# Harnett County Department of Public Health

## Improvement Permit

A building permit cannot be issued with only an Improvement Permit PROPERTY LOCATION: 256 Prince Place Dr. (Christian Light Rd. -ISSUED TO: Davidson Homes, LLC SUBDIVISION Prince Place REPAIR Site Improvements required prior to Construction Authorization Issuance: NEW X Type of Structure: 4-BR 54.3' x 56' SFD Proposed Wastewater System Type: 25% Reduction Sys. Projected Daily Flow: 480 Number of Occupants: 8 Number of bedrooms: 4 X No Basement Yes May be required based on final location and elevations of facilities Pump Required: Yes No Type of Water Supply: Community Public Well Distance from well NA feet Permit valid for: X Five years No expiration Permit conditions: 03/21/2022 Authorized State Agent:: The issuance of this permit by the Health Department in no way guarantees the issuance of other permits. The permit holder is responsible for checking with appropriate governing bodies in meeting their requirements. This site is subject to revocation if the site plan, plat, or the intended use changes. The Improvement Permit shall not be affected by a change in ownership of the site. This permit is subject to compliance with the provisions of the Laws and Rules for Sewage Treatment and Disposal and to conditions of this permit. Construction Authorization (Required for Building Permit) The construction and installation requirements of Rules .1950, .1952, .1954, .1955, .1956, .1957, .1958 and .1959 are incorporated by references into this permit and shall be met. Systems shall be installed in accordance with the attached system layout. ISSUED TO: Davidson Homes, LLC PROPERTY LOCATION: 256 Prince Place Dr. (Christian Light Rd SUBDIVISION Prince Place Facility Type: 4-BR 54.3' x 56' SFD Expansion X New Basement? Yes Basement Fixtures? Yes X No 25% TEOLETION STOTEM Type of Wastewater System\*\* (Initial) Wastewater Flow: 480 GPD (See note below, if applicable ) 25% LEONCTION STETTEM Installation Requirements/Conditions Number of trenches Trench Spacing: 9 Feet on Center Septic Tank Size 1000 gallons Soil Cover: Pump Tank Size \_\_\_\_\_ Trenches shall be installed on contour at a gallons Maximum Trench Depth of: 20 inches (Maximum soil cover shall not exceed (Trench bottoms shall be level to +/-1/4" 36" above the trench bottom) in all directions) Pump Requirements: ft. TDH vs. inches below pipe inches above pipe GRAVITY TO D-BOX EWAL DISTRIBUTION TEWNED \_\_\_\_\_\_\_\_\_inches total WATER LINES (INCLUDING IRRIGATION) MUST BE 10FT. FROM ANY PART OF SEPTIC SYSTEM OR REPAIR AREA. NO UTILITIES ALLOWED IN INITIAL OR REPAIR DRAIN FIELD AREA. \*\*If applicable: I understand the system type specified is different from the type specified on the application. I accept the specifications of this permit. Owner/Legal Representative Signature: This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes. The Construction Authorization shall not be transferred when there is a change in ownership of the site. This SEE ATTACHED SITE SKETCH Construction Authorization is subject to compliance with the provisions of the Laws and Rules for Sewage Treatment and Disposal and to the conditions of this permit. · Limmitay Date: 03/21/2022 Authorized State Agent: Construction Authorization Expiration Date: 63/21/2027 ANDREW CORNIN

## Harnett County Department of Public Health Site Sketch

Property Location: 256 Prince Place Dr. (Christian Light Rd. - SR 1412) Issued To: Davidson Homes, LLC Subdivision Prince Place Lot# Date: 03/21/2022 Authorized State Agent: \_ SETBACKS\_(TYP.) 1351(3) PROPOSAL BY MITCHELL EDUPTIONEURY SEE INSET 11 36.0

PER MITCHELL EDVIRONENTAL: GOLLY AND TERRARE MEAN NEW NEW MEMON DANNFIELD
SHALL BE CLEMED OF ALL CREADIL DEBRIS AND TOPSOIL, FILLED WITH
CLAY SOILS, AND LIGHTLY COMPACT

This drawing is for illustrative purposes only. System installation must meet all pertinent laws, rules, and regulations.

# Mitchell Environmental, P.A.

## **SEPTIC SYSTEM DESIGN**

for

## PRINCE PLACE SUBDIVISION- LOT 60

Fuquay-Varina, Harnett County, North Carolina

#### Submitted to:

Harnett County Health Department 307 Cornelius Harnett Blvd. Lillington, NC 27546

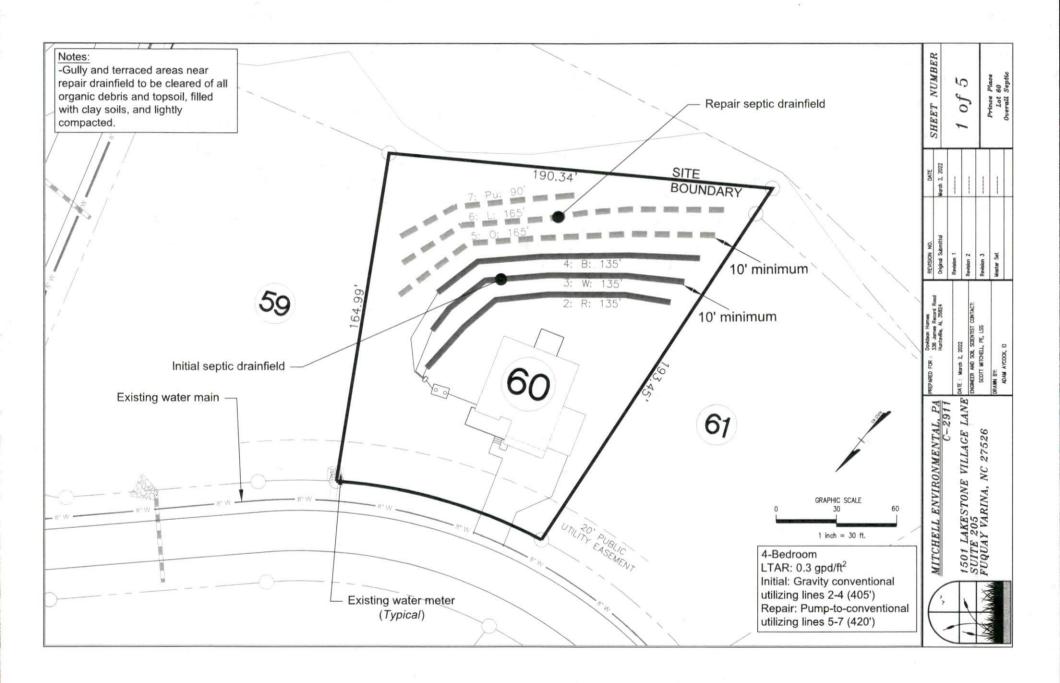
## Prepared for:

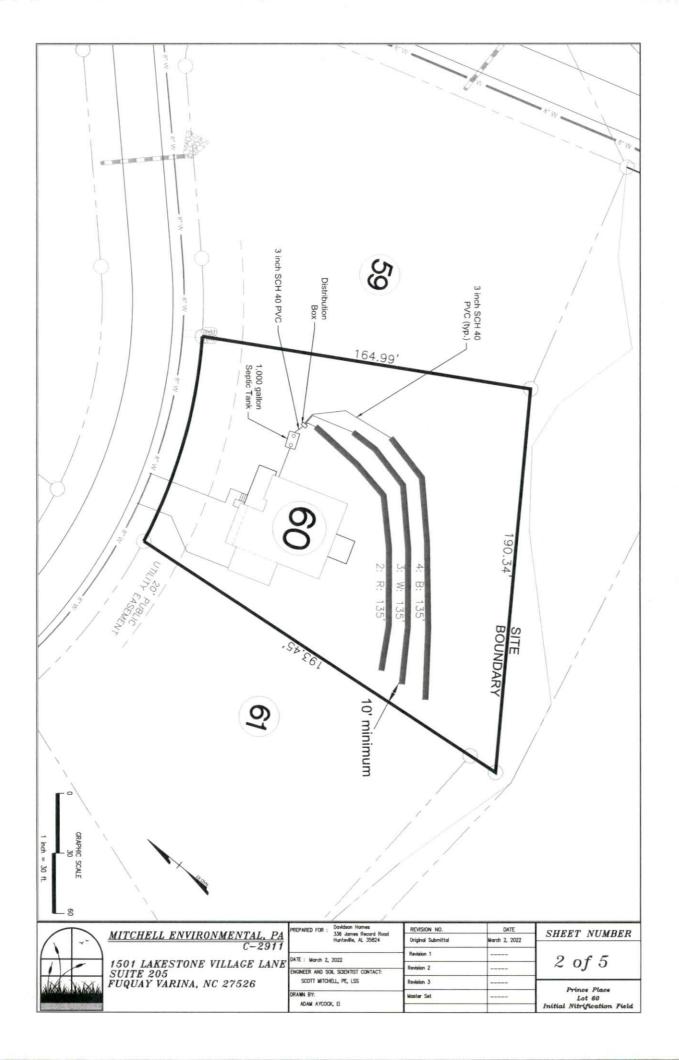
Davidson Homes, LLC 336 James Record Road Huntsville, Alabama 35824

## Prepared by:

Scott Mitchell, PE, LSS Adam Aycock, El

DATE: March 2, 2022 PROJECT NO.: 4321





#### Repair System

#### PRESSURE MANIFOLD DESIGN

Name: Davidson Homes

P.I.N. #: 0633-76-7397

D#: N/A

Address: Blue Monarch Lane

Subdiv: Prince Place

Lot#: 60

# of BDR: 4 Daily Flow:

Septic Tank: 1000 gals (min.)

480

gal/day Pump Tank: 1200 gals (min.)

L.T.A.R.: 0.300 gal/day/sq.ft Sq. Foot:

Stone Depth: N/A

(EZ Flow)

Number of Taps:

Length of Trenches:

Varies

1260

3

ft(See Tap Chart for Details)

in

Depth of Trenches: see Harnett County Permit

Manifold Length:

36

Manifold Diameter: 4 in sch 80pvc (minimum) Tap Configuration: 6 in spacing

1

side(s) of manifold

Supply Line: length: 45

Diameter: 2 in sch 40pvc

Friction Loss + Fitting Loss:

1.80

ft

in

ft(supply line length + 70' for fittings in pump tank)

Design Head:

2.0

**Elevation Head:** 

1.63

Vent Hole Size:

3/16

Orifice Coefficient of Discharge:

0.60

Orifice Coefficient of Contraction:

0.62

Orifice Coefficient of Velocity:

0.97 22

Maximum Head Supplied by Selected Pump(s) at Total Design Flowrate:

1.40 ft

Orifice / Vent Hole Flowrate:

1.94

Head Loss at Orifice / Vent Hole:

Total Head: 6.83 ft Pump to Deliver: 27.62 gals/min at

gpm

6.83

ft

ft head

**Dosing Volume:** 

180.18 gals.

Drawdown: 180.18 gals divided by

19 gals/in =

9.48 inches

SJE Rhombus Installer Friendly Series simplex control panel, or equivalent, required

A septic tank filter,

Hydromatic:

or equal is required. Goulds:

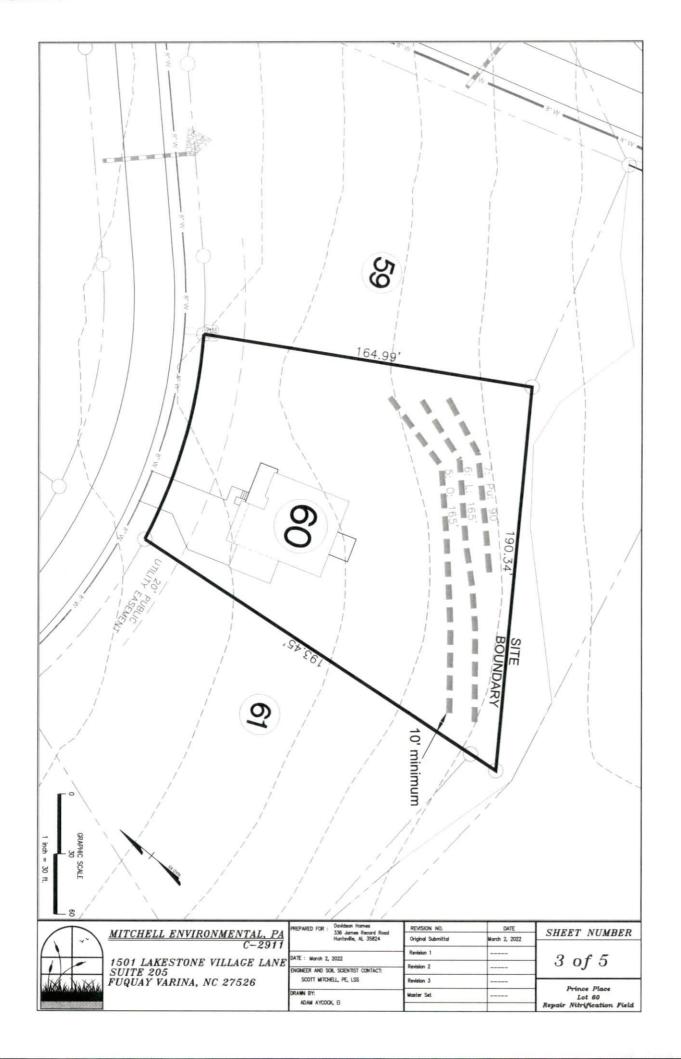
Myers:

Possible pumps: Zoeller: 137

Other:

#### TAP CHART

Bench Mark	14.2	is = 100.00	set at	EC	3 at back right 60/61	EIR	Design Head:	2.0	
Pump tank elev		5	109.20	Pump elev.	104.20		Manifold elev.	105.83	
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR
5	Orange	9.37	104.83	165	3/4in SCH 80	10.10	188.79	495	0.3814
6	Lime	10.35	103.85	165	3/4in SCH 80	10.10	188.79	495	0.3814
7	Purple	11.66	102.54	90	1/2in SCH 80	5.48	102.43	270	0.3794
		total	feet =	420	gal/min =	25.7		LTAR =	0.3000
% of Pipe Vol.		66		Des. Flow	480.00			(Itar + 5%)	0.3150
Dose Volume		180.18		Pump Run=	18.69			(Itar W/ INOV)	0.4000
Dose Pump Tin	ne	7.02		Tank Gal/IN	19			(ltar + 5%)	0.4200
Drawdown in In	ches	9.48		Elev. Head	1,63				
Supply Line Le	ngth	45							
Comments:									



Print this page



**Property Description:** 

LOT#60 PRINCE PLACE PH 1 MAP#2021-372

**Harnett County GIS** 

PID: 050633 0026 37

PIN: 0633-76-7397.000

REID:

Subdivision:

Taxable Acreage: 0.590 AC ac Caclulated Acreage: 0.59 ac Account Number: 1500047269 Owners: DAVIDSON HOMES LLC

Owner Address: 336 JAMES RECORD RD SW HUNTSVILLE, AL 35824-1514

Property Address: PRINCE PLACE DR FUQUAY-VARINA, NC 27526

City, State, Zip: FUQUAY-VARINA, NC, 27526

Building Count: 0
Township Code: 08

Fire Tax District: Northwest Harnett

Parcel Building Value: Unavailable
Parcel Outbuilding Value: Unavailable

Parcel Special Land Value: Unavailable

Parcel Land Value : Unavailable

Total Value : Unavailable

Parcel Deferred Value : Unavailable
Total Assessed Value : Unavailable

Neighborhood: 00821

Actual Year Built:

TotalAcutalAreaHeated: Sq/Ft Sale Month and Year: 2 / 2022

Sale Price: \$65000

Deed Book & Page: 4119-0203

Deed Date: 1645747200000

Plat Book & Page: 2021-372

Instrument Type: SW

Vacant or Improved:

QualifiedCode: Q

Transfer or Split: T

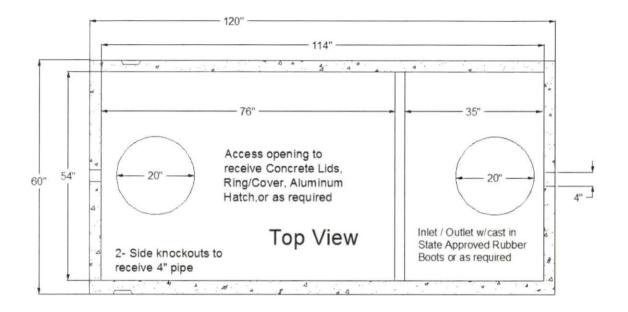
Within 1mi of Agriculture District: Yes

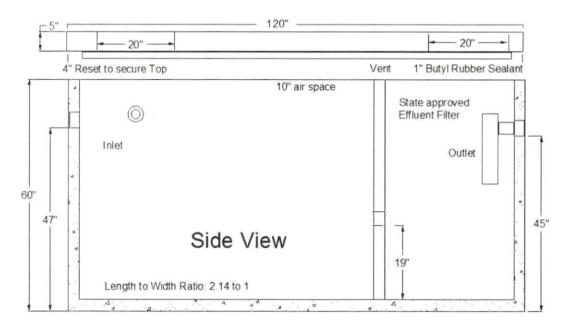
Prior Building Value: Unavailable
Prior Outbuilding Value: Unavailable
Prior Land Value: Unavailable

Prior Special Land Value: Unavailable

Prior Deferred Value : Unavailable
Prior Assessed Value : Unavailable







## STB - 345 - Top Seam

Approval Date: 12 - 09 - 99

Liquid Capacity 1007 Gallons

Non Traffic Rated

Reinforcing Schedule: # 3 Grade 60 Rebar

4500 PSI Concrete w/ State Approved Structural Fiber

Est. Weight: 8,200 lbs.

#### Manufactured By:

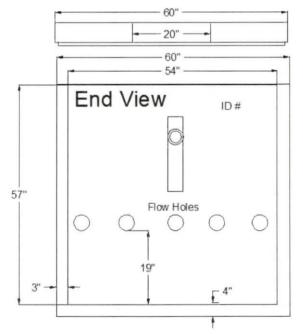


Eddie Garner, President 919-718-5181

121 Stanton Hill Road

Carthage, NC 28327 Fax 919-775-2229

Eddie@garnersseptictanks.com





#### PL-68 Filter and Tee

PL-68 is much more than just an effluent filter. The housing can also be used as an inlet baffle (tee) or an outlet baffle. The housing is designed to accept Polylok's snap in gas deflector to deflect gas bubbles away from the tee and to keep the solids in the tank.

#### Features:

- Offers 68 linear feet of 1/16" filter slots, which significantly extends time between cleaning.
- Accepts 3/4" PVC handle.
- Locks in any 360° position when used with PL-68 Tee.
- PL-68 Housing can be used as an inlet or outlet tee.
- · Gasket prevents bypass.

#### PL-68 Installation:

Ideal for residential waste flows up to 800 gallons per day (GPD). Easily installs in any new or existing 4" outlet tee.

- 1. Locate the outlet of the septic tank.
- 2. Remove the tank cover and pump tank if necessary.
- 3. Glue the filter housing to the outlet pipe, or use a Polylok Extend & Lok if not enough pipe exists.
- 4. Insert the PL-68 filter into tee.
- 5. Replace and secure the septic tank cover.

#### PL-68 Maintenance:

The PL-68 Effluent Filter will operate efficiently for several years under normal conditions before requiring cleaning. It is recommended that the filter be cleaned every time the tank is pumped, or at least every three years.

- 1. Do not use plumbing when filter is removed.
- 2. Pull PL-68 out of the tee.
- 3. Hose off filter over the septic tank. Make sure all solids fall back into septic tank.
- 4. Insert filter back into tee/housing.

#### Related Products:

PL-68 Filter Concrete Baffle Extend & Lok™



Extend & Lok™ Easily installs into existing tanks.



to 110mm Pipe

to SDR 35



# GEOSYNTHETIC AGGREGATE TECHNOLOGY



EZflow by Infiltrator is an environmentally friendly replacement to traditional stone and pipe drainfields using an engineered geosynthetic aggregate modular design. The EZflow system is designed to improve infiltration performance by eliminating the fines associated with crushed stone, and reducing compaction and embedment associated with stone. Preassembled units include a 3" or 4" perforated pipe surrounded by aggregate and held in place with a durable high-strength netting. This product comes in easy-to-contour 5' and 10' lengths and in diameters of 7, 8, 9, 10, 12, 13, or 14 inches.

#### Lightweight expanded polystyrene

construction offers structural integrity and resists compaction. Engineered flow-channels increase void space creating improved water flow and greater storage.





# Compared with stone and pipe, benefits include:

- · Always clean and free of fines
- Bundles are quick to install, saving costs on heavy machinery and labor
- Modular construction allows configurations to match trench dimensions for most system shapes and sizes
- · Engineered for optimal storage and absorption efficiencies
- Ability to contour along sloped sites and around trees or landscaping
- · Lightweight system is perfect for repairs and tight job sites
- · Easily hand-carried into position reducing time and labor
- · 5' or 10' lengths with simple snap, internal couplers
- · Easier cleanup at the job site with the elimination of stone
- Manufactured from recycled materials rather than a mined natural resource
- A wide variety of diameters and configurations to meet any installation professional's needs
- Approved in many jurisdictions with an increased efficiency rating, reducing drainfield size
- · Backed by the leader in the onsite wastewater industry

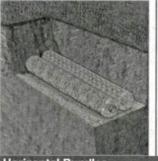
#### Bundle System Configurations: Available in 7", 8", 9", 10", 12", 13" and 14" diameter bundles.



0701P-GEO 1201P-GEO 0801P-GEO 1401P-GEO 1801P-GEO 1001P-GEO

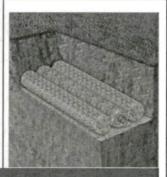


1003T-GEO 1303T-GEO 1203T-GEO 1403T-GEO



Horizontal Bundles

0705H-GEO 1303H-GEO
0904H-GEO 1202H-GEO
1002H-GEO 1203H-GEO



1402H-GEO

1802H-GEO

1206V-GEO

1402V-GFO

1206H-GEO

1303H-GEO

1002V-GEO 1006V-GEO 1203V-GEO 1003V-GEO 1202V-GEO 1204V-GEO 1004V-GEO

© 2015 Infiltrator Water Technologies, LLC, All rights reserved. Printed in U.S.A.

#### Notes:

- Other systems include 10" and 12" bed systems. Bed size will dictate the number of bundles.
- System dimensions are dependent upon bundle diameter and configuration.
- 3. LLP is for "Low Pressure Pipe" in which a pressurized distribution pipe is field installed within the corrugated pipe.
- 4. Internal pipe and couplings meet the requirements of ASTM F405.
- Bundles are also available without geotextile between the netting and synthetic aggregate.

## INFILTRATOR WATER TECHNOLOGIES STANDARD LIMITED WARRANTY

(a) The structural integrity of each EZflow by Infiltrator expanded polystyrene drainfield system and other accessories manufactured by EZflow by Infiltrator ("Units"), when installed and operated in a leachfield of an onsite septic system in accordance with Infiltrator's instructions, is warranted to the original purchaser ("Holder") against defective materials and workmanship for one year from the date that the septic permit is issued for the septic system containing the Units; provided, however, that if a septic permit is not required by applicable law, the warranty period will begin upon the date that installation of the septic system commences. To exercise its warranty rights, Holder must notify Infiltrator in writing at its Corporate Headquarters in Old Saybrook, Connecticut within fifteen (15) days of the alleged defect. Infiltrator will supply replacement Units for Units determined by EZflow by Infiltrator to be covered by this Limited Warranty. EZflow by Infiltrator's liability specifically excludes the cost of removal and/or installation of the Units.

(b)THE LIMITED WARRANTY AND REMEDIES IN SUBPARAGRAPH (a) ARE EXCLUSIVE. THERE ARE NO OTHER WARRANTIES WITH RESPECT TO THE UNITS, INCLUDING NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE

(c) This Limited Warranty shall be void if any part of the EZflow system is manufactured by anyone other than EZflow by Infiltrator. The Limited Warranty does not extend to incidental, consequential, special or indirect damages. Infiltrator shall not be liable for penalties or liquidated damages, including loss of production and profits, labor and materials, overhead costs, or other losses or expenses incurred by the Holder or any third party. Specifically excluded from Limited Warranty coverage are damage to the Units due to ordinary wear and tear, alteration, accident, misuse, abuse or neglect of the Units; the Units being subjected to vehicle traffic or other conditions which are not permitted by the installation instructions; failure to maintain the minimum ground covers set forth in the installation instructions; the placement of improper materials into the system containing the Units; failure of the Units or the septic system due to improper siting or improper sizing, excessive water usage, improper grease disposal, or improper operation; or any other event not caused by Infiltrator. This Limited Warranty shall be void if the Holder fails to comply with all of the terms set forth in this Limited Warranty. Further, in no event shall Infiltrator be responsible for any loss or damage to the Holder, the Units, or any third party resulting from installation or shipment, or from any product liability claims of Holder or any third party. For this Limited Warranty to apply, the Units must be installed in accordance with all site conditions required by state and local codes; all other applicable laws; and Infiltrator's installation instructions.

(d) No representative of Infiltrator has the authority to change or extend this Limited Warranty. No warranty applies to any party other than the original Holder.

The above represents the Standard Limited Warranty offered by Infiltrator. A limited number of states and counties have different warranty requirements. Any purchaser of Units should contact Infiltrator's Corporate Headquarters in Old Saybrook, Connecticut, prior to such purchase, to obtain a copy of the applicable warranty, and should carefully read that warranty prior to the purchase of Units.

EZ01 0315AG

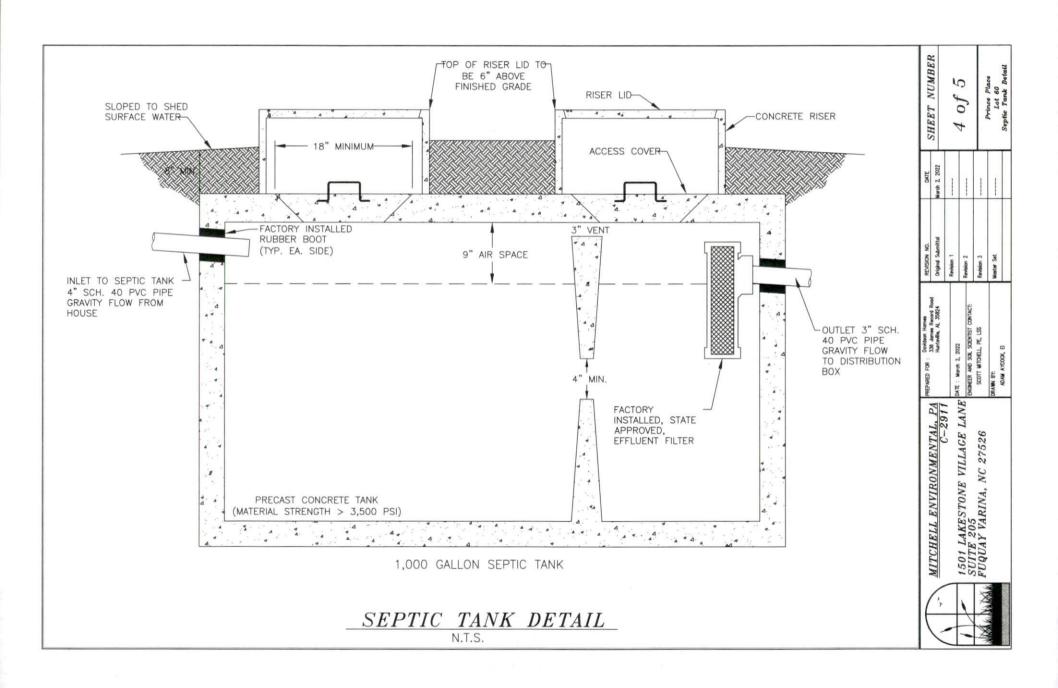


**Vertical Bundles** 

4 Business Park Road P.O. Box 768 Old Saybrook, CT 06475 860-577-7000 • Fax 860-577-7001 1-800-221-4436

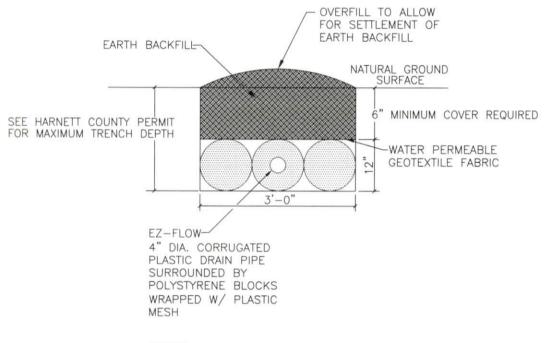
1-800-221-4436 www.infiltratorwater.com

U.S. Patents: 4,759,661; 5,017,041; 5,156,488; 5,336,017; 5,401,116; 5,401,459; 5,511,903; 5,716,163; 5,588,778; 5,839,844 Canadian Patents: 1,329,959; 2,004,564 Other patents pending. Infiltrator, Equalizer, QuickA, and SideWinder are registered trademarks of Infiltrator Water Technologies. Infiltrator is a registered trademark in France. Infiltrator Water Technologies is a registered trademark in Mexico, Contour, MicroLeaching, PolyTuff, ChamberSpacer, MultiPort, PosiLock, QuickPlay, SnapLock and StraightLock are trademarks of Infiltrator Water Technologies. PolyLok is a trademark of PolyLok, Inc. TUF-TITE is a registered trademark of TUF-TITE. INC. Ultra-Rib is a trademark of PEX Inc.



### NITRIFICATION TRENCH DETAIL FOR EZ-FLOW

N.T.S.



#### NOTES:

- PERFORATED CORRUGATED PLASTIC PIPE SHALL MEET REQUIREMENTS OF ASTM D 2729.
- 2. PIPE SHALL BE LEVEL.
- ENDCAP SHALL BE PROVIDED AT END OF ALL CORRUGATED PLASTIC PIPE LINES.
- 4. TRENCH BOTTOM SHALL BE LEVEL.
- HAND RAKE TRENCH WALLS PRIOR TO PLACEMENT OF TRENCH MEDIA IF SOIL SMEARING IS PRESENT.

FREPARED FOR: Daylor Name of the party of th	PREPARED FOR: Davidson Homes	REVISION NO.	DATE	dadmin Laans
HUBEL ENVIRONMENIAL, PA	Hunterelle, Al. 35824	Original Submittal	March 2, 2022	SHEEL NUMBER
163-0				
	DATE: Morech 2, 2022	Kevision		1 4 1
1501 LAKESTONE VILLAGE LANE				0 0 0
STITTE 205	ENGINEER AND SOIL SCIENTIST CONTACT:	X WASSON 2	-	
COLUMN TITUTE OF THE OWNER OWNER OF THE OWNER OW	SOUTH MITSHELL DE 1955	Buddler 1		
"UQUAT VAKINA, NC 27526		Keyleich 3		1
	DRAWN BY:	Montan Cal		Prince Place
	200000	month of the		Tot 60
	ADAM ATOLOG, E			Trench Detail