

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: 11-15-21 ONSITE SEWAGE DISPOSAL SYSTEM P 570217

APPROVAL DATE: 2/14/22 PERMIT: CONSTRUCTION A

PROPERTY ADDRESS: 5625 DOSA COURT, CLARKSVILLE, MD 21029

SUBDIVISION: THE WOODLANDS LOT: 7 TAX ID: 05-601712

CONTRACTOR: Hatfields Equipment EMAIL:

CONTRACTOR ADDRESS: P.O. Box 577 Annapolis Jct, MD 20701 PHONE: 301-489-4290

CONTRACTOR CERTIFIED FOR BAT INSTALLATION: [X] MDE [X] MANUFACTURER: BACKLIVER MarinaMorris@WilliamsburgLLC.co

PROPERTY OWNER: WBG ESM LLC EMAIL: m

OWNER ADDRESS: 5485 HARPERS FARM ROAD, COLUMBIA, MD 21044 PHONE: (410)997-3800

BAT UNIT MODEL: NORWECO TNT 500 PUMP SIZE: n.a. PUMP TANK CAPACITY: n.a.

OPERATION & MAINTENANCE AGREEMENT DATE SIGNED: 11-15-21 DATE RECORDED: 11-15-21

DISTRIBUTION SYSTEM: [X] GRAVITY [] PRESSURE DOSED BEDROOMS: 5 APPLICATION RATE: 1.2

Table with trench specifications: LINEAR FEET REQUIRED: 132, INLET DEPTH: 2.0, TRENCH WIDTH: 3, MAXIMUM BOTTOM DEPTH: 6.0, MINIMUM SPACE BETWEEN TRENCHES: 10, EFFECTIVE AREA BEGINNING DEPTH: 4.0

LOCATION: PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND BAT UNIT LOCATION MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.

NOTES: Install Cleanout on SHC near foundation.

ISSUED BY: R BRICKER ISSUE DATE: EXPIRATION DATE: 11-15-22

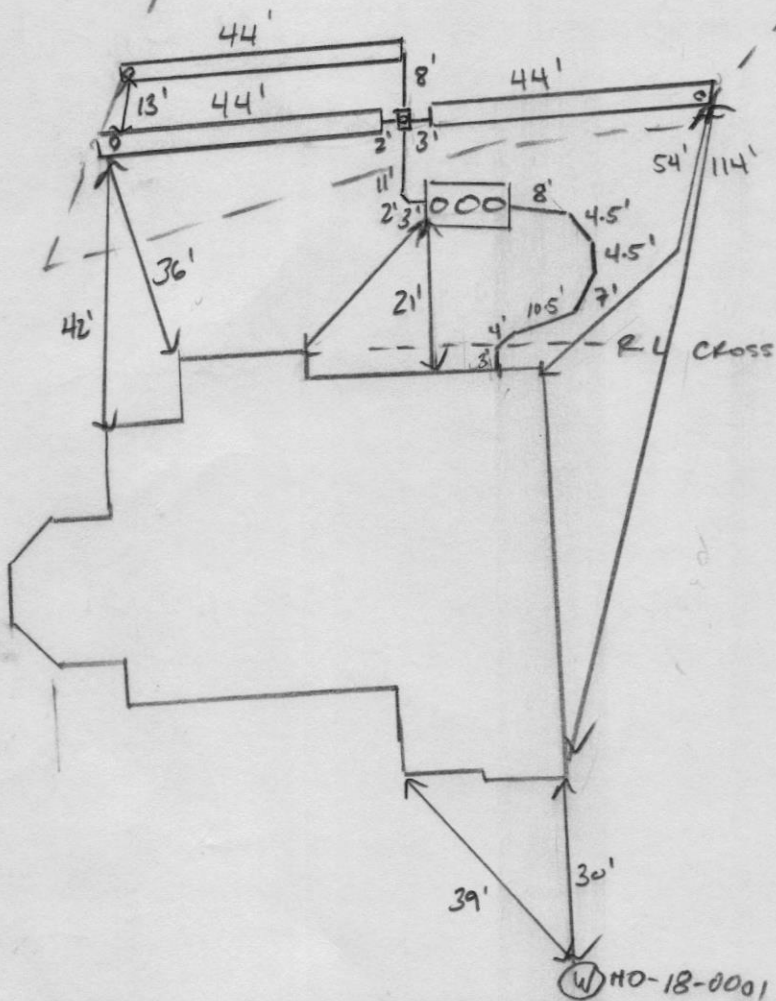
- NOTE: CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION INSPECTION PRIOR TO BEGINNING ANY INSTALLATION
NOTE: CONTRACTOR MUST SCHEDULE AN INSPECTION AND GAIN APPROVAL OF ALL COMPONENTS PRIOR TO COVERING
NOTE: STONE MUST BE APPROVED BY HEALTH DEPARTMENT AND GRAVEL TICKET MUST BE AVAILABLE FOR REVIEW.
NOTE: WATERTIGHT SEPTIC 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
NOTE: AN ELECTRICAL PERMIT ISSUED E 21005781
NOTE: AN INDIVIDUAL CERTIFIED BY MDE AND THE MANUFACTURER FOR BAT INSTALLATION MUST BE PRESENT AT ALL TIMES DURING BAT INSTALLATION.
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'



ROAD NAME

TRENCH/DRAINFIELD DATA

WIDTH INLET BOTTOM
3' 2' 6'
 NUMBER OF TRENCHES 3
 TOTAL LENGTH 132 F
 ABSORPTION AREA 396 SF + 2' SIDE WALL
 DISTRIBUTION BOX LEVEL SPEED
 DISTRIBUTION BOX BAFFLE CONIC.
 DISTRIBUTION BOX PORT YES

SEPTIC TANK DATA

SEPTIC TANK I LEVEL YES
 MANUFACTURER BACK RIVER
 CAPACITY TNTLPSD GAL
 SEAM LOC TOP
 TANK LID DEPTH 2.5'
 BAFFLES BAT
 BAFFLE FILTER BAT
 MANHOLE LOC FRONT/MID/BACK
 6" PORT LOC -
 WATERTIGHT TEST -
 SLOTTED BAT
 DATE ON LID 10/21/2021

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 _____

PRE-CONSTRUCTION:

12/22/21 3x45' trenches were staked out on contour according to plan. (P)

INSTALLATION:

12/23/2021 INSTALLED SL + SET TANK. (P) 12/27/2021 3x4' TRS INSTALLED. D Box LEVELED w/ SPEED LEVELS. AWAITING START UP LETTER. (P)

FINAL INSPECTOR

[Signature]

DATE OF APPROVAL

2/14/2022



BACK RIVER PRE-CAST, LLC
 PO BOX 329
 GLYNDON, MD 21071
 PH# 410-833-3394

NORWECO CERTIFICATION

PROPERTY OWNER: WILLIAMSBURG GROUP, LLC	INSTALLATION COMPANY: HATFIELD'S
ADDRESS: 5625 DOSA CT.	CERTIFIED INSTALLER: TODD TRACEY
CITY, ZIPCODE & COUNTY: CLARKSVILLE, 21029, HOWARD	PERMIT#
SIZE OF SYSTEM INSTALLED:	DATE INSTALLED: 12-22-21
600 GPD CONCRETE	START-UP DATE: 02-02-22
NUMBER OF BEDROOMS:	DATE OF FINAL INSPECTION:
TYPE OF INSTALLATION: NEW	DATE OF ELECTRICAL INSPECTION:
ELECTRICAL WIRING PER ELECTRICAL INSTRUCTIONS: YES	TANK LEVEL: YES
HT. OF CONTROL PANEL ABOVE FINAL GRADE: 48"	BURIAL DEPTH OF TANK: 28"
SYSTEM WIRED ON A 15-AMP DEDICATED CIRCUIT WITH STD. BREAKER: YES	RISERS 4" - 6" ABOVE GRADE: YES
LENGTH(S) OF UF WIRE PAST LAST AERATION RISER(S): 36"	VENTED LID(S) ON AERATION CHAMBER(S): YES
FEMALE PLUG(S) WIRED TO UF WIRE: YES	ANY GROUND SETTLING AROUND TANK:
CONDUIT(S) ENTERING AERATION RISER MADE WITH A WATERTIGHT CONNECTION: YES	NO
ISTHE INSIDE OF THE CONDUIT ENTERING THE CONTROL PANEL(S) AND AERATION RISER(S) SEALED WITH DUCT SEAL: YES	

ON 2ND PAGE MAKE A ROUGH SKETCH OF THE HOUSE ,WHERE THE SYSTEM IS LOCATED, WHERE THE CONTROL PANEL IS LOCATED , WHERE THE FRONT OF THE IS AND DIRECTIONS TO THE PROPERTY.

DIRECTIONS CAN START A FEW STREETS AWAY

EXAMPLE: RT. X LEFT ONTO XX STREET RIGHT ONTO PRIVATE DRIVEWAY 5TH HOUSE OF THE LEFT.

I certify that the Norweco Singulair TNT Wastewater Treatment System was installed according to the manufacture's specifications.

Matthew Geckle

Feb 02,2022

Signature of BRP Representative

Vice-President

Date

Clerk of the Circuit Court for

Howard County

9250 Judicial Way,
Ellicott City, MD 21043
410-313-2111

=====
LR - Agreement Recording Fee
1x 20.00 20.00

Name: morris
Ref: 30

=====
LR - Agreement Surcharge
1x 40.00 40.00

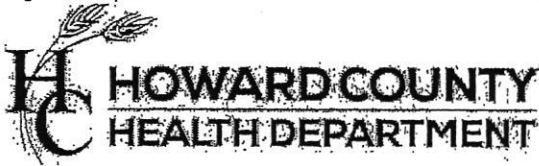
=====
SubTotal: 60.00
Total: 60.00
=====

REV-Check-WFB 60.00
Number : 15357

11/15/2021 15:14 CC13-TeC

#15628563/1247/4

~ Thank you for visiting us today ~



Bureau of Environmental Health
8930 Stanford Blvd | Columbia, MD 21045
410.313.2640 - Voice/Relay
410.313.2648 - Fax
1.866.313.6300 - Toll Free

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

**OPERATION AND MAINTENANCE AGREEMENT
FOR AN ON-SITE SEWAGE DISPOSAL SYSTEM
HAVING AN ADVANCED PRE-TREATMENT SYSTEM**

THIS AGREEMENT is made this 10th day of January-2021, among Williamsburg Group L.L.C., hereinafter collectively referred to as "Owner", and the Howard County Health Department hereinafter referred to as the "County".

WHEREAS, Owner is the owner or contract owner of a parcel of land located at 5625 DOSA CT, in the 05 Election District of Howard County, Maryland, and the deed and subdivision plat of the property is recorded among the Land Records of Howard County, Maryland, Tax Map # 0034, Block # , Parcel # 0015, Deed Reference # and Tax Account # 05-601712 ("the Property").

WHEREAS, The Property is suitable for the installation of a conventional on-site sewage disposal system with an advanced pre-treatment system, utilizing best available technology to perform nitrogen reduction, in accordance with the Code of Maryland Regulations 26.04.02.07, effective November 24, 2016. The pre-treatment device being installed is Norweco Singulair TNTLP GPM 500

NOW, THEREFORE, the parties hereto agree as follows:

- A. Owner hereby grants to the County the right to enter upon the Property at any reasonable time with prior notice for access to the system to make periodic inspections and the Owner agrees to provide any information and data in Owner's possession reasonably requested and needed by the County.
- B. Owner acknowledges and agrees that neither the County nor any of its agents or employees, either officially or individually, underwrites the operation of any system approved by them.
- C. The Owner will devote reasonable care and effort to the operation and maintenance of the system in perpetuity or until a public sewer connection is made so that a system malfunction is not the result of poor maintenance, faulty operation, or neglect.
- D. The Owner agrees to enter into a contract reasonably acceptable to the Owner and the County with a private entity to operate and maintain on a regularly scheduled basis an approved advanced pre-treatment system. The owner shall supply a copy of the contract to the County when it is renewed or altered.
- E. This agreement shall run with the land and upon Owner's taking title to the Property shall bind the Owner, their heirs, successors, and assigns to the provisions of the agreement as long as

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the property is in existence and after installation of the system. Owner further agrees that they shall inform in writing any subsequent purchaser or lessee of the Property that the system shall require maintenance or other attention. Upon taking title to the Property, the Owner agrees to cause this agreement to be recorded in the Land Records of Howard County and assure that it becomes part of the Deed for the subject property in order that prospective buyers may be aware of the special conditions affecting this property.

F. This agreement shall not be construed to limit any authority of the County to protect the public health, safety or comfort or to issue any other orders to take any other action which is now or may hereafter be within its authority.

G. This agreement may be voided at any time at the discretion of the County.

H. This agreement contains the entire agreement and understanding between the County and the Owner. There are no additional terms other than as contained in this agreement. This agreement may not be modified, except in writing signed by each of the parties or by their authorized representatives.

I. The laws of the State of Maryland govern the provisions of all transactions pursuant to this agreement.

J. Owner acknowledges and agrees that interior renovations to increase the number of bedrooms or an increase in living space shall not be permitted without approval from the County.

IN WITNESS WHEREOF, the parties have signed this agreement on the date indicated above.

 11/15/21
Howard County Health Department

Timothy E Morris 1/10/21
Owner #1 Signature Date

Owner #2 Signature Date

Timothy E Morris
Owner #1 Print Name

Owner #2 Print Name

DocuSigned by:
Jason Heavner 1/10/2021
Buyer #1 Signature Date

DocuSigned by:
Mojdeh Heavner 1/10/2021
Buyer #2 Signature Date

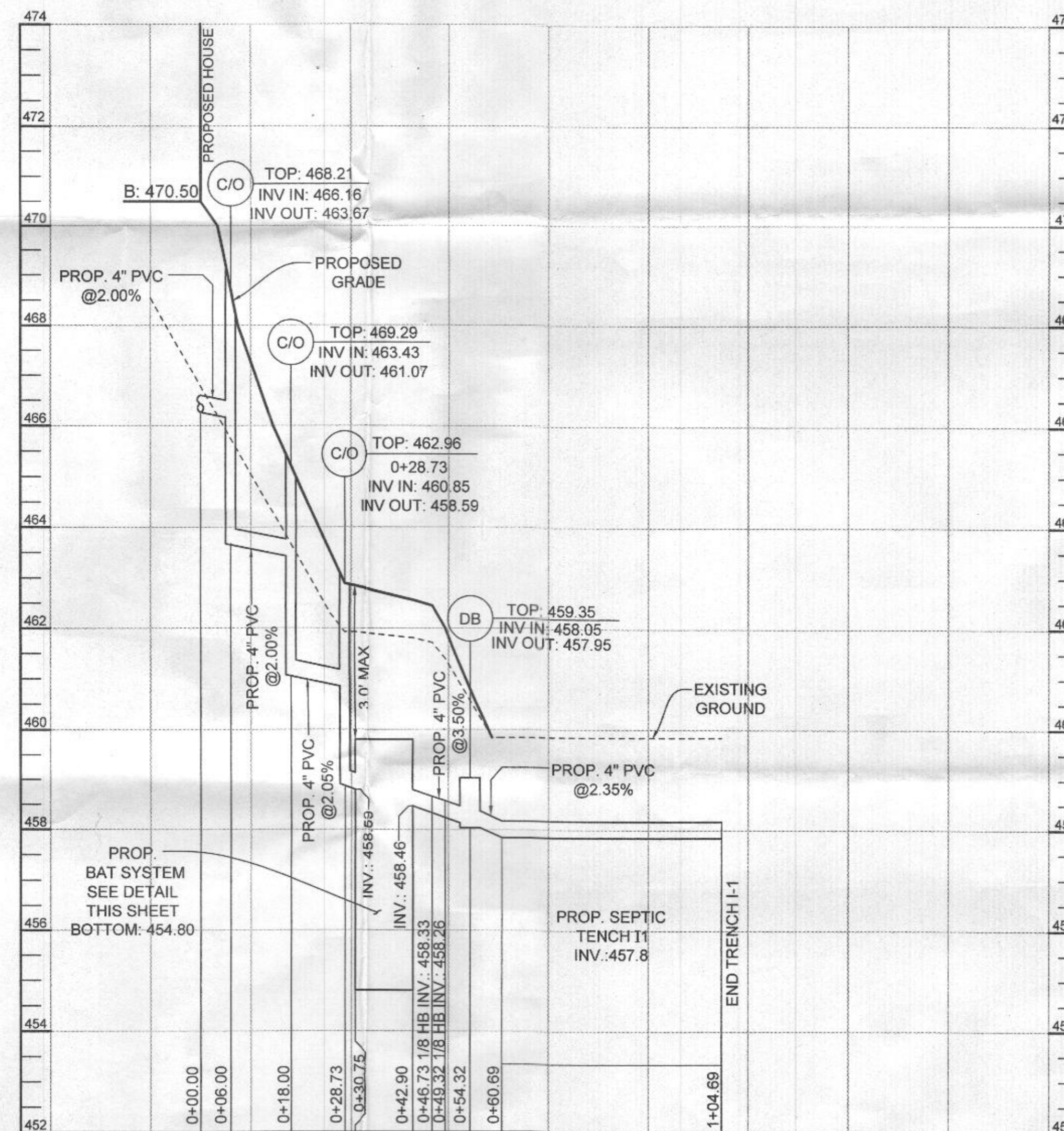
Jason Heavner
Buyer #1 Print Name

Mojdeh Heavner
Buyer #2 Print Name

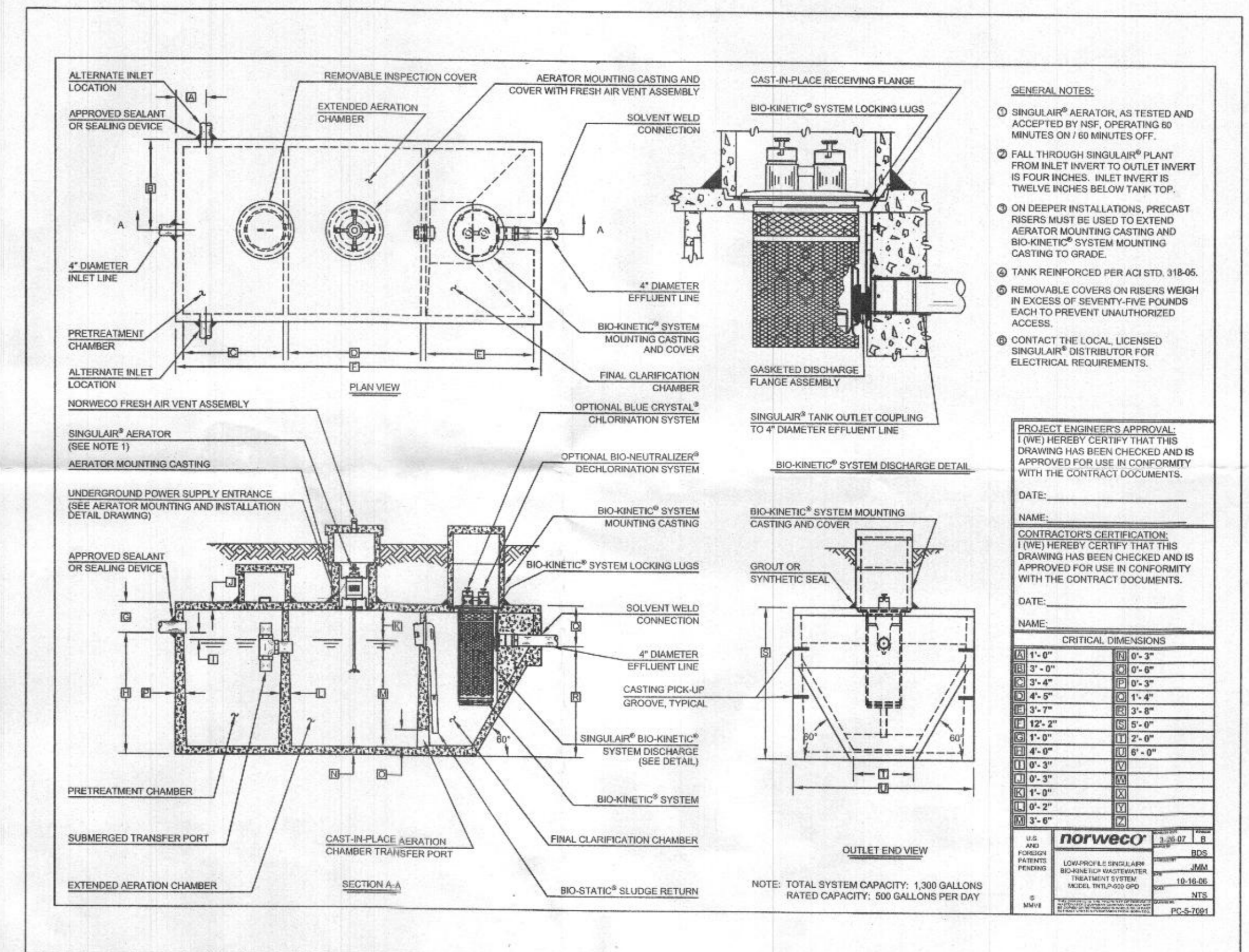
Chamblis Property
Lot 7

FILE INQUIRY NOTES

DATE	RESULTS OF REVIEW FOR FILE
10/21/14	* A BAT unit must be included in the septic system for Lot 8 (Per Cert, Oct 2014).
	* All septic system distribution networks for Lot 7 must be designed for pressure distribution or equivalents.
	* <u>The WELL</u> for Lot 8 must have * <u>steel casing extending * to at least 50 feet, or 10 feet into competent rock, whichever is deeper.</u>
	R. Bricker



PROFILE VIEW
SCALE: HORIZ. 1"=20'
VERT. 1"=20'



BAT SYSTEM DETAIL
NOT TO SCALE

BAT 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 BAT SITE PLAN MAY BE REQUIRED.
2. THE MAXIMUM DEPTH OF THE BAT PER THE MANUFACTURER'S SPECIFICATION IS 3 FEET. DEEPER INSTALLATIONS MAY REQUIRE PRECAST CONCRETE RISERS.
3. THE BLOWER MAY NOT BE LOCATED MORE THAN 50 FEET FROM THE TANK BASED ON THE MANUFACTURER'S SPECIFICATIONS.
4. THE BAT SYSTEM SHALL BE MAINTAINED AND OPERATED FOR THE LIFE OF THE SYSTEM.
5. THE BAT SHALL BE OPERATED BY AND MAINTAINED BY A CERTIFIED SERVICE PROVIDER.
6. WITHIN ONE MONTH OF INSTALLATION, A PERSON INSTALLING THE BAT SYSTEM SHALL REPORT TO THE MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) IN A MANNER ACCEPTABLE TO MDE, THE ADDRESS AND DATE OF COMPLETION OF THE BAT INSTALLATION AND THE TYPE OF BAT INSTALLED.
7. ELECTRICAL WORK FOR THE BAT INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
8. AN AGREEMENT AND EASEMENT MUST BE COMPLETED AND SIGNED BY ALL APPLICABLE PARTIES, AND RECORDED IN THE LAND RECORDS OF HOWARD COUNTY.
9. THE HEALTH DEPARTMENT REQUIRES DOCUMENTATION FOR THE START-UP CERTIFICATION FROM THE MANUFACTURER PRIOR TO FINAL APPROVAL OF THE INSTALLATION.
10. BAT SYSTEM TO BE A NORWECO SINGULAR MODEL TNTLP-500 OR EQUIVALENT.

Approved Septic System Plan
Howard County Health Department
NORWECO TNTLP-500
To Gravity Distribution
for 5-bedroom residence
[Signature]
Signature 5/19/2021
Date

OWNER/DEVELOPER

WILLIAMSBURG GROUP
5485 HARPERS FARM ROAD, SUITE 200
COLUMBIA, MARYLAND 21044
410.997.8600

BAT PLAN, PROFILE NOTES & DETAILS

THE WOODLANDS
5625 DOSA COURT, LOT 7

TAX MAP 34 GRID 05
5TH ELECTION DISTRICT

PART OF PARCEL 15
HOWARD COUNTY, MARYLAND



SILL
ENGINEERING
GROUP, LLC

16005 Frederick Road, 2nd Floor
Woodbine, Maryland 21797
Phone: 443.325.5076
Fax: 410.696.2022
Email: info@sillengineering.com
Civil Engineering for Land Development

DESIGN BY: PS
DRAWN BY: SZS
CHECKED BY: PS
SCALE: AS SHOWN
DATE: MAY 10, 2021
PROJECT #: 20-003
SHEET #: 2 of 2

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. 32026, EXPIRATION DATE: JUNE 20, 2021

GENERAL NOTES

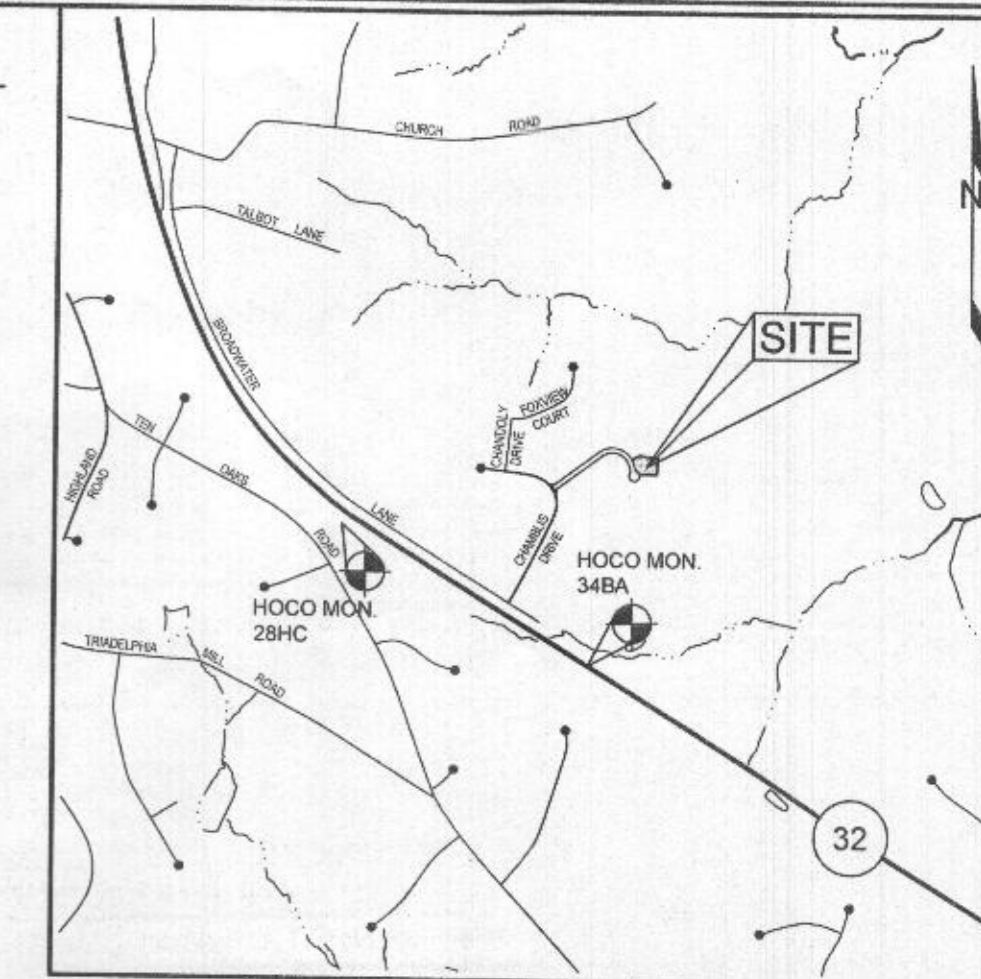
- SUBJECT PROPERTY ZONED RC-DEO PER 10/09/13 COMPREHENSIVE ZONING PLAN.
- PROPERTY ADDRESS: 5625 DOSA COURT, CLARKSVILLE 21029
- TOTAL AREA OF PROPERTY = 0.9677 AC.±
- PRIVATE WATER AND PRIVATE SEWER WILL BE USED WITHIN THIS SITE.
- THIS AREA DESIGNATES A PRIVATE SEWAGE AREA OF AT LEAST 10,000 SF AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL. (COMAR 28.04.03). 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.
- THE BOUNDARY SHOWN HEREON IS BASED ON A FIELD RUN BOUNDARY SURVEY PREPARED BY ADCOCK & ASSOCIATES, LLC ON SEPTEMBER 16, 2014.
- THE TOPOGRAPHY SHOWN HEREON HAS BEEN FIELD RUN BY ADCOCK & ASSOCIATES, LLC. ON SEPTEMBER 16, 2014. THE EXISTING TOPOGRAPHY SHOWN OUTSIDE THE SITE IS BASED ON HOWARD COUNTY AERIAL TOPOGRAPHY FLOWN IN 2004. REFERENCE: RECORD PLAT NO. 29051.
- PREVIOUS HOWARD COUNTY FILE NUMBERS: RECORD PLAT NO. 3471, F-83-114, ECP-16-032, WP-16-017, WP-17-060, SP-16-008, PB 431, WP-18-127, RECORD PLAT NO. 29251, F-18-094.
- THE SOILS SHOWN HAVE BEEN TAKEN FROM THE US DEPARTMENT OF AGRICULTURE, NATURAL RESOURCE CONSERVATION SERVICE, WEB SOIL SURVEY WEBSITE. HOWARD COUNTY SOILS GRID 12, SUB-GRID 205.
- A WETLAND AND STREAM STUDY HAS BEEN PREPARED BY ECO SCIENCE PROFESSIONALS INC. IN NOVEMBER 2014.
- THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP, WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
- ALL EXISTING WELLS, SEPTIC SYSTEMS AND SEWAGE DISPOSAL AREAS WITHIN 100 FEET OF THE PROPERTY BOUNDARIES AND ALL EXISTING AND PROPOSED WELLS THAT ARE LOCATED WITHIN 200 FEET DOWN-GRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS AND SEWAGE DISPOSAL AREAS HAVE BEEN FIELD LOCATED.
- EXISTING UTILITIES ARE LOCATED BY THE USE OF ANY OR ALL OF THE FOLLOWING: ROAD CONSTRUCTION PLANS, FIELD SURVEYS, PUBLIC WATER AND SEWER PLANS AND OTHER AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF THE EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTORS INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO THE CONTRACTORS OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTORS EXPENSE.
- GEOTECHNICAL INFORMATION HAS BEEN TAKEN FROM THE US DEPARTMENT OF AGRICULTURE, NATURAL RESOURCE CONSERVATION SERVICE, WEB SOIL SURVEY WEBSITE AND FIELD INVESTIGATIONS.
- STORMWATER MANAGEMENT OBLIGATIONS FOR THIS SITE WILL BE MET ONE BIORETENTION FACILITY (M-6) AND TWO DRYWELLS (M-5).
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED ON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENTS NUMBERS 28HC AND 34BA WERE USED FOR THIS PROJECT.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAMS, OR THEIR REQUIRED BUFFERS, FLOODPLAIN AND FOREST CONSERVATION EASEMENT AREAS, UNLESS ALTERNATIVE COMPLIANCE HAS BEEN APPROVED OR ACTIVITIES HAVE BEEN DETERMINED ESSENTIAL BY THE DEPARTMENT OF PLANNING AND ZONING.
- THERE ARE NO HISTORIC STRUCTURES OR CEMETERIES WITHIN THE PROJECT BOUNDARY.
- FOREST CONSERVATION OBLIGATIONS HAVE BEEN FULFILLED UNDER F-18-019.
- ANY VEGETATION WITHIN AND NEAR TO WELL ZONES OR SEWAGE DISPOSAL AREAS POTENTIALLY COULD BE DAMAGED OR DESTROYED DURING INSTALLATION OF WELLS OR SEPTIC SYSTEMS. ALL SPECIMEN TREES WITHIN OR NEAR SDA OR WELL ZONES HAVE BEEN DESIGNATED FOR REMOVAL AND APPROVED FOR REMOVAL UNDER SP-16-008 AND WP-17-060.
- BIORETENTION FACILITY 1 IS TO BE WRAPPED IN AN IMPERMEABLE LINER.
- DRIVEWAY(S) SHALL BE PROVIDED PRIOR TO ISSUANCE OF AN USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING REQUIREMENTS:
 - WIDTH - 12 FEET (16 FEET SERVING MORE THAN ON RESIDENCE)
 - SURFACE - SIX (6) INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2" MINIMUM)
 - GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND 45-FOOT TURNING RADIUS
 - STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25-LOADING)
 - DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE
 - MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE
 - DRIVEWAY ENTRANCES TO BE PER HOWARD COUNTY STANDARD DETAIL R-6.05 FOR DRIVEWAY LOTS, 1, 2, AND THE USE IN COMMON DRIVEWAY FOR LOTS 3, 4, 5, 6, 7 AND 8, AND DUNDABLE PAVEMENT PARCEL A.

SOILS LEGEND			
SYMBOL	NAME / DESCRIPTION	GROUP	'K' FACTOR
GaC	GALIA LOAM, 8 TO 15 PERCENT SLOPES	B	0.24
MbC	MANOR LOAM, 8 TO 15 PERCENT SLOPES	B	0.24
MaD	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B	0.24

- NOTES:
- SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCE CONSERVATION SERVICE, WEB SOIL SURVEY, SOILS GRID 12, SUB-GRID 205.
 - 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

- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- DIRECTION OF FLOW
- EXISTING TIE LINE
- SOIL BOUNDARY
- EXISTING SPECIMEN TREE APPROVED FOR REMOVAL IF NECESSARY
- EXISTING WELL
- FUTURE WELL LOCATION
- WALK OUT BASEMENT
- PERCOLATION TEST HOLE, PASSED
- PERCOLATION TEST HOLE, FAILED



VICINITY MAP
SCALE: 1"=2000'

BENCHMARKS

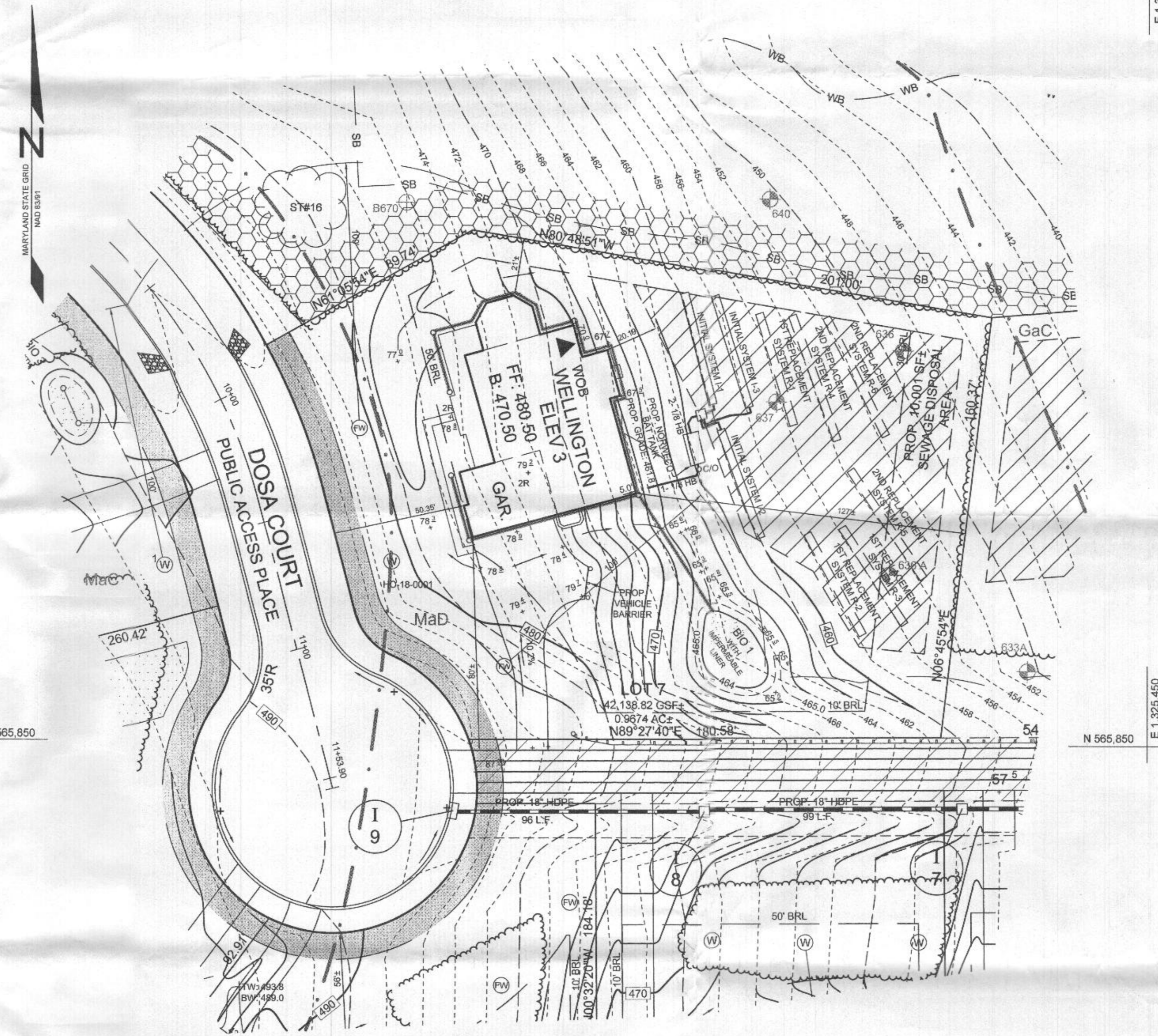
NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
28HC	565,351.762	1,332,102.463	552.207	SIDE OF ROUTE 57, 0.2 MILES W OF EXIT 20 SIGN, +/- 300' E OF GUARD RAIL
34BA	563,852.491	1,324,672.167	450.048	2.5' N OF EDGE OF PAVEMENT OF ROUTE 32, 13.3' SE OF EXIT 20 SIGN

SHEET INDEX

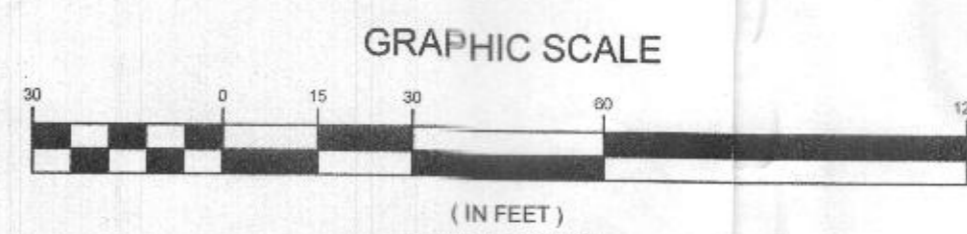
SHEET NO.	DESCRIPTION
1	SITE PLAN FOR BAT INSTALLATION
2	BAT PLAN, PROFILE NOTES & DETAILS

SEPTIC SYSTEM TRENCH DESIGN SPECIFICATIONS

- INITIAL SYSTEM SYSTEM:
 - APPLICATION RATE: 1.2
 - EFFECTIVE AREA BEGINNING DEPTH: 4'
 - BOTTOM MAXIMUM DEPTH: 6'
- DESIGN FLOW:
 - 5 BEDROOMS AT 150 GPD
 - 5x150 GPD = 750 GPD
- SQUARE FOOTAGE OF DRAIN FIELD REQUIRED:
 - DESIGN FLOW (750 GPD) / APPLICATION RATE (1.2) = 625 SF
- SIDEWALL REDUCTION CREDIT:
 - TRENCH WIDTH (W) = 3.0'
 - TRENCH EFFECTIVE DEPTH (D) = 2'
 - (W+2) / (W+1+2D) X 100 = 62.5%
- LINEAR LENGTH OF TRENCH REQUIRED:
 - DRAIN FIELD SQUARE FOOTAGE (625) X SIDEWALL REDUCTION CREDIT (62.5%) / TRENCH WIDTH (3.0') = 130.2'
- LINEAR LENGTH OF TRENCH PROVIDED = 132'
- THREE TRENCHES 44.0 LF EACH
- EXISTING GRADE: TRENCH I1: 459.8
INVERT: TRENCH I1: 457.8
EXISTING GRADE: TRENCH I2: 459.8
INVERT: TRENCH I2: 457.8
EXISTING GRADE: TRENCH I3: 458.0
INVERT: TRENCH I3: 456.0
- 1ST REPLACEMENT SYSTEM:
 - APPLICATION RATE: 1.2
 - EFFECTIVE AREA BEGINNING DEPTH: 4.0'
 - BOTTOM MAXIMUM DEPTH: 6.0'
- DESIGN FLOW:
 - 5 BEDROOMS AT 150 GPD
 - 5x150 GPD = 750 GPD
- SQUARE FOOTAGE OF DRAIN FIELD REQUIRED:
 - DESIGN FLOW (750 GPD) / APPLICATION RATE (1.2) = 625 SF
- SIDEWALL REDUCTION CREDIT:
 - TRENCH WIDTH (W) = 3.0'
 - TRENCH EFFECTIVE DEPTH (D) = 2.0'
 - (W+2) / (W+1+2D) X 100 = 62.5%
- LINEAR LENGTH OF TRENCH REQUIRED:
 - DRAIN FIELD SQUARE FOOTAGE (625) X SIDEWALL REDUCTION CREDIT (62.5%) / TRENCH WIDTH (3.0') = 130.2'
- LINEAR LENGTH OF TRENCH PROVIDED = 132.0'
- THREE TRENCHES 44.0 LF EACH
- EXISTING GRADE: TRENCH R1: 455.8
INVERT: TRENCH R1: 453.8
EXISTING GRADE: TRENCH R2: 457.8
INVERT: TRENCH R2: 455.8
EXISTING GRADE: TRENCH R3: 455.8
INVERT: TRENCH R3: 453.8
- 2ND REPLACEMENT SYSTEM:
 - APPLICATION RATE: 1.2
 - EFFECTIVE AREA BEGINNING DEPTH: 4.5'
 - BOTTOM MAXIMUM DEPTH: 6'
- DESIGN FLOW:
 - 5 BEDROOMS AT 150 GPD
 - 5x150 GPD = 750 GPD
- SQUARE FOOTAGE OF DRAIN FIELD REQUIRED:
 - DESIGN FLOW (750 GPD) / APPLICATION RATE (1.2) = 625 SF
- SIDEWALL REDUCTION CREDIT:
 - TRENCH WIDTH (W) = 3.0'
 - TRENCH EFFECTIVE DEPTH (D) = 1.5'
 - (W+2) / (W+1+2D) X 100 = 71.4%
- LINEAR LENGTH OF TRENCH REQUIRED:
 - DRAIN FIELD SQUARE FOOTAGE (625) X SIDEWALL REDUCTION CREDIT (71.4%) / TRENCH WIDTH (3.0') = 148.75'
- LINEAR LENGTH OF TRENCH PROVIDED = 150'
- THREE TRENCHES 50 LF EACH
- EXISTING GRADE: TRENCH R4: 454.0
INVERT: TRENCH R4: 452.5
EXISTING GRADE: TRENCH R5: 454.0
INVERT: TRENCH R5: 452.5
EXISTING GRADE: TRENCH R6: 452.0
INVERT: TRENCH R6: 450.5



PLAN VIEW
SCALE: 1"=30'



Approved Septic System Plan
Howard County Health Department
NORWECO INTAP-500
to Gravity Distribution
for 5 Bedroom residence
Signature 5/19/2021
Date

OWNER/DEVELOPER

WILLIAMSBURG GROUP
5485 HARRERS FARM ROAD, SUITE 200
COLUMBIA, MARYLAND 21044
410.997.8800

**SITE PLAN FOR BAT INSTALLATION
THE WOODLANDS
5625 DOSA COURT, LOT 7**

TAX MAP 34 GRID 05
5TH ELECTION DISTRICT

PART OF PARCEL 15
HOWARD COUNTY, MARYLAND



SILL ENGINEERING GROUP, LLC
16005 Frederick Road, 2nd Floor
Woodbine, Maryland 21797
Phone: 413.325.5076
Fax: 410.696.2022
Email: info@sillengineering.com
Civil Engineering for Land Development

DESIGN BY: PS
DRAWN BY: SZS
CHECKED BY: PS
SCALE: AS SHOWN
DATE: MAY 10, 2021
PROJECT #: 20-003
SHEET #: 1 of 2

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. 92025, EXPIRATION DATE: JUNE 30, 2021

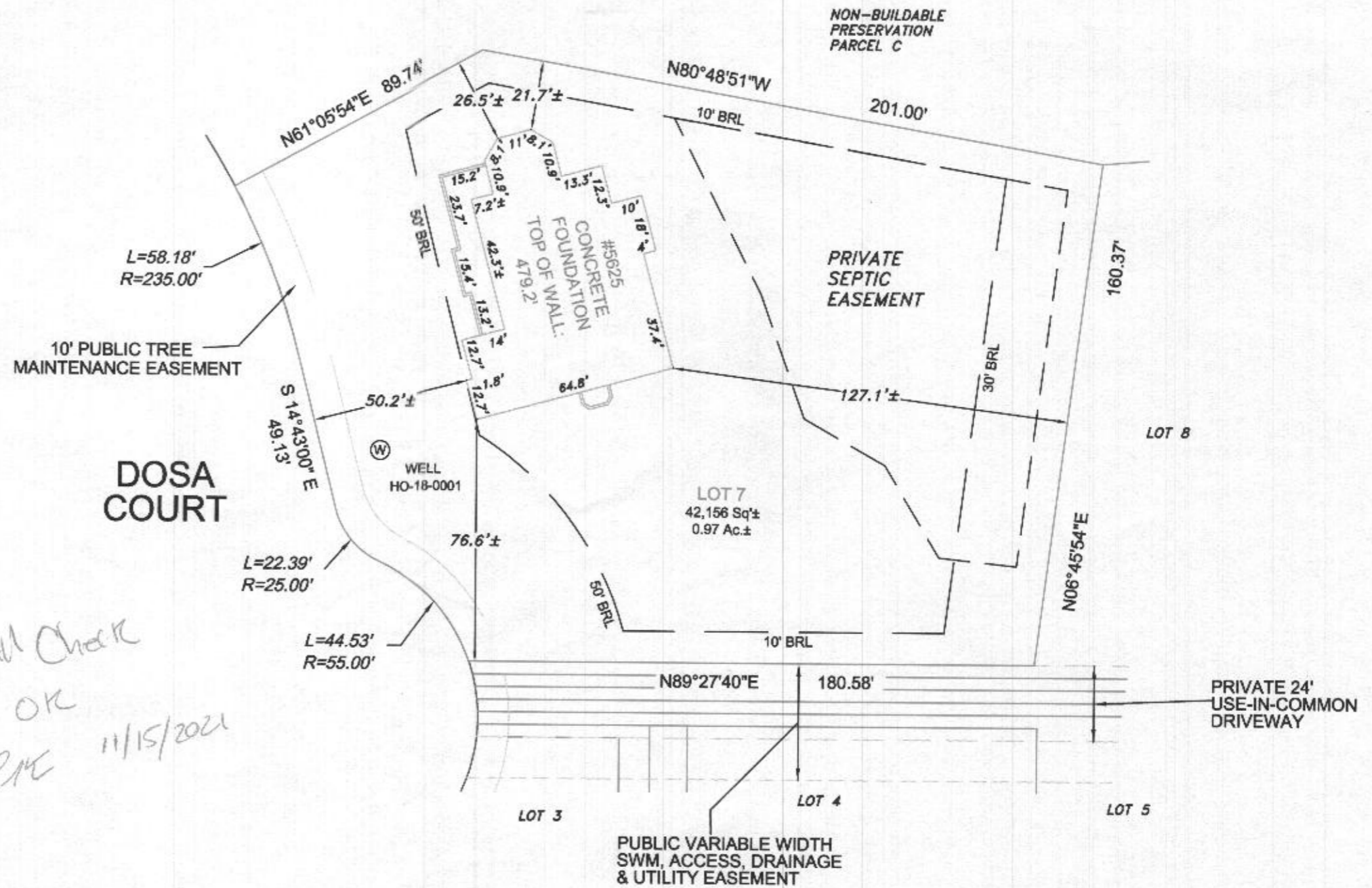
GENERAL NOTES:

- 1) The accuracy of the distances shown from any structure to any apparent property line is 1'±.
- 2) This drawing does not represent a Boundary Survey. Any property markers labeled hereon are not guaranteed by NTT Associates, Inc.
- 3) This plat is of benefit to a consumer only insofar as it is required by a lender, a title insurance company or its agent in connection with contemplated transfer, financing, or refinancing.
- 4) This plat does not provide for the accurate identification of property boundary lines, but such identification may not be required, for the transfer of title or securing financing or refinancing.
- 5) This plat is not to be relied upon for the establishment or location of fences, garages, buildings, or other existing or future improvements.
- 6) Unless noted on the drawing, no title report was provided. This drawing was prepared by examining the current title deed or record plat. Any easements, restrictions, rights of way, or any other property alterations not referred to in the current title deed may not be shown.
- 7) Unless otherwise noted, the bearings and north arrow shown hereon are in the meridian of the current title deed or record plat.
- 8) Building Restriction Line Information, if shown, was obtained from existing records only and is not guaranteed by NTT Associates, Inc.
- 9) Flood Zone Information shown on FIRM maps is subject to interpretation.
- 10) Improvements which in the surveyor's opinion appear to be in a state of disrepair or considered "temporary" may not be shown.
- 11) If it appears encroachments may exist, a Boundary Survey is recommended to determine the exact location of the property boundary lines and improvements.
- 12) The locations of fence lines, if shown, are approximate.

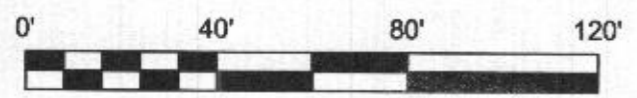
Subject property is shown in Zone X on the FIRM Map of Howard County, Maryland on Community Panel Number 24027C0130 D, effective 11/06/2013

NOTE: BUILDING AND SITE UNDER CONSTRUCTION AT TIME OF SURVEY, IMPROVEMENTS MAY EXIST THAT ARE NOT SHOWN.

Wall Check
OK
RMC 11/15/2021



REVISED 11/11/2021 TO SHOW WELL



The purpose of this drawing is to locate, describe, and represent the positions of buildings and substantial improvements affecting the property shown hereon, being known as: LOT 7 as shown on the plat entitled "THE WOODLANDS" recorded among the land records of Howard County, Maryland in Plat Number 25052

This is to certify that I either personally prepared or was in responsible charge over the preparation of this drawing and the surveying work reflected in it, all set forth in Regulation .12 of Chapter 09.13.06 of the Code of Maryland Annotated Regulations.



James Carl Hudgins
Property Line Surveyor #96
Expiration Date: 3/11/2022

WALL CHECK
5625 DOSA COURT
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

NTT Associates, Inc.
16205 Old Frederick Rd.
Mt. Airy, Maryland 21771
Phone: (410) 442-2031
Fax: (410) 442-1315
www.nttsurveyors.com

Scale: 1" = 40'
Date: 8/27/2021
Field By: CB
Drawn By: SCK
File No.: SEG20-003 UU
Page No.: 1 of 1