

ALEXANDER E. ADAMS
 BETTY S. ADAMS
 TM: 34 PARCEL: 43
 L: 14369 / F: 464
 114.60 AC.
 USE: AGRICULTURAL
 ZONED: RR-DEO
 HOWARD COUNTY AGRICULTURAL
 LAND PRESERVATION PROGRAM
 EASEMENT HO-91-04-E

BUILDABLE PRESERVATION PARCEL 'A'
 3.27 AC.
 OWNED BY ESTATES AT RIVER HILL, LLC
 AND ASSIGNS WITH HOWARD COUNTY
 AND THE HOA BEING EASEMENT HOLDERS

FOREST CONSERVATION
 EASEMENT #3
 (AFFORESTATION)
 3.75 AC. (TOTAL)

NON-BUILDABLE
 PRESERVATION
 PARCEL 'C'
 17.31 AC.
 TO BE OWNED BY THE DEPT.

PLAN VIEW
 SCALE: 1"=30'

WELL LOCATION CERTIFICATION:
 THE EXISTING WELL SHOWN FOR BUILDABLE PRESERVATION PARCEL 'A'
 (TAG #HO-17-0340) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN

THIS AREA DESIGNATES A PRIVATE SEWAGE AREA 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 SEWERAGE IS AVAILABLE. THESE AREAS 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.

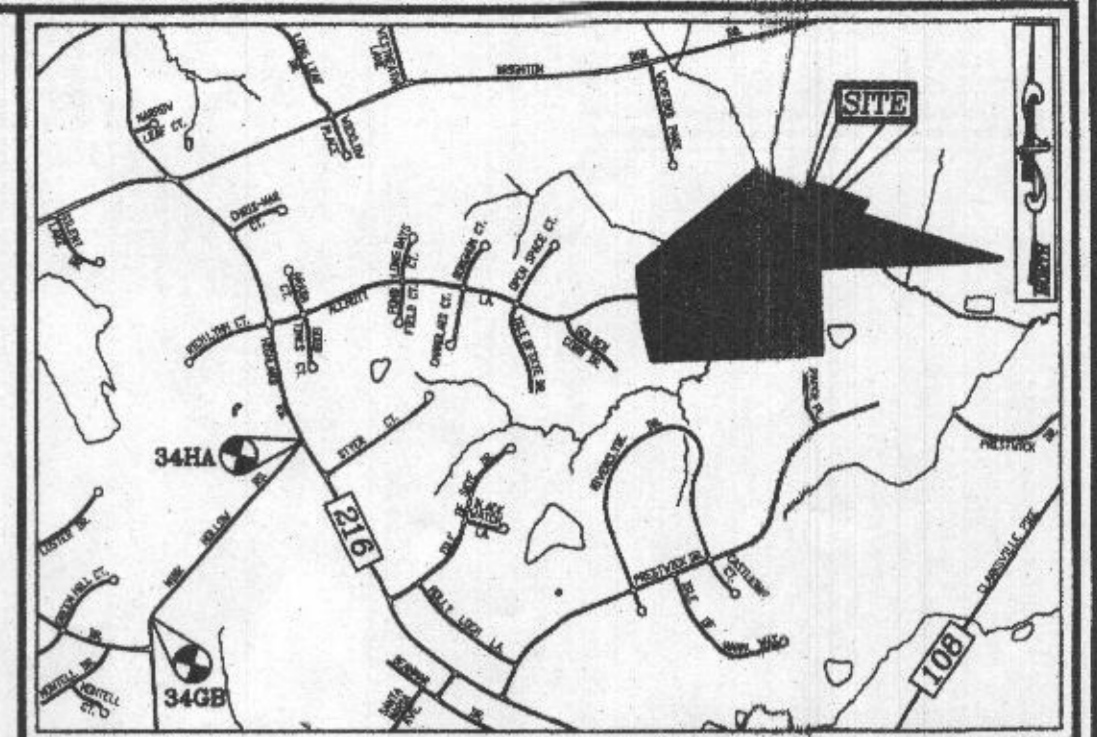
INITIAL SYSTEM TRENCH INFO.

TRENCH	LENGTH	TRENCH WIDTH	EXISTING TRENCH BOTTOM	EXISTING GROUND
1	52'	24.17"	419.67'	427.67'
2	52'	23.76"	419.28'	427.28'

SYSTEM CALCULATIONS:

INITIAL AND FIRST REPLACEMENT SYSTEM:
 5 BEDROOMS AT 750gpd / 1.2 ABSORPTION RATE = 625 SQ. FT.
 625 SQ. FT. / 2 (TRENCH WIDTH) x .33 (SIDEWALL REDUCTION) = 103 LINEAR FEET
 104 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE INITIAL AND THE FIRST REPLACEMENT SYSTEM.
 (2 TRENCHES OF 52 FEET IN LENGTH FOR EACH SYSTEM)

SECOND REPLACEMENT SYSTEM:
 5 BEDROOMS AT 750gpd / 0.8 ABSORPTION RATE = 938 SQ. FT.
 938 SQ. FT. / 3 (TRENCH WIDTH) x .63 (SIDEWALL REDUCTION) = 197 LINEAR FEET
 200 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE SECOND REPLACEMENT SYSTEM.
 (4 TRENCHES OF 50 FEET IN LENGTH)

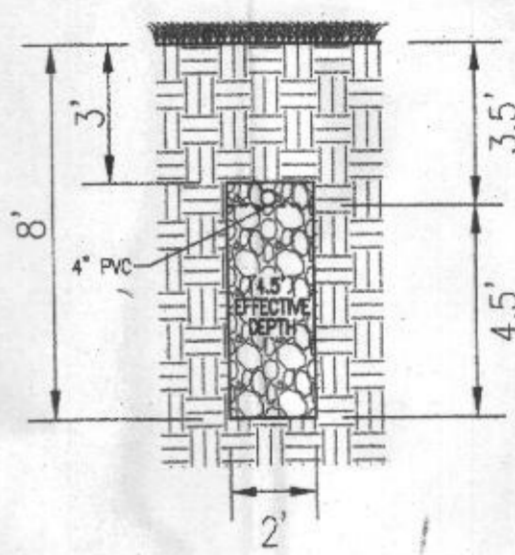


VICINITY MAP
 SCALE: 1"=2000'
 ADC MAP: PAGE: 31 / GRID: B2, B3, & C2

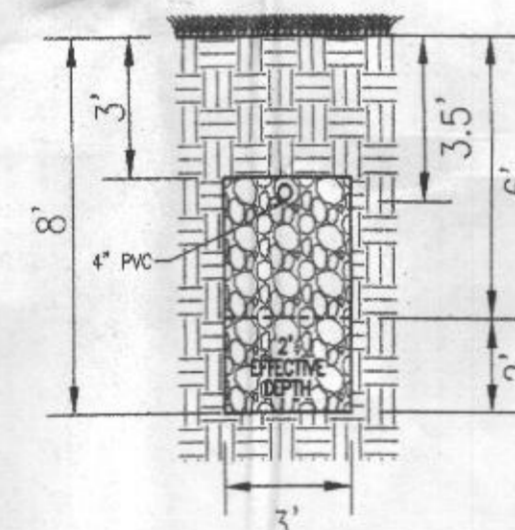
BENCHMARKS
 HOWARD COUNTY BENCHMARK 34GB (CONC. MON.)
 N 553966.73 E 1317752.53 ELEV. 505.18
 LOCATION: MINK HOLLOW RD. 0.45 MI. SW OF
 HIGHLAND RD.
 HOWARD COUNTY BENCHMARK 34HA (CONC. MON.)
 N 555780.15 E 1319355.57 ELEV. 535.23
 LOCATION: CORNER OF HIGHLAND RD. & MINK
 HOLLOW RD.

LEGEND:

- PROPERTY LINE
- RIGHT-OF-WAY LINE
- ADJACENT PROPERTY LINE
- EXISTING EDGE OF PAVING
- EXISTING TREELINE
- PROPOSED TREELINE
- EXISTING SPECIMEN TREES
- EXISTING WOOD FENCE
- EX. PUBLIC 100-YEAR FLOOD PLAN
- PROP. PRIVATE USE-IN-COMMON ACCESS EASEMENT
- PROP. PRIVATE SWM, DRAINAGE & UTILITY EASEMENT
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- PROPOSED 10' CONTOUR
- PROPOSED 2' CONTOUR
- APPROVED SEWAGE DISPOSAL AREA (SDA)
- APPROVED WELL AREA
- EXISTING WELL
- PASSED PERC. TEST
- FAILED PERC. TEST



INITIAL & 1ST REPLACEMENT SYSTEM
 TRENCH DETAIL
 NOT TO SCALE



2ND REPLACEMENT SYSTEM
 TRENCH DETAIL
 NOT TO SCALE

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. THE EXISTING TOPOGRAPHY SHOWN HEREON IS TAKEN FROM HOWARD COUNTY GIS AND SUPPLEMENTED WITH FIELD RUN TOPOGRAPHICAL SURVEYS PREPARED BY ROBERT H. VOGEL ENGINEERING, INC., DATED MARCH AND MAY OF 2016.
4. ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
5. EXISTING WELLS, SEPTIC SYSTEMS, AND SEWAGE DISPOSAL AREAS WITHIN 100' OF THE PROPERTY AND THOSE WELLS WITHIN 200' DOWNGRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS OR SEWAGE DISPOSAL AREAS HAVE BEEN SHOWN USING ALL REASONABLE EFFORTS.
6. THE LOT SHOWN HEREON COMPLES WITH THE MINIMUM OWNERSHIP, WIDTH, AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.

OWNER: ESTATES AT RIVER HILL, LLC
 MICHAEL PFALZ, MEMBER
 3675 PARK AVE., SUITE 301
 ELLICOTT CITY, MD 21043
 (410) 480-0023

DEVELOPER: TRINITY HOMES MARYLAND, LLC
 3675 PARK AVE., SUITE 301
 ELLICOTT CITY, MD 21043
 (410) 480-0023

Approved Septic System Plan
 Howard County Health Department
 500 Gallon Septic Tank
 to Gravity Drain Field
 5 Bedroom SFD
 RB
 Signature 9/18/2020
 Date

ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN
 THE ESTATES AT RIVER HILL
 BUILDABLE PRESERVATION PARCEL 'A'
 13616 OLIVIA WAY
 HIGHLAND, MD 20777

PARCEL: 389
 TAX MAP: 34 GRID: 23
 5TH ELECTION DISTRICT

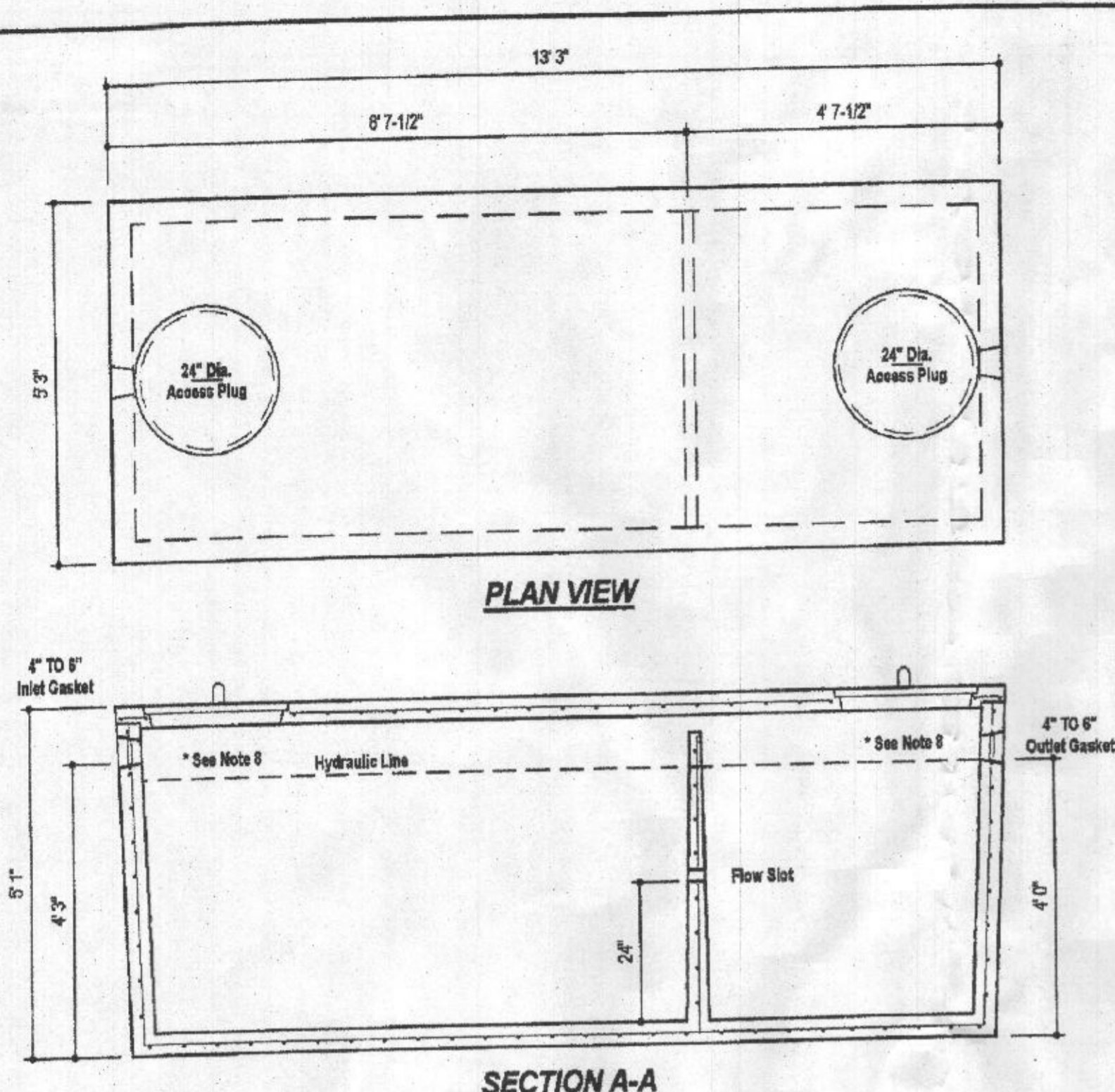
ZONED: RR-DEO
 L 18487 / F. 282
 HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 3300 N. RIDGE ROAD, SUITE 110 TEL: 410.461.7666
 ELLICOTT CITY, MD 21043 FAX: 410.461.8961



DESIGN BY: RHV
 DRAWN BY: JMR
 CHECKED BY: RHV
 DATE: AUGUST 2020
 SCALE: AS SHOWN
 W.O. NO.: 15-39

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. 18193, EXPIRATION DATE 08-27-2025



PLAN VIEW

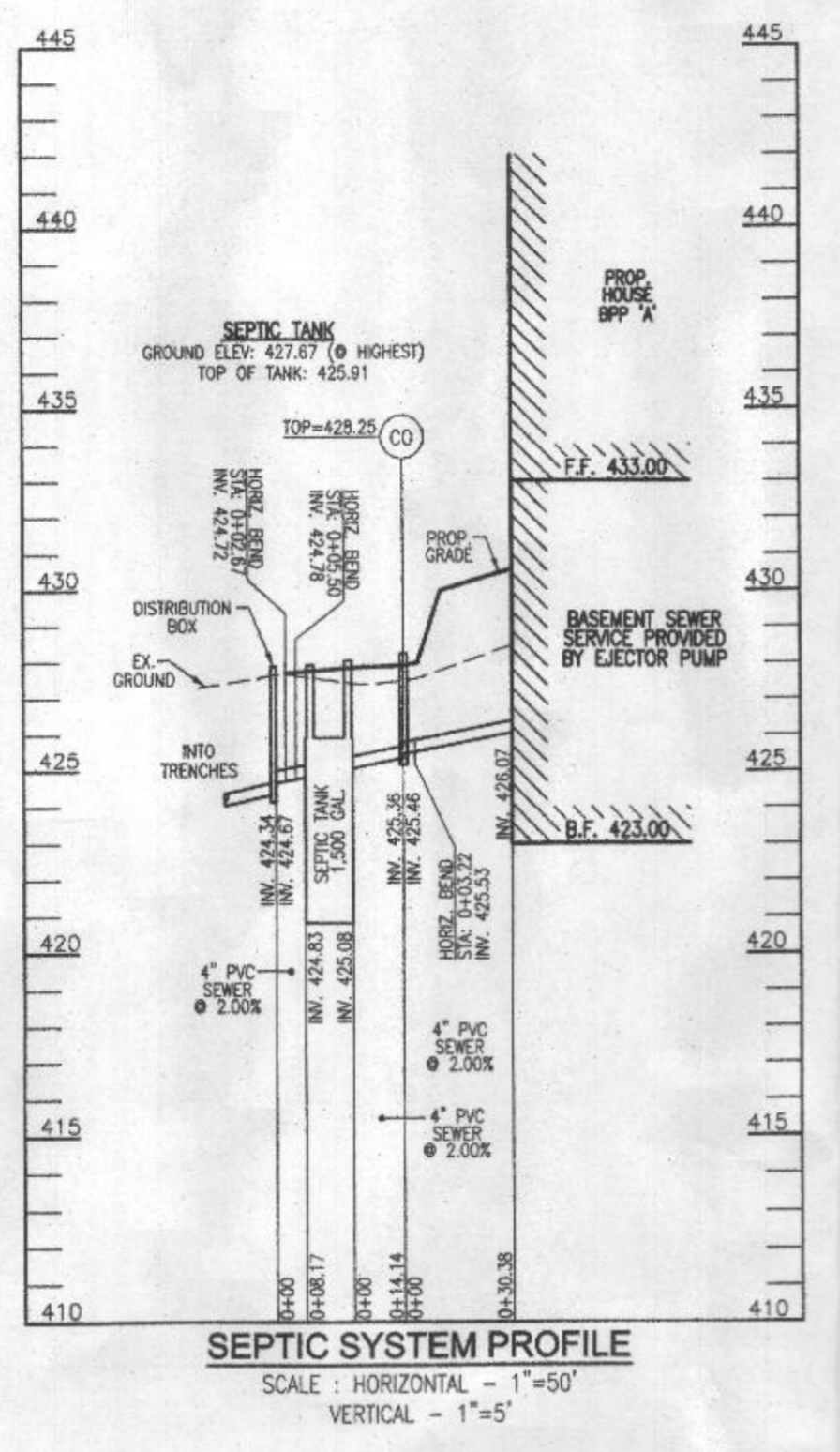
SECTION A-A

- 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 150-92.
 - (3) Admixtures & plasticizers per ASTM C 200-98 & C 484-92.
 - (4) Reinforcing per ASTM A 606, Min. 1-1/2" cover.
 - (5) Top slab sealed with butyl rope mastic.
 - (6) 4" wall, base, & top thickness.
 - (7) Max 3-1/2" of cover.
 - (8) Depending on use of tank, Inlet & Outlet baffles may be required by code.

WEIGHT = 16,750 lbs.

MBI
Mayer Bros., Inc.
6264 Flinn Road
Elkridge, Maryland 21075
Tel. 410.796.1434
Fax. 410.796.1439
www.maybrosprecast.com

**1,500 GALLON TANK (Non-Traffic)
2-Compartment**
Stock Item
Dwg. No. 1500-2C No Scale Aug. 11, 2009



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

OWNER
ESTATES AT RIVER HILL, LLC
MICHAEL PFAU, MEMBER
3675 PARK AVE., SUITE 301
ELLCOTT CITY, MD 21043
(410) 480-0023

DEVELOPER
TRINITY HOMES MARYLAND, LLC
3675 PARK AVE., SUITE 301
ELLCOTT CITY, MD 21043
(410) 480-0023

ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN
THE ESTATES AT RIVER HILL
BUILDABLE PRESERVATION PARCEL 'A'
13616 OLIVIA WAY
HIGHLAND, MD 20777

PARCEL: 389
TAX MAP: 34 GRID: 23
5TH ELECTION DISTRICT

ZONED: RR-OEO
L 18487 / F. 262
HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL
ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
3300 N. RIDGE ROAD, SUITE 110 TEL: 410.461.7666
ELLCOTT CITY, MD 21043 FAX: 410.461.8961

PROFESSIONAL CERTIFICATE

DESIGN BY: RHV
DRAWN BY: JMR
CHECKED BY: RHV
DATE: AUGUST 2020
SCALE: AS SHOWN
W.O. NO.: 15-39

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. 16193, EXPIRATION DATE 08-27-2025.

2 SHEET OF 2