



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

Facebook: www.facebook.com/hocohealth

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

RECEIPT DATE: 9/8/22 **ONSITE SEWAGE DISPOSAL SYSTEM**

P 572129

APPROVAL DATE: 11/10/2022 **PERMIT: CONSTRUCTION**

A _____

PROPERTY ADDRESS: 16493 Frederick Road

SUBDIVISION: Augustin Property

LOT: 2

TAX ID: _____

CONTRACTOR: Holler Contracting

EMAIL: _____

CONTRACTOR ADDRESS: _____

PHONE: 301-898-8180

PROPERTY OWNER: Ermso & Francelian

EMAIL: ermoaugustin@gmail.com

OWNER ADDRESS: 8471 Winding Trail, Laurel MD 20724

PHONE: (240) 264-7020

SEPTIC TANK SIZE (GALLONS): 1500

TANK MANUFACTURER: _____

PUMP MODEL: _____

PUMP SIZE: _____

PUMP TANK CAPACITY: _____

DISTRIBUTION SYSTEM:



GRAVITY



PRESSURE DOSED

BEDROOMS: 4

APPLICATION RATE: 1.2

TRENCHES:	LINEAR FEET REQUIRED: <u>83.3</u>	INLET DEPTH: <u>3</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:	4 Bedrooms with unfinished basement.	

ISSUED BY: Dana Bernard

ISSUE DATE: _____

EXPIRATION DATE: _____

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 DOWNGRAIENT 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

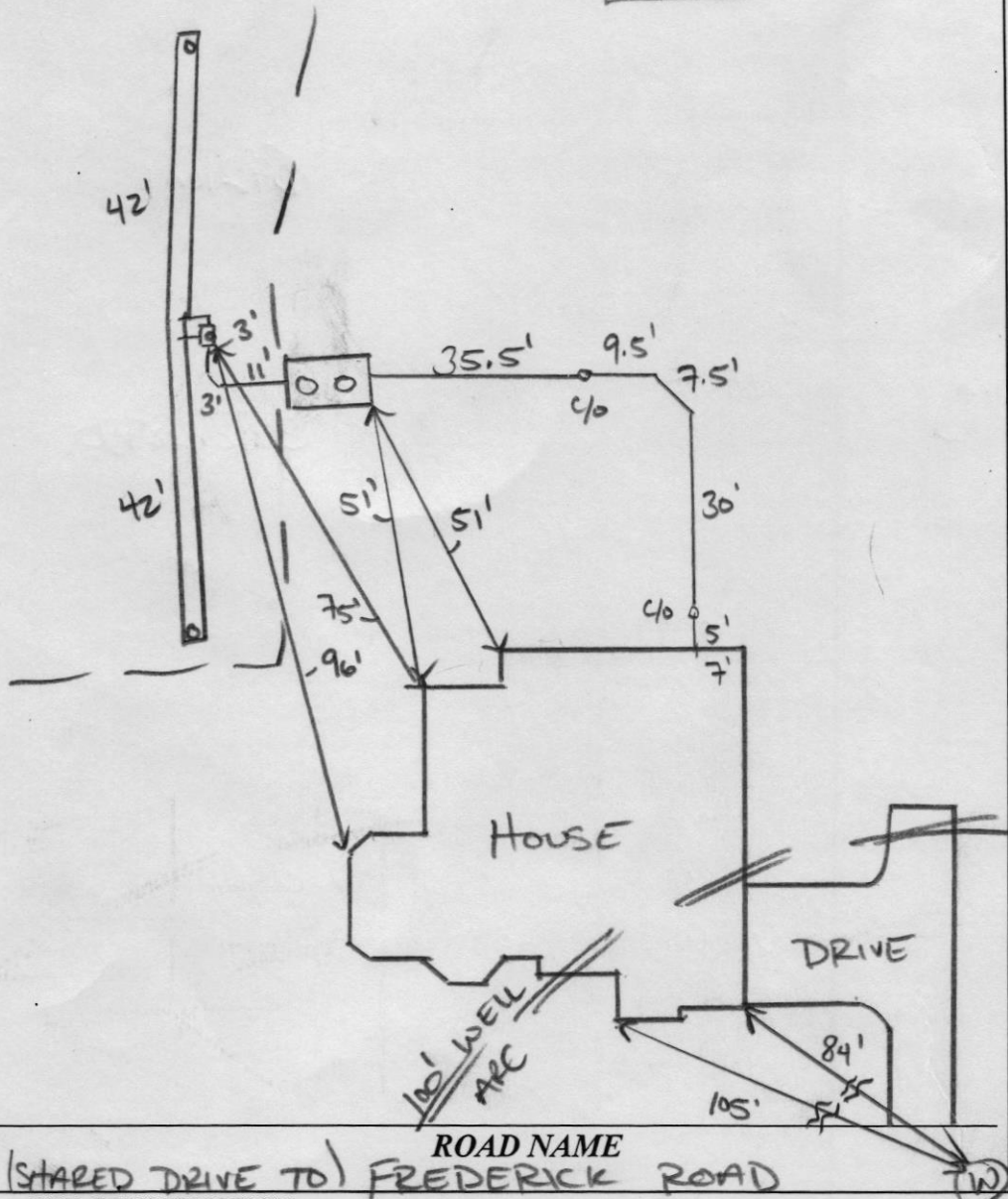
NOTE: MDE RECOMMENDS SEPTIC TANKS, BAT, AND OTHER PRETREATMENT UNITS BE PUMPED AT A FREQUENCY ADEQUATE TO ENSURE THAT SOLIDS ARE NOT DISCHARGED TO THE DISPOSAL AREA

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 $\sim 1:30$



TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	3'	8'
NUMBER OF TRENCHES		1
TOTAL LENGTH		84'
ABSORPTION AREA		252 SF + 3' SIDE WALL
DISTRIBUTION BOX LEVEL		SPEED
DISTRIBUTION BOX BAFFLE		CONC
DISTRIBUTION BOX PORT		YES

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL	YES
MANUFACTURER	SPEC
CAPACITY	1500 GAL
SEAM LOC	TOP
TANK LID DEPTH	1.5'-2'
BAFFLES	yes
BAFFLE FILTER	-
MANHOLE LOC	front/back
6" PORT LOC	-
WATERTIGHT TEST	-
SLOTTED	yes
DATE ON LID	09/2/2022

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	

(STARTED DRIVE TO) ROAD NAME
FREDERICK ROAD

PRE-CONSTRUCTION:

10/31/2022 Confirmed contours of 1x 84' trench. Φ

INSTALLATION:

11/09/2022 SHC, SL, TANK + DBox set. Φ ~ 11/10/2022
Trenches complete. Φ

FINAL INSPECTOR

DATE OF APPROVAL ~ 11/10/2022

PLOTTED: "01:33 PM on Monday, August 29, 2022"
BY: Ryan, Shumaker
FILE: V:_SITE-FACILITIES\Practices\RP27 - Lond Dev GMA\SPARKS-LAND DEVELOPMENT\RESOURCES\Keystone Homes\271803754.89 - August.in



Vertical Control
Horizontal Control
Datum
Scale

N28° 38' 26" E 201.78'

ERMSO & FRANCELAIN
AUGUSTIN
TAX MAP 7 GRID 10
PARCEL 305
LIBER 20859 FOLIO 98

FOUNDATION ONLY

N68° 58' 58" W 302.68'

S28° 38' 26" W 190.36'

S68° 58' 58" E 290.41'

N17° 19' 56" E 465.48'

N17° 19' 56" E 476.88'

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N17° 19' 56" E 476.88'

FREDERICK ROAD
(MD ROUTE 144)
S69° 18' 17" E
10.02'

SEE MATCHLINE "A"

MATCHLINE "A"

Wall Check
OK
RAC
9/8/2022



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.

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. NO. 24027C0030D EFFECTIVE NOVEMBER 6, 2013.

FOUNDATION LOCATION DRAWING
16493 FREDERICK ROAD

TAX MAP 7 GRID 10 PARCEL 305
LOT 4

4TH ELECTION DISTRICT HOWARD COUNTY, MD
SCALE 1" = 50'



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

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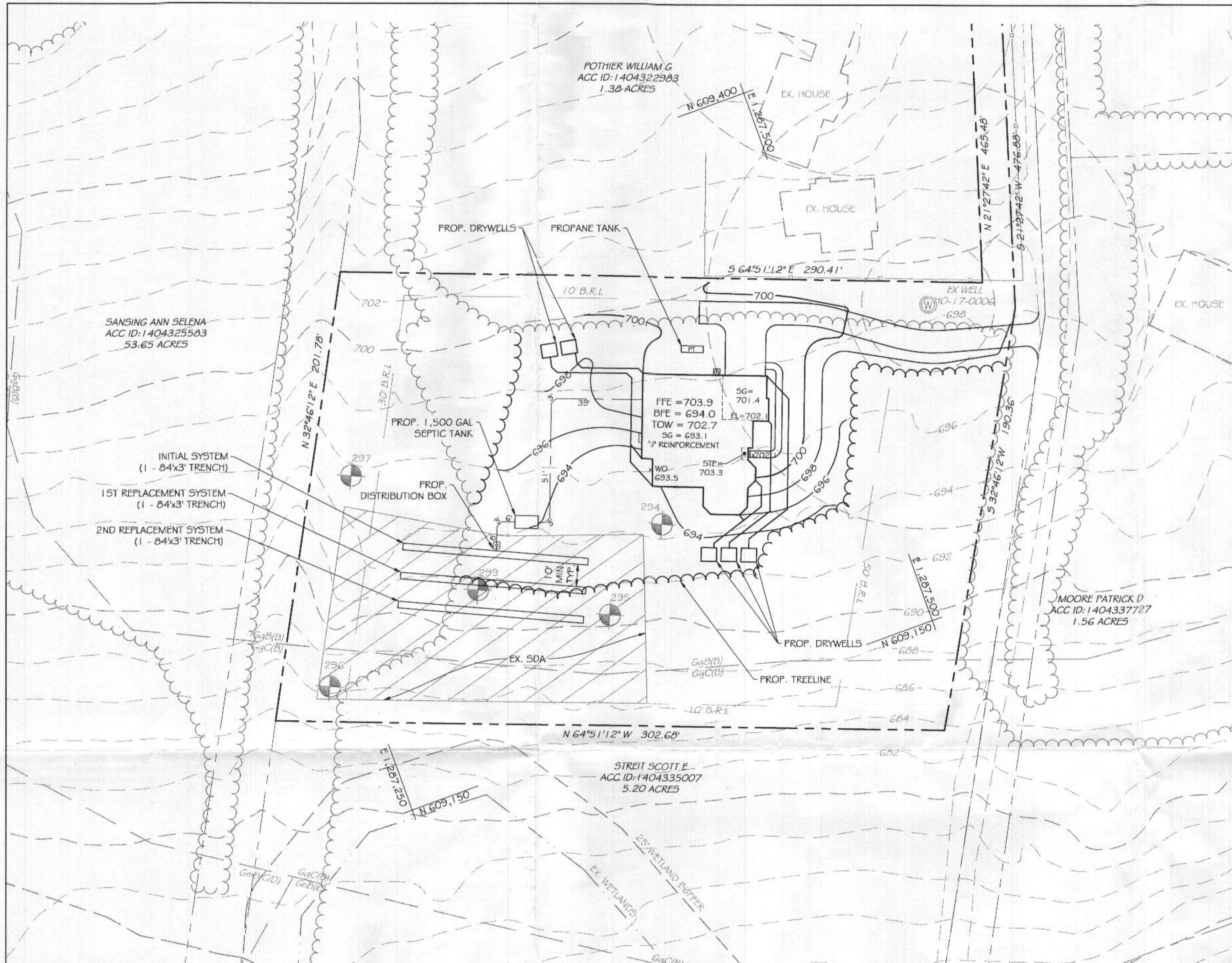
4TH ELECTION DISTRICT

HOWARD COUNTY, MD

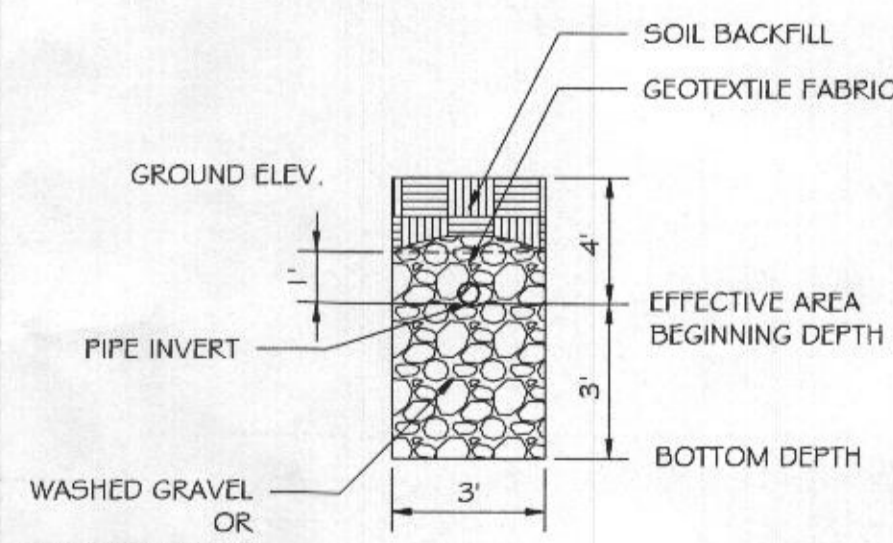
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PLAN VIEW
SCALE: 1" = 30'



TRENCHES DETAIL
N.T.S.

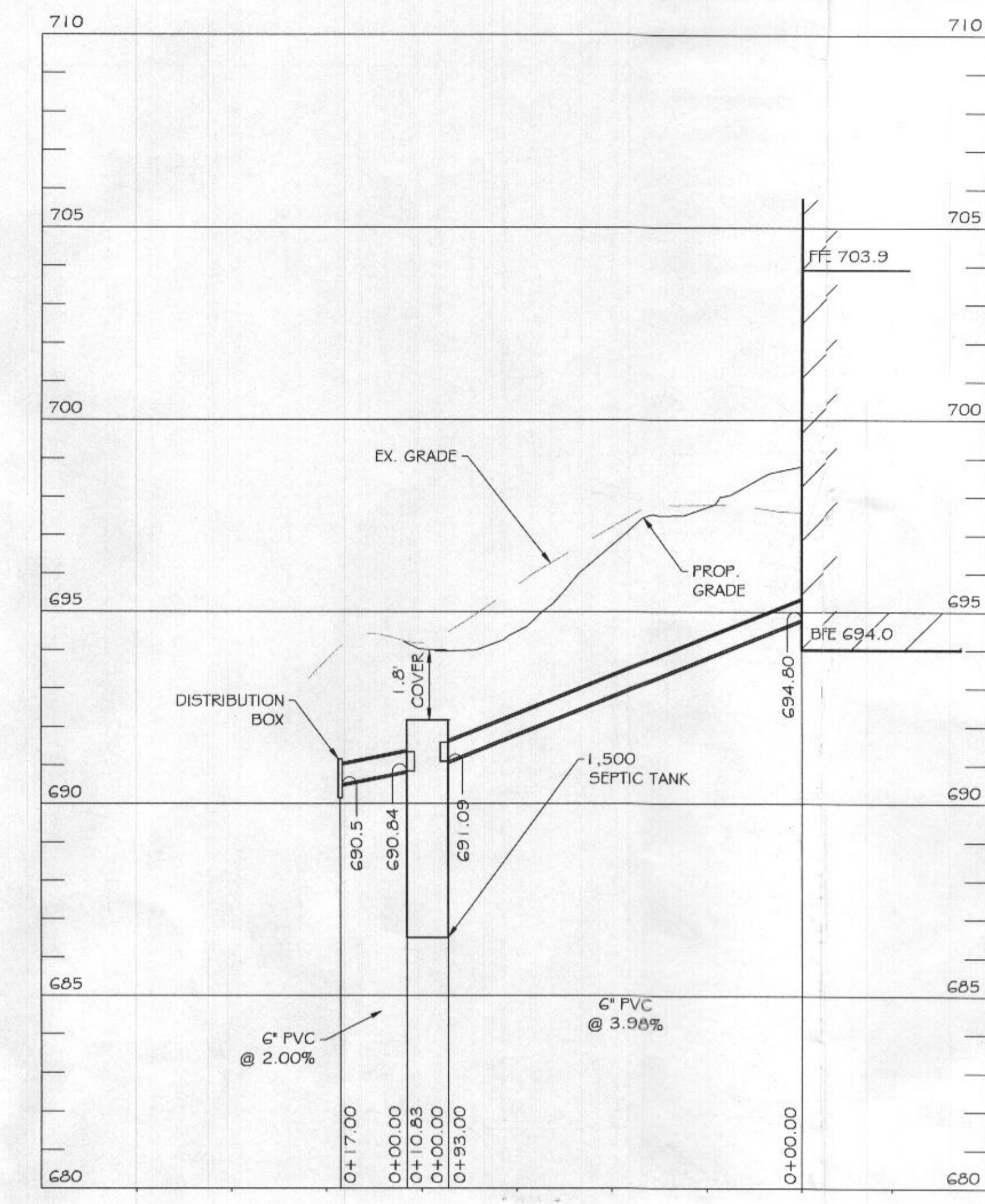
PERC RESULTS (9/13/16)

TEST #	TIME OF 2ND INCH (MIN.)
297	3
294	5
295	2
296	3
299	5

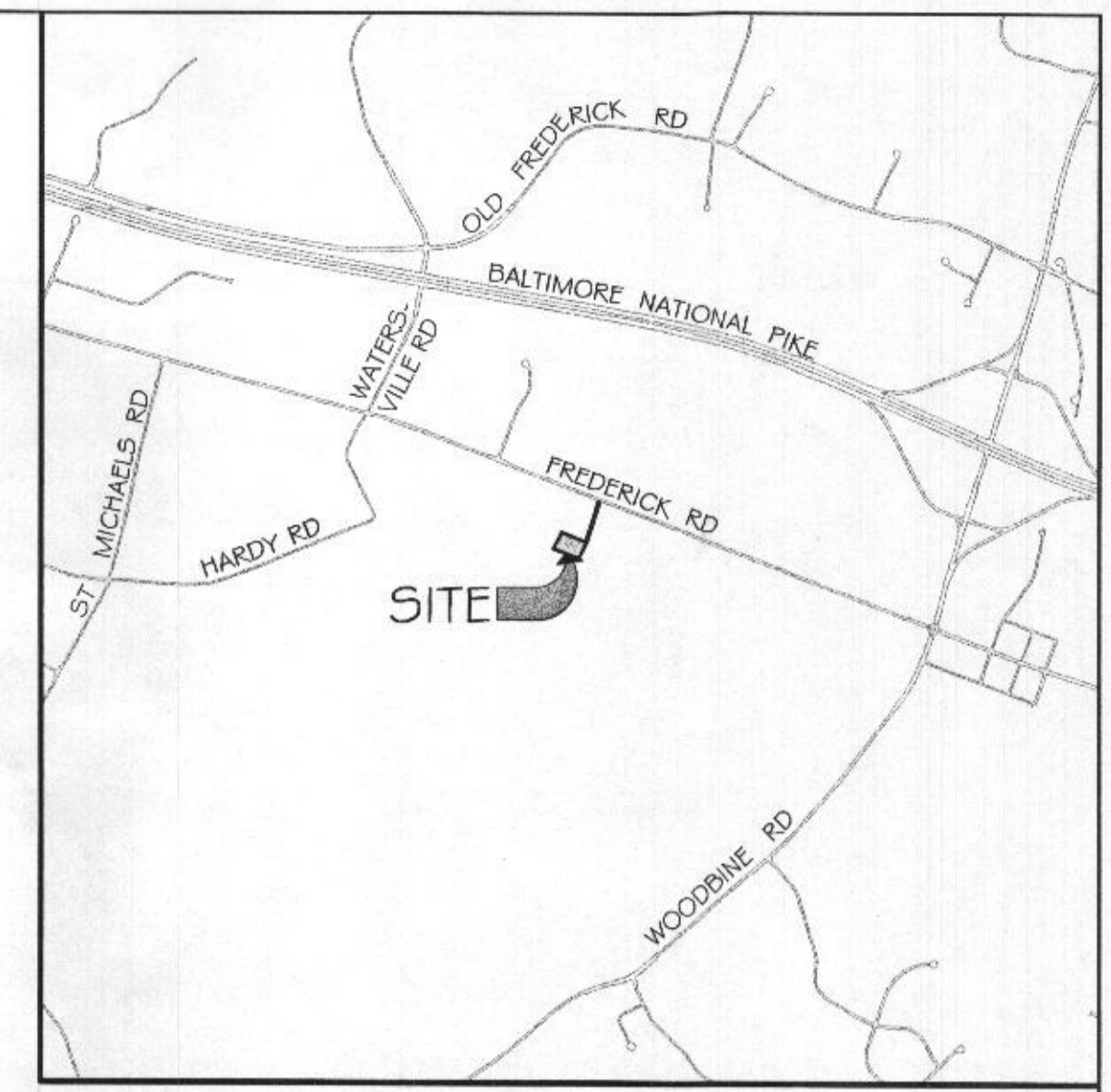
PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THE INFORMATION SHOWN HEREIN IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AND IS CORRECT, TO THE BEST OF MY KNOWLEDGE AND BELIEF. LICENSE NO. 26935 EXPIRATION DATE: 1/15/2023



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



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



VICINITY MAP
SCALE: 1" = 2000'

TRENCH LENGTH AND SPACING CALCULATIONS
TRENCH DESIGN (4 BDRM X 150 GPD/BDRM = 600 GPD)

- INITIAL SYSTEM
600 GPD / 1.2 GPD/SF (APP. RATE) = 500 SF
USE 3' WIDE TRENCH W/ 3" OF GRAVEL BELOW PIPE EFFECTIVE AREA 5' - 8"
500 SF / 3' WIDTH = 166.7 LF X 0.50 = 83.3 LF MIN. TRENCH
10' MIN. SPACING BETWEEN TRENCH EDGES
- 1ST REPLACEMENT SYSTEM
600 GPD / 1.2 GPD/SF (APP. RATE) = 500 SF
USE 3' WIDE TRENCH W/ 3" OF GRAVEL BELOW PIPE EFFECTIVE AREA 5' - 8"
500 SF / 3' WIDTH = 166.7 LF X 0.50 = 83.3 LF MIN. TRENCH
10' MIN. SPACING BETWEEN TRENCH EDGES
- 2ND REPLACEMENT SYSTEM
600 GPD / 1.2 GPD/SF (APP. RATE) = 500 SF
USE 3' WIDE TRENCH W/ 3" OF GRAVEL BELOW PIPE EFFECTIVE AREA 5' - 8"
500 SF / 3' WIDTH = 166.7 LF X 0.50 = 83.3 LF MIN. TRENCH
10' MIN. SPACING BETWEEN TRENCH EDGES

- 1 - 84' LONG TRENCH FOR INITIAL SYSTEM
- 1 - 84' LONG TRENCH FOR 1ST REPLACEMENT SYSTEM
- 1 - 84' LONG TRENCH FOR 2ND REPLACEMENT SYSTEM

	PIPE INVERT	EFFECTIVE AREA BEGINNING	MAXIMUM TRENCH BOTTOM
INITIAL SYSTEM	5.0	5.0	8.0
1ST REPLACEMENT SYSTEM	5.0	5.0	8.0
2ND REPLACEMENT SYSTEM	5.0	5.0	8.0

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.
- ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
- THE WELL (TAG HO-17-0006) 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. EXISTING SYSTEM LOCATION HAVE BEEN SHOWN BASED ON INFORMATION OBTAINED FROM THE HEALTH DEPARTMENT AND THE PROPERTY OWNER.
- 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 SEWERAGE IS AVAILABLE. THIS AREA 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 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.
- 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.
- A PROFESSIONAL SURVEYOR OR ENGINEER MUST MARK THE PROPERTY LINE WHEN THE TRENCHES ARE BEING INSTALLED IN AREAS WHERE THE PROPERTY LINE SETBACK HAS BEEN REDUCED.

Approved Septic System Plan
Howard County Health Department
DBernard 4-11-22
Signature Date

4BR Unfinished Basement

OWNER:
ERMSO & FRANCELAIN AUGUSTIN
8471 WINDING TRAIL,
LAUREL, MD 20724
(240) 264-7020

DEVELOPER:
KEYSTONE CUSTOM HOMES
GREG 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

	APPROXIMATE ELEVATIONS		
	GROUND ELEVATION	INVERT ELEVATION	BOTTOM ELEVATION
INITIAL SYSTEM	693.1	688.1	684.1
1ST REPLACEMENT SYSTEM	691.9	686.9	682.9
2ND REPLACEMENT SYSTEM	690.6	685.6	681.6

LEGEND

- 750 --- EXISTING MINOR CONTOUR (2' INTERVAL)
- 760 --- EXISTING MAJOR CONTOUR (10' INTERVAL)
- 307.30 --- ADJACENT PROPERTY LINE
- N 22°46'12" E 201.78' --- EXISTING PROPERTY BOUNDARY
- 307.30 --- EXISTING ROAD / EDGE OF PAVING
- N 22°37'18" W --- EXISTING ROAD CENTERLINE
- 761 --- PROPOSED MINOR CONTOUR (2' INTERVAL)
- 760 --- PROPOSED MAJOR CONTOUR (10' INTERVAL)
- EXISTING BUILDING
- PROPOSED BUILDING
- 765.0 X --- PROPOSED SPOT ELEVATION
- LIMIT OF DISTURBANCE
- PROPOSED SILT FENCE
- BrC --- SOIL DELINEATION LINE
- GdB --- EXISTING PERCOLATION TEST HOLE

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS
HEALTH OFFICER, HOWARD COUNTY HEALTH DEPT. DATE

LOT 2, AUGUSTIN PROPERTY
ON SITE DISPOSAL SYSTEM PLAN
16493 TBD FREDERICK RD,
WOODBINE, MD 21797
TAX#: 313453, SUB: 1002

DRAWING NO.:
ZhoFR3
SHEET 1 OF 1
KCI JOB NUMBER
271803754.89