flotender™

Installation, Service & Troubleshooting Manual

GL Series Greywater Single Zone Irrigation Systems

www.flotender.com

2025

GETTING STARTED

INTRODUCTION

Thank you for purchasing a Flotender™ Greywater Irrigation System. This installation manual will guide you through a Flotender™ GL Series installation. Additional instructions are also included with individual kits and accessories. If you have any questions feel free to contact us at support@filtrific.com, or call (425) 643-2312.

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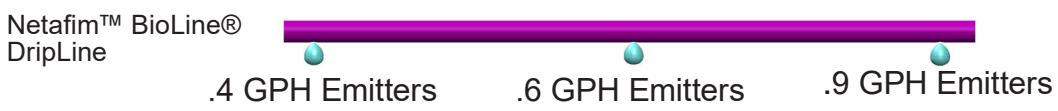
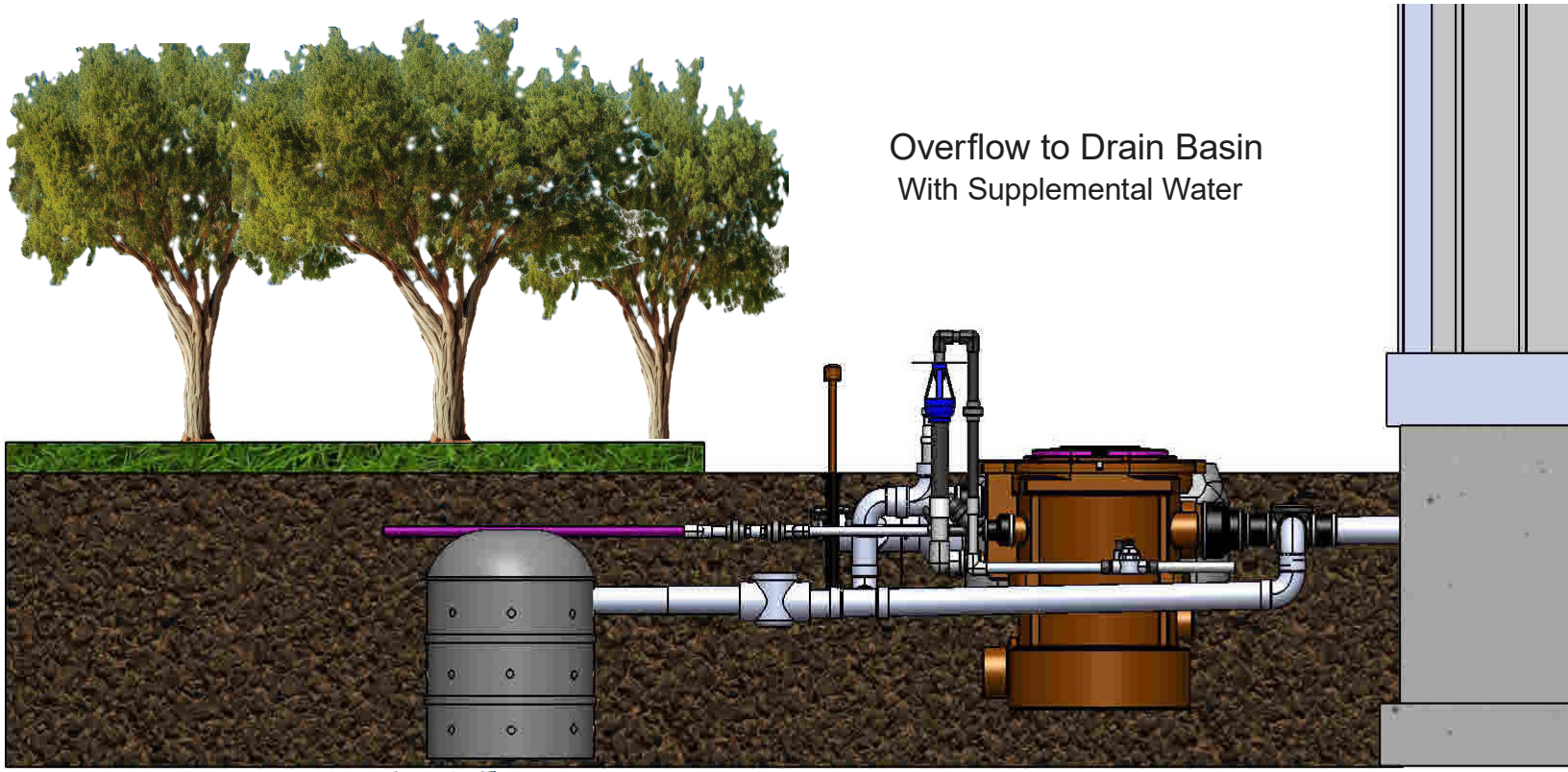
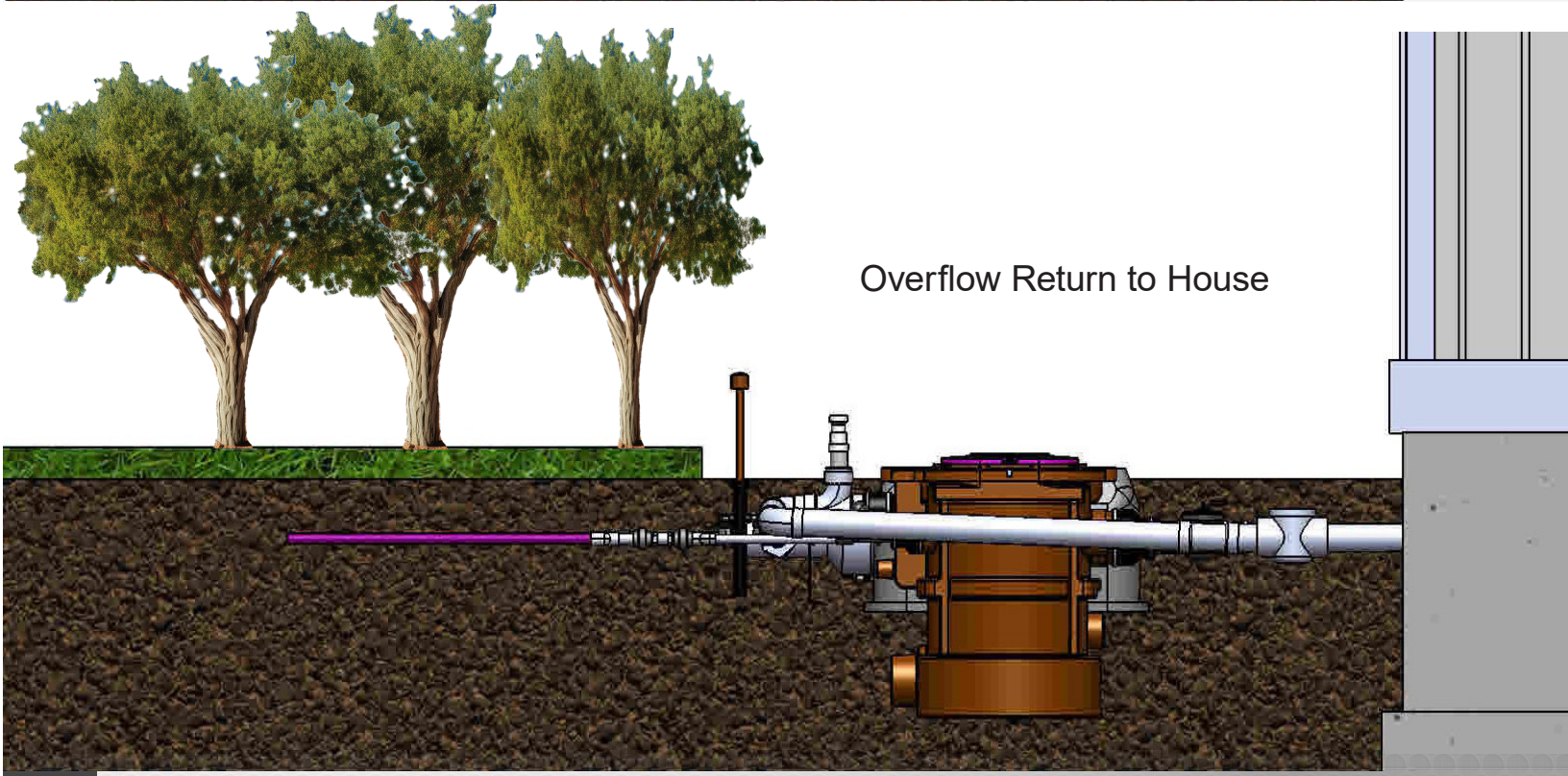

Netafim™ BioLine®
DripLine
.4 GPH Emitters
.6 GPH Emitters
.9 GPH Emitters

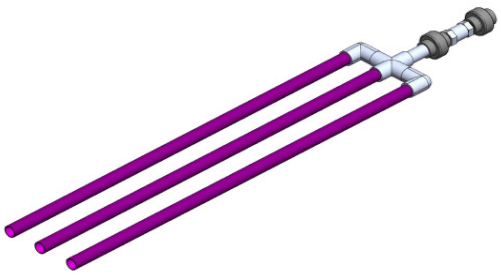

Overflow to Drain Basin
With Supplemental Water


Overflow Return to House

GETTING STARTED

2 GPM Flow Restrictor Maintains
Required Filter Wash Pressure

GL-2SP
2 Stage Pump
1/2 HP, 115V, 5.5 Amps



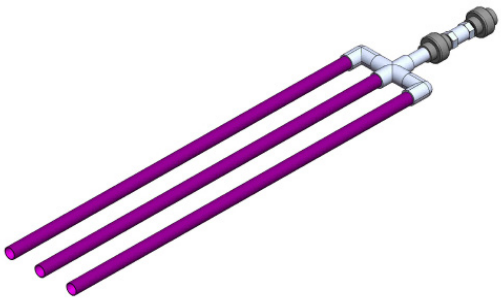
Level landscape:
The maximum GreyWater use in one hour will be:
3 showers... *or...***2 showers and 1 load of laundry...***or...* **1 bath**

The maximum zone size can be 120 Gallons/Hour

See Pages 30-31 For Elevated Landscapes

6 GPM Flow Restrictor Maintains
Required Filter Wash Pressure

GL-3SP
3 Stage Pump
3/4 HP, 115V, 8.4 Amps



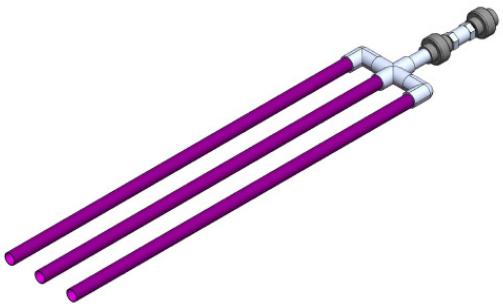
Level Landscape:
The maximum GreyWater source in one hour will be:
9 showers...*or...***6 showers and 3 loads of laundry...***or...3 baths**

The maximum zone size can be 360 Gallons/Hour

See Pages 30-31 For Elevated Landscapes

10 GPM Flow Restrictor Maintains
Required Filter Wash Pressure

GL-4SP
4 Stage Pump
1 HP, 115V, 9.8 Amps



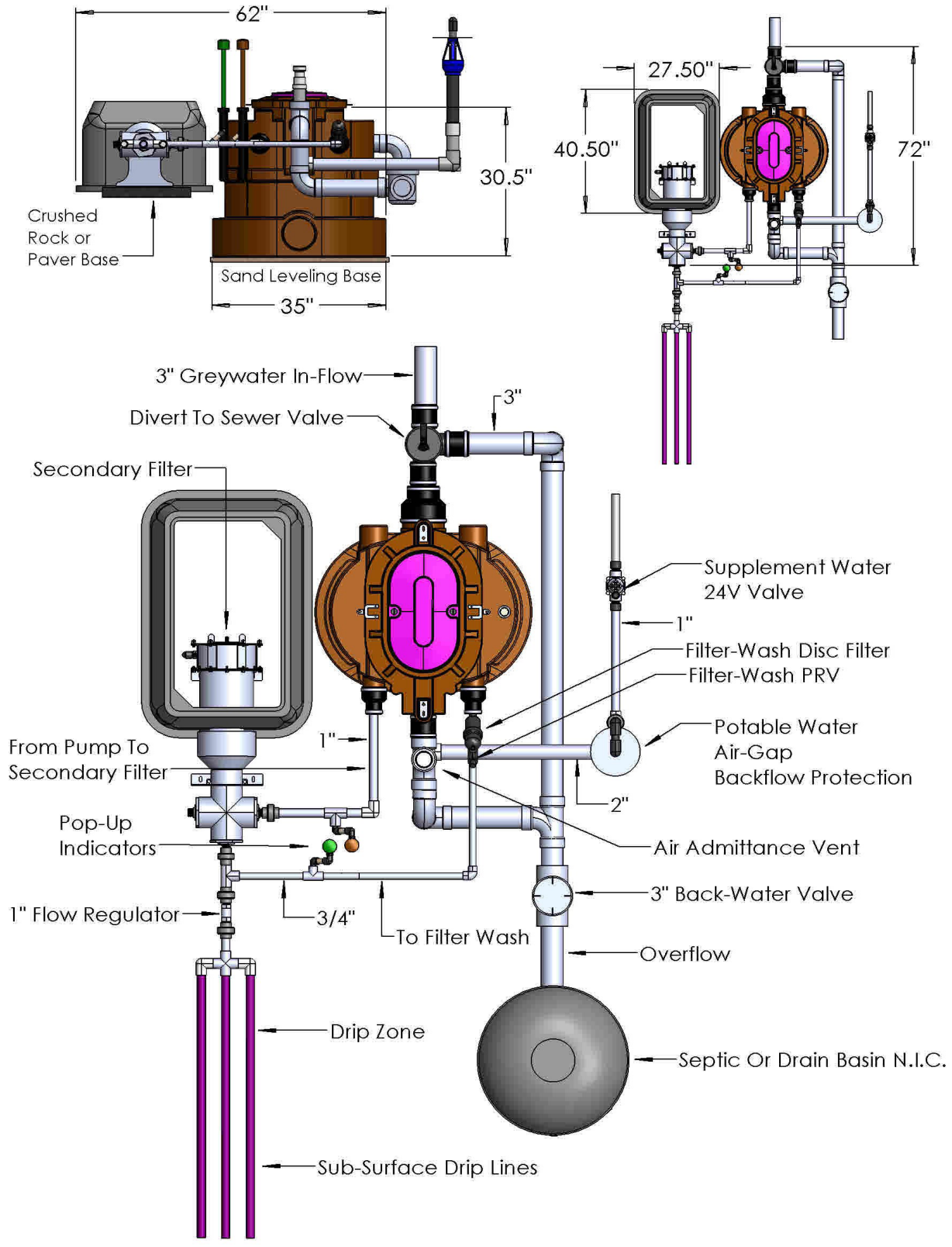
Level Landscape:
The maximum GreyWater source in one hour will be:
15 showers...*or...*10 **showers and 5 loads of laundry...***or...***5 baths**

The maximum zone size can be 600 Gallons/Hour

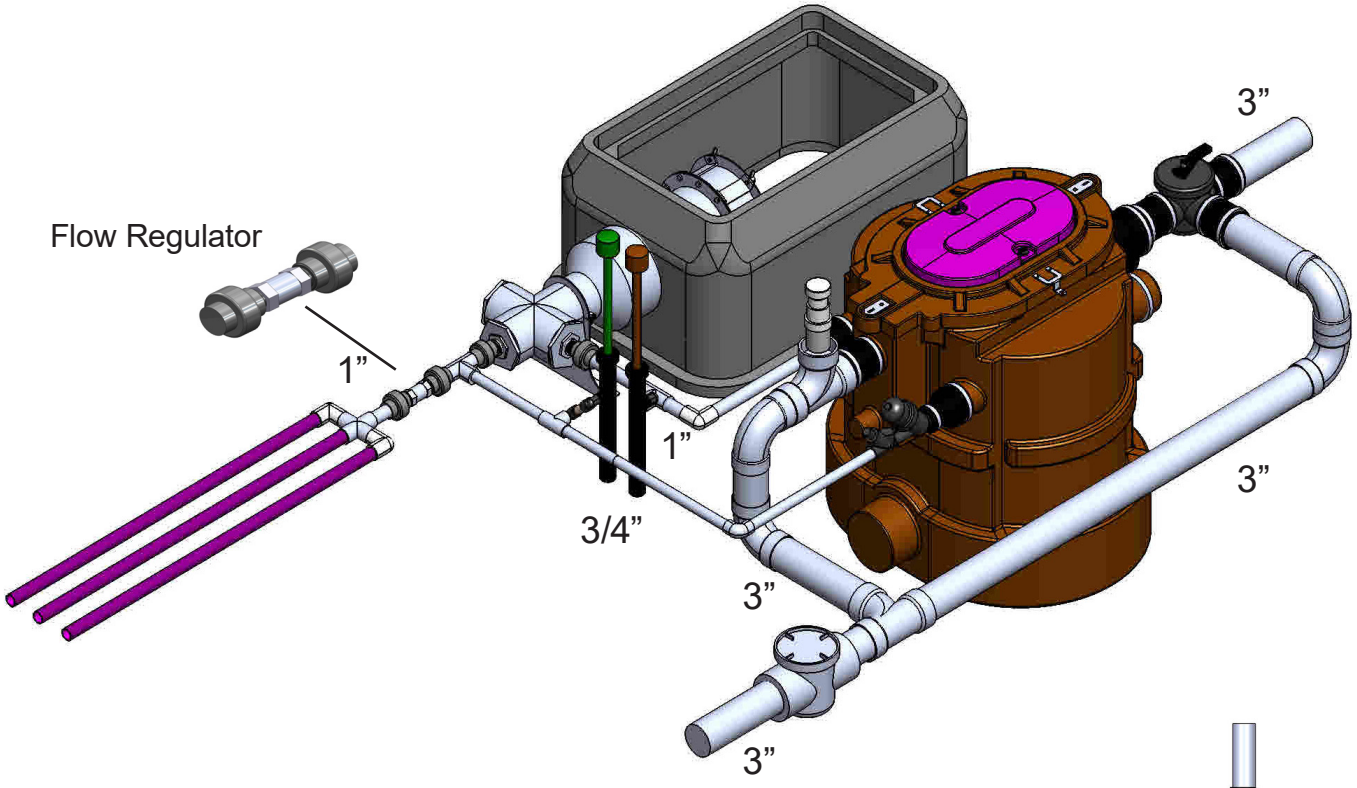
See Pages 30-31 For Elevated Landscapes

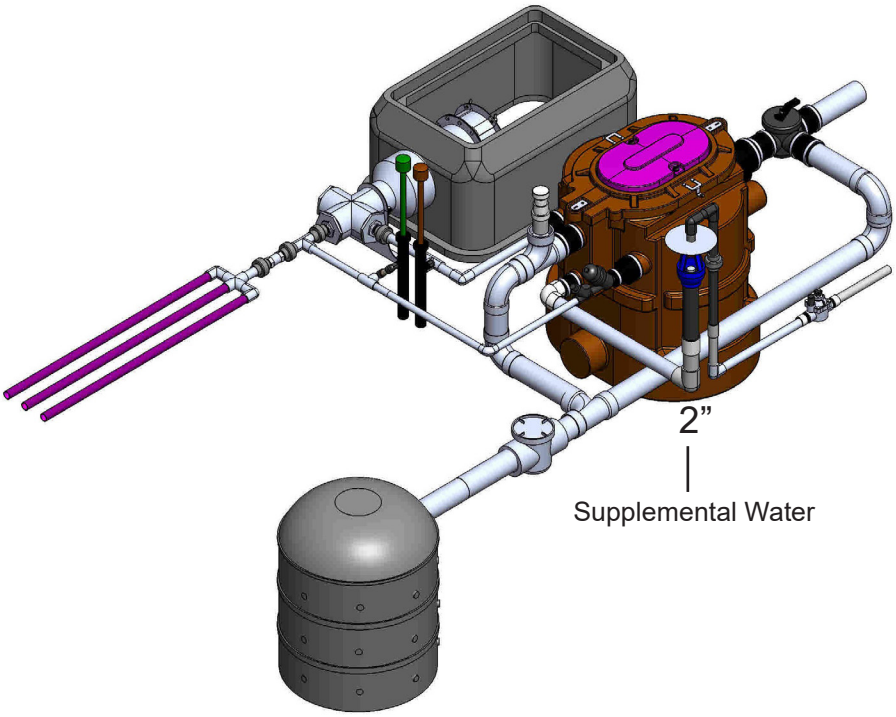
PROCESSOR OVERFLOW TO BASIN-SEPTIC

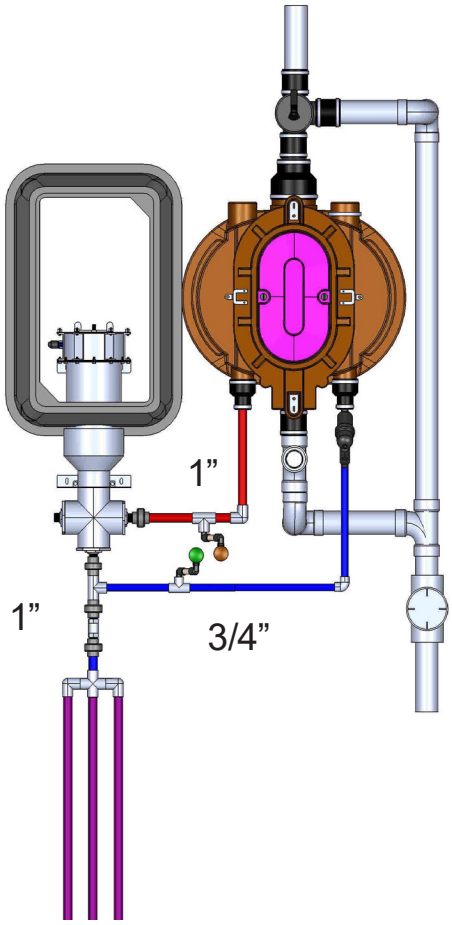
GL Series Processor



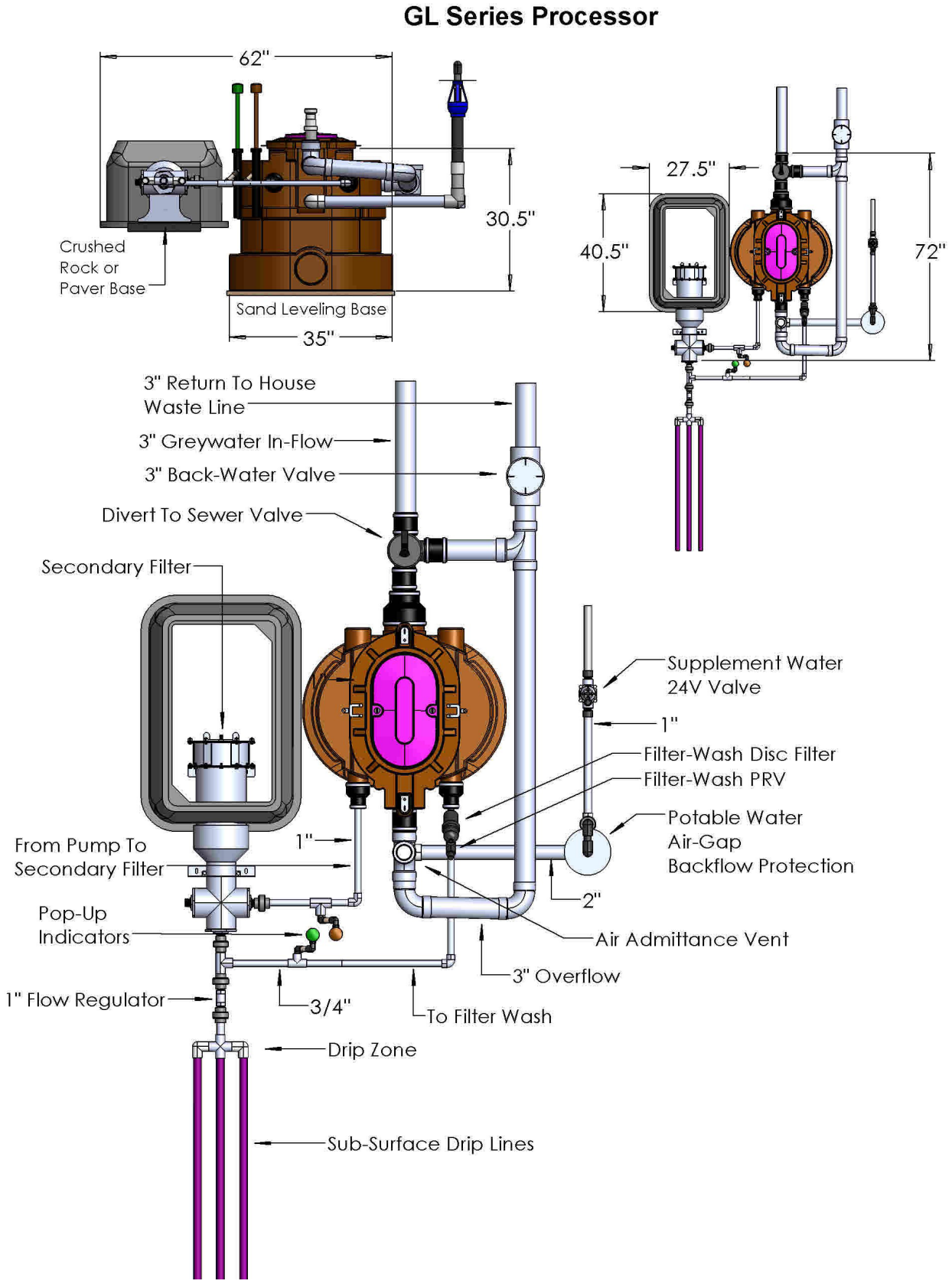
PROCESSOR OVERFLOW TO BASIN-SEPTIC



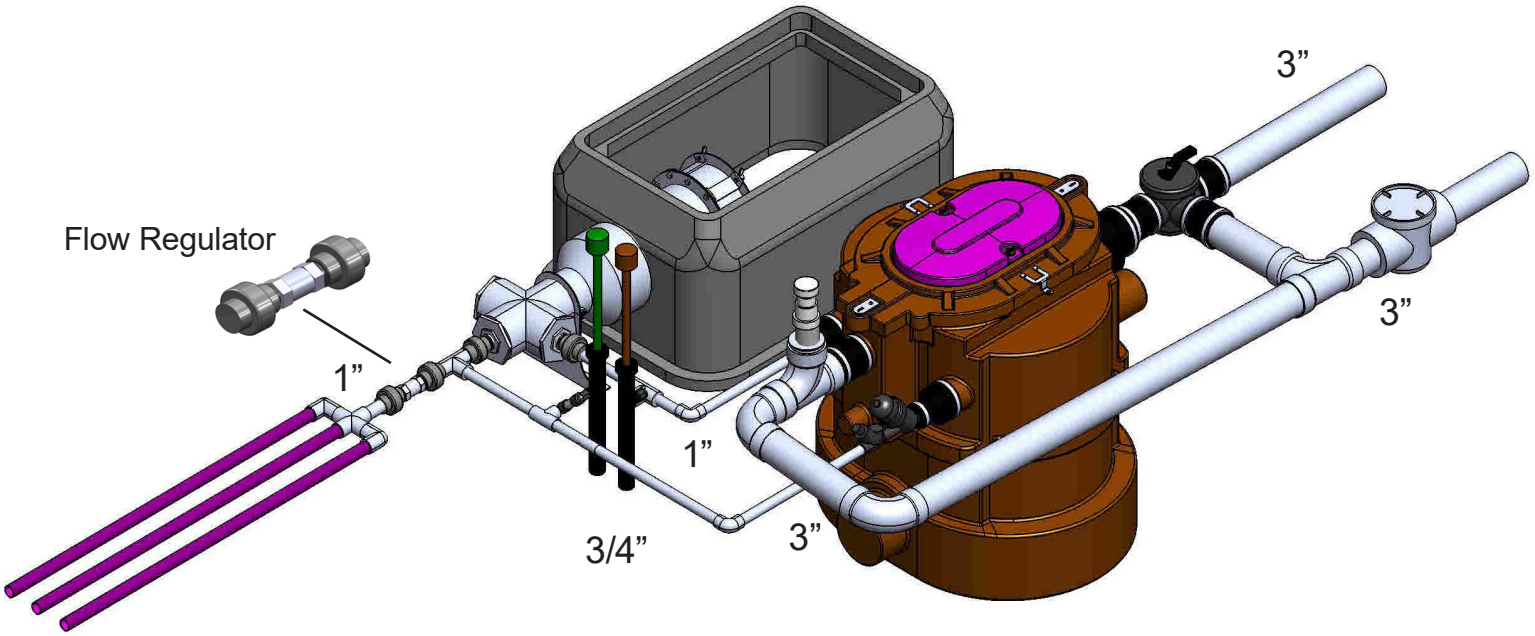


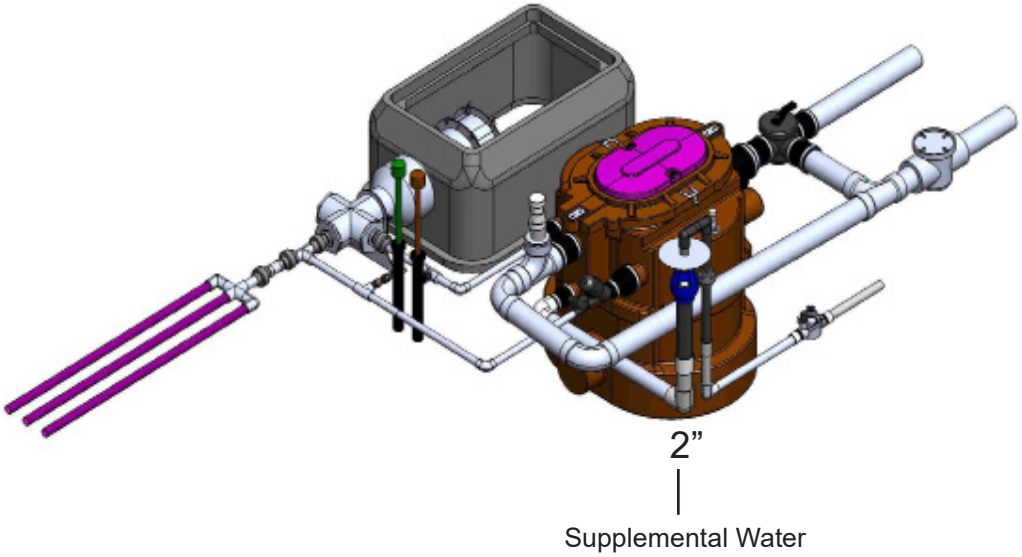


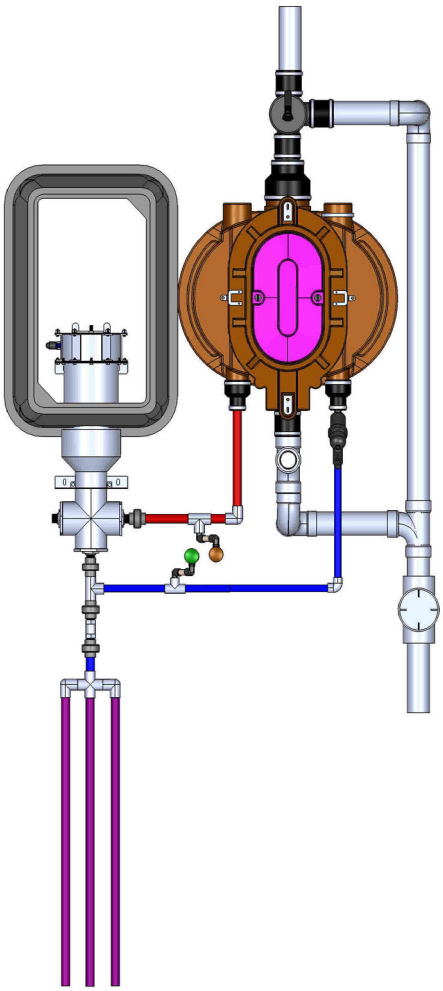
PROCESSOR OVERFLOW TO HOUSE SEWER



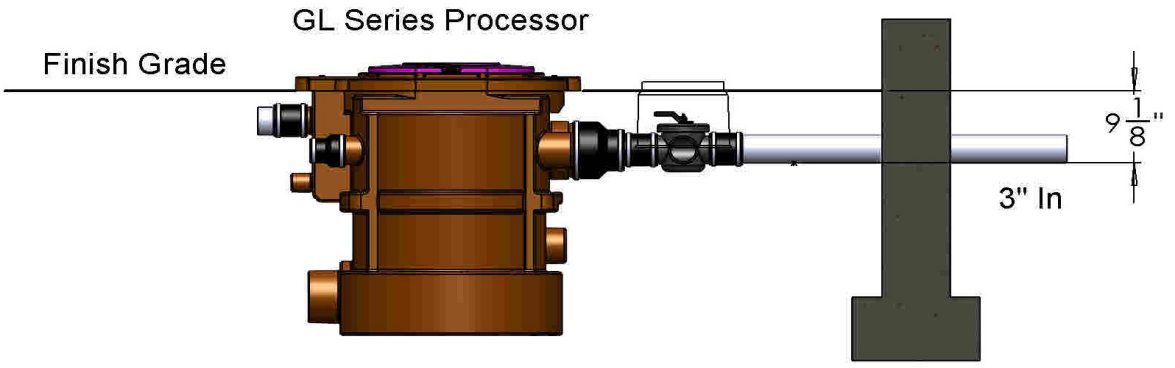
PROCESSOR OVERFLOW TO HOUSE SEWER

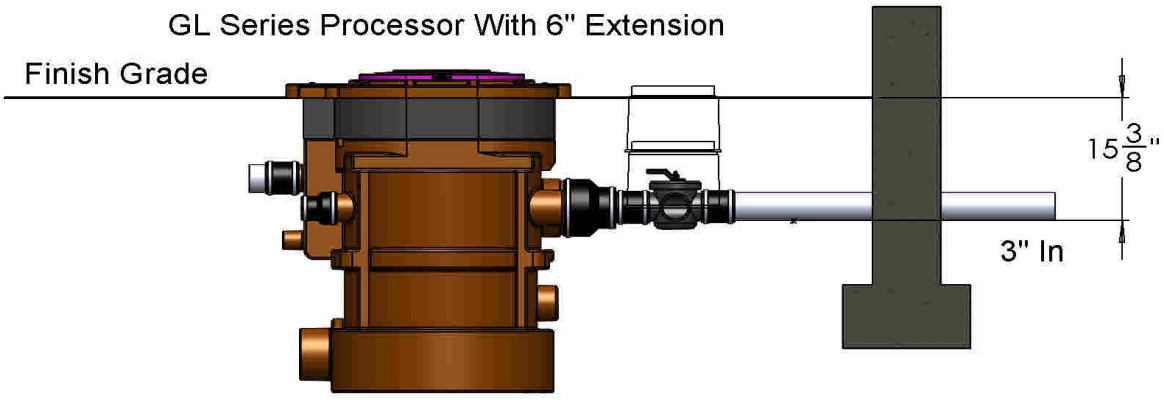


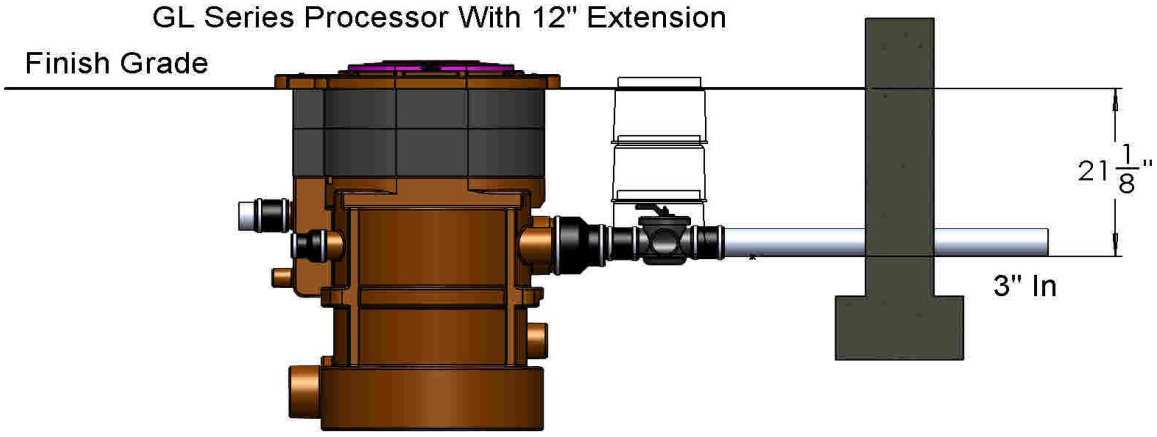




PROCESSOR PLACEMENT



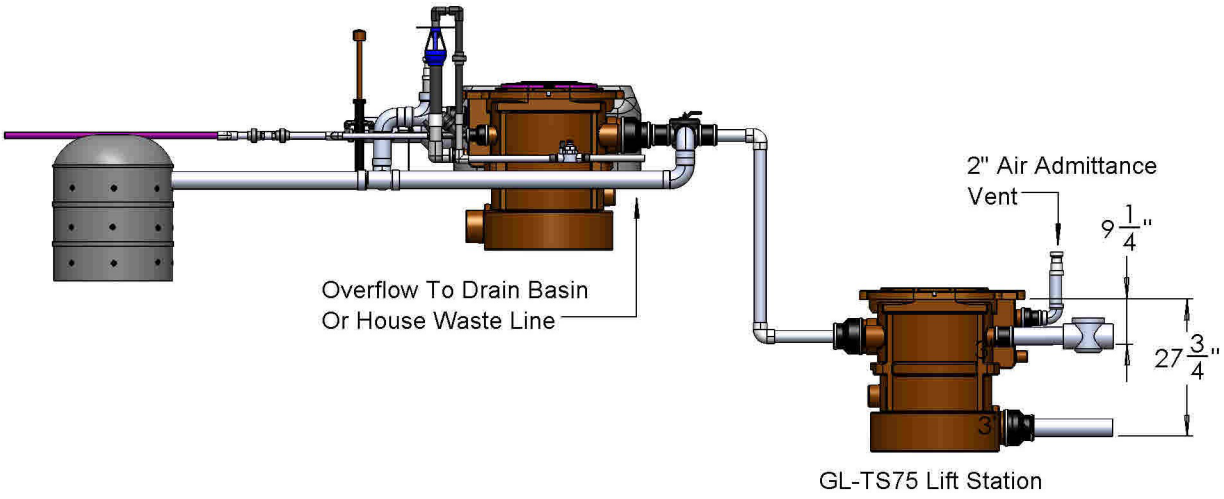




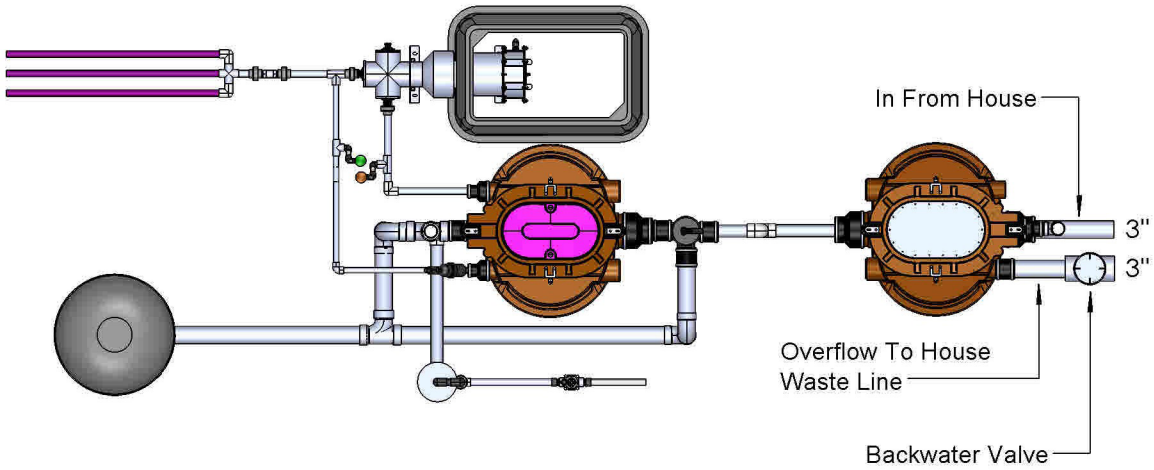
PROCESSOR PLACEMENT

DEEP GREYWATER STUB-OUTS

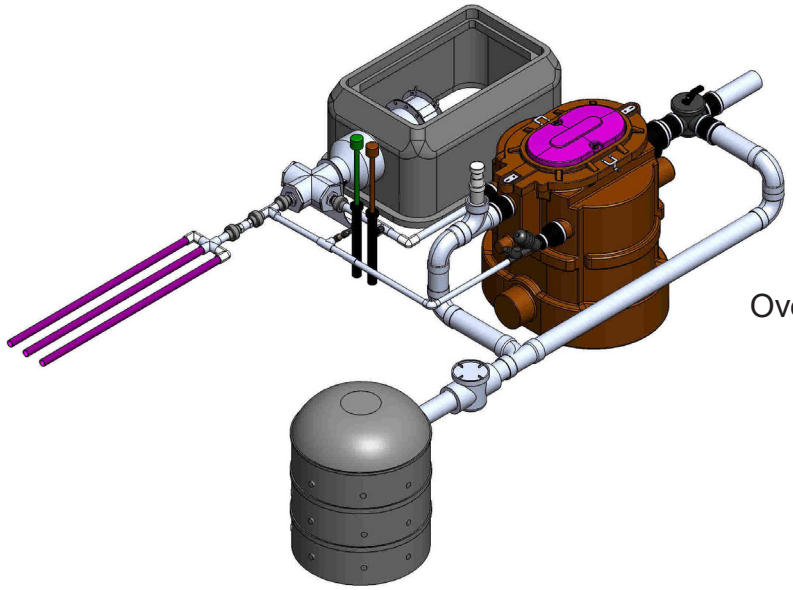
For installations where the greywater stub-out is below the intake level of the processor, a lift station may be installed. The lift station features a built-in pump, and activation float switch which pumps the incoming greywater up and into the greywater processor intake port.



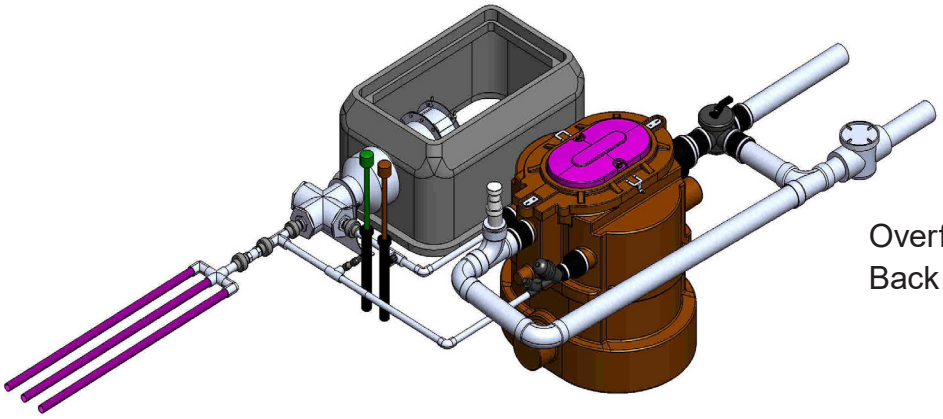
GL-TS75 Lift Station



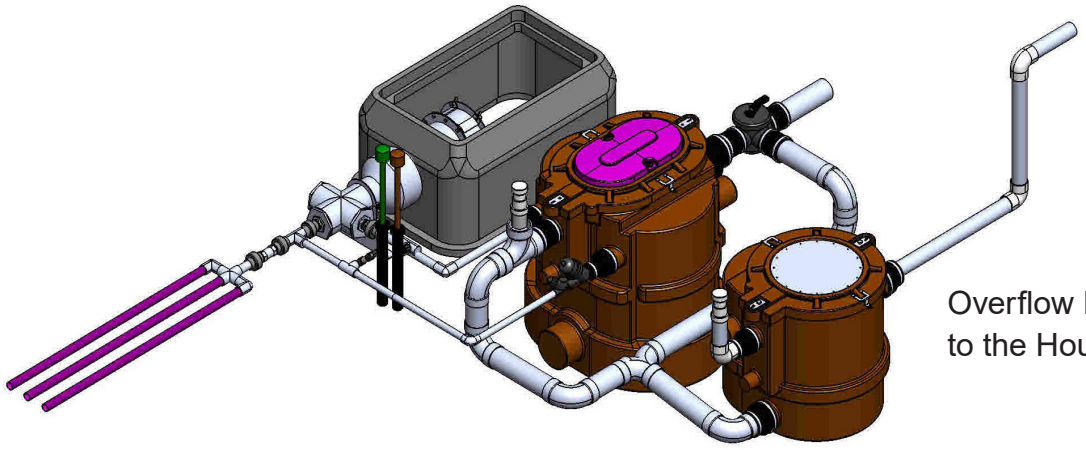
OVERFLOW OPTIONS



Overflow Gravity Drain to a Drain Basin

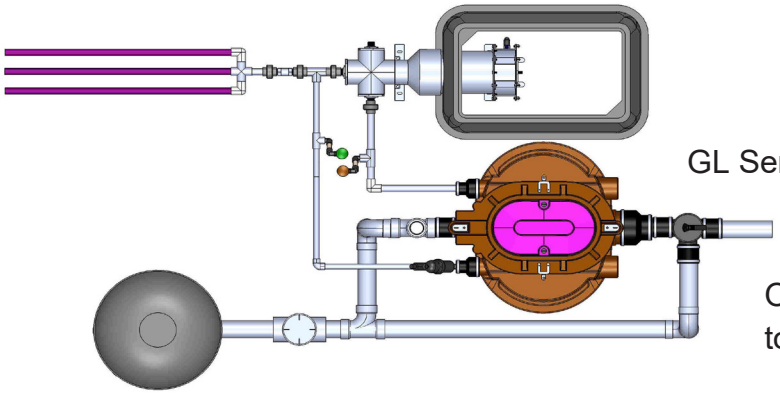


Overflow Gravity Flow
Back to the House Sewer

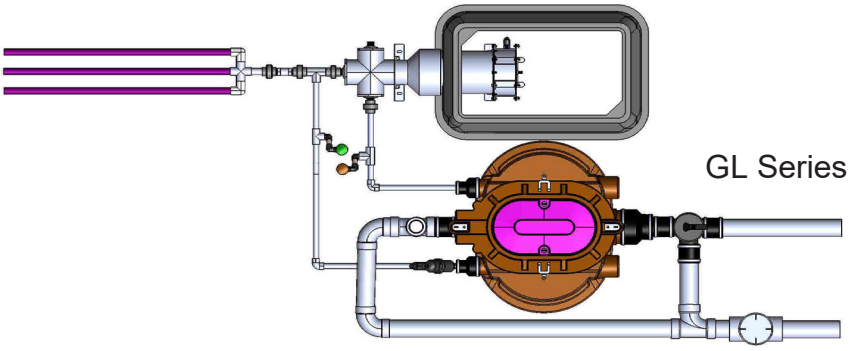


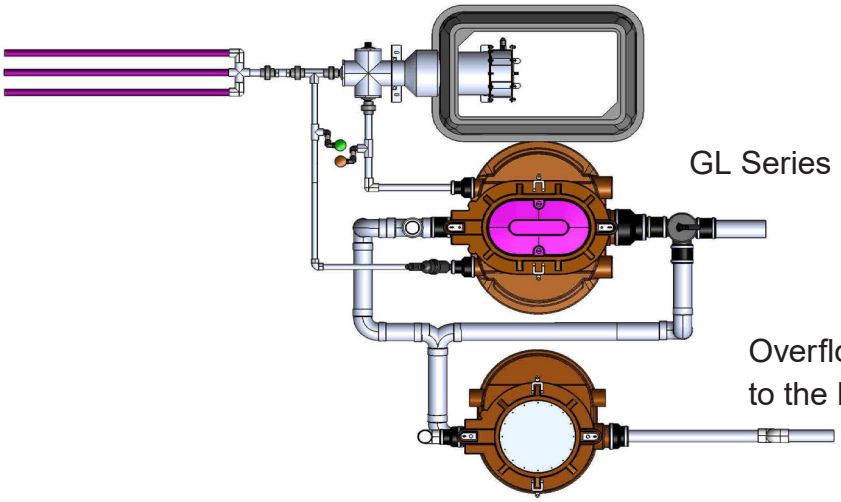
Overflow Pumped Up
to the House Sewer

OVERFLOW OPTIONS



DW-50 Dry Well





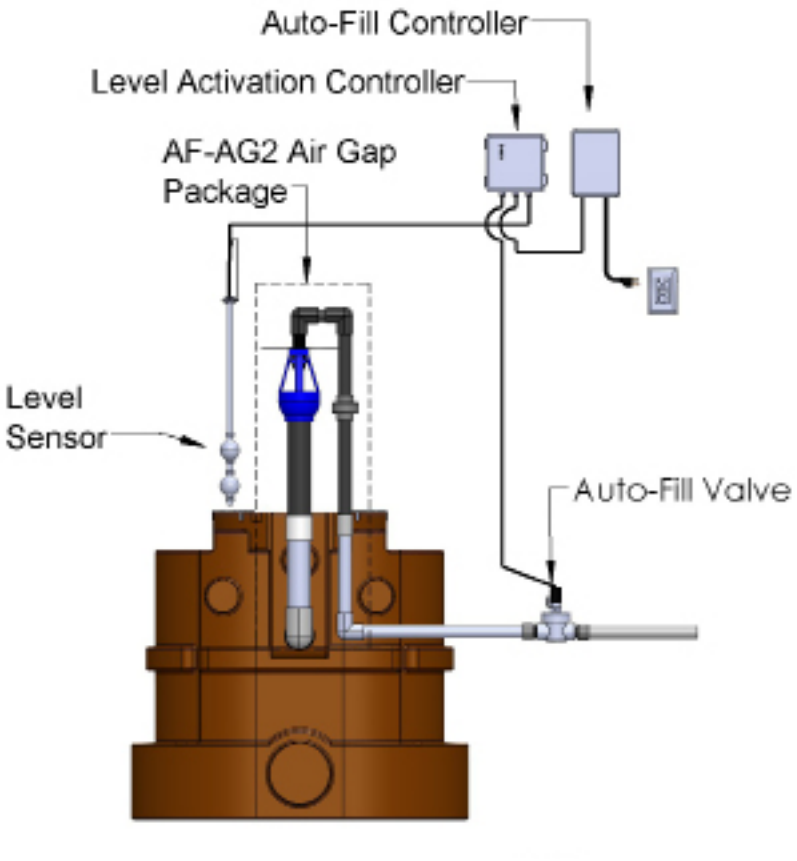
GS-TS40 Lift Station

WATER SUPPLEMENT COMPONENTS

AFS-GL
GL Series Auto-Fill

An upper and lower float switch adds water at a low water level and turns it off when water reaches the upper float. The override controller provides scheduling of auto-fill times and provides manual off when not needed.

Includes:
1 - Sensor w/ Mounting Bracket
1 - Level Actation Controller
1 - Auto-Fill Activation Override Controller
1 - 24V Auto-Fill Valve
50 ft 24V 18-4 Mult-Strand
50 ft 24V 18-2 Multi-Strand
7- Blue Spade Connectors
5 - Waterproof GreyBlack Wire Nuts
1 - AF-AG2 Air-Gap Assembly

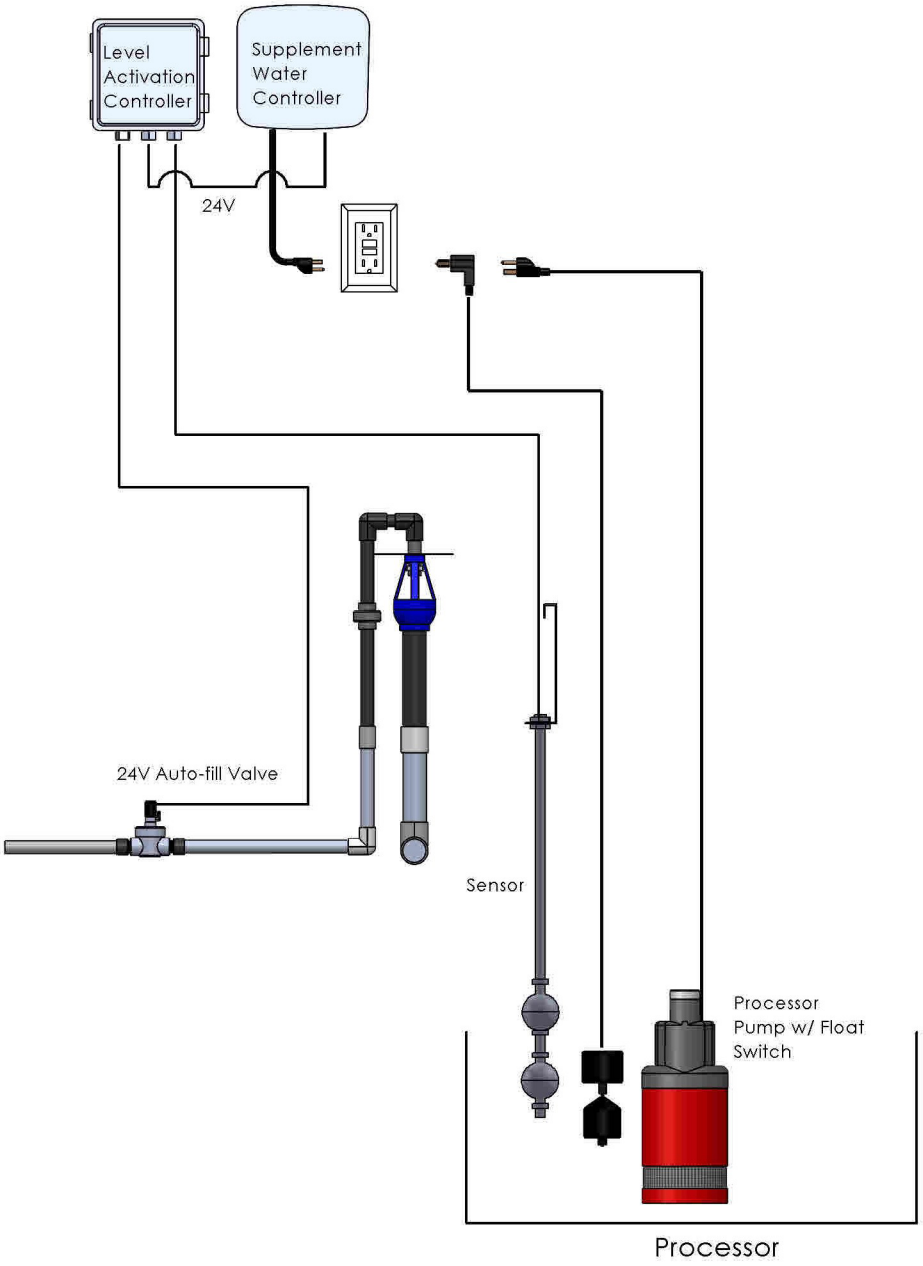


Supplemental Water Controller

Set Station # 1 to operate the supplement electric valve the days of the week where supplement watering is needed.

- Indoor or outdoor
- 3 individual programs, A,B,C for station # 1.
- 4 independent start times per program
- Operates any or all days of the week as needed.

WATER SUPPLEMENT COMPONENTS



SERVICING FILTERS

The Flotender™ GL System requires periodic maintenance. The following are recommendations based on average usage as detailed below:

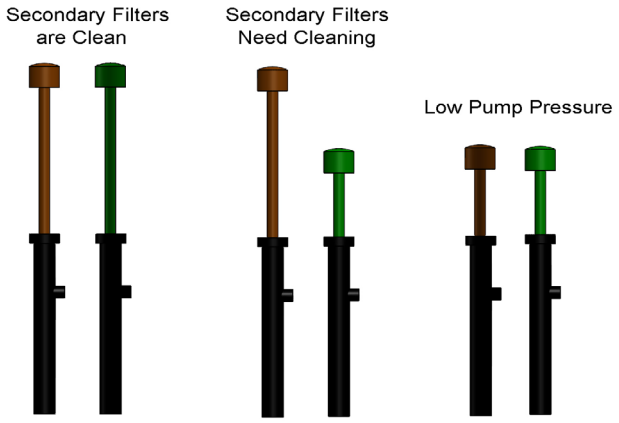
GL-2SP-MZP4 Sugested Service Guide For Shower, Sink Washing Machine and Tub Systems	
Primary Filter:	2 years
Secondary Filter:	2 years

GL-3SP-MZP Sugested Service Guide For Shower, Sink Washing Machine and Tub Systems	
Primary Filter:	1 year
Secondary Filter:	1 year

GL-4SP-MZP Sugested Service Guide For Shower, Sink Washing Machine and Tub Systems	
Primary Filter:	1 year
Secondary Filter:	1 year

When the primary filters have collected excessive lint, the filters will flush through the overflow flush tubes, helping to remove excessive lint and debris.

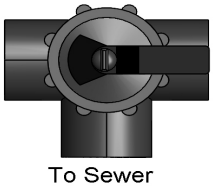
The performance indicator positions shown below will indicate when the filters neeed cleaning.



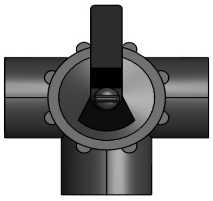
CLEANING FILTERS

Before cleaning the Primary Filter, turn the diverter gate so it is blocking the greywater flowing into the processor. The return to sewer will be on the left or right as shown below with the handle pointing at the port being blocked.

Flow To Processor Is Blocked (Maintenance Position)



Flow To Sewer Is Blocked



REMOVE ACCESS CAP
Turn the knobs on each side of the cap so they are parallel and past the dot as shown.

REMOVING FILTER FLUSH TUBES

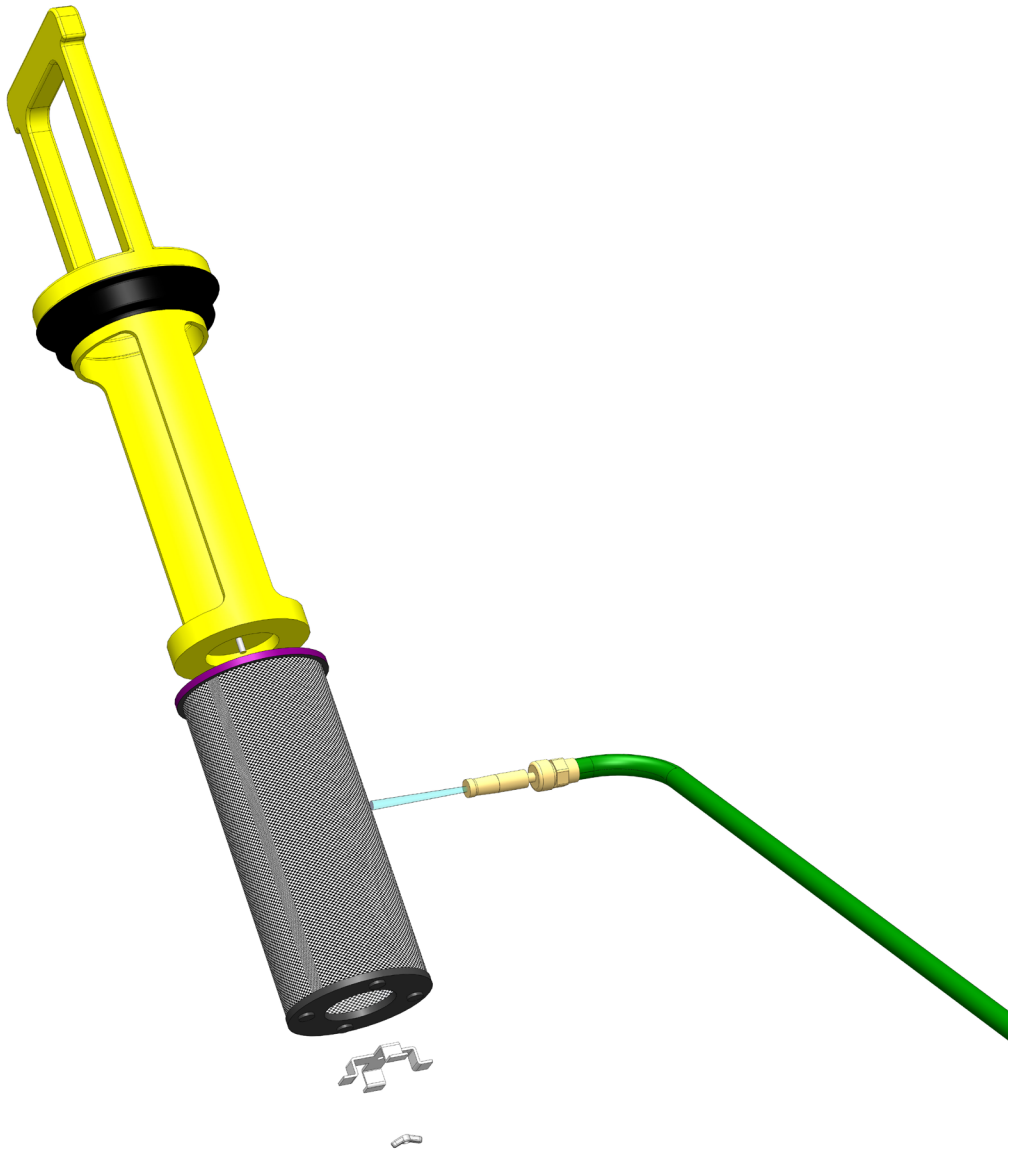
Occasionally, it is recommended that the primary filter is manually cleaned. In order to access the primary filters, the overflow flush tubes must be removed.

STEP 1:
Pull back on the Filter Flush Tube to disconnect pipe from the overflow port.

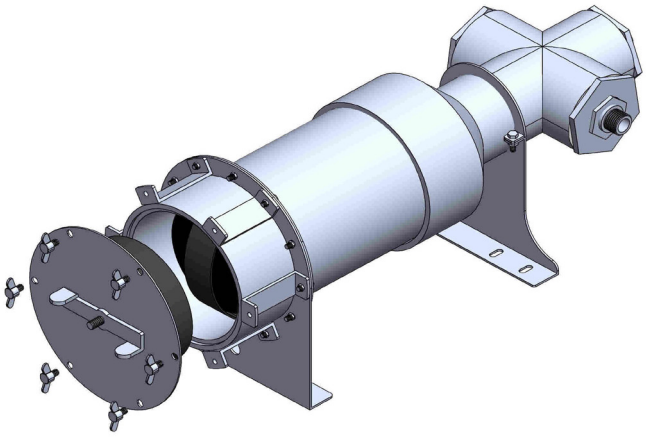
STEP 2:
Lift the Filter Flush Tube from the Filter Carriage. The Primary Filter Baskets can now be lifted out.

CLEANING PRIMARY FILTERS

Remove the filter screen from the filter frame by loosening the wing nut on the bottom of the basket. Use a standard garden hose to spray debris from the basket. Once the debris is removed from the basket reconnect the screen, replace the basket in the processor and reconnect the overflow flush tubes.



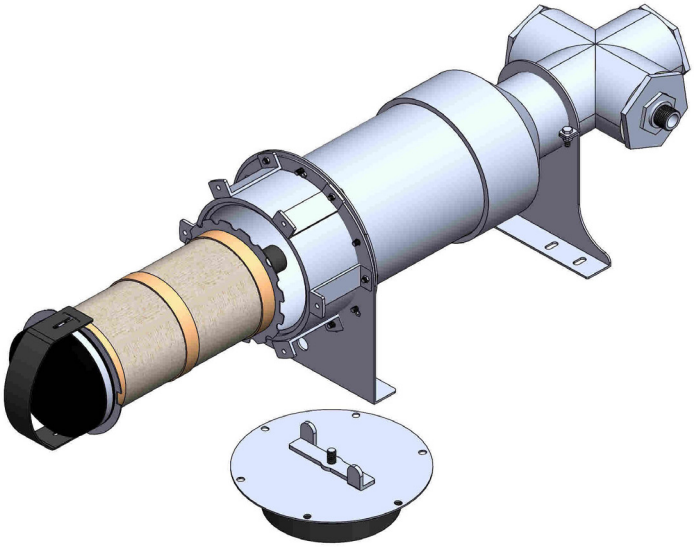
CLEANING SECONDARY FILTER



STEP 1:

REMOVE THE FRONT ACCESS PLATE

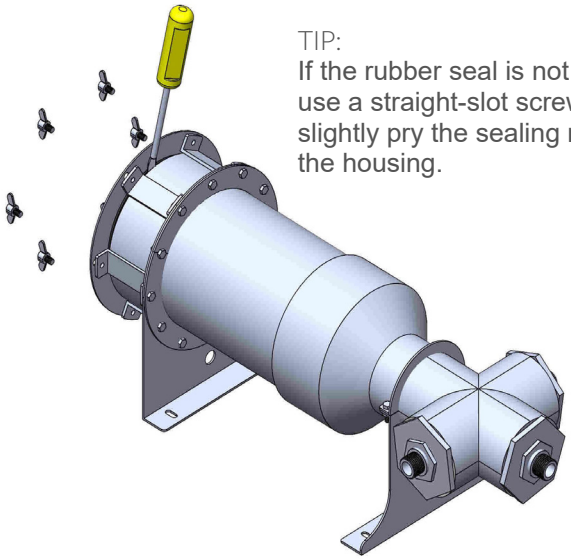
Open the drain valve beneath the filter to relieve pressure then loosen the center wing nut and remove the 6 outer wing nuts.



STEP 2:

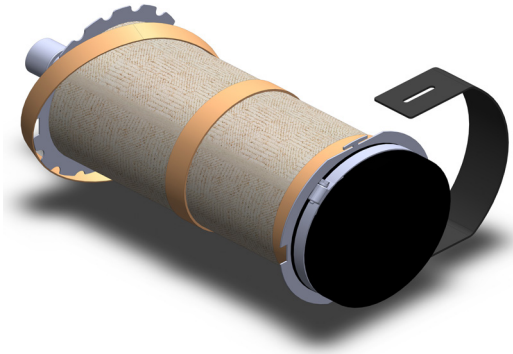
REMOVE THE FILTER ELEMENT

Pull straight back on the filter handle to remove the filter element.

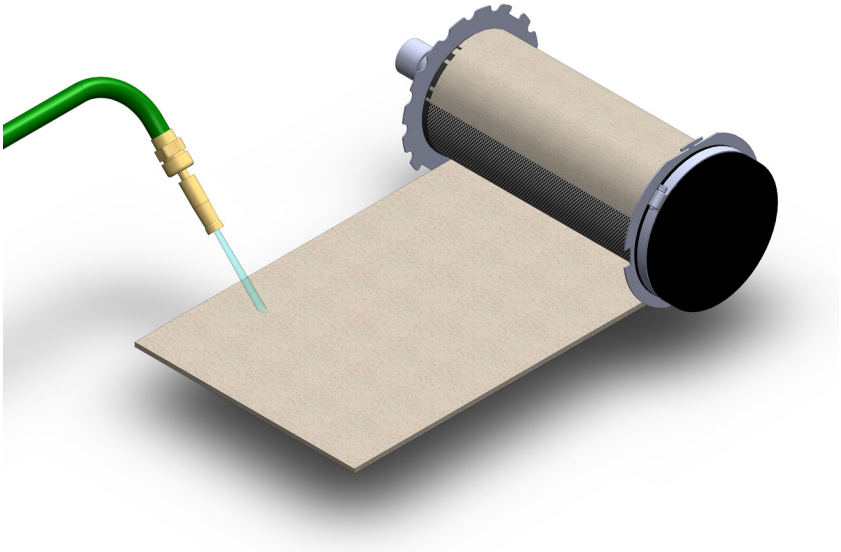


TIP:
If the rubber seal is not releasing, use a straight-slot screw driver to slightly pry the sealing ring from the housing.

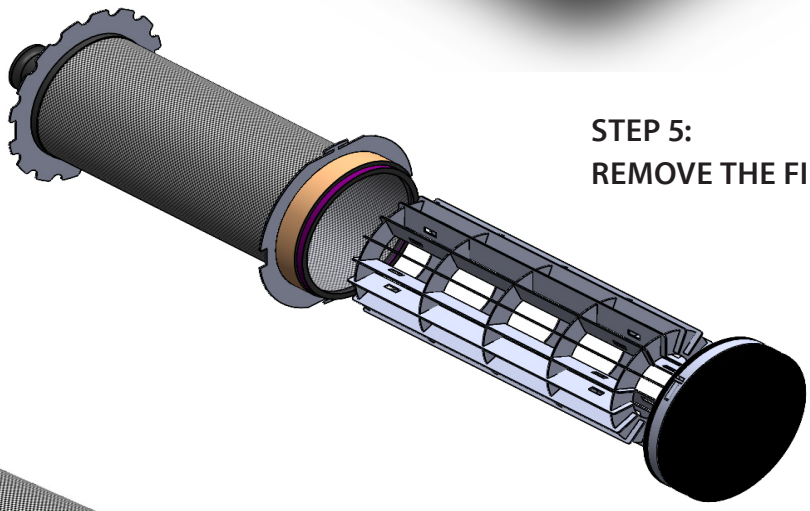
CLEANING SECONDARY FILTER



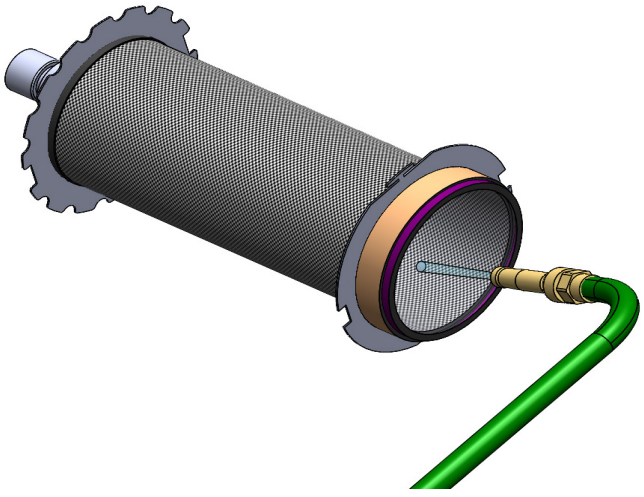
STEP 3:
REMOVE THE HANDLE AND SILICONE STRETCH BANDS



STEP 4:
CLEAN THE FILTER FABRIC
Unroll the filter fabric and spray off the collected lint.

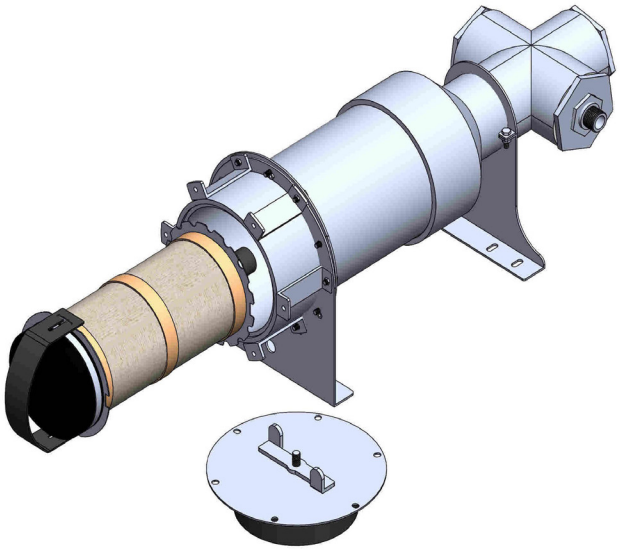


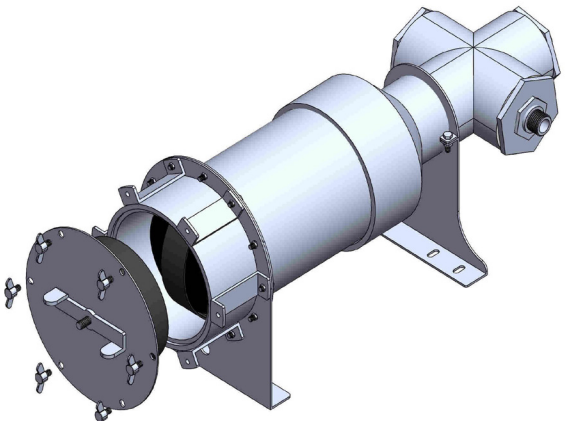
STEP 5:
REMOVE THE FILTER FRAME



STEP 6:
WASH LINT FROM THE FILTER SCREEN
Wash away lint accumulation on the filter element by directing a spray nozzle against the inside of the surface of the filter screen. This will reverse wash the lint from the outer surface of the screen.

CLEANING SECONDARY FILTER

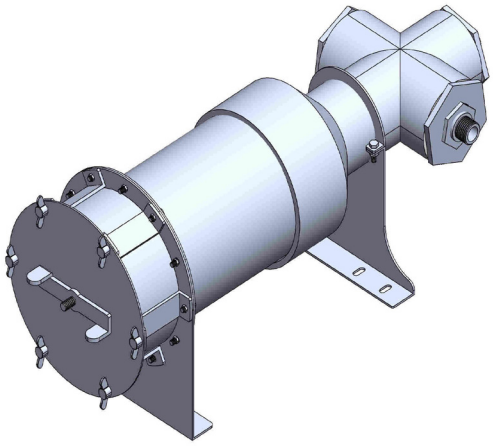




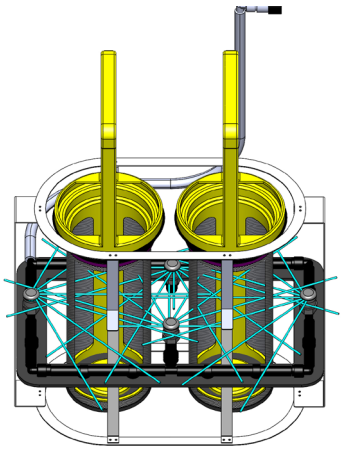
STEP 7:

RE-ASSEMBLE

Insert the cleaned filter element and the face plate. Hand tighten the perimiter wing nuts then firmly hand tighten the center wing nut. (Note: Once the system is operating, further hand tighten the front wing nut as needed)

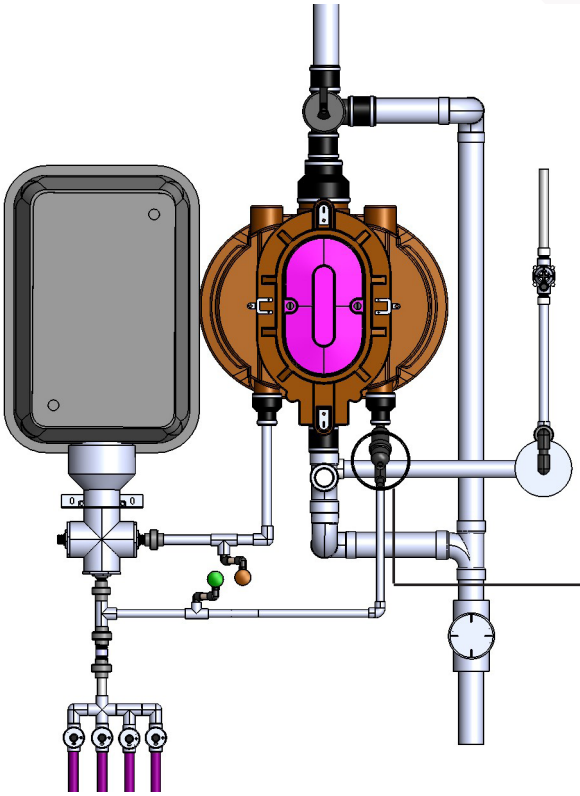


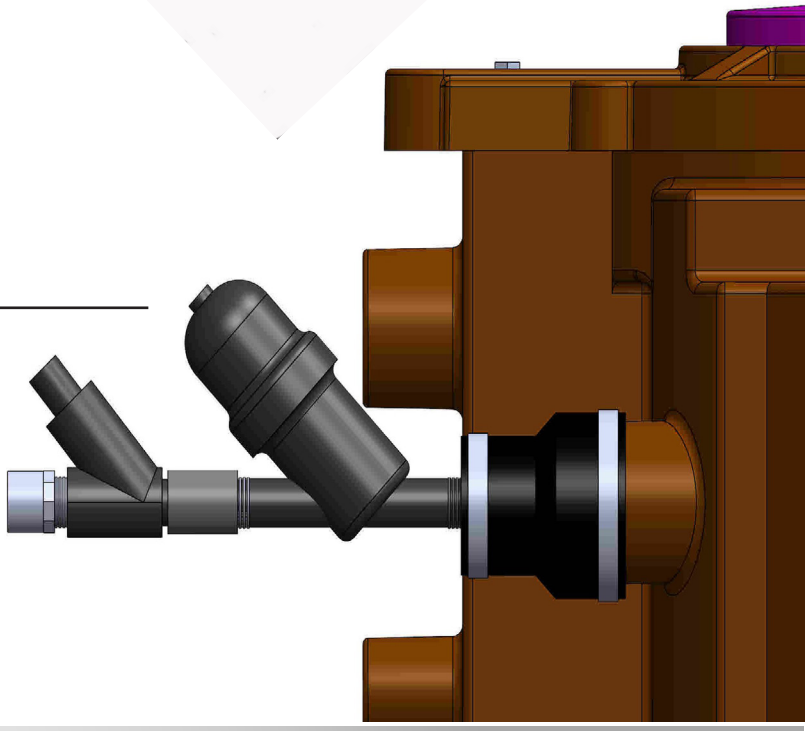
CLEANING FILTER-
WASH DISC FILTER



The filter wash disc filter prevents initial installation pipe debris from plugging the internal wash system. Unless there has been a disruption to the system this is not a regular maintenance item. To clean, unthread the top cover and lift out the filter disc and then rinse.

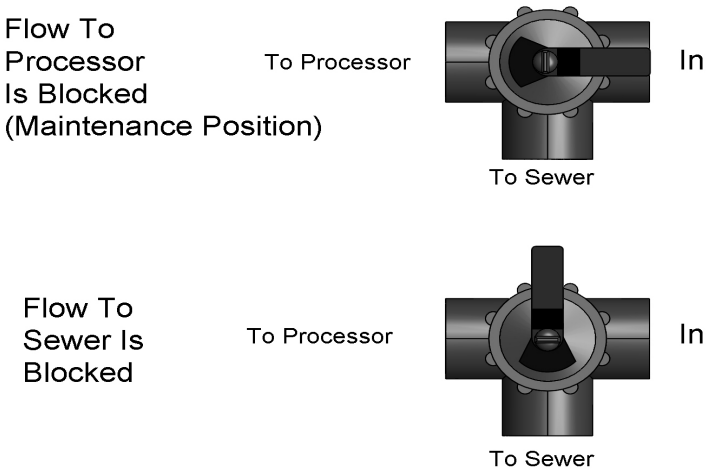
UnPlug the pump before servicing the filter.
Unscrew the top and pull out the entire filter element,
Wash the discs and re-assemble in reverse order.





ACCESSING GREYWATER PROCESSOR

NOTE:
DISCONECT THE POWER FROM THE PUMP, OR TURN THE 3-WAY VALVE TO DIVERT IN-FLOWING GREYWATER BEFORE CLEANING THE SECONDARY FILTER.



Follow the steps below to access the internal components inside of the Greywater Processor.

STEP 1:
Remove front and back connection bolts.

STEP 2:
Remove side connection bolts.

Continue

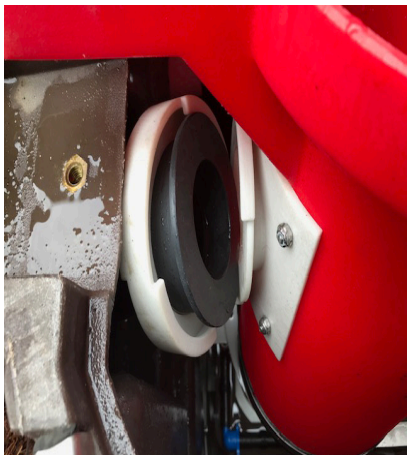
DISCONNECTING OVERFLOW FROM CARRIAGE:

STEP 3:
Remove The Lid

STEP 4:
Remove the bolt at the back of the filter carriage.

STEP 5:
Remove poly-mat, overflow flush tubes and filter baskets.

STEP 6:
Rotate the fastening nut left or right 90 degrees to free the collar from the filter carriage and pull back on the accordian tube.

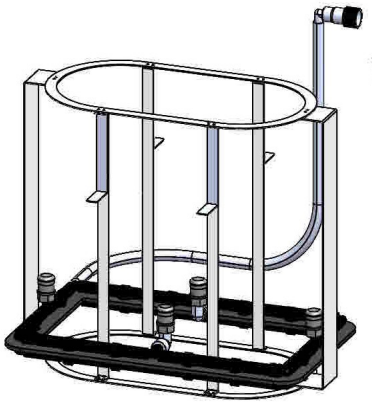


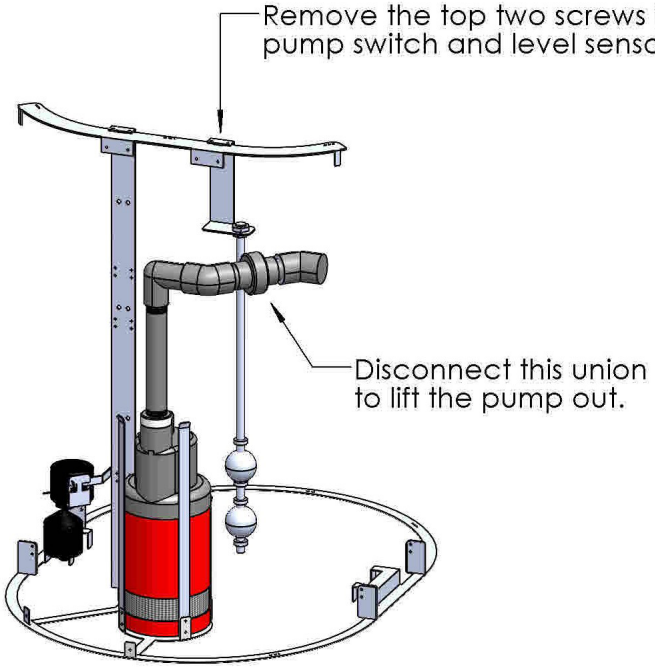
Overflow disconnected from carriage

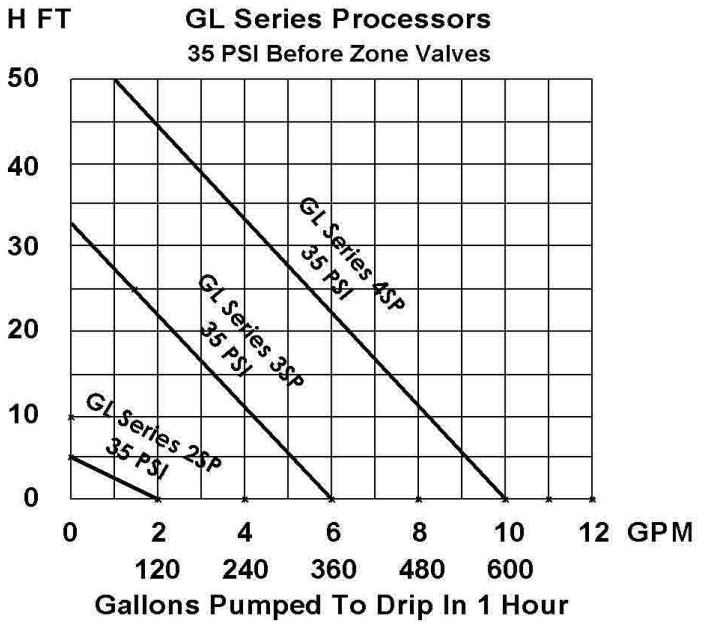
STEP 7:
Pull back of the filter carriage to clear the metal wash assembly then lift the filter carriage carriage out.

ACCESSING GREYWATER PROCESSOR

After the filter carriage has been lifted out, internal components are easily removed for inspection or future servicing.







GL-2SP Sizing Guide:

Level Landscape:

The maximum Water Conserving GreyWater use in one hour will be:

3 showers ... or ... 2 showers and 1 load of laundry ... or ...1 bath

Drip Zone Size:

The maximum zone can be 120 Gallons/Hour

GL-3SP Sizing Guide:

Level Landscape:

The maximum Water Conserving GreyWater use in one hour will be:

9 showers ... or ... 6 showers and 3 loads of laundry ... or ... 3 baths

Drip Zone Size:

The maximum zone size can be 360 Gallons/Hour

10 ft Elevation Rise Landscape:

The maximum Water Conserving GreyWater use in one hour will be:

6 showers ... or ... 4 showers and 2 loads of laundry ... or...2 baths

Drip Zone Size:

The maximum zone size can be 220 Gallons/Hour

20 ft Elevation Rise landscape:

The maximum Water Conserving GreyWater use in one hour will be:

3 showers ... or ... 2 showers and 1 load of laundry ... or ... 1 bath

Drip Zone Size:

The maximum zone size can be 120 Gallons/Hour

GL-4SP Sizing Guide:

Level Landscape:

The maximum Water Conserving GreyWater use in one hour will be:
15 showers... or ...10 showers and 5 loads of laundry ... or ... 5 baths
Drip Zone Size:
The maximum zone size can be 600 Gallons/Hour

10 ft Elevation Rise Landscape:

The maximum Water Conserving GreyWater use in one hour will be:
12 showers ... or ... 8 showers and 4 loads of laundry ... or ... 4 baths
Drip Zone Size:
The maximum zone size can be 480 Gallons/Hour

20 ft Elevation Rise Landscape:

The maximum Water Conserving GreyWater use in one hour will be:
9 showers ... or ... 6 showers and 3 loads of laundry ... or ... 3 baths
Drip Zone Size:
The maximum zone size can be 360 Gallons/Hour

30 ft Elevation Rise Landscape:

The maximum Water Conserving GreyWater use in one hour will be:
6 showers ... or ... 4 showers and 2 loads of laundry ... or... 2 baths
Drip Zone Size:
The maximum zone size can be 300 Gallons/Hour

40 ft Elevation Rise Landscape:

The maximum Water Conserving GreyWater use in one hour will be:
3 showers ... or ... 2 showers and 1 load of laundry ... or ... 1 baths
Drip Zone Size:
The maximum zone size can be 150 Gallons/Hour

LIST OF COMPONENTS

Model: GL-2SP

1 - 75 Gallon Processor With Internal And External Secondary Filters

1 - 2 GPM Zone Flow Regulator

Model: GL-3SP

1 - 75 Gallon Processor With Internal And External Secondary Filters

1 - 6 GPM Zone Flow Regulator

Model: GL-4SP

1 - 75 Gallon Processor With Internal And External Secondary Filters

1 - 10 GPM Zone Flow Regulator

Connection Components: Models: GL-2SP, GL-3SP, GL-4SP

Mechanical Connections

Flow Regulator

1 - Regulator for the above selected Processor

Divert To Sewer

1 - 3” 3-Way Valve

3 - 3” Flex-Couplings

Disc filter & PRV

1 - 3/4” Disc Filter & PRV Assembly

Performance Indicators

2 - Performance Indicator Assembly

Overflow Vent Assembly

1 - Studor Vent / Overflow Assembly

1 - Sanitary Tee, 1 - 3” x 2” SxS RB

1 - 3” X 2” SXT RB

Backwater

1 - 3” Backwater Valve

Access Vault

1 - Secodary Filter Access Vault

PVC Fittings:

1” Fittings

2 - 1” S x T Unions

2 - 1” SxSxS Tee

3 - 1’ SxS 90

1 - 1” Slip Cross

1 - 1” x 3/4” SxS Reducer Bushing

3/4” Fittings

1 - 3/4” SxS 90

PVC Overflow Fittings

4 - 3” Sanitary 90s

1 - 3” Sanitary Tee

1 - 3” Coupling

PVC Pipe:

9 ft - 3” Cl 200

2 ft - 2” Sch 40

6 ft - 1” Sch 40

6 ft - 3/4” Sch 40

Note:

Drip Pipe is purchased seperately

Valve Pits

1 - Standard Valve Box W/ Black Lid

4 - 10” Valve Pits W/ Lids

Misc

2 - Pints of 717 Cement

1 - Pint Purple Primer

1 - 3/4” Teflon Tape

1 - Bio-Clean 2 lb

Optional Components

Model: AFS-AG2
Supplemental Water Components

l - Level Activation Sensor With Mounting Bracket **(Pre-Installed when ordered with Processor)**

1 - Level Activation Controller

1 - Activation Override Controller

1 - Irritrol 24V Electric Valve

50 ft 24V 18-4 Multi Strand

50 ft 24V 18-2 Multi Strand

7- Blue Spade Connectors

5 - Waterproof GreyBlack Wire Nuts

1 - 2” Air Gap

1 - 3” x 2” Tank Flex Coupling

2 - 1” Male Adapters

3 ft - 2” Sch 40 Pipe

3 ft - 3/4” Sch 40 Pipe

1 - 2” SxS Coupling

1 - 2” SxS 90

1 - 3/4” SxS Coupling

1 - 3/4” SxS 90

2 - 3/4” Mipt Adapters

Problem:
Neither performance indicators are fully popped up and minimal water is coming out of the drip emitters.

Solution:
Look for a break in the drip Line.

Problem:
Brown indicator pops up but green indicator does not.

Solution:
Both the primary and the secondary filters need to be cleaned.

Problem:
Primary filter baskets are requiring cleaning more frequently than usuual.

Solution:
Check to make sure the spray system is operating. If the sprayers are not forcefully rotating then the fiter wash disc filter needs cleaning.

Problem:
When the pump is running and both primary and secondary filters have been cleaned, the pop-up indicators are still not popping up.

Solution:
The screen at the base of the pump has become obstructed.
Remove the red filter carriage then disconnect the pump and lift it out of the pump holder.
Wash off the pump screen at the base of the pump and reconnect the pump.
If the overflow drains to a drain pit, make sure there is sufficient drainage so that excess unfiltered greywater is not backing up and flowing over the top of the red filter carriage.

Problem:
Pump does not run.

Solution:
Check to make sure there is power to the pump and the relay turns on when a zone valve is activated.
With at least 4 inches of water in the bottom of the filter tank, plug the pump in. If the pump does not turn on and you have power to the pump, unplug the low level pump float switch and plug the pump directly into the power outlet.
If the pump starts pumping then the float switch needs to be replaced. If the pump does not run then the pump will need to be replaced.

NOTES

SYSTEM WARRANTY

LIMITED TRADE WARRANTY

The Filtrific Co. LLC (Filtrific) offers a 5 year warranty on all Flotender polyethylene components. All other products and accessory components are warranted to be free of defects in material and workmanship for a period of one (2) years from the original date of purchase. This warranty extends only to the original installer of the Flotender system. Filtrific will repair or replace any properly handled and installed product which fails under normal operating conditions within the warranty period, providing it was installed and maintained correctly, and all materials are returned to the factory (shipping prepaid). This warranty does not extend to labor or replacement charges, nor does it apply to any equipment of another manufacturer used in conjunction with Flotender products. Filtrific shall not be held liable for indirect, incidental, or consequential damages to Flotender products.

GL Series Greywater Multi-Zone Irrigation Systems

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