MON.)
N 541312.56 E 1325896.28 ELEV. 367.00
LOCATION: BY #12639 LIME KILN ROAD

HOWARD COUNTY BENCHMARK 0079 (CONC. MON.)
N 540070.96 E 1327702.79 ELEV. 426.13
LOCATION: LIME KILN ROAD EAST OF BROWNS BRIDGE ROAD

SYSTEM CALCULATIONS:

INITIAL SYSTEM:
5 BEDROOMS AT 750gpd / 1.2 ABSORPTION RATE = 625 SQ. FT.
625 SQ. FT. / 2 (TRENCH WIDTH) x 40 (SIDEWALL REDUCTION) = 125 LINEAR FEET
125 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE INITIAL SYSTEM.
(2 TRENCHES OF 63 FEET IN LENGTH)

FIRST REPLACEMENT SYSTEM:
5 BEDROOMS AT 750gpd / 1.2 ABSORPTION RATE = 625 SQ. FT.
625 SQ. FT. / 3 (TRENCH WIDTH) x 38 (SIDEWALL REDUCTION) = 79 LINEAR FEET
79 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE FIRST REPLACEMENT SYSTEM.
(1 TRENCHES OF 79 FEET IN LENGTH)

SECOND REPLACEMENT SYSTEM:
5 BEDROOMS AT 750gpd / 1.2 ABSORPTION RATE = 625 SQ. FT.
625 SQ. FT. / 3 (TRENCH WIDTH) x 50 (SIDEWALL REDUCTION) = 104 LINEAR FEET
104 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE SECOND REPLACEMENT SYSTEM.
(2 TRENCHES OF 52 FEET IN LENGTH)

NOTE:
THE PURPOSE OF THIS PERCOLATION CERTIFICATION REVISION PLAN IS TO REDUCE THE SIZE OF THE APPROVED SDA FOR LOT 12 TO ALLOW FOR BETTER FIT OF THE PROPOSED HOUSE

OWNER
NICHOLAUS B. KENNEDY
SOPHIA KENNEDY
12405 KONDRUP DRIVE
FULTON, MD 20759
(443) 250-5483

DEVELOPER
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C/O STEPHEN G. FORNEY
1601 JACKSON STREET
BALTIMORE, MD 21230
(443) 250-5483

PERCOLATION CERTIFICATION REVISION PLAN

BEAUFORT PARK - LOT 12
12405 KONDRUP DRIVE
FULTON, MD 20759

PARCEL: 48
TAX MAP: 45
L. 21467 / F. 40
5TH ELECTION DISTRICT

LOT: 12
BLOCK: 12
ZONED: RR-DEO
HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING
+
TIMMONS GROUP
3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
P: 410.461.7666 F: 410.461.8961 www.timmons.com

PROFESSIONAL CERTIFICATE

DESIGN BY: RHY
DRAWN BY: JMR
CHECKED BY: RHY
DATE: JUNE 2022
SCALE: AS SHOWN
W.O. NO.: 52714

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. 11183 EXPIRATION DATE: 09-27-2022

1 SHEET OF 1

- GENERAL NOTES**
- THE LOT SHOWN HEREON COMPLES WITH THE MINIMUM OWNERSHIP, WIDTH, AND LOT AREA AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
 - EXISTING WELLS, SEPTIC SYSTEMS, AND SEWAGE DISPOSAL AREAS WITHIN 100' OF THE PROPERTY AND THOSE WELLS WITHIN 200' DOWN GRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS OR SEWAGE DISPOSAL AREAS HAVE BEEN SHOWN.
 - ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERC CERTIFICATION PLAN.
 - PREVIOUS PERCOLATION TEST LOCATIONS AND EXISTING WELL LOCATIONS TAKEN FROM HOWARD COUNTY HEALTH DEPARTMENT RECORDS AND FIELD SURVEY.
 - SOIL TYPES SHOWN HEREON ARE FROM THE USDA WEB SOIL SURVEY.
 - ADJUSTMENT TO THE SEPTIC EASEMENT AREA IS NOT PERMITTED WITHOUT ADDITIONAL TESTING.
 - THE EXISTING TOPOGRAPHY SHOWN HEREON IS TAKEN FROM A FIELD RUN TOPOGRAPHICAL SURVEY WITH 2' CONTOUR INTERVALS PREPARED BY VOGEL ENGINEERING & TIMMONS GROUP, DATED APRIL 2022. INFORMATION IS SUPPLEMENTED WITH CURRENT HOWARD COUNTY GIS DATA.
 - THE PROJECT BOUNDARY IS BASED ON A FIELD RUN BOUNDARY SURVEY PREPARED BY VOGEL ENGINEERING & TIMMONS GROUP, DATED MAY 2022.

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS.

COUNTY HEALTH OFFICER _____ DATE _____

PERCOLATION CERTIFICATION:
I CERTIFY THAT THE LOCATIONS SHOWN HEREON ARE BASED ON FIELD LOCATIONS DONE UNDER MY DIRECT SUPERVISION, AND ARE CORRECT TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND BELIEF.

THOMAS M. HOFFMAN, JR.
PROPERTY LINE SURVEYOR, NO. 267

6/23/22
DATE

PLAN VIEW
SCALE: 1"=30'

SCALE 1"=30'
15' 0' 30'