



**Howard County  
Health Department**

**Bureau of Environmental Health**

8930 Stanford Boulevard, Columbia, MD 21045  
Main: 410-313-2640 | Fax: 410-313-2648  
TDD 410-313-2323 | Toll Free 1-866-313-6300  
[www.hchealth.org](http://www.hchealth.org)  
Facebook: [www.facebook.com/hocohealth](http://www.facebook.com/hocohealth)

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

RECEIPT DATE: 8/11/23 **ONSITE SEWAGE DISPOSAL SYSTEM**

P 574990

APPROVAL DATE: 9/6/23 **PERMIT: CONSTRUCTION**

A \_\_\_\_\_

PROPERTY ADDRESS: 5236 Green Bridge Road

-UPGRADE-

SUBDIVISION: \_\_\_\_\_ LOT: \_\_\_\_\_ TAX ID: \_\_\_\_\_

CONTRACTOR: Fogles Septic Clean, Inc EMAIL: \_\_\_\_\_

CONTRACTOR ADDRESS: 580 Obrecht Rd, Sykesville MD 21784 PHONE: 410-795-8670

PROPERTY OWNER: Alexandra & Bradley Palmer EMAIL: \_\_\_\_\_

OWNER ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

SEPTIC TANK SIZE (GALLONS): 1500 GAL TANK MANUFACTURER: N/A

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

DISTRIBUTION SYSTEM:  GRAVITY  PRESSURE DOSED BEDROOMS: 4 APPLICATION RATE: 1.2

TRENCHES:	LINEAR FEET REQUIRED: <u>70' (2 @ 35')</u>	INLET DEPTH: <u>4'</u>
	TRENCH WIDTH: <u>3'</u>	MAXIMUM BOTTOM DEPTH: <u>8'</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>11'</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>4'</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:	<u>2 trenches @ 35'</u> <u>cesspool to be abandoned.</u>	

ISSUED BY: Zack Silvast ISSUE DATE: 8/23/23 EXPIRATION DATE: 8/23/24

- 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 N/A
- NOTE: MDE RECOMMENDS SEPTIC TANKS, BAT, AND OTHER PRETREATMENT UNITS BE PUMPED AT A FREQUENCY ADEQUATE TO ENSURE THAT SOLIDS ARE NOT DISCHARGED TO THE DISPOSAL AREA

**NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM.  
PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT.  
CALL 410-313-1771 TO SCHEDULE INSPECTIONS.**

NOT TO SCALE

TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	3.5'-4'	8'
NUMBER OF TRENCHES		2
TOTAL LENGTH		70'
ABSORPTION AREA		210 sqft + sidewalk
DISTRIBUTION BOX LEVEL		yes
DISTRIBUTION BOX BAFFLE		yes
DISTRIBUTION BOX PORT		yes w/riser

See separate  
sheet for  
AS-built

ROAD NAME

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL	yes
MANUFACTURER	Babylon
CAPACITY	1500 GAL
SEAM LOC	top
TANK LID DEPTH	1.5'-2'
BAFFLES	6" front / 4" back
BAFFLE FILTER	-
MANHOLE LOC	front/back
6" PORT LOC	-
WATERTIGHT TEST	-
* SLOTTED	yes
DATE ON LID	7/12/23
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:

8/31/2023 - Contractor onsite for prec on. Sewer on of existing house exposed, shot elevation from trench to street, 22" fall. 2' of cover at man will be outside from 25' from house. Initial septic trenches had large trees in the area, decided to move trenches up closer toward front & right toward house. vertical perc hole 8 & 10 had similar soils as 5. upper trench length @ 35', elevation has 1.5" difference. Lower trench @ 35', elevation has 1.5"-2.5" difference. Distance between trenches 10'. Will 7100' from trench to street. OK to start work @

INSTALLATION: 9/5/23 - Site inspection w/ contractor onsite, septic tank in the ground and sewer line from the house installed. SHC made, line from the tank to the d box completed and the 2 leader pipes to the trenches installed, contractor working on the trenches, ok to continue work (check slot in ST) 9/6/23 - contractor onsite, installation complete, 2 x 35' trenches, inlet raised to 3.5' to 4' with a step down to both trenches from the d box, observation ports installed, contractor ran into a perc hole in the middle of the trench closest to the house and filled in w/ stone, stone looked ok, geotextile fabric in place, d box leveled w/ levelers, ok to backfill. (11-22)

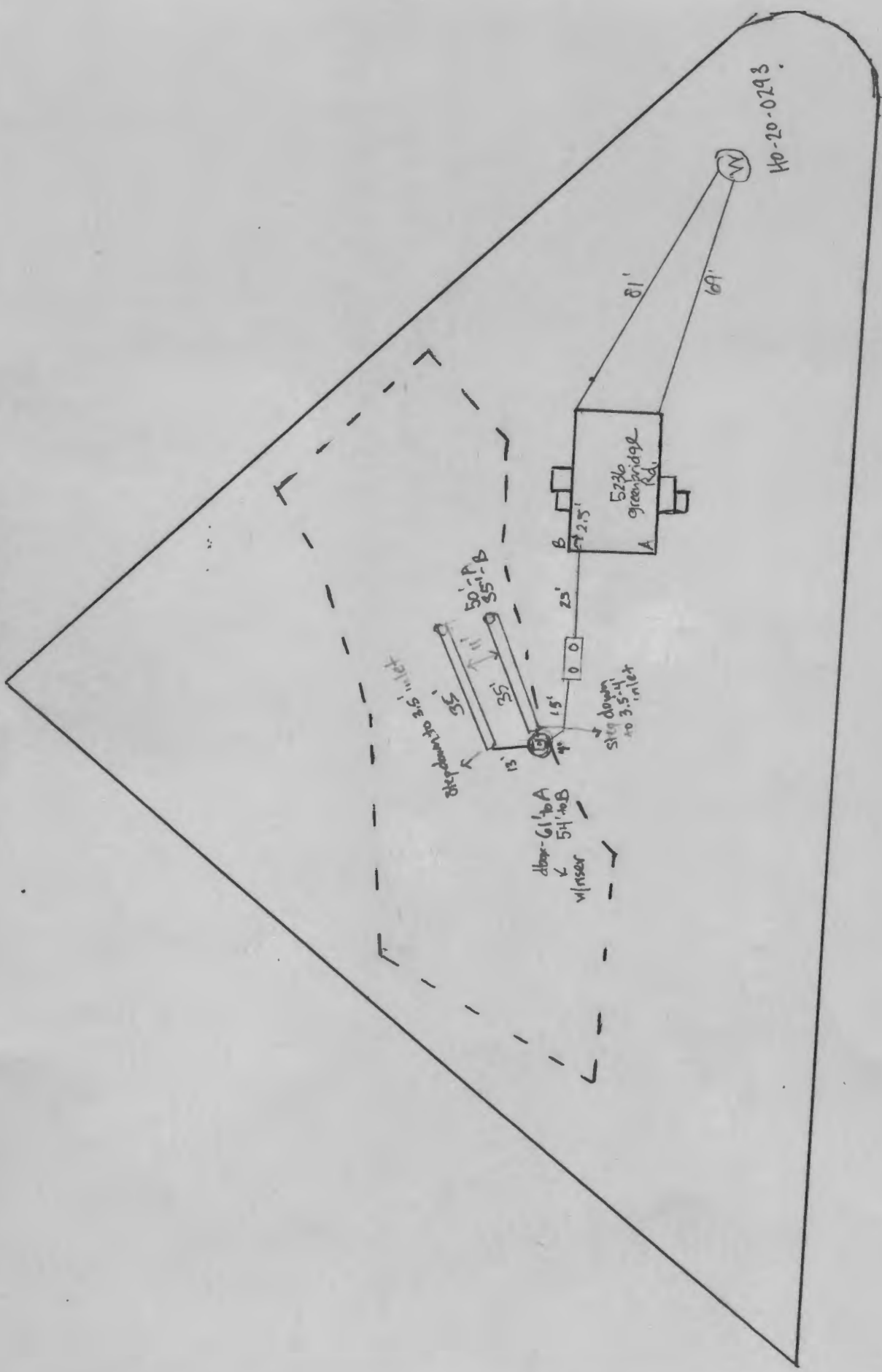
FINAL INSPECTOR

R. Peppas

DATE OF APPROVAL

9/6/23

NOT TO SCALE 1" = 40'



## Silvast, Zackary

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**From:** Silvast, Zackary  
**Sent:** Thursday, July 13, 2023 5:30 PM  
**To:** Luke Groom  
**Cc:** Paul Cavanaugh  
**Subject:** regarding 5236 Green Bridge Road OSDS revision comments

Hello,

Has this new well been drilled and the old well abandoned? I cannot approve a OSDS plan until that has been completed.

I have the following revision comments for what was submitted.

1. Trenches need to be as linear as possible while maintaining natural contours.
  - a. NO wiggle worm trench drawings.
2. Scale needs to be adjusted, actual site plan is way too small use 1" = 40'.
3. Note 7 is not acceptable, this needs to be accounted for in the design and shown on the plan.
4. There's pump tank details and elevations but no pump tank shown on the plan?
5. Trench detail is off and upside down and not fully labeled.
  - a. 4.5' of stone 3.5' earth cover.
  - b. Need to show effective depth in profile.
6. What does note 6 mean? Is it applicable?
7. For septic system calculations.
  - a. Initial, use 35' lines.
  - b. For the two replacements, use 63' lines.

We look forward to your resubmittal. Thank you.

- ZS

**Zack Silvast (LEHS)**

*Plan Review Supervisor - Water & Sewer Division*  
410-313-1777

Environmental Health Bureau  
Howard County Health Department

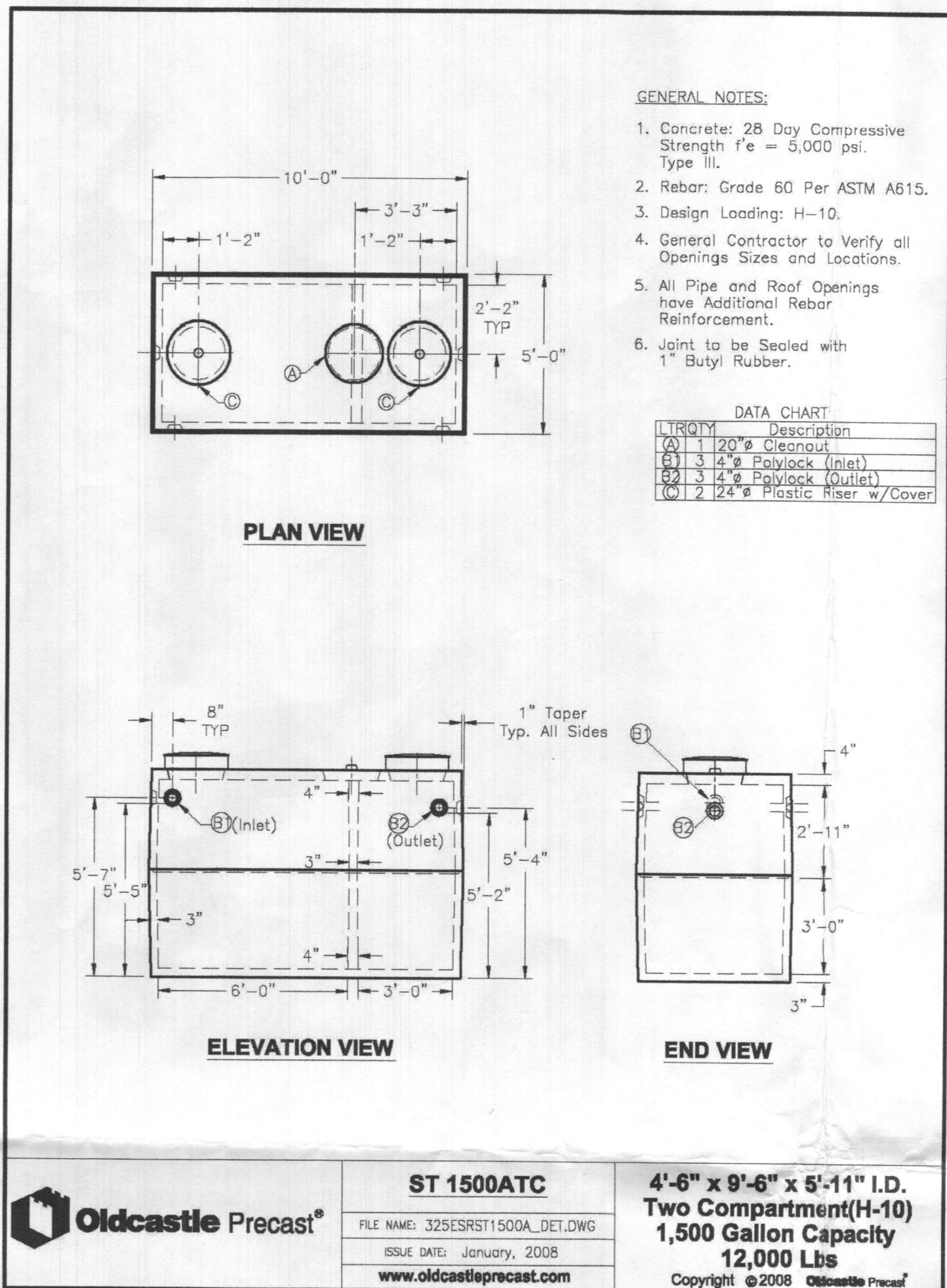
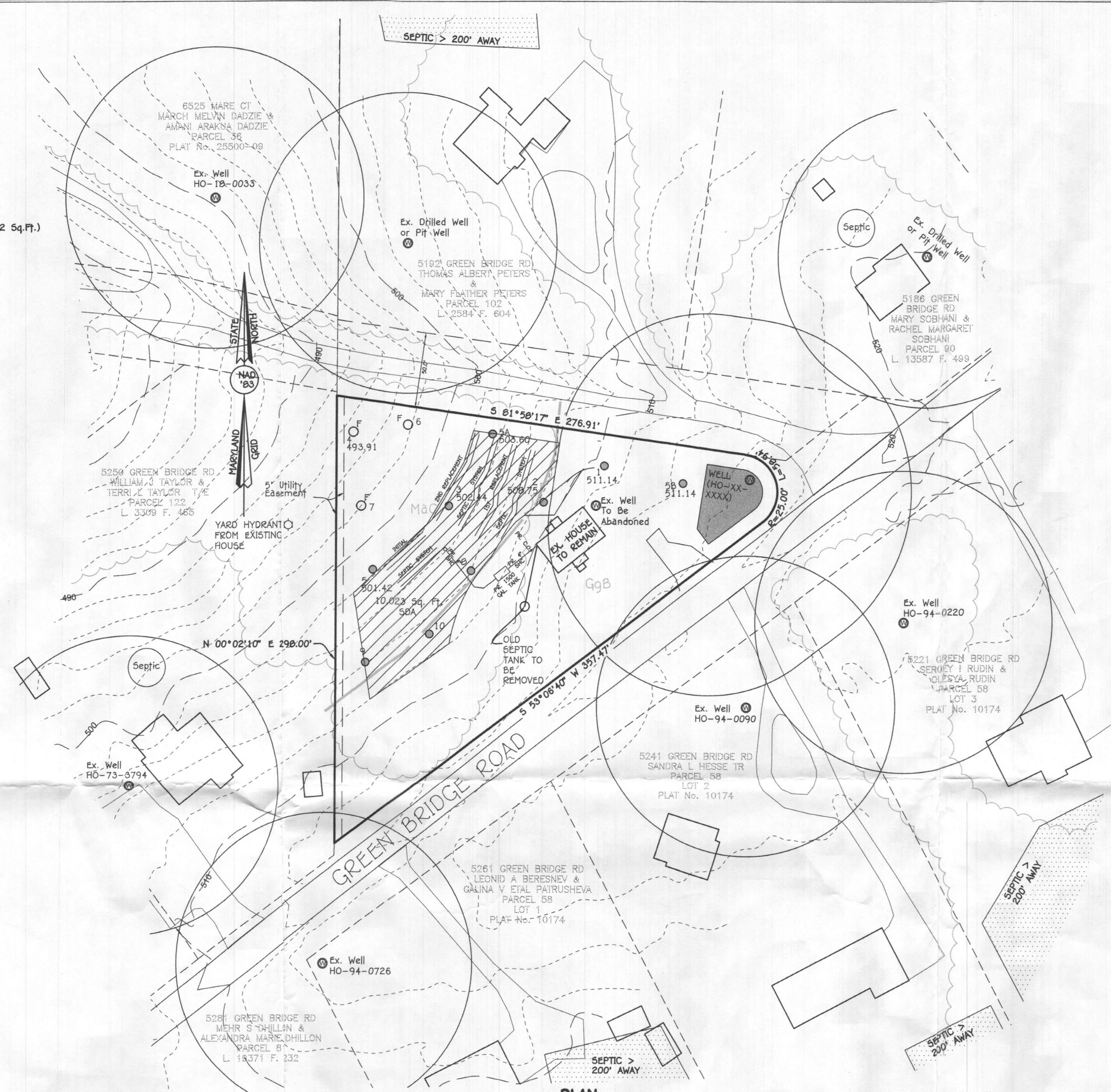
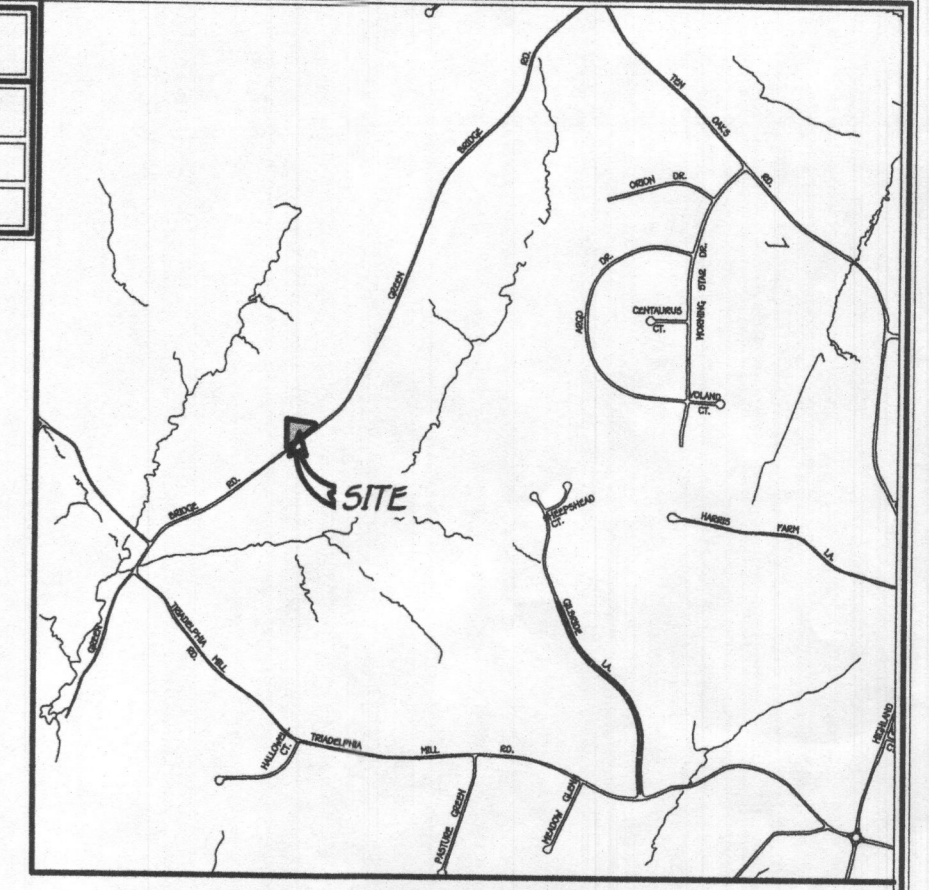


**LEGEND**

- EXISTING 2' CONTOURS
- EXISTING 10' CONTOURS
- EXISTING TREE LINE
- SOIL LINES AND TYPES
- ⊙ DENOTES EXISTING WELL
- ⊕ DENOTES PROPOSED WELLS
- ⊖ DENOTES FAILED PERC
- ⊙ DENOTES PASSED PERC
- ⊙ DENOTES 1500 Sq.Ft. ALTERNATE WELL SITE
- ▨ DENOTES ADDED SEWAGE DISPOSAL AREA (10,032 Sq.Ft.)

**SOILS LEGEND**

SOIL	NAME	CLASS
GgB	Cleneq loam, 3 to 8 percent slopes	B
MAC	Minor loam, 8 to 15 percent slopes	B



- 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-XX-XXXX 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.
- THE ENGINEER IS REGISTERED WITH MDE TO PERFORM ON-SITE WASTEWATER SERVICES IN MARYLAND.
- BASEMENT MAY REQUIRE THE INSTALLATION OF AN EJECTOR PUMP TO UTILIZE SEPTIC SYSTEM. BASEMENT ELEVATION IS APPROXIMATE.

**INITIAL SYSTEM**

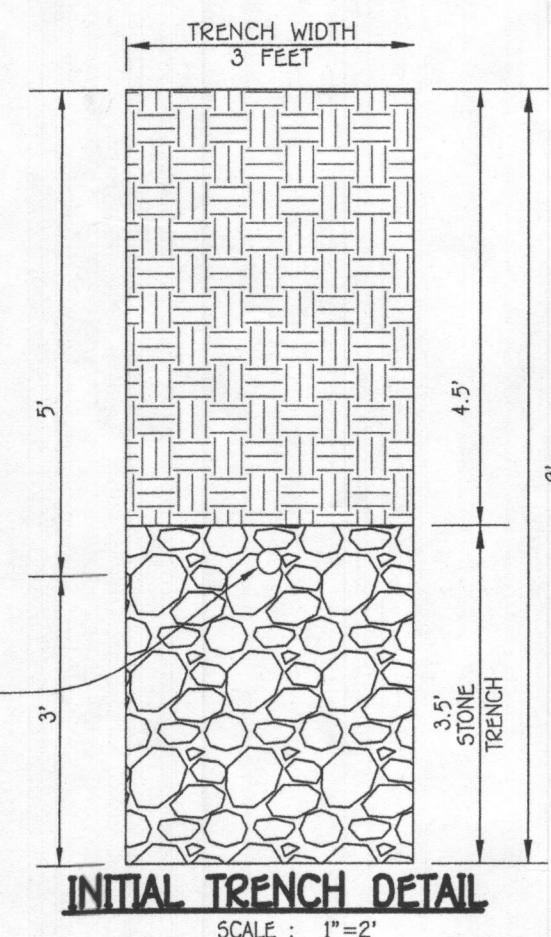
SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 4 BEDROOMS  
 LOADING RATE = 4 BEDROOMS X 150 GPD/BEDROOM = 600 GPD  
 APPLICATION RATE = 1.2  
 EFFECTIVE SIDEWALL BEGINS AT 4 FEET  
 TRENCH DEPTH = 8 FEET  
 TRENCH WIDTH (W) = 3 FEET  
 EFFECTIVE DEPTH (D) = 4 FEET  
 SF OF DRAINFIELD = 600 GPD / 1.2 = 500 SF  
 COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x4)) = 0.417  
 TRENCH LENGTH = 166.67 SF x 0.417 = 69.44 FEET  
 (USE 2 TRENCHES AT 34.72 L.F.)  
 TRENCH SPACING = 2D+W = ((2x4) + 3) = 11' USE 11'

**1ST REPLACEMENT SYSTEM**

SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 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)) = 0.500  
 TRENCH LENGTH = 250 SF x 0.500 = 125.00 FEET  
 (USE 2 TRENCHES AT 62.50 L.F.)  
 TRENCH SPACING = 2D+W = ((2x3) + 3) = 9' USE 10'

**2ND REPLACEMENT SYSTEM**

SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 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)) = 0.500  
 TRENCH LENGTH = 250 SF x 0.500 = 125.00 FEET  
 (USE 2 TRENCHES AT 62.50 L.F.)  
 TRENCH SPACING = 2D+W = ((2x3) + 3) = 9' USE 10'



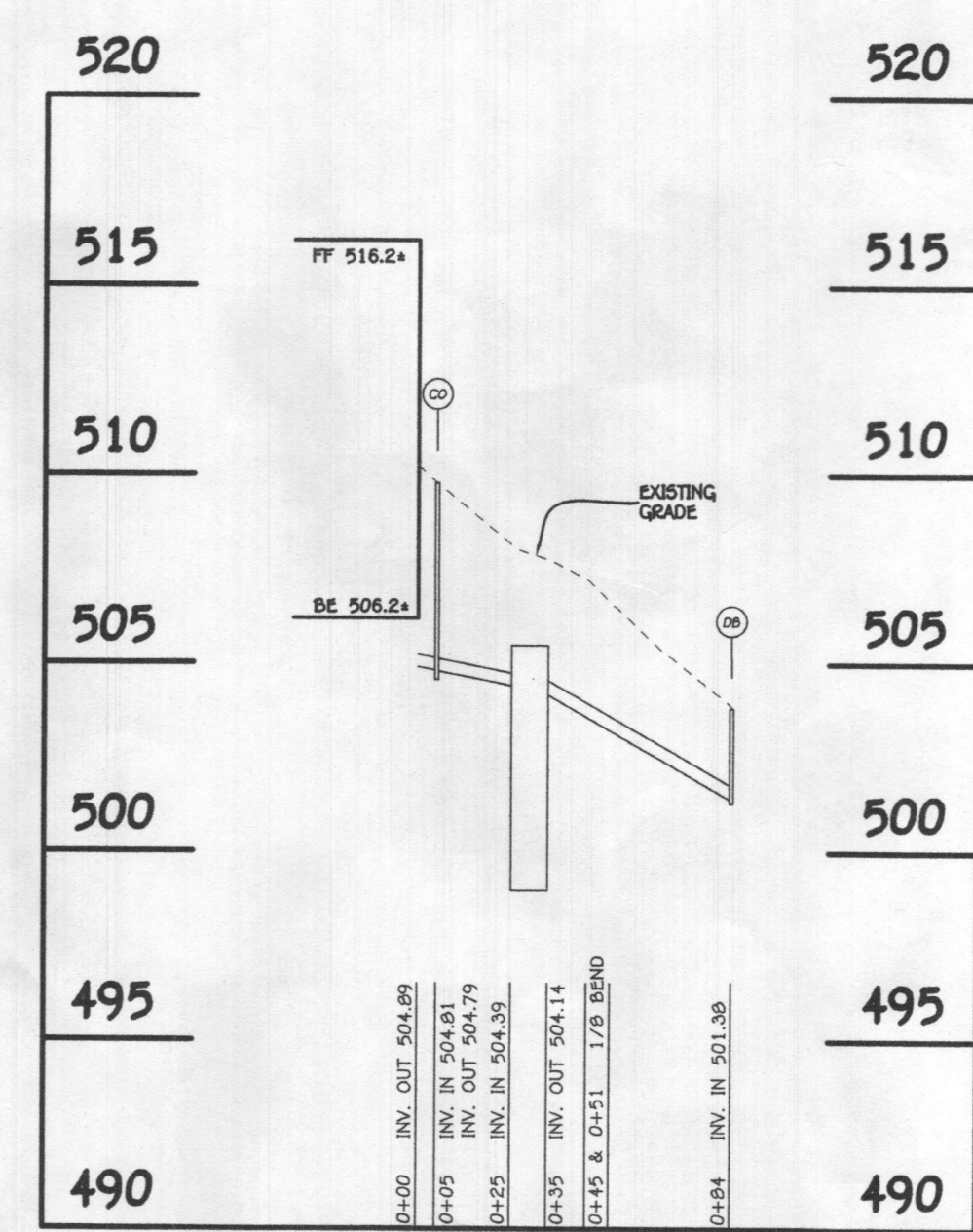
**TRENCH DATA:**

TRENCH 1:  
 EX. GROUND ABOVE = 464  
 INV. IN = 462  
 BOTTOM TRENCH = 458

TRENCH 2:  
 EX. GROUND ABOVE = 462  
 INV. IN = 460  
 BOTTOM TRENCH = 456

TRENCH 3:  
 EX. GROUND ABOVE = 462  
 INV. IN = 460  
 BOTTOM TRENCH = 456

SLAB 516.20  
 INV. OUT OF HOUSE = 504.89  
 EX. GROUND AT CLEANOUT = 509.79  
 INV. INTO CLEANOUT = 504.81  
 INV. OUT OF CLEANOUT = 504.79  
 EX. GROUND AT PUMP TANK = 507.92  
 TOP OF PUMP TANK = 505.48  
 INV. INTO PUMP TANK = 504.39  
 INV. OUT OF PUMP TANK = 504.14  
 EX. GROUND AT DISTRIBUTION BOX = 503.79



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

**DAILY STABILIZATION NOTE:**  
 CONTRACTOR SHALL ONLY DISTURB THAT AREA WHICH CAN BE COMPLETED AND STABILIZED BY THE END OF EACH WORKING DAY. STABILIZATION SHE BE AS FOLLOWS.  
 1. FOR AREAS TO BE PAVED, THAT APPLICATION OF STONE BASE.  
 2. FOR AREAS TO BE VEGETATIVELY STABILIZED:  
 A. PERMANENT SEED AND SOIL STABILIZATION MATTING OF 500 FOR ALL STEEP SLOPES, CHANNELS OR SWALES.  
 B. PERMANENT SEED AND MULCH FOR ALL OTHER AREAS.  
 ANY AREAS WHICH CAN NOT BE STABILIZED BY THE END OF EACH WORKING DAY MUST HAVE SILT FENCE INSTALLED ON THE DOWN SLOPE SIDE.



**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. 48091, EXPIRATION DATE 09/14/2025.

Yuh Aroon  
 Signature of Professional Engineer  
 DATE: 6/12/2023

**OWNER**  
 ALEXANDRA ROSE KATZOFF PALMER & BRADLEY S PALMER  
 5236 GREEN BRIDGE ROAD  
 DAYTON MD. 21036

**SEPTIC SYSTEM INSTALLATION PLAN**  
**5236 GREEN BRIDGE ROAD**

TAX MAP #28  
 5TH ELECTION DISTRICT  
 SCALE: 1"=50'

PARCEL: 91  
 HOWARD COUNTY, MARYLAND  
 DATE: JUNE 12, 2023