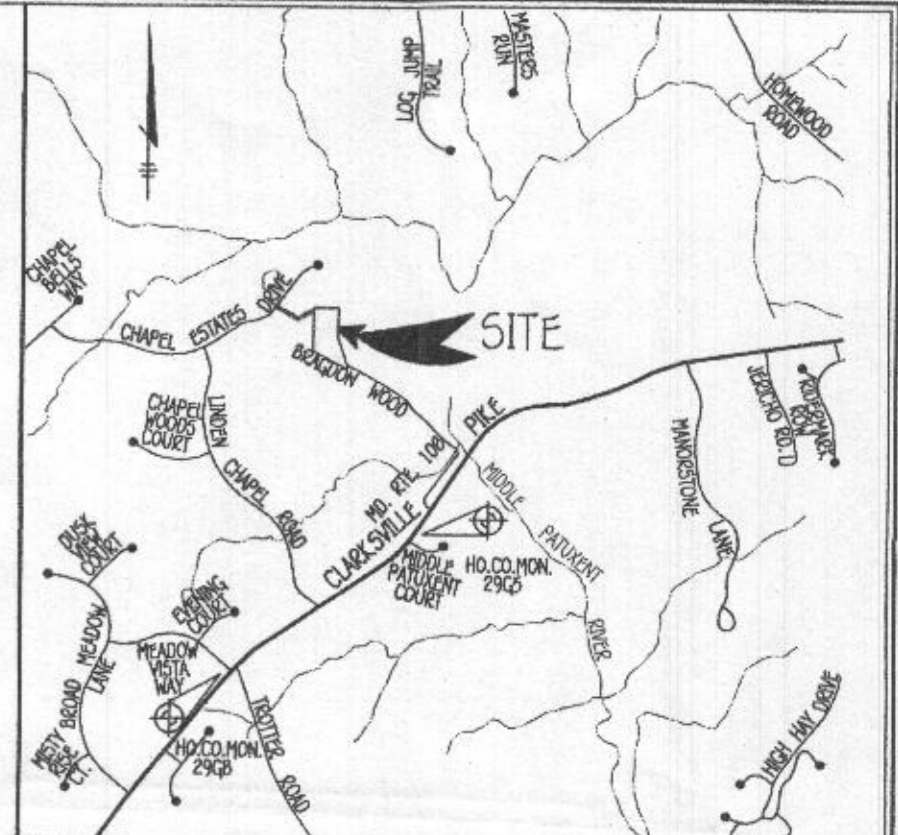


CHapel Estate Drive  
 Existing Public County Road  
 50' P.A.M.  
 P.N. 9328  
 N37°42'33"E  
 351.1'±

LEGEND	
SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
- - - -	PROPOSED CONTOUR 2' INTERVAL
X362.5	SPOT ELEVATION
-DF--DF-	DIVERSION FENCE
-SSF--SSF-	SUPER SILT FENCE
-SF--SF-	SILT FENCE
---	EROSION CONTROL MATTING
LOO	LIMITS OF DISTURBANCE
○	SPECIMEN TREE
○	TEMPORARY STONE OUTLET STRUCTURES
1009 ○	FAILED PERC HOLE
1001 ○	PASSED PERC HOLE



VICINITY MAP  
 SCALE: 1" = 2000'  
 HO. CO. MD. ADC MAP 4934, GRID C3

TRENCH DESIGN										
TRENCH	GROUND ELEV.	TOP OF STONE ELEV.	PIPE INVERT ELEV.	DEPTH TO STONE FROM GROUND	DEPTH OF TRENCH (FT)	EFFECTIVE DEPTH STARTS AT	EFFECTIVE DEPTH (D)	TRENCH DEPTH	WIDTH OF TRENCHES (W)	TRENCH SPACING
1A	420.7	419.2	418.7	1.5'	3.5'	415.7	2'	3'	3.0'	10'
1B	420.1	419.6	418.1	1.5'	3.5'	415.1	2'	3'	3.0'	10'

LOW PRESSURE DOSING SYSTEM - INITIAL INSTALLATION										
TRENCH	GROUND ELEV.	PIPE INVERT ELEV.	TRENCH LENGTH (FT)	LATERAL PIPE LENGTH (FT)	PERFORATION DIAMETER (IN)	HEAD (FT)	PERFORATION FLOW RATE (GPM)	PERFORATION SPACING (FT)	NUMBER OF ORIFICES	TRENCH FLOW RATE (GPM)
1A	420.7	418.7	62.5	99.66	5/16	2	1.63	5.68	11	17.93
1B	420.1	418.1	62.5	99.36	5/16	2.6	1.85	6.25	10	18.50
TOTAL TRENCH FLOW RATE										36.43

FRICITION LOSS IN 2" PIPE FITTINGS:  
 2 1/2 180° x 4 FEET PER FITTING = 20 EQUIVALENT FEET OF PIPE  
 1 Tee/Cross x 11 FEET PER FITTING = 11 EQUIVALENT FEET OF PIPE  
 1 UNION x 2 FEET PER FITTING = 2 EQUIVALENT FEET OF PIPE  
 1 ELBOWS x 9 FEET PER FITTING = 9 EQUIVALENT FEET OF PIPE  
 TOTAL EQUIVALENT FEET OF PIPE = 42 FT

TOTAL LINEAR FEET OF 2" SCH. 40 PVC = 54.95 LF + 42 LF = 96.94 LF

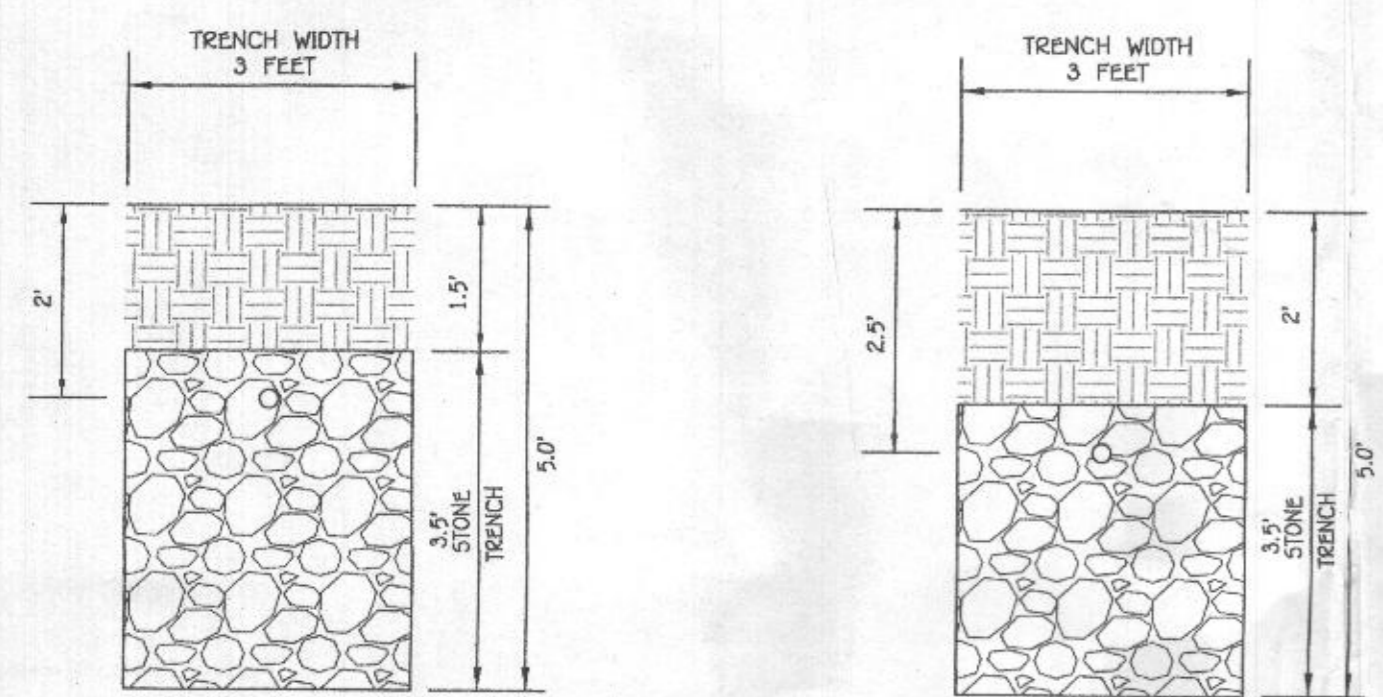
DYNAMIC HEAD  
 96.94 LF x 1.5 FT PER 100 LF OF PIPE = 1.5 FT OF FRICTION HEAD  
 DISTAL HEAD = 2.0 FT  
 VERTICAL FROM PUMP OFF TO DISCHARGE = 5.6 FT OF STATIC HEAD  
 VERTICAL FROM DISCHARGE TO HIGHEST ELEV OF MAIN = 8.3 FT  
 TOTAL DYNAMIC HEAD = 17.4 FT

MANIFOLD AND LATERALS VOLUMES  
 96.94 LF (2" SCH. 40 PIPE) X 17.4 GALLONS PER 100 LF = 16.86 GALLONS  
 119 LF (1.5" SCH. 40 PIPE) X 10.6 GALLONS PER 100 LF = 12.6 GALLONS

MINIMUM DOSE = (5 X 1.5" PIPE VOLUME) + (FORCE MAIN & MANIFOLD)  
 MINIMUM DOSE = (5 X 12.6) + (16.9) = 79.9 GALLONS

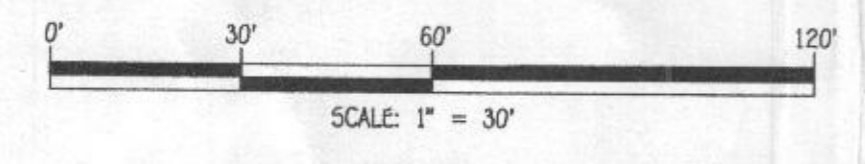
IF GALLONS IS LESS THAN 1/6 DESIGN FLOW (900/6=150)  
 USE 177 GALLON DOSE (150 GALLON MINIMUM)  
 (RUN TIME = 3.9 MIN (46 GPM X 3.9 = 179 GALLON DOSE)

PUMP NEEDS TO HANDLE 46 GPM AT 17.4 FT OF HEAD



INITIAL TRENCH DETAIL SCALE: 1"=2'  
 1ST REPLACEMENT TRENCH DETAIL SCALE: 1"=2'

FISHER, COLLINS & CARTER, INC.  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTRAL SQUARE OFFICE PARK - 1872 BALTIMORE NATIONAL PLACE  
 ELKROTT CITY, MARYLAND 21042  
 (410) 461-2895



OWNER  
 E-ONE CORPORATION  
 239 RIVER BEND ROAD  
 GREAT FALLS, VA 22066  
 (703)-757-8757

PLAN VIEW  
 SCALE: 1"=30'

PROFESSIONAL CERTIFICATION  
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DAILY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 20748, EXPIRATION DATE: 02/22/2028.23

*Michael J. Vitell*  
 Signature of Professional Engineer DATE: 2/26/21



BAT 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.
- SINCE COVER OVER THE BAT AND PUMP TANK EXCEEDS 3 FEET, TRAFFIC BEARING TANKS TO BE INSTALLED.
- THE BAT SYSTEM SHALL BE MAINTAINED AND OPERATED FOR THE LIFE OF THE SYSTEM.
- THE BAT SHALL BE OPERATED BY AND MAINTAINED BY A CERTIFIED SERVICE PROVIDER.
- 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.
- ANY ELECTRICAL WORK FOR THE BAT INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
- AN AGREEMENT AND EASEMENT HAS BEEN COMPLETED AND SIGNED BY ALL APPLICABLE PARTIES, AND RECORDED IN THE LAND RECORDS OF HOWARD COUNTY, LIBER 1 FOLIO 104.
- THE HEALTH DEPARTMENT REQUIRES DOCUMENTATION FOR THE START-UP CERTIFICATION FROM THE MANUFACTURER PRIOR TO FINAL APPROVAL OF THE INSTALLATION.
- SURFACE RUNOFF SHALL BE DIRECTED AROUND THE BAT TANK.

SEPTIC SYSTEM ELEVATIONS

FFE = 418.19  
 BSE = 408.00  
 INV. OUT OF HOUSE = 412.57  
 PROP GROUND AT C/O = 412.25  
 INV. INTO C/O = 412.15  
 INV. OUT OF C/O = 412.15  
 PROP GROUND AT BAT TANK = 415.00  
 TOP OF BAT TANK = 412.00  
 COVER OVER BAT TANK = 3 FT  
 INVERT INTO BAT TANK = 411.00  
 INVERT OUT OF BAT TANK = 410.75  
 PROP GROUND AT PUMP TANK = 414.00  
 TOP OF PUMP TANK = 411.69  
 COVER OVER PUMP TANK = 2.31 FEET  
 INVERT INTO PUMP TANK = 410.69  
 INVERT OUT OF PUMP TANK = 410.44

SEWAGE DISPOSAL SYSTEM DATA (INITIAL)

6 BEDROOMS  
 LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD  
 APPLICATION RATE = 1.2  
 EFFECTIVE SIDEWALL BEGINS AT 2 FEET  
 TRENCH DEPTH = 5 FEET  
 TRENCH WIDTH (W) = 3 FEET  
 EFFECTIVE DEPTH (D) = 3 FEET  
 SF OF DRAINFIELD = 900 GPD / 1.2 = 750 SF  
 COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x3)) = 0.50  
 TRENCH LENGTH = 750 SF x 0.50 / 3 = 125 FEET  
 TRENCH SPACING = 2D+W = ((2x3) + 3) = 9 USE 10'

SEWAGE DISPOSAL SYSTEM DATA (FIRST REPLACEMENT)

6 BEDROOMS  
 LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD  
 APPLICATION RATE = 1.2  
 EFFECTIVE SIDEWALL BEGINS AT 2.5 FEET  
 TRENCH DEPTH = 5 FEET  
 TRENCH WIDTH (W) = 3 FEET  
 EFFECTIVE DEPTH (D) = 2.5 FEET  
 SF OF DRAINFIELD = 900 GPD / 1.2 = 625 SF  
 COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x2.5)) = 0.556  
 TRENCH LENGTH = 750 SF x 0.556 / 3 = 139 FEET  
 TRENCH SPACING = 2D+W = ((2x2.5) + 3) = 8 USE 10'

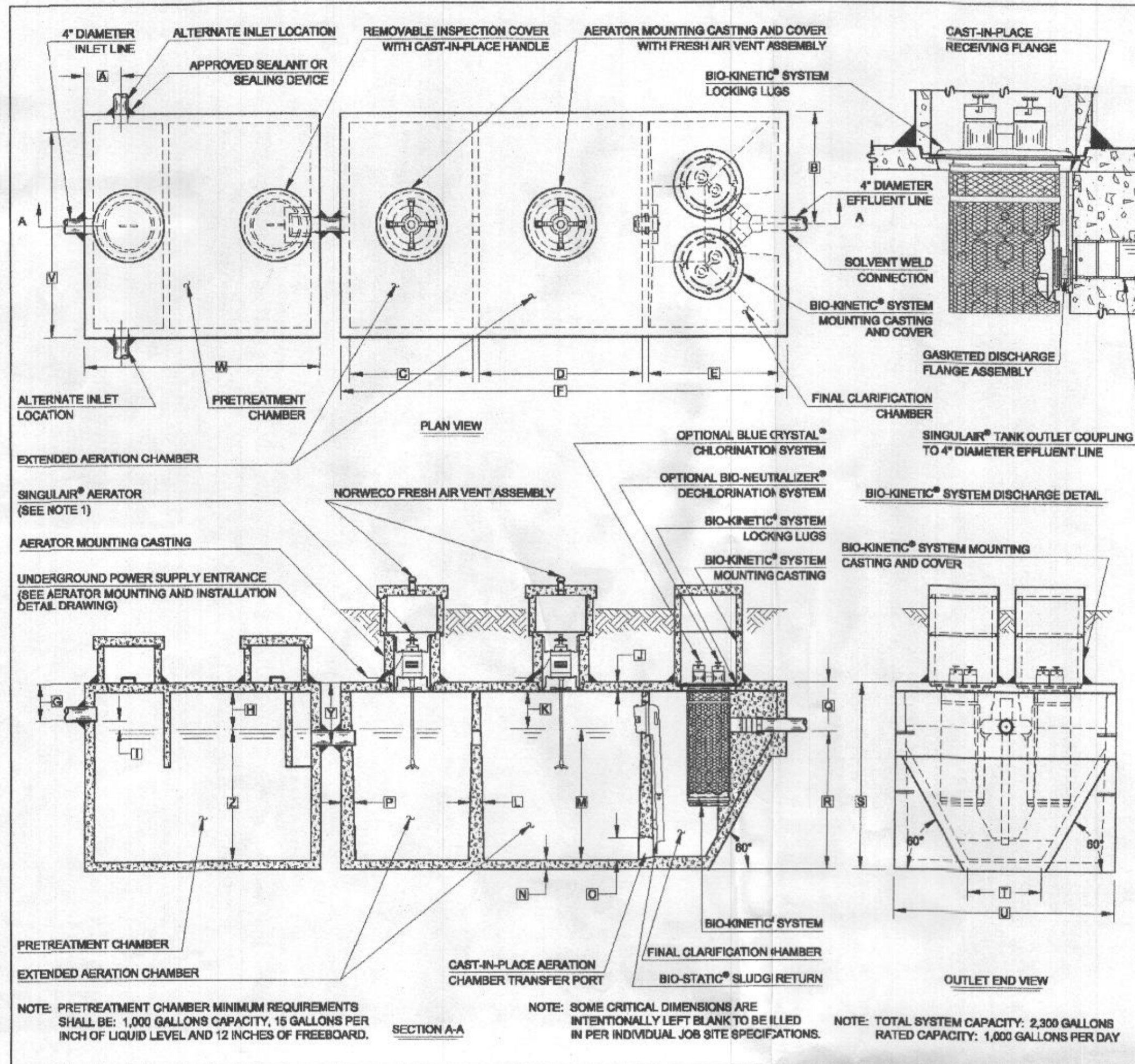
SEWAGE DISPOSAL SYSTEM DATA (FIRST REPLACEMENT)

6 BEDROOMS  
 LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD  
 APPLICATION RATE = 1.2  
 EFFECTIVE SIDEWALL BEGINS AT 3 FEET  
 TRENCH DEPTH = 5 FEET  
 EFFECTIVE DEPTH (D) = 2 FEET  
 SF OF DRAINFIELD = 900 GPD / 1.2 = 625 SF  
 COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x2)) = 0.625  
 TRENCH LENGTH = 750 SF x 0.625 / 3 = 156.25 FEET  
 TRENCH SPACING = 2D+W = ((2x2) + 3) = 7 USE 10'

Approved Septic System Plan  
 Howard County Health Department  
 Signature: *[Signature]* Date: 3/4/2021

BAT SITE PLAN  
 CHAPEL RISE, LOT 2  
 11540 CHAPEL RISE  
 ZONED RC-DEO PLAT NO. 22022  
 TAX MAP NO.: 29 GRID NO'S: B & 14  
 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SCALE: AS SHOWN DATE: JANUARY 26, 2021  
 SHEET 1 OF 2

I:\2021\220607\Engineering\Design\22066-6010 Chapel Rise Lot 2\22066-6008 Septic Install Plan 1-19-21.dwg, BAT SI, 3/25/21 8:53:55 AM, 11



**GENERAL NOTES:**

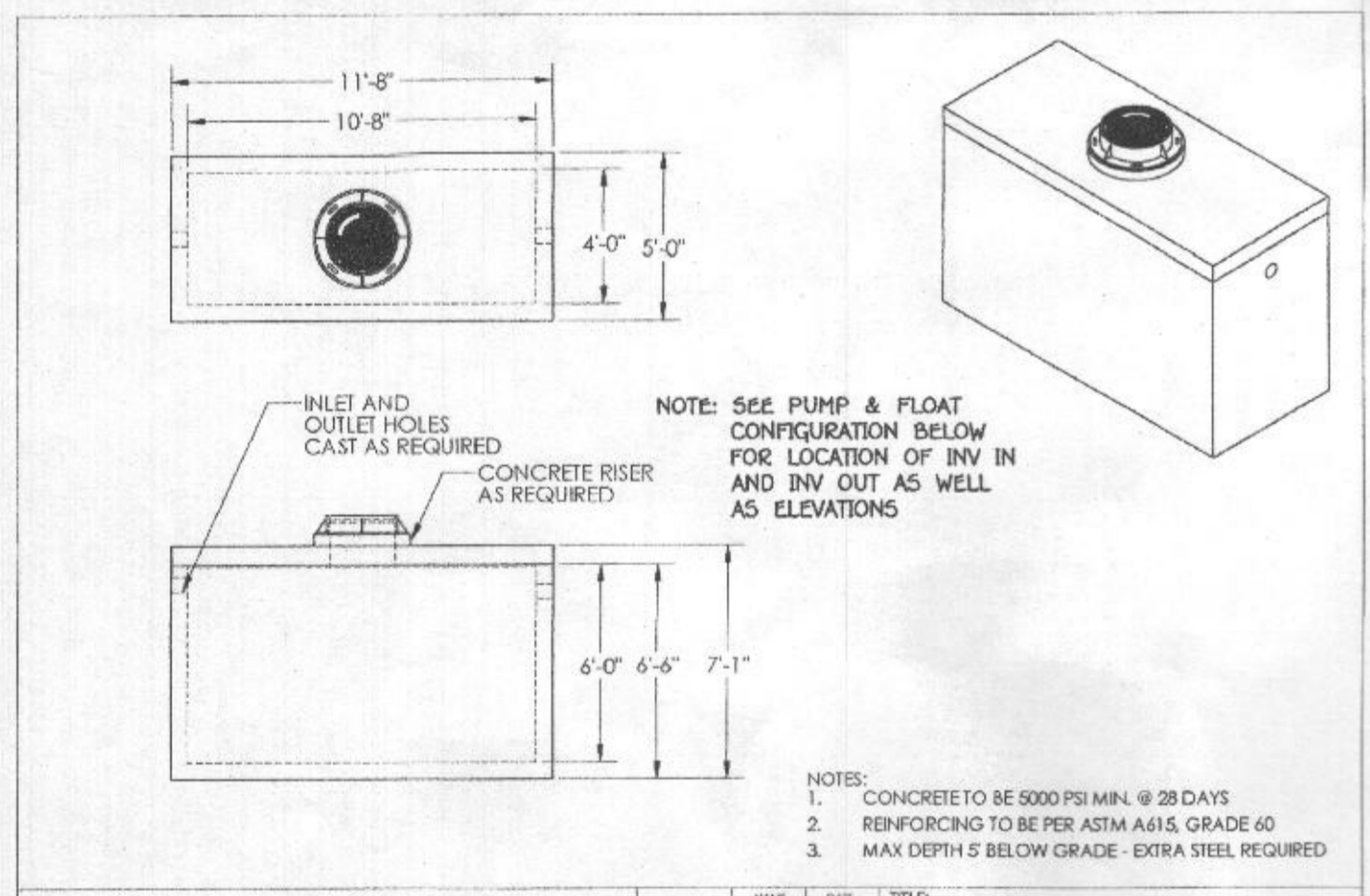
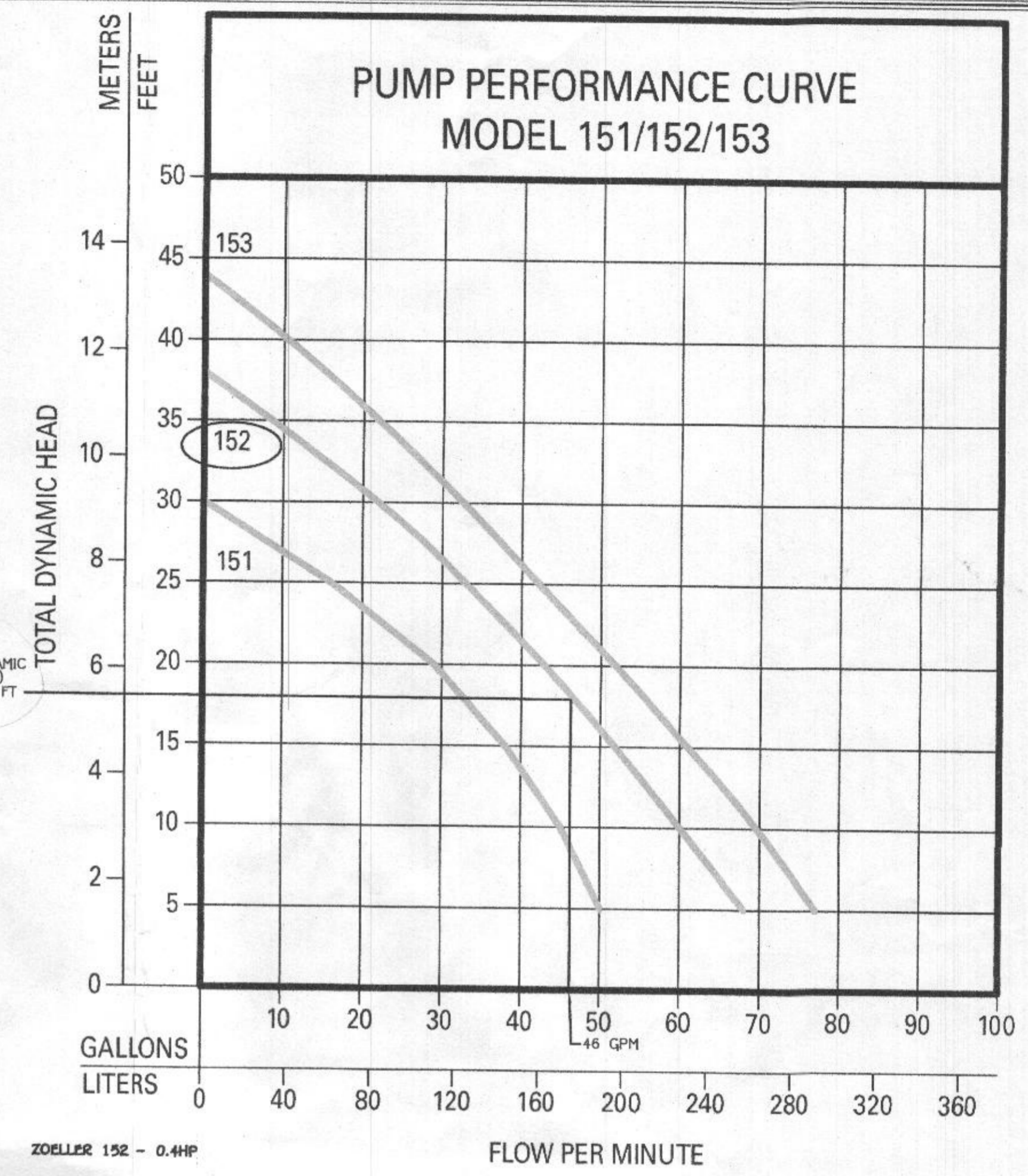
- SINGULAR<sup>®</sup> AERATOR, AS TESTED AND ACCEPTED BY NSF, OPERATING 60 MINUTES ON / 60 MINUTES OFF.
- FALL THROUGH SINGULAR<sup>®</sup> PLANT FROM INLET INVERT TO OUTLET INVERT IS FOUR INCHES. INLET INVERT IS TWELVE INCHES BELOW TANK TOP.
- ON DEEPER INSTALLATIONS, PRECAST RISERS MUST BE USED TO EXTEND AERATOR MOUNTING CASTING AND BIO-KINETIC<sup>®</sup> SYSTEM MOUNTING CASTING TO GRADE. INSPECTION COVER ON PRETREATMENT CHAMBER MUST BE DEVELOPED TO WITHIN TWELVE INCHES OF GRADE.
- TANK REINFORCED PER ACI STD. 318.
- REMOVABLE COVERS ON RISERS WEIGH IN EXCESS OF SEVENTY-FIVE POUNDS EACH TO PREVENT UNAUTHORIZED ACCESS.
- CONTACT THE LOCAL, LICENSED SINGULAR<sup>®</sup> DISTRIBUTOR FOR ELECTRICAL REQUIREMENTS.

**PROJECT ENGINEER'S APPROVAL:**  
I (WE) HEREBY CERTIFY THAT THIS DRAWING HAS BEEN CHECKED AND IS APPROVED FOR USE IN CONFORMITY WITH THE CONTRACT DOCUMENTS.  
NAME: \_\_\_\_\_  
DATE: \_\_\_\_\_

**CONTRACTOR'S CERTIFICATION:**  
I (WE) HEREBY CERTIFY THAT THIS DRAWING HAS BEEN CHECKED AND IS APPROVED FOR USE IN CONFORMITY WITH THE CONTRACT DOCUMENTS.  
NAME: \_\_\_\_\_  
DATE: \_\_\_\_\_

CRITICAL DIMENSIONS			
A	1'-0"	N	0'-3"
B	3'-0"	O	0'-8"
C	3'-4"	P	0'-5"
D	4'-5"	Q	1'-4"
E	3'-7"	R	3'-0"
F	12'-2"	S	0'-0"
G	1'-0"	T	2'-0"
H	1'-0"	U	0'-0"
I	0'-3"	V	0'-0"
J	0'-3"	W	0'-0"
K	1'-0"	X	1'-0"
L	0'-2"	Y	1'-8"
M	3'-6"	Z	0'-0"

**norweco** 7-15-07 1 c  
 U.S. PATENT PENDING  
 LOW PROFILE SINGULAR<sup>®</sup> BIO-KINETIC<sup>®</sup> WATER TREATMENT SYSTEM MODEL 151-152-153  
 © 2007  
 PD-6-2008



NAME	TITLE
MONARCH PRODUCTS COMPANY, INC.	1500 GAL PUMP TANK
YORK, PA. 17350	
717-298-8303	
www.MonarchProducts.net	
DRAWN BY: MCH/03/14	DATE: 03/14/14
CHECKED BY: MCH/03/14	DATE: 03/14/14
TOTAL STRUCTURE WEIGHT: 2400 lbs	JOB NAME: PUMP TANK
	JOB NAME: PUMP TANK

**PUMP ALARMS / INFORMATION**

- A. PUMP OFF: 408.27
- B. PUMP ON: 408.72
- C. HIGH WATER ALARM: 409.22
- D. TOP OF ACCESS COVER: 414
- E. TOP OF TANK: 411.59
- F. BOTTOM OF TANK: 406.44
- G. DISCHARGE OUT OF TANK: 410.45
- H. INVERT INTO TANK: 410.69

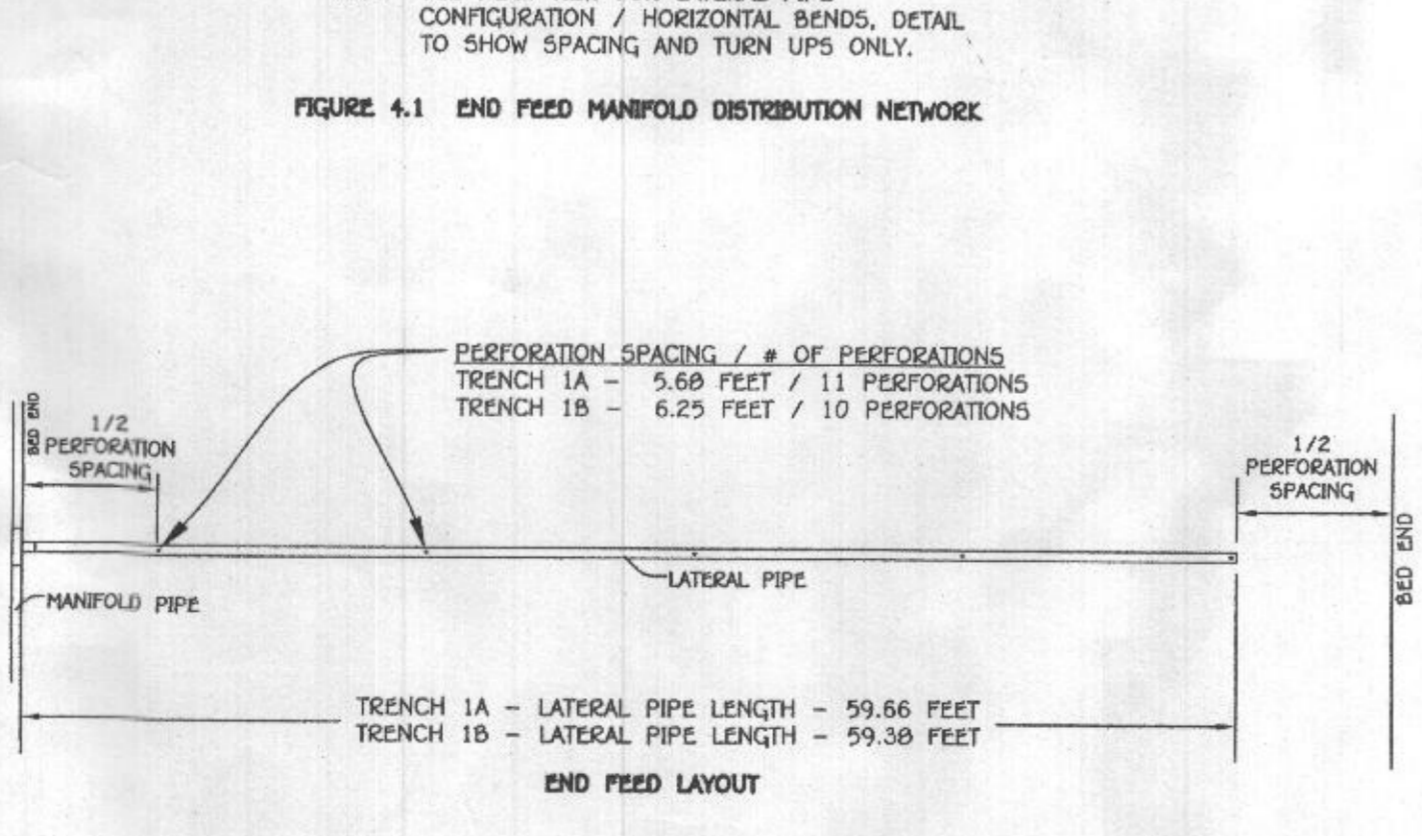
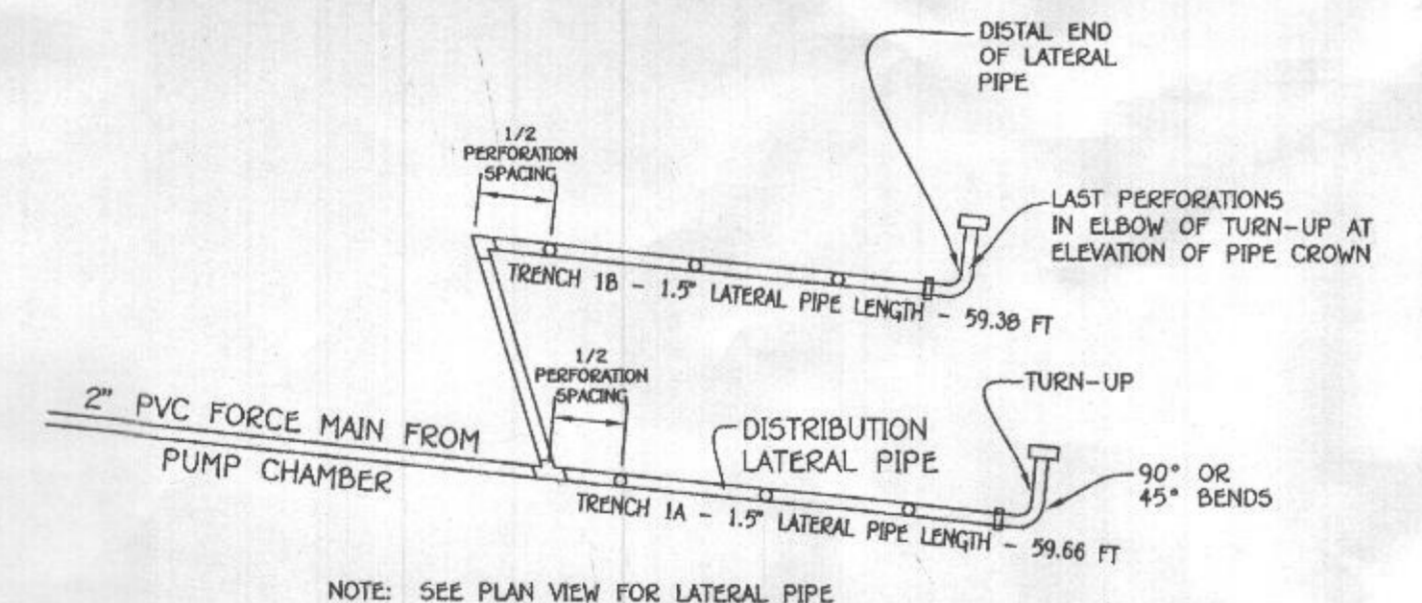
NOTE: SEPTIC SYSTEM ALARM WILL BE ON A CIRCUIT SEPARATE FROM ANY OTHER SEPTIC SYSTEM COMPONENTS OR ALARMS.

TOTAL EMERGENCY STORAGE = 654 + 266 = 920 GAL

THIS DETAIL IS TO BE USED FOR FLOAT CONFIGURATION ONLY - SEE DETAIL ABOVE FOR TANK DIMENSIONS AND ACTUAL LOCATION OF ACCESS COVER.

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING, CONSULTANTS & LAND SURVEYORS  
 10272 BALTIMORE NATIONAL PIKE  
 ELKROFT, MD 21027  
 (410) 285-1200

**OWNER**  
 K-ONE CORPORATION  
 209 RIVER BEND ROAD  
 GREAT FALLS, VA 22066  
 (703)-757-8757

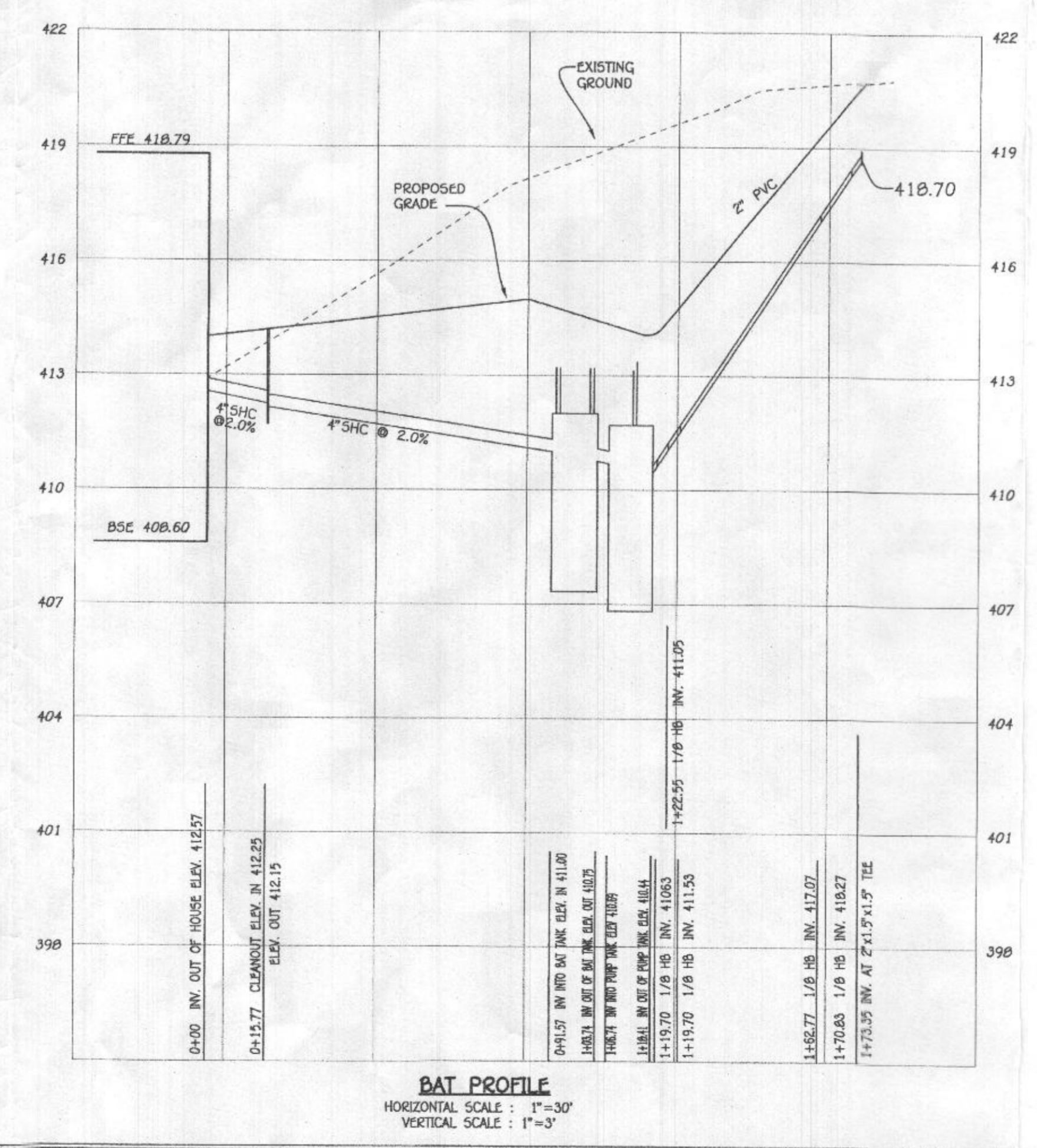


**PROFESSIONAL CERTIFICATION**

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. 20740, EXPIRATION DATE: 02/22/2022.

*Michael J. Vitale*  
 Signature Of Professional Engineer  
 DATE: 2/5/21

STATE OF MARYLAND  
 MICHAEL J. VITALE  
 LICENSE NO. 20740  
 PROFESSIONAL ENGINEER



NOTE: PLACE AN OBSERVATION PIPE IN THE GRAVEL BED AT THE DISTAL END OF EACH TRENCH SEGMENT.

LARGER DIAMETER PIPE BROUGHT TO GRADE SURROUNDS LATERAL TO PROVIDE ACCESS AND PROTECTION

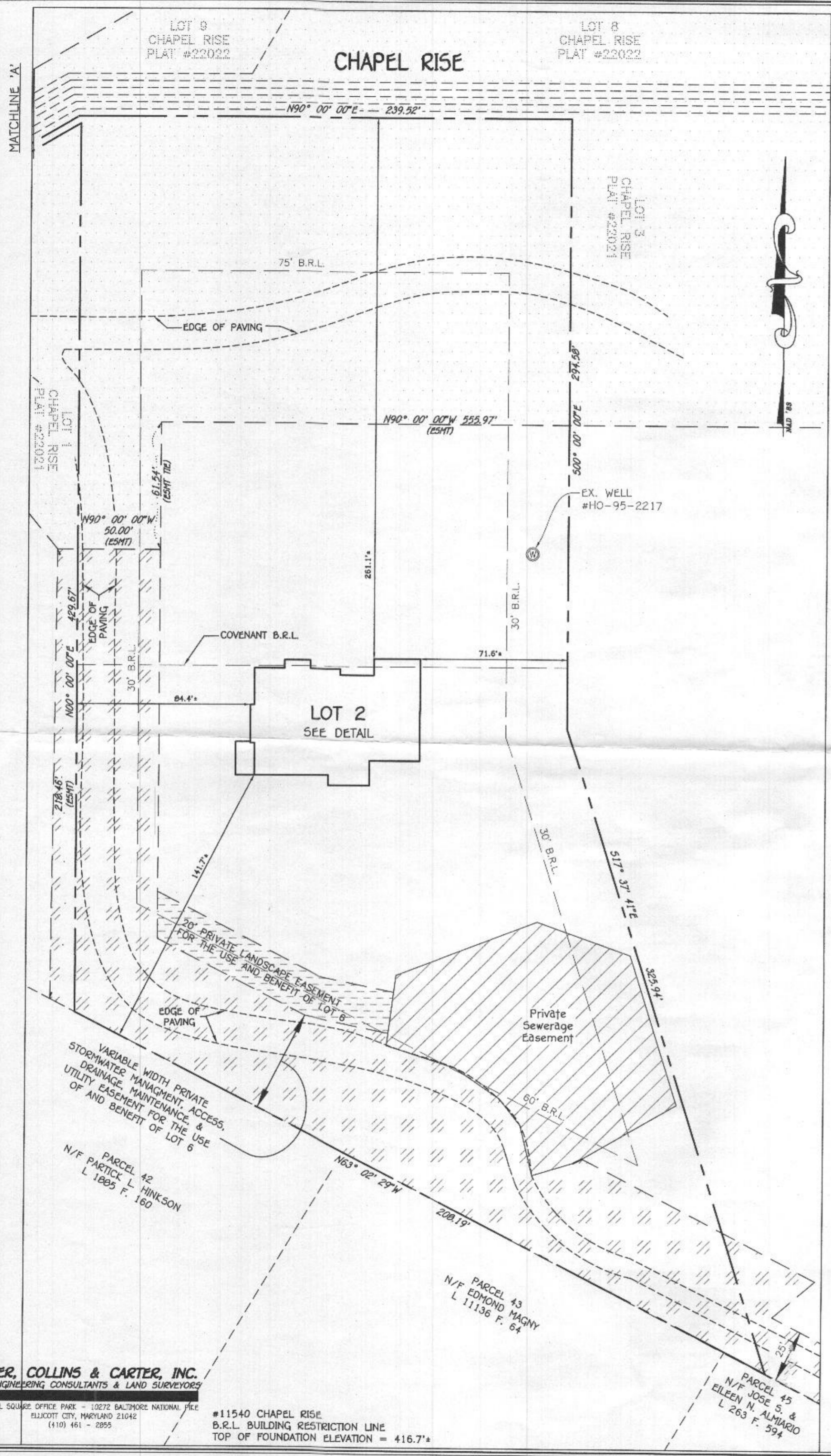
TURN-UP HEIGHT 2 FEET

ANCHOR - LAST PERFORATIONS IN ELBOW OF TURN-UP AT ELEVATION OF PIPE CROWN

5/16\"/>
 PERFORATED SCH. 40 PVC LATERAL PIPE BLOWUP DETAIL  
 SCALE: 1\"/>

Approved Septic System Plan  
 Howard County Health Department  
*Robert J. ...*  
 Signature  
 3/4/2021  
 Date

**BAT SITE PLAN**  
**CHAPEL RISE, LOT 2**  
 11540 CHAPEL RISE  
 ZONED RC-DEO PLAT NO. 22022  
 TAX MAP NO.: 29 GRID NO'S.: B & 14  
 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SCALE: AS SHOWN DATE: JANUARY 26, 2021  
 SHEET 2 OF 2

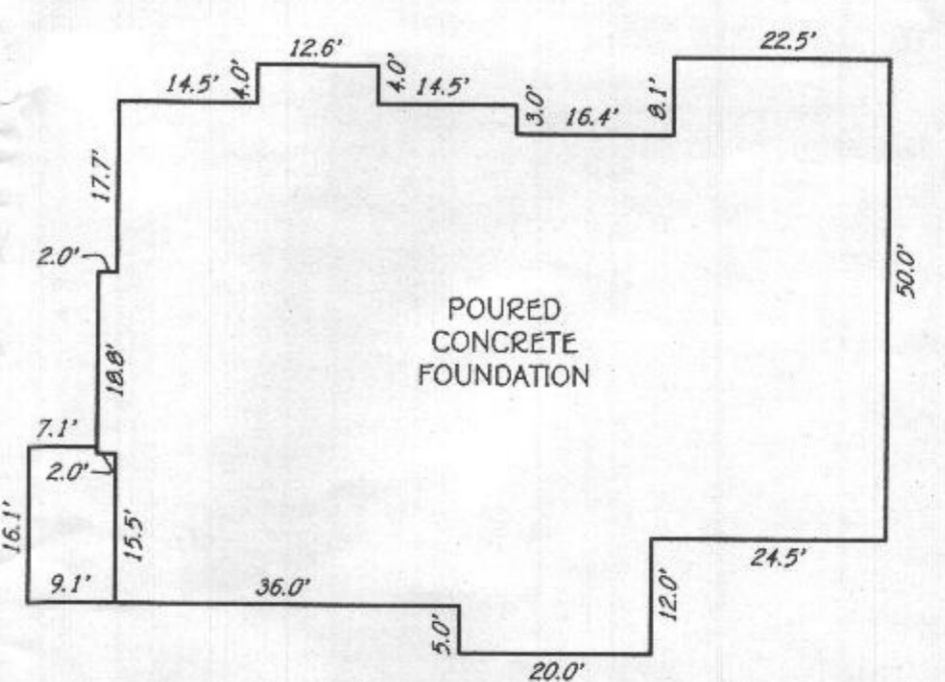
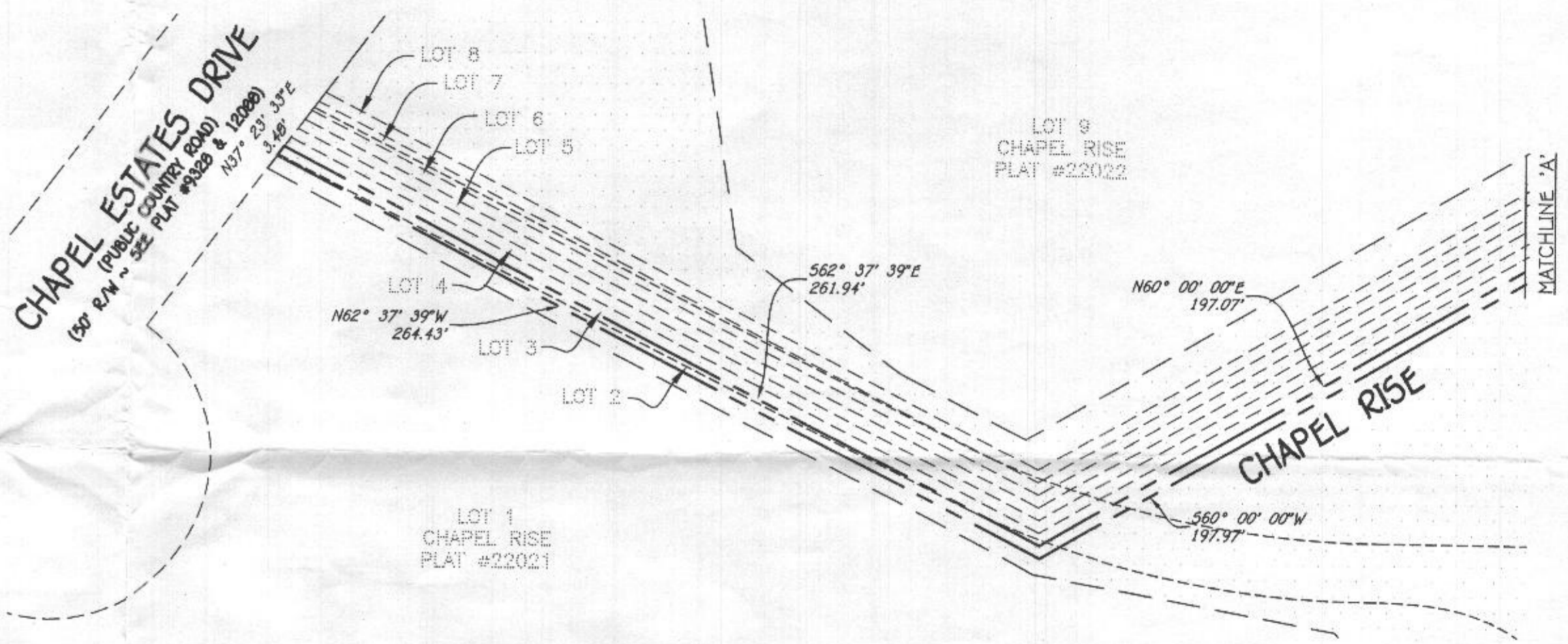
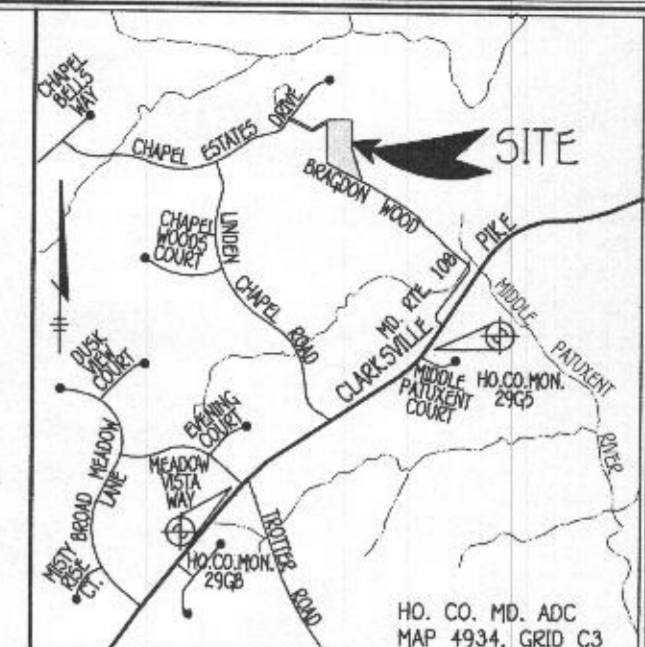


**GENERAL NOTES:**

- 1) THIS LOCATION DRAWING IS PREPARED FOR THE BENEFIT OF THE CLIENT SIGNING THE HOUSE LOCATION SURVEY APPROVAL FORM INsofar AS IT IS REQUIRED BY A LENDER OR TITLE INSURANCE COMPANY OR ITS AGENTS IN CONNECTION WITH THE CONTEMPLATED TRANSFER, FINANCING OR REFINANCING OF THE PROPERTY SHOWN HEREON. UNLESS INDICATED AS BEING A BOUNDARY SURVEY, THIS LOCATION DRAWING IS NOT INTENDED FOR USE IN THE ESTABLISHMENT OF PROPERTY LINES AND IS NOT TO BE RELIED UPON FOR THE ESTABLISHMENT OR LOCATIONS OF FENCES, GARAGES, BUILDINGS OR OTHER EXISTING OR FUTURE IMPROVEMENTS. AS A RESULT, THIS LOCATION DRAWING DOES NOT PROVIDE FOR ACCURATE IDENTIFICATION OF PROPERTY LINES, BUT SUCH IDENTIFICATION MAY NOT BE REQUIRED FOR THE TRANSFER OF TITLE OR SECURING FINANCING FOR RE-FINANCING.
- 2) SUBJECT PROPERTY IS SHOWN IN ZONE X ON THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP OF HOWARD COUNTY, MARYLAND, COMMUNITY PANEL No. 24027C01300, EFFECTIVE 11/6/2013.
- 3) THE OFFSETS FROM BUILDING LINE TO PROPERTY LINE AS SHOWN ON THE PLAT HEREON ARE TO AN ACCURACY OF PLUS OR MINUS 2.0'.
- 4) NO TITLE REPORT FURNISHED. SUBJECT TO ALL EASEMENTS, RIGHTS OF WAY AND CONDITIONS OF RECORD.
- 5) THE EXISTING WELL(S) SHOWN ON THIS PLAN (IDENTIFIED WITH THE ATTACHED WELL TAG NUMBER HO-95-2217 HAS BEEN FIELD LOCATED BY FISHER, COLLINS AND CARTER, INC. PROFESSIONAL LAND SURVEYORS AND IS ACCURATELY SHOWN.
- 6) PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROPERTY LINE SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 339, EXPIRATION DATE 10/04/2022.
- 7) BUILDING PERMIT #B-2100026

**Legend**

- [Hatched Pattern] VARIABLE WIDTH PRIVATE STORMWATER MANAGEMENT, ACCESS, DRAINAGE, MAINTENANCE, & UTILITY EASEMENT FOR THE USE OF AND BENEFIT OF LOT 6
- [Dotted Pattern] Private SWM, Drainage, Entrance Sign, Maintenance, Use-In-Common Driveway Access, & Utility Easement For The Use & Benefit Of Lots 1 Thru 9 (Plat# 22022)



Well check  
OK  
RAC 11/15

LOT 2 CHAPEL RISE  
LOTS 1 THRU 9  
A SUBDIVISION OF PARCEL 202 & 353  
AND A RESUBDIVISION OF LOT 6, CHAPEL WOODS II  
PLAT NOS. 22020 THRU 22023  
FIFTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

DETAIL:  
1"=20'

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
ELIJACOTT CITY, MARYLAND 21042  
(410) 461-2855

#11540 CHAPEL RISE  
B.R.L. BUILDING RESTRICTION LINE  
TOP OF FOUNDATION ELEVATION = 416.7'

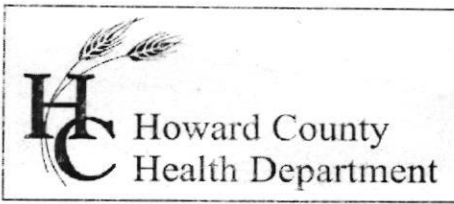
Mark A. Pobel  
PROPERTY LINE SURVEYOR  
REG. #339

**HOUSE LOCATION DRAWING**

FOUNDATION LOCATION: 2/26/21  
FINAL LOCATION:  
BOUNDARY SURVEY:

SCALE: 1"=40'  
DATE: 5/28/2021  
DRAWN BY: MID  
CHECKED BY: MLR  
PROJECT No.: 12060-6010





**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

RECEIPT DATE: \_\_\_\_\_ **ONSITE SEWAGE DISPOSAL SYSTEM** P \_\_\_\_\_  
 APPROVAL DATE: \_\_\_\_\_ **PERMIT: CONSTRUCTION** A \_\_\_\_\_  
 PROPERTY ADDRESS: 11540 Chapel Rise  
 SUBDIVISION: Chapel Rise LOT: 2 TAX ID: 05-594203  
 CONTRACTOR: \_\_\_\_\_ EMAIL: \_\_\_\_\_  
 CONTRACTOR ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

CONTRACTOR CERTIFIED FOR BAT INSTALLATION:  MDE  MANUFACTURER:

PROPERTY OWNER: K-One Corporation EMAIL: \_\_\_\_\_  
 OWNER ADDRESS: 209 River Bend Road, Great Falls, VA 22066 PHONE: 703-757-8757

BAT UNIT MODEL: TNTLP-500/600 PUMP SIZE: 4/10HP PUMP TANK CAPACITY: 800

OPERATION & MAINTENANCE AGREEMENT DATE SIGNED: 11/28/17 DATE RECORDED: 11/28/17

DISTRIBUTION SYSTEM:  GRAVITY  PRESSURE DOSED BEDROOMS: 5 APPLICATION RATE: 1.2

TRENCHES:	LINEAR FEET REQUIRED: <u>104</u>	INLET DEPTH: <u>2</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>5</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>2</u>

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

NOTES:

ISSUED BY: Robert Freemon 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 SEPTIC 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 \_\_\_\_\_
- 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

**TRENCH/DRAINFIELD DATA**

WIDTH \_\_\_\_\_ INLET \_\_\_\_\_ BOTTOM \_\_\_\_\_

NUMBER OF TRENCHES \_\_\_\_\_

TOTAL LENGTH \_\_\_\_\_

ABSORPTION AREA \_\_\_\_\_

DISTRIBUTION BOX LEVEL \_\_\_\_\_

DISTRIBUTION BOX BAFFLE \_\_\_\_\_

DISTRIBUTION BOX PORT \_\_\_\_\_

**SEPTIC TANK DATA**

**SEPTIC TANK I LEVEL** \_\_\_\_\_

MANUFACTURER \_\_\_\_\_

CAPACITY \_\_\_\_\_ GAL

SEAM LOC \_\_\_\_\_

TANK LID DEPTH \_\_\_\_\_

BAFFLES \_\_\_\_\_

BAFFLE FILTER \_\_\_\_\_

MANHOLE LOC \_\_\_\_\_

6" PORT LOC \_\_\_\_\_

WATERTIGHT TEST \_\_\_\_\_

SLOTTED \_\_\_\_\_

DATE ON LID \_\_\_\_\_

**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 \_\_\_\_\_

**ROAD NAME**

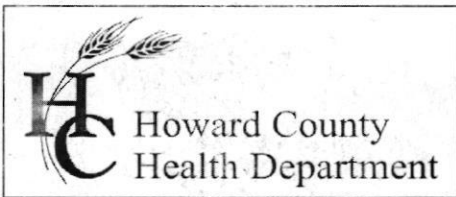
PRE-CONSTRUCTION:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

INSTALLATION:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

FINAL INSPECTOR \_\_\_\_\_ DATE OF APPROVAL \_\_\_\_\_



**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

RECEIPT DATE: \_\_\_\_\_ **ONSITE SEWAGE DISPOSAL SYSTEM** P \_\_\_\_\_

APPROVAL DATE: \_\_\_\_\_ **PERMIT: CONSTRUCTION** A \_\_\_\_\_

PROPERTY ADDRESS: 11540 Chapel Rise

SUBDIVISION: Chapel Rise LOT: 2 TAX ID: 05-594203

CONTRACTOR: \_\_\_\_\_ EMAIL: \_\_\_\_\_

CONTRACTOR ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

CONTRACTOR CERTIFIED FOR BAT INSTALLATION:  MDE  MANUFACTURER:

PROPERTY OWNER: K-One Corporation EMAIL: \_\_\_\_\_

OWNER ADDRESS: 209 River Bend Road, Great Falls, VA 22066 PHONE: 703-757-8757

BAT UNIT MODEL: TNTLP-500/600 PUMP SIZE: 4/10HP PUMP TANK CAPACITY: 800

OPERATION & MAINTENANCE AGREEMENT DATE SIGNED: 11/28/17 DATE RECORDED: 11/28/17

DISTRIBUTION SYSTEM:  GRAVITY  PRESSURE DOSED BEDROOMS: 5 APPLICATION RATE: 1.2

TRENCHES:	LINEAR FEET REQUIRED: <u>104</u>	INLET DEPTH: <u>2</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>5</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>2</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND BAT UNIT LOCATION MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:		

ISSUED BY: Robert Freemon 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 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 \_\_\_\_\_
- 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

**TRENCH/DRAINFIELD DATA**

WIDTH	INLET	BOTTOM
_____	_____	_____
NUMBER OF TRENCHES	_____	
TOTAL LENGTH	_____	
ABSORPTION AREA	_____	
DISTRIBUTION BOX LEVEL	_____	
DISTRIBUTION BOX BAFFLE	_____	
DISTRIBUTION BOX PORT	_____	

**SEPTIC TANK DATA**

**SEPTIC TANK I LEVEL** \_\_\_\_\_

MANUFACTURER \_\_\_\_\_

CAPACITY \_\_\_\_\_ GAL

SEAM LOC \_\_\_\_\_

TANK LID DEPTH \_\_\_\_\_

BAFFLES \_\_\_\_\_

BAFFLE FILTER \_\_\_\_\_

MANHOLE LOC \_\_\_\_\_

6" PORT LOC \_\_\_\_\_

WATERTIGHT TEST \_\_\_\_\_

SLOTTED \_\_\_\_\_

DATE ON LID \_\_\_\_\_

**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 \_\_\_\_\_

**ROAD NAME**

PRE-CONSTRUCTION:

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INSTALLATION:

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FINAL INSPECTOR \_\_\_\_\_ DATE OF APPROVAL \_\_\_\_\_

# Howard County Health Department

Bureau of Environmental Health, Ellicott City, Maryland 410-313-2640

SEWAGE DISPOSAL PERMIT NO. A-\_\_\_\_\_ P-\_\_\_\_\_

PERMITTEE

LOCATION

11840 Chapel Rise, Chapel Rise lot 2  
R-One Corporation

Do Not Cover Work Until Health Department Approval Appears On This Card

POST THIS CARD WHERE IT CAN BE SEEN FROM ROAD

STOP ALL CONSTRUCTION ON SEWAGE  
DISPOSAL SYSTEM AND CONTACT HEALTH  
DEPARTMENT BEFORE CONTINUING

WORK IS SATISFACTORY,  
CONTINUE

Inspector

Date

Inspector

Date

FINAL INSPECTION MADE,  
COVER ALL WORK

Inspector

Date