

**ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY
NOTICE OF INTENT
INDIVIDUAL TREATMENT FACILITIES
NPDES GENERAL PERMIT ARG550000**

Application Type: New ☒ Renewal ☐ (Permit # ARG55 _____)

I. PERMITTEE/OPERATOR INFORMATION

Permittee (Legal Name): <u>Brad Eichler</u>	Operator Type:
Permittee Mailing Address: <u>55 Scenic Boulevard</u>	<input type="checkbox"/> State <input type="checkbox"/> Partnership
Permittee City: <u>Little Rock</u>	<input type="checkbox"/> Federal <input type="checkbox"/> Corporation*
Permittee State: <u>Arkansas</u> Zip: <u>72207</u>	<input checked="" type="checkbox"/> Sole Proprietorship/Private
Permittee Telephone Number: <u>501-377-3761</u>	*State of Incorporation: _____
Permittee Fax Number: <u>NA</u>	The legal name of the Permittee must be identical to the name listed with the Arkansas Secretary of State.
Permittee E-mail Address: <u>beichler@stephens.com</u>	

II. INVOICE MAILING INFORMATION (Home owners are exempt.)

Invoice Contact Person: <u>Brad Eichler</u>	City: _____
Invoice Mailing Company: _____	State: <u>Arkansas</u> Zip: _____
Invoice Mailing Address: _____	Telephone: <u>501-377-3761</u>

III. FACILITY INFORMATION

Facility Name: <u>Eichler Residence</u>	Facility Contact Person: <u>Brad Eichler</u>
Facility Address: <u>55 Scenic Boulevard</u>	Telephone Number: <u>501-377-3761</u>
Facility County: <u>Pulaski</u>	Facility City, State & Zip: <u>Little Rock, Ar 72207</u>
Facility Latitude: <u>34 Deg 46 Min 45.6 Sec</u>	Facility Longitude: <u>92 Deg 19 Min 41.3 Sec</u>
Accuracy: _____ Method: _____ Datum: _____ Scale: _____ Description: _____	

IV. DISCHARGE INFORMATION

Outfall Number: <u>001</u>	Flow: <u>600</u> gpd (Gallons per Day)
Stream Segment: <u>3C</u>	Hydrologic Basin Code: <u>111 102 07</u>
Outfall Latitude: <u>34 Deg 46 Min 40.1 Sec</u>	Outfall Longitude: <u>92 Deg 19 Min 42.5 Sec</u>
Accuracy: _____ Method: _____ Datum: _____ Scale: _____ Description: _____	
Type of Treatment: <u>Orengo AX20RT w/ UV</u>	
Receiving Stream: <u>Arkansas River</u>	

V. FACILITY PERMIT INFORMATION

NPDES Individual Permit Number (If Applicable): <u>AR00</u>	
NPDES General Permit Number (If Applicable): <u>ARG</u>	
State Construction Permit Number: _____	
NPDES General Construction Stormwater Permit Number (If Applicable): <u>ARR15</u>	

WATER DIVISION
5301 NORTHSHORE DRIVE / NORTH LITTLE ROCK, ARKANSAS 72118
PHONE 501-682-0623 / FAX 501-682-0880
www.adeq.state.ar.us

SCANNED

APR 18 2024

MAILROOM

VII. OTHER INFORMATION:

Operator Name: David A. Meints
 Operator License Number: 009055 License Class: III
 Consultant Contact Name: David A. Meints
 Consultant Email Address: David@meincowastewater.com
 Consultant Address: P.O. Box 1001 City: Bryant State: Arkansas Zip: 72089
 Consultant Phone Number: 501-804-0837 Consultant Fax Number: 501-821-4048

Has this treatment system been approved by AHD? Yes ☐ No ☐

Disclosure Statements:

Arkansas Code Annotated Section 8-1-106 requires that all applicants for the issuance or transfer of any permit, license, certification or operational authority issued by the Arkansas Department of Environmental Quality (ADEQ) file a disclosure statement with their applications. The filing of a disclosure statement is mandatory. No application can be considered complete without one. You must submit a new disclosure statement even if you have one on file with the Department. The form may be obtained from ADEQ web site at: http://www.adeg.state.ar.us/disclosure_stmt.pdf.

VII. CERTIFICATION OF OPERATOR

Be (Initial) "I certify that, if this facility is a corporation, it is registered with the Secretary of the State of Arkansas."
Be (Initial) "I certify that the cognizant official designated in this Application is qualified to act as a duly authorized representative under the provisions of 40 CFR 122.22(b). If no cognizant official has been designated, I understand that the Department will accept reports signed only by the Applicant."
Be (Initial) "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Responsible Official Printed Name: Brad Eichler
 Responsible Official Signature: [Signature]
 Responsible Official Email: beichler@stephens.com
 Cognizant Official Printed Name: David A. Meints
 Cognizant Official Signature: [Signature]
 Cognizant Official Email: David@meincowastewater.com

Title: Owner
 Date: 1/31/2024
 Title: Operator
 Telephone: 501-804-0837

X. PERMIT REQUIREMENT VERIFICATION

Please check the following to verify completion of permit requirements.

	Yes	No	* If No is answered for any of the questions, then a permit can not be issued!
Submittal of Complete NOI?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Submittal of Required Permit Fee?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Check Number: _____
Submittal of AHD Form EHP-19?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Submittal of Site Map?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Submittal of Disclosure Statement?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

WATER DIVISION
 5301 NORTHSORE DRIVE / NORTH LITTLE ROCK, ARKANSAS 72118
 PHONE 501-682-0623 / FAX 501-682-0880
www.adeg.state.ar.us

ler Residence

enic Boulevard
ock, Ar 72207

Le

POE
55 Scenic Blvd

POD

gle Earth

sat / Copernicus

200 ft



Arkansas Department of Health
Environmental Health Protection

Receipt Number
20209672

Individual Onsite Wastewater System Permit Application

Permit Type ☒ New Installation
☐ Alteration / Repair

DR Environmental ID #

7 6 0 1 0 5 5 4 7

Fee Schedule for Structures		✓
Structures 1500 sq ft or less	\$ 30.00	<input type="checkbox"/>
Structures more than 1500 sq ft and up to 2000 sq ft	\$ 45.00	<input type="checkbox"/>
Structures more than 2000 sq ft and up to 3000 sq ft	\$ 90.00	<input type="checkbox"/>
Structures more than 3000 sq ft and up to 4000 sq ft	\$120.00	<input type="checkbox"/>
Structures more than 4000 sq ft	\$150.00	<input checked="" type="checkbox"/>
Alteration and Repair	\$ 30.00	<input type="checkbox"/>

Part 1 Application		Treatment Type (check one)		Disposal Method (check one)	
<input type="checkbox"/> STD = Standard Septic Tank	<input type="checkbox"/> ATU = Aerobic Treatment Plant	<input type="checkbox"/> STD = Standard Absorption Field	<input type="checkbox"/> LPD = Low Pressure Distribution		
<input type="checkbox"/> ISF = Intermittent Sand Filter	<input type="checkbox"/> RSF = Re-circulating Sand Filter	<input checked="" type="checkbox"/> SUR = Surface Discharge	<input type="checkbox"/> HLD = Holding Tank		
<input checked="" type="checkbox"/> PMF = Proprietary Media Filter	<input type="checkbox"/> RGF = Re-circulating Gravel Filter	<input type="checkbox"/> CPF = Capping Fill	<input type="checkbox"/> SRL = Serial Distribution		
<input type="checkbox"/> OTH = Other (Describe)	<input type="checkbox"/> HLD = Holding Tank	<input type="checkbox"/> OTH = Other	<input type="checkbox"/> DRP = Drip Irrigation		
1. Owner's/Applicant's Name Brad Eichler c/o Jacob White Construction		2. Phone Number (501) 912-2444			
3. Mailing Address 2523 North Pierce Street, Little Rock, AR 72207		4. County Pulaski			
5. Address of Proposed System (If a 911 address is not available, attach detailed directions or map) 55 Scenic Boulevard, Little Rock, AR 72207 (Call ahead locked gate or try 2444#)					
6. Subdivision Name n/a	7. Approval Date n/a	8. Date Recorded n/a	9. Lot Number n/a		
10. Lot Dimensions 584' x 313' x 584' x ~800'	11. Total Area (Acres) 11.84	12. # Bedrooms # People 3	13. Daily Flow (GPD) 370		
14. Brief Legal Description of Property (Attach a separate sheet of paper, if necessary) Section 30, Township 2 North, Range 12 West, Pulaski County					
15. Water Supply (Specify supplier, if Public Water) Central Arkansas Water		16. GPS Coordinates HM 34.77839, -92.32863 POD 34.77801, -92.32834			
17. Loading Rates (gpd/ft²)	18. System Specifications				
Primary Area n/a	a. Size of Septic Tank 1250/PVU gal	f. Trench Depth n/a	inches		
Secondary Area n/a	b. Size of Dose Tank ATU gal	g. Trench Spacing n/a	feet		
Percolation Test (min/in)	c. Absorption Area n/a ft²	h. Trench Media (List Below)			
Primary Area Avg n/a	d. Number of Field Lines n/a	n/a	i. Trench Width n/a in		
Secondary Area n/a	e. Length of Field Lines n/a ft	n/a	n/a in		

TO THE OWNER
The permit for construction may be deemed invalid by the local Environmental Health Specialist before the start of construction, if the site and/or soil conditions have been changed after approval of this permit, or if the information within this permit is inaccurate or has been found to be misrepresented. Approval for operation does not constitute a guarantee that the system will function properly. The approval states that the system was designed and installed according to the Arkansas Department of Health, Rules and Regulations Pertaining to Onsite Wastewater Systems, unless there are exceptions or deviations noted in the comments. A Permit for Construction is valid for one (1) year from the date of approval. The authorized agent must revalidate a permit more than one (1) year old prior to the start of any construction.

19. Utilization Verification
I hereby attest that item 12, the number of bedrooms (number of persons for commercial) and square footage of the structure that will utilize the designed individual onsite wastewater system in this permit application, is accurate. I have reviewed the permit application and understand the layout, installation, maintenance, operation and expense(s) that may be associated with this system.

Owner/Applicant Signature See Opt. A Date n/a

20. I certify that I have conducted the above tests and that the above listed information is in accordance with the latest requirements of the Arkansas Department of Health Rules and Regulations Pertaining to Onsite Wastewater Systems.

David A. Meints Designated Representative Soil Certified ☒ Yes ☐ No

Designated Representative Signature Title
David A. Meints 10/08/2023 501-821-3837/501-804-0837
Print Name Date Phone Number

21. Approval of Health Authority
The information and specifications in the application has been reviewed and found to meet the requirements of the Arkansas Department of Health Rules and Regulations Pertaining to Onsite Wastewater Systems. A PERMIT FOR CONSTRUCTION is hereby issued.

[Signature] 864 11-6-23
Environmental Specialist Signature EHS Number Date

Individual Onsite Wastewater System Permit Application

Receipt Number

Continue Part 1

22. Soil Criteria (Primary Area)								Indicate the depth to items a-f, if observed in the soil (designate in inches)
a. Bedrock	b. BSWT	c. MSWT	d. LSWT	e. Adj. MSWT	f. Adj. LSWT	g. H.C./Depth	h. Loading Rate (gpd/ft ²)	
n/a	n/a	n/a	n/a	n/a	n/a	n/a	Unsuitable	
23. Soil Criteria (Secondary Area)								Indicate the depth to items a-f, if observed in the soil (designate in inches)
a. Bedrock	b. BSWT	c. MSWT	d. LSWT	e. Adj. MSWT	f. Adj. LSWT	g. H.C./Depth	h. Loading Rate (gpd/ft ²)	
n/a	n/a	n/a	n/a	n/a	n/a	n/a	Unsuitable	
24. Seasonal Water Table (SWT) Classes Detail								
Primary Area		List Redoximorphic Features and/or Clay Content Restrictions						
Brief	in	n/a						
Moderate	in	n/a						
Long	in	n/a						
Secondary Area		List Redoximorphic Features and/or Clay Content Restrictions						
Brief	in	n/a						
Moderate	in	n/a						
Long	in	n/a						
Comments Site requires a 1250 gallon trash tank and a PMF (Advantex AX20 RT Mode B-1) with UV disinfection and surface discharge, due to steep slopes and disturbed soil (old quarry site). NPDES Permit required. If system is not installed within a year of the date approved, a revalidation fee may be required. Service contract only applies if Meinco installs system. <i>Sewer over 300'</i>								

Part 2 Installation Inspection

Septic tank manufacturer	Pump information
Septic tank material	Trench media and width
Dose tank manufacturer	Depth of interceptor drain
Dose tank material	Depth of settled fill
Name of Installer	License Number
Installation Inspected by <input type="checkbox"/> Environmental Health Specialist <input type="checkbox"/> Designated Representative (check one or installer signs System Installation Verification below)	
Signature	EHS / License Number Date
System Installation Verification I have installed this system as designed and in compliance with all Rules and Regulations Pertaining to Onsite Wastewater Systems.	
Installer Signature	License Number Date

Part 3 Permit for Operation

The information contained in Part 1 and 2 of this form has been reviewed and found to meet the requirements of the Arkansas Department of Health. THE PERMIT FOR OPERATION of this system is hereby issued.			
Environmental Health Specialist	Signature	EHS Number	Date
Comments			
Site Revalidation conducted by <input type="checkbox"/> Environmental Health Specialist <input type="checkbox"/> Designated Representative (check one)			
Signature	EHS / License Number	Date	



References are found in the Arkansas State Board of Health Rules and Regulations Pertaining to Onsite Wastewater Systems Effective 08/01/2019.

Zone A : LEGEND TO AutoCAD DRAWING

- A Sewer stub out location. Maximum depth of flow line from existing grade is 24". Show this drawing to your plumber (Reference 11.8).
- B 2-way clean out location. Sewer popper required. Install clean out and sewer popper at or above grade (Reference 8.13). Fall to inlet of septic tank can be no less than 1/8" per foot, and no more than 1/4" per foot (Reference 4.1).
- C Trash tank location. Risers to grade over inlet and outlet, minimum 18" diameter over inlet and minimum 24" diameter over outlet for PVU (Reference 11.6.8). ~~Effluent filter required - Oranco Filter FTS0436-28 (Reference 10.7.6).~~ Bed and backfill septic tank with 3/4" or smaller gravel (Reference 10.4). Trash tank must meet or exceed manufacturer requirements, 5000 psi, aged 28 days minimum (Reference 10.7.3 - 10.7.5.1). *pumped to pmt*
- D Proprietary Media Filter location. Disinfection required. Refer to included spec sheet for precise model.
- E UV Disinfection.
- F Sample Basin, 30"x78"
- G Point of Discharge (POD). POD meets all setbacks required. (Reference 9.8)
- H Proposed water line. Water line must be installed 10' from any part of wastewater system (Reference 6.2.8).
- I Benchmark location. Stake at base of tree.

PIPE SPECIFICATIONS

Building stub out to trash tank inlet: 4" Schedule 40 Pipe
Trash Tank to Proprietary Media Filter: 1-1/4" Schedule 40 Pipe
Proprietary Media Filter to Point of Discharge: 4" Schedule 40 Pipe

TANK SPECIFICATION

Manufacturer: Whitten Concrete 1250 Gallon Trash Tank

TREATMENT UNIT SPECIFICATION

Advantex AX20 RT Mode B-1

EFFLUENT STRENGTH

Biochemical oxygen demand < 300 mg/L
Total suspended solids < 300 mg/L
Fats, oil, and grease < 25 mg/L

(Reference 8.41 and Appendix B, Footnotes)

Any changes or substitutions to the notes and specifications in this permit must be approved by the Designated Representative.



GROUND AND INSTALLED ELEVATIONS (feet & inches)

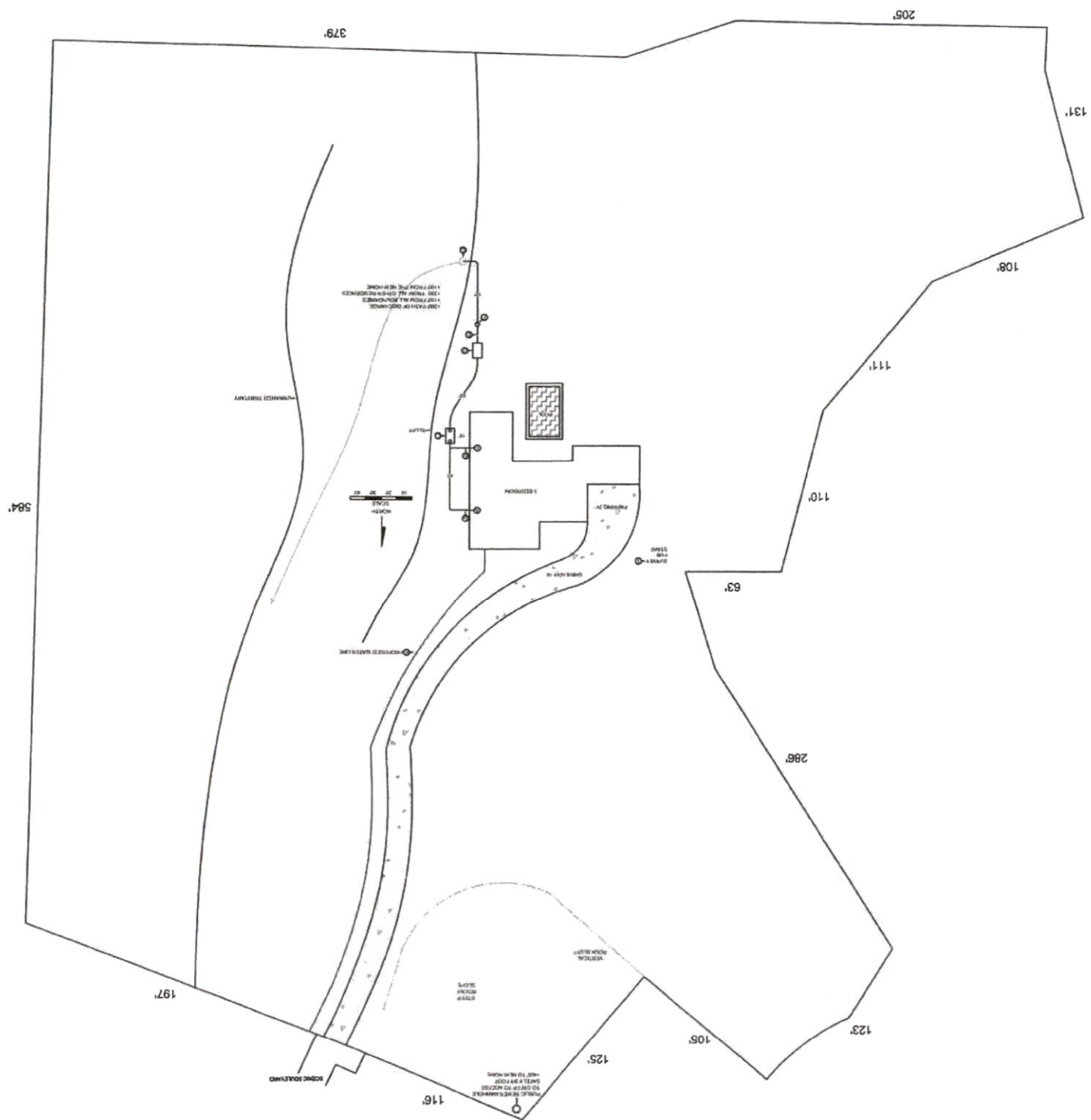
Component	Ground	Flow Line	Fall
Stub Out	06-09"	08-09"	24"
Trash Tank Inlet	06-09"	09-01"	4"
Trash Tank Outlet	06-09"	09-04"	3"
Discharge Out of Riser		08-04"	-12"*
ATU Inlet	06-09"	08-07"	3"
ATU Outlet	06-09"	09-08"	13"
UV Disinfection	06-09"	09-09"	1"
Sample Basin Inlet	06-09"	09-10"	1"
Sample Basin Outlet	06-09"	10-04"	6"
Point of Discharge	11-05"	11-05"	13"
Benchmark	00-02"	Stake at Base of Tree (See Drawing)	

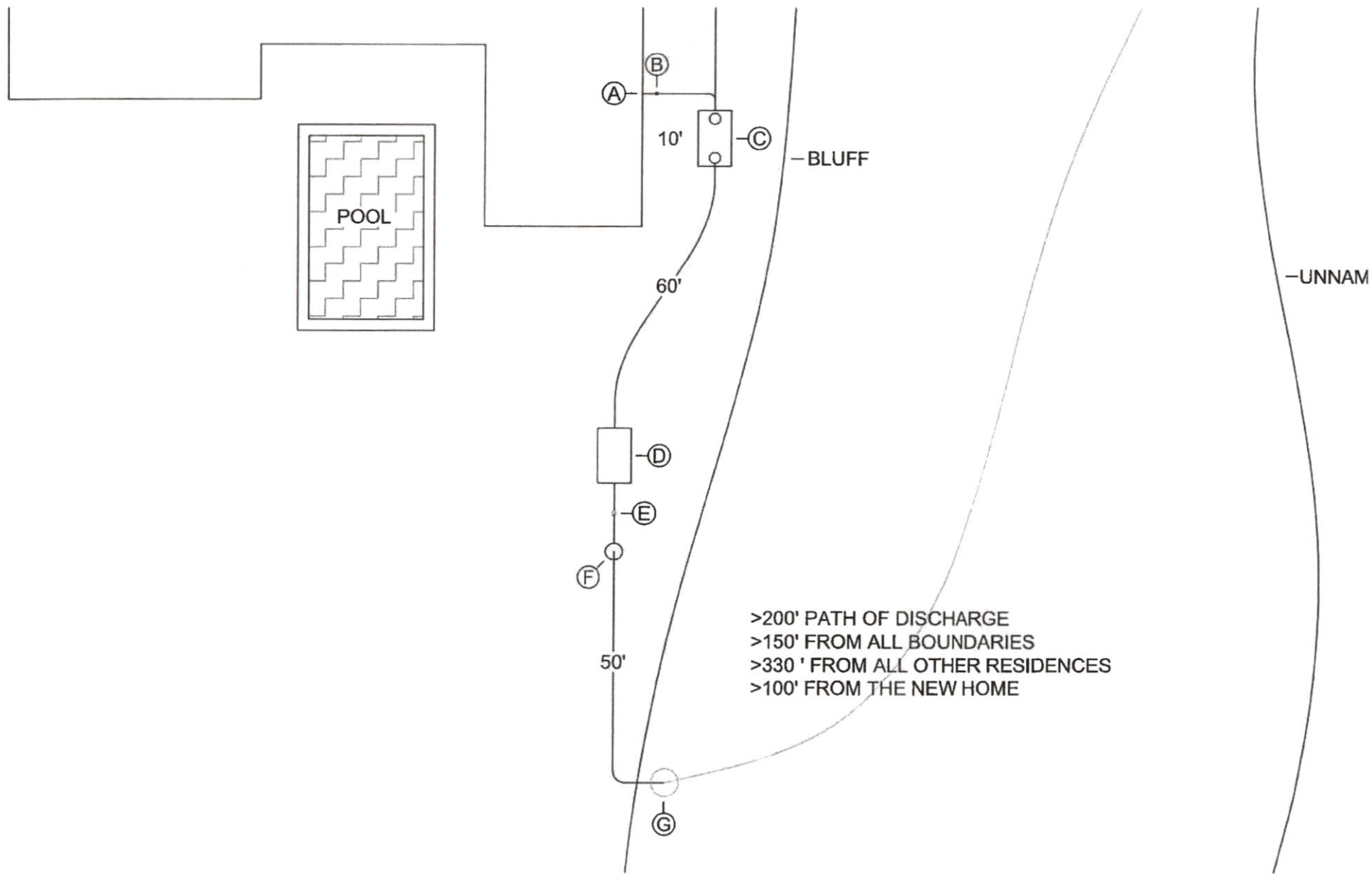
NOTES

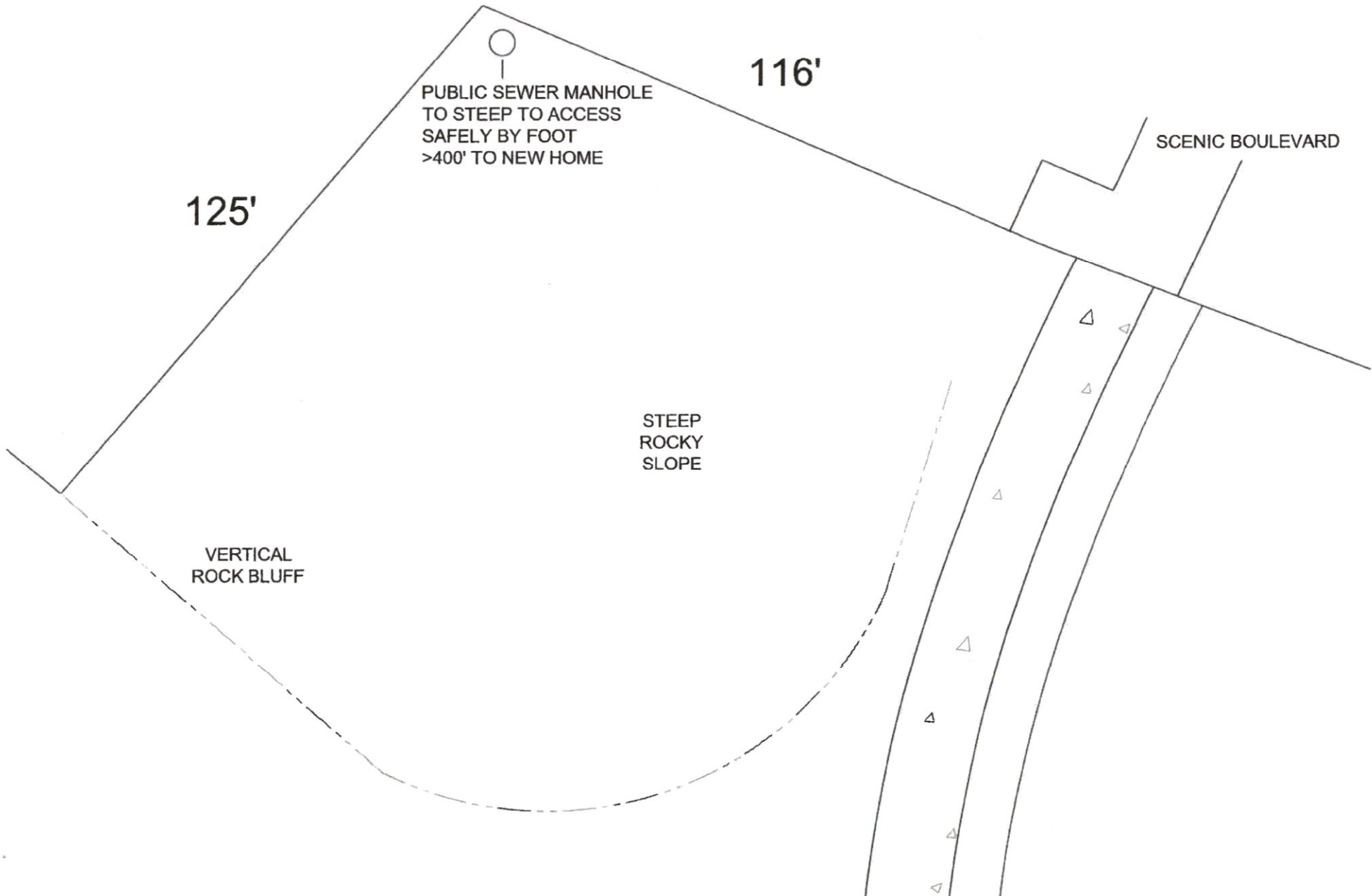
NPDES permit required on all surface discharging wastewater systems. (*Reference 9.6 and 11.1*)

Proprietary Media Filter Systems must comply with the AR Department of Health's Onsite Wastewater Systems Monitoring Program. (*Reference 12*)

Any changes or substitutions to the notes and specifications in this permit must be approved by the Designated Representative.







PUBLIC SEWER MANHOLE
TO STEEP TO ACCESS
SAFELY BY FOOT
>400' TO NEW HOME

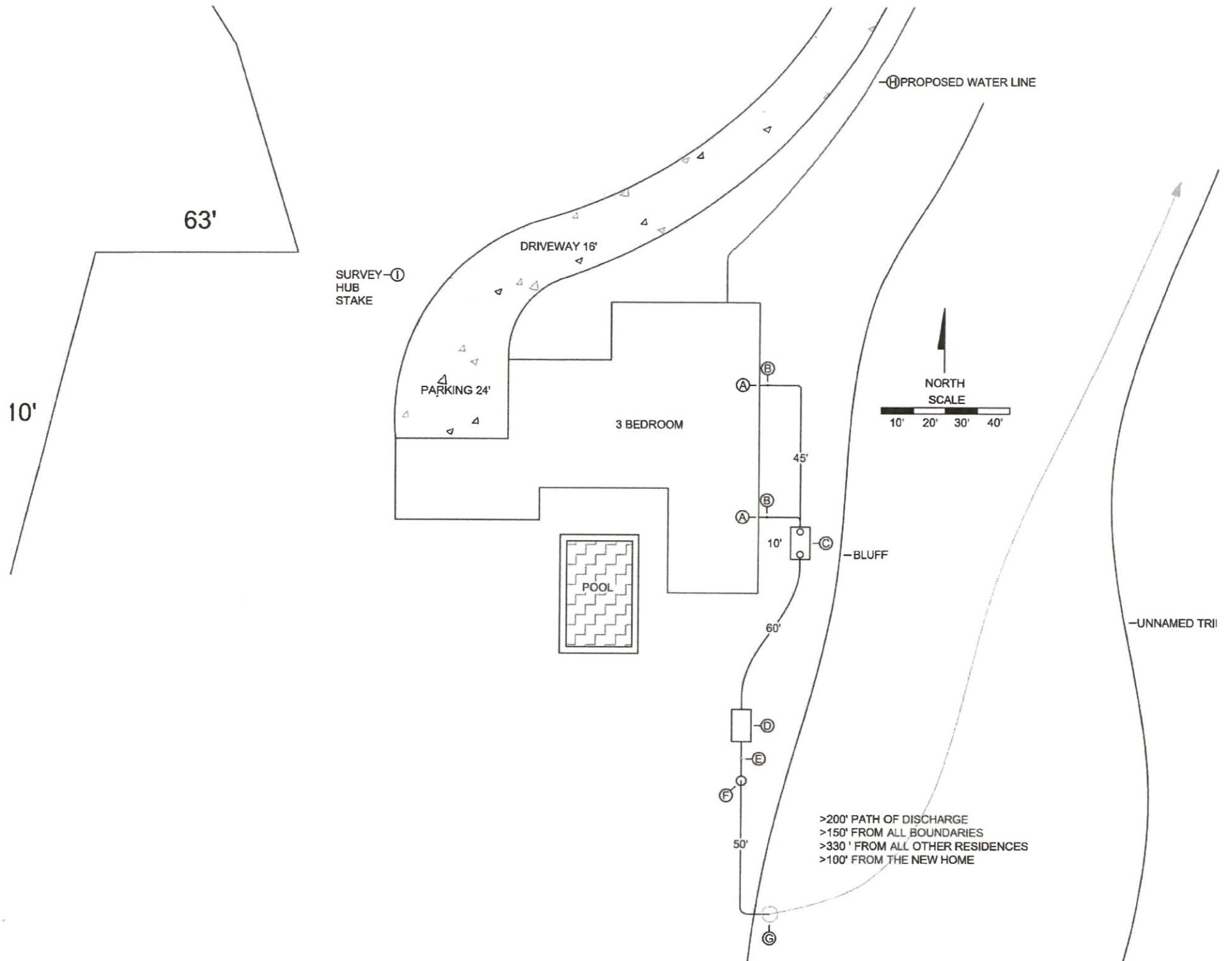
116'

125'

STEEP
ROCKY
SLOPE

VERTICAL
ROCK BLUFF

SCENIC BOULEVARD



* Optional System Utilization Verification Form



Arkansas Department of Health
Environmental Health Protection

Receipt Number

Individual Onsite Wastewater System Permit Application

Permit Type ☒ New Installation
☐ Alteration / Repair

DR Environmental ID #

7 6 0 1 0 5 5 5 4 7

☒ Homeowner

☐ Builder/Developer

Fee Schedule for Structures	✓
Structures 1500 sq ft or less \$ 30.00	<input type="checkbox"/>
Structures more than 1500 sq ft and up to 2000 sq ft \$ 45.00	<input type="checkbox"/>
Structures more than 2000 sq ft and up to 3000 sq ft \$ 90.00	<input type="checkbox"/>
Structures more than 3000 sq ft and up to 4000 sq ft \$120.00	<input type="checkbox"/>
Structures more than 4000 sq ft \$150.00	<input checked="" type="checkbox"/>
Alteration and Repair \$ 30.00	<input type="checkbox"/>

TO THE PROPERTY OWNER

Onsite Wastewater System Utilization Verification

Property location: 55 Scenic Boulevard, Little Rock, AR 72207

(Address of Proposed System, City, State, Zip)

I hereby attest there are 3 bedrooms (____ number of persons for commercial) and the square footage of the structure that will utilize the designed onsite wastewater system in this permit application is accurate. I have reviewed the permit application and understand the layout, installation, maintenance, operation and expense(s) that may be associated with this system.

As Developer/Builder, I hereby attest that the above information is correct and prior to the sale of the property, I will convey, to the buyer, all information associated with this system.

Owner/Applicant Signature _____

Date 8/12/23

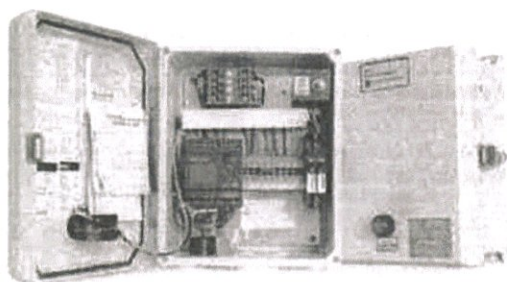
This document must be submitted with the permit application, if the Owner/Applicant Signature Section (number 19 on the EHP-19) is not signed.

MVP Simplex Control Panel

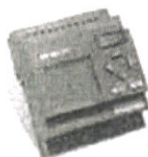
Applications

Orenco® MVP Simplex Control Panels provide timed- or demand-dosing controls for single pumps in onsite septic systems, effluent sewer (STEP) systems, and for pump controls into gravity sewer systems.

All MVP panels include an easy-to-use, programmable logic unit (PLU) that incorporates many timing and logic functions, such as multiple timing intervals to adjust for changing flow conditions and a built in elapsed time meter and counter.



The MVP control panel (MVP-S1DM shown) accommodates both timed- and demand-dosing



The brain of the Orenco® MVP control panel is its programmable logic unit (PLU)



Materials of Construction

Component	Material
Enclosure	UV-resistant fiberglass, Type 4X (IP 66)
Hinge	Stainless steel
Latch	Stainless steel

Specifications

Feature	Specifications
Height, in. (mm)	11.5 (292)
Width, in. (mm)	9.3 (236)
Depth, in. (mm)	5.4 (137)
MVP-S1 panel ratings*	120 VAC, 1 hp (0.75 kW), 16 A, 1-phase, 60 Hz
MVP-S2 panel ratings*	120 VAC, 1 hp (0.75 kW), 16 A, 1-phase, 60 Hz or 240 VAC, 3 hp (2.24 kW) 16 A, 1-phase, 60 Hz

* Pump motors used with these panels require internal overload protection

Features/Unique Specifications

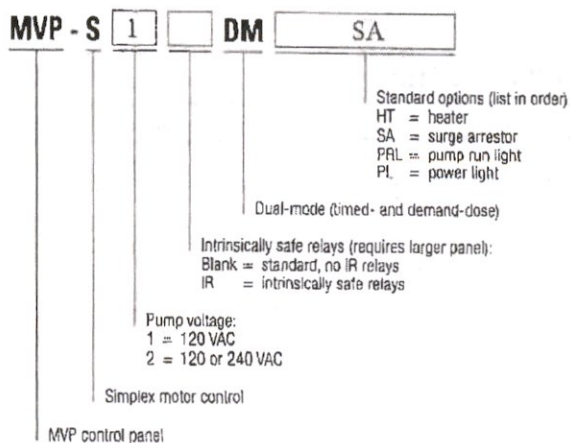
To specify this panel for your installation, require the following:

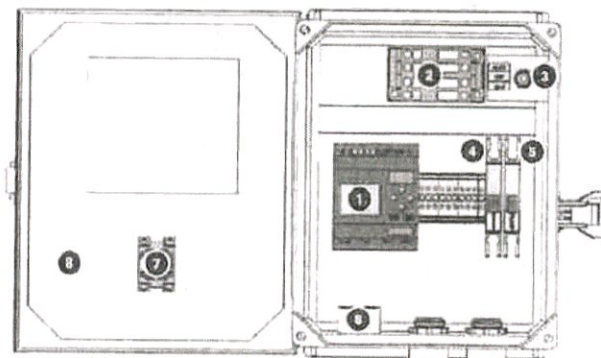
- Programmable for timed- or demand dosing applications
- Built-in elapsed time meter and counters
- Digital timed-dose function accurate within 1%
- Multiple timer settings for optimum dosing during normal and peak flow conditions
- Built-in programming keys for field-adjustable timer settings without a portable computer
- Ability to use EEPROM card to change panel functions
- High- and low-level alarm conditions differentiated by steady or blinking LED light
- Silenced alarms automatically reactivated after 12 hours if condition is not corrected
- Standard 120 V output for remote alarm activation
- Timed delays on float inputs to prevent chattering
- Ability to use one model of float for all functions
- Visual indicators of float positions
- Redundant-off function as standard
- UL 508 listing in US and Canada

Standard Models

MVP-S1DM, MVP-S2DM

Product Code Diagram





Orenco® MVP-S1DM 120 V panel

Standard Components

Feature	Specification(s)
1. Programmable Logic Unit	120 V programmable logic unit with built-in LCD screen and programming keys. Provides control functions and timing for panel operation.
2. Motor-Start Contactor	120 V, 16 FLA, 1 hp (0.75 kW), 60 Hz: 2.5 million cycles at FLA (10 million at 50% of FLA). 240 V, 16 FLA, 3 hp (2.24 kW), 60 Hz: 2.5 million cycles at FLA (10 million at 50% of FLA).
3. Toggle Switch	Single-pole, double-throw HOA switch. 20 A, 1 hp (0.75 kW)
4. Controls Circuit Breaker	10 A, OFF/ON switch. Single-pole 120 V. DIN rail mounting with thermal magnetic tripping characteristics. (240 V units are available for international markets.)
5. Pump Circuit Breaker	20 A, OFF/ON switch. Single-pole 120 V or double-pole 240 V. DIN rail mounting with thermal magnetic tripping characteristics
6. Audible Alarm	95 dB at 24 in. (610 mm), warble-tone sound.
7. Visual Alarm	7/8-in. (22-mm) diameter red lens, "Push-to-silence." UL Type 4X rated, 1 W LED light, 120 V
8. Panel Enclosure	Measures 11.5 in. high x 9.5 in. wide x 5.4 in. deep (290 x 240 x 135 mm). UL Type 4X rated. Constructed of UV-resistant fiberglass; hinges and latch are stainless steel. Conduit couplings provided.
Dual-Mode Operation	Programmable for timed- and demand-closing
MVP-S1DM Panel Ratings	120 V, 1 hp (0.75 kW), 16 A, single phase, 60 Hz.
MVP-S2DM Panel Ratings	240 V, 3 hp (2.24 kW), 16 A, single phase, 60 Hz.

Optional Components*

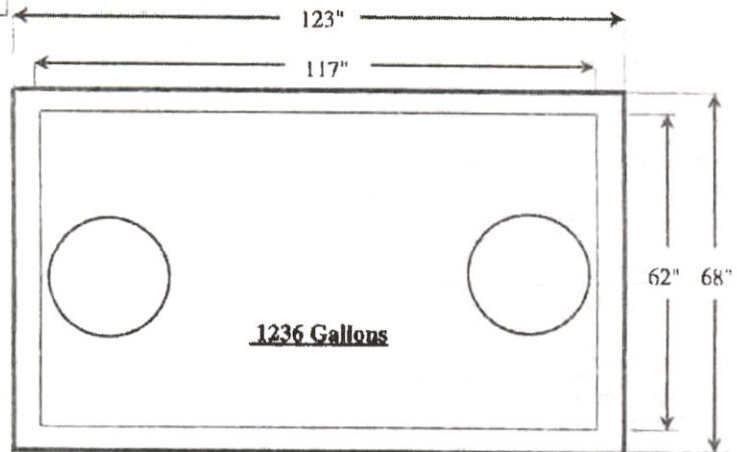
Feature	Specification(s)	Product Code Adder
Intrinsically Safe Control Relays	120 V. Listed per UL 698A, for Class 1 Div. 1, Groups A, B, C, D hazardous locations. Larger enclosure required.	IR
Heater	Anti-condensation heater. Self-adjusting; radiates additional wattage as temperature drops.	HT
Surge Arrestor	120 V. Status light on unit. Protects incoming power supply from electrical surges.	SA
Pump Run Lights	7/8-in. (22-mm) diameter green lens. UL Type 4X rated, 1 W LED light, 120 V.	PRL
Power Light	7/8-in. (22-mm) diameter green lens. UL Type 4X rated, 1 W LED light, 120 V.	PL

* Additional options available on a custom basis. Contact Orenco Controls for more information.

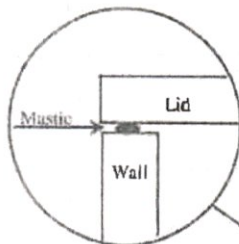
**1250 – Gallon Single
Compartment Septic Tank**

TOP VIEW

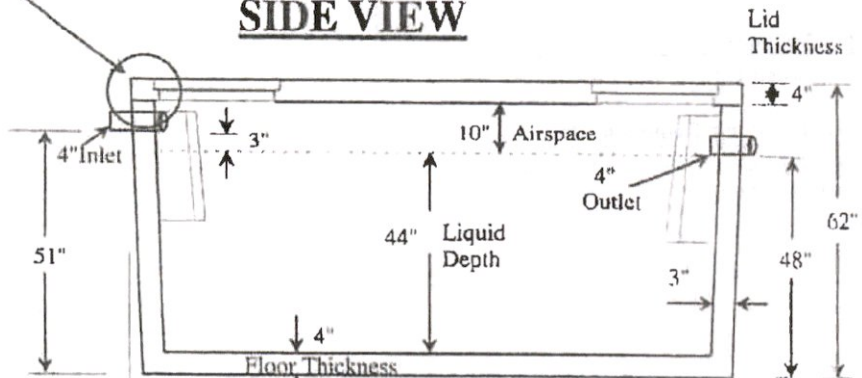
Drawings Not To Scale



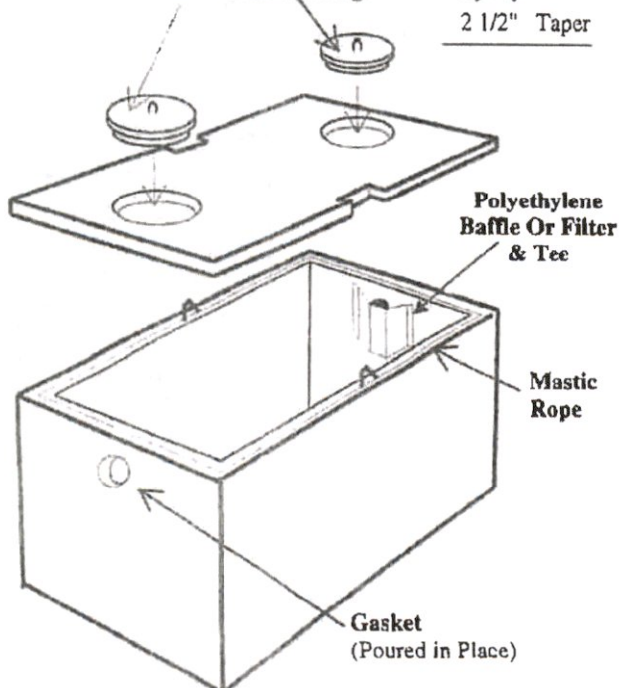
Enlarged Detail



SIDE VIEW



Manhole Lids/Openings



WHITTEN CONCRETE CO.
2703 W. 2nd AVE.
PINE BLUFF, AR. 71601
PHONE: 870-534-6901
FAX: 870-534-6902

1250 – Gallon Single Compartment Septic Tank

Drawing #: DZ-2

Drawing by: SMR Date: 1/19/2011

Pump Selection for a Non-Pressurized System - Single Family Residence Project

Eichler_Brad

Parameters

Discharge Assembly Size	1.0FC	inches
Transport Length	60	feet
Transport Pipe Class	40	
Transport Line Size	1.00	inches
Distributing Valve Model	None	
Max Elevation Lift	4	feet
Design Flow Rate	10	gpm
Flow Meter	None	inches
'Add-on' Friction Losses	10	feet

Calculations

Transport Velocity	3.7	fps
--------------------	-----	-----

Frictional Head Losses

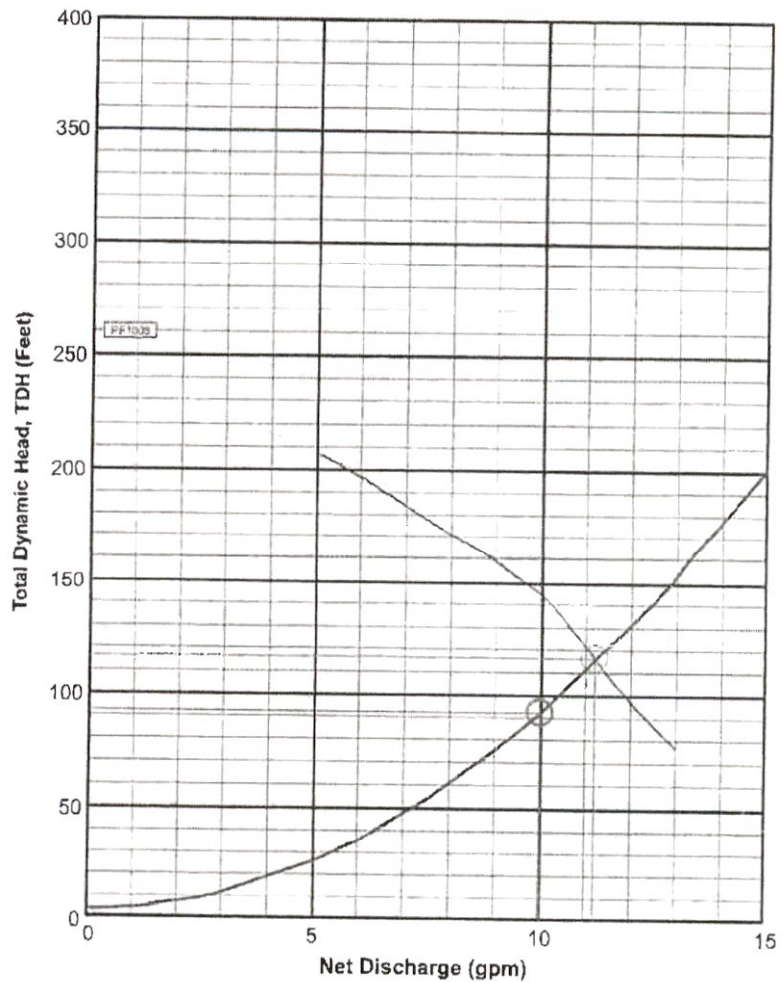
Loss through Discharge	75.0	feet
Loss in Transport	3.3	feet
Loss through Valve	0.0	feet
Loss through Flowmeter	0.0	feet
'Add-on' Friction Losses	10.0	feet

Pipe Volumes

Vol of Transport Line	2.7	gals
-----------------------	-----	------

Minimum Pump Requirements

Design Flow Rate	10.0	gpm
Total Dynamic Head	92.3	feet



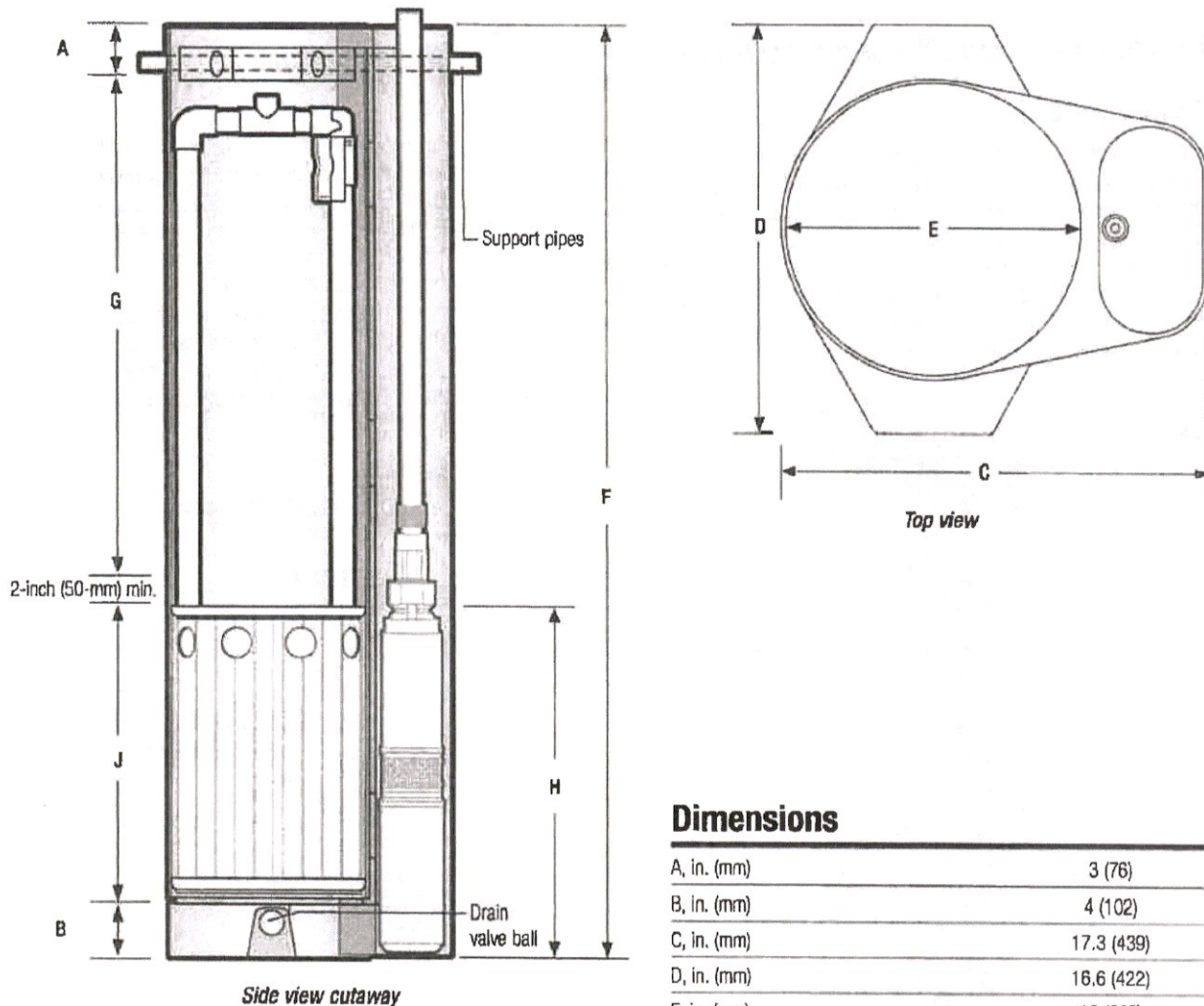
PumpData

PF1005 High Head Effluent Pump
10 GPM, 1/2HP
115/230V 1Ø 60Hz, 200V 3Ø 60Hz

Legend

System Curve:	—
Pump Curve:	- - -
Pump Optimal Range:	—
Operating Point:	○
Design Point:	○





Specifications

Model	PVU48-1818	PVU57-1819	PVU68-2419	PVU84-2419	PVU95-3625
F, vault height, in. (mm)	48 (1219)	57 (1448)	68 (1727)	84 (1727)	95 (2413)
G, lowest float setting point, in. (mm)	21 (533)	29 (737)	35 (889)	51 (1295)	50 (1270)
H, inlet hole height, in. (mm)*	18 (457)	19 (483)	19 in. (483)	19 (482)	25 (635)
J, Biotube® cartridge height, in. (mm)	18 (457)	18 (457)	24 (610)	24 (610)	36 (914)
Biotube mesh opening, in. (mm)	0.125 (3)	0.125 (3)	0.125 (3)	0.125 (3)	0.125 (3)
Filter flow area, ft² (m²)	4.4 (0.4)	4.4 (0.4)	5.9 (0.5)	5.9 (0.5)	9.0 (0.84)
Filter surface area, ft² (m²)	14.5 (1.35)	14.5 (1.35)	19.7 (1.83)	19.7 (1.83)	30 (2.79)
Maximum flow rate, gpm (L/sec)	140 (8.8)	140 (8.8)	140 (8.8)	140 (8.8)	140 (8.8)

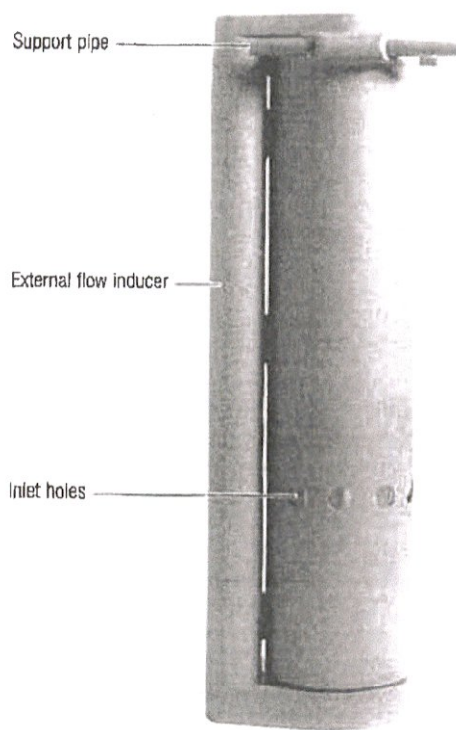
* May vary depending on the configuration of the tank.

Universal Biotube® Pump Vaults

For use with Orenco® 4-inch (100-mm) Submersible Effluent Pumps

Applications

Orenco Biotube® Pump Vaults are used to filter effluent that is pumped from septic tanks or separate dosing tanks in STEP systems and onsite wastewater treatment systems. They remove two-thirds of suspended solids, on average. Pump vaults house a Biotube effluent filter and one or two Orenco high-head effluent pumps and can be used in single-compartment septic tanks with flows up to 40 gpm (2.5 L/sec). When flows are greater than 40 gpm (2.5 L/sec), a double-compartment septic tank or separate dosing tank is recommended.



Side view

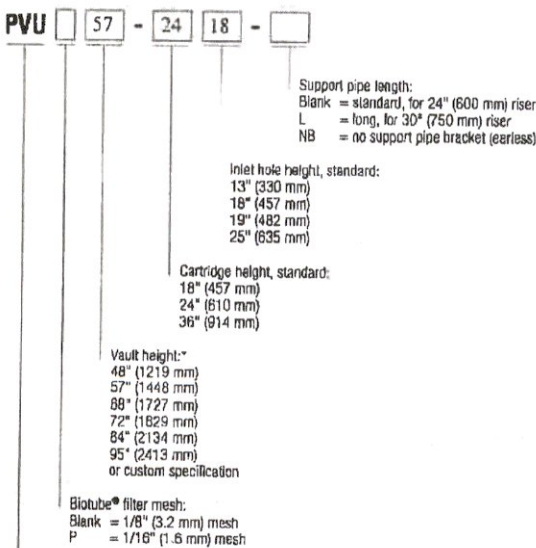
General

The Orenco Biotube Pump Vault includes a molded polyethylene housing with an internal Biotube filter cartridge constructed of polypropylene and PVC. Schedule 80 PVC support pipes are included to suspend the vault in a tank opening. "Earless" 68-inch (1727-mm) vaults, which rest on the bottom of the tank instead of on support pipes, are also available. The filter cartridge can be removed without pulling the pump or the vault. Effluent enters through inlet holes around the perimeter of the Biotube vault and flows through the Biotubes to the external flow inducer. The external flow inducer accommodates one or two pumps. Orenco Biotube Pump Vaults are covered by U.S. patents #4,439,323 and 5,492,635.

Standard Models

PVU48-1818, PVU57-1819, PVU68-2419, PVU84-2419, PVU95-3625

Product Code Diagram



Universal Pump Vault

* Custom heights from 42" to 135" available

Tank Access and Riser Diameters

Diameter, in. (mm)	PVU with simplex pump	PVU with duplex pumps
Tank access, minimum	19 (483)	19 (483)
Tank access, recommended	20 (508)	20 (508)
Riser, minimum	24 (600)	30 (750)

Materials of Construction

Support pipe	Schedule 80 PVC
Biotube® vault	Polyethylene
Biotube filter cartridge	Polypropylene/PVC
Float stem	Schedule 40 PVC
Drain valve ball	Polypropylene

Specifications

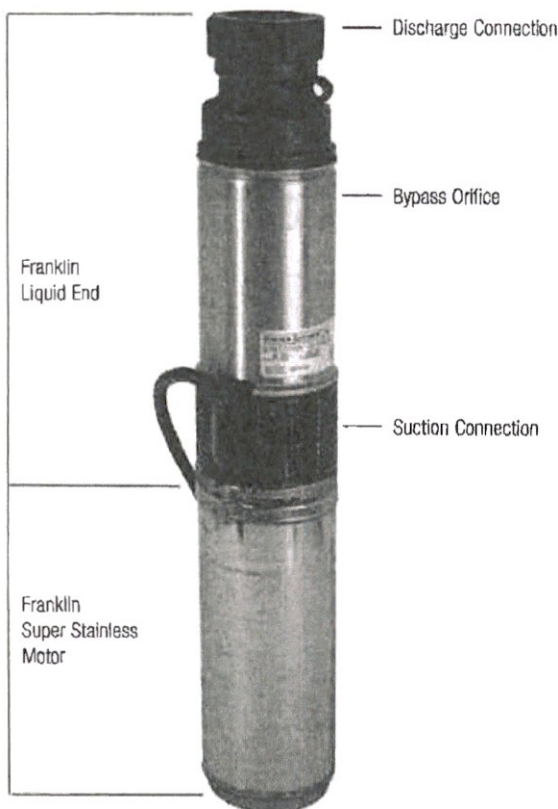
Pump Model	Design gpm (L/sec)	Horsepower (kW)	Phase	Nameplate voltage	Actual voltage	Design flow amps	Max amps	Impellers	Discharge size and material ¹	Length, in. (mm)	Min. liquid level, ² in. (mm)	Weight, ³ lb (kg)	Rated cycles/day
PF100511	10 (0.6)	0.50 (0.37)	1	115	120	12.7	12.7	6	1 1/4 in. GFP	23.0 (660)	16 (406)	26 (12)	300
PF100511CV	10 (0.6)	0.50 (0.37)	1	115	120	12.7	12.7	6	1 1/4 in. GFP	23.0 (660)	16 (406)	26 (12)	300
PF100512	10 (0.6)	0.50 (0.37)	1	230	240	6.3	6.3	6	1 1/4 in. GFP	23.0 (660)	16 (406)	26 (12)	300
PF10053200	10 (0.6)	0.50 (0.37)	3	200	208	3.8	3.8	6	1 1/4 in. GFP	23.0 (660)	16 (406)	26 (12)	300
PF100712 ^{4,5}	10 (0.6)	0.75 (0.56)	1	230	240	8.3	8.3	8	1 1/4 in. GFP	25.9 (658)	17 (432)	30 (14)	300
PF10073200 ^{4,5}	10 (0.6)	0.75 (0.56)	3	200	208	5.1	5.2	8	1 1/4 in. GFP	25.4 (645)	17 (432)	31 (14)	300
PF101012 ^{5,6}	10 (0.6)	1.00 (0.75)	1	230	240	9.6	9.6	9	1 1/4 in. GFP	27.9 (709)	18 (457)	33 (15)	100
PF10103200 ^{5,6}	10 (0.6)	1.00 (0.75)	3	200	208	5.5	5.5	9	1 1/4 in. GFP	27.3 (693)	18 (457)	37 (17)	300
PF102012 ^{5,6,7,8}	10 (0.6)	2.00 (1.49)	1	230	240	12.1	12.1	18	1 1/4 in. SS	39.5 (1003)	22 (559)	48 (22)	100
PF102032 ^{5,6,8}	10 (0.6)	2.00 (1.49)	3	230	240	7.5	7.6	18	1 1/4 in. SS	37.9 (963)	20 (508)	44 (20)	300
PF10203200 ^{5,6,8}	10 (0.6)	2.00 (1.49)	3	200	208	8.7	8.7	18	1 1/4 in. SS	37.9 (963)	20 (508)	44 (20)	300
PF150311	15 (1.0)	0.33 (0.25)	1	115	120	8.7	8.8	3	1 1/4 in. GFP	19.5 (495)	15 (380)	23 (10)	300
PF150312	15 (1.0)	0.33 (0.25)	1	230	240	4.4	4.5	3	1 1/4 in. GFP	19.5 (495)	15 (380)	23 (10)	300
PF2005 ¹	20 (1.3)	0.50 (0.37)	1	115	120	12.3	12.5	4	1 1/4 in. GFP	22.3 (566)	18 (457)	25 (11)	300
PF2005 ²	20 (1.3)	0.50 (0.37)	1	230	240	6.4	6.5	4	1 1/4 in. GFP	22.5 (572)	18 (457)	26 (12)	300
PF20053200	20 (1.3)	0.50 (0.37)	3	200	208	3.7	3.8	4	1 1/4 in. GFP	22.3 (566)	18 (457)	26 (12)	300
PF201012 ^{4,6}	20 (1.3)	1.00 (0.75)	1	230	240	10.5	10.5	7	1 1/4 in. GFP	28.4 (721)	20 (508)	33 (15)	100
PF20103200 ^{4,5}	20 (1.3)	1.00 (0.75)	3	200	208	5.8	5.9	7	1 1/4 in. GFP	27.8 (706)	20 (508)	33 (15)	300
PF201512 ^{4,5}	20 (1.3)	1.50 (1.11)	1	230	240	12.4	12.6	9	1 1/4 in. GFP	34.0 (864)	24 (610)	41 (19)	100
PF20153200 ^{4,5}	20 (1.3)	1.50 (1.11)	3	200	208	7.1	7.2	9	1 1/4 in. GFP	30.7 (780)	20 (508)	35 (16)	300
PF300511	30 (1.9)	0.50 (0.37)	1	115	120	11.8	11.8	3	1 1/4 in. GFP	21.3 (541)	20 (508)	28 (13)	300
PF300512	30 (1.9)	0.50 (0.37)	1	230	240	6.2	6.2	3	1 1/4 in. GFP	21.3 (541)	20 (508)	25 (11)	300
PF30053200	30 (1.9)	0.50 (0.37)	3	200	208	3.6	3.6	3	1 1/4 in. GFP	21.3 (541)	20 (508)	25 (11)	300
PF300712	30 (1.9)	0.75 (0.56)	1	230	240	8.5	8.5	5	1 1/4 in. GFP	24.8 (630)	21 (533)	29 (13)	300
PF30073200	30 (1.9)	0.75 (0.56)	3	200	208	4.9	4.9	5	1 1/4 in. GFP	24.6 (625)	21 (533)	30 (14)	300
PF301012 ⁴	30 (1.9)	1.00 (0.75)	1	230	240	10.4	10.4	6	1 1/4 in. GFP	27.0 (686)	22 (559)	32 (15)	100
PF30103200 ⁴	30 (1.9)	1.00 (0.75)	3	200	208	5.8	5.8	6	1 1/4 in. GFP	26.4 (671)	22 (559)	33 (15)	300
PF301512 ^{4,5}	30 (1.9)	1.50 (1.11)	1	230	240	12.6	12.6	8	1 1/4 in. GFP	32.8 (833)	24 (610)	40 (18)	100
PF30153200 ^{4,5}	30 (1.9)	1.50 (1.11)	3	200	208	6.9	6.9	8	1 1/4 in. GFP	29.8 (757)	22 (559)	34 (15)	300
PF301534 ^{4,5}	30 (1.9)	1.50 (1.11)	3	460	480	2.8	2.8	8	1 1/4 in. GFP	29.5 (685)	22 (559)	34 (15)	300
PF302012 ^{5,6,7}	30 (1.9)	2.00 (1.49)	1	230	240	11.0	11.0	10	1 1/4 in. SS	35.5 (902)	26 (660)	44 (20)	100
PF30203200 ^{5,6}	30 (1.9)	2.00 (1.49)	3	200	208	9.3	9.3	10	1 1/4 in. SS	34.0 (864)	24 (610)	41 (19)	300
PF303012 ^{5,6,7,8}	30 (1.9)	3.00 (2.23)	1	230	240	16.8	16.8	14	1 1/4 in. SS	44.5 (1130)	33 (838)	54 (24)	100
PF303032 ^{5,6,8}	30 (1.9)	3.00 (2.23)	3	230	240	10.0	10.1	14	1 1/4 in. SS	44.3 (1125)	27 (686)	52 (24)	300
PF305012 ^{5,6,7,8}	30 (1.9)	5.00 (3.73)	1	230	240	25.6	25.8	23	1 1/4 in. SS	66.5 (1689)	53 (1346)	82 (37)	100
PF305032 ^{5,6,8}	30 (1.9)	5.00 (3.73)	3	230	240	16.6	16.6	23	1 1/4 in. SS	60.8 (1544)	48 (1219)	66 (30)	300
PF30503200 ^{5,6,8}	30 (1.9)	5.00 (3.73)	3	200	208	18.7	18.7	23	1 1/4 in. SS	60.8 (1544)	48 (1219)	66 (30)	300
PF500511	50 (3.2)	0.50 (0.37)	1	115	120	12.1	12.1	2	2 in. SS	20.3 (516)	24 (610)	27 (12)	300
PF500512	50 (3.2)	0.50 (0.37)	1	230	240	6.2	6.2	2	2 in. SS	20.3 (516)	24 (610)	27 (12)	300
PF500532	50 (3.2)	0.50 (0.37)	3	230	240	3.0	3.0	2	2 in. SS	20.3 (516)	24 (610)	28 (13)	300
PF50053200	50 (3.2)	0.50 (0.37)	3	200	208	3.7	3.7	2	2 in. SS	20.3 (516)	24 (610)	28 (13)	300
PF500534	50 (3.2)	0.50 (0.37)	3	460	480	1.5	1.5	2	2 in. SS	20.3 (516)	24 (610)	28 (13)	300
PF500712	50 (3.2)	0.75 (0.56)	1	230	240	8.5	8.5	3	2 in. SS	23.7 (602)	25 (635)	31 (14)	300
PF500732	50 (3.2)	0.75 (0.56)	3	230	240	3.9	3.9	3	2 in. SS	23.7 (602)	25 (635)	32 (15)	300

PF Series 60-Hz, 4-inch (100-mm) Submersible Effluent Pumps

Applications

Our 4-inch (100-mm) Submersible Effluent Pumps are designed to transport screened effluent (with low TSS counts) from septic tanks or separate dosing tanks. All our pumps are constructed of lightweight, corrosion-resistant stainless steel and engineered plastics; all are field-serviceable and repairable with common tools; 60-Hz PF Series models are CSA certified to the U.S. and Canadian safety standards for effluent pumps, meeting UL requirements.

Orenco's Effluent Pumps are used in a variety of applications, including pressurized drainfields, packed bed filters, mounds, aerobic units, effluent irrigation, effluent sewers, wetlands, lagoons, and more. These pumps are designed to be used with a Biotube® pump vault or after a secondary treatment system.



Features/Specifications

To specify this pump for your installation, require the following:

- Minimum 24-hour run-dry capability with no deterioration in pump life or performance*
- Patented 1/8-inch (3-mm) bypass orifice to ensure flow recirculation for motor cooling and to prevent air bind
- Liquid end repair kits available for better long-term cost of ownership
- TRI-SEAL™ floating impeller design on 10, 15, 20, and 30 gpm (0.6, 1.0, 1.3, and 1.9 L/sec) models; floating stack design on 50 and 75 gpm (3.2 and 4.7 L/sec) models
- Franklin Electric Super Stainless motor, rated for continuous use and frequent cycling
- Type SOOW 600-V motor cable

* Not applicable for 5-hp (3.73 kW) models

Standard Models

See specifications chart, pages 2-3, for a list of standard pumps. For a complete list of available pumps, call Orenco.

Product Code Diagram

PF	10	05	1	1	-	
						Cord length, ft (m): Blank = 10 (3) 20 = 20 (6) 30 = 30 (9) 50 = 50 (15)
						Check valve: Blank = no internal check valve CV = internal check valve ¹
						Voltage, nameplate: 1 = 115* 200 = 200 2 = 230 4 = 460
						Frequency: 1 = single-phase 60 Hz 3 = three-phase 60 Hz
						Horsepower (kW): 03 = 1/8 hp (0.25) 05 = 1/4 hp (0.37) 07 = 3/8 hp (0.56) 10 = 1/2 hp (0.75) 15 = 3/4 hp (1.1) 20 = 1 hp (1.50) 30 = 3 hp (2.24) 50 = 5 hp (3.73)
						Nominal flow, gpm (L/sec) 10 = 10 (0.6) 15 = 15 (1.0) 20 = 20 (1.3) 30 = 30 (1.9) 50 = 50 (3.2) 75 = 75 (4.7)

Pump, PF Series

* 1/4-hp (0.37 kW) only

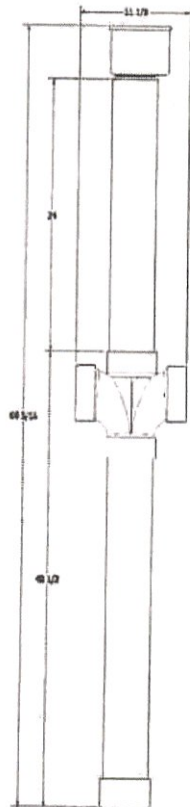
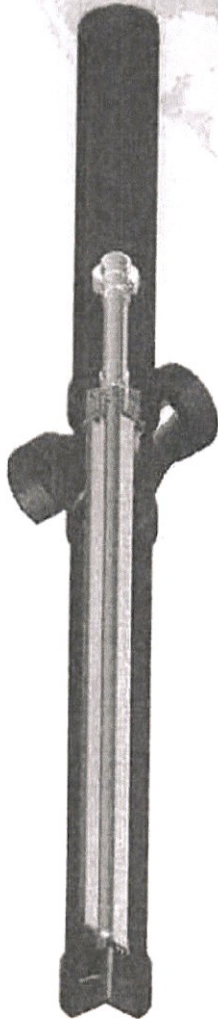
¹ Available for 10 gpm (0.6 L/sec), 1/2 hp (0.37 kW) only

² Note: 20-ft corde are available only for single-phase pumps through 1 1/2 hp



Powered by
Franklin Electric

Illumi-Jet UV Disinfection Unit®



Designed to disinfect the effluent from advanced onsite treatment systems, the model Illumi-Jet is capable of reducing fecal coliform bacteria levels to well below the most stringent U.S. treatment standards. The Illumi-Jet utilizes a germicidal lamp which emits 95% of the ultraviolet energy at the wavelength of 254 nanometers. This wavelength is in the region of maximum germicidal effectiveness and is highly lethal to virus, bacteria, protozoa and mold. The disinfection chamber couples directly to any system's 4" discharge pipe and is permanently installed below grade. When fully inserted, the lamp housing is properly positioned by an integrated keyway near the top of the disinfection chamber. This creates a well defined flow path ensuring system effluent has the proper ultraviolet exposure time. Under standard operating conditions, fecal coliform reduction exceeds 99.9%.

Parameter	Specification
UV Lamp	GPH793T5
UV Dose at 10 GPM	64,000 µW at 0-4cm
Lamp Wattage	37
Ballast Type	WH3-120-C
Voltage	120 VAC
Frequency	50/60 HZ
Current	0.4 A
Power	40 W
Alarm Contacts	NC/NO
Indicator Light	Green LED
Enclosure Type	NEMA 6P
Unit Height	53" - 70"
Connections	4"
Material	ABS
Reservoir Capacity	~2 Gallon
Max. Flow Rate	10 GPM
Min. Influent Quality	30 TSS / 30 BOD



DANGER
Ultraviolet Radiation
1. Do not look directly at the lamp.
2. Do not touch the lamp.

FOR OUTDOOR USE ONLY!



WARNING:
Electric Shock Risk
Disconnect Power
Before Maintenance



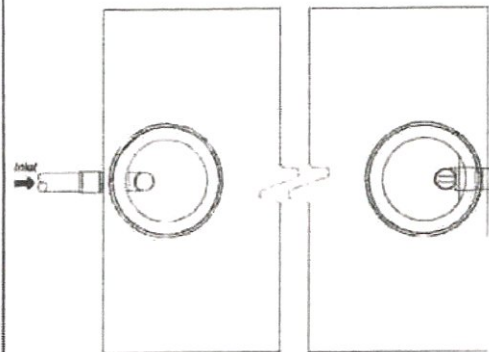
2. General Notes: 120 VAC, 50/60 Hz, 0.4 Amp, 40 Watts.
 3. Installation: Mounting Bracket, 250" x 120" x 120", 1/2" Thick.
 4. Maximum Lamp Wattage: 37 Watts.
 5. Water: None.

AX20RT Treatment System - Gravity Discharge (VA)

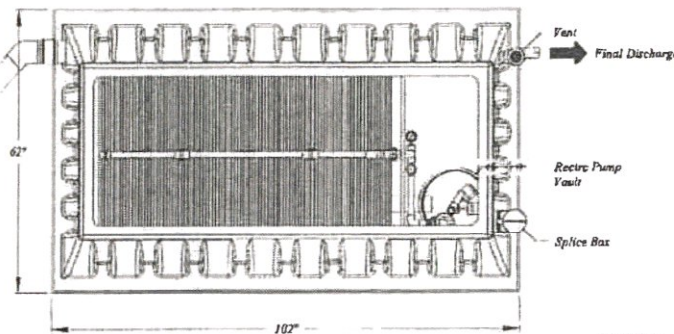
Filter Tank Dry Weight: 860 lbs

Design and Installation Notes

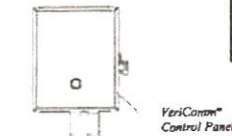
- For Expected Flows 4 Bedrooms or less
- Installation To Be Performed By An AdvanTex Trained Installer Only
- Start-up And Service To Be Performed By An AdvanTex Trained Service Provider



1000 gal. Primary Tank - Top View



AX20 800 gal. Recirc. Tank - Top View



Control Panel Detail
Not To Scale

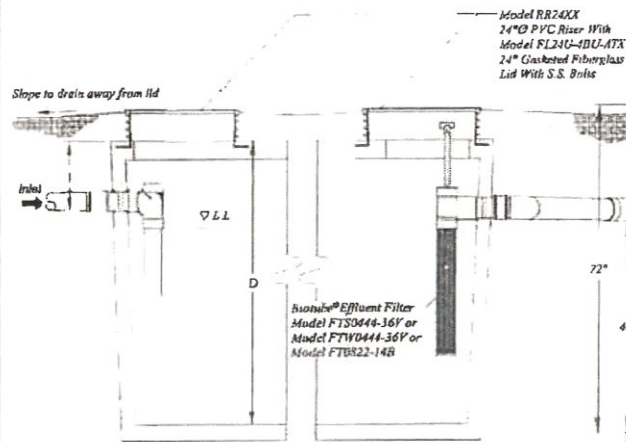
Note: Only tanks from the manufacturers listed below shall be used.

Tank Manufacturer	Septic Tank Size	L	D
Oreco Fiberglass Tank	1000 Gal.	11'	65"
C.T. Jackson	1000 Gal.	14'	65"
Kanover Plastics	1000 Gal.	16'	66.5"
Rodriguez Plastics	1000 Gal.	16'	64"
Wright Ready Mix	1000 Gal.	15'	65"
Brasley Concrete	1000 Gal.	16'	66"
Rich Global Plastics	1000 Gal.	11'	51"

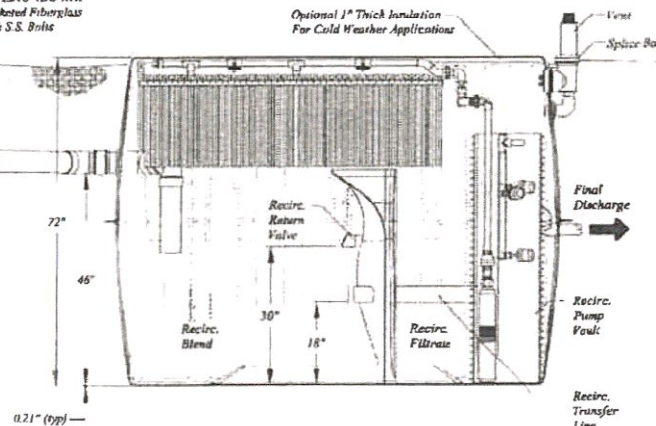
Note: All tanks shall be tested for watertightness. All concrete tanks shall have PTFA14 cast into tank for acceptance of Model RR24XX Riser.



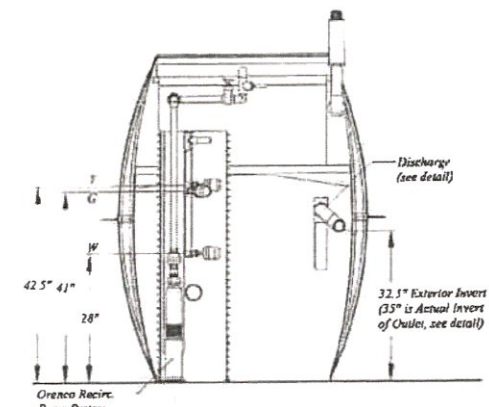
Discharge Detail
Not To Scale



1000 gal. Primary Tank - Side View



AX20 800 gal. Recirc. Tank - Side View



Discharge Chamber - End View



Graphic Scale

Float Functions
F High Level Alarm
G Override Timer On/Off
H LLARO

UNAUTHORIZED CHANGES & USES

Drawings are prepared for use by the design engineer. Changes will not be recognized or made for unauthorized alterations to or use of these drawings. All changes to these drawings must be made in writing and must be approved by the design engineer.

PRODUCT CONFIGURATION DRAWINGS



Drawn By: BEN SMITH

Drawn For:

Project:

AX20RT Mode 1A

Title:

NDW-ATX-RT-VA-01

Copyright © 2011
Oreco Systems, Inc.

Scale: AS SHOWN

Sheet: 1 OF 1

Rev. A-05

Date: 8/17/2011

(b) any consumable or replacement parts or inventory required for the SYSTEM to operate as designed, which may include, without limitation, chlorine tablets, floats, soda ash, UV bulbs, pumps, or control panel(s), provided that MEINCO shall notify SYSTEM OWNER, either verbally or in writing, prior to incurring expenses pursuant to this subsection, and MEINCO may proceed unless SYSTEM OWNER objects in writing within 24 hours after MEINCO sends notification; or

(c) removing solids or grease from the SYSTEM; or

(d) maintaining the grass and/or landscaping on or around any part of the Wastewater System, including any disposal area used by the Wastewater System, unless noted in Exhibit A or as agreed to in writing; or

(e) paying any application fees or professional fees associated with any permit renewals, corrective action plans, or any other application fees or professional fees that may be required by the regulatory agencies to remain in compliance, with the SYSTEM.

4. **Term.** This Agreement commences as of the Effective Date and continues through the 365 day after the Effective Date (the "Initial Term"). The Initial Term will renew automatically for an additional 365 days (a "Renewal Term"), and each Renewal Term will renew automatically for an additional 365 days (the Initial Term and all Renewal Terms are referred to collectively as the "Term"). Either MEINCO or SYSTEM OWNER may terminate this Agreement at any time, provided that (i) the terminating party delivers to the other party a written termination notice at least thirty (30) days prior to the effective termination date and (ii) if SYSTEM OWNER is the terminating party, SYSTEM OWNER has paid MEINCO in full for all then-due Service and Maintenance Fees and any agreed-to Excluded Service and Maintenance Responsibilities.

5. **Automatic Termination Events.** Unless MEINCO agrees otherwise in writing, MEINCO may terminate this Agreement if any of the following occur:

(a) the flow rate of the SYSTEM exceeds the Maximum System Flow Rate or otherwise violates SYSTEM OWNER's regulatory permit(s); or

(b) the SYSTEM is modified, abused, misused, or altered; or

(c) SYSTEM OWNER fails or refuses to pay any Service and Maintenance Fee, repair costs, or agreed-to Excluded Service and Maintenance Responsibilities for longer than 60 days after the payment for the Service and Maintenance Fees, repair costs, or agreed-to Excluded Service and Maintenance Fees was otherwise due.

6. **Assignment.** MEINCO or SYSTEM OWNER may assign this Agreement without the other's consent provided that the assigning party delivers the other party notice, either written or verbally, at least thirty (30) days prior to any assignment.

7. **Non-Waiver.** No failure by a party to insist upon strict compliance with any term of this Agreement, to enforce any right, or seek any remedy upon any default of the other party shall affect or constitute a waiver of the first party's right to insist upon such strict compliance, enforce that right, or seek that remedy with respect to that default or any prior, contemporaneous, or subsequent default, nor shall any custom or practice of the parties at variance with any provision of this Agreement affect, or constitute a waiver of, any party's right to demand strict compliance with all provisions of this Agreement.

8. **No Third-Party Benefit.** This Agreement is intended for the exclusive benefit of SYSTEM OWNER and MEINCO and their respective permitted successors and assigns, and nothing contained in this Agreement shall be construed as creating any right or benefit in or to any third party.

9. **Complete Agreement.** This Agreement contains the entire agreement between the parties and supersedes any prior negotiations, representations, understandings, or agreements among them respecting the subject matter. No change, alteration, modification, addition, or qualification to the terms of this Agreement shall be made or be binding unless made in writing and signed by each of the parties.

10. **No Partnership or Joint Venture.** Nothing contained in this Agreement shall constitute or be construed to be or create a partnership or joint venture between SYSTEM OWNER and MEINCO.

11. **Force Majeure.** MEINCO's obligation to perform Routine Service and Maintenance shall be extended to the extent that the performance thereof shall be delayed by acts of God, fire, windstorm, flood,

WASTEWATER SYSTEM SERVICE AND MAINTENANCE AGREEMENT

System Owner:	Brad Eichler
System Location:	55 Scenic Boulevard, Little Rock, AR 72207
Wastewater System:	AX20 RT with Surface Discharge
Daily Flow Limit:	370 GPD
Phone Number(s):	(501) 912-2444
Email Address(es):	jacobwhitecc@gmail.com
Billing Address:	2523 North Pierce Street, Little Rock, AR 72207

In consideration of the mutual covenants in this Agreement, the sufficiency of which is hereby acknowledged, MEINCO Wastewater Systems, Inc. ("MEINCO") and ("SYSTEM OWNER") agree as follows:

1. **Service and Maintenance Fees.** Commencing as of the Effective Date (defined in the footer) and continuing each month (the "Billing Cycle") through the Term (defined in Section 4 below), SYSTEM OWNER shall pay to MEINCO (a) the service and maintenance fees stated at the bottom of the table on the first page of EXHIBIT A attached hereto (the "Service and Maintenance Expenses") and (b) the consumable material expenses stated at the bottom of the table on the second page of EXHIBIT A attached hereto ("Consumable Materials Expense") (Service and Maintenance Expenses and Consumable Materials Expense are referred to as "Service and Maintenance Fees"). With thirty (30) days' prior written notice to SYSTEM OWNER, MEINCO may amend EXHIBIT A one or more times, if MEINCO deems an amendment necessary in MEINCO's sole discretion to capture additional unforeseen Service and Maintenance Fees and any actual Consumable Material Expenses.

2. **Service and Maintenance Responsibilities.** SYSTEM OWNER grants MEINCO access to the System Location (defined above) and the Wastewater System (defined above) and all components of the Wastewater System, including any alarm system, pressure pump, riser, or tank connected to the Wastewater System (collectively, the "SYSTEM") to perform the following routine service and maintenance services on the SYSTEM (collectively, "Routine Service and Maintenance"):

(a) during normal business hours Monday through Friday (excluding any national holidays): MEINCO agrees to the following, as recommended by the SYSTEM's manufacturer to:

- i. conduct inspections of the SYSTEM; and
- ii. perform routine maintenance to the SYSTEM;

(b) prepare field reports documenting the SYSTEM's performance, as required by the Arkansas Department of Health (ADH) or other applicable federal, state, or local regulatory agency;

(c) manage analytical sampling of the SYSTEM performance per regulatory permit requirements to include the following:

- i. submit analytical data to regulatory agency, if applicable;
- ii. retain and file written copies of analytical data per regulatory agencies permit requirements, if applicable;

(d) communicate, in writing, any recommendations that MEINCO believes the SYSTEM requires to operate efficiently; and

(e) within 8 hours after receiving any emergency service request, respond to the request either verbally or at the System Location (as MEINCO deems necessary).

3. **Excluded Service and Maintenance Responsibilities.** Unless MEINCO and SYSTEM OWNER agree otherwise in writing, MEINCO has no obligation to repair, replace, or perform any of the following in relation to the SYSTEM (collectively, the "Excluded Service and Maintenance Responsibilities"):

- (a) monitoring or taking any action to adjust the SYSTEM's inflow rate, or

Contract Number: Brad Eichler

Effective Date: 06/13/2023

Page 1

EXHIBIT A

Routine Service and Maintenance Fees

Labor (MEINCO)	Unit	Rate	Total
Services	8	\$175	\$600
Additional Mileage	N/A	N/A	N/A
Lab Fees (3rd Party)			
Fees, Lab	2	\$150	\$300
Total Service and Maintenance Fee			\$820

explosion, collapse of structures, riot, war, acts of terrorism, labor disputes, delays or restrictions by government action (including, without limitation, any federal, state, or local order, ordinance, or warning to shelter in place or otherwise restrict public interactions), inability to obtain necessary materials, or any other cause beyond MEINCO's reasonable control.

EXECUTED AND ENTERED INTO AS OF THE EFFECTIVE DATE.

SYSTEM OWNER:

By: _____

Title: _____

MEINCO:

MEINCO Wastewater Systems, Inc.

By: _____

Title: Owner



14. Turn **right** to stay on **Scenic Blvd**

197 ft

Arrive at **Scenic Blvd**

15. The last intersection before your destination is Scenic Pt

B 55 Scenic Blvd, Little Rock, AR 72207

- A** North Little Rock Health Department, 2800 Willow St, North Little Rock, AR 72114
- B** 55 Scenic Blvd, Little Rock, AR 72207

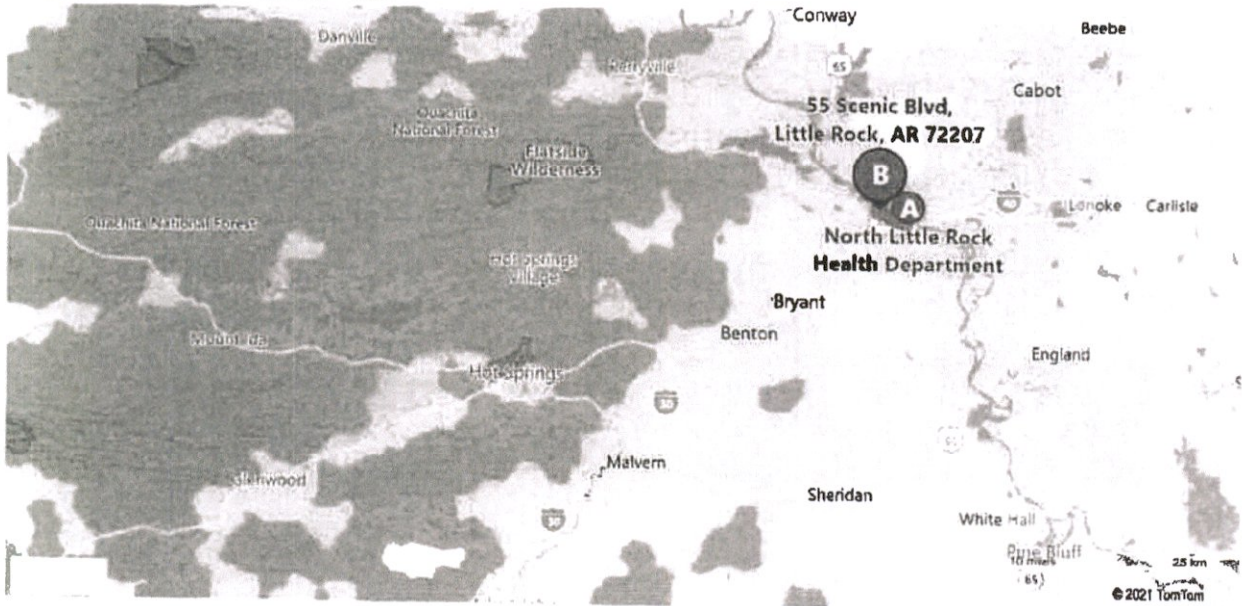
20 min , 8.4 miles
Light traffic (Leave at 10:14 AM)
Via AR-365, AR-10

Call ahead locked gate!

A North Little Rock Health Department

↑	1.	Depart and head south on Willow St	453 ft
↘	2.	Turn right onto W Pershing Blvd	0.4 mi
↙	3.	Turn left onto AR-365 / Pike Ave	1.5 mi
↻	4.	Enter the roundabout	384 ft
↻	5.	Exit the roundabout onto AR-365 / W Broadway St	79 ft
↗	6.	Bear right onto AR-365 / W Broadway St	0.4 mi
↘	7.	Turn right onto US-70 W / US-67 S / AR-5 / AR-365 / Broadway Bridge Valero on the corner ▲ Minor Congestion	0.4 mi
10	8.	Take the ramp on the right and follow signs for La Harpe Blvd Pass Do ar Tree in 1.9 mi	3.8 mi
↘	9.	Turn right onto Kavanaugh Blvd	0.5 mi
↘	10.	Turn right onto N Taylor St	0.6 mi
↘	11.	Turn right onto N Grandview St	0.2 mi
↑	12.	Keep straight to get onto Scenic Blvd	518 ft
↑	13.	Keep left to stay on Scenic Blvd	0.4 mi

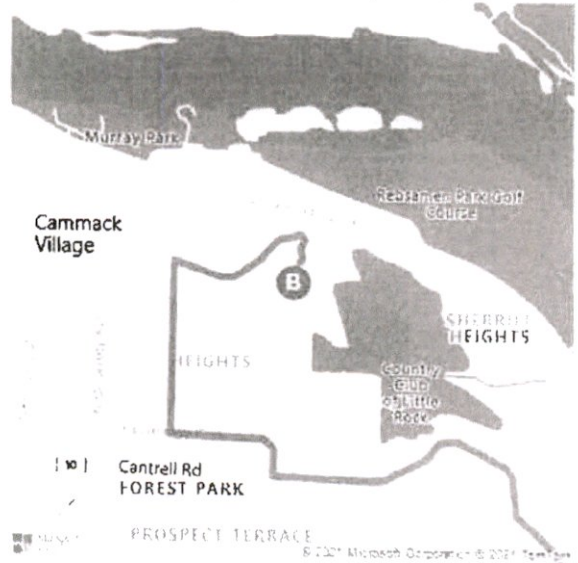
Directions Traffic Local My Places More



A North Little Rock Health Department, 280...



B 55 Scenic Blvd, Little Rock, AR 72207



These directions are subject to the Microsoft® Service Agreement and are for informational purposes only. No guarantee is made regarding their completeness or accuracy. Construction projects, traffic, or other events may cause actual conditions to differ from these results. Map and traffic data © 2021 TomTom



Meinco, Inc
PO Box 1001 * Bryant, AR 72089

ADEQ
Water Permits
5301 Northshore Drive
North Little Rock, AR 72118



UNITED STATES
POSTAL SERVICE.

Retail

G

US POSTAGE PAID

\$8.95

Origin: 72089
04/17/24
0412870518-20

USPS GROUND ADVANTAGE™

1 Lb 0.40 Oz

RDC 01

R015

SHIP
TO:



5301 NORTHSHORE DR
NORTH LITTLE ROCK AR 72118-5328

USPS TRACKING® #



9534 6106 0208 4108 0600 72

