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# VDH-D2PI SWAP

Low Income Qualified Residential Septic Repair/Replacement, Well Replacement, Abandonments, Sewer Connections, and Public Water Connections

#### **Contractors:**

The Middle Peninsula Planning District Commission Septic and Well Assistance Program is soliciting bids for the attached project. Projects are supported by a grant program funded by the Virginia Department Health (VDH) and administered by the Middle Peninsula Planning District Commission (MPPDC) Septic and Well Assistance Program.

Grant funds will be utilized to fund 100% of the approved amount. The attached project has already been qualified for grant funding and the next phase is to solicit bids from contractors.

Attached you will find an itemized bid sheet breaking out certain costs and acknowledgments that need to be captured, a scope of work, and existing permits. Awarded projects are to be completed in a timely manner. All work must be completed before the expiration of permits. Work is done for the MPPDC SWAP Program, who disperses payment. You will receive a Notice to Proceed if you are awarded the project.

The grant has a hard deadline, to be reimbursed by this program all work, associated paperwork, invoices, and receipts must be dated prior to and received by the MPPDC SWAP Program Manager no later than December 31st, 2024.

For additional information or assistance, please contact Taylor Ovide, Coastal Resilience Planner at (804) 758-2311 or <a href="mailto:tovide@mppdc.com">tovide@mppdc.com</a>.

# Alternative Onsite Sewage System Instalation Project (2022-ER-100S) Address: 4545 Buckley Hall Rd, Cobbs Creek, VA 23035

Cost for Line Item #1 (include total cost for items A-L) These are known factors. Vendors must invoice for actual cost incurred as described in the attached scope of work and permits.

Total						
	Line 1 Total Bid Cost					
<b>Line Item # 1</b> ; The contractor shall furnish all labor, supervision, equipment, tools, parts, supplies and materials, as necessary, to perform the services as described in the scope of work:	\$					
Itemized Include	ed in Line 1:					
	Itemized Bid Cost					
<b>A&amp;B</b> ) Costs to construct and install an alternative onsite sewage system to specification in compliance with the attached Local Health Department Permit:	\$					
<b>C</b> ) Costs of Septic Pump-out, 1 initial pumpout if deemed necessary to prevent sewage backup:	\$					
E1) Costs of Tree Removal per permit:	\$					
E2) Costs of Site Clearing per permit:	\$					
<b>G</b> ) Costs to provide or subcontract O&M for 2 Years, unless it is included in the purchase price of the unit:	\$					
H) Costs of abandoning any unused component of the former onsite sewage system may include removing pipes, abandoning tank including pumping out of tank, demolising of tank, abandoning distribution boxes, as specified by permit:	\$					
I) Costs of stabilizing, seeding and grading the site after construction to return to the original state in compliance with code:	\$					
Additional Itemized Costs NOT Included In Line 1:						
<b>C-2</b> ) Additional pumpout costs per pumpout if needed, for example to dry drainfield, overflows before completion etc. (not included in line 1 total):	\$					
Additional costs not included in line item 1:	\$					
Signature:days						

The following are required. Please initial in agreement to perform the foll costs to perform these tasks are included in Line Item 1	
	Initial on the lines below;
<b>D</b> ) Check for and comply with any Special Requirements in the permit. For example have surveyor locate property line, install french drain, have service provider drop electrical wire.	
<b>E</b> ) Provide, or subcontract with a licensed plumber and electrician to complete project per permits, scope of work, and code:	
I) Bidders shall comply with all requirements of DPOR for contracting and executing the contract with the MPPDC. Documentation of appropriate Licenseses provided to the MPPDC.	
J) Obtain a final installation inspection from the Local Health Department and assure that the onsite sewage system complies with the Regulations.	
<b>K</b> ) Provide all required documentation to the Local County Health Department following completion of construction and obtain an Operation Permit for the onsite sewage system:	
L) Submit invoice to tovide@mppdc.com once Local Health Department has issued the Operations Permit. Include a copy of the completion statement and operations permit:	

# Alternative Onsite Sewage System Installation Project (2022-ER-100S) Address: 4545 Buckley Hall Road, Cobbs Creek, VA 23035

# Scope of work:

The contractor shall furnish all labor, supervision, equipment, tools, parts, supplies and materials, as necessary, to perform the services as described herein:

# <u>Cost for Line Item #1 (include total cost for items A-K) These are known factors. Vendors</u> must invoice for actual cost incurred as described herein

- A) Construct an Alternative onsite sewage system that meets the location and construction specifications of the Virginia Sewage Handling and Disposal Regulations (12VAC5-610-10 et seq., the Regulations).
- B) Construct the above Alternative onsite sewage disposal system in compliance with the Gloucester County Health Department Construction Permit 157-24-0129 at 4545 Buckley Hall Rd Cobbs Creek, VA 23035 in the location shown on the permit. The permit may contain additional conditions, notes, and information needed to construct the onsite sewage system.
- C) Septic Pump-out Requirements: All bids shall include the cost to pumpout the contents of the existing septic tank by a properly licensed sewage hauler. To prevent sewage from backing into the home or erupting on property surface prior to the completion of the septic work, additional pumpouts of the contents of the existing septic tank by a properly licensed sewage hauler may be required on an as-needed basis. Bids should provide a cost-breakdown per additional pumpout. If multiple pumpouts are needed preauthorization will need to occur to allow for a change order for additional, justifiable pumpouts. If the permit requires work within or under the existing drainfield (as indicated in the Permit) additional monitoring and pumping of the existing septic tank may be required in order to allow for the drying out of the drainfield. In these cases, for one week prior to the installation or repair of the onsite sewage system the effluent level of the septic tank must be monitored so that it does not discharge into the pump chamber or dispersal field. The contents of the existing septic tank shall be pumped by a properly licensed sewage hauler to prevent sewage from entering the drainfield for one week prior to installation
- E) Tree Removal and Site Clearing: A pre-bid site visit is recommended to determine what if any tree removal or site clearing that may need to occur. Per the above referenced Permit, remove any trees and wood debris as described in the permit and haul away wood and debris unless notified otherwise. Costs of tree removal and site clearing should be included in initial bids. Any additional site clearing or tree removal required during installation must be

submitted in writing to and approved by VDH in writing including an additional cost estimate. Some AOSS designs may call for special procedures when doing tree removal or site clearing as will be referenced in the above referenced permit. Please pay attention to the following permit requirements.

- F) Provide, or subcontract with a licensed plumber and electrician to provide plumbing and electrical required to convey the wastewater from the house to the onsite sewage system as required by the Regulations and the Virginia Uniform Statewide Building Code. This includes obtaining or assuring that the owner obtains all permits and inspections necessary by the local building authority in compliance with the Virginia Uniform Statewide Building Code.
- G) Operation and Maintenance (O&M) Requirements: As the SWAP will fund two years of regulatory O&M for the Alternative Onsite Sewage System (AOSS) installed on this property, please provide or subcontract for two years of O&M unless the cost is included in the purchase price of the treatment unit. The O&M requirements can be found in the Regulations for Alternative Onsite Sewage Systems 12 VAC 5-613 and 12VAC5-640. The O&M agreement shall include the maintenance visits and any samples as required by the AOSS regulations. This funding is provided to assist the homeowner at meeting their first two years of O&M requirements per the Owner's Operation and Maintenance Manual and the Regulations for Alternative Onsite Sewage Systems (12VAC5-613-100 et seq.). The first two years of O&M listed in the agreement should be at no cost to the homeowner. Contractor should provide a copy of the O&M agreement to the homeowner and provide a copy to [Middle Peninsula Planning District Commission SWAP Staff].
- H) Abandon any unused component of the former onsite sewage system as specified by the Gloucester County Health Department Construction Permit 136-23-0033. Upon completion of the onsite sewage system repair, the existing septic tank shall be pumped by a properly licensed sewage hauler, the tank crushed in place, lime placed over the crushed tank, and the tank hole filled with clean backfill material and restoring the area to its original condition. Abandonment may also include removing unused sewer line and conveyance lines and crushing and filling the distribution box.
- I) Follow all regulations and permitting pertaining to erosion and sediment control including stabilizing, seeding, and grading the site after construction to return to the original state. Control construction runoff with proper practices so as not to become a nuisance to the owner or to neighboring properties or cause sediment to be discharged into state waters and drainage ditches. Any construction debris must also be removed from the site and disposed of properly.
- J) Bidders shall comply with all requirements of the Department of Professional and Occupational Regulations (DPOR) for contracting and executing the contract with the Virginia

Department of Health. Must provide a copy of Class A or B contractor's licenses from DPOR, with an Alternative Sewage Disposal System Contracting (ADS) specialty from DPOR, a Master Alternative Onsite Sewage System Installer license from DPOR, and proof of insurance. Bidders contacted by [Middle Peninsula Planning District Commission SWAP Staff] to provide any missing required documents, must provide the document within 24 business hours or their bid will be considered non-responsive.

- K) Obtain a final installation inspection from the private OSE and assure that the onsite sewage system complies with the Regulations. Receive a completion/inspection report, as-built design from private OSE.
- L) Provide all required documentation to the Mathews County Health Department following completion of construction and obtain an Operation Permit for the onsite sewage system.
- M) Submit invoice and required paperwork once the Local Health Department has issued the Operations Permit. Include a copy of the completion statement and operations permit. Final invoice a paperwork should be submitted to: [Taylor Ovide at tovide@mppdc.com]

<u>Additional Services (If needed):</u> Bidder must contact [name and contact information for local partner] listed on the awarded contract for written approval prior to any additional services performed. [Middle Peninsula Planning District Commission SWAP Staff will issue a change order for actual additional services rendered.

The contractor shall furnish all labor, supervision, equipment, tools, parts, supplies and materials, as necessary, to perform the services as described herein:

- A. Additional materials
- B. Additional labor and equipment.

# **Breakdown of Total Cost**

When responding to solicitation Bidders must attach a document listing breakdown of total cost for line item 1. Bidders must attach a separate breakdown of cost for additional services.

Additional cost should not be included in line item 1 bid submission.

<u>Optional site visit</u>: To arrange a site visit prior to bidding, please contact: Taylor Ovide at tovide@mppdc.com or 804-758-2311

# **Additional questions:**

Contact Taylor Ovide via email: tovide@mppdc.com

# **Notice to Proceed**

If Bidder is selected for award, the Bidder shall be required to provide a signed Notice to proceed form within 3 business days of notification. [Middle Peninsula Planning District Commission SWAP staff] will provide a form for signature.



Private Sector Repair Permit 32.1-163.5

September 04, 2024

Onsite Sewage System Repair Permit - Va. Code §32.1-163.5

RE: 4545 Buckley Hall Road, Cobbs Creek, 23035 Tax Map/GPIN: MAT 05-08-A / HDID#157-24-0129

County: MATHEWS/115

Permit ID: 115-STS-109807 Reserve: 0% reserve area provided System Capacity: Residential, 5 Bedrooms, 750 gallons per day

Occupancy Limit: 10 persons maximum

Dear

This letter and the attached drawings, specifications, and calculations (21 pages) dated 08/28/2024, constitute your permit to repair your sewage disposal system. Your application for a permit was submitted pursuant to §32.1-163.5 of the Code of Virginia, which requires the Health Department to accept private soil evaluations and designs from an Onsite Soil Evaluator (OSE) or a Professional Engineer (PE). VDH is not required to perform a field check to verify the private evaluations of OSEs or PEs and such a field check may not have been conducted for the issuance of this permit.

The soil absorption area ("site"), sewage system design were certified by Larry Madison Private OSE as substantially complying with the Board of Health's regulations. This permit is issued in reliance upon that certification. VDH hereby recognizes that the soil and site conditions acknowledged by this permit are suitable for the installation of an onsite sewage system. The attached plat shows the approved area for the sewage disposal system; there are additional records on file with the Mathews County Health Department pertaining to this permit, including the Site and Soil Evaluation Report. This repair permit is null and void if any substantial physical change in the soil or site conditions occurs where a sewage disposal system is to be located.

If modifications or revisions are necessary, please contact the OSE/PE who performed the evaluation and design on which this permit is based. Should revisions be necessary during construction, your contractor should consult with the OSE/PE that submitted the site evaluation or site evaluation and design. The OSE/PE is authorized to make minor adjustments in the location or design of the system at the time of construction provided adequate documentation is provided to the Mathews County Health Department. The OSE/PE that submitted the certified design for this permit is required to conduct a final inspection of this sewage system when it is installed and to submit an inspection report and completion statement. As the owner, you are responsible for giving reasonable notice to the OSE/PE of the need for a final inspection. No part of this installation shall be covered until it has been inspected by the OSE/PE as noted herein. The sewage system may not be placed into operation until you have obtained an Operation Permit from the Mathews County Health Department.

This Repair Permit is null and void if conditions are changed from those shown on your application or if conditions are changed from those shown on the Site and Soil Evaluation Report and the attached construction drawings, specifications, and calculations. VDH may revoke or modify any permit if, at a later date, it finds that the site and soil conditions and/or design do not substantially comply with the Sewage Handling and Disposal Regulations, 12 VAC 5-610-20 et seq., or if the system would threaten public health or the environment.

This permit approval has been issued in accordance with applicable regulations based on the information and materials provided at the time of application. There may be other local, state, or federal laws or regulations that apply to the proposed construction of this onsite sewage system. The owner is responsible at all times for complying with all applicable local, state, and federal laws and regulations. This construction permit is transferrable until expired or deemed null and void. A permit transfer form may be found on the VDH website at http://www.vdh.virginia.gov/environmental-health/gmp-2015-01-forms/.lf you have any questions, please contact me.

This permit expires: 03/04/2026.

Sinceyely,

Evic Thomas

CC: Larry Madison Private OSE

Well and Sewage Contractors: Please notify Health Department and OSE or PE 48 hours prior to installation to arrange for inspection.

#### WHAT YOU WILL NEED TO GET YOUR SEPTIC SYSTEM OPERATION PERMIT

Your system must have a satisfactory inspection at the time of installation. This will be done by a private OSE or a PE, depending on the designer of your permitted system. Your OSE or PE must submit a copy of the inspection results, complete with an as-built diagram, to the Health Department.

Please ensure that your contractor turns in a Completion Statement to the local Health Department after installation.

If your permit is for an alternative system, you must sign, have notarized, and record the attached Notice of Recordation in your locality's land records. Please bring proof of this recordation to the local Health Department

If you have a conditional permit then you must sign, have notarized, and record the permit in your locality's land records. Please bring proof of this recordation to the Health Department.



#### **AOSS Owner Responsibility Letter**

September 04, 2024

Subject: Alternative Onsite Sewage Disposal System, Owner Responsibilities

Permit ID: 115-STS-109807 Tax Map Number/ GPIN: MAT 05-08-A/ HDID#157-24-0129

County: MATHEWS/115

Physical Address: 4545 Buckley Hall Road Cobbs Creek, VA 23035

Dear

Records on file at the Mathews County Health Department indicate that you are the owner of an Alternative Onsite Sewage System (AOSS) located at 4545 Buckley Hall Road, Cobbs Creek, VA. This letter is to provide you with important information regarding owner responsibilities for the operation and maintenance of your AOSS.

The Regulations for Alternative Onsite Sewage Systems (the "AOSS Regulations," 12 VAC 5-613) became effective on December 7, 2011. These regulations can be found online at https://law.lis.virginia.gov/admincode/title12/agency5/chapter613/. The AOSS Regulations outline the owner's responsibilities for AOSS. Owners are required to:

- 1. Have the AOSS operated and maintained by a licensed operator.
- 2. Have a licensed operator visit the AOSS at the frequency required by the regulations.
- 3. Have a licensed operator collect any samples required by the regulations. Specific laboratory sampling requirements depend on the date your application was filed, the size of the treatment system, the approval status of the treatment unit, whether or not disinfection was required, and whether or not there is direct dispersal to groundwater. Laboratory sampling is not required for any small AOSS with an installed soil treatment area that is sized for septic tank effluent and complies with the requirements of 12VAC5-610 for septic tank effluent. Please consult your Operation and Maintenance Manual, the system designer, an Operator, or the Health Department if you have questions.
- 4. Keep a copy of the maintenance log provided by the operator on the property where the AOSS is located, make the log available to the health department upon request, and transfer the log to any future owner of the property.
- 5. Keep a copy of the Operation and Maintenance (O&M) Manual for the AOSS on the property where the system is located, make the manual available to the health department upon request, and transfer the O&M Manual to any future owner.
- 6. Comply with the onsite sewage disposal requirements contained in any local ordinance adopted pursuant to the Chesapeake Bay Preservation Act (§10.1-2100 of the Code of Virginia) and the Chesapeake Bay Preservation Area Designation and Management Regulations (9 VAC 10-20) if the AOSS is located within a designated Chesapeake Bay preservation area.

Proper operation and maintenance of an AOSS is required by law and is necessary to ensure continued functioning of the system and may prevent premature failure of the system. Operation and maintenance information for your system may be found by contacting the system designer, the local health department, or by visiting the VDH website at https://www.vdh.virginia.gov/environmental-health/onsite-sewage-water-services-updated/manufacturers-instructions/. If you have any questions regarding this letter or believe that you received this letter in error, please contact Mathews County Health Department at (804) 725-7131. Your cooperation and timely response will be appreciated.

Eri¢ Thomas

Virginia Department of Health



#### **Notice of Recordation of Future Operation Permit**

September 04, 2024

**Subject: Recordation of Future Operation Permit** 

Health Department ID Number: 115-STS-109807 Tax Map Number/GPIN: MAT 05-08-A/ HDID#157-24-0129

Locality: 4545 Buckley Hall Road Cobbs Creek, VA 23035

Dear

Your application to construct an alternative onsite sewage system to serve a residence at the above location, filed on 08/28/2024 with the Mathews County Health Department, has been evaluated in accordance with the requirements contained in Section 32.1-164.1 of the Code of Virginia, 12 VAC 5-610-250 of the Sewage Handling and Disposal Regulations, and current agency policies and procedures.

Your application is approved and your construction permit is attached to this letter. After your alternative onsite sewage system is constructed and approved for use, the local health department will issue an Operation Permit. The Operation Permit will be valid as long the sewage disposal system is properly operated and maintained. In accordance with Section 15.2-2157 of the Code of Virginia, operation permits for alternative onsite sewage systems serving residential facilities must be conditioned. Before you receive an operation permit for your alternative onsite sewage system, you must record a notice in the land records of the Circuit Court in the locality where the system is located. You must furnish to the local health department a certification from the Clerk of the Circuit Court showing the deed book number and page number (or instrument number) upon which the notice was recorded. The notice must be indexed in the grantor index under your name.

The notice will state the following:

This permit is issued in accordance with the provisions of Title 32.1, Chapter 6 of the <u>Code of Virginia</u> as Amended, and §12VAC5-610-340 of the <u>Sewage Handling and Disposal Regulations</u> of the Virginia Department of Health. The continued validity of this permit is contingent upon compliance with the operation and maintenance requirements contained in the Owner's Operation and Maintenance Manual and <u>Regulations for Alternative Onsite</u>

<u>Sewage Systems</u> of the Virginia Department of Health (12VAC5-613-100 et seq.). Owners are advised to be aware of the operation and maintenance instructions for their alternative onsite sewage system and to follow them. Copies of the operation and maintenance instructions can be found by contacting the local health department for the locality where the onsite sewage disposal system is located.

If you have any questions or if this office can be of further service to you, please contact the Mathews County Health Department at (804) 725-7131.

Eric Thomas



Notice of Recordation: AOSS Operation and Maintenance Required

September 04, 2024

Notice for Recordation: AOSS Operation and Maintenance Required

TO:

FROM: Eric Thomas, Mathews County Health Department

RE: Tax Map/GPIN: MAT 05-08-A/ Permit ID #: 115-STS-109807 HDID#157-24-0129

Address: 4545 Buckley Hall Road Cobbs Creek, VA 23035

#### TO WHOM IT MAY CONCERN:

The Mathews County Health Department has approved an alternative onsite sewage system (AOSS) for use for the property identified above as long as the system is properly operated and maintained and performs in accordance with the Sewage Handling and Disposal Regulations (12 VAC 5-610-10 et seq.) and the Regulations for Alternative On-Site Sewage Systems (12 VAC 5-613-10 et seq.)

This permit is issued in accordance with the provisions of Title 32.1, Chapter 6 of the Code of Virginia as Amended, and section 12VAC5-610-340 of the Sewage Handling and Disposal Regulations. The continued validity of this permit is contingent upon compliance with the operation and maintenance requirements contained in the Owner's Operation and Maintenance Manual and the Regulations for Alternative Onsite Sewage Systems (12VAC5-613-100 et seq.). Owners are advised to be aware of the operation and maintenance instructions for their AOSS and to follow them. Copies of the operation and maintenance instructions should have been given to the original owner by the system designer and should be passed on from owner; they can also be found by contacting the local health department for the locality where the onsite sewage disposal system is located.

This Notice must be recorded in the owner's name in the grantor's index of the land records of the Clerk of the Circuit Court of the county having jurisdiction over the property. You must furnish the Mathews County Health Department with certification from the Clerk of the Circuit Court showing the deed book and page number or the instrument number upon which the notice was recorded before you can receive your permit to operate the on-site sewage treatment and disposal system.

As owner of the property, I acknowledge that the sewage disposal system designed to serve the dwelling requires adherence to the Owner's Operation and Maintenance Manual and to Part III, Operation and Maintenance, found in the Regulations for Alternative Onsite Sewage Systems of the Virginia Department of Health (12VAC5-613-100 et seq.).

Date	
COMMONWEALTH OF VIRGINIA, COUNTY/CITY OF	, to wit:
Subscribed and acknowledged before me this day of	, 20 by
Registration #:	
NOTARY PUBLIC for the	
COMMONWEALTH OF VIRGINIA AT LARGE My Commission expir	res



P.O. Box 353 Chesterfield, VA 23832 O 804-930-1007 F 804-930-1008

# **AOSE/PE Report for**

# Repair Permit

Property location:

Lot: Section: Subdivision:

County: Mathews

GPIN or Tax Map #: 5-8-A

Applicant/Client Address:

Prepared by AOSE/PE:

Larry W. Madison Jr.

4545 Buckley Hall Road Cobbs Creek, VA 23035 Madison Environmental P.O. Box 353 Chesterfield, VA 23832

Date: 08/28/2024

Revision Date: 09/04/2024

AOSE/PE Job Number: 6184

Health Dept. ID Number:

Contents of this Report: **Design Summary** Pump calculations **Pretreatment Specifications** 14 15 & 17 Construction Specifications Soil Summary Report **GeoMat Specifications** 10-13 General Construction Notes Construction Drawing Soil Profile Descriptions 6 19 Site Sketch Abbreviated Design **Pump Chamber Specifications** 16 & 18 Survey/Plat Well Documentation Other: 2-4 20 & 21

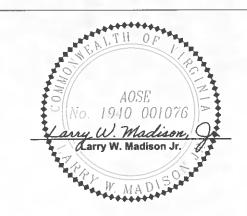
#### Certification Statement(s)

I hereby certify that the evaluations and/or designs contained herein were conducted in accordance with the applicable provisions of the Sewage Handling and Disposal Regulations (12 VAC5-610), the Private Well Regulations (12 VAC5-630), the Regulations for Alternative Onsite Sewage Systems (12VAC5-613) and all other applicable laws, regulations and policies implemented by the Virginia Department of Health. I further certify that I currently possess any professional license required by the laws and regulations of the Commonwealth that have been duly issued by the applicable agency charged with licensure to perform the work contained herein. The potential for both conventional and alternative onsite sewage systems has been discussed with the owner/applicant.

The work attached to this cover page has been conducted under an exemption to the practice of engineering, specifically the exemption in Code of Virginia Section 54.1-402.A.11

I recommend approval of:

Repair Permit



# **Condition Assessment**

Condition As	9622IIIC	III.			VDH Use Only HDIN: VPDES GP:
Owner and Applica Name:		ation 🛮 Repa	ir    Voluntai	ry Upgrade Phone Nun	nber:
Address: 4545 Buckley F Email:	fall Road				
System Location 4545	Buckley Hall R	oad			
Address:	0 A				
Tax Map/GPIN #: 5- Subdivision:		ction:	Blo	ok:	Lot:
Directions:	36	ction:	Div	CK.	Lut.
Directions.					
System File Informa	tion				
Permit Type:  Or	site Disposa	al 🔲	Stream Disch	arging System	1
Property Type: reside	ential				
Permitted Design Fl	ow: 750	gpd		ermitted #Bed	
System Type: Co					
Dispersal Method:					
Dispersal Media:	Gravel [			Tire Chips D	3 Sand
Gravelless Type:		Notes			
☐ Attach a Copy of	As-built dra	wing or drawii	ng of system la	iyout	
If failure observed or	reported by c	owner, REPA	AIR permit RE	QUIRED.	ne Effluent on the ground surface
Number of Occupant	S; <u>4</u>		Date S	ystem mstane	u
Current Use: Resident	al		Curren	t Number of E	Bedrooms: 5
Has property been oc	cupied durin	ng previous 30	day period?	Yes D N	No
Garbage Disposal:	☐ Yes ■	No Water	Softener:	Yes 🗏 No	Jacuzzi/Hot Tub: 🗆 Yes 🗏 No
Date of Last Septic T	ank Pump O	Out:	Date of	of Last Operate	or Visit
Component Status (	place check	under appropr	riate box)		
Component	Present	Inspected	Functional	Non- Functional	Observations/Comments
Sewer Line	х	х	Х		
Septic Tank	х	х		X	
Septic Tank Tees	х	х		X	
Treatment Unit					
Pump Chamber					
Pump					
Disinfection					

Conveyance Line				X	
D-Box	x	x		x	1
Splitter Manifold					
Header Trench	·x	х		Х	
Dispersal Pipe	x	x		Х	
Dispersal media	x			х	
Dispersal Field	1	1			
Other <sup>2-4</sup>					
Other	-	<del> </del>	:	<del>                                     </del>	
				1	
Additional Analyses	Needed	Conducted	Ob		
Analysis	Needed	Conducted	Observatio	ns/Comment	18
Flow	-				
Wastewater Sample					
Dye Test					
Other					
		-			
Sketch, if applicable					

Recommended Action: Repair
Identify Probable Cause of Component Malfunction (check all that apply):
☐ Unknown ☐ Damaged/Compromised ☐ Deterioration ☐ Hydraulic Overload ☐ Organic Overload ☐
Improper Maintenance  Root Infiltration
Describe temporary corrective recommended action(s) and purpose of action(s): reduced water usage
Describe Permanent recommended action(s) and purpose of action(s):
Form Completed By: Larry W Madison Jr.
Name:
Signature: Larry W. Madison, Or.
Signature: Larry W. Madison, Jr.  Date: 08/28/2024
Date.
AOSE #1940 001076
Professional License Type and Number: AOSE #1940 001076

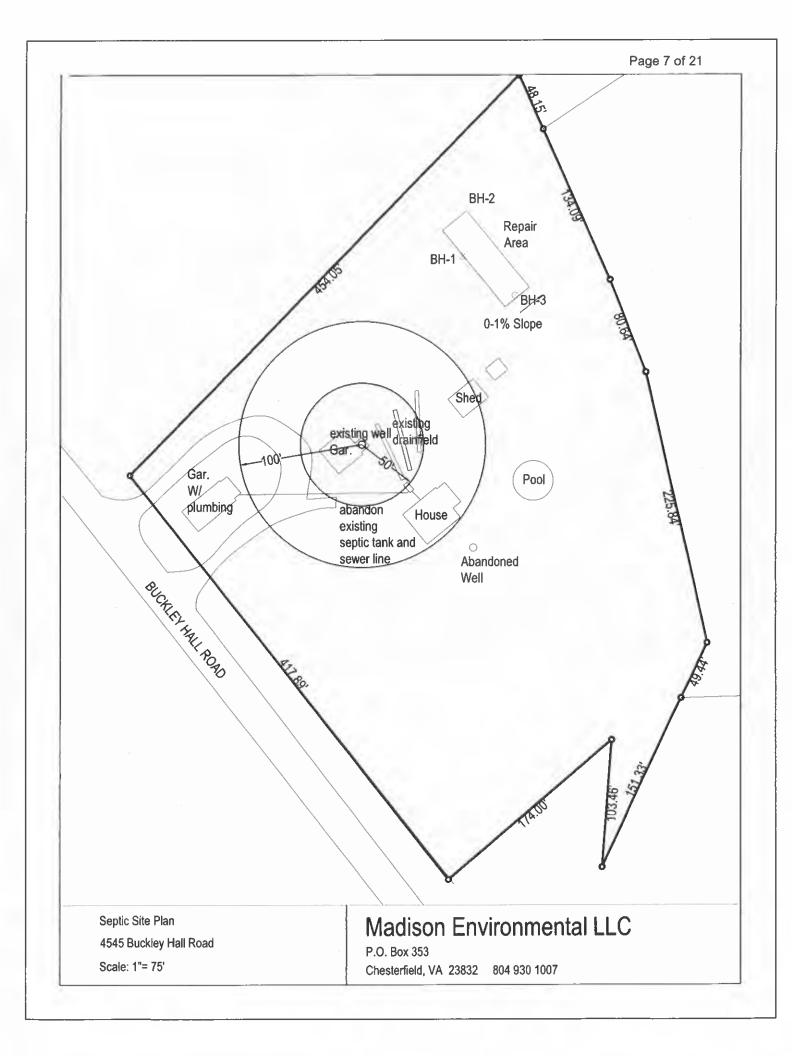
# **Site and Soil Evaluation Report**

HDIN:	VDH Use Only
חטווע:	

Genera	l Information
Date: 07/15/2024	Mathews County Health Department
Owner:	Phone:
Owner Address: 4545 Buckley Hall	Road , Cobbs Creek, VA 23035
Property Address: 4545 Buckley Hall Road	
Tax Map/GPIN #: 5-8-A	
Subdivision:	Section: Block: Lot:
	nation Summary
<ol> <li>Position in landscape satisfactory: ■ Yes □ No</li> <li>Slope: 0-1 %</li> </ol>	
3. Depth to rock/impervious strata: Maxin.	
4. Free Water Present: ☐ Yes ■ No	Range in inches:
5. Depth to seasonal water table (gray mottling or gra	
	Estimated rate: 45 min/in at 0 inches depth
Texture Group: □ I ■ II □ III □ IV	
7. Percolation test performed: Yes No If yes	
Name and title of evaluator: Larry W. Madison, Jr	
Signature: Larry W. Madison, Jr.	ribe dispersal area, e.g. absorption trenches) dispersing
TL3 (proposed level of treatment at	time of evaluation) to be placed at 0 (inches) depth at
site designated on permit. Site provides a total of 10	square feet of absorption area for primary and
reserve (if applicable).	
☐ Site disapproved: Reasons for rejection (check all	that apply)
<ol> <li>Position in landscape subject to flooding</li> <li>Insufficient depth of suitable soil over ha</li> <li>Insufficient depth of suitable soil to seaso</li> <li>Rates of absorption too slow.</li> </ol>	ord rock.
<ul> <li>5. □ Insufficient area of acceptable soil for red</li> <li>6. □ Proposed system too close to well.</li> <li>7. □ Other (specify)</li> </ul>	quired absorption area, and/or reserve area.

			Page 6	of 21
Date of	Evaluation	on: 07/15/202	Profile Description	
			SOIL EVALUATION REPORT	
Propert	y ID: 454	5 Buckley Hall	I Road	
drawing of private Concluding	on the cons Insite Soil I g all structu	truction peri Evaluator or ral features (	ent conducts the soil evaluation the location of profile holes may be shown on the somit or the sketch submitted with the application. If soil evaluations are conducted be Professional Engineer, location of profile holes and sketch of the area investigated (i.e. sewage disposal systems, wells, etc.) within 200 feet of the site and reserve sites page or prepared on a separate page and attached to this form.	y a l
☐ See a	pplication s	ketch	See Construction Permit	form.
Hole #	Horizon	Depth (Inches)	Description of color, texture, etc.	Texture Group
1	Α	0-4	2.5Y 4/2 loose sandy loam	- II
	E	4-12	2.5Y 7/4 loose sandy loam	11
	В	12-24	2.5Y 5/8 with few fine distinct 5YR 5/8 and 10YR 6/2 loose sandy loam	II
	В	24-36	2.5Y 5/8 with common medium distinct 5YR 5/8 and 10YR 6/2 loose sandy loam	II
2	A	0-4	2.5Y 4/2 loose sandy loam	l II
	E	4-12	2.5Y 7/4 loose sandy loam	11
	В	12-24	2.5Y 5/8 with few fine distinct 5YR 5/8 and 10YR 6/2 loose sandy loam	11
	В	24-36	2.5Y 5/8 with common medium distinct 5YR 5/8 and 10YR 6/2 loose sandy loam	11
3	Α	0-4	2.5Y 4/2 loose sandy loam	II
	Е	4-12	2.5Y 7/4 loose sandy loam	H
	В	12-24	2.5Y 5/8 with few fine distinct 5YR 5/8 and 10YR 6/2 loose sandy loam	H
	В	24-36	2.5Y 5/8 with common medium distinct 5YR 5/8 and 10YR 6/2 loose sandy loam	II.
		<u> </u>		
	*			
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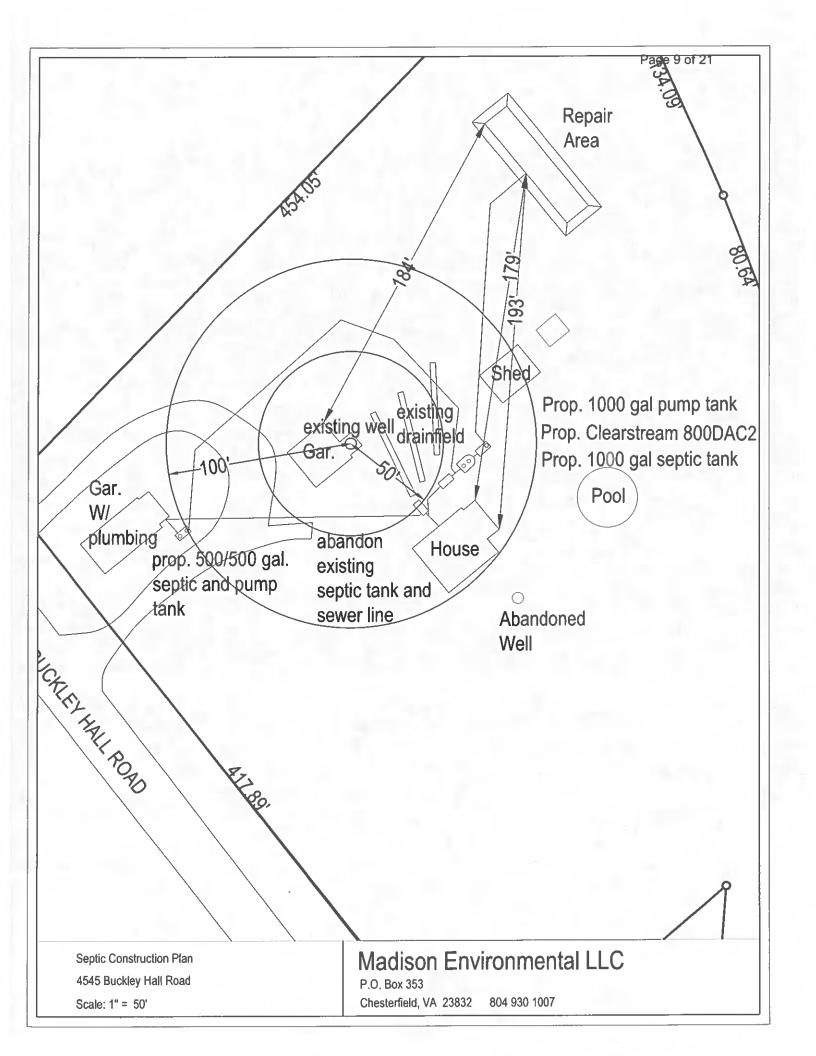
REMARKS: \_



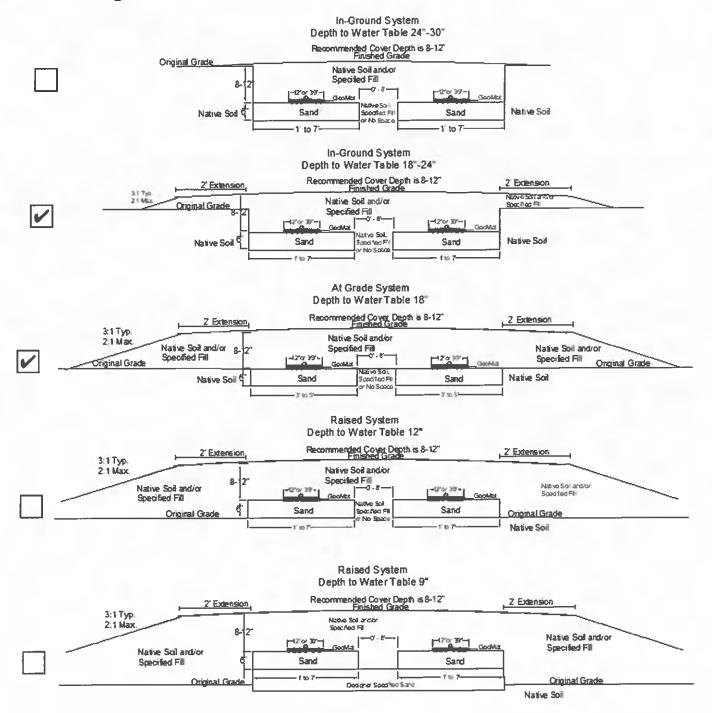
# **System Specifications**

	VDH Use Only
HDIN:	

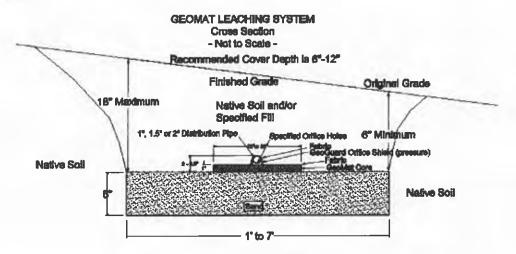
Application Information	
Name:	Address: 4545 Buckley Hall Road
Phone:	Cobbs Creek, VA 23035
Location Information	
Tax Map/GPIN #: 5-8-A	Property Address: 4545 Buckley Hall Road
Subdivision: Section:	Block: Lot:
Directions:	
General Information	
Property Type (e.g. residential): residential	Number of Bedrooms: 5
Daily Flow: 750 gpd	Conditions: none
Notes:	
Sewer Line	
Diameter: 4 in. Material: Sch 40	(or equivalent) Notes:
Pretreatment Unit(s)	
Treatment Level: TL3	Septic Tank Capacity: 1000 gallons
Number of Septic Tanks 1	Size of Septic Tank(s) 1000 gallons
Per the Sewage Handling and Disposal Regulations, cl	heck which option(s) chosen:
☐ Septic tank with inspection port ☐ Septic tank with	effluent filter  Reduced maintenance septic tank
Secondary treatment device(s), if applicable: Clearstream	800DAC2
Notes: the garage has plumbing, must add a top seam 1000 gallon 500/500 b	
Conveyance Line	Distribution Method and Header Lines
Conveyance Method: pump	Distribution Method: gravity
If pumping, include pump specifications sheet.	No. of boxes: 1 No. of outlets: 10
Material: Sch 40 Diameter: 1.5"	Surge or splitter box required: ☐ Yes ☐ No
Notes: see pump specs, 1000 gals top seam pump tank	Header Line Material: 4" I.D. 1500lb. crush strength plastic or equivalent
Percolation Lines/Absorption Area	
Dispersal Method (e.g. laterals, pad, mound): Pad	
If using pressure dispersal (e.g. drip), include pressure	dispersal specifications sheet.
No. of laterals/pads: 1 Length of lateral(s)/pa	d(s): 68 ft. Width of lateral(s)/pad(s): 15.5 ft.
Center to center spacing: NA ft. Installation de	epth: 0 in. Aggregate depth: NA in.
Size/Type of Aggregate: NA	Lateral/pad slope: 0 in. per 100 ft.
Reserve Area Provided: NA % Notes: See Geo	Mat spec. Cap and Crown with 12" of Screened Sandy loam topsoil
Please Note: 200' sanitary survey was conducted	



# **Drawings Cross Sections**

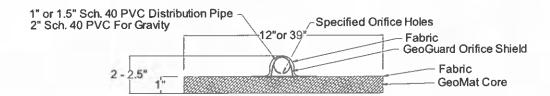


# **Sloping Detail**

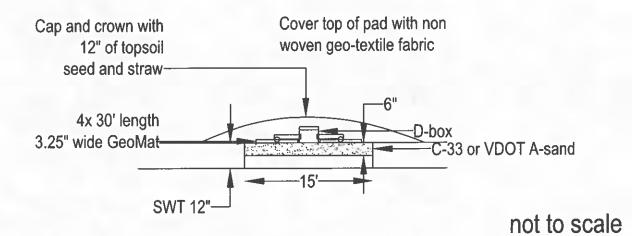


# **Parts**

# GEOMAT LEACHING SYSTEM Cross Section - Not to Scale -

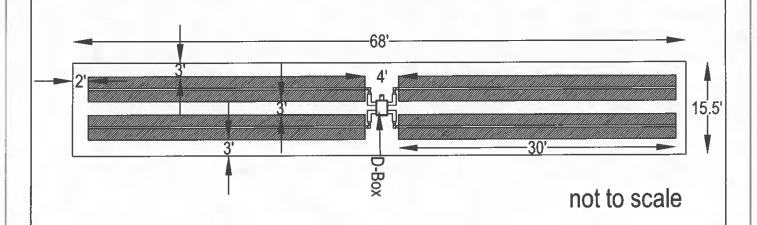


# cross section



# view from above

Bottom of pad to be level



Pad Detail

4545 Buckley Hall Road

Not to Scale

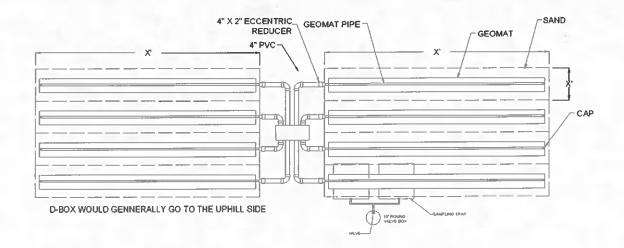
# Madison Environmental LLC

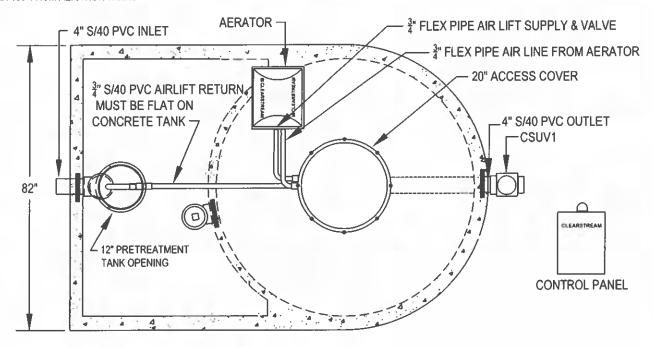
PO Box 353

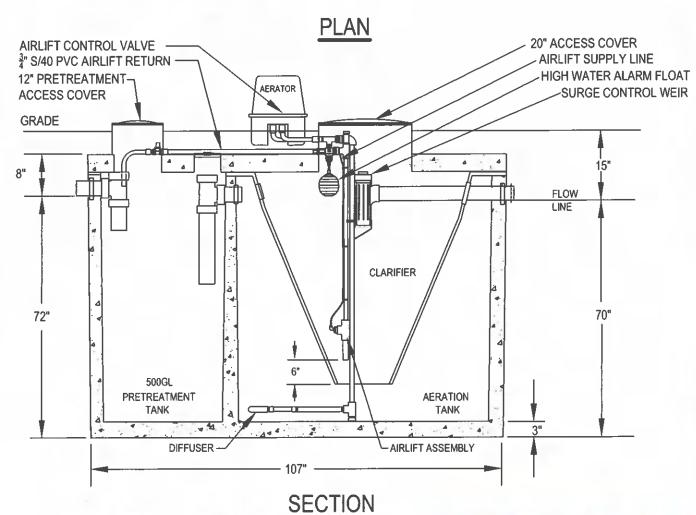
Chesterfield, VA 23832 804 930 1007

# **Taking a Sample**

- These procedures are to be performed only by a trained technician.
- Use proper safety equipment, including gloves and eye protection.
- Open valve in Sampling Port.
- Let water drain out
- Place cup under valve and leave in place until a sufficient amount of treated effluent has been obtained.
- When obtaining samples, use care not to touch collection cup against the side walls or bottom of the sampling port to prevent contamination.
- Immediately perform visual and olfactory assessment of collected sample.
- Thoroughly wash hands and any equipment used.







#### PROPRIETARY AND CONFIDENTIAL

THIS INFORMATION CONTAINED IN THE DRAWING IS THE SOLE PROPERTY OF CLEARSTREAM. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PREMISSION OF CLEARSTREAM IS PROHIBITED.

DRAWN BY RC	DATE		900DAC2
REVISED RC	DATE 11/13/2021		800DAC2
SCALE: NTS	SHEET 1 OF 1	DWG. NO.	800DAC2.dwg

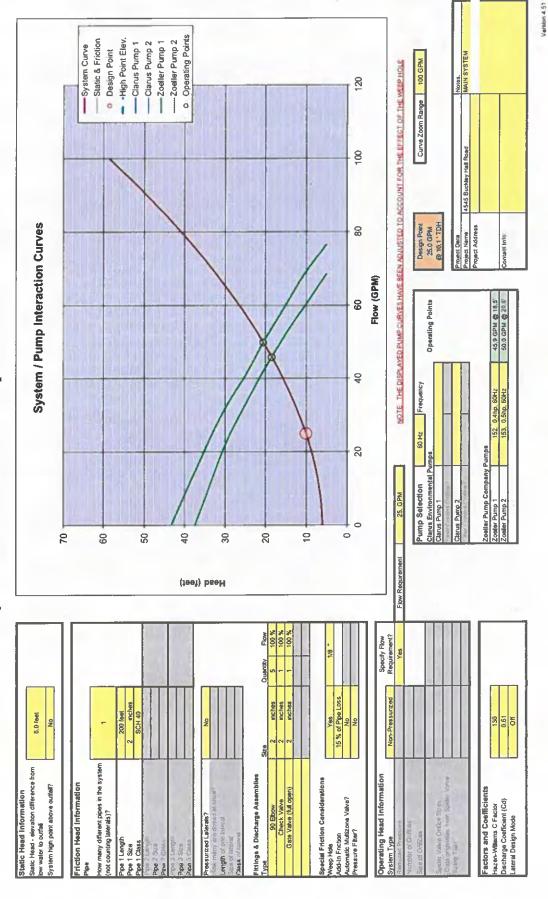




# **Zoeller Company**



# System Head Curve and Pump Selection Tool



# **PUMP SYSTEM PLANS AND SPECIFICATIONS**

# Required parts

1. Zoller 153 Effluent Pump

2. Clear stream plumbing Package

3. 5 hole clearsteam splice box

4. clearstream 3/4" GROMMETS

TANK SUPPLIER: Alcat Preacast TANK VOLUME: 1000 GALLONS

TANK VOLUME PER INCH: 21 GALLONS

**GALLON PER DAY: 900** 

TIMED DOSED

FLOW RATE 25 GPM

ON TIME: 2.5 MIN

OFF TIME: 1HR 57.5 MIN

#### Notes

1. Pump chamber shall be level and water tight. Boot seals require on inlet and outlet

2. The electrical motor control center and master disconnect switch shall be placed in a secure location 36" min. above grade and remote from pump station..

3. The alarm shall be audiovisual and shall alarm in an area where it may be easily

monitored.

 All electrical connections shall be hardwired with color coded, stranded wire. Do not use compression fittings.

All electrical wiring must be in conduit. Conduit must be primed and glued for water

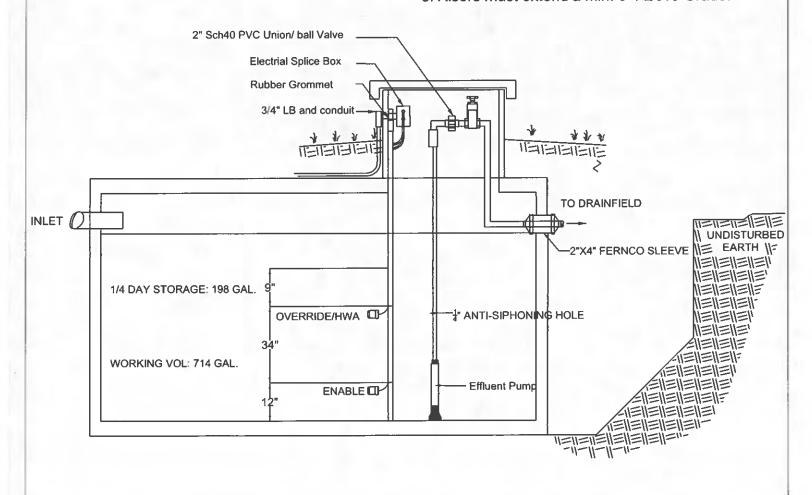
tiahtness.

6. All holes into risers for any electrical wiring must be sealed using **Polylok rubber** 

grommets.

7. All electrical splice boxes must be placed above grade and check valves must be readily accessible for maintenance and no deeper than 12" below top of riser

8. Risers must extend a min. 6" Above Grade.

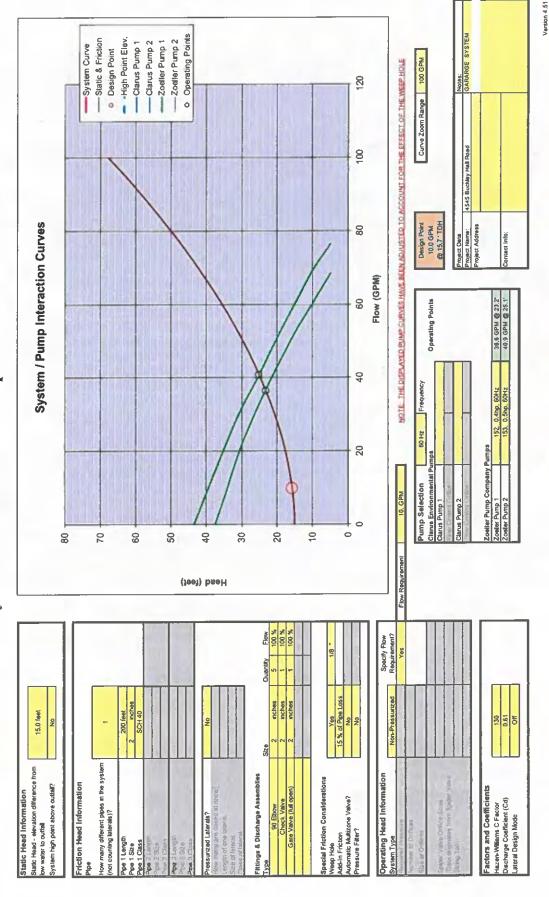




# **Zoeller Company**



System Head Curve and Pump Selection Tool



# **GARAGE PUMP SYSTEM PLANS AND SPECIFICATIONS**

# Required parts

- 1. Zoeller 152 .4HP 115V PUMP
- 2. clearstream demand dosed control panel
- 3. 2" SXS CHECKMATE CHECK UNION BALL VALVE
- clearstream PVC SPLICE BOX W/ 5 CORD GRIPS
- 5. 3007-GM.75 POLYLOK 3/4" GROMMET
- 6. CARLON E990ER-CAR 3/4 PVC PULL ELLBOW

REQUIRED POWER SUPPLY: 30 AMP BREAKER -115 VOLT (PUMP and CONTROLS )

TANK SUPPLIER: ALCAT PRECAST TANK VOLUME: 500 GALLONS

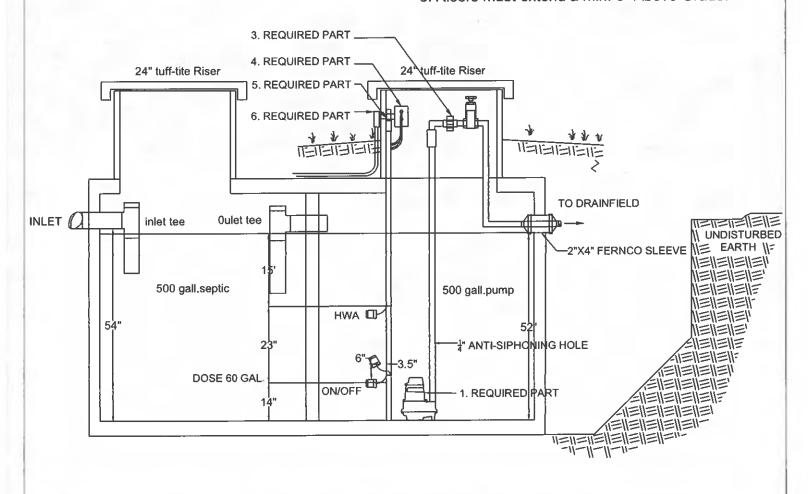
TANK VOLUME PER INCH: 10 GALLONS

DOSE: 25 GAL

PUMP FLOAT: SJE PUMP MASTER WITH 3.5" TETHER

# **Notes**

- 1. Pump chamber shall be level and water tight. Boot seals require on inlet and outlet
- The electrical motor control center and master disconnect switch shall be placed in a secure location 36" min. above grade and remote from pump station..
- The alarm shall be audiovisual and shall alarm in an area where it may be easily monitored.
- All electrical connections shall be hardwired with color coded, stranded wire. Do not use compression fittings.
- All electrical wiring must be in conduit. Conduit must be primed and glued for water tightness.
- All holes into risers for any electrical wiring must be sealed using Polylok rubber grommets.
- 7. All electrical splice boxes must be placed above grade and check valves must be readily accessible for maintenance and no deeper than 12" below top of riser
- 8. Risers must extend a min. 6" Above Grade.



# MADISON ENVIRONMENTAL SEPTIC SYSTEM CONSTRUCTION NOTES

- Installation must be in accordance with the Virginia Board of Health current Sewage Handling Regulations and OSHA codes.
- This sewage disposal system and/or water supply is to be constructed as specified by the permit and the attached drawings and specifications.
- Madison Environmental must be notified prior to any suggested changes to the design.
- Failure to install the system in accordance with the permit and state regulations may result in the system not being approved.

# PRE-CONSTRUCTION

- Read and review construction notes and pump specs prior to installation of system. Any deviation without prior approval may cause additional inspection fees.
- No buried utility service shall be closer than 10 ft. to any part of this system.
- Do not install drainfield system during periods of wet weather or wet soil. This could cause the site to become unsuitable for the drainfield.
- Do not stock pile soil on drainfield area.
- Shallow-placed drainfields (12" or less) must be hand cleared. Shallow-placed drainfield must be protected from heavy excavating equipment. The drainfield permit can be revoked if the site has been damaged by heavy equipment. Stumps may be carefully removed on the day of installation.
- Water loving trees and plants such as weeping willow, maple, gums and others shall be removed if within 25 feet of the drainfield. The roots of these trees may enter distribution lines or drainfield trenches and cause clogging and failure of the drainfield.

# INSTALLATION AND CONSTRUCTION

- Concrete septic tanks and d-boxes shall be sealed with hydraulic cement. This includes inlet and outlet ports, seams and any unused ports.
- All risers must extend 6" above final grade.
- Drainfield is to be installed in original, undisturbed soil at location specified on permit.
- The drainfield trenches shall be installed on contour and per VDH Regulations 12VAC 5-610-930, Section E.
- If installing anything other than gravel trenches, it must be preapproved.
- If system calls for a pump or alternative system please read additional notes for electrical wiring.
- Tank must be filled with water prior to start-up.
- Madison Environmental must be notified at least 48 hours prior to the final inspection.

# DRAINFIELD SITE CARE

- Keep structures and driveways off the drainfield and reserve areas.
- Do not drive heavy equipment on drainfield area (before and after installation of system).
- Roof drains, basement sump discharges (non-sewage), floor drains, footing drains, etc. being connected to this system is prohibited.
- Madison Environmental does not recommend the use of garbage disposals with septic systems unless an additional dedicated grease trap is installed.
- Lawn irrigation over drainfield area may cause drainfield failure and is not recommended.

	but 24
	GENERAL NOTES:
OWNER'S CONSENT	THE LAND DELINEATED HEREON IS LOCATED ON COUNTY TAX MAP NO. 5     (8) AS PARCEL A & PARCEL B.
THE FAMILY DIVISION OF PROPERTY, AS IT APPEARS ON THIS PLAT, IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES OF THE UNDERSIGNED OWNER (S), PROPRIETORS AND TRUSTEES, IF ANY.	2. CURRENT OWNER & REFERENCES: PARCEL A: RUTH ANN HUTSON; RACHEL A. DUKES; REGINA A. BROWN; LOGAN B. CANNON, III; ALUSON R. THOMAS; ANGELA THOMAS ELLINGTON; J.W. THOMAS, III-D.B. 229 @ PG 523; P.B. 10 @ PG, 43; L.B. 1 @ PG, 458, PLAT NO. 603. PARCEL B: RACHEL A. & DAVID J. DUKES-D.B. 117 @ PG, 471; P.B. 10 @ PG, 43; L.B. 1 @ PG, 456; PLAT NO. 603.
	3. THIS PARCEL LIES IN ZONE X, AREA DETERMINED TO BE OUTSIDE THE FLOOD HAZARD AREA, AS DEFINED ON THE NATIONAL FLOOD INSURANCE RATE MAP, PANEL NO. 510096 0003 B, DATED FEB. 4, 1987.
STATE OF: VUGENIA	4. THE LAND SHOWN HEREON AS PARCEL A-2, CONTAINING 1,4980 AC. IS TO BE ADDED TO AND NOT TO BE SOLD SEPARATE OR APART FROM THE LAND LYING TO THE MORTH, SHOWN HEREON AS PARCEL B.
	5. PROPERTY IS ZONED: RU
THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME	5. THE PROPERTY LINE SHOWN HEREON FROM (A) - (B) IS HEREBY VACATED.
THIS 19th DAY OF april 2004.	7. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND DOES NOT NECESSARILY SHOW ALL EASEMENTS, SERVITUDES AND COVENANTS OF RECORD.
	auster
The Stands	8. TOTAL AREA OMOED = 5.3975 ACRES.  HIERMAROS OF TRUSTEE  HIERMAROS OF TRUSTEE
- Dates of Sarright	W. Law 25 35 75 75 75
NOTARY PUBLIC AYPIRES: 7-31-04	HELEN THACKER LEWISCOS 22 N. 5.3. 2.3. 14 LEVINGER CO. T.
	EN TWO & B.
MAT APPROVAG	HELD STREET AND
ner is in conference with the requirements of this include Ordinance of Mathews County, VA., as existed on the	as desiler
the second and in baselist president for record-	1 Mark
as a market small stand that explained proposed by the first	
toward board box for our compact dolly in their past an exceptions.	
covers regard to the end of the county, YA., prior to the end of amendments subsequent to the approval data	1.
on to the Buildhislan Ordinance or other ordinances and	R=994 93'
and of the Commonwealth of Virginia pertaining to large	\=00°33′12°
ivision and the pletting of some that effect the succession	L=9.61' T=4.81'
in property depicted hursen.	Ø \ C=9.61'
ing Vacation / Dunday time Adjustment	?_ \ CB=N29'58'45"W
100 7 and Outdoor , 2004	8 10001123 30 43 11
211111-	PARCEL A-1
Our Ours	3.9015 Ac.
Talestone County Salastone Injury	
(4)	INSTRUMENT 8940002161 REFORMED IN THE CLERK'S OFFICE
	COLUMNY OF MATHEMS UN
RTIFICATE OF CERTIFIED LAND SURVEYOR	OCTURER 14, 2004 AT 08:21A
FAMILY DIVISION OF LAND AS SHOWN ON THIS PLAY, CONTAINING	E. E. CALLIS, III, CLERK
975 ACRES, SITUATED IN THE PIANKATANK MAGISTERIAL DISTRICT,	PECCORDEN BY: ACI
THE COUNTY OF WATHEWS, VIRGINIA, HAVING BEEN CONVEYED TO H ANN HUTSON, ET ALS. FROM RUTH A. CANNON BY DEED DATED	3 5.10
1, 1999 AND OF RECORD IN THE CLERK'S OFFICE OF THE CIRCU	in & on anylactifia
RT OF MATHEWS COUNTY, VIRGINIA IN DEED BOOK 229 @ PG. 52	E. E. CALLIS, 111, CLERK RECORDED BY: ACI August 171
Nd.	* \
HARLES F DAWSON DATE	\
DATE OF STREET	\
IMONWEALTH OF VIRGINIA	
TIFICATE NUMBER: 11338	\\
	<b>\</b>
HE UNDERSIGNED HEREBY CERTIFY THAT THIS SURVEY IS CORRECT	\
THE BEST OF MY KNOWLEDGE AND BELIEF AND IS BASED ON A RENT FIELD SURVEY.	LEGEID: 14.00.2
SEALTH ONE	RON ROD FOUND (I.R.F.) OR
OF WELL	IRON PIPE FOUND (LP F.)
18	O- CONCRETE MONUMENT FOUND  IRON ROD OR PIPE SET  DAVID L & CH
15 0 5 2 3 3 2 3	CONCRETE MONUMENT SET
C. F. DAWSON 5	T.J.B. TELEPHONE JUNCTION BOX D.B. 208 PG.
No. 1133B	O.U.L. OVERHEAD UTILITY LINE \ 0.8. 154 @ PG. 75
4/05/04	O/M OLD MARK N/F NOW OR FORMERLY L.B. 1 © PG. PLAT NO. 80
All Sold	R/W RIGHT-OF-WAY N.R. NON RADIAL
SURVI	1.0144 salas radione

