

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): Neil Robertson Operator Type:  
Permittee Mailing Address: 601 Black Hawk Dr  State  Partnership  
Permittee City: Little Rock  Federal  Corporation\*  
Permittee State: Arkansas Zip: 72210  Sole Proprietorship/Private  
Permittee Telephone Number: 501-915-2234 \*State of Incorporation: \_\_\_\_\_  
Permittee Fax Number: NA The legal name of the Permittee must be  
Permittee E-mail Address: NA identical to the name listed with the  
Arkansas Secretary of State.

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

Invoice Contact Person: N/A City: \_\_\_\_\_  
Invoice Mailing Company: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Invoice Mailing Address: \_\_\_\_\_ Telephone: \_\_\_\_\_

**III. FACILITY INFORMATION**

Facility Name: Neil Robertson Residence Facility Contact Person: Neil Robertson  
Facility Address: 601 Black Hawk Drive Telephone Number: 501-915-2234  
Facility County: Saline Facility City, State & Zip: Little Rock, Arkansas 72210  
Facility Latitude: 34 Deg 43 Min 54.4 Sec Facility Longitude: 92 Deg 35 Min 1 Sec  
Datum  
Accuracy: \_\_\_\_\_ Method: \_\_\_\_\_ : \_\_\_\_\_ Scale: \_\_\_\_\_ Description: \_\_\_\_\_

**IV. DISCHARGE INFORMATION**

Outfall Number: 001 Flow: 500 gpd (Gallons per Day)  
Stream Segment: 3C Hydrologic Basin Code: 111 102 07  
Outfall Latitude: 34 Deg 43 Min 52.5 Sec Outfall Longitude: 92 Deg 35 Min 1.3 Sec  
Datum  
Accuracy: \_\_\_\_\_ Method: \_\_\_\_\_ : \_\_\_\_\_ Scale: \_\_\_\_\_ Description: \_\_\_\_\_  
Type of Treatment: Bio Microbics Microfast 0.5 with UV and Post Aeration  
Receiving Stream: Arkansas River

**V. FACILITY PERMIT INFORMATION**

NPDES Individual Permit Number (If Applicable): AR00  
NPDES General Permit Number (If Applicable): ARG  
State Construction Permit Number: \_\_\_\_\_  
NPDES General Construction Stormwater Permit Number (If Applicable): ARR15

**VI. OTHER INFORMATION:**

Operator Name: David Meints  
Operator License Number: 009055 License Class: III

Consultant Contact Name: David Meints  
Consultant Email Address: david@meincowastewater.com  
Consultant Address: PO Box 1001 City: Bryant State: AR 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](http://www.adeg.state.ar.us/disclosure_stmt.pdf).

**VII. CERTIFICATION OF OPERATOR**

NR (Initial) "I certify that, if this facility is a corporation, it is registered with the Secretary of the State of Arkansas."

NR (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."

NR (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: Neil Robertson Title: Owner  
Responsible Official Signature: Neil Robertson Date: 4/10/23  
Responsible Official Email: nfrobertson@gmail.com  
Cognizant Official Printed Name: David Meints Title: Class III Operator  
Cognizant Official Signature: David Meints Telephone: 501-804-0837  
Cognizant Official Email: david@meincowastewater.com

**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?
- Submittal of Required Permit Fee?   Check Number: \_\_\_\_\_
- Submittal of AHD Form EHP-19?
- Submittal of Site Map?

Handwritten signature

Submittal of Disclosure  
Statement?

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



# Robertson Residence

## Legend

 601 Black Hawk Dr

 POE

 601 Black Hawk Dr

 POD

 Glenwood Spgs Dr



100 ft







**Arkansas Department of Health**  
Environmental Health Protection

Receipt Number  
**23645289**

**Individual Onsite Wastewater System Permit Application**

Permit Type  New Installation  
 Alteration / Repair

DR Environmental ID #

7 6 0 1 0 9 7 6 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 checked="" 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 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  
Neil Robertson

2. Phone Number  
(501) 915-2234

3. Mailing Address  
1529 North Silverthorn Drive Little Rock, AR 72210

4. County  
Saline

5. Address of Proposed System (If a 911 address is not available, attach detailed directions or map)  
Lot 5 Glenwood Springs Little Rock, AR 72210 (Gate Code: #3690)

6. Subdivision Name  
Glenwood Springs Phase I

7. Approval Date  
n/a

8. Date Recorded  
n/a

9. Lot Number  
5

10. Lot Dimensions  
300' x 362' x 306' x 410'

11. Total Area (Acres)  
3

12. # Bedrooms # People  
5

13. Daily Flow (GPD)  
500

14. Brief Legal Description of Property (Attach a separate sheet of paper, if necessary)  
Section 11 Township 1 North Range 15 West, Saline County

15. Water Supply (Specify supplier, if Public Water)  
Salem Water Users

16. GPS Coordinates  
HM 34.731193, -92.583566 POD 34.731373, -92.583322

17. Loading Rates	(gpd/ft <sup>2</sup> )	18. System Specifications					
Primary Area	n/a	a. Size of Septic Tank	ATU	gal	f. Trench Depth	n/a	inches
Secondary Area	n/a	b. Size of Dose Tank	250	gal	g. Trench Spacing	n/a	feet
Percolation Test	(min/in)	c. Absorption Area	n/a	ft <sup>2</sup>	h. Trench Media (List Below)		i. Trench Width
Primary Area Avg	n/a	d. Number of Field Lines	n/a		n/a		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 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 \_\_\_\_\_

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.

*Rene E. Meints*  
Designated Representative Signature Title  
Rene E. Meints 06/22/2020 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.

*Jann Kellum, RS*  
Environmental Specialist Signature EHS Number Date  
836 7-22-2020

**Individual Onsite Wastewater System Permit Application**

Receipt Number
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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 <sup>2</sup> )								
>48"	Surface	12"	24"	n/a	18"	Mod/24"	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 <sup>2</sup> )								
>48"	n/a	n/a	n/a	n/a	n/a	n/a	Shale to surface								
24. Seasonal Water Table (SWT) Classes Detail															
Primary Area				List Redoximorphic Features and/or Clay Content Restrictions											
Brief	in	Depletions noted on 20% or less of ped surface or interior. Depletion chroma >= chroma 3.													
Moderate	in	Depletions noted on less than 50% of ped surface or interior. Depletion <= chroma 2.													
Long	in	Depletions noted on more than 50% of ped surface or interior. Depletion <= chroma 2.													
Secondary Area				List Redoximorphic Features and/or Clay Content Restrictions											
Brief	in	Shale to the surface.													
Moderate	in	n/a													
Long	in	n/a													
Comments		Site requires an ATU (BioMicrobics Fast 0.5) with UV disinfection and surface discharge. NPDES Permit required. If system is not installed within a year of the date approved, a revalidation fee may be required. Waiver request for P.O.D. 100' from upslope boundary to meet 200' down slope path of discharge.													

**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 checked="" type="checkbox"/> Environmental Health Specialist <input type="checkbox"/> Designated Representative (check one)		
Signature	EHS / License Number	Date
	0198	12/09/2021



\* 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	9	7	6	4	7
---	---	---	---	---	---	---	---	---	---

Homeowner  
 Builder/Developer

Fee Schedule for Structures	y
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: Lot 5 Glenwood Springs Little Rock, AR 72210  
(Address of Proposed System, City, State, Zip)

I hereby attest there are 5 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 Neil Roberts

Date 6/18/2020

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



BLACK HAWK DRIVE

362'

PROPERTY CORNER STAKE - BENCHMARK GE 09-02

LOW / DRAINAGE AREA

-DRIVEWAY 16'

-PROPOSED WATER LINE

APPROVED

SOIL PIT FAIL

PARKING 24'

5 BEDROOM RESIDENTIAL

60'

200' PATH OF DISCHARGE

-STUB OUT 70'

-CLEAN OUT

-TRASH TANK

-ATU

STUB OUT	GE 03-00	FL 05-00
INLET	GE 03-00	FL 05-04
OUTLET	GE 03-00	FL 05-07
P.O.D.	GE 01-00	FL 01-00

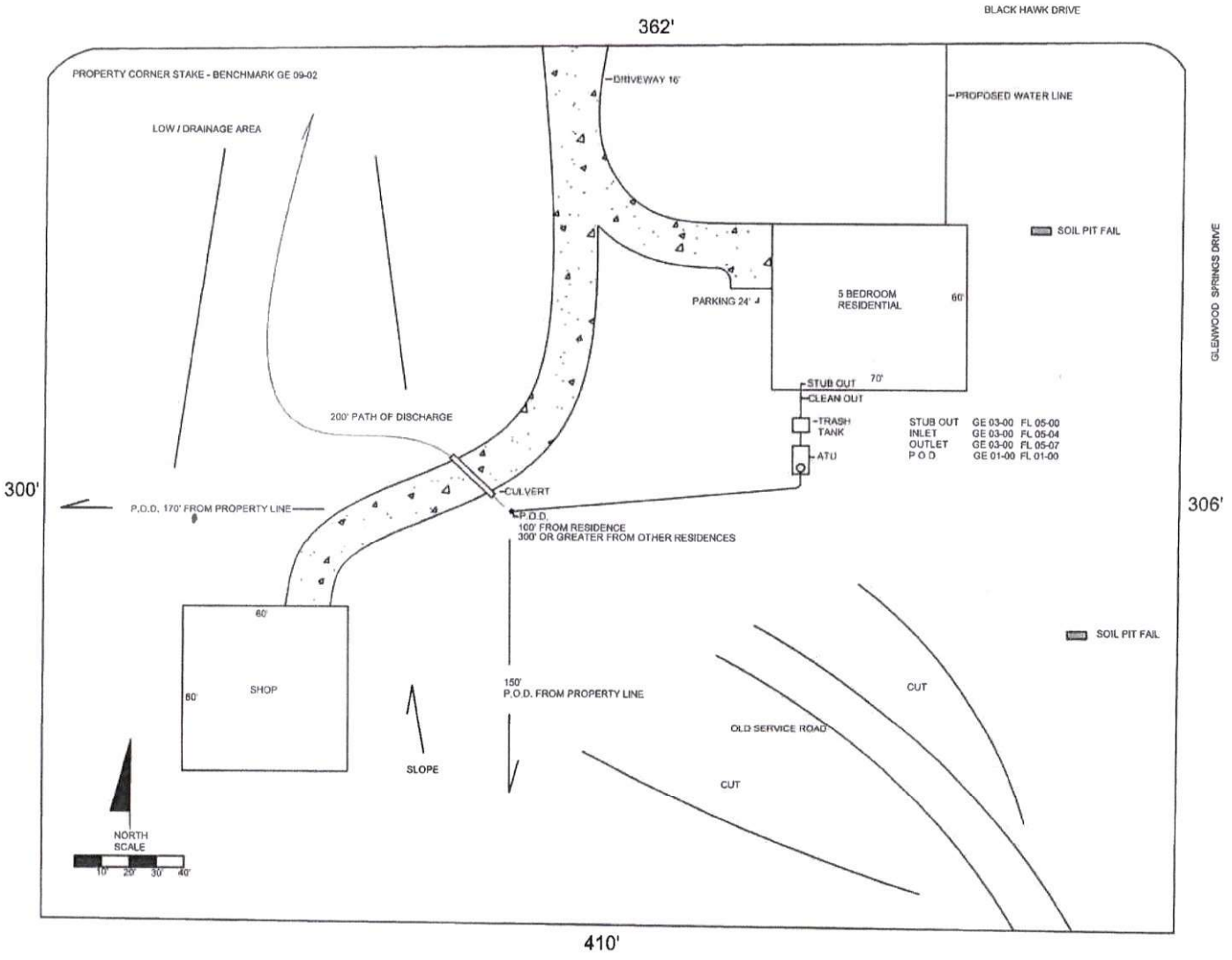
300'

P.O.D. 170' FROM PROPERTY LINE

-CULVERT

P.O.D. 100' FROM RESIDENCE  
300' OR GREATER FROM OTHER RESIDENCES

*Jamie Keown, PS*  
7-22-2020

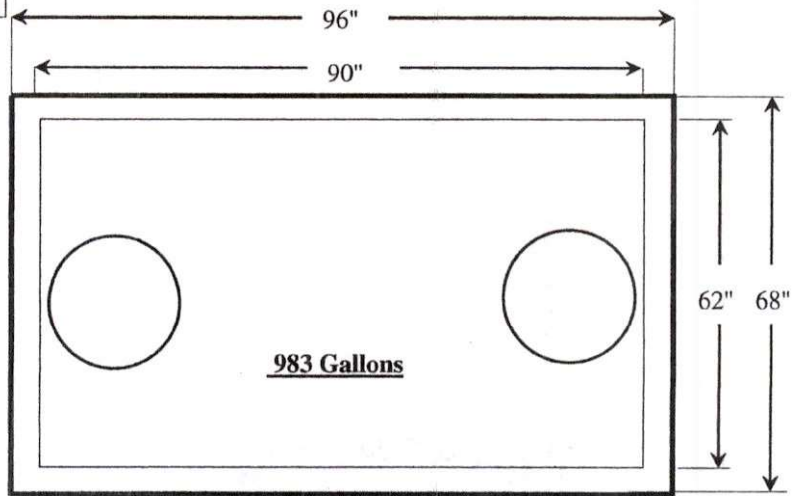




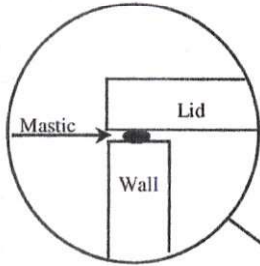
**1000 – Gallon Single  
Compartment Septic Tank**

**TOP VIEW**

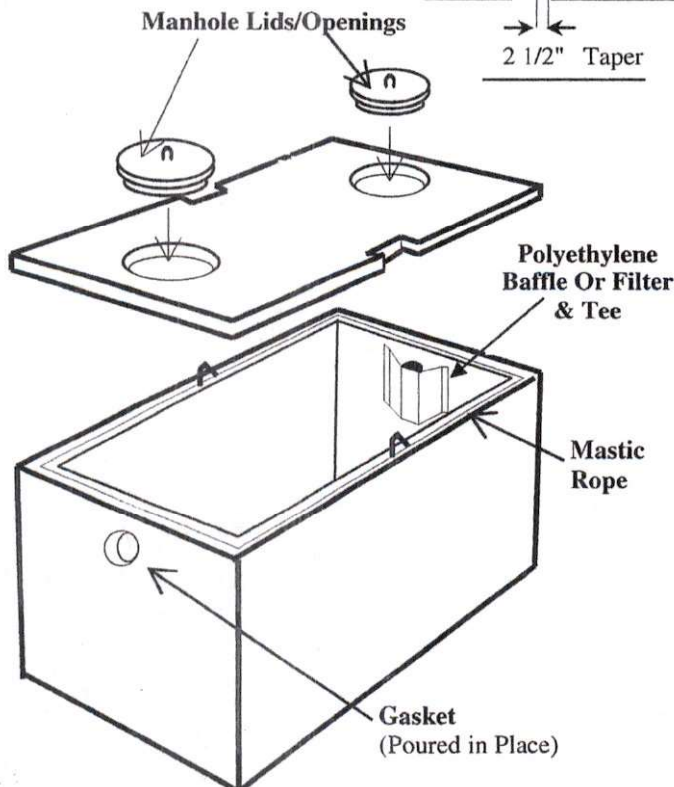
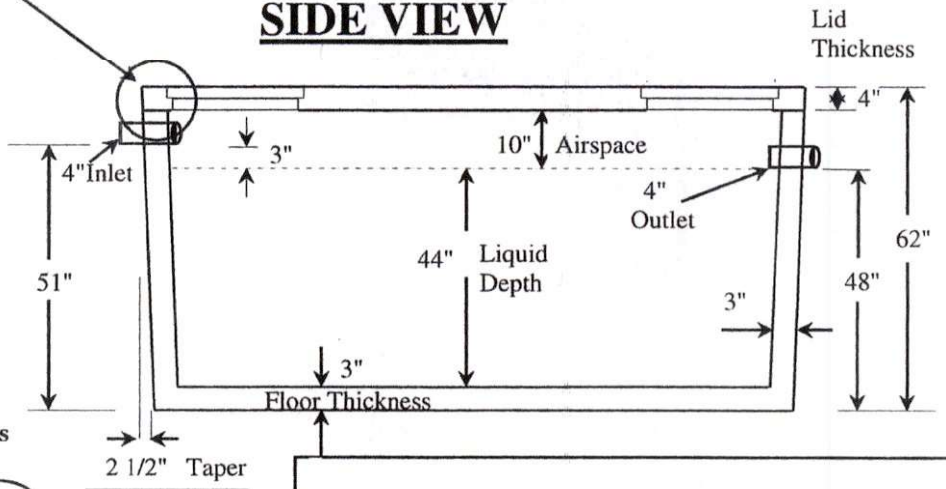
Drawings Not To Scale



**Enlarged Detail**



**SIDE VIEW**

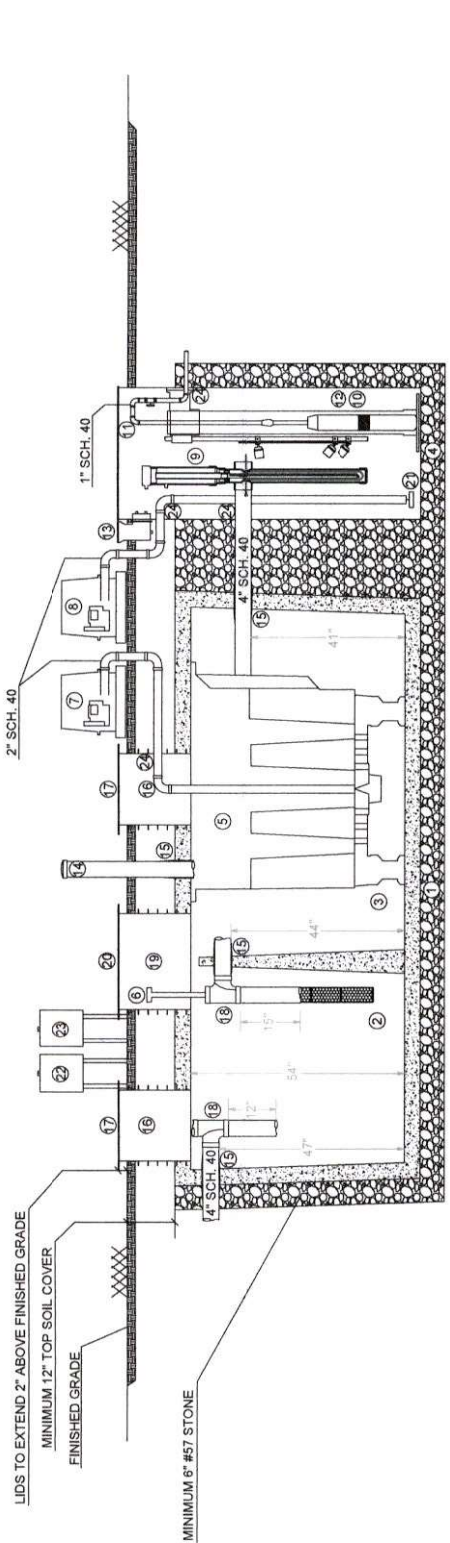


**WHITTEN CONCRETE CO.**  
2703 W. 2nd AVE.  
PINE BLUFF, AR. 71601  
PHONE: 870-534-6901  
FAX: 870-534-6902

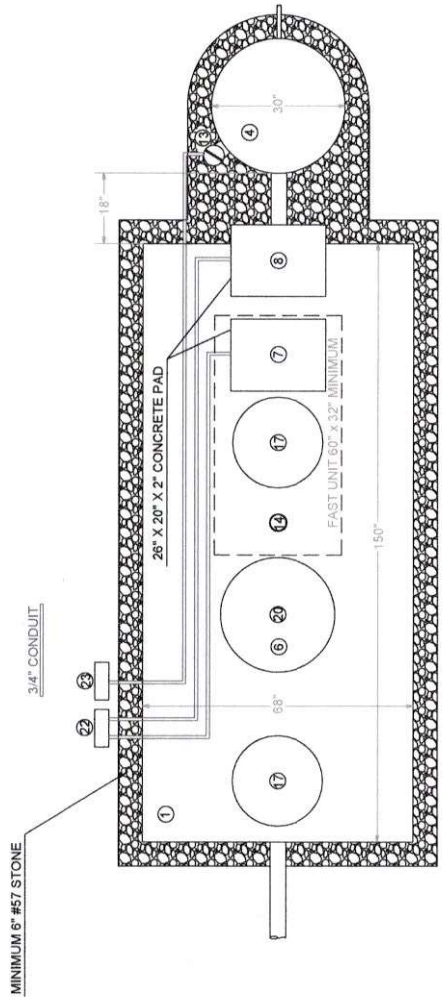
**1000 – Gallon Single Compartment Septic Tank**

Drawing #: DZ-2

Drawing by: SMR Date: 1/19/2011



SECTION VIEW



PLAN VIEW

- EQUIPMENT AND PARTS LIST**
1. WHITTEN CONCRETE TANK OR EQUIVALENT, VOLUME 1500 GALLONS
  2. SETTling TANK, 500 GALLONS
  3. STEEL PLASTICS PUMP BASIN, 30" X 72" (STEEL PLASTICS BA30X072TA & CVF30(SLDRT) OR EQUIVALENT
  4. MICROFAST TREATMENT UNIT, (BIOMICROBICS MFC 0.5)
  5. EFFLUENT FILTER, (BIOMICROBICS SANITEE-418)
  6. BLOWER, (BIOMICROBICS FUJI 1/2 HP 1PH VCF30) & HOUSING, (BIOMICROBICS 250-BBHSFL)
  7. BLOWER, (BIOMICROBICS FUJI 1/2 HP 1 PH VCF20) & HOUSING, (BIOMICROBICS 250-BBHSFL)
  8. UV DISINFECTION UNIT, (SALCOR 3G)
  9. DISCHARGE PUMP, (ORENCO PF100511) OR EQUIVALENT
  10. DISCHARGE ASSEMBLY, 1"
  11. UNIVERSAL FLOW INDUCER, (ORENCO FIT D 80) OR EQUIVALENT
  12. EXTERNAL SPLICE BOX, (ORENCO SB4EX) OR EQUIVALENT
  13. VENT CAP, 4", (GIZMO ENGINEERING) OR EQUIVALENT
  14. BOOT SEAL, (POLYLOK 3005-CE)
  15. RISER, ULTRA-RIB, 18"
  16. FIBERGLASS LID, 18", (ORENCO FLD18G) OR EQUIVALENT
  17. SANITARY "T", 4" SCHEDULE 40
  18. RISER, ULTRA-RIB, 24"
  19. FIBERGLASS LID, 24", (ORENCO FLD24G) OR EQUIVALENT
  20. DIFFUSER (FINE BUBBLE 10 SCFM, 304 SS) OR EQUIVALENT
  21. CONTROL PANEL, (BIOMICROBICS 110V AMI)
  22. CONTROL PANEL, POST AIR
  23. GROMMET, MATCH DIAMETER OF PIPE
  - 24.



### Specifications for MicroFAST 0.50 Wastewater Treatment System

#### 1. GENERAL

The contractor shall furnish and install (1) MicroFAST® 0.50 treatment system as manufactured by Bio-Microbics, Inc. The treatment system shall be complete with all needed equipment as shown on the drawings and specified herein.

The principal items of equipment shall include the FAST® system insert, blower assembly, blower controls and leg extensions or lid. All other items will be provided by others. The MicroFAST 0.50 unit shall be situated within a 450 Gallon (1700L) minimum compartment as shown on the drawings. Suggested maximum settling zone is (1) X the daily flow. Tank must provide adequate pump out access and conform to local, state, and all other applicable codes. The contractor shall coordinate the proper fabrication of the tank between the FAST system and tank supplier with regard to fabrication of the tank, installation of the FAST unit, and delivery to the job site.

#### 2. OPERATING CONDITIONS

The MicroFAST 0.50 treatment system shall be capable of treating the wastewater produced by typical family activities (bath, laundry, kitchen, etc.) ranging from (1) one to (8) eight people and not to exceed 500 US Gallons per day (1800 LPD) provided the waste contains nothing that will interfere with biological treatment. The FAST system is a biological treatment system not meant for non-biodegradable or industrial wastewater.

#### 3. MEDIA

The FAST® media shall be manufactured of rigid PVC, polyethylene, or polypropylene and it shall be supported by the polyethylene insert. The media shall be fixed in position and contain no moving or wearing parts and shall not corrode. The media shall be designed and installed to ensure that sloughed solids descend through the media to the bottom of the septic tank.

#### 4. BLOWER

The MicroFAST 0.50 unit shall come equipped with a regenerative type blower capable of delivering 17-25 CFM [31-46 m<sup>3</sup>/hr]. The blower assembly shall include an inlet filter with metal filter element. The blower shall be mounted outside the tank on a contractor supplied concrete base. Blower piping to the tank shall use non-corrosive material (PVC, Galvanized, or stainless Steel). Do not run galvanized pipe inside the treatment tank. Refer to Installation Manual for further details.

#### 5. REMOTE MOUNTED BLOWER

The blower shall be placed on a contractor supplied concrete base. The blower must not sit in standing water and its elevation must be higher than the tank and normal flood level. A two-piece, rectangular housing shall be provided. The discharge air line from the blower to the MicroFAST® System shall be provided and installed by the contractor.

#### 6. ELECTRICAL

The electrical source should be within 150 feet [45 meters] of the blower consult local codes for longer wiring distances. All wiring must conform to all applicable codes (IEC, NEC, etc.). Wiring distances must prevent significant voltage loss. Input power on 60Hz electrical systems 110/220VAC, 1Ø, 3.5/1.7 FLA, on 50 Hz electrical systems 220VAC, 1Ø, 1.9 FLA. Other voltages and phase are also available. Actual power consumption varies with site conditions. All conduit and wiring shall be supplied by contractor.

#### 7. CONTROLS

The control panel provides power to the blower and contains an alarm system consisting of a visual and audible alarm capable of signaling blower circuit failure and high water conditions. The control panel is equipped with SFR® (Sequencing Fixed Reactor) timed control feature. A manual alarm silence button is included.

#### 8. INSTALLATION AND OPERATING INSTRUCTIONS

All work must be done in accordance with local codes and regulations. Installation of the FAST 0.50 shall be done in accordance with the written instructions provided by the manufacturer. Manuals shall be furnished, which will include a description of system installation, operation, and maintenance procedures.

#### 9. FLOW AND DOSING

FAST® systems have been successfully designed, tested and certified receiving gravity, demand-based influent flow. When influent flow is controlled by pump or other means to help with highly variable flow conditions, then multiple dosing events should be used to maximize performance. The flow rate shall not exceed 5 gpm (19 Lpm) with a maximum hourly flow not to exceed 10% of the design daily flow (50 gph [190 LPH]).

#### 10. WARRANTY

Bio-Microbics, Inc. warrants all new residential FAST® models (MicroFAST® 0.50, 0.625, 0.75, 0.90, and 1.5) against defects in materials and workmanship for a period of two years after installation or three years from date of shipment which ever occurs first. All other FAST® system models are warranted for a period of one year after installation or eighteen months from date of shipment, whichever occurs first. All are subject to the following terms and conditions below:

During the warranty period, if any part is defective or fails to perform as specified when operating at design conditions, and if the equipment has been installed and is being operated in accordance with the written instructions provided by Bio-Microbics, Inc., Bio-Microbics, Inc. will repair or replace at its discretion such defective materials and equipment. Defective parts will be turned by order to Bio-Microbics, Inc.'s factory postage paid, if so requested. The cost of labor and all other expenses resulting from repairs, including the cost of shipping and installation, shall be borne by the owner. This warranty does not cover general system misuse, disassembly, or components that have been disassembled by unauthorized persons, improperly installed or damaged due to altered or improper blower operation. This warranty applies only to the treatment plant and does not include any of the structure, piping, plumbing, drainage, septic tank or disposal system. Bio-Microbics, Inc. reserves the right to revise, change or modify the construction and/or design of the FAST system or any component part or parts thereof, without incurring any obligation to make such changes or modifications in present equipment. Bio-Microbics, Inc. is not responsible for consequential or incidental damages of any nature resulting from such things as, but not limited to, defect in design, material, or workmanship, or delays in delivery, replacements or repairs.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED. BIO-MICROBICS SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. NO REPRESENTATIVE OR PERSON IS AUTHORIZED TO GIVE ANY OTHER WARRANTY OR TO ASSUME FOR BIO-MICROBICS, INC., ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF ITS PRODUCTS. Contact your local distributor for parts and service.

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DO NOT SCALE  
UNLESS NOTED  
DIMENSIONS  
ARE IN INCHES  
(CENTIMETERS)  
TOLERANCES  
± 0.02 IN/IN  
[± 0.05 CM/CM]



MicroFAST 0.50 FAST Unit

WEIGHT	lb	DATE
DRAWN	DATE	DATE
CHECKED	DATE	DATE

DRAWING	SIZE	DRAWING NUMBER	SHEET
	A	MicroFAST@ 0.50 Specifications	3 OF 4
		REVISED: 9/18/2013	
		REV. IN+05-Y	

# Salcor 3G UV Disinfection Unit

NOTE: Not all dimensions to scale

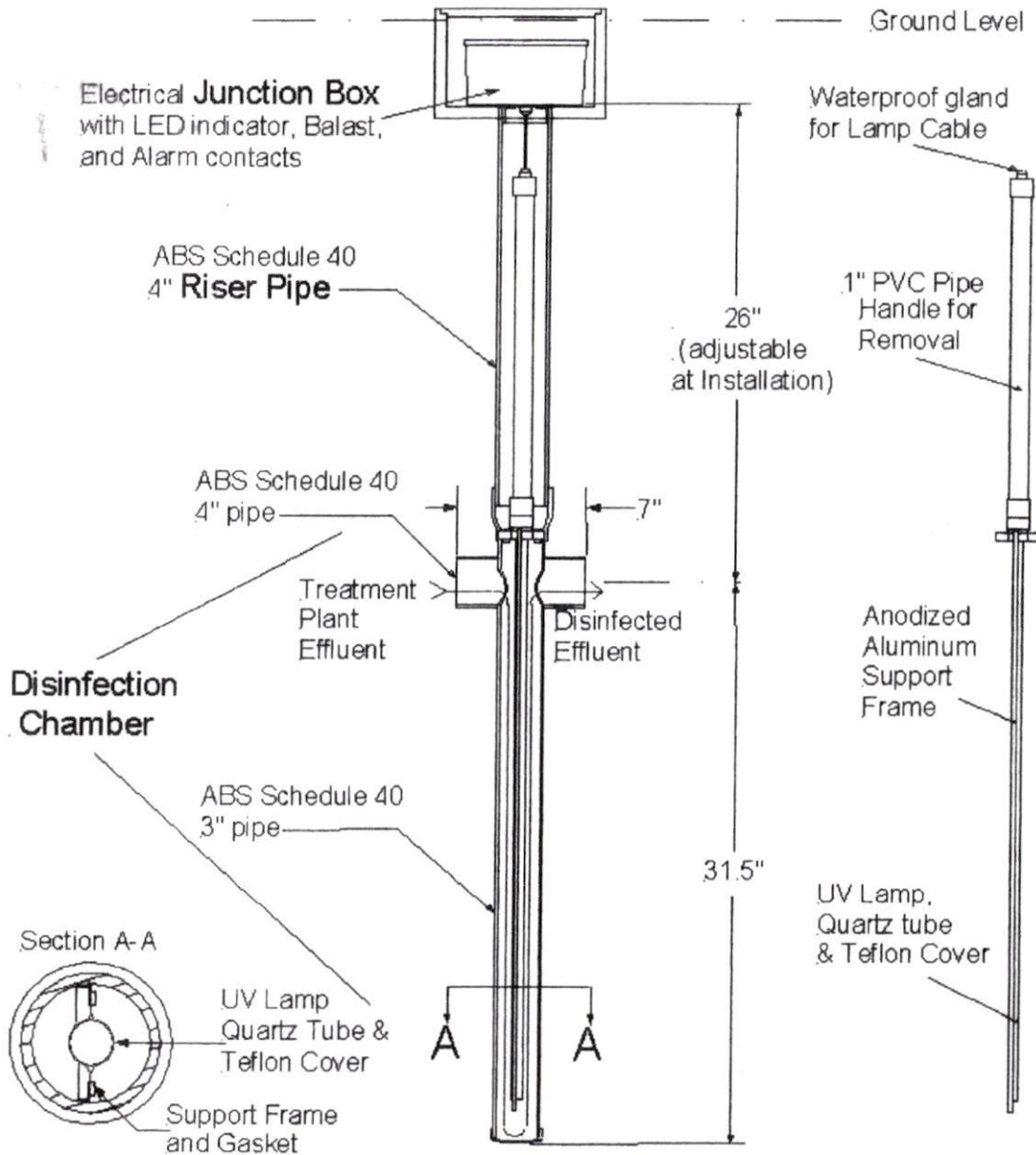


Figure 1



# In Ground Installation

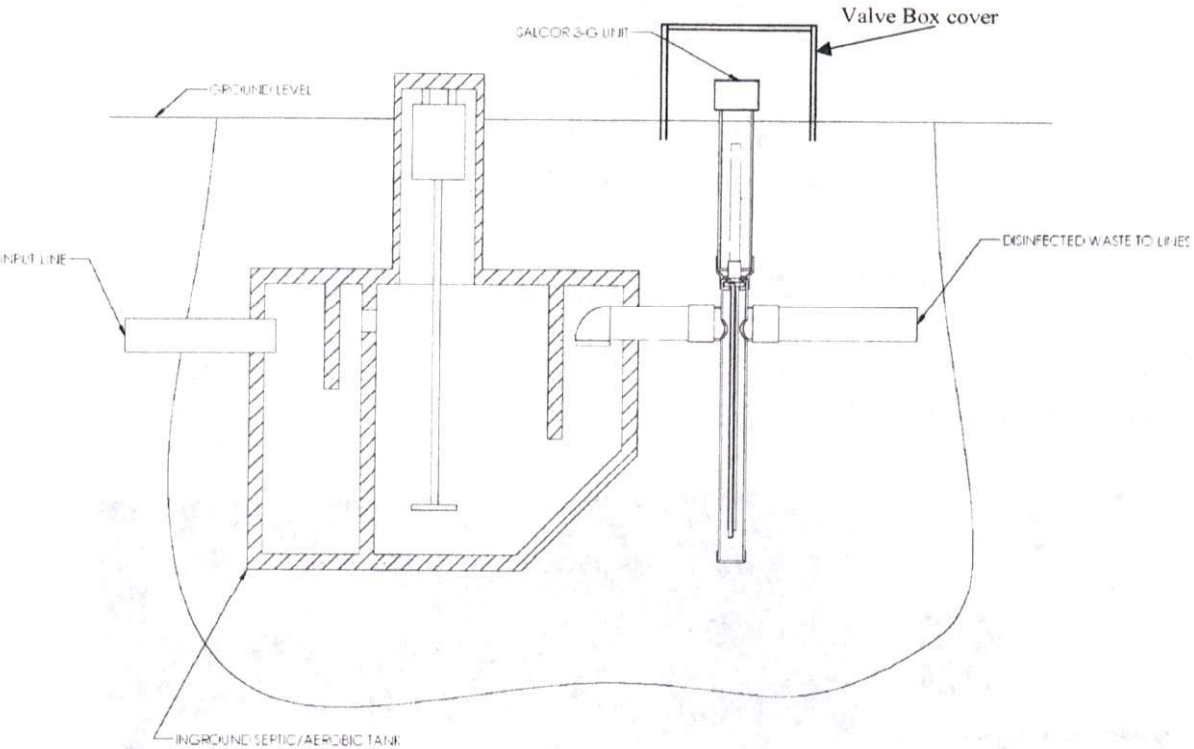


Figure 2

# In Tank Installation

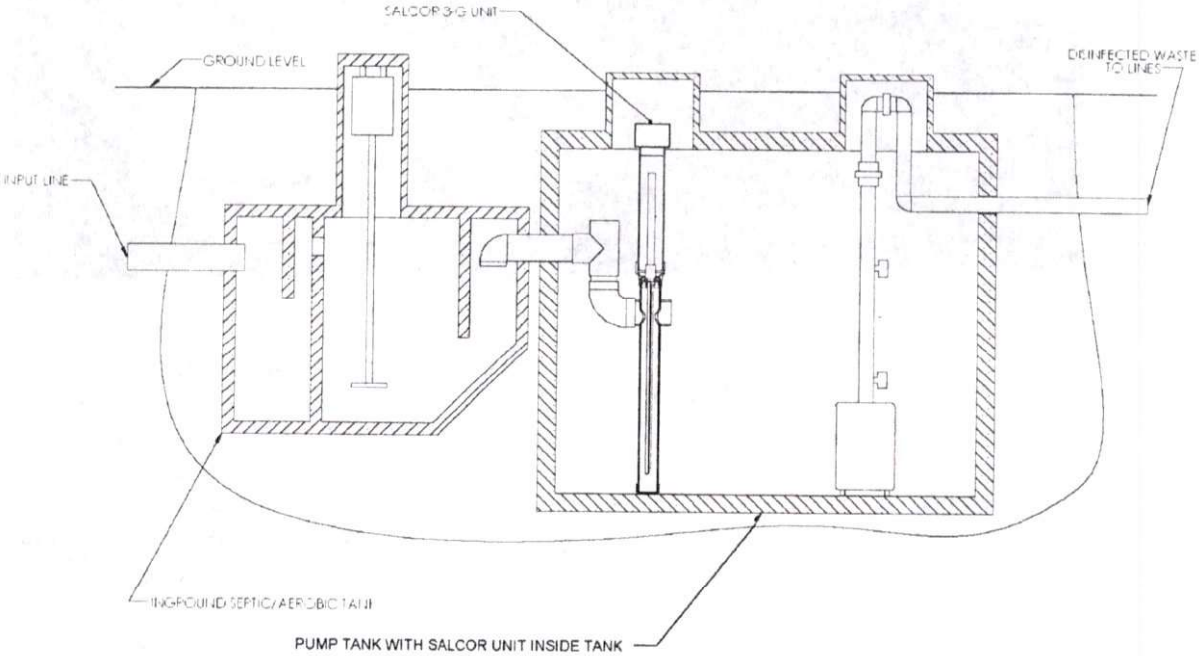


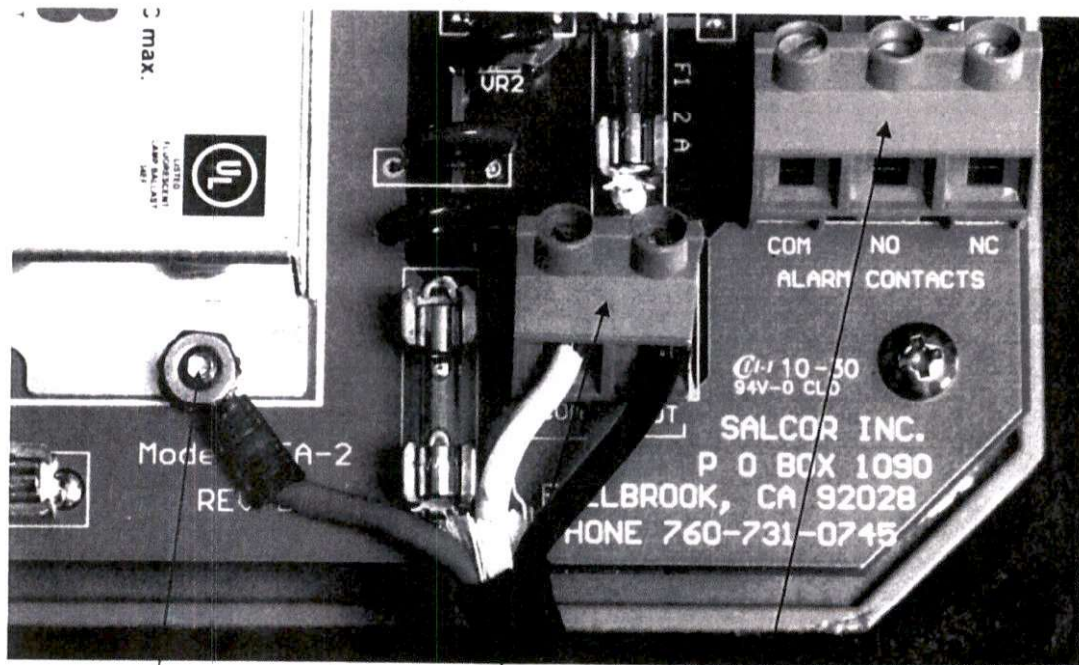
Figure 3

# SALCOR INC.

P.O Box 1090  
Fallbrook, Ca. 92088  
Telephone: 760 731 0745

## V. ELECTRICAL JUNCTION BOX LID

The Ballast and terminal strips are now mounted on the Alarm Board, mounted to the Junction Box Lid.



Grounding Post

Power Inlet Terminal

Alarm Wire terminal block.  
Connect alarm wires as needed  
for your specific circuit.  
N/O and N/C describes the contact  
configuration when the  
relay has **NO POWER** applied,  
or it is **NOT** energized.

Figure 4





**ENVIRONMENTAL**  
Zoeller Family of Water Solutions™



**PUMP COMPANY**  
Zoeller Family of Water Solutions™

# Zoeller Company

## System Head Curve and Pump Selection Tool

**Static Head Information**

Static Head - elevation difference from low water to outfall:

System high point above outfall?:

**Friction Head Information**

How many different pipes in the system (not counting laterals)?

Pipe 1 Length:

Pipe 1 Size:

Pipe 1 Class:

Pipe 2 Length:

Pipe 2 Size:

Pipe 2 Class:

Pipe 3 Length:

Pipe 3 Size:

Pipe 3 Class:

**Pressurized Laterals?**

How many are dosed at once?

Length of one lateral:

Size of lateral:

Class of lateral:

**Fittings & Discharge Assemblies**

Type:

Size:

Quantity:

**Special Friction Considerations**

Weep Hole:

Add-In Friction: 

Automatic Multizone Valve?:

Pressure Filter?:

**Operating Head Information**

System Type:

Specify Flow Requirement?

Number of Orifices:

Base of Orifice:

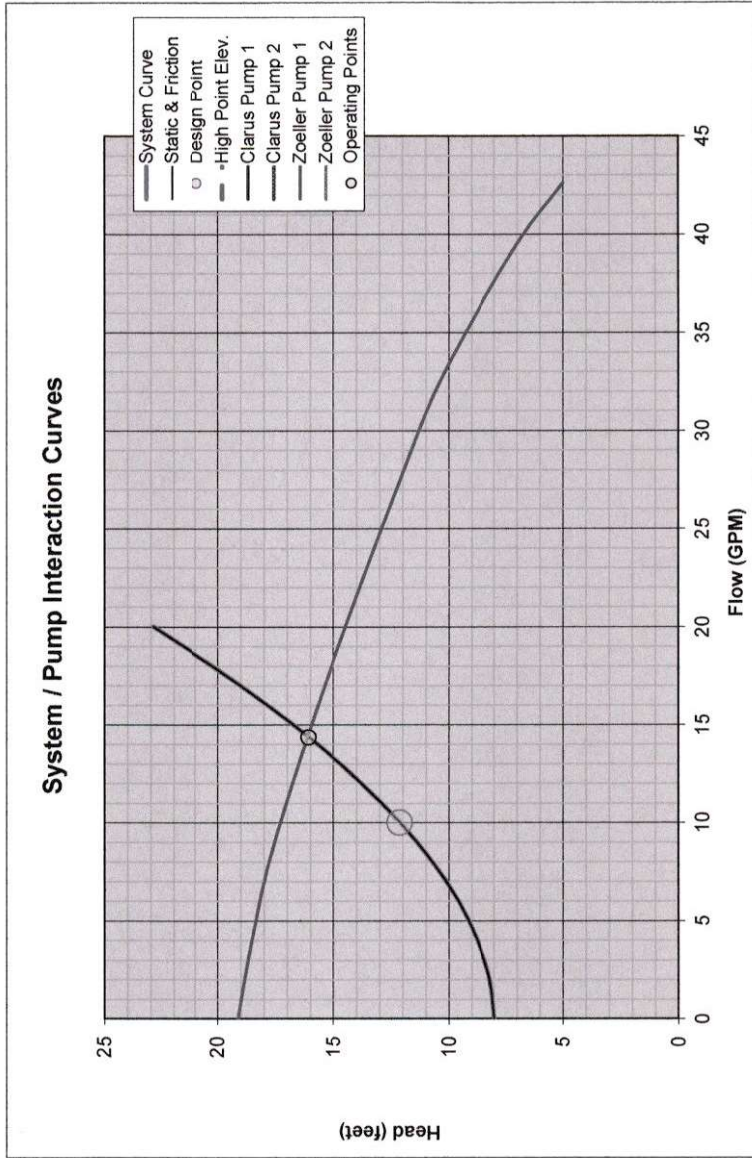
Spacer Valve Orifice Sizes (Data originates from Spool Valve String Tab):

**Factors and Coefficients**

Hazen-Williams C Factor:

Discharge Coefficient (Cd):

Lateral Design Mode:



NOTE: THE DISPLAYED PUMP CURVES HAVE BEEN ADJUSTED TO ACCOUNT FOR THE EFFECT OF THE WEEP HOLE

Flow Requirement:

Design Point:

Curve Zoom Range:

Pump Selection	Flow	Frequency	Operating Points
Clarus Environmental Pumps	60 Hz		
Clarus Pump 1			
Clarus Pump 2			
Zoeller Pump Company Pumps			
Zoeller Pump 1	53755/57/59	0.3hp, 60Hz	14.4 GPM @ 16.1'
Zoeller Pump 2			

**Project Data**

Project Name:

Project Address:

Contact Info:

**Notes:**

- 1 1/4" discharge assembly
- 1 1/4" transport line

Product information presented here reflects conditions at time of publication. Consult factory regarding discrepancies or inconsistencies.



**PUMP COMPANY**

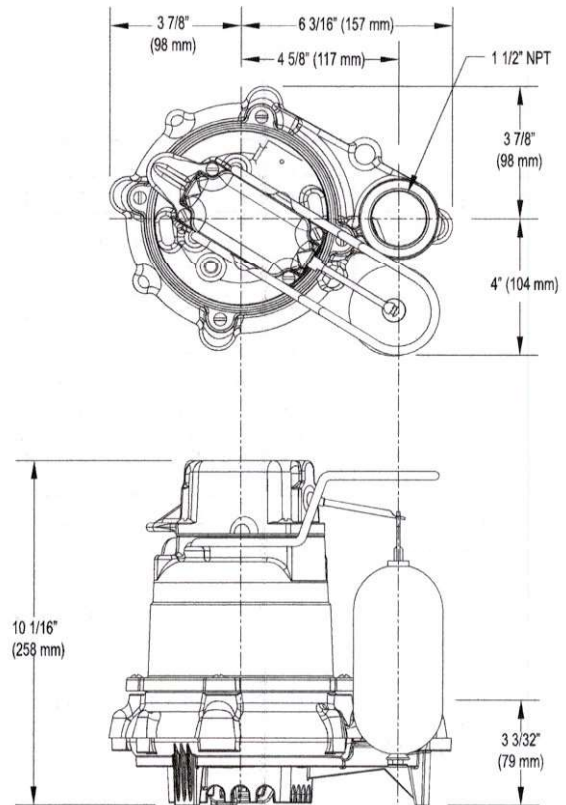
Zoeller Family of Water Solutions™

## TECHNICAL DATA SHEET MIGHTY-MATE SERIES

**Cast Iron Models 53, 57 and Bronze Models 55, 59  
Submersible Effluent / Dewatering Pumps**

### PRODUCT SPECIFICATIONS

<b>MOTOR</b>	Horse Power	3/10
	Voltage	115 or 230
	Phase	1 Ph
	Hertz	60 Hz
	RPM	1550
	Type	Shaded pole
	Insulation	Class B
	Amps	4.8 - 9.7
<b>PUMP</b>	Operation	Automatic or nonautomatic
	Auto On/Off Points	7-1/4" (18.4 cm) / 3" (7.6 cm)
	Discharge Size	1-1/2" NPT
	Solids Handling	1/2" (12 mm) spherical solids
	Cord Length	9' (3 m) automatic, 15' (5 m) nonautomatic
	Cord Type	UL listed, 3-wire, grounded plug
	Max. Head	19.25' (5.9 m)
	Max. Flow Rate	43 GPM (163 LPM)
	Max. Operating Temp.	130° F (54° C)
	Cooling	Oil filled
	Motor Protection	Auto reset thermal overload
	<b>MATERIALS</b>	Cap
Motor Housing		Cast iron or bronze
Pump Housing		Cast iron or bronze
Base		Cast iron, bronze or engineered thermoplastic
Upper Bearing		Sleeve bearing
Lower Bearing		Sleeve bearing
Mechanical Seals		Carbon and ceramic
Impeller Type		Non-clogging vortex
Impeller		Plastic, cast iron or bronze
Hardware		Stainless steel
Motor Shaft		AISI 1215 cold rolled steel
Gasket		Neoprene



SK856

NOTE: See model comparison chart for specific details.



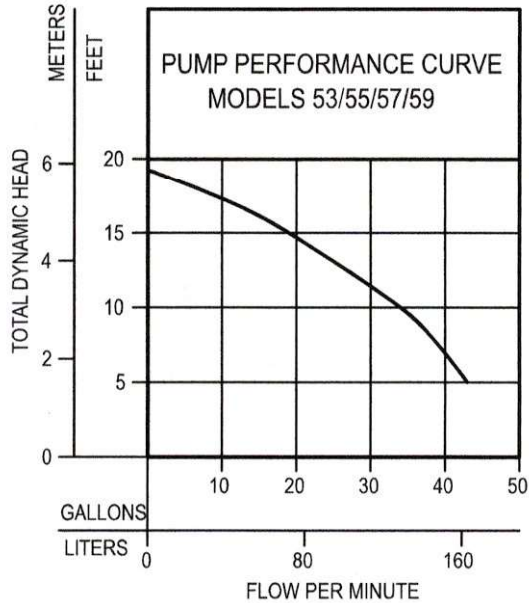
Tested to Standard UL778 and Certified to CSA Standard C22.2 No. 108





**TOTAL DYNAMIC HEAD  
FLOW PER MINUTE**

MODEL		53/55/57/59	
Feet	Meters	Gal.	Liters
5	1.5	43	163
10	3.0	34	129
15	4.6	19	72
Shut-off Head:		19.25 ft.(5.9m)	



009897

Model	MODEL COMPARISON										
	Seal	Mode	Volts	Ph	Amps	HP	Hz	Lbs	Kg	Simplex	Duplex
M53/M55	Single	Auto	115	1	9.7	3/10	60	23	10	1	---
N53/N55	Single	Non	115	1	9.7	3/10	60	23	10	2	3 & 4
* BN53	Single	Auto	115	1	9.7	3/10	60	25	11	*	---
* BE53/BE57	Single	Auto	230	1	4.8	3/10	60	24 / 30	11 / 13	*	---
D53	Single	Auto	230	1	4.8	3/10	60	23	10	1	---
E53/E55	Single	Non	230	1	4.8	3/10	60	22	10	2	3 & 4
M57/M59	Single	Auto	115	1	9.7	3/10	60	29 / 33	13 / 15	1	---
N57/N59	Single	Non	115	1	9.7	3/10	60	28 / 29	12 / 13	2	3 & 4
* BN57	Single	Auto	115	1	9.7	3/10	60	30	13	*	---
D57/D59	Single	Auto	230	1	4.8	3/10	60	30 / 33	13 / 15	1	---
E57/E59	Single	Non	230	1	4.8	3/10	60	28 / 29	12 / 13	2	3 & 4
E59	Single	Non	230	1	4.8	3/10	60	29	13	2	3 & 4

\* Single piggyback switch included.

**SPECIAL MODEL FEATURES**

Additional cord lengths are available in 15' (5 m), 25' (8 m) and 35' (11 m). 50' (15 m) cord lengths available for 230 V units only.

BE and BN models include a piggyback variable level pump switch.

Model 53: cast iron switch case, motor and pump housing, a plastic impeller and base. Model 57: all cast iron construction with a cast iron impeller. Model 55: bronze switch case, motor and pump housing, a plastic impeller and base. Model 59: bronze construction with a bronze impeller.

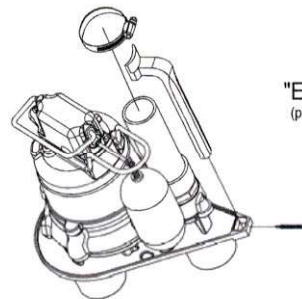
Optional pump stand (P/N 10-2421).

**SELECTION GUIDE**

1. Integral float-operated mechanical switch, no external control required.
2. Single piggyback variable level float switch or double piggyback variable level float switch. Refer to FM0477.
3. See FM0712 for correct model of Electrical Alternator.
4. Variable level control switch 10-0743 used as a control activator with electrical alternator (3) or (4) float system.

**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" (5 cm) off bottom of basin
  - Provides the ability to raise intake by adding sections of 1½" or 2" (DN40 or DN50) PVC piping
  - Attaches securely to pump
  - Accommodates sump, dewatering and effluent applications
- NOTE: Make sure float is free from obstruction.



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

**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).

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502-778-2731 | 800-928-7867 | 3649 Cane Run Road | Louisville, KY 40211-1961 | www.zoeller.com



# SERVICE AND MAINTENANCE CONTRACT

1. **Parties.** This contract ("Agreement" or "Contract") is between Meinco Septic Systems, Inc., ("Meinco") and Neil Robertson, ("Client"), referred to individually as a "Party" and collectively as the "Parties."
2. **Service Location.** This is a Contract for septic system service and maintenance services provided by Meinco for Client located at Lot 5 Glenwood Springs, Little Rock, AR 72210, hereinafter referred to as the "Service Site."
3. **Service Fees.** Client agrees to pay Meinco Ninety Dollars (\$90.00) for septic system service and maintenance specifically work performed every Three Months (Quarterly) and described more specifically below (hereinafter referred to as "Service Work"). Meinco and Client agree that the invoiced amount is good consideration for this Contract and the services set forth below and reflects the bargained for terms of this agreement.
4. **Materials Charges.** During regular maintenance Meinco will replace materials necessary to keep the septic system operating efficiently (chlorine tablets, UV light bulbs, floats, filters, etc.). Meinco and Client agree that Meinco shall submit to client the costs of maintenance parts and materials and Client will promptly pay the same.
5. **Laboratory Fees.**
  - A)  This paragraph is inapplicable.
  - B)  Client agrees that Meinco will use a third party laboratory, Environmental Services, Inc., for any sampling that is required under this Contract. In such event, Meinco shall submit to Client a laboratory fee of \$125.00 and Client will promptly pay the same.
6. **Services Provided.** Meinco agrees to provide the following Service Work to the Client and the Service Site:
  - A) Maintenance requirements, including review of system components and their working condition, monitoring of solid levels to determine system efficiency, and periodic cleaning of system filters or media.
  - B) I.  This paragraph is inapplicable.  
II.  Necessary sampling and submission of paperwork every     month(s) or as required to comply with the Arkansas Department of Health Onsite Maintenance Program.
  - C) Necessary paperwork every 6 month(s) as required to comply with the Arkansas Department of Health and/or the Arkansas Department of Environmental Quality.
  - D) I.  This paragraph is inapplicable.  
II.  Sampling of discharge every 6 month(s) in coordination with a 3rd party laboratory for required laboratory tests.
7. **Contract Duration.** This contract shall be for a period of 24 month(s) from the date this Contract is executed by the parties on page 2
8. **Flow Requirements.** This contract shall be null and void if septic system flow exceeds 500 gallons per day.
9. **Modification to System.** If the septic system is modified, abused, mis-used, or altered, then Meinco's responsibility to service or maintain the septic system is terminated. Meinco may remedy such conditions by replacing parts or correcting defects. If Meinco makes such changes to the septic system, then it may charge to client the costs of repairs, modifications, parts, and labor. Meinco may, at its discretion, seek payment in advance of making any repairs or modifications to the septic system. In such event, Meinco shall not be responsible for any damage or adverse effects for its delay in making repairs or modifications to the septic system.
10. **Access to System.** Client agrees to provide Meinco access to the septic system as well as its parts and components.
11. **Termination by Client.** Client may terminate this contract by providing thirty (30) days written notice to Meinco.
12. **Termination by Meinco.** Notwithstanding, and in addition to, any other provision or term in this Contract, **MEINCO MAY TERMINATE THIS CONTRACT AT ANY TIME AND WITHOUT PREVIOUS NOTICE TO CLIENT.**
13. **Solid Removal.** Solid removal is not a covered service and shall incur an additional fee. If Meinco removes solids from the septic system, then it may charge to client the costs of solid removal. In any event, Meinco shall not be responsible for any damage or adverse effects for any delay in removing solids.
14. **Indemnity.** To the fullest extent permitted by law, Client shall indemnify, hold harmless, and defend Meinco and any agent or employees of Meinco from and against all injuries, claims, damages, losses, and expenses, including, but not limited to, attorneys' fees, arising directly or indirectly out of the obligations herein undertaken or resulting out of operations related to the Service Work or Service Site conducted by Meinco, Meinco's agents, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such injury, claim damage, losses, or expenses is caused in part by a party indemnified. Such obligation shall not negate, abridge, or otherwise reduce the rights or obligations of indemnity which would otherwise exist to a party or person described in this paragraph.



15. **Assignment.** Client agrees that even though this is a contract for services, Meinco may assign this Contract to any third party without written notice to Client.
16. **Bilateral Contract.** Meinco and client specifically agree that Client is seeking Meinco's promise to perform and not its performance.
17. **Claims Against Meinco.** Client shall give Meinco written notice of all claims within five (5) days of Client's knowledge of facts giving rise to the event for which claim is made. Otherwise, such claims shall be deemed waived by Client. All unresolved claims, disputes and other matters in question between Meinco and Client shall be resolved in the manner provided for in this Agreement.
18. **Rights Upon Breach.** If Client breaches this Agreement with Meinco, Meinco may stop all work, including all Service Work. Additionally, Client will be liable to Meinco for consequential, incidental, and reliance damages as well as attorneys' fees and court costs. Such liability upon Client shall extend to petitions for and orders of contempt as well as any attempts by Meinco to collect upon any debt or damages owed to it by Client, including those entered by court of law or other dispute resolution proceeding.
19. **Direct Discussion.** If a dispute arises out of or relates to this Agreement, the Parties shall endeavor to settle the dispute through direct discussion before advancing to any dispute resolution proceeding.
20. **Joint Drafting.** The Parties expressly agree that this Agreement was jointly drafted and that this Agreement shall be construed neither against nor in favor of either Party. Instead, this Agreement shall be construed in a neutral manner.
21. **Choice of Law.** The Parties expressly agree that any dispute or claim filed or heard in any jurisdiction concerning or relating to this Agreement or worked performed as a result of this Agreement shall be governed by the laws of the State of Arkansas.
22. **Forum Selection and Choice of Venue.** The Parties expressly agree that any dispute or claim arising from, filed, or heard concerning or relating to this Agreement or work performed as a result of this Agreement shall be heard in Saline County, Arkansas, and no other forum. If this clause is penetrated and the hearing

concerning the dispute removed to the United States federal court system, then the Parties expressly agree that the dispute shall be heard in the United States District Court for the Eastern District of Arkansas, Western Division, at the Richard Sheppard Arnold United States Courthouse in Little Rock, Arkansas.

23. **Waiver of Agreement Terms.** Meinco, at its sole discretion and leisure, may waive any term in this Agreement. Such waiver shall not, under any conditions or circumstances, constitute a modification of this Agreement. Additionally, such waiver shall not, under any conditions or circumstances, constitute a course of performance, course of dealings or trade usage between Meinco and Client. Any waiver by Meinco shall be limited to a single incident or event. No waiver of any term of this Agreement is valid unless it is in writing, signed by Meinco, and attached to this Agreement as an addendum. It is the responsibility and duty of Client to draft any written waiver and to present it to Meinco for Meinco's approval and signature.
24. **Force Majeure.** Neither Party shall be in breach of its obligations under this Agreement (other than payment obligations) or incur any liability to the other Party for any losses or damages of any nature whatsoever incurred or suffered if and to the extent that the other party it is prevented from carrying out its obligations by, or such losses or damages are caused by, a *force majeure* event. For purposes of this paragraph, the failure of the state of Arkansas or the United States of America to act according to current practices, procedure, or law at the time of the making of this Contract shall be considered a *force majeure* event. Such event by the government shall be in addition to any current or commonly accepted definition of *force majeure* event.
25. **Merger and Integration.** Meinco and Client agree that this Agreement represents a full, final, and complete memorial of their Agreement for the Service Work and that this Agreement does not rely upon any term or promise not otherwise specified within the four corners of this Agreement.
26. **No Oral Modification.** Meinco and Client agree that this Agreement shall not be subject to oral modification. The Parties agree that any modification made or agreed to by the Parties shall be in writing, signed by both Parties, and attached to this Agreement as an Addendum.

By signing this Agreement below, I indicate that I have read this Agreement and its terms, consisting of two (2) pages, excluding any Addendum or Addenda, and that these express terms are both acceptable and agreeable to me. I further declare that these terms do not represent an undue hardship, are not illusory, and are not unconscionable as I have expressly bargained for these terms in consideration of entering into this Contract for the value specified in paragraph three (3).

\_\_\_\_\_  
 Meinco Septic Systems, Inc.

06/18/2020

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 Neil Mueller  
 Client

6/30/20  
 \_\_\_\_\_  
 Date



**Arkansas Department of Health**  
 4815 West Markham, Slot 46  
 Little Rock, Arkansas 72205-3867

**MEMORANDUM OF AGREEMENT**

**SUBJECT: ONSITE WASTEWATER SYSTEM APPLICATION**

This is an agreement that the onsite wastewater system installed on this property has been permitted under authority of Act 402 of 1977 and by the Arkansas Department of Health with the understanding that the following provisions are met:

1. Onsite Wastewater Systems requiring a Monitoring Contract with a Certified Monitoring Personnel are Holding Tanks, Experimental Systems (i.e. Reduced Absorption Areas, \*ABGs), and Drip Dispersal Systems. \*Aerobic Biological Generators – Commercial applications only, residential applications must follow manufacturers' service contract requirements.
2. The property owner assumes all responsibility for the proper operation of the onsite wastewater system.
3. The property owner must maintain a monitoring contract with a licensed Certified Monitoring Personnel for the life of the system and retain Onsite Wastewater System Assessments (EHP-71), on file, for at least five (5) years.
4. The Arkansas Department of Health has no responsibility in the operation and maintenance of such systems.
5. That the Arkansas Department of Health may monitor the system as to its operation capabilities.
6. That the Arkansas Department of Health is granted permission to make such inspections as deemed necessary.
7. Subsurface systems with flows  $\geq 3000$  gpd and all surface discharging systems require the owner to file an additional permit application with the Arkansas Department of Environmental Quality (ADEQ).
8. **That, on the sale of the property, the owner of the property must disclose to the perspective buyer notice of this agreement and any permit requirements. The buyer is to sign memoranda, contracts or permit name change forms and submit these documents to the appropriate regulatory agency.**

SIGNED: Neil Meltzer  
 (Property Owner)

SIGNED: Jamun Kefauver, RS  
 (Health Department)

DATE: 6/30/20

DATE: 7-22-2020





- A** Saline County Health Department, 1612 Edison Ave, Benton, AR 72015
- B** Beaver Township, AR US

**30 min , 16.8 miles**  
 Light traffic  
 Via Congo Rd, Congo Ferndale Rd  
 · Unpaved roads

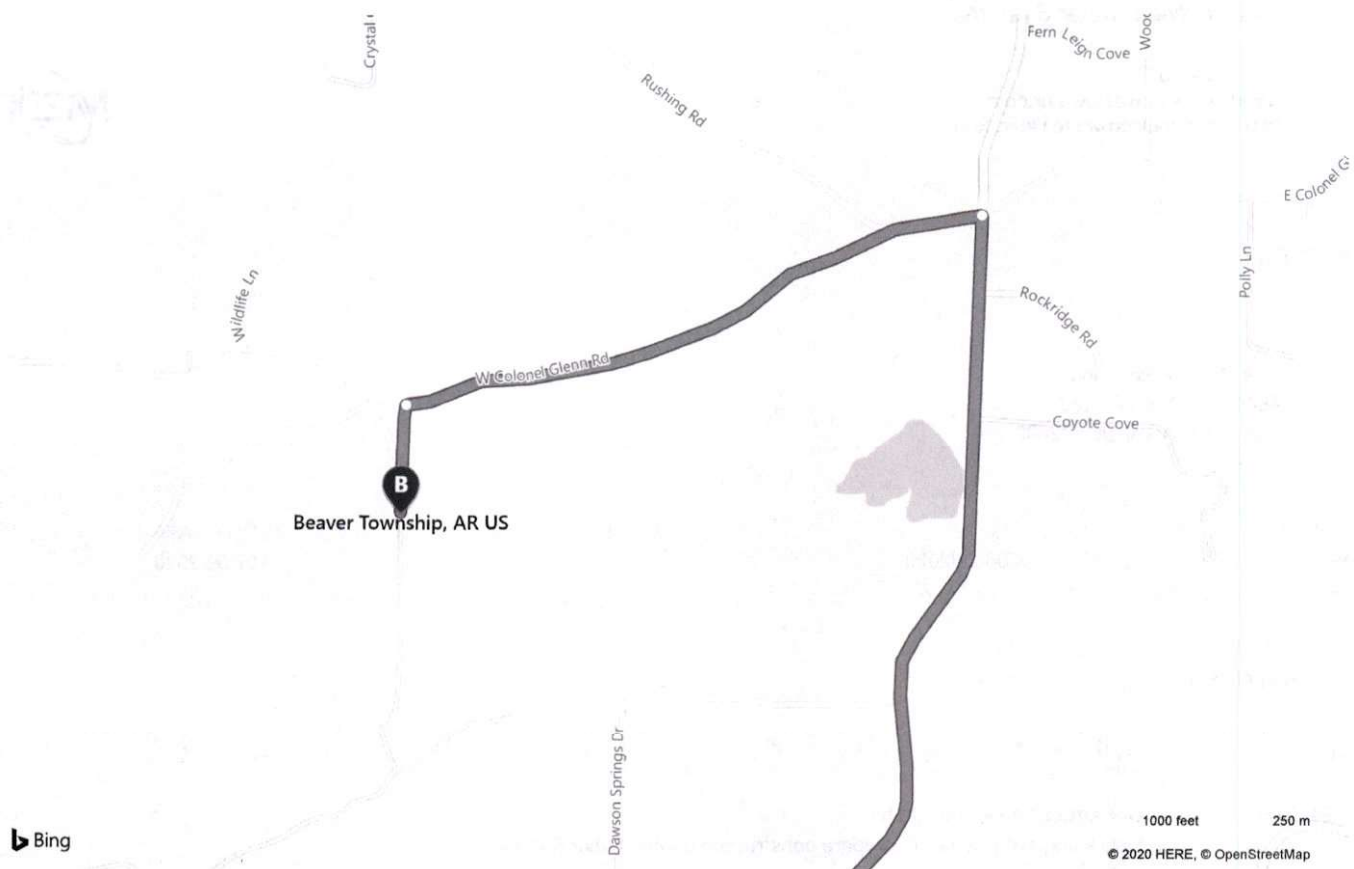
Lot 5 Glenwood Springs Phase I  
 Lot is on the corner of Black Hawk Drive and Glenwood Springs Drive.

**A** Saline County Health Department

	1. Head <b>west</b> on <b>AR-183 / Edison Ave</b> toward Cox St	0.1 mi
	2. Road name changes to <b>AR-35 / Edison Ave</b>	1.7 mi
	3. Turn <b>left</b> to stay on <b>AR-35 / E Carpenter St</b> Valero on the corner	0.3 mi
	4. Take ramp <b>right</b> for <b>I-30 E Service Rd / I-30 E</b>	0.4 mi
	5. Take ramp <b>left</b> and follow signs for <b>I-30 East</b>	0.5 mi
	6. At exit <b>118</b> , take ramp <b>right</b> for <b>I-30 E Service Rd / I-30 E</b> toward <b>Congo Road</b>	0.6 mi
	7. Take ramp <b>right</b> and follow signs for <b>Congo</b>	0.1 mi
	8. Turn <b>left</b> onto <b>Congo Rd</b> toward <b>Congo</b>	3.1 mi
	9. Turn <b>left</b> to stay on <b>Salem Rd / Congo Rd</b> CITGO on the corner	0.2 mi
	10. Keep <b>right</b> to stay on <b>Congo Rd</b>	2.6 mi
	11. Turn <b>right</b> onto <b>Congo Ferndale Rd</b>	5.8 mi
	12. Turn <b>left</b> onto <b>W Colonel Glenn Rd</b>	1.0 mi
	13. Turn <b>left</b> • Unpaved Road	0.2 mi

- Arrive at your destination on the left
14. The last intersection is W Colonel Glenn Rd

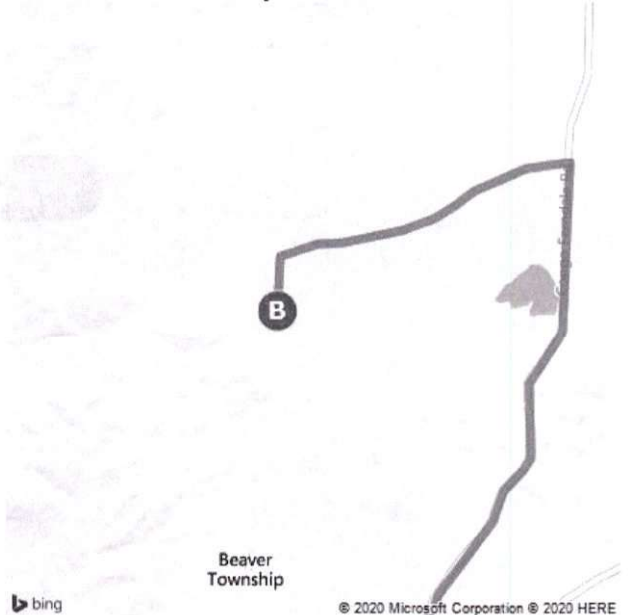
**B** Beaver Township, AR US



**A Saline County Health Department, 1612 E...**



**B Beaver Township, AR US**



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**Meinco Wastewater Systems**

(501) 821-3837  
david@meincowastewater.com  
http://www.meincowastewater.com



**INVOICE**

**BILL TO**  
Ives Development, Inc.  
4844 Lake Norrell Road  
Alexander, Arkansas 72002

**INVOICE #** 318A      **DATE** 06/21/2020      **DUE DATE** 07/06/2020

Please detach top portion and return with your payment.

**JOB REFERENCE**  
Glenwood Springs 5

DATE	ACTIVITY	QTY	AMOUNT
06/21/2020	Construction Permit - ADH Field work, soil evaluation, prepare construction permit (Labor & Overhead)	1	650.00
06/21/2020	Permit Fee Arkansas Health Department	1	150.00

**BALANCE DUE** **\$800.00**

**Pay invoice**