

Notice of Recordation of Future Operation Permit

November 30, 2023

Lewis Clark & Sons LLC
P.O. Box 371
Chincoteague, VA 23336

Subject: Recordation of Future Operation Permit
Permit ID: 001-STS-93637
Tax Map #: 30A6-16-D Part
Locality: Lot 3, East Side Road
Chincoteague, VA 23336

Dear Lewis Clark & Sons LLC:

Your application to construct an alternative onsite sewage system to serve a residence at the above location, filed on 11/06/2023 with the Accomack 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.

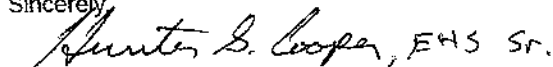
Your application is approved, and your construction permit is attached to this letter. After your alternative onsite sewage system is constructed and approved for use, the local health department will issue an Operation Permit. The Operation Permit will be valid as long the sewage disposal system is 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 Clerk 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 Code of Virginia as Amended, and §12VAC5-610-340 of the Sewage Handling and Disposal Regulations 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 Regulations for Alternative Onsite Sewage Systems 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 Accomack County Health Department at (757) 787-5886.

Sincerely,


Hunter S. Cooper, EHS Sr.



COMMONWEALTH of VIRGINIA

EASTERN SHORE HEALTH DISTRICT

ACCOMACK COUNTY HEALTH DEPARTMENT
23191 FRONT STREET
PO BOX 177
ACCOMAC, VIRGINIA 23301-0177

PHONE (757) 787-5880 OR 824-5616

NORTHAMPTON COUNTY HEALTH DEPARTMENT
7114 LANKFORD HIGHWAY
PO BOX 248
NASSAWADOX, VIRGINIA 23413-0248

PHONE (757) 442-6228

November 30, 2023

Lewis Clark & Sons LLC
P.O. Box 371
Chincoteague, VA 23336

Re: Notice for Recordation Instructions
Lot 3, East Side Road
Chincoteague, VA 23336
Tax Map#: 30A6-16-D Part
HDID# 23-100-0378

Dear Lewis Clark & Sons LLC:

The attached document (3 pgs – plus Clerk's Office Cover Sheet) will need to be signed in front of a Notary Public, in blue ink.

The documents, once notarized, need to be recorded at the **Accomack County Clerk of Court** in Accomac, Virginia. The **Clerk of Court** can be contacted at (757)787-5776 to check on the recordation fees. If you would like the Clerk of the Court to return the documents directly to the local health department, please discuss that procedure with them.

Please return the recorded documents, with clerk's receipt, to the Accomack County Health Department, located at 23191 Front Street, Accomac, Virginia 23301 and your operations permit will be issued to you.

It is important to have this document recorded. Without recordation future building applications may not be approved by approved by our office.

Please feel free to call me at (757) 302-4276 if you have any question.

Sincerely,

Hunter S. Cooper,
Environmental Health Specialist

Attachments: Notice for Recordation (3 pg) Clerk's Office Cover Sheet (1pg)



Accomack County Health Department
23191 Front Street
PO Box 177
Accomack, VA 23301
(757) 787-5880

PE Construction Permit 32.1-163.6

November 30, 2023

Sewage Disposal System Construction Permit - Va. Code § 32.1-163.6

Lewis Clark & Sons LLC
P.O. Box 371
Chincoteague, VA 23336

RE: Lot 3, East Side Road
Chincoteague, VA 23336
Tax Map#: 30A6-16-D Part
County: ACCOMACK
Permit ID: 001-STS-93637
HDID#: 23-100-0378

System Capacity: Residential, 6 Bedrooms, 900 gallons per day

Dear Lewis Clark & Sons LLC:

This letter and the attached drawings, specifications and calculations dated 10/31/2023, constitute your permit to install a sewage disposal system on the property referenced above. Your application for a permit was submitted pursuant to § 32.1-163.6 of the Code of Virginia, which requires the Virginia Department of Health (VDH) to accept designs for onsite sewage systems from individuals licensed as Professional Engineers (PEs). This law allows PEs to design onsite sewage systems that do not fully comply with the Sewage Handling and Disposal Regulations (12 VAC 5-610-10 et seq.) and requires VDH to accept such designs provided they comply with standard engineering practices, performance requirements set by the Board of Health, and certain horizontal setback requirements necessary to protect public health and the environment. VDH hereby recognizes that the design submitted by George Young, P.E., complies with the requirements of the Code of Virginia and the applicable regulations and grants permission to install the system as designed in the area shown on the attached plans and specifications.

If modifications or revisions are necessary between now and when the system is constructed, please contact the PE who designed the system upon which this permit is based. Should revisions be necessary during construction, your contractor should consult with the PE. The PE is authorized to make minor adjustments in the location or design of the system provided that adequate documentation is provided to the Accomack County Health Department.

The PE that submitted the design for this permit is required by the Sewage Handling and Disposal Regulations to conduct a final inspection of this sewage system when it is installed and to submit an inspection report and completion statement to the Accomack County Health Department. The sewage system may not be placed into operation until you have obtained an Operation Permit from the Accomack County Health Department.

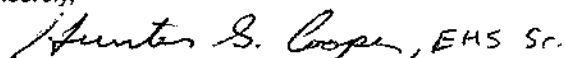
This Construction Permit is null and void if site and soil conditions are changed from those shown on your application or if conditions are changed from those shown on the attached plans and specifications. VDH may revoke or modify any permit if, at a later date, it finds that the system would threaten 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/>.

If you have any questions, please contact me.

This permit expires 05/30/2025.

Sincerely,



Hunter S. Cooper, EHS Sr.

CC: George E. Young, III P.E. / Robert C. Savage, AOSE

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 your PE. Your 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.

Allow 5 business days after the last piece of documentation is received for the Operation Permit to be issued. To avoid delays, clearly label each piece of documentation with the property Tax Map/GPIN number and HDID number shown above and on your construction permit. Please note that due to the individual circumstances of your permit there may be additional required items not covered by this checklist.

If you have any questions about any of the items on this list, please do not hesitate to contact the Accomack County Health Department.

Commonwealth of Virginia

Application for: ☒ Sewage System ☐ Water Supply

Owner Lewis Clark & Sons LLC

Mailing Address P.O. Box 371

Chincoteague, VA 23336-0371

Agent Savage Onsite Septic, LLC

Mailing Address P.O. Box 24

Painter, VA 23420

Site Address See Below

VDH Use only
Health Department ID# 23-100-10578
Date 11/6/23

Phone _____

Phone _____

Fax _____

Phone 757-710-2681

Phone _____

Fax N/A

Email _____

Directions to Property: Chincoteague, VA -- East Side Road S; lot on right just past 7917 East Side Road.

Subdivision _____ Section _____ Block _____ Lot 3 & Remainder

Tax Map 30A6-16-D Part Other Property Identification _____ Dimension/Acreage of Property 25,234.57 SF

Sewage System

Type of Approval: Applicants for new construction are advised to apply for a certification letter to determine if land is suitable for a sewage system and to apply for a construction permit (valid for 18 months) **only when ready to build.**

☐ Certification Letter ☒ Construction Permit ☐ Voluntary Upgrade ☐ Repair Permit ☐ Minor Modification

Proposed Use:

Single Family Home (Number of Bedrooms _____) Multi-Family Dwelling (Total Number of Bedrooms 6)

Other (describe) _____

Basement? ☐ Yes ☒ No

Walk-out Basement? ☐ Yes ☒ No

Fixtures in Basement ☐ Yes ☒ No

Conditional permit desired? ☐ Yes ☒ No

If yes, which conditions do you want?

☐ Reduced water flow ☐ Limited Occupancy ☐ Intermittent or seasonal use ☐ Temporary use not to exceed 1 year

Do you wish to apply for a betterment loan eligibility letter? ☐ Yes ☒ No *There is a \$50 fee for determination of eligibility.

Water Supply

Will the water supply be ☒ Public or ☐ Private?

Is the water supply ☒ Existing or ☐ Proposed?

If proposed, is this a replacement well? ☐ Yes ☒ No

If yes, will the old well be abandoned? ☐ Yes ☒ No

Will any buildings within 50' of the proposed well be termite treated? ☐ Yes ☒ No

Well Type (e.g. domestic use, agricultural, irrigation, etc.) Town of Chincoteague Public Water Supply

All Applicants

Is this property intended to serve as your (owners) principal place of residence? ☐ Yes ☒ No

All applications must be accompanied by private sector evaluations and designs, unless a petition for VDH services is approved. Is a Petition for Service form attached? ☐ Yes ☒ No

In order for VDH to process your application for a sewage system you must attached a plat of the property and a site sketch. For water supplies, a plat of the property is recommended and a site sketch is required. The site sketch should show your property lines, actual and/or proposed buildings and the desired location of your well and/or sewage system. When the site evaluation is conducted the property lines, building location and the proposed well and sewage sites must be clearly marked and the property sufficiently visible to see the topography. I give permission to the Virginia Department of Health to enter onto the property described during normal business hours for the purpose of processing this application and to perform quality assurance checks of evaluations and designs certified by a private sector Onsite Soil Evaluator or Professional Engineer as necessary until the sewage disposal system and/or private water supply has been constructed and approved.

Robert C. Savage For Savage Onsite Septic, LLC

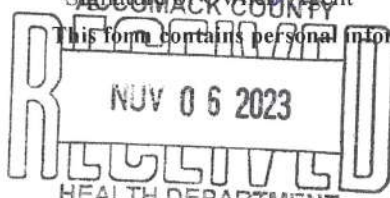
October 31, 2023

Signature of Owner/Agent

Date

This form contains personal information subject to disclosure under the Freedom of Information Act.

Revised 7/1/2019



001-515-93637

OSE/PE Report For:

Construction
PermitRepair
PermitVoluntary Upgrade
PermitCertification
LetterSubdivision
Approval

Property Location:

911 Address: N/A -- Not Yet Assigned City: Chincoteague

Lot 3 & Remainder Section Subdivision 23-100-0378

GPIN or Tax Map # 30A6-16-D Part Health Dept ID #

Latitude Longitude

Applicant or Client Mailing Address:

Name: Lewis Clark & Sons LLC

Street: P.O. Box 371

City: Chincoteague State VA Zip Code 23336-0371

Prepared by:

OSE Name License #

Address

City State Zip Code

PE Name George E. Young, III, P.C. License # 13087

Address 1504 Market Street

City Pocomoke City State MD Zip Code 21851

Date of Report 11/03/2023

Date of Revision #1

OSE/PE Job # V23238-F

Date of Revision #2

Contents/Index of this report (e.g., Site Evaluation Summary, Soil Profile Descriptions, Site Sketch, Abbreviated Design, etc.)

VDH Application

Construction Specs

Site Plan

Schematic Drawing

AOSE Soil Evaluation Report

Pump Calcs & Tech Data Sheets

Design Calcs

Recorded Easement & Survey Plat

Certification Statement

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 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 54-1-40. A.1.

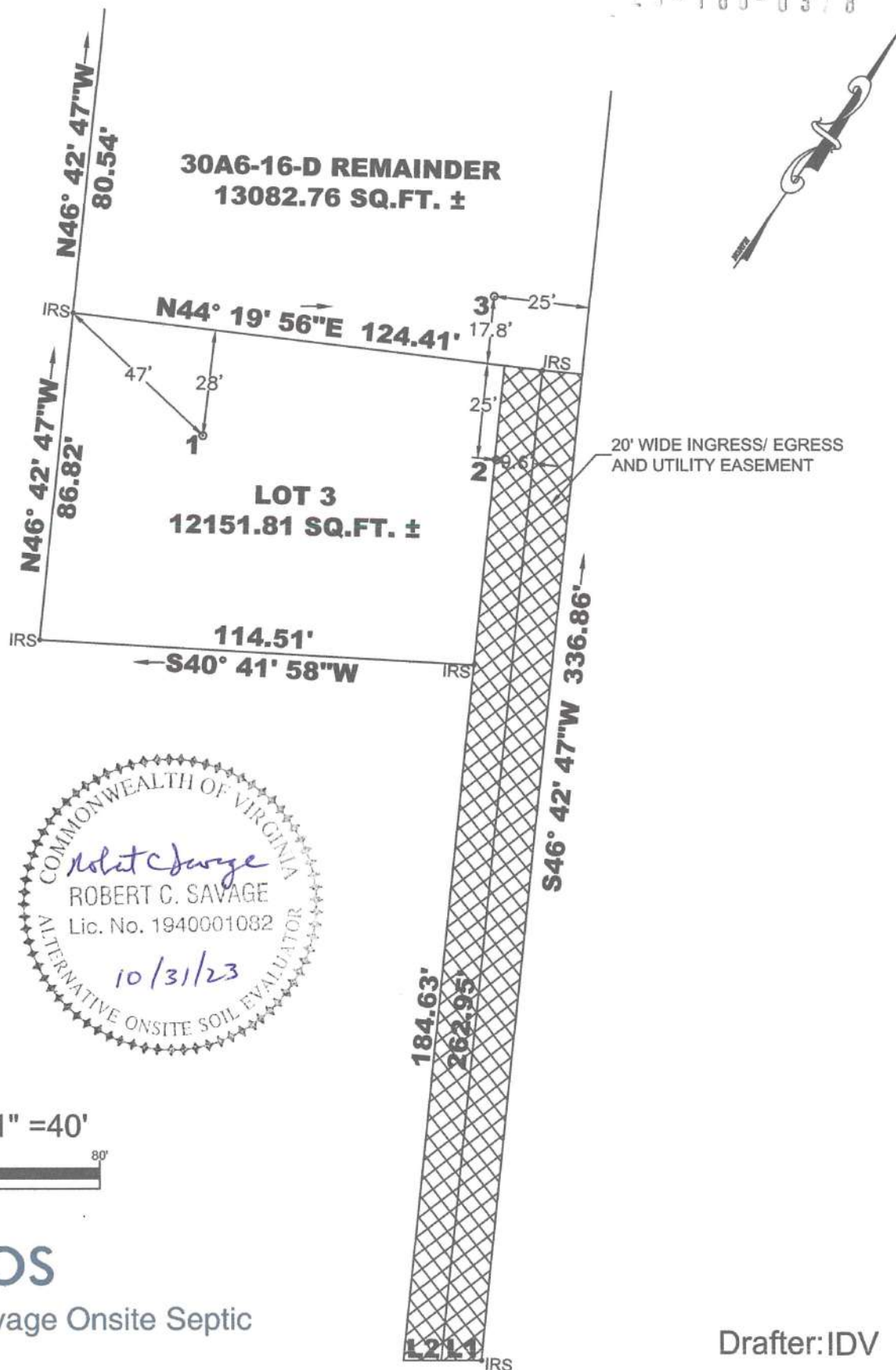
I recommend that a (select one) construction permit ☒ certification letter ☐ subdivision approval ☐ be (select one) issued ☒ repair permit ☒ voluntary upgrade ☐ Denied ☐

OSE/PE Signature

Date

NOV 03 2023

H.D.I. # 23-100-0378



Drafter: IDV

**VIRGINIA STATE
RTE #2103 EAST SIDE ROAD**

Site and Soil Evaluation Report

VDH Use Only
HDIN: 20-100-0378

General Information

Date: March 28, 2023 Accomack County Health Department
Owner: Lewis Clark & Sons LLC Phone: _____
Owner Address: P.O. Box 371, Chincoteague, VA 23336-0371
Property Address: Chincoteague, VA -- East Side RD S; lot on right just past 7917 East Side RD.
Tax Map/GPIN #: 30A6-16-D Part
Subdivision: _____ Section: _____ Block: _____ Lot: 3 & R

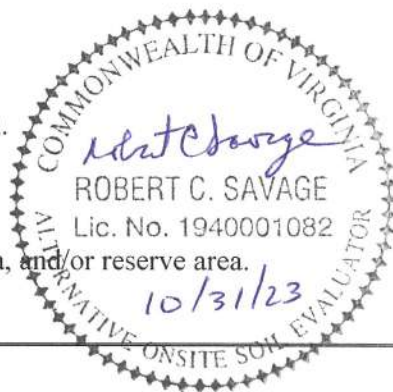
Soil Information Summary

1. Position in landscape satisfactory: ☒ Yes ☐ No Describe landscape position: Broad Flat
2. Slope: <1 %
3. Depth to rock/impervious strata: Max. _____ in. Min. _____ in. ☒ Not observed
4. Free Water Present: ☒ Yes ☐ No Range in inches: 44
5. Depth to seasonal water table (gray mottling or gray color): 0 inches ☐ Not observed
6. Soil percolation rate estimated: ☒ Yes ☐ No Estimated rate: 25 min/in at 6 inches depth
Texture Group: ☐ I ☒ II ☐ III ☐ IV
7. Percolation test performed: ☐ Yes ☒ No If yes, provide additional data on percolation test results.
Name and title of evaluator: Robert C. Savage, Master AOSE
Signature: _____

☒ Site approved: Disposal Pad (describe dispersal area, e.g. absorption trenches) dispersing TL-3 Effluent (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 840 square feet of absorption area for primary and reserve (if applicable).

☐ Site disapproved: Reasons for rejection (check all that apply)

1. ☐ Position in landscape subject to flooding or periodic saturation.
2. ☐ Insufficient depth of suitable soil over hard rock.
3. ☐ Insufficient depth of suitable soil to seasonal water table.
4. ☐ Rates of absorption too slow.
5. ☐ Insufficient area of acceptable soil for required absorption area, and/or reserve area.
6. ☐ Proposed system too close to well.
7. ☐ Other (specify) _____



Commonwealth of Virginia

Design Calculations

- 29-100-0378

Health Department ID# _____ (VDH Use)

Name of property / site: Lewis Clark & Sons LLC

Subdivision _____ Section _____ Block _____ Lot 3 & R

Other Property Identification 25,234.57 SF (Total) Tax Map No 30A6-16-D Part

DESIGN BASIS

A. Estimated percolation rate: 25 mpi

B. Trench bottom square footage required: _____ (based on _____ Gravity or X LPD)

GPD/SQ Ft: 1.1

Per 100-gallons: _____

C. Number of bedrooms: 6 (at 150 gallons/bedroom) Total flow from bedrooms: 900 gpd

Other: _____ (at _____ gpd) Total flows from other sources: _____ gpd

_____ (at _____ gpd) Total Sewage Flows = 900 gpd

_____ (at _____ gpd)

AREA CALCULATIONS

D. Length of pad: 70 ft (length of available area 70 ft)

E. Width of pad: 12 ft

F. Number of trenches: N/A

G. Center-to-center spacing: N/A ft

H. Required width of pad: 12 ft (width of available area 12 ft)

I. Total area required: 818 sf

J. Square footage in design: 840 sf

K. Is a reserve area required? _____ Yes X No: _____

Size: _____ % Area provided: _____

L. Type: FujiClean CEN-5 Units (2) with UV Disinfection

Note: 3-bedroom home on each lot Each residence to utilize its own CEN-5 unit and 500 gal. timed dose pump station.

Pump Station = 500 gals. 1/4 Day Storage = 112.5 gals. Working Volume = 75 gals.

Tank Volume = 1 Inch = 13.1 gals

1/4 Day Storage = 112.5 gals. / 13.1 = 8.59"

Time Dose Calcs:

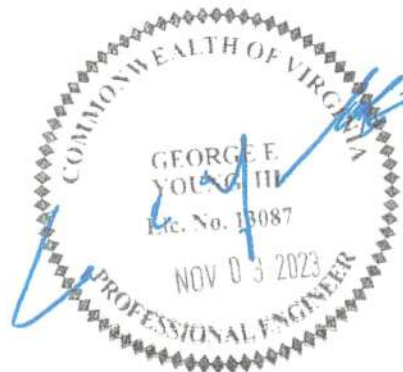
Cycles per day = 6

1440 min (minutes/24 hrs) / 6 cycles = 240 minutes per cycle

450 gals. / 6 cycles = 75 gals. per cycle

75 gals. / 41.4 gpm = 1.8 minutes (say 2 minutes) ON run time

Dosing Run Time = 2 minutes ON and 238 minutes OFF



Sewage Disposal System Construction Specifications

Page 7 of 29

General Information

Accomack County Health Department		ID #
Map reference		30A6-16-D Part
New ☒	Repair ☐	Expanded ☐
Owner Lewis Clark & Sons LLC		Telephone
Address P.O. Box 371, Chincoteague, VA 23336		
For a Type II Sewage disposal system which is to be constructed on/at Chincoteague, VA -- East Side Road S; lot on right just past 7917 East Side Road.		
Subdivision	Section	Block
Actual or estimated water use: 900 gpd		Lot 3 & Remainder

DESIGN

NOTES

Water supply, existing: (describe) **Chincoteague Town Public Water Supply**

To be installed: class _____ cased _____ grouted _____

Building Sewer:

4" I.D. PVC Schedule 40, or equivalent

Slope 1.25" per 10' (minimum).

☐ Other: _____

Septic tank:

Capacity _____ gallons (minimum).

☒ Other: **Sedimentation Chamber of FujiClean CEN5 Unit**

Inlet-Outlet structures:

PVC Schedule 40, 4" tees or equivalent

☒ Other: **Built-in Baffles inside FujiClean CEN5**

Pump and pump station:

No ☐ Yes ☒ describe and show design:

If yes: **See Attached**

Gravity mains: 3" or larger I.D., minimum 6" fall per 100', 1500 lb. Crush strength or eq.

☒ Other: **2" SCH 40 PVC Force Main**

Distribution Box:

Precast concrete with _____ ports.

☒ Other: **2" SCH 40 PVC Pressure Manifold**

Header lines:

Material: 4" I.D. 1500 lb. Crush strength plastic or equivalent from distribution box to 2' into trench.

Slope 2" minimum

☒ Other: **2" SCH 40 PVC Pressure Manifold**

Percolation lines:

Gravity 4" plastic 1000 lb. Per foot bearing load or equivalent, slope 2"-4" (min. max) per 100'.

☒ Other: **1.25" SCH 40 PVC LPP Laterals**

LPP Laterals to be housed inside
Ezflow 1203H-GEO

Disposal Pad:

Depth of aggregate: **12"**

Pad length: **70'**

Square feet required: **840**

Pad width: **12'**

Depth from ground surface to bottom of pad: **0"**

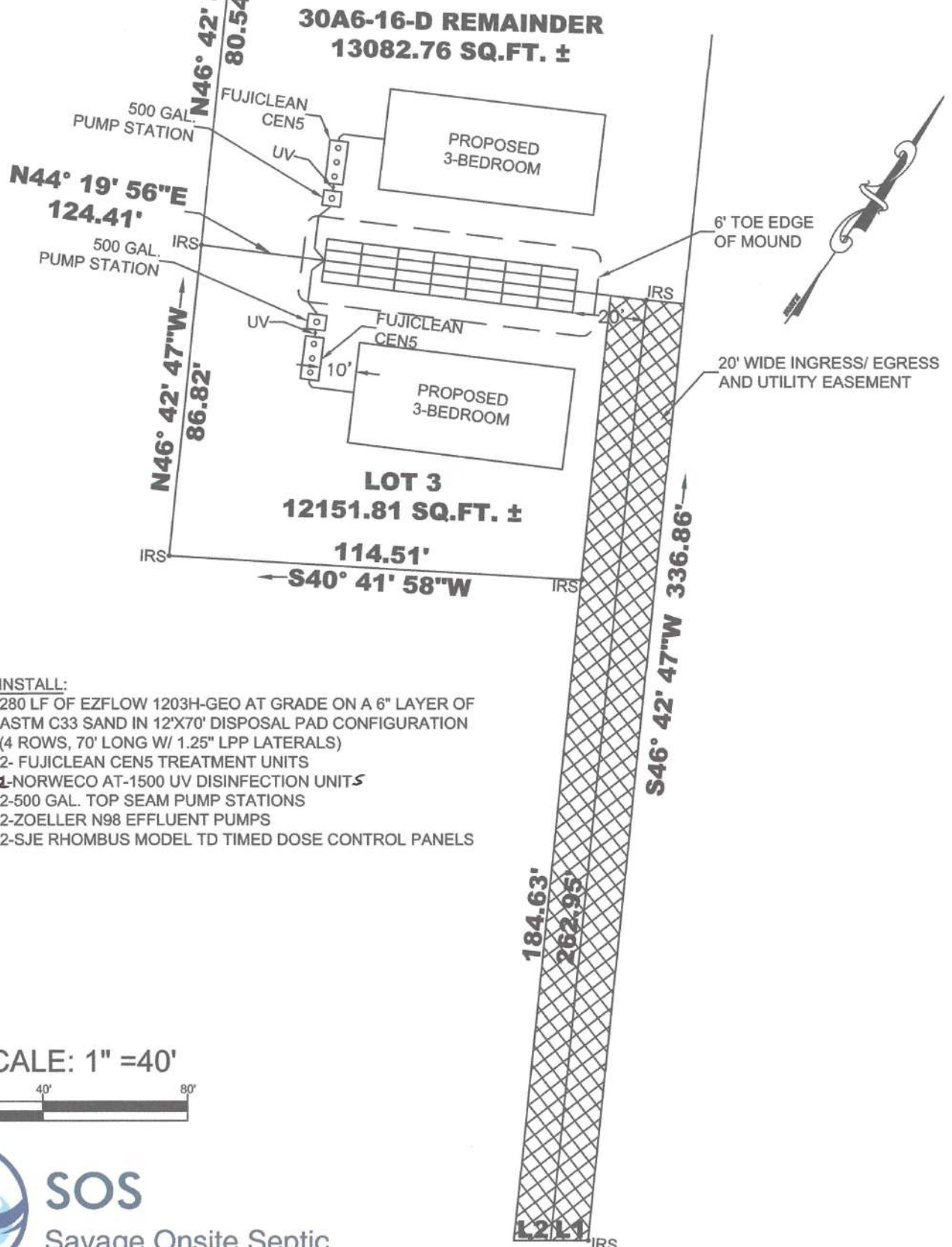
Number of trenches: **N/A**

*Height of Ezflow 1203H-GEO

Revised 6/99

Inspected by: _____

Date: _____



INSTALL:
280 LF OF EZFLOW 1203H-GEO AT GRADE ON A 6" LAYER OF ASTM C33 SAND IN 12'X70' DISPOSAL PAD CONFIGURATION (4 ROWS, 70' LONG W/ 1.25" LPP LATERALS)
2- FUJICLEAN CEN5 TREATMENT UNITS
1-NORWECO AT-1500 UV DISINFECTION UNITS
2-500 GAL. TOP SEAM PUMP STATIONS
2-ZOELLER N98 EFFLUENT PUMPS
2-SJE RHOMBUS MODEL TD TIMED DOSE CONTROL PANELS

SCALE: 1" = 40'

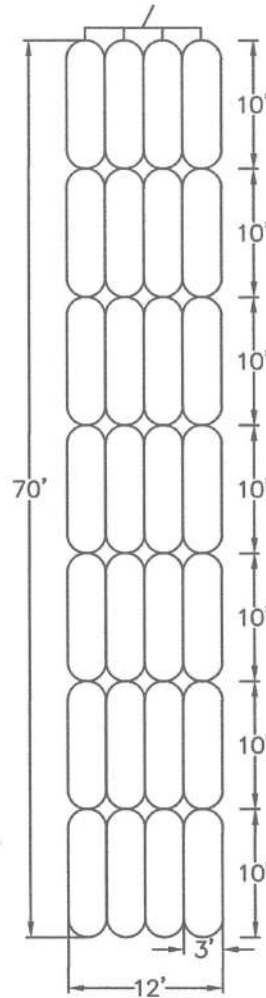


SOS

Savage Onsite Septic

**VIRGINIA STATE
RTE #2103 EAST SIDE ROAD**

Drafter: IDV

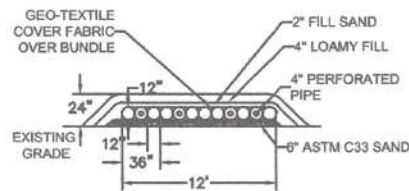


LPP NOTE:

1) $\frac{3}{16}$ " ORIFICES, 3-11/4" SCH40 PVC LLP LATERALS, 13 ORIFICES FACING UP AT THE 12 O'CLOCK POSITION, LAST POINTS DOWN AT THE 6 O'CLOCK POSITION.

2) ORIFICES TO BE SPACED 5' ON CENTER WITH FIRST ORIFICE PLACED 2.5' FROM THE BEGINNING OF THE LATERAL AND THE LAST PLACED 2.5' FROM THE DISTAL END OF THE LATERAL.

NOTE: TAPER ON A 3:1 SLOPE ON ALL 4 SIDES OF PAD. ALL DISTURBED AREAS SHALL BE SEEDDED WITH TALL FESCUE AT A RATE OF 2LBS. PER 1,000 SQ. FT. SCARIFY SURFACE PRIOR TO SAND PLACEMENT



SOS

Savage Onsite Septic

Drafter: IDV

10/29

LATERAL DESIGN SHEET									
PROJECT:	Lewis Clark & Sons LLC								
JOB NO.:	Lot 3 & Remainder								
DESIGN BY:	GEY	DATE:	10/30/23						
1.25 " Diameter Lateral, Schedule 40, PVC Pipe									
0.188 " Orifices at 5.00 Feet O.C.									
Nominal Pipe Diameter	1.25	inches					Actual Pipe I.D.	1.38	inches
Orifice Size	0.188	inches					Number of Orifices per Lateral	14	
Distance between Orifices	5.00	ft.					Lateral Discharge	10.3	GPM
Pressure at last Orifice	3.00	ft.					Required Head at Manifold	3.54	ft.
Note: Orifice #1 is the distal (last) orifice in the lateral.									
Orifice #	Residual Pressure	GPM per orifice	Sum of flow (gpm)	Segment Velocity (ft./sec.)	Segment Headloss (ft.)	Sum of lateral length (ft.)	Sum of headloss (ft.)	Is orifice flow greater than 10% of distal orifice (#1)	
1	3	0.721	0.721	0.15	0.001	5	0.001	-	
2	3.001	0.721	1.442	0.31	0.003	10	0.004	no	
3	3.004	0.722	2.164	0.46	0.007	15	0.011	no	
4	3.011	0.722	2.887	0.62	0.012	20	0.023	no	
5	3.023	0.724	3.610	0.77	0.018	25	0.041	no	
6	3.041	0.726	4.337	0.93	0.025	30	0.066	no	
7	3.066	0.729	5.066	1.09	0.033	35	0.099	no	
8	3.099	0.733	5.798	1.24	0.043	40	0.142	no	
9	3.142	0.738	6.536	1.40	0.053	45	0.195	no	
10	3.195	0.744	7.281	1.56	0.065	50	0.261	no	
11	3.261	0.752	8.033	1.72	0.078	55	0.339	no	
12	3.339	0.761	8.793	1.89	0.093	60	0.431	no	
13	3.431	0.771	9.565	2.05	0.108	65	0.539	no	
14	3.539	0.783	10.348	2.22	0.125	70	0.664	no	
15	3.664	0.797	11.145	2.39	0.143	75	0.808	yes	
16	3.808	0.812	11.957	2.57	0.163	80	0.971	yes	
17	3.971	0.830	12.787	2.74	0.185	85	1.156	yes	
18	4.156	0.849	13.636	2.93	0.208	90	1.364	yes	
19	4.364	0.870	14.506	3.11	0.234	95	1.598	yes	
20	4.598	0.893	15.399	3.30	0.261	100	1.859	yes	
21	4.859	0.918	16.316	3.50	0.290	105	2.149	yes	
22	5.149	0.945	17.261	3.70	0.322	110	2.471	yes	
23	5.471	0.974	18.235	3.91	0.357	115	2.828	yes	
24	5.828	1.005	19.240	4.13	0.394	120	3.222	yes	
25	6.222	1.039	20.279	4.35	0.434	125	3.656	yes	
26	6.656	1.074	21.353	4.58	0.478	130	4.133	yes	
27	7.133	1.112	22.465	4.82	0.525	135	4.658	yes	
28	7.658	1.152	23.617	5.07	0.575	140	5.233	yes	
29	8.233	1.195	24.812	5.33	0.630	145	5.863	yes	
30	8.863	1.240	26.051	5.59	0.690	150	6.553	yes	
31	9.553	1.287	27.338	5.87	0.754	155	7.308	yes	
32	10.308	1.337	28.675	6.15	0.824	160	8.132	yes	
33	11.132	1.389	30.064	6.45	0.899	165	9.031	yes	
34	12.031	1.444	31.508	6.76	0.981	170	10.012	yes	
35	13.012	1.502	33.010	7.08	1.069	175	11.081	yes	
36	14.081	1.562	34.573	7.42	1.165	180	12.245	yes	
37	15.245	1.626	36.198	7.77	1.268	185	13.513	yes	
38	16.513	1.692	37.890	8.13	1.380	190	14.893	yes	
39	17.893	1.761	39.651	8.51	1.501	195	16.393	yes	
40	19.393	1.834	41.485	8.90	1.632	200	18.025	yes	
41	21.025	1.909	43.394	9.31	1.773	205	19.798	yes	
42	22.798	1.988	45.382	9.74	1.926	210	21.724	yes	
43	24.724	2.070	47.452	10.18	2.092	215	23.816	yes	
44	26.816	2.156	49.608	10.65	2.271	220	26.088	yes	
45	29.088	2.246	51.854	11.13	2.465	225	28.553	yes	
46	31.553	2.339	54.193	11.63	2.675	230	31.228	yes	
47	34.228	2.436	56.629	12.15	2.901	235	34.129	yes	
48	37.129	2.537	59.166	12.70	3.146	240	37.275	yes	
49	40.275	2.642	61.808	13.27	3.411	245	40.687	yes	
50	43.687	2.752	64.560	13.86	3.698	250	44.385	yes	

PUMP DESIGN SHEET PG. 1

PROJECT	Lewis Clark & Sons LLC		
JOB NO	Lot 3 & Remainder		
DESIGN BY	GIF	DATE	10/30/23

LATERALS

NUMBER OF LATERALS	4	GPM PER LATERAL	10.35 GPM
		TOTAL REQUIRED GPM	41.39 GPM

DOSING TANK

SELECT PIPE TYPE AND DIAMETER	1 1/2" ▼	☒ SCHEDULE 40 OR POLYETHYLENE ☐ SCHEDULE 80 ☐ SDR 26	ACTUAL PIPE ID	1.61 IN
NOMINAL PIPE DIAMETER	1.50 IN	VEL =	6.52 FT/SEC	EQ LENGTH
LENGTH OF PIPE	4.0 FT			4.0 FT
NO. REDUCERS	EA	OUTPUT DIA	2.00 IN	0.0 FT
NO. 90 DEG ELBOWS	1 EA			4.5 FT
NO. GATE VALVES	1 EA			1.0 FT
NO. CHECK VALVES	1 EA			11.0 FT
TOTAL EQUIVALENT LENGTH				20.5 FT
-HEAD LOSS IN DOSING TANK = (E LENGTH) X (FRICTION LOSS PER LENGTH)				
20.50 FT		X	0.0949 FT/FT	1.94 FT

FORCE MAIN

SELECT PIPE TYPE AND DIAMETER	2" ▼	☒ SCHEDULE 40 OR POLYETHYLENE ☐ SCHEDULE 80 ☐ SDR 26	ACTUAL FM ID	2.07 IN
NOMINAL FORCE MAIN DIAMETER	2.00 IN	VEL =	3.96 FT/SEC	EQ LENGTH
LENGTH FORCE MAIN	20.0 FT			20.0 FT
NO. REDUCERS	EA	OUTPUT DIA	2.00 IN	0.0 FT
NO. 90 DEGREE ELBOWS	4 EA			22.0 FT
NO. GATE VALVES	EA			0.0 FT
NO. CHECK VALVES	EA			0.0 FT
TOTAL EQUIVALENT LENGTH				42.0 FT
-HEAD LOSS IN FORCE MAIN = (E LENGTH) X (FRICTION LOSS PER LENGTH)				
42.00 FT		X	0.0281 FT/FT	1.18 FT

ELEVATION HEAD

INVERT ELEV. OF LATERALS	5.00 FT		
LOW WATER ELEV. DOSING TANK	FT		
		ELEVATION HEAD DIFFERENCE	5.00 FT
		HEAD REQUIRED AT LATERAL AND MANIFOLD INTERSECT	3.54 FT
		-ELEVATION HEAD REQUIRED =	8.54 FT

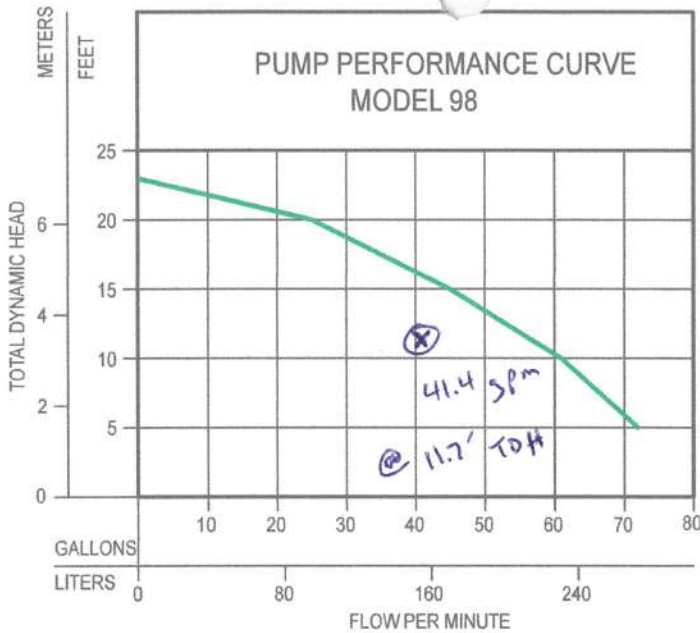


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20-100-0370

PUMP DESIGN SHEET PG. 2			
PROJECT	Lewis Clark & Sons LLC		
JOB NO	Lot 3 & Remainder		
DESIGN BY	G-E-Y	DATE	10/30/23
OTHER HEAD LOSSES			
K-RAIN VALVE # (0 FOR NONE)		K-RAIN HEAD LOSS	0.00 FT
DESCRIBE (IE. ADDITIONAL REDUCERS)			FT
-TOTAL OTHER LOSSES =			0.00 FT
TOTAL DYNAMIC HEAD			
DOSING TANK LOSSES			1.94 FT
FORCE MAIN LOSSES			1.18 FT
ELEVATION (STATIC) HEAD			8.54 FT
OTHER LOSSES			0.00 FT
TOTAL HEAD LOSS			11.66 FT
PUMP MUST BE CAPABLE OF PUMPING 41.4 G.P.M.			
AT A T.D.H. OF 11.7 FT.			

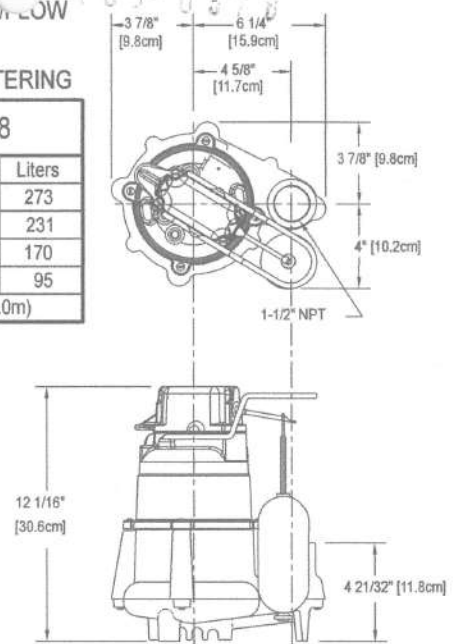




**TOTAL DYNAMIC HEAD PER MINUTE
EFFLUENT AND DEWATERING**

MODEL		98	
Feet	Meters	Gal.	Liters
5	1.5	72	273
10	3.0	61	231
15	4.6	45	170
20	7.1	25	95
Shut-off Head:		23 ft.(7.0m)	

009971



SK1102

CONSULT FACTORY FOR SPECIAL APPLICATIONS

- Electrical alternators, for duplex systems, are available and supplied with an alarm
- Mechanical alternators, for duplex systems, are available with or without alarm switches
- Variable level float switches are available for controlling single and three phase systems
- Double piggyback variable level float switches are available for variable level long cycle controls
- Refer to FM1922 and FM0806 for temperatures above 130°F

98 Series					Control Selection	
Model	Volts-Ph	Mode	Amps		Simplex	Duplex
M98	115	1	Auto	9.4	1	4
N98	115	1	Non	9.4	2 or 3	4
D98	230	1	Auto	4.7	1	4
E98	230	1	Non	4.7	2 or 3	4

SELECTION GUIDE

1. Integral float operated mechanical switch, no external control required.
2. For automatic use single piggyback variable level float switch or double piggyback variable level float switch. Refer to FM0477.
3. See FM1228 for correct model of simplex control panel.
4. See FM0712 for correct model of duplex control panel or FM1663 for a residential alternator system.

For information on additional Zoeller products refer to catalog on Piggyback Variable Level Switches, FM0477; Electrical Alternator, FM0486; Mechanical Alternator, FM0495; Sump/ Sewage Basins, FM0487; Single Phase Simplex Pump Control, FM1596; Alarm Systems, FM0732.

CAUTION

All installation of controls, protection devices and wiring should be done by a qualified licensed electrician. All electrical and safety codes should be followed including the most recent National Electrical Code (NEC) and the Occupational Safety and Health Act (OSHA).

"Easy assembly"
(pump & discharge pipe not included.)

OPTIONAL PUMP STAND P/N 10-2421

- Reduces potential clogging by debris.
- Replaces rocks or bricks under the pump.
- Made of durable, noncorrosive ABS.
- Raises pump 2" off bottom of basin.
- Provides the ability to raise intake by adding sections of 1½" or 2" PVC piping.
- Attaches securely to pump.
- Accommodates sump, dewatering and effluent applications.

NOTE: Make sure float is free from obstruction.

RESERVE POWERED DESIGN

For unusual conditions a reserve safety factor is engineered into the design of every Zoeller pump.



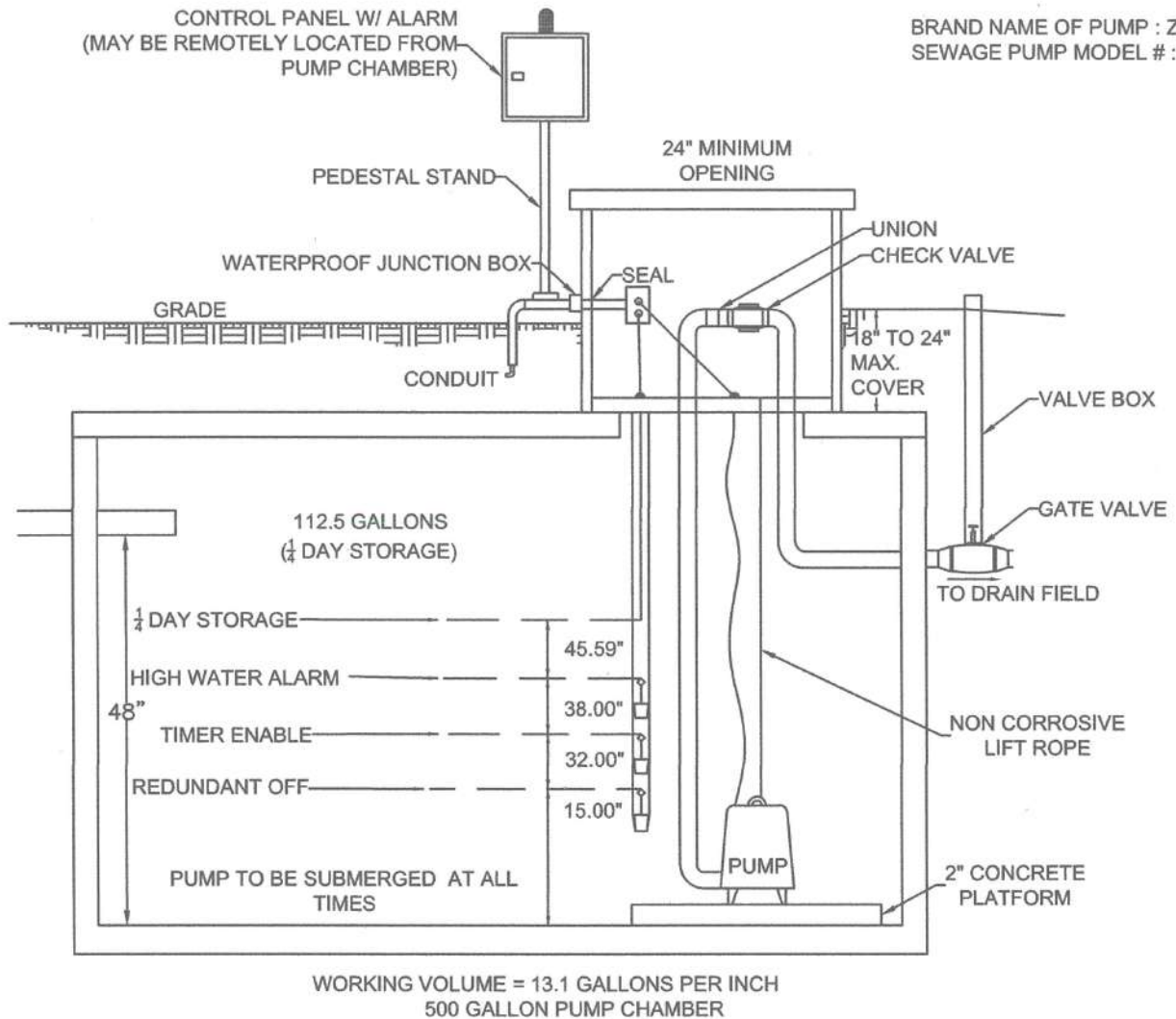
PUMP COMPANY

MAIL TO: P.O. BOX 16347 • Louisville, KY 40256-0347
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(502) 778-2731 • 1 (800) 928-PUMP • FAX (502) 774-3624

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www.zoeller.com

PUMP STATION SCHEMATIC



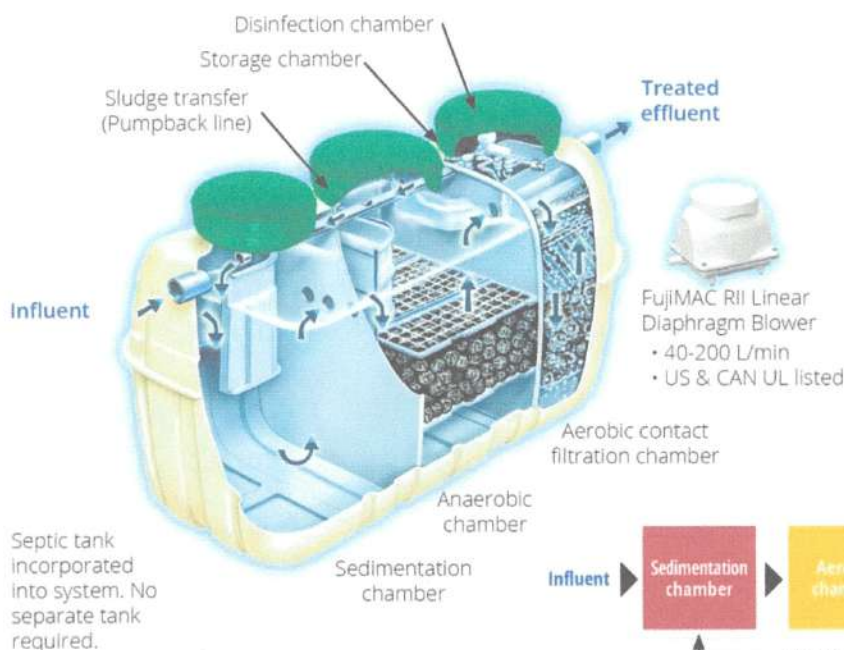
CONSTRUCTION NOTES

- PUMP CHAMBER TO BE SEALED WATERTIGHT.
- PUMP TO BE SEPARATE ELECTRICAL CIRCUIT FROM ALARM.
- ALARM TO BE AUDIO/VISUAL.
- PUMP AND ALARM TO BE HARDWIRED INTO ELECTRIC SYSTEM.
- PUMP CHAMBER MUST BE ANCHORED OR WEIGHTED TO PREVENT FLOTATION.
- CENTER AND TOP SEAM TANKS MUST BE SEALED WITH BITUMINOUS MASTIC-TOP SEAM TANKS RECOMMENDED.



SOS
Savage Onsite Septic

Drafter: IDV



Fuji Clean Advantages

- Over 2 million installed systems worldwide
- 1-tank system - no septic tank necessary
- No moving parts in tank
- Built-in equalization - levels variable inflow
- NSF 40 and 40/245 certified
- TN removal to 70+% with CEN models
- Phosphorous reduction technology
- Smallest footprint vs. competitors
- Lowest power use vs. competitors
- Lightweight tank - easy installation
- Quick and easy O&M - no mess
- Rapid startup and restart for seasonal homes

Treatment Process



Design Specification Table	CE Series BOD, TSS, TN*							CEN Series BOD, TSS, Enhanced TN				
Model:	CE5	CE7	CE10	CE14	CE21	CE30	CE6KG	CEN5	CEN7	CEN10	CEN14	CEN21
Load Hydraulic (GPD)	500	700	900	1,000	1,900	2,700	6,000	500	700	1,000	1,350	1,900
Effluent (assumes domestic strength influent):												
BOD - Effluent (mg/L)	10-20	10-20	10-20	10-20	10-20	10-20	10-20	10	10	10	10	10
BOD (Removal Lbs./Day)	.52	.73	1.04	1.46	2.08	3.12	6.93	.69	.97	1.38	1.86	2.9
TSS (mg/L)	10-20	10-20	10-20	10-20	10-20	10-20	10-20	10	10	10	10	10
TN (mg/L)	10-20	10-20	10-20	10-20	10-20	10-20	10-20	10	10	10	10	10
Blower Detail:												
Blower Model	80RII	80RII	100RII	150RII	200RII	150RII (2)	200RII (4)	80RII	100RII	150RII	200RII	150RII (2)
Normal Pressure (kPa)	15	15	18	20	20	20	20	15	18	20	20	20
CFM; L/Min	2.8 CFM 80 L/MIN	2.8 CFM 80 L/MIN	3.5 CFM 100 L/MIN	5.3 CFM 150 L/MIN	7.0 CFM 200 L/MIN	11.0 CFM 300 L/MIN	28.0 CFM 800 L/MIN	2.8 CFM 80 L/MIN	3.5 CFM 100 L/MIN	5.3 CFM 150 L/MIN	7.0 CFM 200 L/MIN	11.0 CFM 300 L/MIN
Power Use (kWh/day)	1.2	1.2	1.7	2.7	3.7	5.4	14.8	1.2	1.7	2.7	3.7	5.4
Weight (lbs.)	11	11	11	13	13	13 x 2	13 x 4	11	11	13	13	13 x 2
Outlet Diameter OD-inches)	0.70	0.70	0.70	1.0	1.0	1.0 x 2	1.0 x 4	0.70	0.70	1.0	1.0	1.0 x 2
Tank Detail:												
Material	Fibre-reinforced plastic							Fibre-reinforced plastic				
Height (inches)	61.8	65.7	73.6	77.4	81.3	87.2	87.2	65.7	73.6	77.4	81.3	87.2
Length (inches)	85	95.7	98.8	118.9	152.8	183.7	434.7	95.7	98.8	118.9	152.8	183.7
Width (inches)	43.7	49.2	56.7	68.9	72.4	78.3	115.3	49.2	56.7	68.9	72.4	78.3
Weight (lbs.)	397	463	705	926	1,168	1,543	2,900	463	705	926	1,168	1,543
Inlet Invert (inches)	49	53	61	62	65	71	67	53	61	62	65	71
Outlet Invert (inches)	47	51	59	59.5	63	69	64	51	59	59.5	63	69
Access Ports (number)	3	3	3	3	3	3	7	3	3	3	3	3
Access Port Diameter (inches)	3@20"	2@20" 1@24"	2@20" 1@24"	2@20" 1@24"	2@20" 1@24"	2@20" 1@24"	4@24"x24" 3@24"x48"	2@20" 1@24"	2@20" 1@24"	2@20" 1@24"	2@20" 1@24"	2@20" 1@24"
Volume Total (gallons)	545	749	1,069	1,498	2,252	3,199	7,267	749	1,069	1,498	2,252	3,199

* TN removal for CE systems based on field testing. Contact Fuji Clean USA for details.

MODEL TD Control Panel

Single phase, simplex timed dosing pump control.

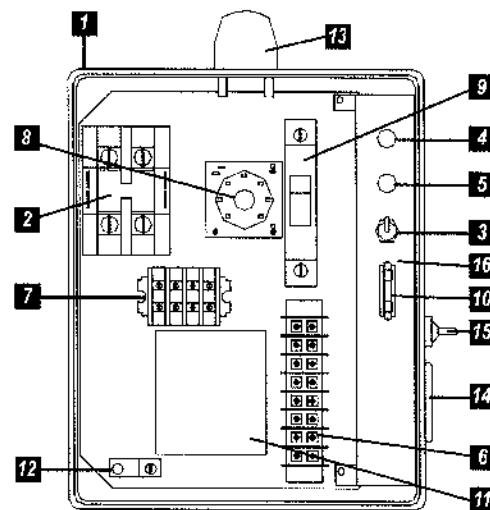
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The Model TD control panel provides a reliable means of controlling one single phase pump in onsite septic installations. A programmable timer activates a magnetic motor contactor to turn the pump on and off. A low level cutout float overrides the timer to prevent the pump from running dry. An alarm float activates the audio/visual alarm system indicating a high liquid level. Common applications include sand filter systems, pressure distribution systems, mound systems, or any application requiring a timed dose.

PANEL COMPONENTS

1. **Enclosure** measures 10 x 8 x 4 inches (25.40 x 20.32 x 10.16 cm) NEMA 4X (ultraviolet stabilized thermoplastic with removable mounting feet for outdoor or indoor use).
2. **Magnetic Motor Contactor** controls pump by switching electrical lines.
3. **HOA Switch** for manual pump control.
4. **Control Fuse**
5. **Alarm Fuse**
6. **Float Switch Terminal Block**
7. **Incoming Power Terminal Block**
8. **Programmable Timer** with separate variable controls allows for setting the on and off times from .05 seconds to 30 hours.
9. **Circuit Breaker** provides pump disconnect and branch circuit protection.
10. **Spare Fuse**
11. **Backplate Label** includes diagram of float, pump, and power connections.
12. **Ground Lug**

NOTE: Timer Installation Label and Pump/Float Switch Installation Specification Label are located inside the panel on enclosure cover.



Model Shown TD1W914X

STANDARD ALARM PACKAGE

13. **Red Alarm Beacon** provides 360° visual check of alarm condition.
14. **Alarm Horn** provides audio warning of alarm condition (83 to 85 decibel rating).
15. **Exterior Alarm Test/Normal/Silence Switch** allows horn and light to be tested and horn to be silenced in an alarm condition. Alarm automatically resets once alarm condition is cleared.
16. **Horn Silence Relay** (mounted under bracket).

NOTE: other options available.

FEATURES

- Entire control system (panel and switches) is UL Listed to meet and/or exceed industry safety standards
- Dual safety certification for the United States and Canada
- Standard package includes two 20' SJE PumpMaster® pump switches
- Complete with step-by-step installation instructions
- Three-year limited warranty

OPTIONAL FEATURE

- **34" (86.36cm) Panel Mounting Post** (Factory Installed). Includes Duplex Installation Kit (Enclosure upsized to 10" x 8" x 6" (25.4 x 20.32 x 15.24 cm). Max. Enclosure size 14" x 12" x 6" (35.56 x 30.48 x 15.24 cm)

SEE BACKSIDE FOR COMPLETE LISTING OF AVAILABLE OPTIONS.
SEE PRICE BOOK FOR LIST PRICE.



SJE Rhombus

PO Box 1708, Detroit Lakes, MN 56502

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1-218-847-4617 Fax

email: sje@sjerhombus.com

www.sjerhombus.com

MODEL AT 1500

UV DISINFECTION SYSTEM

INSTALLATION AND OPERATION MANUAL

The Model AT 1500 UV disinfection system is listed with Underwriters Laboratories (UL) under Standard 979 as a residential treatment device. The installer should provide a power disconnect switch mounted to the exterior of the facility being served to de-energize power to the unit during maintenance. Electrical work must be performed in accordance with the latest edition of the National Electrical Code, as well as all applicable local codes. The Model AT 1500 UV disinfection system conforms to the applicable provisions of the Code of Federal Regulations (CFR) requirements including Title 21, Chapter 1, Subchapter J, Radiological Health. **CAUTION: DO NOT LOOK DIRECTLY AT THE UV LAMP OR EXPOSE SKIN DURING OPERATION. PERMANENT EYE DAMAGE AND SKIN BURNS WILL OCCUR FROM UV RADIATION EXPOSURE. UV BLOCKING SAFETY GLASSES MUST BE WORN DURING INSTALLATION, SERVICE OR ANY TIME THE LAMP MAY BE ILLUMINATED. UV BLOCKING SAFETY GLASSES ARE AVAILABLE FROM NORWECO.**

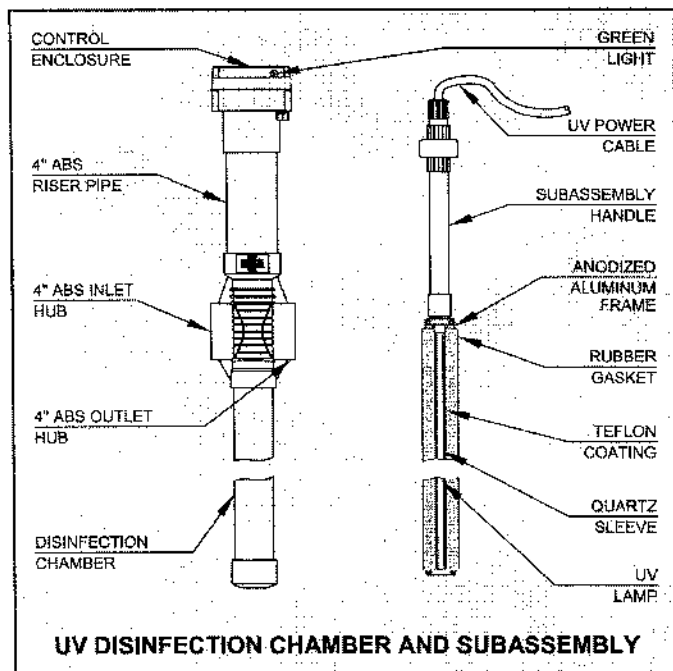
COMPONENTS

The Model AT 1500 UV disinfection system consists of the following components:

- | | |
|---|---|
| 1) Control enclosure | 5) Power cable with female twist lock connector |
| 2) 4" ABS riser pipe | 6) UV subassembly with quartz sleeve and Teflon coating |
| 3) Disinfection chamber with turbulence inducer | 7) Subassembly handle |
| 4) UV lamp (bulb) with male connector | |

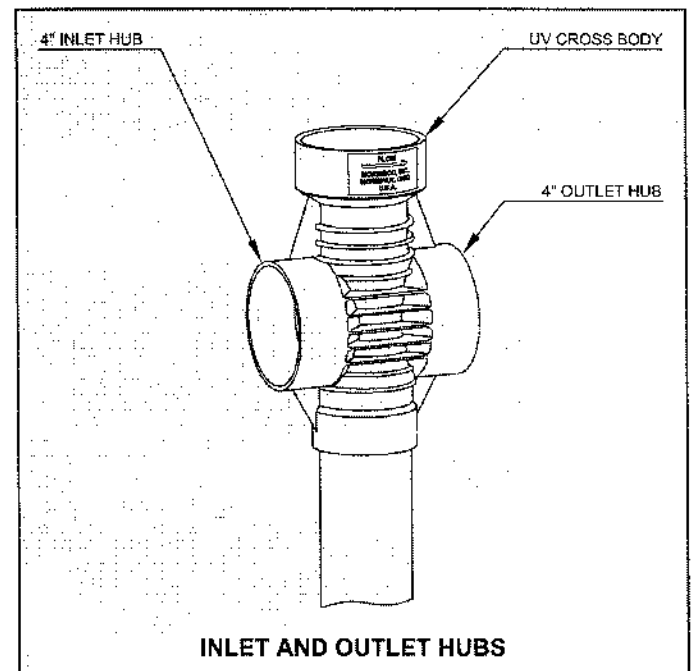
The components should be supplied by the installer:

- | | |
|------------------------|-------------------------------|
| 1) Disconnect switch | 6) Isopropyl alcohol |
| 2) Solvent cement | 7) #14/2 AWG cable |
| 3) Hacksaw | 8) Conduit and fittings |
| 4) Glycerin (optional) | 9) Flat head screwdriver |
| 5) Clean, soft cloth | 10) Phillips head screwdriver |



INSTALLATION INSTRUCTIONS

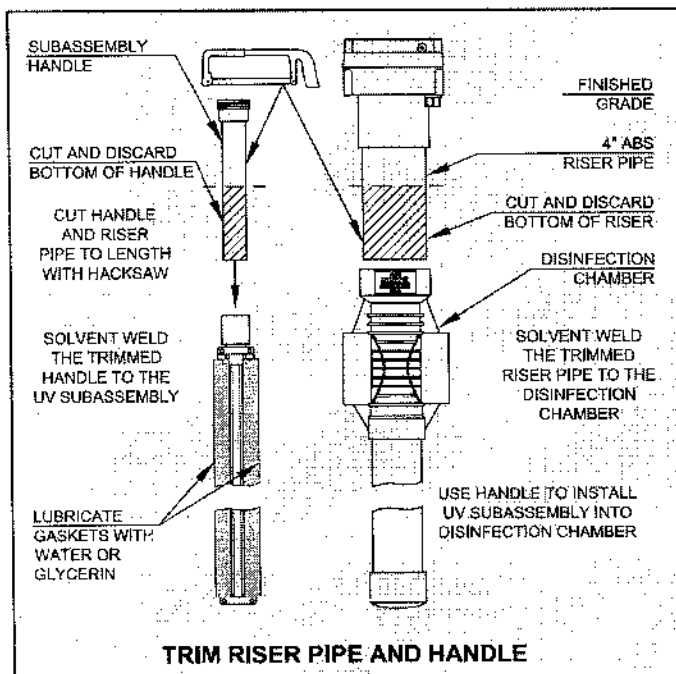
1. The excavation for the upstream wastewater treatment system should include an additional 3 feet of length to allow for installation of the Model AT 1500.
2. Carefully unpack the Model AT 1500 system. Remove and properly discard all packaging materials from the system components. The UV lamp should remain in the protective shipping sleeve until it is installed.
3. Flow direction indicator arrows are molded into the disinfection chamber. When installing the disinfection chamber, be sure to orient the chamber correctly with the flow arrows pointing towards the effluent plumbing.



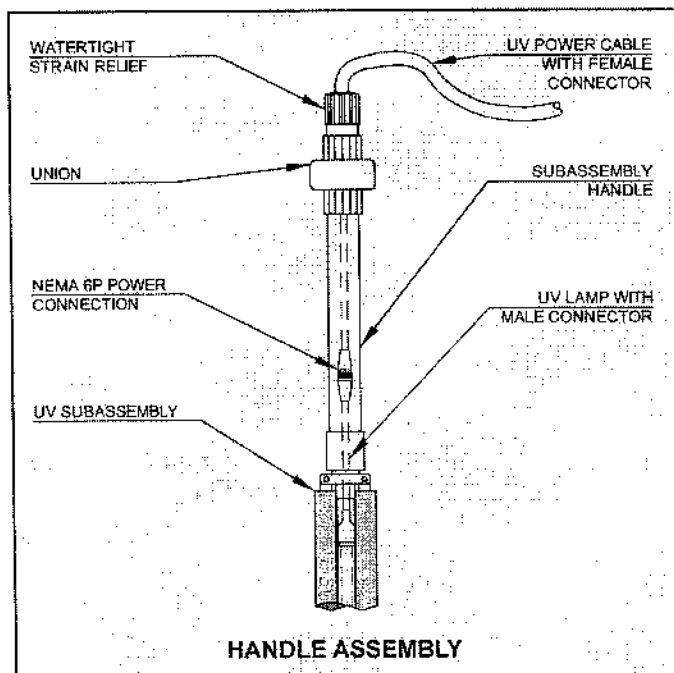
4. Solvent weld the effluent line of the upstream treatment system to the 4" inlet hub of the Model AT 1500. Next, solvent weld the 4" outlet hub to the final effluent line. Cover the open top of the disinfection chamber and backfill up to the bottom of the plumbing.

AT 1500 UV DISINFECTION INSTALLATION AND OPERATION (Cont.)

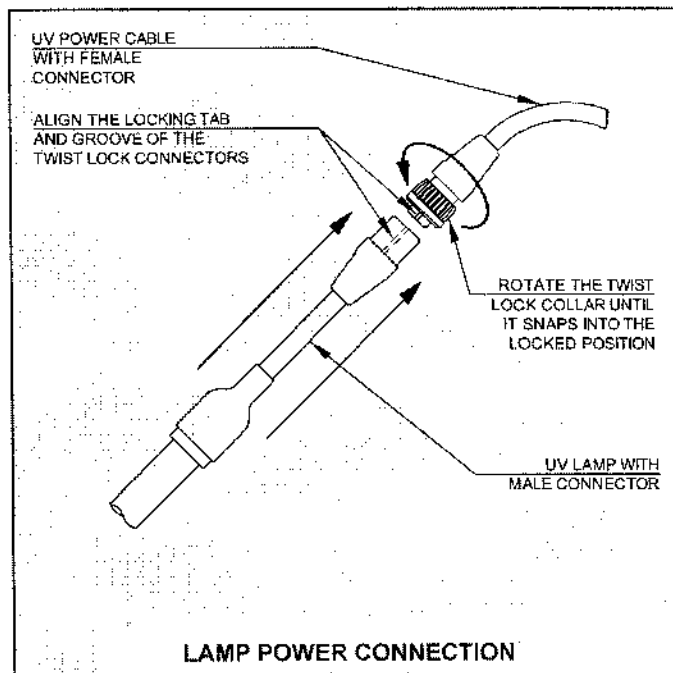
- The control enclosure should be completely above grade in the finished installation. The riser pipe and subassembly handle are purposely manufactured longer than necessary and must be trimmed. Fit the riser pipe into the top of the disinfection chamber and mark a trim line on the bottom. Mark the subassembly handle on the bottom to trim the same amount.



- Disassemble the union on subassembly handle and set aside the top portion with UV power cable.
- Use a hacksaw to cut along the trim line on both the riser pipe and handle to make them the proper length.
- Solvent weld the riser pipe to the disinfection chamber and solvent weld the handle to the UV subassembly.
- The Model AT 1500 is shipped with the UV power cable connected to the control enclosure. If this power cable



has become disconnected, it must be reconnected at this time. To do so, remove the gasketed cover from the control enclosure. Connect the lead labeled "ONE" on the UV power cable to the terminal block marked "1". Connect the lead labeled "TWO" to the terminal block marked "2". Connect the lead labeled "THREE" to the terminal block marked "3". Connect the yellow/green lead to the terminal marked "Y/G".



- Remove the threaded access plug from the riser pipe.
- Match the alignment tab on the male connector from the UV lamp to the alignment groove in the female twist lock connector on the UV power cable. Push the two connectors together until the male connector is fully seated in the female connector. Rotate the twist lock collar until it snaps into the locked position.
- Insert the UV lamp and power cable into the handle assembly until the base of the lamp is seated in the bottom of the quartz sleeve. Rotate the power cable if the lamp becomes misaligned.
- Lower the union onto the handle assembly, making sure to pull any slack cable through the strain relief connector. Assemble and tighten the union and strain relief to insure a watertight seal.
- Use water or glycerin to lubricate the rubber gaskets located on both sides of the UV subassembly.
- Do not touch the Teflon coating or allow excess glycerin to contact it. Use a clean, soft cloth and isopropyl alcohol to thoroughly clean the coating.
- Fill the disinfection chamber with clean water.

MANUFACTURED BY

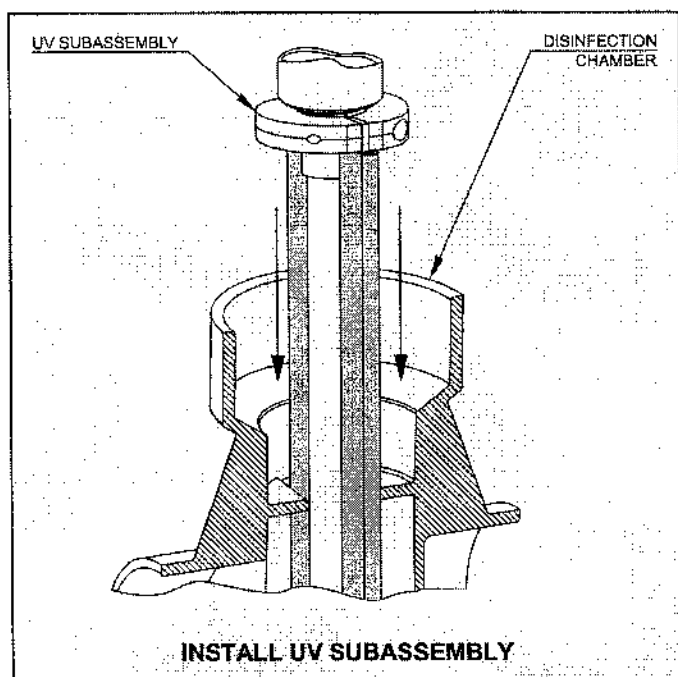
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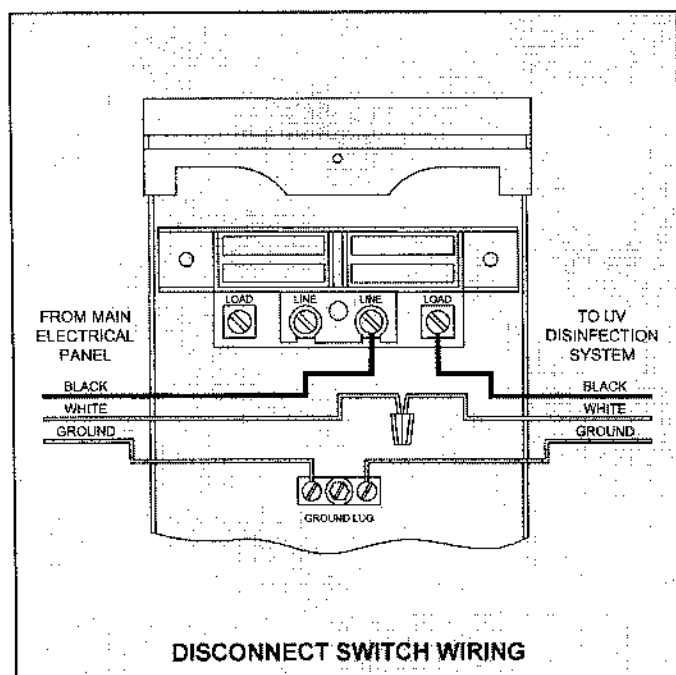
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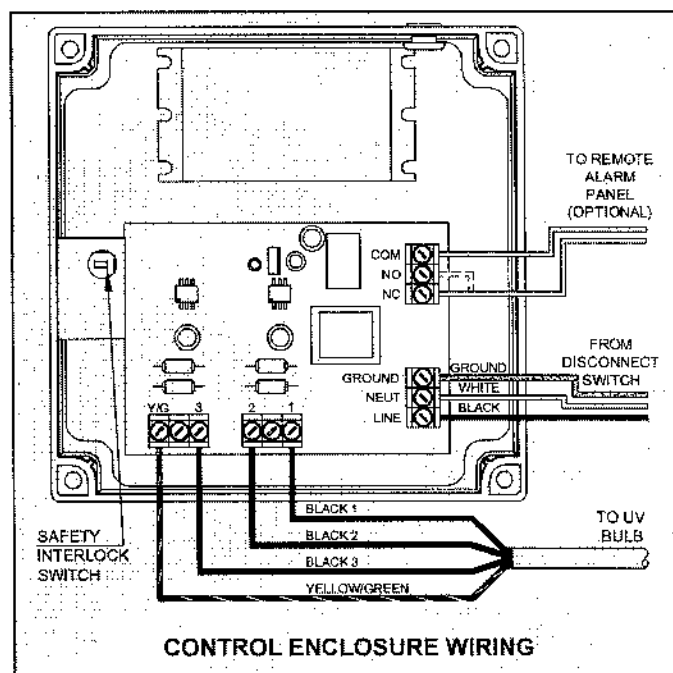
AT 1500 UV DISINFECTION INSTALLATION AND OPERATION (Cont.)



17. Align the rubber gaskets with the rectangular opening and lower the UV subassembly into the disinfection chamber.
18. Tuck the excess power cable into the riser pipe.
19. Use a dedicated 115 volt AC single phase 15 amp circuit in the main electrical panel for the AT 1500. **NOTE:** Make sure the breaker is off before proceeding.
20. Use a disconnect switch to de-energize power during service. Mount directly to the facility being served.
21. Install a #14/2 AWG cable from the dedicated breaker in the main electrical panel to the disconnect switch.
22. In the disconnect switch enclosure, connect the hot (black) lead from the main electrical panel to the "LINE" terminal. Connect the black lead from the UV system to the "LOAD" terminal. Wire nut both white leads together. Connect ground leads to the ground lug.



23. Remove the control enclosure cover and black electrical insulator. Install a #14/2 AWG cable from the disconnect switch to the control enclosure. Insure the connection to the UV system is made in conduit, solvent welded to the conduit fitting provided. A watertight connection is critical for proper operation and safety.
24. Attach the incoming hot (black) lead to the terminal block marked "LINE". Attach the common (white) lead to the terminal block marked "NEUT". Attach the incoming ground lead to the terminal block marked "GROUND".
25. If a remote alarm panel is required, the alarm leads should be installed in a separate conduit, solvent welded to the second conduit fitting provided. Connect one alarm lead to either the normally open (NO) terminal or the normally closed (NC) terminal. Choose the correct terminal for the type of signal required by the remote alarm panel. Connect the other lead to the common (COM) terminal.
26. Solvent weld a conduit plug into any unused fittings.
27. Apply thread sealant to the access plug and install plug in the riser opening. Tighten to insure a watertight seal.



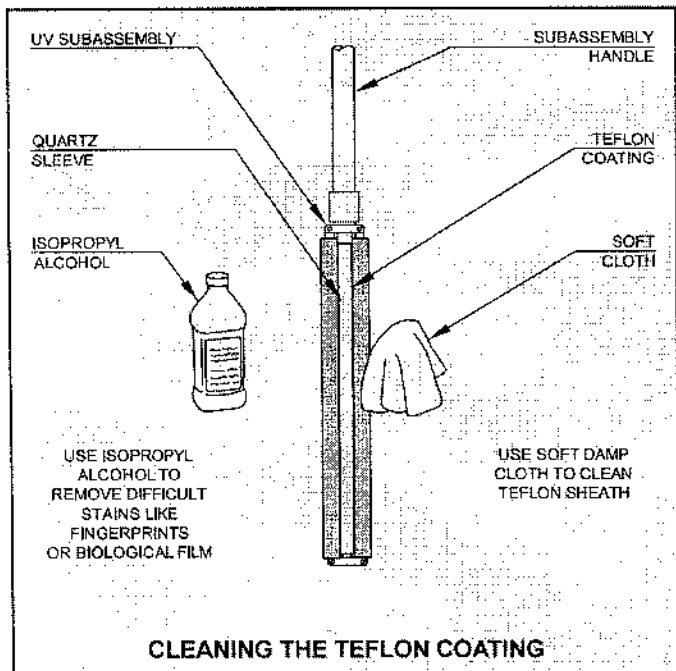
28. Reinstall the electrical insulator and four thumb screws. Make sure that the cutout for the safety interlock switch is positioned correctly over the switch.
29. Reinstall the control enclosure cover, insuring that the safety interlock post is aligned with the safety interlock switch. Tighten the four screws on the cover to insure a watertight seal. **NOTE:** If the switch is not aligned with the post, the UV lamp will not operate and the green light on the side of the enclosure will not illuminate.
30. Backfill around the disinfection chamber and riser pipe. Finished grade should be below the control enclosure to prevent the entry of surface water.
31. Turn on power at the disconnect switch and main service panel. Confirm the green light on the enclosure is illuminated indicating proper operation.

AT 1500 UV DISINFECTION INSTALLATION AND OPERATION (Cont.)

MAINTENANCE AND SERVICE

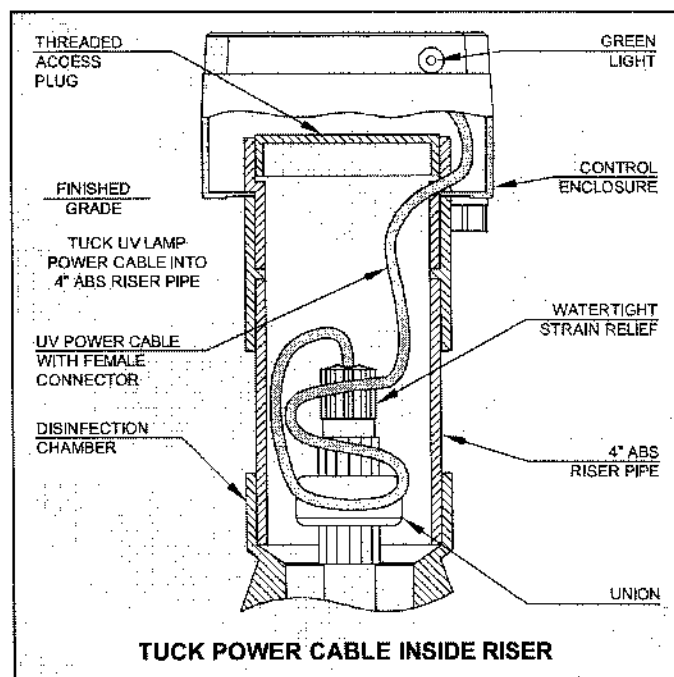
UV protective eyewear must be worn during service or any time the lamp may be illuminated. It is recommended that the subassembly be removed and serviced every six months to insure proper disinfection. To inspect and clean the Teflon coating:

1. Turn off power to the UV system at the disconnect switch and/or main service panel. Confirm that the green light on the side of the enclosure is off.
2. Remove the control enclosure cover and access plug.
3. Carefully remove the UV subassembly from the disinfection chamber
4. Inspect the quartz sleeve and Teflon coating for signs of damage or an accumulation of biological film. If the quartz sleeve has been damaged, the UV subassembly must be replaced. If biological film is present on the surface of the Teflon coating, the coating must be cleaned to insure proper disinfection.
5. Use a soft damp cloth to carefully and thoroughly clean the Teflon coating.
6. Use isopropyl alcohol on a soft cloth to carefully remove difficult stains like fingerprints or biological film.
7. Remove all accumulated solids from the disinfection chamber using a vacuum or service pump.



It is recommended that the UV lamp be replaced every two years to insure proper disinfection of the treatment system effluent. The green light on the side of the control enclosure will no longer illuminate when the lamp needs replaced. To replace the lamp:

1. Repeat steps 1, 2 and 3 above.
2. Disassemble the union on the subassembly handle and remove the UV lamp using the power cable.
3. Disconnect the UV lamp from the UV power cord by rotating the twist lock collar ¼ turn.



4. Connect new lamp and carefully lower into the UV subassembly. Make sure the lamp is fully seated in the quartz sleeve.
5. Reassemble union and tighten strain relief.
6. Lower the subassembly into the disinfection chamber.
7. Reinstall the threaded access plug into the riser.
8. Reinstall the enclosure cover, insuring that the safety interlock post is aligned with the safety interlock switch. Tighten the four screws to insure a watertight seal.
9. Turn on power at the disconnect switch or main service panel. Verify that the green light on the side of the control enclosure is illuminated.

NOTE: UV lamps contain mercury which is harmful to the environment. Recycle old UV lamps at an authorized center.

ALARM CIRCUIT

The Model AT 1500 system is equipped with a current sensing circuit to monitor the UV lamp performance. If the UV lamp output drops below an acceptable level for proper disinfection, the alarm circuit will turn off the green light on the enclosure. When connected to the Service Pro control center, the service provider can be immediately notified that maintenance to the UV system is required. For more information regarding connection of the Model AT 1500 UV disinfection system alarm to a Service Pro control center, please refer to the Service Pro Control Center with MCD Technology Installation and Operation Instructions.

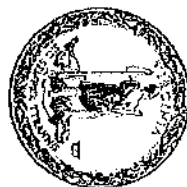
MANUFACTURED BY

norweco

Engineering the future of water and wastewater treatment

NORWECO, INC.
NORWALK, OHIO
U.S.A. 44857
www.norweco.com

22/29



OFFICIAL RECEIPT
ACCOMACK COUNTY CIRCUIT COURT
DEED RECEIPT

DATE : 10/19/2023

TIME : 16:18:50

CASE # : 001CLR230004077

RECEIPT # : 2300009352

TRANSACTION # : 23101900028

CASHIER : TLM

REGISTER # : H722

PAGE :

FILING TYPE : DE

INSTRUMENT : 230004077

BOOK :

RECORDED : 10/19/2023

GRANTOR : LEWIS CLARK & SONS LLC, A VIRGINIA L

LC

EX : N

LOC : CO

GRANTEE : LEWIS CLARK & SONS LLC, A VIRGINIA L

LC

EX : N

PCT : 100%

RECEIVED OF : ROBERT G. TURNER

ADDRESS : P.O. BOX 371 CHINCOTEAGUE, VA 23336

PAYMENT : FULL PAYMENT

AT : 16:18

DATE OF DEED : 09/26/2023

CHECK : \$26.00 CHECK NUMBER : 1518

DESCRIPTION 1 : TOWN OF CHINCOTEAGUE

PAGES : 005

OP : 0

NAMES : 0

CONSIDERATION : \$0.00

AVAIL : \$0.00

PIN OR MAP : 030A61600D000000

ACCOUNT CODE	DESCRIPTION	PAID
035	VIRGINIA OUTDOOR FOUNDATION	\$3.00
106	TECHNOLOGY TRST FND	\$5.00

ACCOUNT CODE	DESCRIPTION	PAID
146	VSLF	\$3.50
301	CLERK RECORDING/INDEXING FEE	\$14.50

TENDERED : \$ 26.00

AMOUNT PAID : \$ 26.00

23/29

VIRGINIA LAND RECORD COVER SHEET

Commonwealth of Virginia VA. CODE §§ 17.1-223, -227.1, -249

FORM A - COVER SHEET CONTENT

Instrument Date: 9/26/2023

Instrument Type: DE

Number of Parcels: 1 Number of Pages: 5

[] City [X] County ACCOMACK COUNTY COURT
CIRCUIT COURT

Tax Exempt? VIRGINIA/FEDERAL CODE SECTION

[] Grantor:

[] Grantee:

Business/Name

(Area Above Reserved For Deed Stamp Only)

1 X Grantor: LEWIS CLARK & SONS LLC, A VIRGINIA LIMITED LIABILITY COMPANY

Grantor:

1 X Grantee: LEWIS CLARK & SONS LLC, A VIRGINIA LIMITED LIABILITY COMPANY

Grantee:

Grantee Address

Name: LEWIS CLARK & SONS LLC, A VIRGINIA LIMITED LIABILITY COMPANY

Address: P.O. BOX 371

City: CHINCOTEAGUE State: VA Zip Code: 23336

Consideration: \$0.00 Existing Debt: \$0.00 Actual Value/Assumed: \$0.00

PRIOR INSTRUMENT UNDER § 58.1-803(D):

Original Principal: \$0.00 Fair Market Value Increase: \$0.00

Original Book No.: Original Page No.: Original Instrument No.:

Prior Recording At: [] City [] County Percentage In This Jurisdiction: 100%

Book Number: Page Number: Instrument Number:

Parcel Identification Number/Tax Map Number: 030A61600D00000

Short Property Description: TOWN OF CHINCOTEAGUE

Current Property Address:

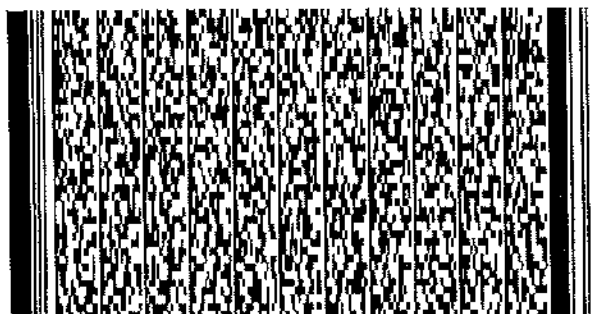
City: CHINCOTEAGUE State: VA Zip Code: 23336

Instrument Prepared By: ROBERT G. TURNER Recording Paid By: ROBERT G. TURNER

Recording Returned To: ROBERT G. TURNER

Address: 23328 WISE COURT, P.O. BOX 536

City: ACCOMAC State: VA Zip Code: 23301



Tax Map No. 030A61600D00000

THIS SEPTIC SYSTEM AND DEED OF EASEMENT is made and entered into this 26th day of September, 2023, by and between LEWIS CLARK & SONS LLC, a Virginia limited liability company, Grantor, and LEWIS CLARK & SONS LLC, a Virginia limited liability company, of P.O. Box 371, Chincoteague, Virginia 23336, Grantee.

WITNESSETH:

WHEREAS, Lewis Clark & Sons LLC owns certain real estate which was conveyed to it by a deed dated August 4, 2022, which deed is recorded in the Clerk's Office of the Circuit Court of Accomack County, Virginia as Instrument No. 220004352; and

WHEREAS, since its purchase of the above referenced property the parcel has been subdivided into four separate lots with said approved subdivision plat being recorded in the aforesaid Clerk's Office as Instrument No. 230002874; and

WHEREAS, the parties hereto desire to establish certain easements which easements shall run with the land and be binding on the heirs, successors, and assigns of the Grantee herein.

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) and other valuable consideration, the receipt of which is hereby acknowledged, the Grantor herein grants and conveys:

SEPTIC SYSTEM EASEMENT

A perpetual septic system easement as between Lots 3 and 4 such that Lot 3 and Lot 4 shall each be entitled to three bedroom

use of the six bedroom septic system capacity. Reference is hereby made to that certain schematic drawing attached hereto as Exhibit A which shows in particularity exactly where said system will be constructed and the Grantor does hereby grant and convey a right of access to each lot owner and owner's contractors to go onto the other's lot in the vicinity of the mound as shown on said drawing for the purpose of maintenance and/or replacement of said system as may be required by the Accomack County Health Department, and each lot owner shall have a duty to timely pay for one-half (1/2) of all required maintenance and/or replacement costs of any and all components of said system located within the mound as shown on said drawing in order to maintain the system in good working order and in compliance with all applicable Health Department rules and regulations. However, all components located outside the perimeters of the mound including pump stations, fuji clean components, pipes, uv lights, etc. as the same are located outside of said mound shall be maintained at the sole expense of the lot owner on whose lot the equipment is placed and neither lot owner shall have any duty to pay for any repair for equipment located on the other lot which is outside of the mound. Said easement shall be perpetual in nature and shall run with the land.

INGRESS/EGRESS EASEMENT

Grantor does hereby grant and convey to the said Grantee a twenty foot (20 ft.) wide easement for ingress/egress and utilities

from and to Virginia Route No. 2103 to Lots 2, 3, and 4 as shown on the plat referenced herein to provide for physical access and for the location of utilities to serve said Lots 2, 3, and 4 except that the owner of Lot 2 shall have no right to any portion of the easement located past its northwest property line separating it from Lot 3. Lot 1 is hereby granted utility access from Lot 1 to the area within said twenty foot (20 ft.) easement as may be desirable to provide utilities to Lot 1. The owners of Lots 2, 3, and 4 shall be required to maintain the road in good condition for its entire length free from potholes so as to provide for safe access to emergency vehicles with the said Lot 2 to being responsible for twenty-four percent (24%) of said maintenance costs and Lots 3 and 4 being responsible for thirty-eight percent (38%) each of the total maintenance costs for said roadway. This easement shall run with the land and be binding on the heirs, successors, and assigns of the parties hereto.

WITNESS the following signatures and seals:

27/29

Lewis Clark & Sons LLC,
a Virginia limited liability
company

By: Meghan O. Clarkson (SEAL)
Meghan O. Clarkson,
Member/Manager

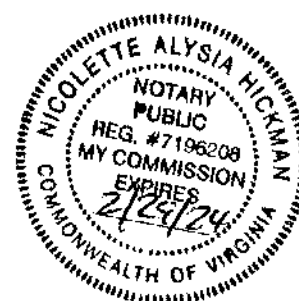
By: Charles V. Clarkson, Jr. (SEAL)
Charles V. Clarkson, Jr.,
Member/Manager

COMMONWEALTH OF VIRGINIA
COUNTY OF ACCOMACK, to-wit:

The foregoing instrument was acknowledged before me this 6th
day of October, 2023, by Meghan O. Clarkson and Charles
V. Clarkson, Jr., Members/Managers of Lewis Clark & Sons LLC, a
Virginia limited liability company, on behalf of Lewis Clark & Sons
LLC, a Virginia limited liability company.

[Signature]
Notary Public

My commission expires: 2/29/24



Lewis Clark & Sons LLC,
a Virginia limited liability
company

By: [Signature] (SEAL)
Bryan E. Lewis,
Member/Manager

By: [Signature] (SEAL)
Jessica L. Lewis,
Member/Manager

COMMONWEALTH OF VIRGINIA
COUNTY OF ACCOMACK, to-wit:

The foregoing instrument was acknowledged before me this 6th
day of October, 2023, by Bryan E. Lewis and Jessica L.
Lewis, Members/Managers of Lewis Clark & Sons LLC, a Virginia
limited liability company, on behalf of Lewis Clark & Sons LLC, a
Virginia limited liability company.

[Signature]
Notary Public

My commission expires: 2/29/24



GENERAL NOTES

1. ACCOMACK COUNTY TAX MAP 30A6-16-D
2. CHINCOTEAGUE ISLAND, ISLAND DISTRICT ACCOMACK COUNTY VA
3. CURRENT OWNER HIGH TIDE PROPERTIES, LLC
4. PO BOX 271
5. CHINCOTEAGUE, VA 23336
6. DEED REF: 20090435
7. PLAT REF: 443221
8. 11,000,204' ± ELEV 4.6 AND 5.0 AS SHOWN ON
9. FROM MAP 5100102900, DATED 5/19/15

LEGEND

- CONCRETE PILE FOUND
- IRON ROD SET



VIRGINIA STATE RTE #2103

OWNERS CONSENT AND DEDICATION
THE DIVISION OF LAND SHOWN HEREON IS WITH THE FREE CONSENT
AND IN ACCORDANCE WITH THE DESIRE OF THE UNDERSIGNED OWNER
ALL STATEMENTS AFFIXED TO THIS PLAT ARE TRUE AND CORRECT TO
THE BEST OF MY KNOWLEDGE.

AUTHORIZED DESIGNER OF LEWIS CLARK & SONS, LLC
CHINCOTEAGUE, VIRGINIA

LINE	BEARING	DISTANCE
L1	S 37°18'13" W	10.05
L2	S 37°18'13" W	10.05
L3	S 37°18'13" W	10.05

MARK BOWEN, PLANNING AND ZONING ADMIN
CHINCOTEAGUE, VIRGINIA



I HEREBY CERTIFY THAT THE SURVEY WAS BASED ON A CURRENT FIELD SURVEY, AND
TO THE BEST OF MY KNOWLEDGE AND BELIEF IS CORRECT AND COMPLETE WITH THE
MINIMUM PRECISION AND STANDARDS ESTABLISHED BY THE VIRGINIA STATE BOARD
OF ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS AND CERTIFIED
LANDSCAPE ARCHITECTS.

This plat is based on a current field survey.

No Title Report Furnished.

Except as specifically stated or shown on this plat, this
survey does not purport to reflect any of the following
which may be applicable to the subject real estate:
easements; building setback lines; restrictive covenants;
subdivision restrictions; zoning or other land use
regulations, and any other facts that an accurate and
current title search may disclose.



LANDS OF LEWIS CLARK & SONS LLC

BOUNDARY SURVEY SHOWING CREATION OF LOTS 1, 2, AND 3

SCALE	1" = 40'	SURVEYED	MAN	JOB NO.	CHURCH 30A6-16-C
DATE	10/12/22	DRAWN	MAN	FIELD BOOK	X PAGE X
REVISED		CAD FILE	SUBDIVISION	SHEET	1 OF 1

WILKINS-NOBLE LLC

LAND SURVEYING and CIVIL ENGINEERING

11729 CHURCH ST. 410-621-0321
PRINCESS ANNE, MD 21853

Name: Lewis Clark & Sons LLC

Property Address: Lot 3, East Side Rd.

Chincoteague, VA 23336

Tax Map#: 30A6-16-D Part

Reviewer: Hunter Cooper, EH Specialist, Sr.

Date: 11/30/2023

Date of Level I Review	IN ²	OUT ²	N.O. ³	N.A. ⁴	Comments
Location					
Site features affecting well and septic system location identified	X				
Landscape position identified	X				Broad Flat <1% slope
Absorption Area	X				
House site located	X				6 Bedroom. Multi-Family Dwelling
Other:					
Separation Distance adequate	X				
Adequate triangulation/scale	X				
Depth					
Limiting factors (or lack of) noted	X				SWT = 0"
Depth adequate for slope	X				
Depth adequate for limiting factors	X				Disposal Pad to be placed at 0".
Timed-Dosing specified (if required)	X				
Capacity					
Absorption area adequately evaluated (number and location of borings/pits)	X				
Design flow adequate for intended use	X				900 GPD
Adequate trench area, based on flow & estimated/measured perc rate	X				25 mpi
Adequate footprint area (including reserve area area, if required)	X				840 sq. ft.
Treatment					
Treatment level specified	X				Alternative / TL-3
Treatment level adequate for specified absorption area depth	X				2- FujiClean CEN-5 Units
Treatment capacity adequate for design flow	X				

Additional comments, if any: ENG. New Sewage.