

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

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

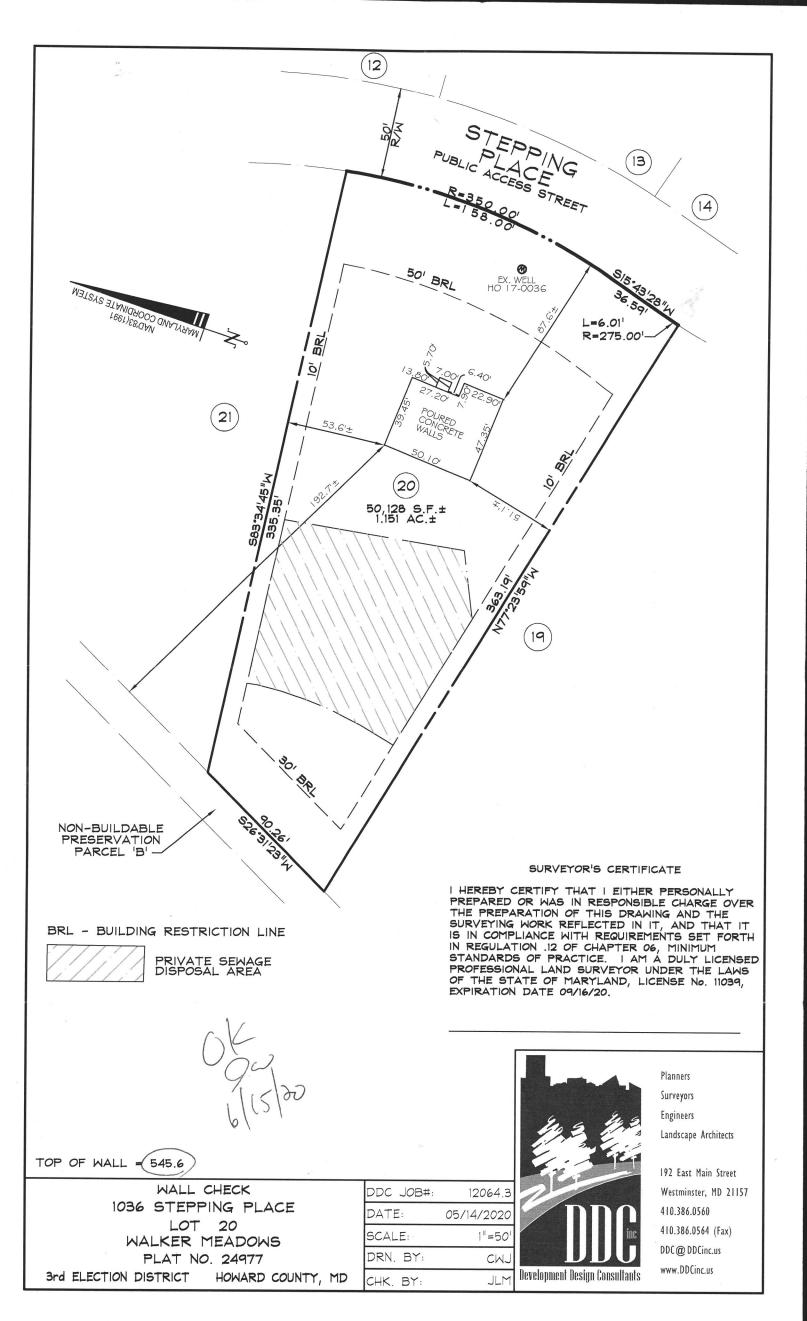
RECEIPT DATE: 6/15/20 UNSITE SEWAGE DISPOSAL SYSTEM P 567870-0
APPROVAL DATE: 9 13 20 PERMIT: CONSTRUCTION
PROPERTY ADDRESS: 1036 STEPPING PLACE, SYKESVILLE, MD 21784
SUBDIVISION: WALKER MEADOWS LOT: 20 TAX ID:
CONTRACTOR: SOUTH CARROLL BACKHOE EMAIL: SCBACKHOE@COMCAST.NET
CONTRACTOR ADDRESS: 4410 Salem Bottom Road, Westminster, MD 21157 PHONE: 410-596-3618
CONTRACTOR CERTIFIED FOR BAT INSTALLATION:
PROPERTY OWNER: NVR, INC. EMAIL: janastas@nvrinc.com
OWNER ADDRESS: 9720 PATUXENT WOODS DRIVE, COLUMBIA, MD 21046 PHONE: (410)379-5956
BAT UNIT MODEL: HOOT 600 BNR PUMP SIZE: WE 0.3 L PUMP TANK CAPACITY: 1500
OPERATION & MAINTENANCE AGREEMENT DATE SIGNED: DATE RECORDED:
DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 5 APPLICATION RATE: 1.2
LINEAR FEET REQUIRED: 104 INLET DEPTH: 2.0
TRENCHES: TRENCH WIDTH: 3.0 MAXIMUM BOTTOM DEPTH: 5.0
MINIMUM SPACE BETWEEN TRENCHES: 10 EFFECTIVE AREA BEGINNING DEPTH: 2.0
LOCATION: PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND BAT UNIT LOCATION MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.
BAT, LPD, and 5' max bottom depth required due to downgrade well variance. See OSDS plan for LPD details NOTES:
ISSUED BY: J. Williams ISSUE DATE: 6/15/20 EXPIRATION DATE: 6/15/20
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 ELECTRICAL PERMIT ISSUED E 2000 2449 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

SUCCESSFUL OPERATION OF ANY SYSTEM.

PERMITTEE RESPONSIBLE FOR OPTAINING FINAL APPROVAL ON THE DEPARTMENT IS RESPONSIBLE FOR THE

PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT. CALL 410-313-1771 TO SCHEDULE INSPECTIONS.

	Lateral A	wera.		
279189279189		2 2 31 23 21 21 21 21 21 21 21 21 21 21 21 21 21	NOT TO SCALE 75' 20' 75' 20' 75' 10' 10' 10' 10' 10' 10' 10' 1	TRENCH/DRAINFIELD DATA WIDTH INLET BOTTOM 3' 5' NUMBER OF TRENCHES 2 TOTAL LENGTH 104' ABSORPTION AREA 312 saft tsides DISTRIBUTION BOX LEVEL
10/19/1000	o. TANK	SDA, T	RENCHES STAKED. CO	NARMED TRENCH
A confirm 16 perfs, for SHC, 6"b tank, back ri	ed to h	er tank 4" r date the	parts, 56. I apart and 19/20 rest of baffle on pumptank, discharge li	manifold and laterals. Lateral teral B confirmed to have system installed except Stc, recheck note the plumbed out of back riser on pump - Bat Stant up ak, distel head rig elo, alarm & circuit good, to HD. PD
FINAL INSPE	CTOR _	2. Roppa	DATE OF	APPROVAL 8 13 20





MAYER BROS., INC.

Precast Concrete Products 6264 Race Rd. Elkridge, MD 21075

Letter of Satisfaction Hoot System Installation

Address of Property: 1036 Stepping Place Sykesville, mp. 21784
Date of Final Inspection: 8 13 20
Installer: South Carroll Backhoe Service
Hoot Technician/Inspector: mike Sample
I hereby certify that the Hoot system installed at the property listed above has been installed according to proper Hoot installation practices. I have also verified the startup of the system and it is in proper working order.
Sincerely.
Name of Inspector Mayer Bros., Inc.

PH: 410-796-1434 FX: 410-796-1438

WBE NPCA Certified Plant

mayerbro@connext.net www.mayerbrosprecast.com



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

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

THIS AGREEMENT is made this day of May 2020, amo	ngNVHomes/Feng Li/Ying Yu
"Owner", and the Howard County Health Department hereinafter	LIACTITION TO TOTAL A L.
WHEREAS, Owner is the owner or contract owner of a parcel of 1036 Stepping Pl Sykesville, MD 21784 , in the 3 Electron E	etion District of Howard rty is recorded among the Land Parcel # 0066 Deed
WHEREAS, The Property is suitable for the installation of a conv disposal system with an advanced pre-treatment system, utilizing perform nitrogen reduction, in accordance with the Code of Maryl effective November 24, 2016. The pre-treatment device being inst	best available technology to
NOW, THEREFORE, the parties hereto agree as follows:	Clerk of the Circuit Court for Howard County Land Records/Licensing
A. Owner hereby grants to the County the right to enter upon the I with prior notice for access to the system to make periodic inspect provide any information and data in Owner's possession reasonabl County.	Suite 120
B. Owner acknowledges and agrees that neither the County nor an	LR - Agreement Recording Fee 1x 20.00 20.00 Name: Li
either officially or individually, underwrites the operation of any s	LR - Agreement Surcharge 1x 40.00 40.00
C. The Owner will devote reasonable care and effort to the operation system in perpetuity or until a public sewer connection is made so not the result of poor maintenance, faulty operation, or neglect.	LR - Agreement Recording Fee 1x 20.00 20.00 Name: brooks Ref: 38
D. The Owner agrees to enter into a contract reasonably acceptable	LR - Agreement Surcharge 1x 40.00 40.00
with a private entity to operate and maintain on a regularly schedul advanced pre-treatment system. The owner shall supply a copy of t when it is renewed or altered.	SubTotal: 120.00
E. This agreement shall run with the land and upon Owner's taking bind the Owner, their heirs, successors, and assigns to the provisior	08/11/2020 13:15 CC13-LP #13961523/497/109 Thank you for visiting us today~

Bed Mifon 7/7/2020

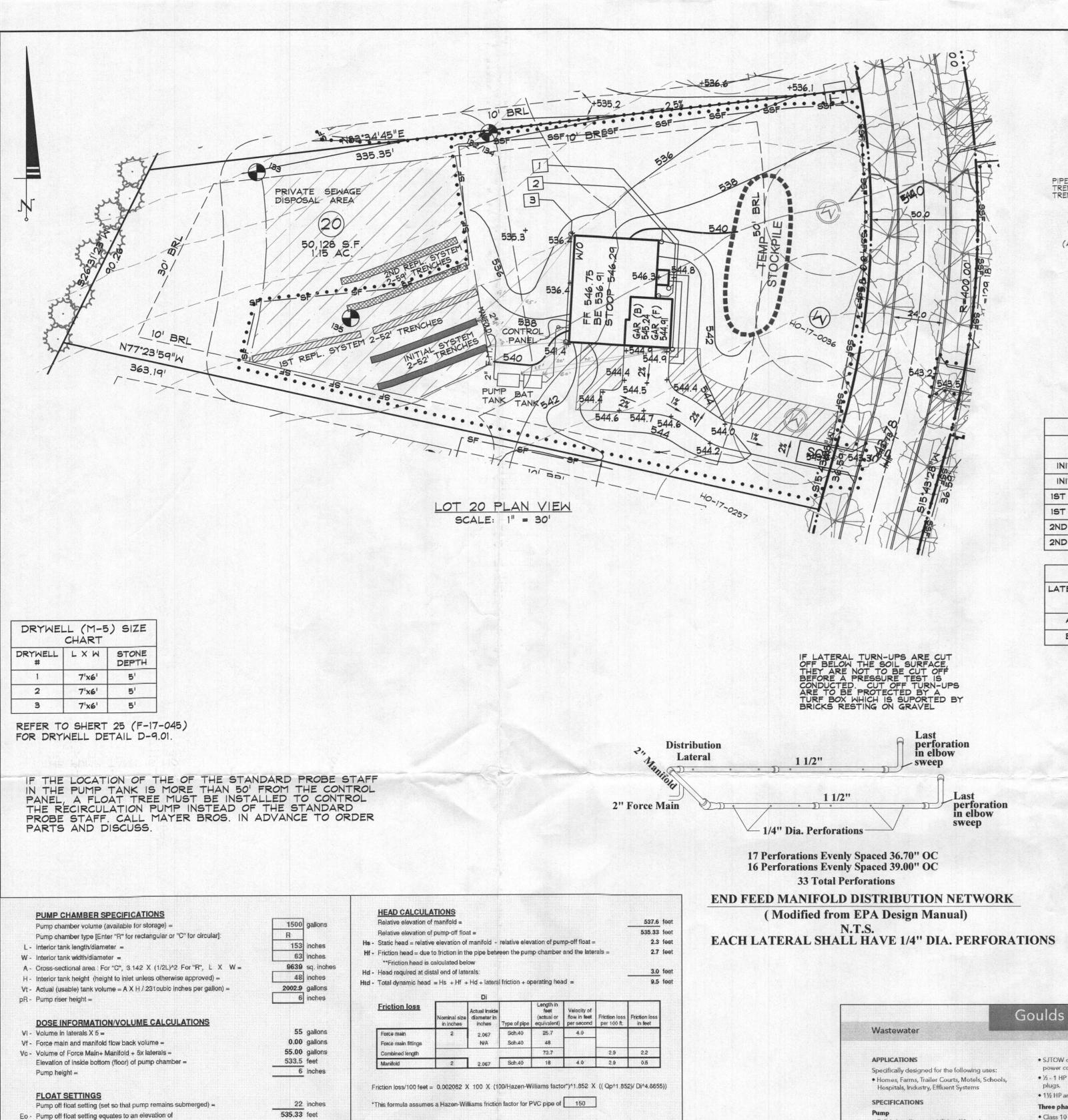
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the property is in existence and after installation of the system. Owner further agrees that they shall inform in writing any subsequent purchaser or lessee of the Property that the system shall require maintenance or other attention. Upon taking title 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.

Howard County Héalth Department		·
6/11/20		
Owner #1 Signature Date	Owner#2 Signature	Date
Jimmy Anastesia	•	
Owner #1 Print Name	Owner #2 Print Name	
DocuSigned by:	DocuSigned by:	
FENC U 6/11/2020	Ying Yu	6/11/2020
Buyer #1 Signature Date	Buyer #2 Signature	Date
FENG LI	Ying Yu	
Buyer #1 Print Name	Buyer #2 Print Name	



Width = 63"

Hoot 600 BNR

Drwg: BNR 1500 pump No Scale Mar 7, 2014

3 inches

25 inches

31 inches

17 inches

9 inches

6 inches

22 inches

2 inches

12 inches

13 feet

2 laterals

pipe which gallons (for force

0 gallons

55 gallons

125 gallons

DESIGN DATA & GENERAL NOTES

[] Concrete strength for=4,000 p.s.i. @ 28 days, Density = 140 pcf. [] Comant - Portland Type W por ASTM C 140-42. [] Admixtures & plasticiours por ASTM C 240-88 & C 484-92. [4] Reinfording per ASTM A136. Win. 1-1/2" cover.

Mayer Brothers, Inc.

25 inches

Pump off float setting

Pump on float setting _

High water alarm setting ___

(see chart Type of size in below) pipe inches inches gallons in feet chamber back volume only)

2.067

2 2.067

709.4 gallons

Distance reg'd. b/n on and off floats = (Vc X 231 cubic inches per gallon) / A =

Pump on float setting = off float setting + distance b/n on and off floats =

Height of storage above high water alarm required for ONE DAY's storage =

Height of storage above high water alarm required for a HALF DAY's storage =

Ha - High water alarm setting = pump on float setting + 6 inches

Height of storage remaining above high water alarm = H - Ha =

Distance between manifold and end of bed (12 inches suggested) =

Check valve to be installed downstream from disconnect (Y or N) - generally not advised:

Volume of force main(s) plus manifold which will flow back between pump cycles =

Volume to be pumped per pump cycle based on pipe volume

STORAGE/PUMP REQUIREMENTS

[] Configuration is acceptable with a single pump

[X] Configuration is acceptable with duplex pumps

[X] END MANIFOLD SPECIFICATIONS

Distance between laterals =

Pipe Diameter=

Laterals (select diameters from chart)

olume of laterals multiplied by 5 =

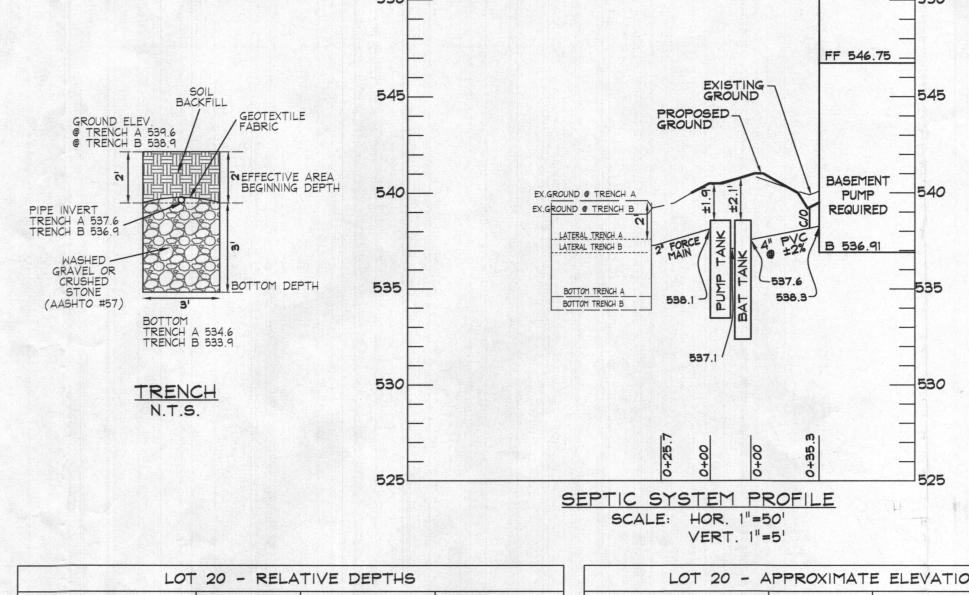
Volume of laterals multiplied by 5 plus flow back =

Minimum Dose (at least 1/6 of design flow)

Pipe sizes and diameters

Pump chamber does not provide adequate storage

Number of laterals (allowing for 2 to 4 foot spacing) =



				VERI. I'=	5			
LOT	20 - RELA	TIVE DEPTHS	LOT 20 - APPROXIMATE ELEVATIONS					
	PIPE INVERT	EFFECTIVE AREA BEGINNING	MAXIMUM TRENCH BOTTOM		GROUND ELEVATION	INVERT ELEVATION	BOTTOM ELEVATION	
INITIAL SYSTEM (A)	2'	21	51	INITIAL SYSTEM (A)	539.6	537.6	534.6	
INITIAL SYSTEM (B)	21	21	51	INITIAL SYSTEM (B)	538.9	536.9	533.9	
T REPLACEMENT (A)	2'	21	5 ¹	IST REPLACEMENT (A)	538.2	536.2	533.2	
T REPLACEMENT (B)	21	21	51	IST REPLACEMENT (B)	538.2	536.2	533.2	
ND REPLACEMENT (A)	21	2.5'	51	2ND REPLACEMENT (A)	537.2	535.2	532.2	
ND REPLACEMENT (B)	21	2.5'	51	2ND REPLACEMENT (B)	536.3	534.3	531.3	

LOT 20 - INITIAL SYSTEM LATERALS											
TERAL	ELEV	VARIABLE HEAD	PERF. FLOW RATE	# PERF.	PERF. DIAMETER	LATERAL FLOW RATE	PERF. SPACING	LATERAL LENGTH	TRENCH LENGTH	1/2 PERF. SPACING	DIST FROM MANIFOLD TO 1ST PERF.
Α	537.6	3.0	1.28	17	1/4	21.8	36.70"	50.5	52	1.531	2.53'
В	536.9	3.7	1.42	16	1/4	22.7	39.00"	50.4	52	1.621	2.62

SEWAGE DISPOSAL SYSTEM DATA (5 BEDROOM) 1. INVERT @ FOUNDATION WALL: 538.3 (BASEMENT PUMP REQUIRED) 2. HOOT 600 BNR SYSTEM W/ 1,500 GALLON PUMP CHAMBER EX. GRADE OVER BAT TANK: 540.7

PROP. GRADE OVER BAT TANK: 540.7 INVERT: 537.6 PUMP TANK EX GRADE OVER PUMP TANK: 540.4

3. TRENCH DESIGN (5 BDRM x 150 GPD/BDRM = 750 GPD)

INITIAL SYSTEM & IST REPLACEMENT SYSTEM 750 GPD / 1.2 GPD/SF (APP. RATE) = 625 SF USE 3' WIDE TRENCH W/ 30" OF EFFECTIVE DEPTH 625 SF / 3' WIDTH = 208 LF x 0.50 = 104 LF MIN. TRENCH

PROP GRADE OVER PUMP TANK: 540.4

2ND REPLACEMENT SYSTEM 750 GPD / 1.2 GPD/SF (APP. RATE) = 625 SF USE 3' WIDE TRENCH W/ 30" OF EFFECTIVE DEPTH 625 SF / 3' WIDTH = 208 LF x 0.56 = 117 LF MIN. TRENCH

10' MIN SPACING BETWEEN TRENCH EDGES

USE 2 - 52' LONG TRENCHES FOR INITIAL SYSTEM USE 2 - 52' LONG TRENCHES FOR FIRST REPLACEMENT SYSTEM USE 2 - 59' LONG TRENCHES FOR SECOND REPLACEMENT SYSTEM

DATA SOURCES: SEPTIC SYSTEM/BEST AVAILABLE TECHNOLOGY (BAT) NOTES: ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT

BENCHMARK

609029.596

1325501.308 B.M. O9CA - CONC MON

> 609753.341 1331668.810 10AA - CONC MON

563.089

ADC MAP COORDINATES MAP 5 GRID E9

N 39°20'00", E 76°57'30"

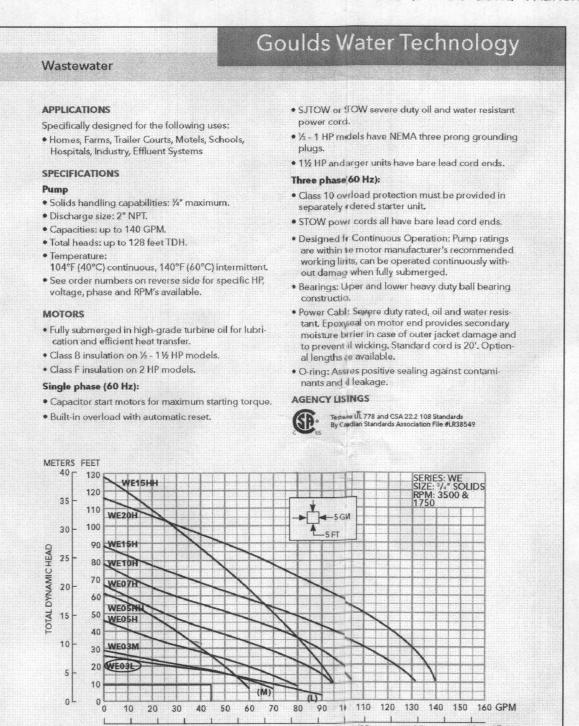
BENCHMARK O9CA

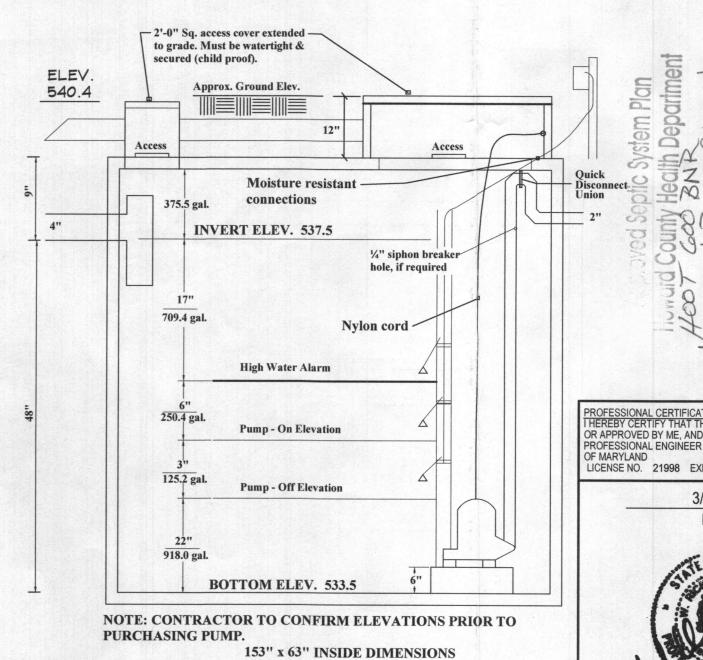
ELEV.N. 549.030

BENCHMARK 10AA

ELEV.

- PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED. 2. THE MAXIMUM DEPTH OF THE BAT PER THE MANUFACTURER'S SPECIFICATION
- BASED ON THE MANUFACTURE'S SPECIFICATIONS. 4. THE BAT SYSTEM SHALL BE MAINTAINED AND OPERATED FOR THE LIFE OF
- 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 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. THE WELL HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN. 11. 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





TYPICAL PUMP CHAMBER DETAIL

N.T.S.

OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE LICENSE NO. 21998 EXPIRATION DATE: 6/6/20 3/24/20 DATE

WILLIAM R. DEMARIO PROFESSIONAL ENGINEER NO. 21998

1036 STEPPING PLACE 5TH COUNCIL DISTRICT **REVISIONS**

DRN. REV. DATE DESCRIPTION OF CHANGES DES. BY: LJC DRN. BY: LJC CHK. BY: WRD DATE: 3/24/20 PARCEL#: 66 DDC JOB#: 12064.3 SHEET NUMBER: ZONE / USE: RR-DEO of

F-17-045

OWNER: 410-720-3021 PROFESSIONAL CERTIFICATION

HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED

SRD ELECTION DISTRICT

410.386.0564 (Fax) Development Design Consultants **DEVELOPER:**

Surveyors Engineers Landscape Architects 192 East Main Street Westminster, MD 21157 410.386.0560

VALLEY STATE PARK

VICINITY MAP

DRAWING LEGEND

SCE

• • • • • LIMIT OF DISTURBANCE

TRANSFORMER

PERCOLATION TEST

WELL BOX WITH

SEWAGE DISPOSA AREA

WIDE GRASS SHOULDER

www.DDCinc.us

ESC WALKER MEADOWS, L.C.
5074 DORSEY HALL DR., SUITE 205
ELLICOTT CITY, MD 21042

NV HOMES
9720 PATUXENT WOODS DRIVE
COLUMBIA, MD 21046 410-379-3391

SITE ADDRESS: S/E RIVER ROAD SYKESVILLE, MD 21784

WALKER MEADOWS A RESUBDIVISION OF LOT 2 OF THE DIEHL PROPERTY (PLAT #6937)

LOTS 1-34 \$ BUILDABLE PRESERVATION PARCEL A \$ NON-BUILDABLE PRESERVATION PARCEL B-K, NON-BUILDABLE BULK PARCELS L-M

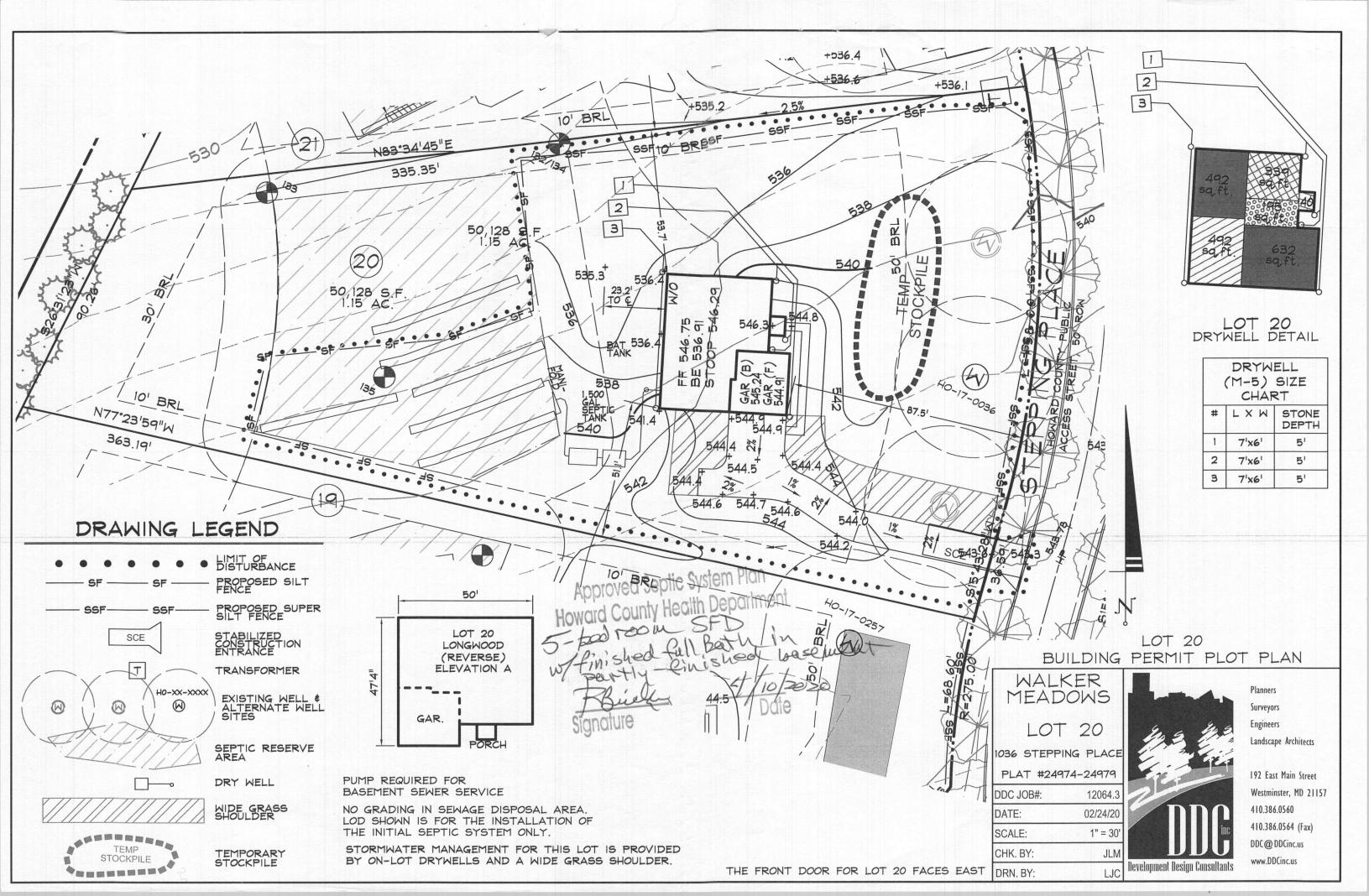
LOT 20 SITE PLAN FOR

BAT INSTALLATION

HOWARD COUNTY, MD

CO. FILE #: F-17-045 TAX ACC. #: 03-601577 TAX MAP: 9 BLOCK / GRID: 6

DWG. SCALE: 1" = 30'



	reblets
Dell Property, Lot 2 Prop	sed 6+# 2
* Any septic system drain finstalled in the area o	Pield Pathis
distribution (ARD) design	re
I Bridge 65 bo14	design
960/15 Septic system must include a B Trench Bottoms are limited to 5 Raidher	AT unit.
Any Jell anstalled on Lot 20 have steel casing installed to a 50-feet depth, or lo lest into a	must at least upotent
Pock, whichever is deeper.	