

**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

**ONSITE SEWAGE DISPOSAL SYSTEM**

RECEIPT DATE: 8-2-23 P 574982

APPROVAL DATE: 9/1/2023 **PERMIT: CONSTRUCTION** A \_\_\_\_\_

PROPERTY ADDRESS: 6526 Haviland Mill Rd

SUBDIVISION: Fomengia Property LOT: 3 TAX ID: 1405385474

CONTRACTOR: Holler Contracting LLC EMAIL: \_\_\_\_\_

CONTRACTOR ADDRESS: 4810 Blackettle Road, Mount Airy, MD PHONE: 301-898-8780

PROPERTY OWNER: Julious & Yvone Fomengia EMAIL: 21771

OWNER ADDRESS: 12801 Gessford Ct. Beltsville, MD 20705 PHONE: 2404756115

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

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

DISTRIBUTION SYSTEM:  GRAVITY  PRESSURE DOSED BEDROOMS: 7 APPLICATION RATE: 1.2

TRENCHES:	LINEAR FEET REQUIRED: <u>123</u>	INLET DEPTH: <u>3</u>
	TRENCH WIDTH: <u>3'</u>	MAXIMUM BOTTOM DEPTH: <u>7'</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>11'</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>3</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>3 trenches @ 41' each</u>	

ISSUED BY: Hank Oswald ISSUE DATE: 8-2-23 EXPIRATION DATE: 8-2-24

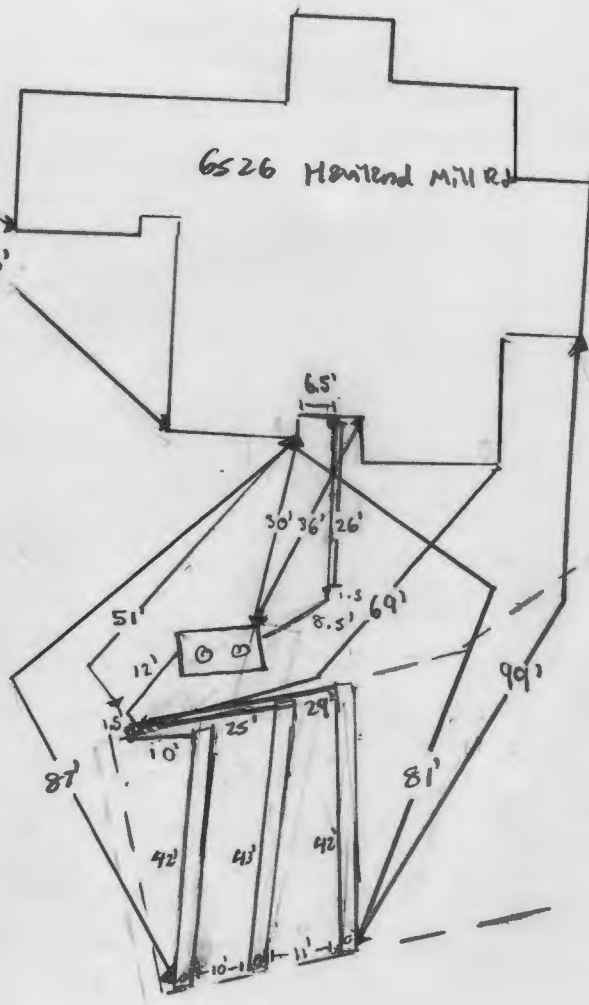
- NOTE CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION INSPECTION PRIOR TO BEGINNING ANY INSTALLATION
- NOTE: CONTRACTOR MUST SCHEDULE AN INSPECTION AND GAIN APPROVAL OF ALL COMPONENTS PRIOR TO COVERING
- NOTE: STONE MUST BE APPROVED BY HEALTH DEPARTMENT AND GRAVEL TICKET MUST BE AVAILABLE FOR REVIEW.
- NOTE: WATERTIGHT TANKS REQUIRED
- NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE AT LEAST 100 FEET DOWNGRAIDENT 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 1" = 30'

No. 20-0260



ROAD NAME

**TRENCH/DRAINFIELD DATA**

WIDTH	INLET	BOTTOM
3'	3'-3.5'	7'
NUMBER OF TRENCHES		3
TOTAL LENGTH		127'
ABSORPTION AREA		381 ft <sup>2</sup>
DISTRIBUTION BOX LEVEL		YES
DISTRIBUTION BOX BAFFLE		YES
DISTRIBUTION BOX PORT		YES

**SEPTIC TANK DATA**

SEPTIC TANK 1 LEVEL	YES
MANUFACTURER	Babylon
CAPACITY	_____ GAL
SEAM LOC	Top
TANK LID DEPTH	1.5'-1'
BAFFLES	6" Front & 4" back
BAFFLE FILTER	_____
MANHOLE LOC	Front & back
6" PORT LOC	_____
WATERTIGHT TEST	_____
SLOTTED	YES
DATE ON LID	7/11/2023
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:**

8/28/2023 - Installer onsite for pre-con. 90A stake. Tank started, well 103' from tank, installer shifting tank slightly. All 3 trenches staked, upper trench has 2.5"-0.5" difference, distance between upper & middle trench 14'. Middle stake 3.5"-1.5" difference, distance between middle & lower trench 14'. Lower trench has 3.5"-1.5" difference. All trenches @ 41' & straightened out slightly compared to plan. Beginnings of middle & lower trench has small dip in them, causing 2.5" difference in elevation. Saw hole for sewer line coming out of house, line has adequate fall. (P)

INSTALLATION: 8/30/2023 - Installer onsite for inspection. Tank set, 120' from well, ramped for baffles. Contractor installed lower trench, inlet @ 3'-3.5', length 42' long, slope ok. (SP)


8/31/2023 - Middle trench @ 43, inlet @ 3', line to inlet has fall, switch to PVC used. Saw 6" front & 4" back baffle. Dbox set but not tied into all trenches. Resurvey for upper trench & lower D-box. (SP)

9/1/2023 - Installer onsite for inspection. Left upper trench finished. Inlet @ 3'-3.5'. Measured tank to D-box to 3 trenches. Loaded D-box. Saw baffle & port, gave all to backfill. (SP)

9/6/2023 - Saw C/O coming out of house & connection to house. (SP)

FINAL INSPECTOR S. Page DATE OF APPROVAL 9/6/2023

# HOME LAND LABS



247741      Due Date: 11/11/2023  
Client: Barlow Wel

Phone: (443) 505-8375 Email: [lab@homelandhealthyhomes.com](mailto:lab@homelandhealthyhomes.com)

1220 E Joppa Rd. Ste C505      108 Old Solomons Island Road, Ste L2      3430 Rockefeller Court      2216 Commerce Road, Ste 2A  
Towson, MD 21286      Annapolis, MD 21401      Waldorf, MD 20602      Forest Hill, MD 21050  
MD Lab # 365      MD Lab # 106      MD Lab # 139

Please provide completed form with samples. Highlighted fields are required.

Client Name: <u>Barlow Well Drilling</u>	Property Address: <u>6526 Haviland Mill Rd</u>
Email Address: <u>misom@mbwd.us</u>	<u>Clarksville, MD 21029</u>
Phone Number: <u>410-838-6910</u>	

### Field Collection Information

Sampler Name: <u>Derek Bodum</u>	Field pH: <u>7.72</u>
Sampler ID #: <u>2248DB</u>	Field Chlorine (mg/L): <u>0.0</u>
Date Sampled: <u>11/16/23</u> Time Sampled: <u>10:15</u>	Sand: <u>NO</u>
Well Tag Number: <u>H0-20-0250</u>	Clarity: <u>Clear</u>
Compliance sample for public water system? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	If yes, PWS ID #:

### Well Casing and Cap Condition

Well Type:  Drilled     Well Pit     Below Grade     Artesian     Hand Dug     N/A     Other: \_\_\_\_\_

Height Above Grade: <u>18"</u>	Cap Type: <u>2 pc PVC</u>	Casing: <u>6" PVC</u>	Conduit: <u>Secure</u>
Sample Point: <u>pressure tank</u>	Water Conditioning: <u>S.F.</u>		

### Requested Testing: (Please check all that apply)

- Potability (Bacteria, Nitrate + Nitrite, Turbidity)
- FHA/VA (Bacteria, Nitrate + Nitrite, Turbidity, Lead, Iron)
- Bacteria       Chlorides       Total Dissolved Solids
- Lead       Hardness       Copper
- Nitrate + Nitrite       Arsenic       VOCs
- Iron       Cadmium       Other: \_\_\_\_\_
- Turbidity       Gross Alpha       Other: \_\_\_\_\_

List rush samples below  
\*Refer to table for rush turnaround times and fees\*

\_\_\_\_\_

\_\_\_\_\_

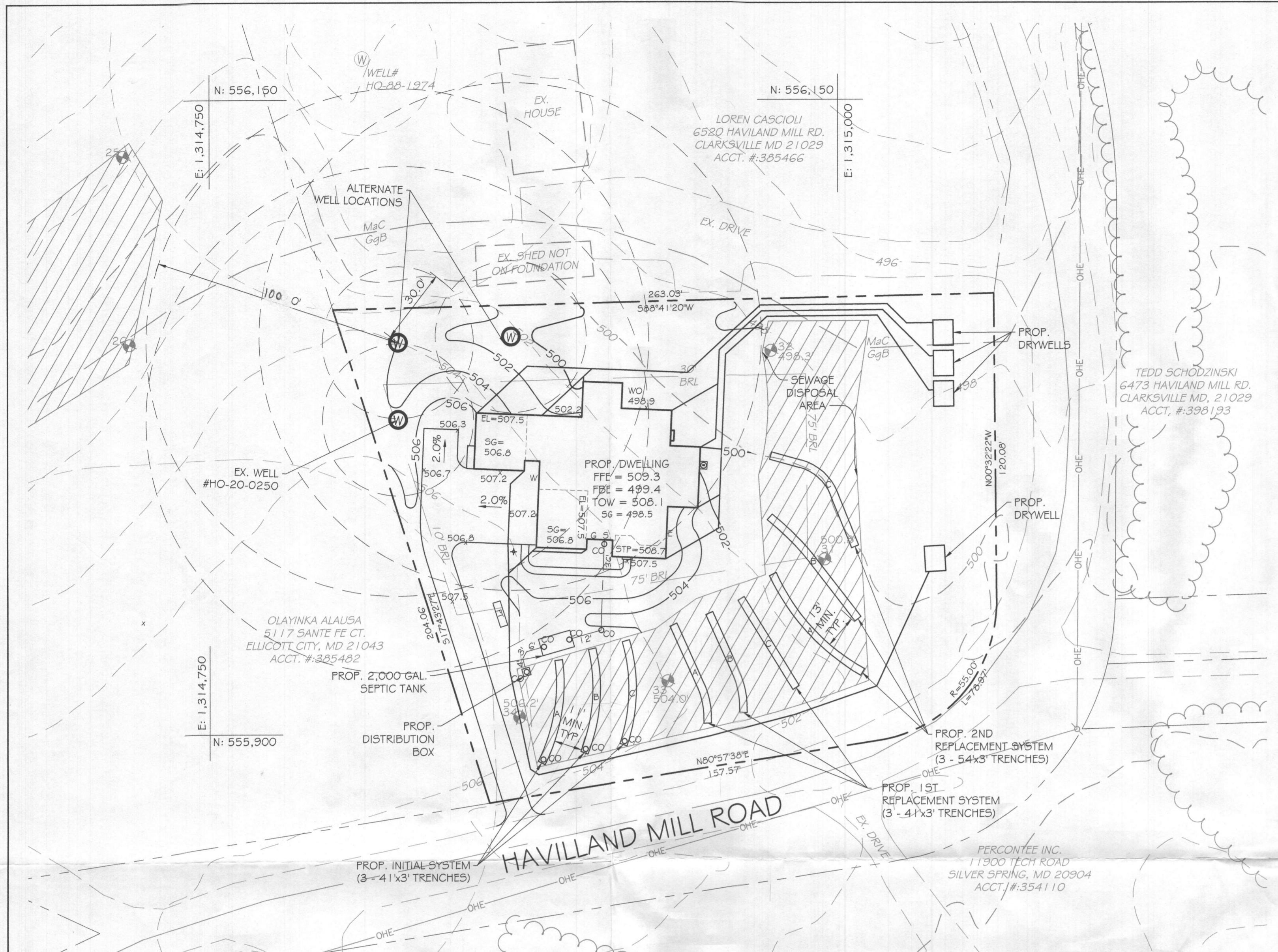
### Release Signatures

Released By: D Bodum      Date/Time: 11/16/23 11:40      Samples received on Ice?  Yes     No

Released By: \_\_\_\_\_      Date/Time: \_\_\_\_\_

Released By: \_\_\_\_\_      Date/Time: \_\_\_\_\_

Received in lab by: Shane McFaul      Date/Time: 11/16/2023 11:40 AM      Temperature: \_\_\_\_\_



**PLAN VIEW**  
SCALE: 1" = 30'

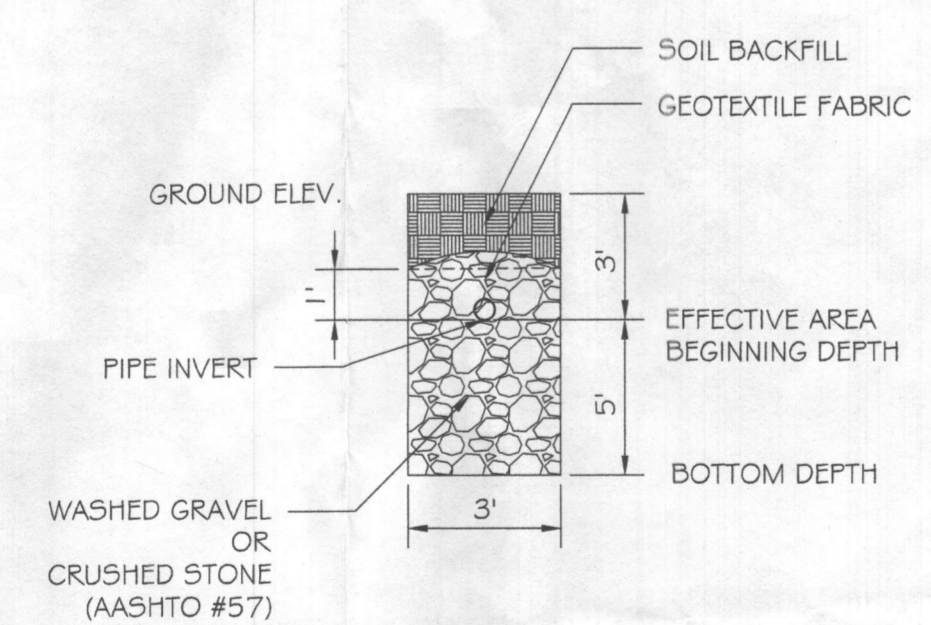
**TRENCH LENGTH AND SPACING CALCULATIONS**

**TRENCH DESIGN** (7 BDRM X 1.50 GPD/BDRM = 1050 GPD)

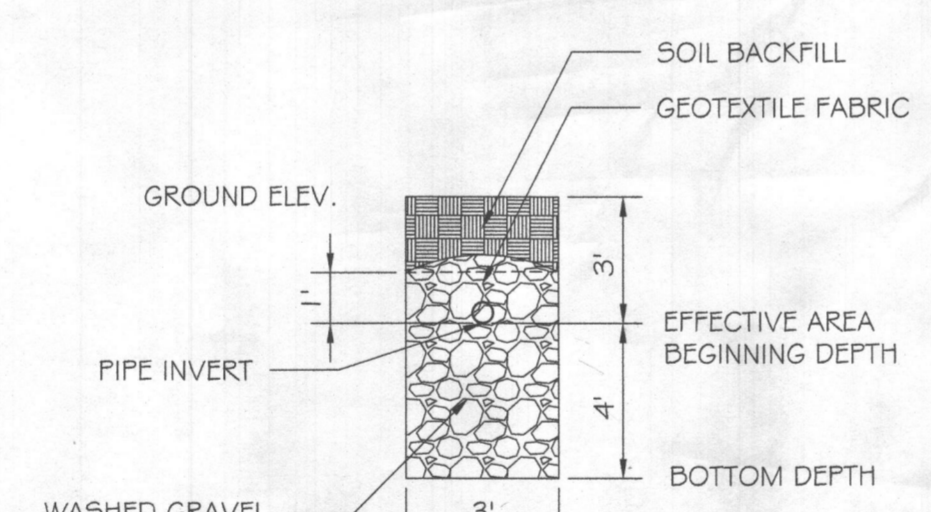
**INITIAL SYSTEM**  
1050 GPD / 1.2 GPD/SF (APP. RATE) = 875 SF  
USE 3' WIDE TRENCH W/ 48" OF GRAVEL BELOW PIPE EFFECTIVE AREA 3' - 7'  
SIDEWALL REDUCTION = (3' + 2) / (3' + 1 + 2 x 4) = 0.42  
875 SF / 3' WIDTH = 292 LF x 0.42 = 123 LF MIN. TRENCH  
TRENCH SPACE = 2 x 4' + 3' = 11' MIN. SPACING BETWEEN TRENCH EDGES

**1ST REPLACEMENT**  
1050 GPD / 1.2 GPD/SF (APP. RATE) = 875 SF  
USE 3' WIDE TRENCH W/ 48" OF GRAVEL BELOW PIPE EFFECTIVE AREA 3' - 7'  
SIDEWALL REDUCTION = (3' + 2) / (3' + 1 + 2 x 4) = 0.42  
875 SF / 3' WIDTH = 292 LF x 0.42 = 123 LF MIN. TRENCH  
TRENCH SPACE = 2 x 4' + 3' = 11' MIN. SPACING BETWEEN TRENCH EDGES

**2ND REPLACEMENT SYSTEM**  
1050 GPD / 0.8 GPD/SF (APP. RATE) = 1313 SF  
USE 3' WIDE TRENCH W/ 60" OF GRAVEL BELOW PIPE EFFECTIVE AREA 3' - 8'  
SIDEWALL REDUCTION = (3' + 2) / (3' + 1 + 2 x 5) = 0.36  
1313 SF / 3' WIDTH = 438 LF x 0.36 = 157 LF MIN. TRENCH  
TRENCH SPACE = 2 x 5' + 3' = 13' MIN. SPACING BETWEEN TRENCH EDGES

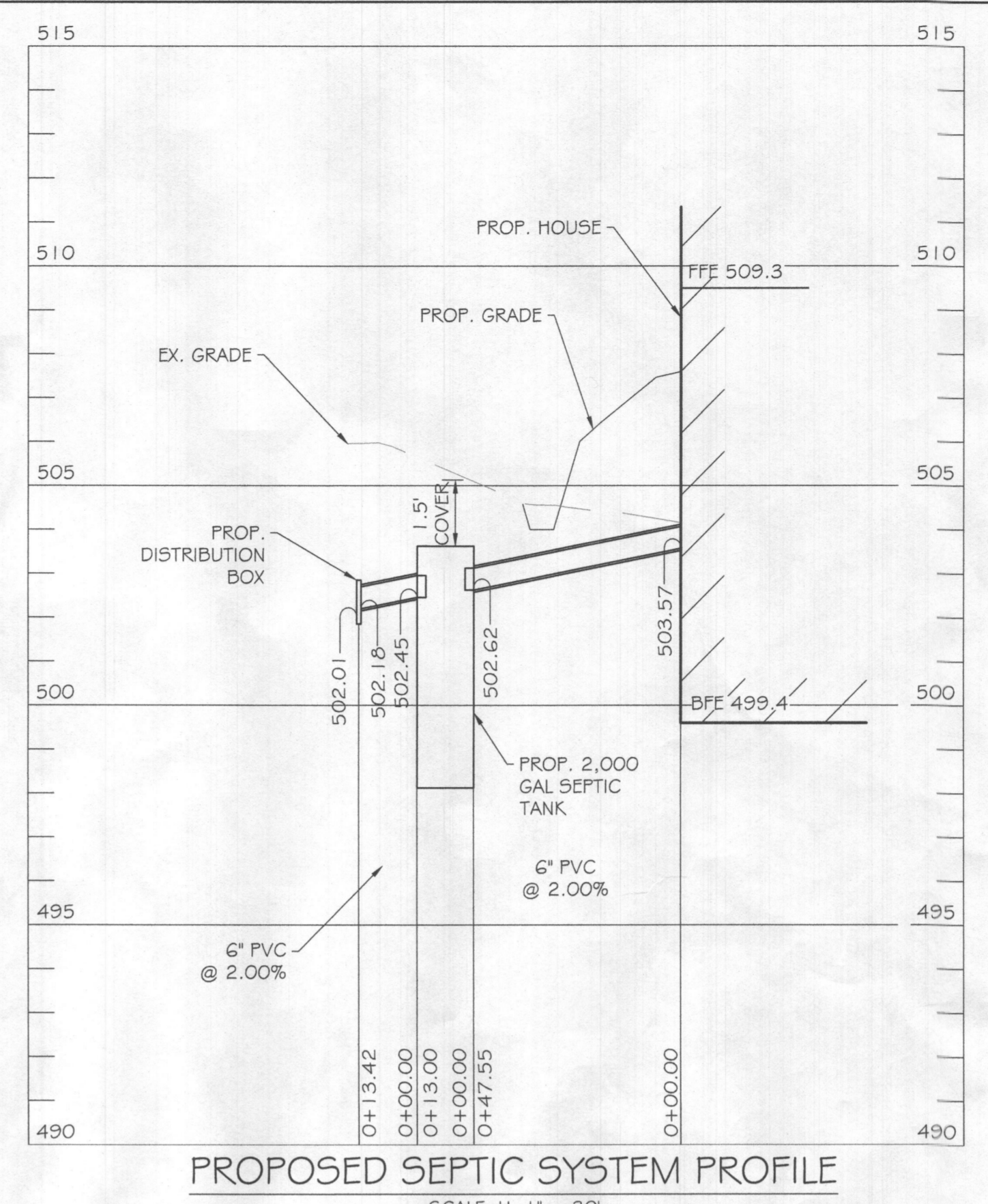
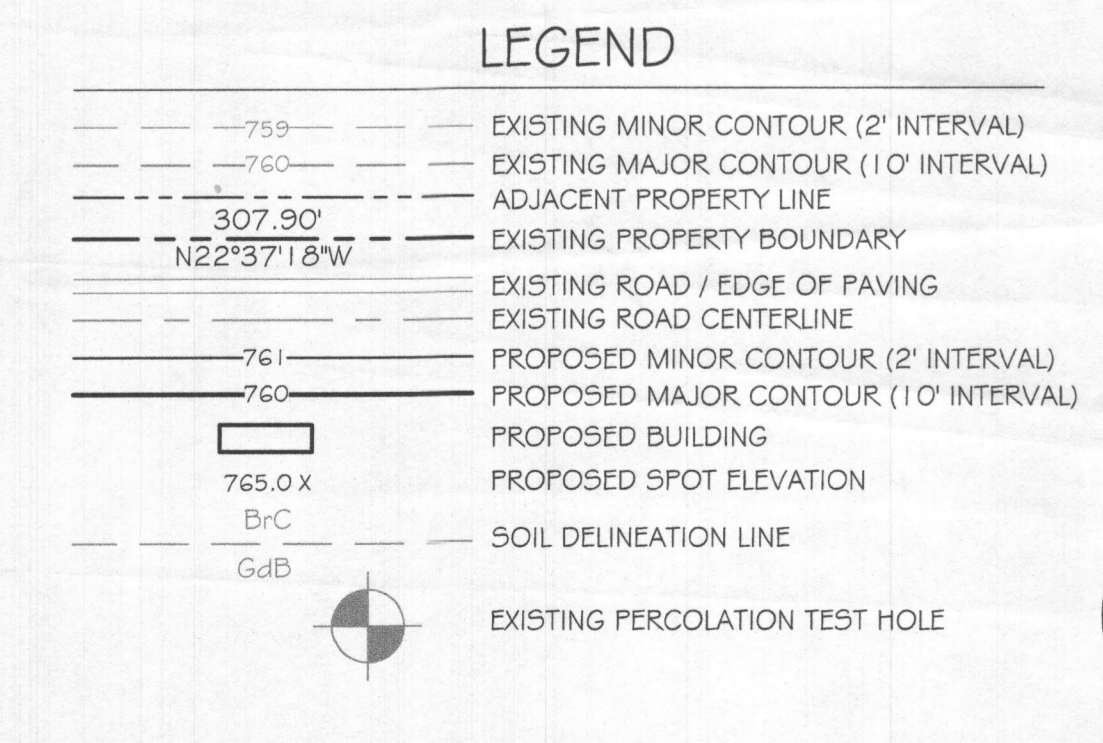


**2ND REPLACEMENT TRENCHES DETAIL**  
N.T.S.

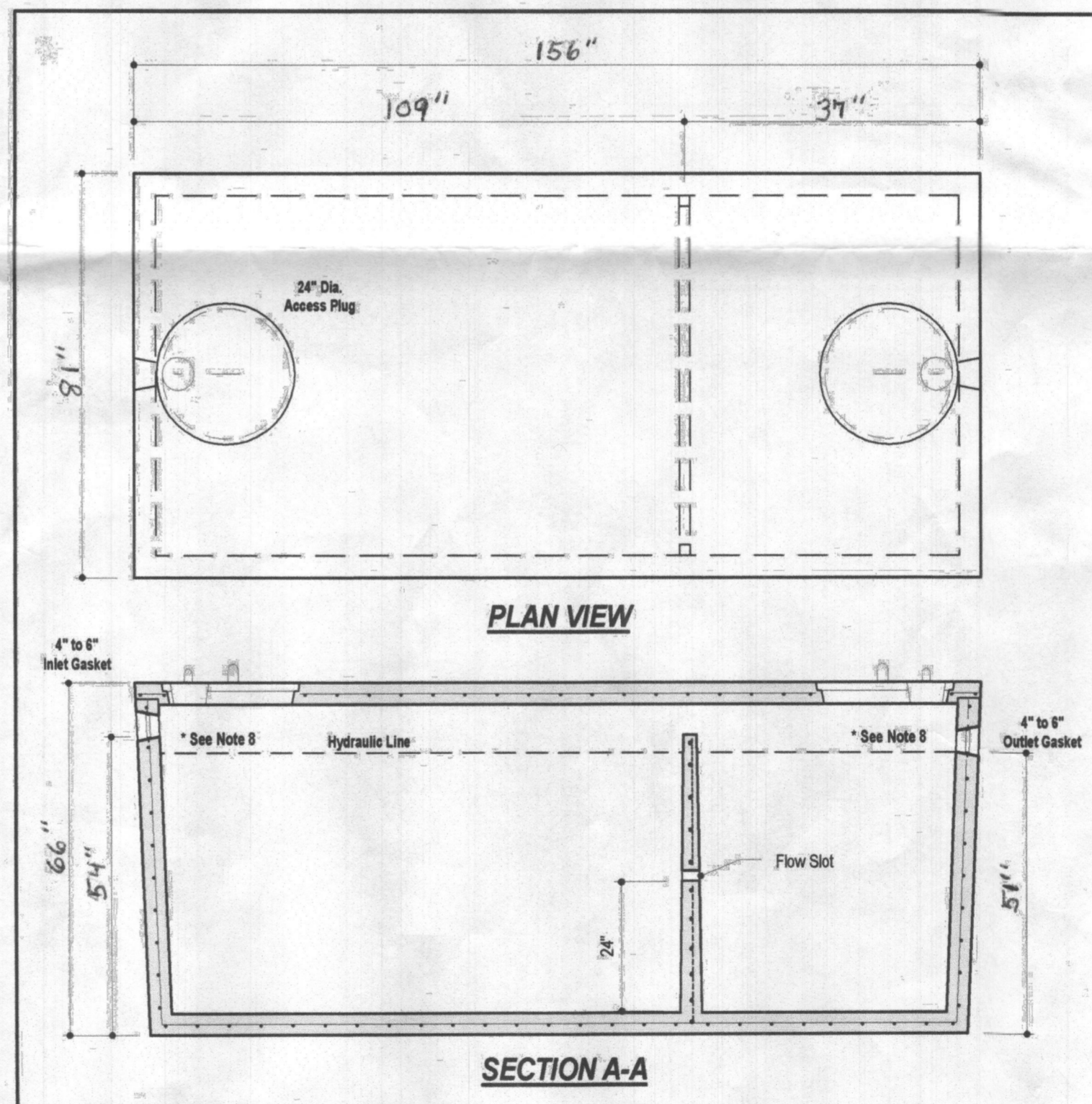


**INITIAL & 1ST REPLACEMENT TRENCHES DETAIL**  
N.T.S.

	RELATIVE DEPTHS		
	PIPE INVERT	EFFECTIVE AREA BEGINNING	MAXIMUM TRENCH BOTTOM
INITIAL SYSTEM TRENCH A,B,C	3	3	7
1ST REPLACEMENT TRENCH A,B,C	3	3	7
2ND REPLACEMENT TRENCH A,B,C	3	3	8



**PROPOSED SEPTIC SYSTEM PROFILE**  
SCALE: H. 1" = 30'  
V. 1" = 3'



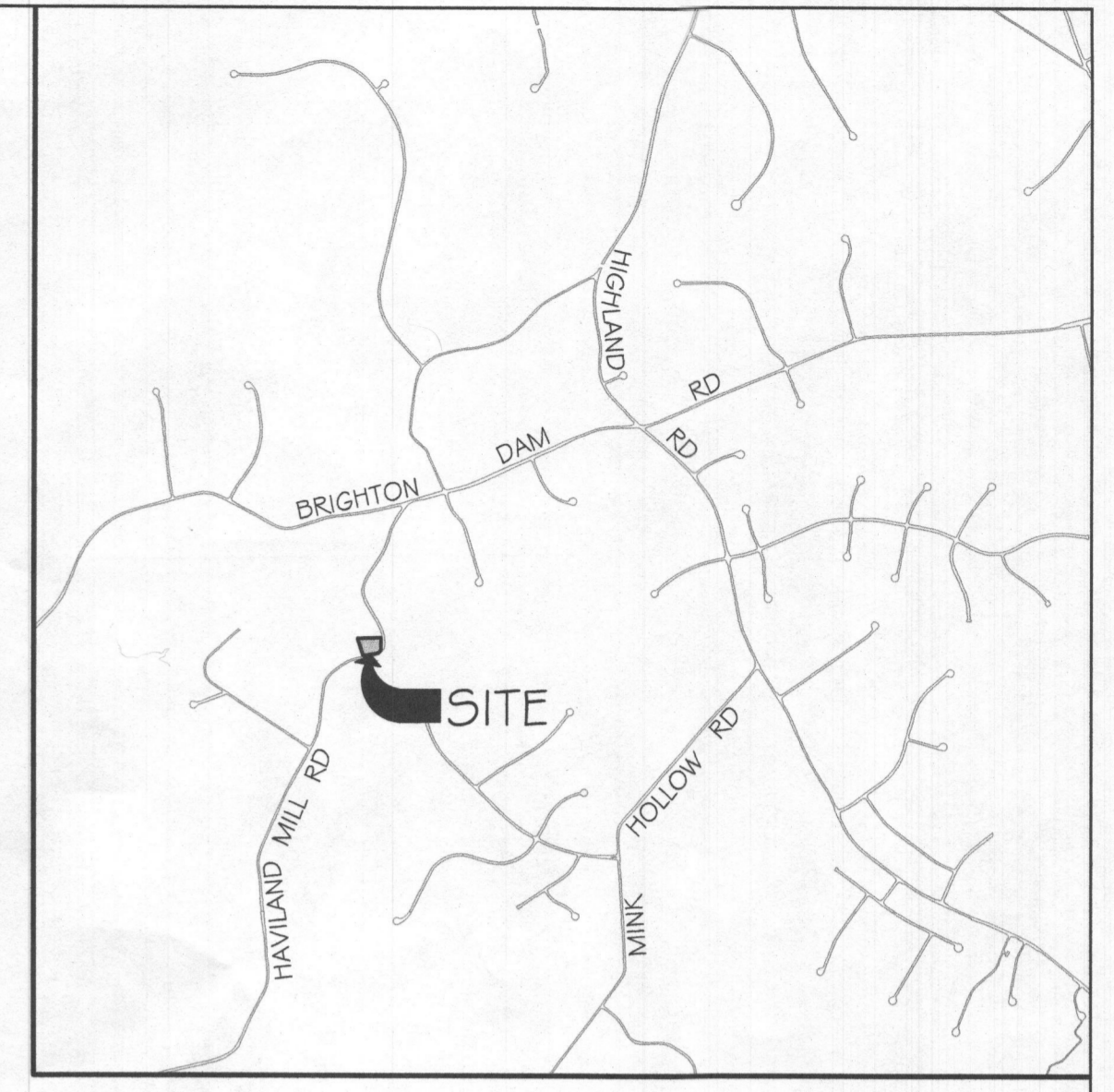
**SECTION A-A**

**DESIGN DATA & GENERAL NOTES**

[1] Concrete strength  $f_c=4,000$  p.s.i. @ 28 days. Density = 150 pcf.  
 [2] Cement - Portland Type III per ASTM C 150-02.  
 [3] Admixtures & plasticizers per ASTM C 200-08 & C 484-02.  
 [4] Reinforcing per ASTM A198. Min. 1-1/2" cover.  
 [5] Top slab sealed with butyl rope mastic.  
 [6] 4" x 4" x 1/2" base, 5/8" top thickness.  
 [7] Max 3" of cover.  
 [8] Depending on use of tank, Inlet & Outlet baffles may be required by code.

**2,000 GALLON SEPTIC TANK 2-Compartment**  
Stock Item [Approx. 19,900 lbs]

**SEPTIC TANK DIAGRAM**  
N.T.S.



**VICINITY MAP**  
SCALE: 1" = 200'

**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 COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
- 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 SEWAGE DISPOSAL AREA SHOWN HERE ON ARE BASED ON THE APPROVED PERCOLATION CERTIFICATION PLAN SIGNED 5/2/2023.
- THIS AREA DESIGNATES A PRIVATE SEWAGE AREA OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL. IMPROVEMENT OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWAGE IS AVAILABLE. THIS AREA 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 AREA. RECORDATION OF A MODIFIED SEWAGE AREA SHALL NOT BE NECESSARY.
- TOPOGRAPHY SHOWN IS AT TWO-FOOT CONTOUR INTERVALS (ONE-FOOT INTERVALS ARE REQUIRED FOR MOUND SYSTEMS AND SYSTEMS WITH PIPE DEPTH LESS THAN TWO FEET) AND HAS BEEN FIELD VERIFIED OR FIELD RUN BY KCI TECHNOLOGIES.
- ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
- THE LOT SHOWN HEREIN COMPLIES WITH THE MINIMUM OWNERSHIP, WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
- PRIOR TO LAYOUT AND INSTALLATION A PROFESSIONAL SURVEYOR OR ENGINEER MUST STAKE OUT THE PROPERTY LINE AND SDA CLOSEST TO THE INITIAL TRENCHES TO BE INSTALLED ALONG WITH THE DRIVEWAY AND SEPTIC TANK.
- THE WELL TAG# HO-20-0250 HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.

	APPROXIMATE ELEVATIONS		
	GROUND ELEVATION	INVERT ELEVATION	BOTTOM ELEVATION
INITIAL SYSTEM TRENCH A	505.6	502.6	498.6
INITIAL SYSTEM TRENCH B	504.9	501.9	497.9
INITIAL SYSTEM TRENCH C	504.2	501.2	497.2
1ST REPLACEMENT TRENCH A	503.5	500.5	496.5
1ST REPLACEMENT TRENCH B	503.0	500.0	496.0
1ST REPLACEMENT TRENCH C	502.3	499.3	495.3
2ND REPLACEMENT TRENCH A	501.7	498.7	493.7
2ND REPLACEMENT TRENCH B	500.9	497.9	492.9
2ND REPLACEMENT TRENCH C	499.9	496.9	491.9

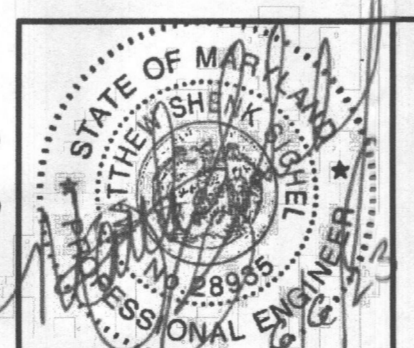
**OWNER:**  
JULIUS & YVONNE FOMENGIA  
12801 GESSFORD COURT  
BELTSVILLE, MD 20705  
(240) 475-6115

**DEVELOPER:**  
KEYSTONE CUSTOM HOMES  
GREGG REINSMITH  
227 GRANITE RUN DR., SUITE 100,  
LANCASTER, PA 17601  
(717) 464-9060 EXT. 1108

**DESIGNER:**  
KCI TECHNOLOGIES  
FRANK WHITE  
936 RIDGEBROOK RD.,  
SPARKS, MD 21152  
(410) 316-0803

Approved Septic System Plan  
Howard County Health Department  
Signature: *Frank White* Date: 6/9/2023

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THE INFORMATION SHOWN HEREIN IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AND IS CORRECT, TO THE BEST OF MY KNOWLEDGE AND BELIEF. LICENSE NO. 28935 EXPIRATION DATE: 1/15/2025



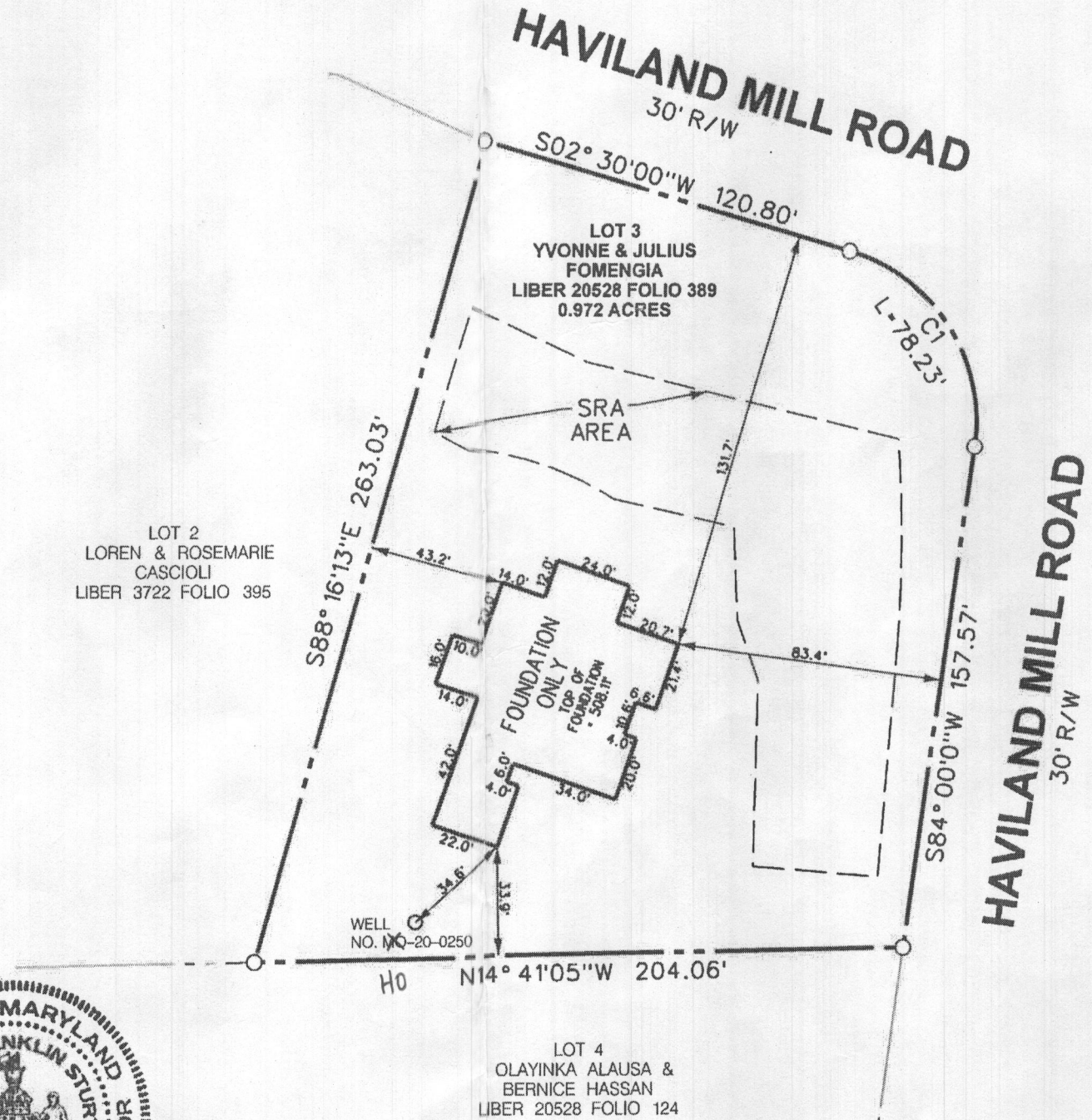
**KCI TECHNOLOGIES**  
ENGINEERS  
PLANNERS  
SCIENTISTS  
CONSTRUCTION MANAGERS  
936 RIDGEBROOK ROAD  
SPARKS, MARYLAND 21152  
TELEPHONE: (410) 316-7800  
FAX: (410) 316-7818

REVISIONS				DATE
NO.	DATE	DESCRIPTION	BY	06/06/2023

**LOT 3, FOMENGIA PROPERTY**  
**ON SITE DISPOSAL SYSTEM PLAN**  
6526 HAVILAND MILL ROAD  
CLARKSVILLE, MD 21029  
TAX#: 385474, SUB: 1002

DRAWING NO.  
**ZhoHM3**  
SHEET 1 OF 1  
KCI JOB NUMBER  
271803754.74

MCS NAD 83/91

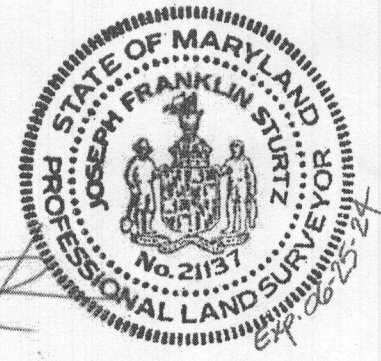


C1  
RADIUS=55.00'  
LENGTH=78.23'  
TANGENT=47.39'  
CHORD=S43° 14' 59" W 71.80'

**CERTIFICATION**

I HEREBY CERTIFY THAT THIS LOCATION DRAWING AND THE SURVEYING WORK REFLECTED IN IT WAS PREPARED UNDER MY RESPONSIBLE CHARGE AND IS IN COMPLIANCE WITH THE REQUIREMENTS SET FORTH IN THE ANNOTATED CODE OF MARYLAND FOR LAND SURVEYING.

*Joseph Franklin Sturtz*



**FLOOD NOTE**

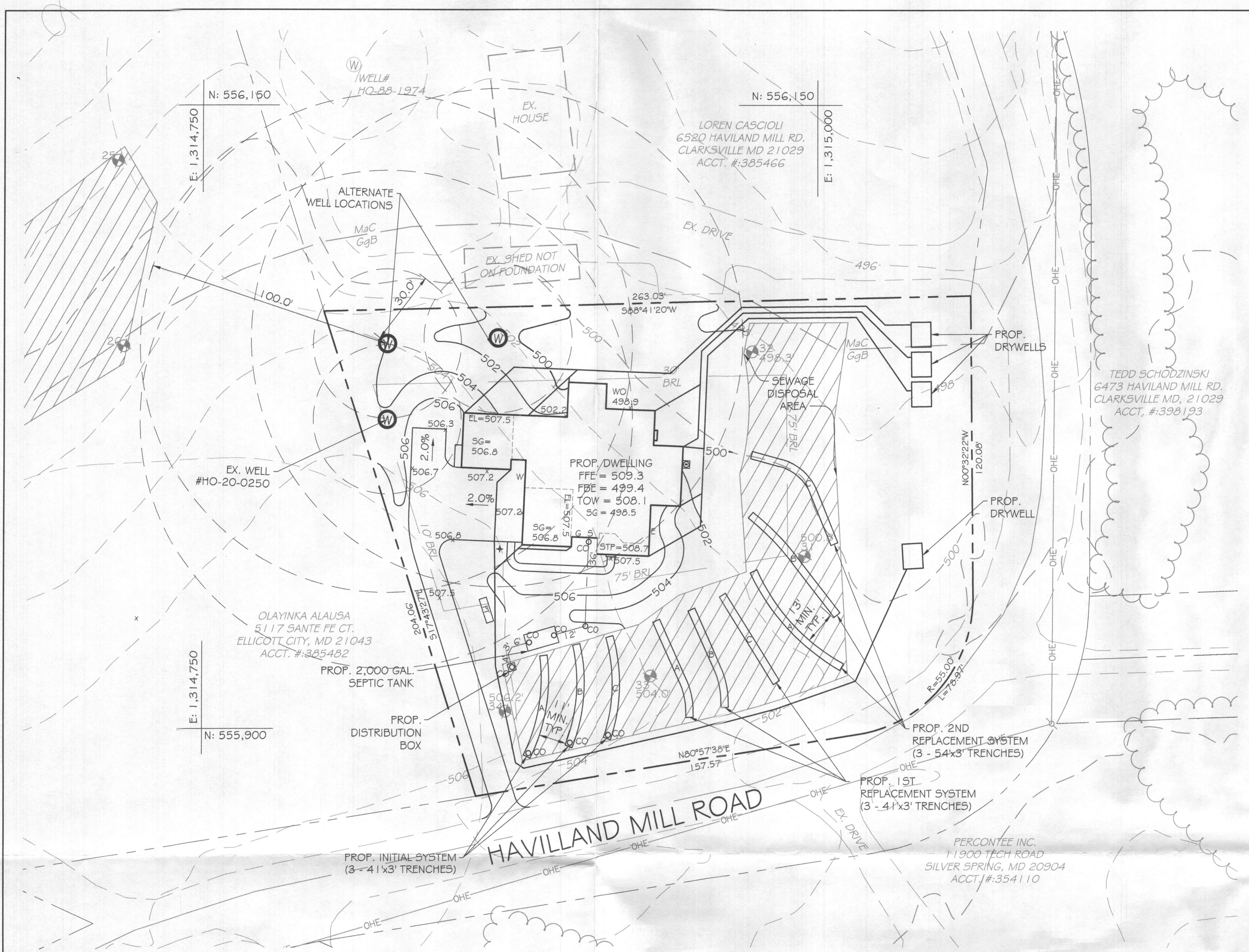
THE SITE LIES WITHIN FLOOD ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN ON F.I.R.M. 24027C0130D EFFECTIVE DATE NOVEMBER 6, 2013.

Permit #B21003349

FOUNDATION LOCATION DRAWING  
LOT 3  
LOTS 1, 2, 3, 4, & 5  
**HAYWARD PICKENS PROPERTY**  
PLAT NO. 4006

**HAVILAND MILL ROAD**  
5TH ELECTION DISTRICT HOWARD COUNTY, MD  
DATE: 7-13-23 KCI JOB NO.: 271803754.74 SCALE: 1" = 50'

**KCI TECHNOLOGIES**  
ENGINEERS  
PLANNERS  
SCIENTISTS  
CONSTRUCTION MANAGERS  
936 RIDGEBROOK ROAD  
SPARKS, MARYLAND 21152  
TELEPHONE: (410) 316-7800  
FAX: (410) 316-7818



PLAN VIEW  
SCALE: 1" = 30'

TRENCH LENGTH AND SPACING CALCULATIONS

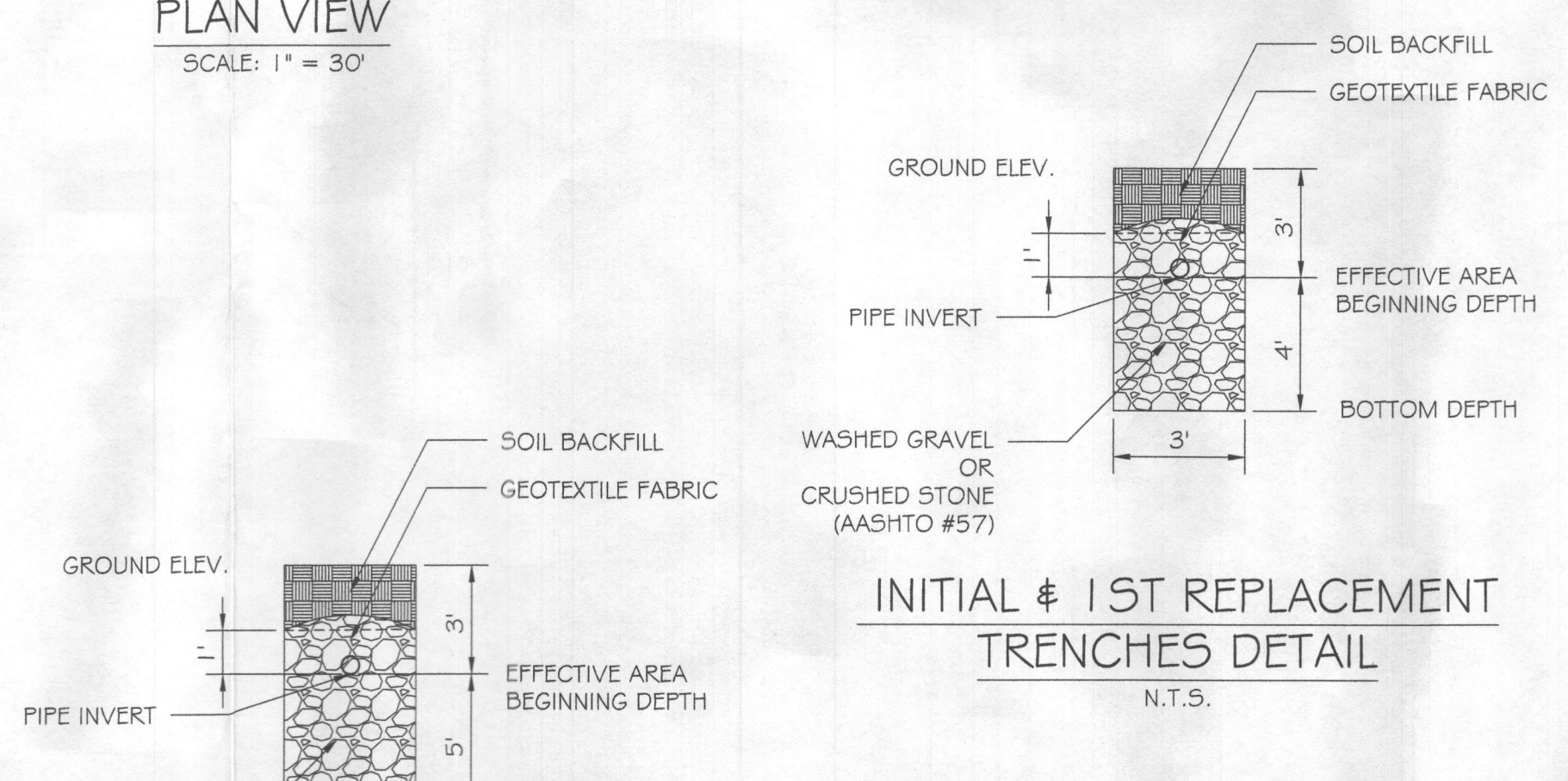
TRENCH DESIGN (7 BDRM X 150 GPD/BDRM = 1050 GPD)

- INITIAL SYSTEM**  
1050 GPD / 1.2 GPD/SF (APP. RATE) = 875 SF  
USE 3' WIDE TRENCH W/ 48" OF GRAVEL BELOW PIPE EFFECTIVE AREA 3' - 7'  
SIDEWALL REDUCTION =  $(3' + 2') / (3' + 1' + 2 \times 4') = 0.42$   
875 SF / 3' WIDTH = 292 LF X 0.42 = 123 LF MIN. TRENCH  
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- 1ST REPLACEMENT**  
1050 GPD / 1.2 GPD/SF (APP. RATE) = 875 SF  
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- 2ND REPLACEMENT SYSTEM**  
1050 GPD / 0.8 GPD/SF (APP. RATE) = 1313 SF  
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SIDEWALL REDUCTION =  $(3' + 2') / (3' + 1' + 2 \times 5') = 0.36$   
1313 SF / 3' WIDTH = 438 LF X 0.36 = 157 LF MIN. TRENCH  
TRENCH SPACE =  $2 \times 5' + 3' = 13'$  MIN. SPACING BETWEEN TRENCH EDGES

- 3 - 4' LONG TRENCHES FOR INITIAL SYSTEM
- 3 - 4' LONG TRENCHES FOR 1ST REPLACEMENT SYSTEM
- 3 - 5' LONG TRENCHES FOR 2ND REPLACEMENT SYSTEM

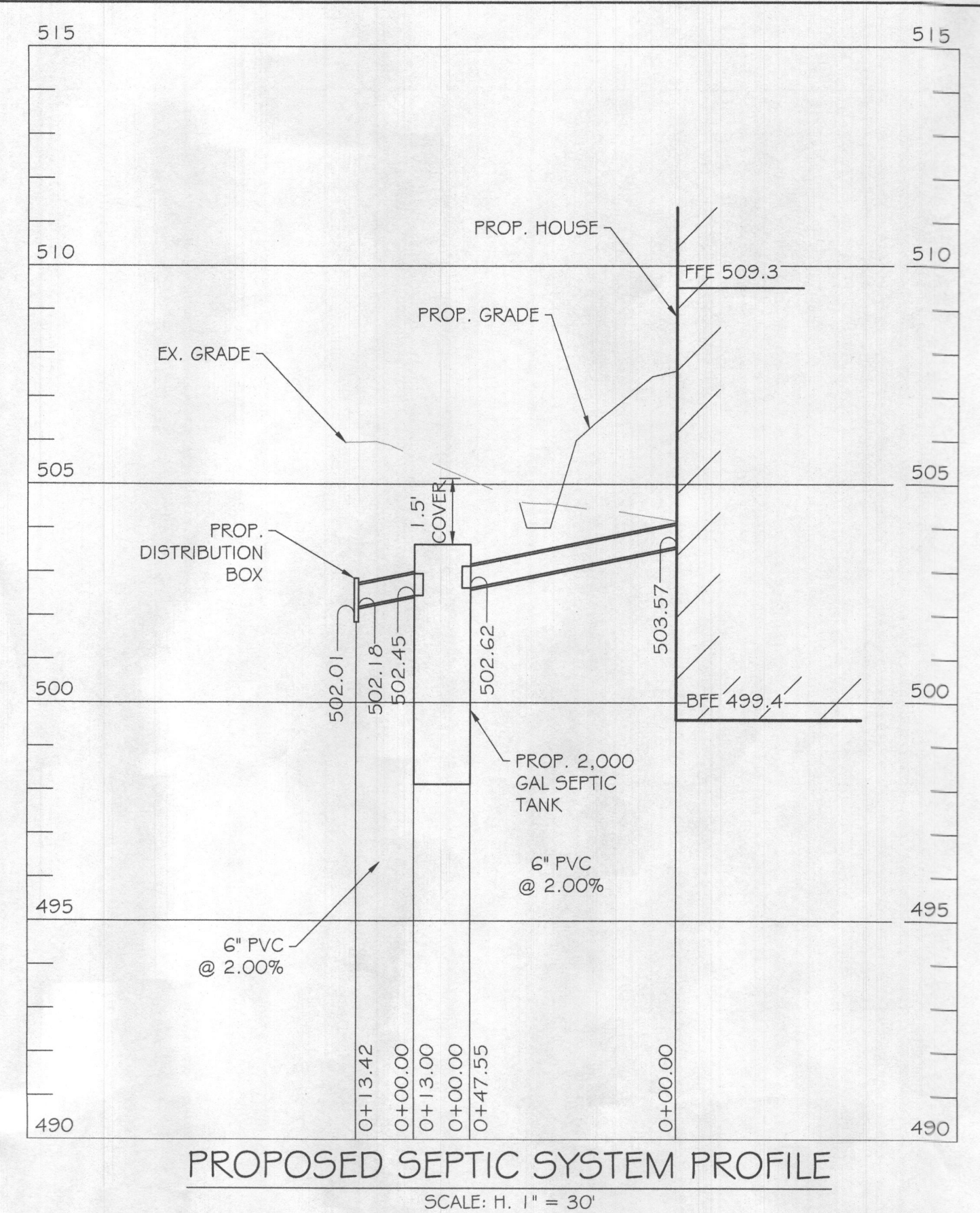
LEGEND

- 759- - - - - EXISTING MINOR CONTOUR (2' INTERVAL)
- 760- - - - - EXISTING MAJOR CONTOUR (10' INTERVAL)
- - - - - ADJACENT PROPERTY LINE
- - - - - EXISTING PROPERTY BOUNDARY
- - - - - EXISTING ROAD / EDGE OF PAVING
- - - - - EXISTING ROAD CENTERLINE
- 761- - - - - PROPOSED MINOR CONTOUR (2' INTERVAL)
- 760- - - - - PROPOSED MAJOR CONTOUR (10' INTERVAL)
- [ ] PROPOSED BUILDING
- [ ] PROPOSED SPOT ELEVATION
- - - - - SOIL DELINEATION LINE
- [ ] EXISTING PERCOLATION TEST HOLE
- [ ] PROPOSED WELL LOCATION

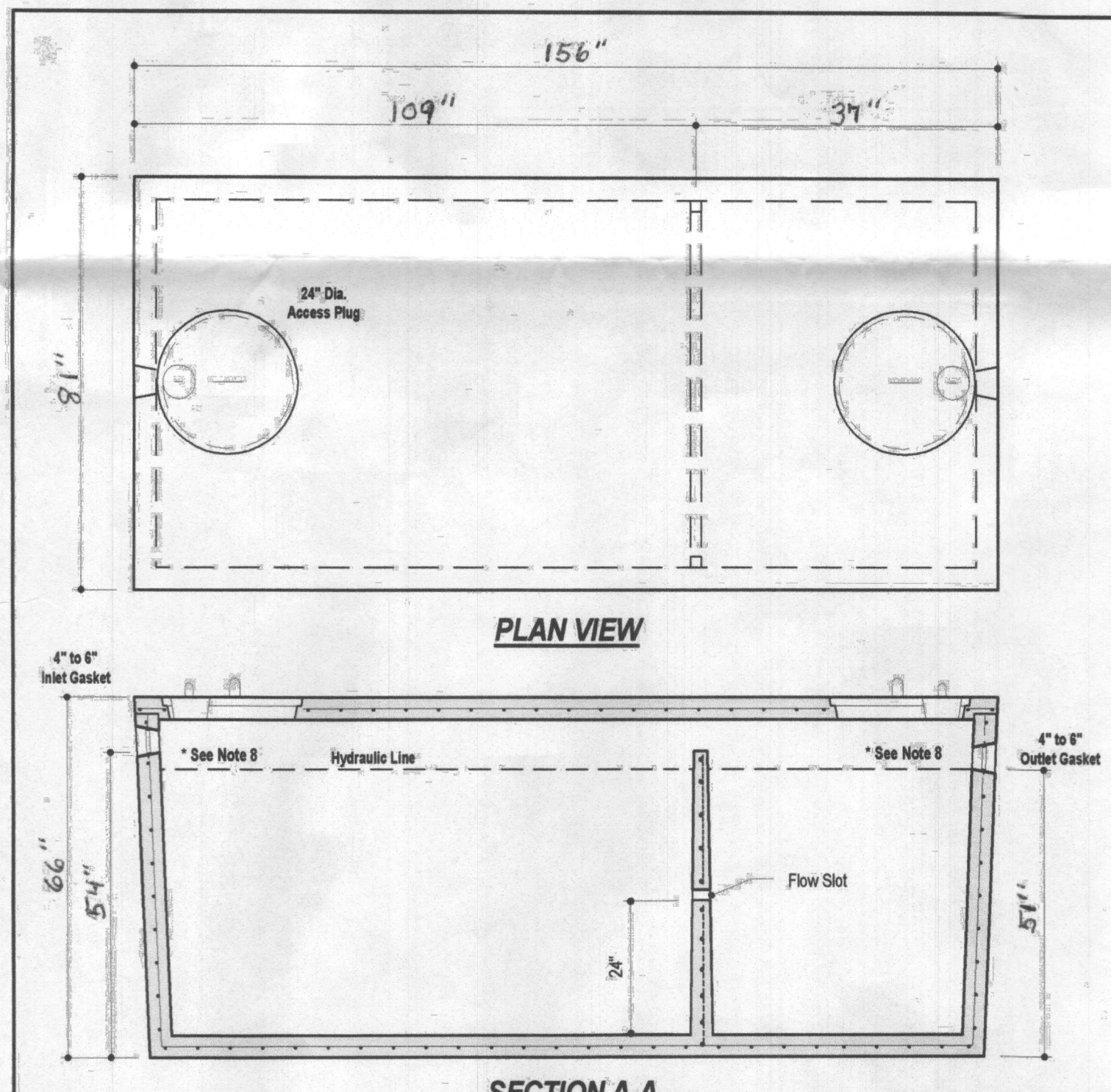


INITIAL & 1ST REPLACEMENT TRENCHES DETAIL  
N.T.S.

	RELATIVE DEPTHS		
	PIPE INVERT	EFFECTIVE AREA BEGINNING	MAXIMUM TRENCH BOTTOM
INITIAL SYSTEM TRENCH A,B&C	3	3	7
1ST REPLACEMENT TRENCH A,B&C	3	3	7
2ND REPLACEMENT TRENCH A,B&C	3	3	8



PROPOSED SEPTIC SYSTEM PROFILE  
SCALE: H. 1" = 30'  
V. 1" = 3'



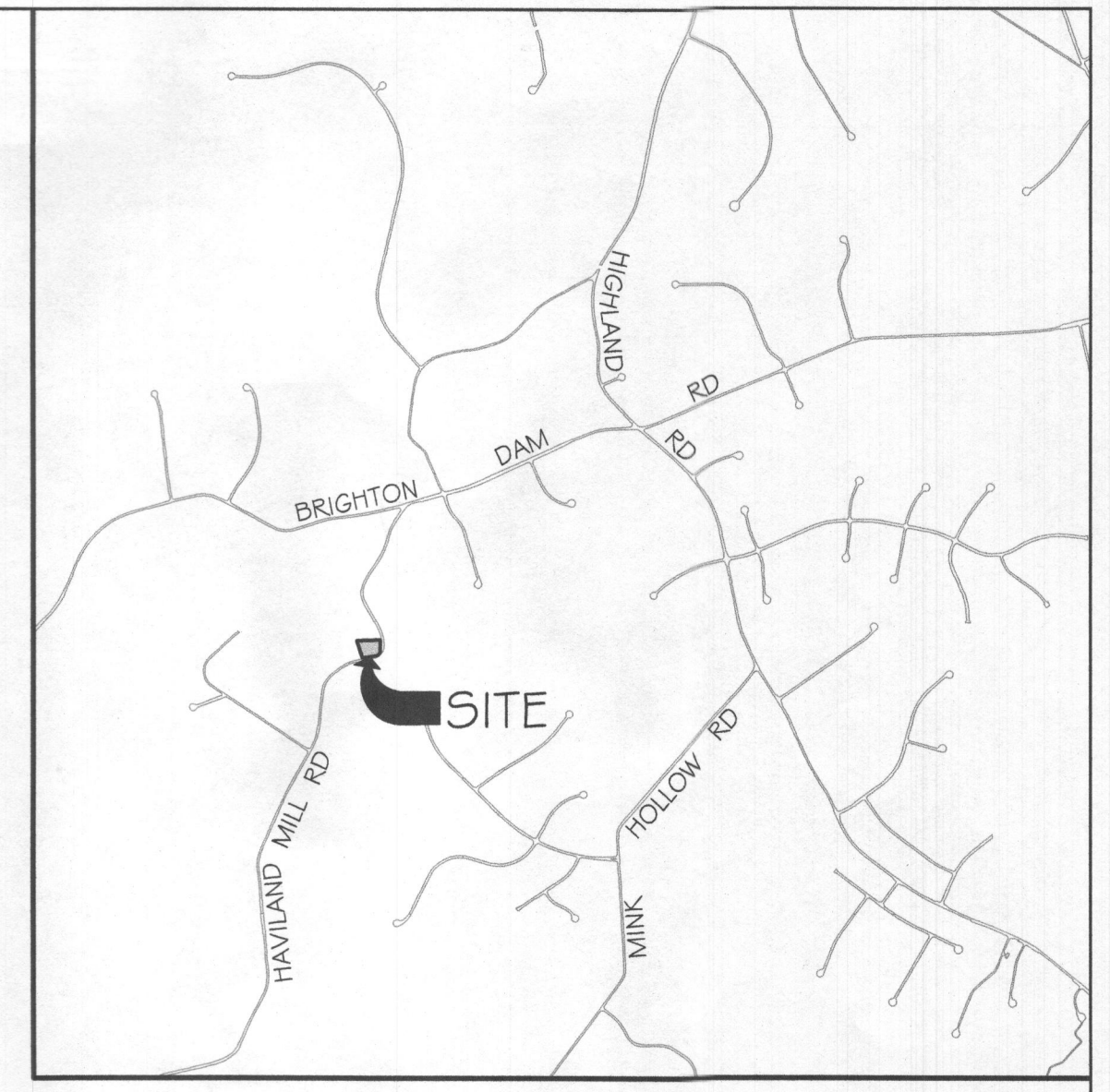
**DESIGN DATA & GENERAL NOTES**

- Concrete strength  $F_c=4,000$  p.s.i. @ 28 days. Density = 160 pcf.
- Cement - Portland Type III per ASTM C 150-92.
- Reinforcing & plasticizers per ASTM C 309-88 & C 484-92.
- Reinforcing per ASTM A 186. Min. 1-1/2" cover.
- Top slab sealed with butyl rope mastic.
- 4" max. 4" base, 6" top thickness.
- Max 3" of cover.
- Depending on use of tank, Inlet & Outlet baffles may be required by code.

**Babylon VAULT**  
SINCE 1930

**2,000 GALLON SEPTIC TANK**  
2-Compartment  
Stock Item [Approx. 19,900 lbs]

SEPTIC TANK DIAGRAM  
N.T.S.



VICINITY MAP  
SCALE: 1" = 2000'

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1ST REPLACEMENT TRENCH B	503.0	500.0	496.0
1ST REPLACEMENT TRENCH C	502.3	499.3	495.3
2ND REPLACEMENT TRENCH A	501.7	498.7	493.7
2ND REPLACEMENT TRENCH B	500.9	497.9	492.9
2ND REPLACEMENT TRENCH C	499.9	496.9	491.9

**OWNER:**  
JULIOUS & YVONNE FOMENGIA  
12801 GESSFORD COURT  
BELTSVILLE, MD 20705  
(240) 475-6115

**DEVELOPER:**  
KEYSTONE CUSTOM HOMES  
GREGG REINSMITH  
227 GRANITE RUN DR, SUITE 100,  
LANCASTER, PA 17601  
(717) 464-9060 EXT. 1108

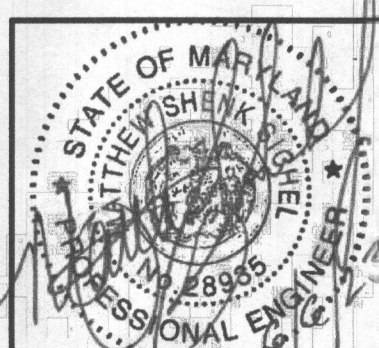
**DESIGNER:**  
KCI TECHNOLOGIES  
FRANK WHITE  
936 RIDGEBROOK RD,  
SPARKS, MD 21152  
(410) 316-0803

Approved Septic System Plan  
Howard County Health Department  
Signature: *Frank White* Date: 6/1/2023

LOT 3, FOMENGIA PROPERTY  
ON SITE DISPOSAL SYSTEM PLAN  
6526 HAVILAND MILL ROAD  
CLARKSVILLE, MD 21029  
TAX#: 385474, SUB: 1002

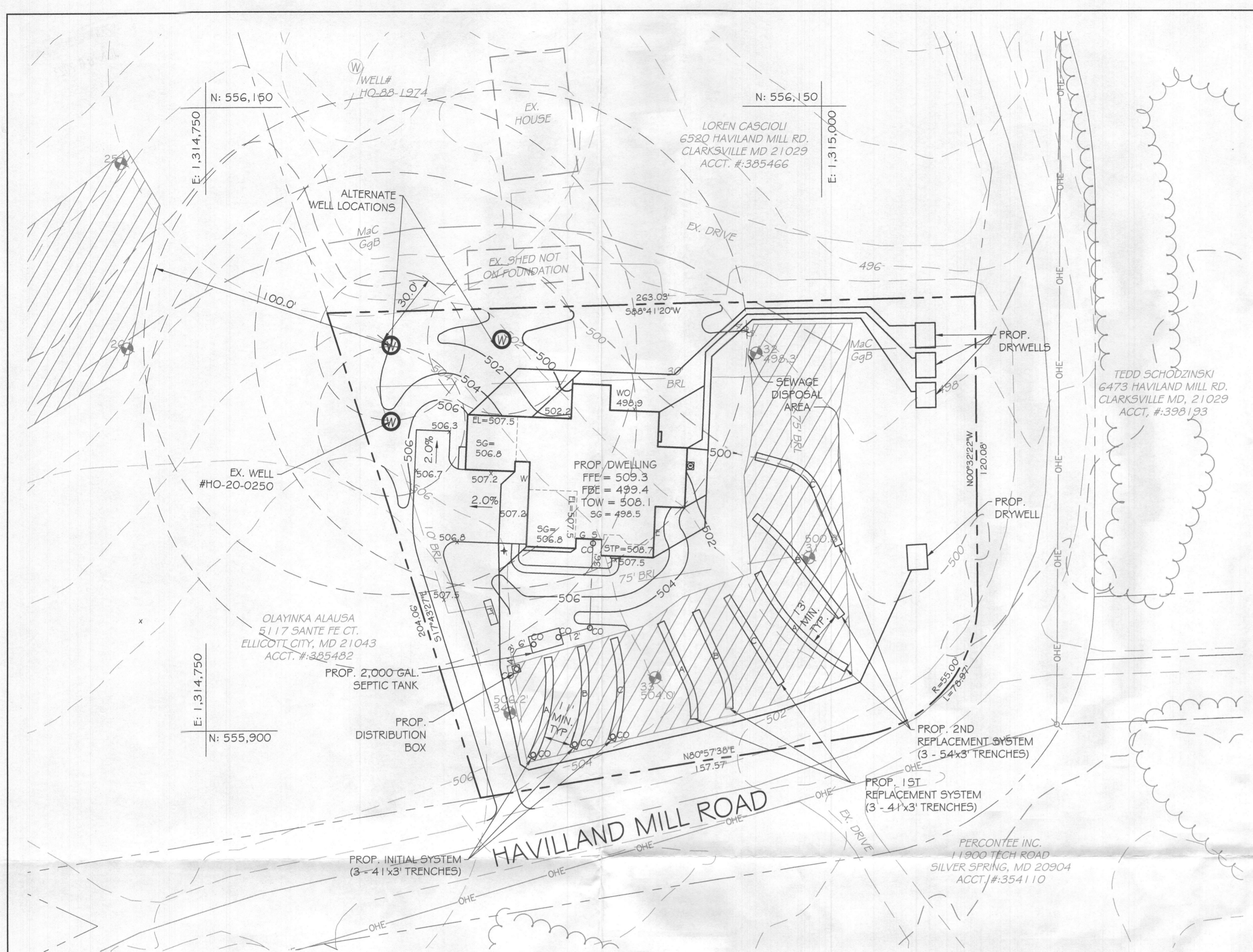
DRAWING NO.  
ZhoHM3  
SHEET 1 OF 1  
KCI JOB NUMBER  
271803754.74

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THE INFORMATION SHOWN HEREIN IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AND IS CORRECT, TO THE BEST OF MY KNOWLEDGE AND BELIEF. LICENSE NO. 28935 EXPIRATION DATE: 1/15/2025



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PLANNERS  
SCIENTISTS  
CONSTRUCTION MANAGERS  
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SPARKS, MARYLAND 21152  
TELEPHONE: (410) 316-7800  
FAX: (410) 316-7818

REVISIONS				DATE
NO.	DATE	DESCRIPTION	BY	06/06/2023



PLAN VIEW  
SCALE: 1" = 30'

TRENCH LENGTH AND SPACING CALCULATIONS

TRENCH DESIGN (7 BDRM X 1.50 GPD/BDRM = 1050 GPD)

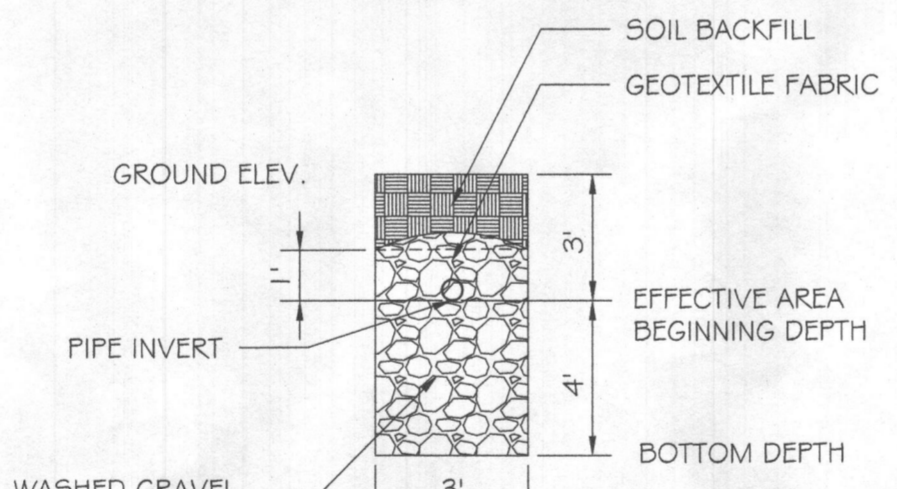
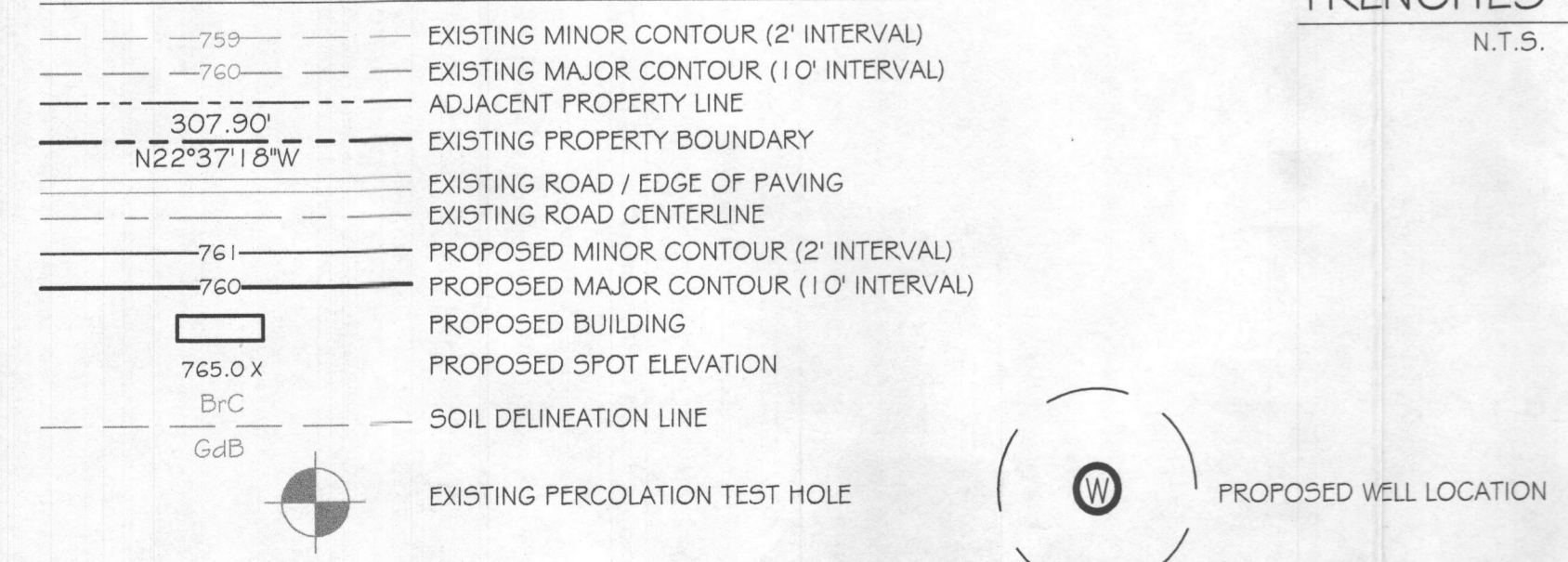
**INITIAL SYSTEM**  
1050 GPD / 1.2 GPD/SF (APP. RATE) = 875 SF  
USE 3' WIDE TRENCH W/ 48" OF GRAVEL BELOW PIPE EFFECTIVE AREA 3' - 7'  
SIDEWALL REDUCTION = (3' + 2') / (3' + 1' + 2 x 4') = 0.42  
875 SF / 3' WIDTH = 292 LF x 0.42 = 123 LF MIN. TRENCH  
TRENCH SPACING = 2 x 4' + 3' = 11' MIN. SPACING BETWEEN TRENCH EDGES

**1ST REPLACEMENT**  
1050 GPD / 1.2 GPD/SF (APP. RATE) = 875 SF  
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TRENCH SPACING = 2 x 4' + 3' = 11' MIN. SPACING BETWEEN TRENCH EDGES

**2ND REPLACEMENT SYSTEM**  
1050 GPD / 0.8 GPD/SF (APP. RATE) = 1313 SF  
USE 3' WIDE TRENCH W/ 60" OF GRAVEL BELOW PIPE EFFECTIVE AREA 3' - 8'  
SIDEWALL REDUCTION = (3' + 2') / (3' + 1' + 2 x 5') = 0.36  
1313 SF / 3' WIDTH = 438 LF x 0.36 = 157 LF MIN. TRENCH  
TRENCH SPACING = 2 x 5' + 3' = 13' MIN. SPACING BETWEEN TRENCH EDGES

- 3 - 41' LONG TRENCHES FOR INITIAL SYSTEM
- 3 - 41' LONG TRENCHES FOR 1ST REPLACEMENT SYSTEM
- 3 - 53' LONG TRENCHES FOR 2ND REPLACEMENT SYSTEM

LEGEND

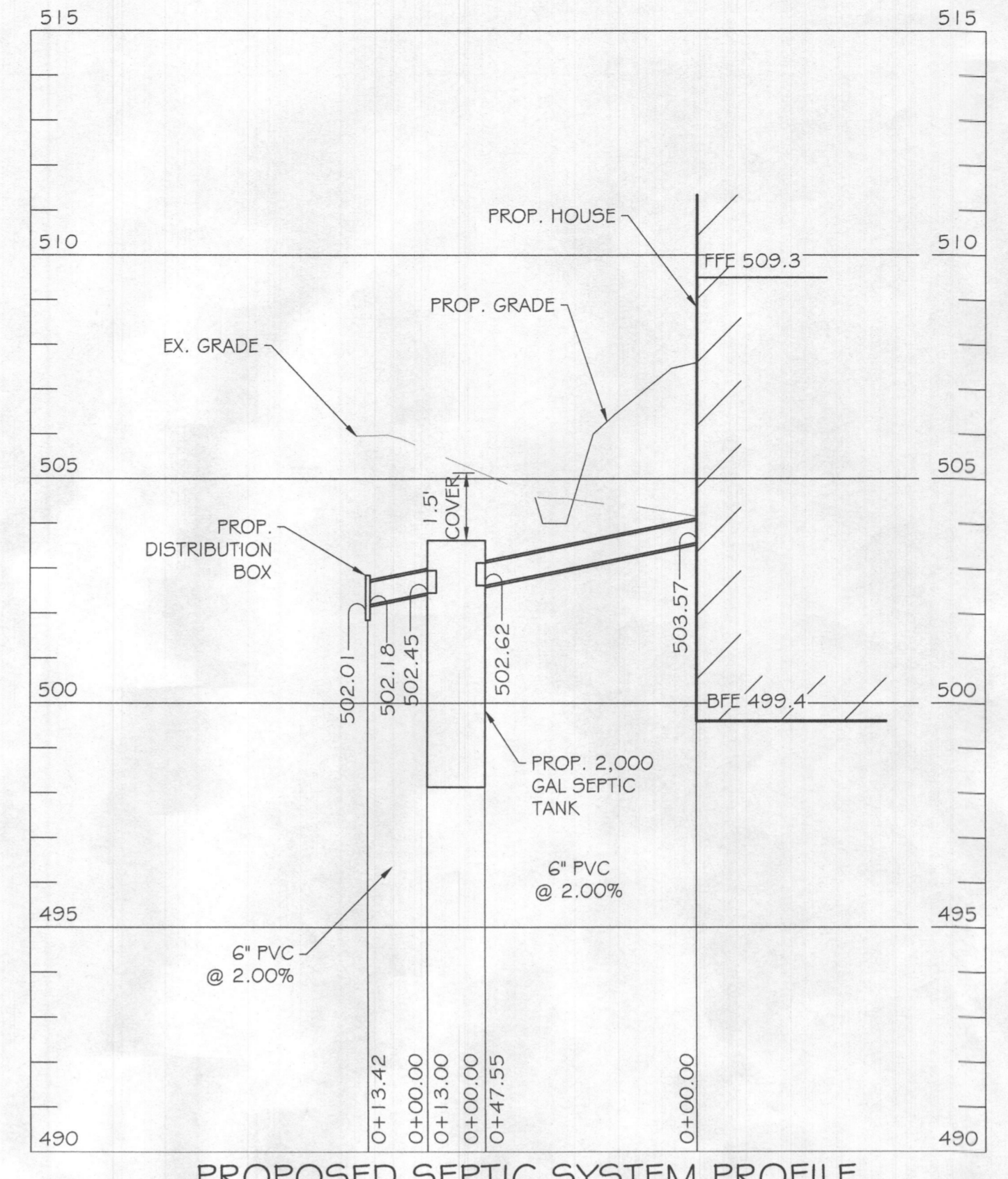


INITIAL & 1ST REPLACEMENT TRENCHES DETAIL  
N.T.S.

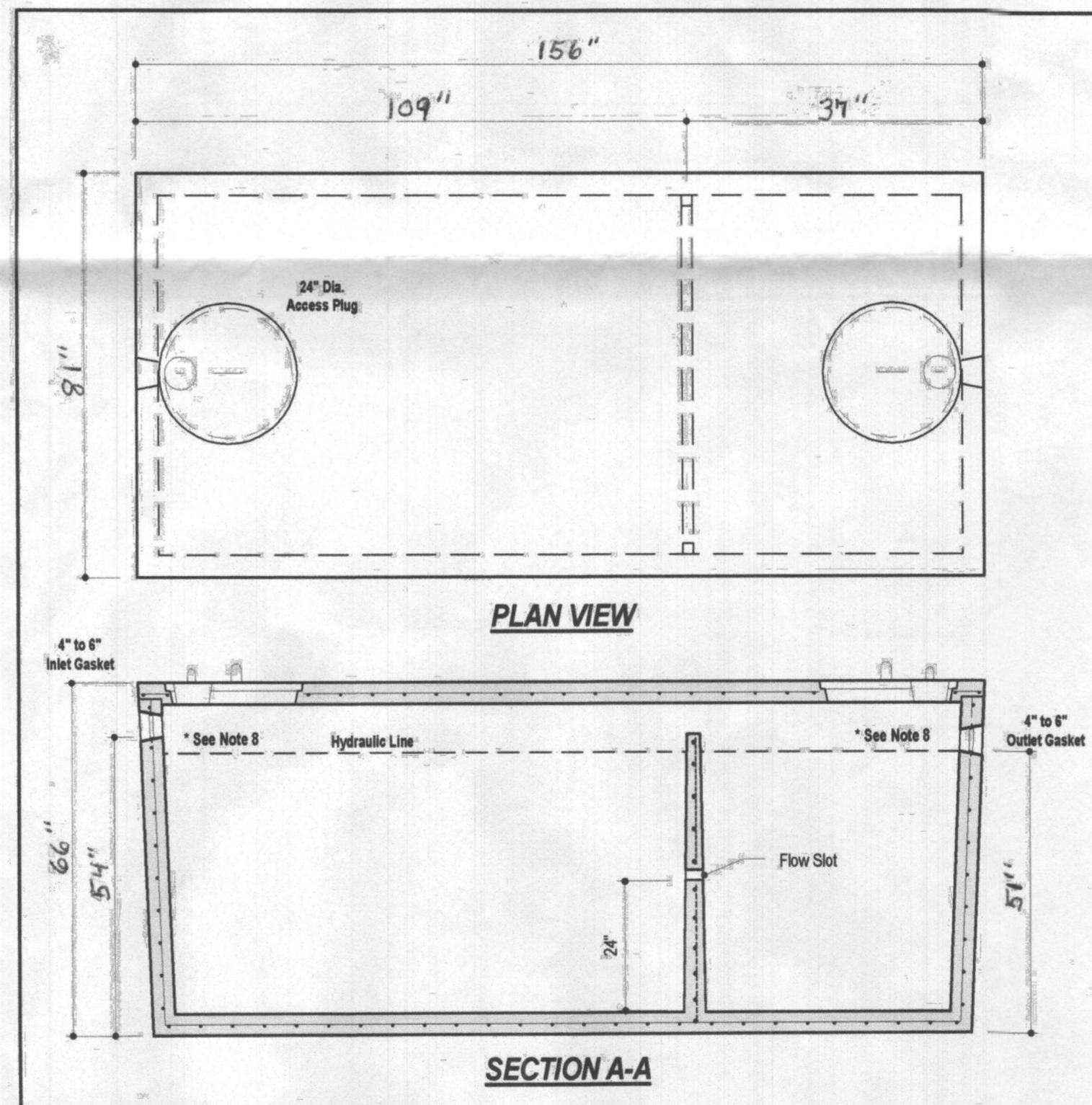
	RELATIVE DEPTHS		
	PIPE INVERT	EFFECTIVE AREA BEGINNING	MAXIMUM TRENCH BOTTOM
INITIAL SYSTEM TRENCH A,B,C	3	3	7
1ST REPLACEMENT TRENCH A,B,C	3	3	7
2ND REPLACEMENT TRENCH A,B,C	3	3	8



2ND REPLACEMENT TRENCHES DETAIL  
N.T.S.



PROPOSED SEPTIC SYSTEM PROFILE  
SCALE: H. 1" = 3' V. 1" = 3'



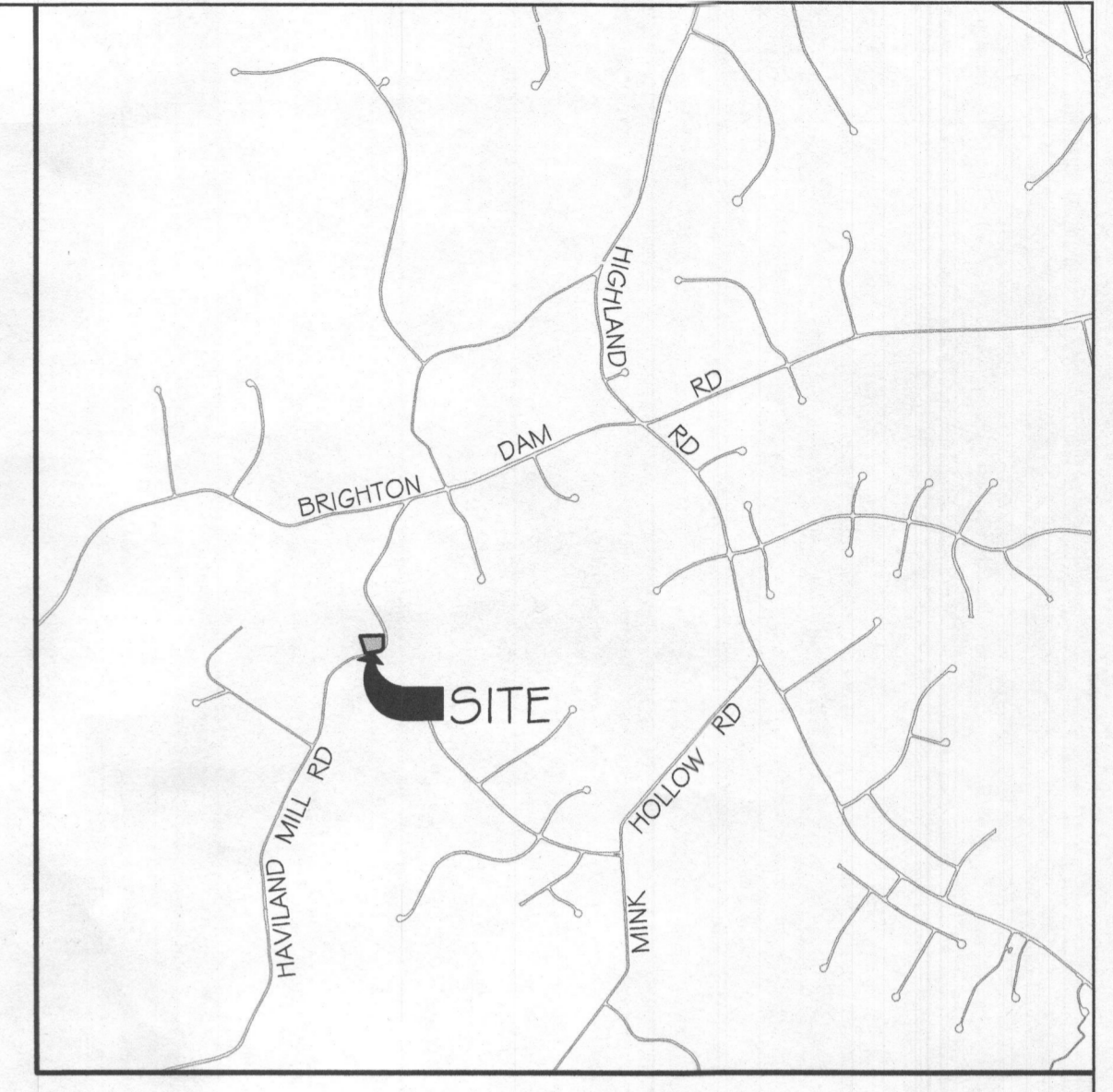
SEPTIC TANK DIAGRAM  
N.T.S.

**DESIGN DATA & GENERAL NOTES**

- Concrete strength  $F_c=4000$  p.s.i. @ 28 days. Density = 160 pcf.
- Cement-Portland Type III per ASTM C 150-92.
- Reinforcing per ASTM A 601.
- Reinforcing per ASTM A 108. Min. 1-1/2" cover.
- Top slab sealed with butyl rope mastic.
- 4" wall, 4" base, 8" top thickness.
- Max 3' of cover.
- Depending on use of tank, inlet & outlet baffles may be required by code.



**2,000 GALLON SEPTIC TANK**  
2-Compartment  
Stock Item [Approx. 19,900 lbs]



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				SCALE: 1" = 30'
				DESIGNED BY: FFW
				DRAWN BY: JDL

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