

CONSTRUCTION AUTHORIZATION FOR G.S. 130A-335(a2)

County: Harnett

PIN/Lot Identifier: 0643-36-3130

Issued To: J Douglas Contracting

Property Location: 172 Hook Drive, Fuquay-Varina, NC 27526 (Cotton Farms Subdivision, Lot 8)

AOWE/PE Plans/Evaluations Provided: Yes No If yes, name and license number of AOWE/PE: Jason Hall, AOWE #10004E

Facility Type: 3-Bedroom, Single Family

New Expansion Repair System Relocation Change of Use

Basement? Yes No Basement Fixtures? Yes No

Type of Wastewater System* IIIB, Pressure Manifold (LPC) (Initial) IIIB, Pressure Manifold (PPBPS) (Repair)

**Please include system classification for proposed wastewater system types in accordance with 15A NCAC 18A .1961 Table V(a)*

Design Daily Flow: 360 GPD Wastewater Strength: domestic high strength industrial process

Session Law 2014-120 Section 53, Engineering Design Utilizing Low-flow Fixtures and Low-flow Technologies? Yes No
(if yes, please provide engineering documentation)

Installation Requirements/Conditions

Septic Tank Size: 1000 gallons Total Trench/Bed Length: 440 feet Trench/Bed Spacing: 9 feet on center

Trench/Bed Width: 36 inches LTAR 0.275 gpd/ft²

Soil Cover: 8 inches Slope Corrected Maximum Trench/Bed Depth⁺: 8 inches * *Measured on the downhill side of the trench*

Aggregate Depth: N/A inches above pipe N/A inches below pipe N/A inches total

Pump Tank Size (if applicable): 1000 gallons Requires more than 1 pump? Yes No

Pump Requirements: 23.10 ft. TDH vs. 37.41 GPM Grease Trap Size (if applicable): _____ gallons

Distribution Method: Serial D-Box or Parallel Pressure Manifold(s) LPP Other: _____

Artificial Drainage Required: Yes No If yes, please specify details: _____

Legal Agreements (If the answer is "Yes" to any type of legal agreements, please attach a copy of the agreement.)

Multi-party Agreement Required [.1937(h)]: Yes No

Easement, Right-of-Way, or Encroachment Agreement Required [.1938(j)]: Yes No

Declaration of Restrictive Covenants: Yes No

Pre-Construction Conference Required: Yes No

Conditions: 8" of additional soil cover needed over the Initial System

Quick4 Plus, Standard Low Profile Chambers for the Initial System

The construction and installation requirements of Rules .1950, .1952, .1954, .1955, .1956, .1957, .1958, and .1959 are incorporated by reference into this permit and shall be met. Systems shall be installed in accordance with the attached system layout.

AOWE/PE Print Name: Jason Hall

Expiration Date: 12/31/2023

AOWE/PE Signature:

Date: 07/11/2023

This AOWE/PE submittal is pursuant to and meets the requirements of G.S. 130A-335(a2) and (a5).

See attached site sketch





Central Carolina Soil Consulting, PLLC
1900 South Main Street, Suite 110, Wake Forest, NC 27587
Office Number: 919-569-6704

Acknowledgment of Subsurface wastewater evaluation and septic design by Central Carolina Soil Consulting, PLLC. for Cotton Farms, Lot 8 (PIN: 0643-36-3130), for issuance of an IP and CA.

For Improvement Permit (IP) issuance:

"The LSS/LG evaluation(s) attached to this application is to be used to issue an Improvement Permit in accordance with G.S. 130A-335(a2) and (a3)."

For Construction Authorization (CA) issuance:

"The plans or evaluations attached to this application are to be used to issue a Construction Authorization in accordance with G.S. 130A-335(a2), (a5) and (a6)."

The LSS evaluation attached to this application was used to produce and design a subsurface wastewater septic system for permitting to obtain an IP and CA in accordance G.S. 130A-335(a2), (a3), (a5) and (a6).

Owner:

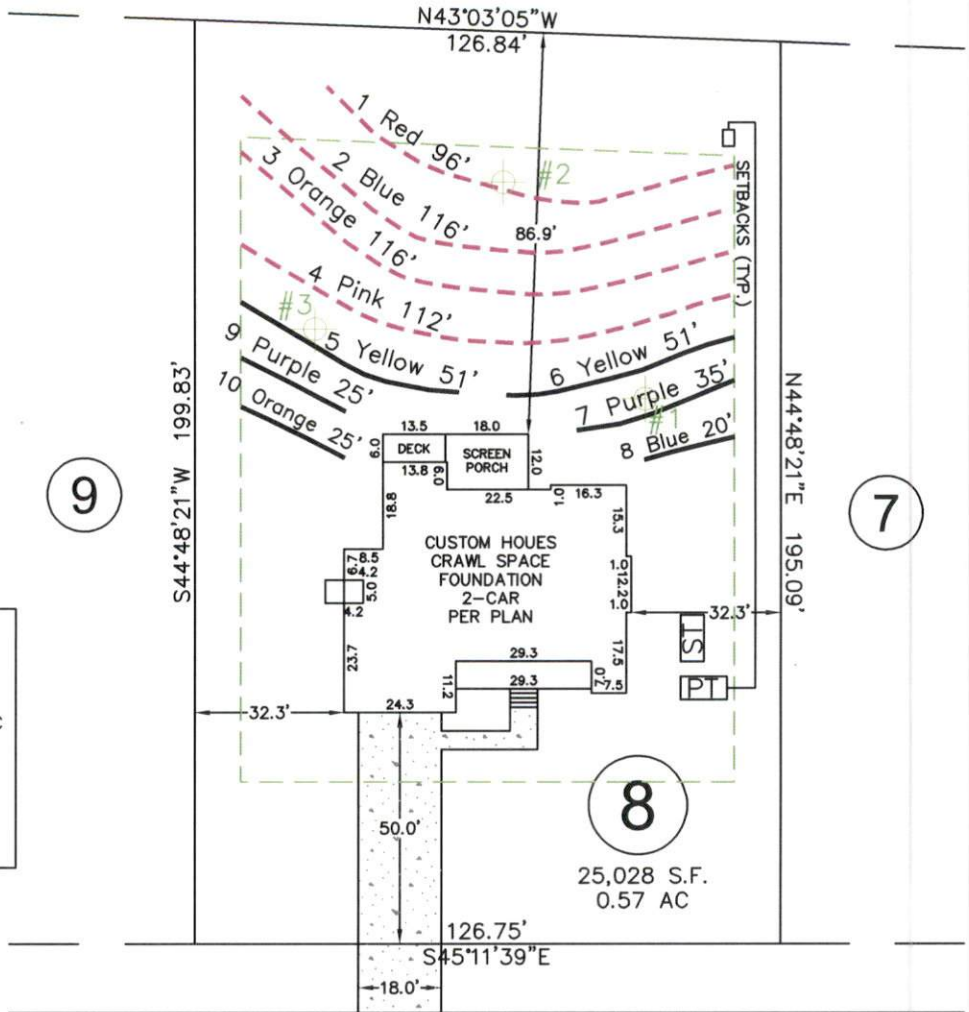
Tom Kelly

Owner's representative:

[Signature]

Date:

7/14/23



System =
 Repair =
 = 1000 gallon septic & pump tanks
 = 1000 gallon septic & pump tanks
 = profile description locations

HOOK DRIVE

50' PUBLIC R/W & UTILITY

- *Keep tanks and drain lines 10' from property lines.
- *Not a survey.
- *Not a guarantee of a septic permit.
- *Keep supply lines >5' from property lines.
- *Some lines are flagged longer in the field than lengths indicate.
- *No grading septic area.
- *No adding soil within septic area
- *No rutting-up septic area
- *No cuts of >2' within 15' of septic areas

System: Pressure Manifold
 Lines: 1-4, (440')
 Low Profile Chambers System (Quick4+)
 0.275 Soil LTAR
 8" Trench Bottom with 8" of cover

Repair: Pressure Manifold
 Lines: 5-10, (207')
 T&J Panel Block System (Horizontal)
 0.3 Soil LTAR
 14" Trench Bottom with 8" of cover

GRAPHIC SCALE
 1" = 40'



Central Carolina Soil Consulting, PLLC
 1900 South Main Street, Suite 110
 Wake Forest, North Carolina 27587
 Phone (919)569-6704 Fax (919)569-6703

3-Bedroom Septic Layout
 Lot 8, Cotton Farms Subdivision
 Harnett County, North Carolina

Job#: 4609
 Drawn By: JR
 Date: 07/10/2023
 Revision:

Pressure Manifold
Septic System Design

for

Cotton Farms S/D, Lot 8
Harnett County, North Carolina

Designed by:

James Rice
Central Carolina Soil Consulting, PLLC
Wake Forest, North Carolina

07/11/2023

Cotton Farms S/D, Lot 8
Contact Information

Client: J Douglas Contracting
Attn: Ronnie Adams
Street Address:

Phone: 919-868-3114
Email: ronnie@jdouglascontracting.com

Designer: Central Carolina Soil Consulting, PLLC
Attn: Jason Hall
Designed By: James Rice
Street Address: 1900 South Main Street, Suite 110
Wake Forest, NC 27587
Office Phone: 919-569-6704
Cell Phone: 910-740-3226
Fax: 919-569-5703
Email: jrice@centralcarolinasoil.com

Cotton Farms S/D, Lot 8
Layout/Design Specifications

Facility Type:	Single Family Home
# of Bedrooms:	3
Daily Flow:	360 gal/day
L.T.A.R.:	0.275 gal/day/sq.ft
Trench Depth:	8 in with 8" of additional cover
Trench Width:	36 in
Stone Depth:	EZ-FLOW in
Manifold Length:	42 in
Manifold Diameter:	4 in sch 80pvc
Supply Line Length:	140 ft
Supply Line Diameter:	2 in sch 40pvc
Supply Line Volume:	24.36 gallons
Friction Loss + Fitting Loss:	6.60 ft(supply line length + 70' for fittings in pump tank)
Design Head:	2 ft
Elevation Head:	14.50 ft
Total Head:	23.10 ft
Dose Volume:	188.76 gals
% of Pipe Vol.	0.66
Drawdown:	9.44 in @ 20.0 gal/in
Pump Run Time:	5.05 Mins
Control Panel:	SJE Rhombus Model112 control panel (or approved equivalent)
Pump:	Zoeller: Model 140 (or approved equivalent)
Septic Tank Effluent Filter:	Polylok PL-68 residential effluent filter (or approved equivalent)
Septic Tank:	Brantley 1,000 Gallon ST
Pump Tank:	Brantley 1,000 Gallon PT

**Cotton Farms, Lot 8
TAP CHART**

Bench Mark		is = 100.00 Location of BM		Elevation Head		14.50			
Pump tank elev.		10.5	89.50	Pump elev.	84.10	Manifold elev.		98.60	
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR
1	Red	2.40	97.60	96	1/2in SCH 40	7.11	68.42	288	0.2376
2	Blue	3.00	97.00	116	3/4in SCH 80	10.1	97.19	348	0.2793
3	Orange	3.60	96.40	116	3/4in SCH 80	10.1	97.19	348	0.2793
4	Pink	4.20	95.80	112	3/4in SCH 80	10.1	97.19	336	0.2893

total feet = 440 gal/min = 37.41 LTAR = 0.2750
LTAR + %5 0.2888

% of Dose Vol. 66 Des. Flow 360
Dose Volume 188.76 Pump Run= 9.62
Dose Pump Time 5.05 Tank Gal/IN 20
Drawdown in Inches 9.44

**Cotton Farms, Lot 8
T&J Panel Block Repair, TAP CHART**

Bench Mark		is = 100.00 Location of BM		Elevation Head		12.30					
Pump tank elev.		10.5	89.50	Pump elev.	84.10	Manifold elev.		96.40	Spacing of		
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR	# of Panels	Panels (in)
5	Yellow	4.60	95.40	51	1/2in SCH 80	5.48	90.00	153	0.5882	12	4.6
6	Yellow	4.60	95.40	51	1/2in SCH 80	5.48	90.00	153	0.5882	12	4.6
7 & 8	Purp/Blue	5.10	94.90	55	1/2in SCH 80	5.48	90.00	165	0.5455	13	4.4
9 & 10	Purp/Oran	5.50	94.50	50	1/2in SCH 80	5.48	90.00	150	0.6000	12	3.7

total feet = 207 gal/min = 21.92 Total Number of Panels: 49
T&J Panel Block Orientation: Horizontal

% of Dose Vol. 0 Des. Flow 360 LTAR = 0.3000
Dose Volume 245.00 Pump Run= 16.42 LTAR + %5 0.3150
Dose Pump Time 11.18 Tank Gal/IN 20 (ltar W/ INOV) 0.6000
Drawdown in Inches 12.25 (ltar W/ INOV + 5%) 0.6300

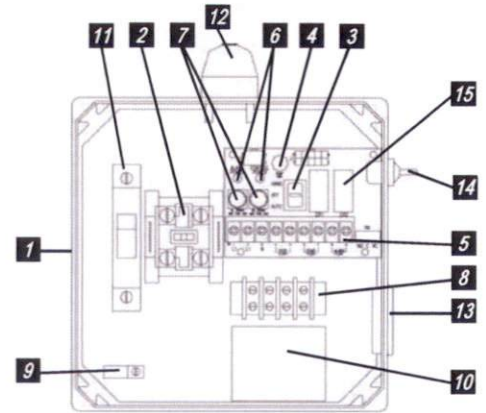
MODEL 112 Control Panel

Single phase, simplex motor contactor control.

The Model 112 control panel provides a reliable means of controlling one 120, 208, or 240 VAC single phase pump in pump chambers, sump pump basins, irrigation systems and lift stations. Two control switches activate a magnetic motor contactor to turn the pump on and off. If an alarm condition occurs, an additional alarm switch activates the audio/visual alarm system.

PANEL COMPONENTS

1. **Enclosure** measures 8 x 8 x 4 inches (20.32 X 20.32 X 10.16 cm). Choice of NEMA 1 (steel for indoor use), or NEMA 4X (ultraviolet stabilized thermoplastic with removable flanges for outdoor or indoor use).
* Options selected may increase enclosure size and change component layout.
2. **Magnetic Motor Contactor** controls pump by switching electrical lines.
3. **HOA Switch** for manual pump control (mounted on circuit board).
4. **Green Pump Run Indicator Light** (mounted on circuit board).
5. **Float Switch Terminal Block** (mounted on circuit board).
6. **Alarm and Control Fuses** (mounted on circuit board).
7. **Alarm and Control Power Indicators** (mounted on circuit board).
8. **Pump Input Power and Pump Connection Terminal Block**
9. **Ground Lug**
10. **Terminal Block Installation Label**
11. **Circuit Breaker** (optional) provides pump disconnect and branch circuit protection.



Model Shown 1121W914X

STANDARD ALARM PACKAGE

12. **Red Alarm Beacon** provides 360° visual check of alarm condition.
Note: NEMA 1 style utilizes a door mounted indicator in lieu of a beacon.
13. **Alarm Horn** provides audio warning of alarm condition (83 to 85 decibel rating).
Note: NEMA 1 style utilizes an internally mounted buzzer in lieu of horn.
14. **Exterior Alarm Test/Normal/Silence Switch** allows horn and light to be tested and horn to be silenced in an alarm condition. Alarm automatically resets once alarm condition has been cleared.
15. **Horn Silence Relay** (mounted on circuit board).

NOTE: other options available.

FEATURES

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



SJE
Rhombus
CONTROLS

PO Box 1708, Detroit Lakes, MN 56502

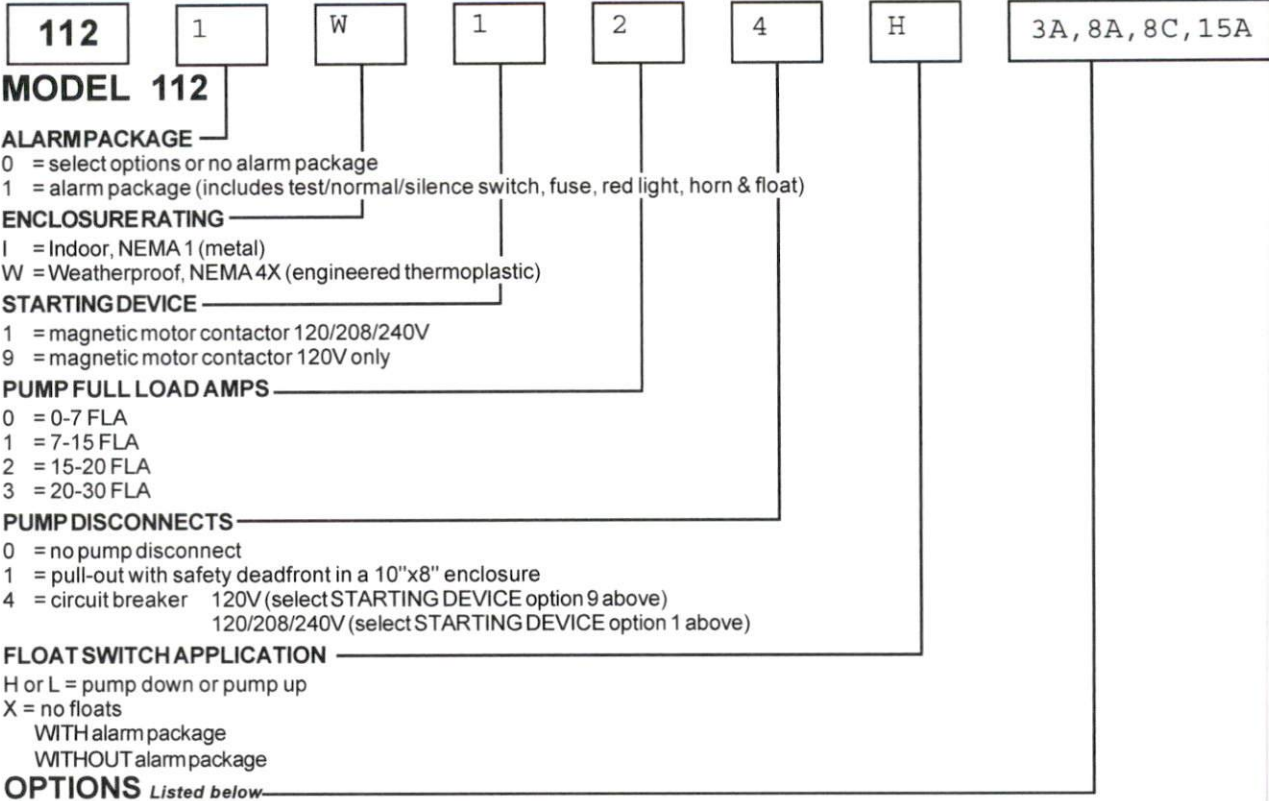
1-888-DIAL-SJE • 1-218-847-1317

1-218-847-4617 Fax

email: sje@sjerhombus.com

www.sjerhombus.com

SEE BACKSIDE FOR COMPLETE LISTING OF AVAILABLE OPTIONS.



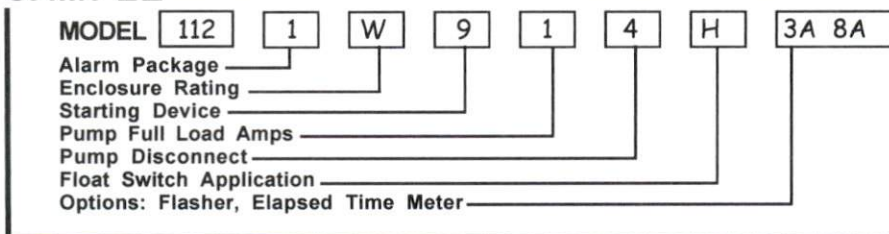
ENCLOSURE UPSIZE - If you selected 3 or more of the ★ options, or one ★★ option, a one-time enclosure upsize fee would apply.

If additional features are required, call the factory for a quote on either a SJE-Rhombus Pro-Line or Engineered Custom control panel.

CODE	DESCRIPTION	CODE	DESCRIPTION
<input type="checkbox"/>	1A Red beacon only / no audio (must select 1E if floats included)	<input type="checkbox"/>	11C NEMA 1 alarm panel <i>must select option 6A</i>
<input type="checkbox"/>	1C Horn only / no visual (must select 1E if floats included)	<input type="checkbox"/>	11D NEMA 4X alarm panel <i>must select option 6A</i>
<input type="checkbox"/>	1E Alarm float	<input type="checkbox"/>	★★14B Main disconnect (rotary style, mounted through door) non-fused
<input checked="" type="checkbox"/>	3A Alarm flasher	★★ <input type="checkbox"/>	0-20 FLA (total of both pumps)
<input type="checkbox"/>	★ 3B Manual alarm reset	★★ <input type="checkbox"/>	20-30 FLA (total of both pumps)
<input type="checkbox"/>	★ 4A Low level cutout (select option 4D if floats included)	<input checked="" type="checkbox"/>	15A Control / alarm circuit breaker <i>Does not include the circuit board as in standard.</i>
<input type="checkbox"/>	★ 4B Red low-level indicator & alarm (must select 4A also)	<input type="checkbox"/>	16A 10' cord in lieu of 20' (per float)
<input type="checkbox"/>	4D Low-level float	<input type="checkbox"/>	16B 15' cord in lieu of 20' (per float)
<input type="checkbox"/>	★ 5A Thermal cutout/heat sensor auto reset (for pumps w/thermal switch leads)	<input type="checkbox"/>	16C 30' cord in lieu of 20' (per float)
<input type="checkbox"/>	★★5E Seal failure circuit & red indicator (2 wire)	<input type="checkbox"/>	16D 40' cord in lieu of 20' (per float)
<input type="checkbox"/>	6A Auxiliary alarm contact, form C type	<input type="checkbox"/>	17A SJE SignalMaster® / mounting strap ● (per float)
<input checked="" type="checkbox"/>	★ 8A Elapsed time meter	<input type="checkbox"/>	17B SJE SignalMaster® / externally weighted ● (per float)
<input checked="" type="checkbox"/>	★ 8C Event (cycle) counter	<input type="checkbox"/>	17C Sensor Float® / internally weighted ▲ (per float)
<input type="checkbox"/>	★★9_A Pump overload specify amperage after number 9 followed by letter "A". Example: 912A = 12 amp pump.	<input type="checkbox"/>	17D Sensor Float® / externally weighted ▲ (per float)
★★ <input type="checkbox"/>	0-25 FLA	<input type="checkbox"/>	17E Sensor Float® Mini / pipe clamp ▲ (per float)
★★ <input type="checkbox"/>	25-30 FLA	<input type="checkbox"/>	17F Sensor Float® Mini / externally weighted ▲ (per float)
<input type="checkbox"/>	10E Lockable latch - NEMA 4X	<input type="checkbox"/>	19T TOA (Test/Off/Automatic) switch and pump run light through door mounted
<input type="checkbox"/>	10E Lockable latch - NEMA 1	<input type="checkbox"/>	19U HOA (Hand/Off/Automatic) switch and pump run light through door mounted
<input type="checkbox"/>	★ 10F Lightning arrester	<input type="checkbox"/>	19X Door mounted pump run indicator
<input type="checkbox"/>	★ 10K Anti-condensation heater	<input type="checkbox"/>	21A SJE PumpMaster® in lieu of on/off switches ●
		<input type="checkbox"/>	21B SJE PumpMaster® Plus in lieu of on/off switches ●
		<input type="checkbox"/>	21C Super Single® in lieu of on/off switches ▲
		<input type="checkbox"/>	21D Double Float® in lieu of on/off switches ▲

● Mechanically-activated ▲ Mercury-activated

SAMPLE



Trusted. Tested. Tough.®

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



SECTION: 2.15.070
FM2783
0419
Supersedes
0617

TECHNICAL DATA SHEET FLOW-MATE SERIES

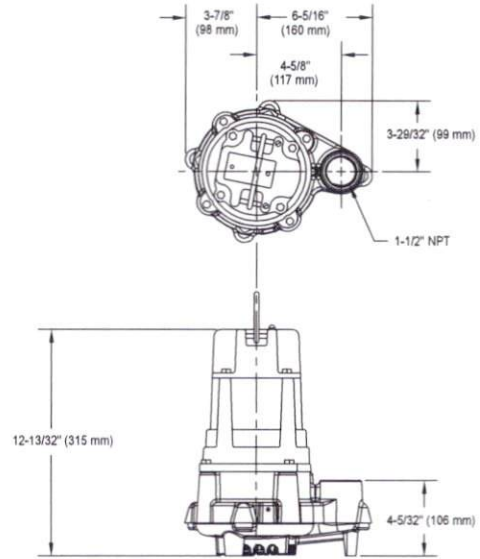
Models 140/4140, 145/4145 Effluent / Dewatering Pumps

PRODUCT SPECIFICATIONS

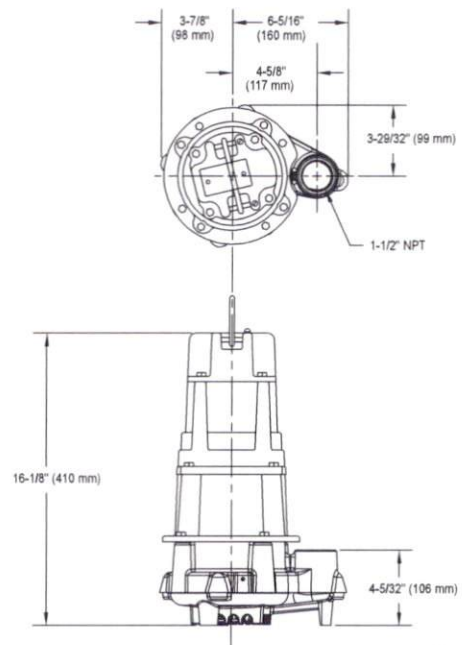
MOTOR	Horse Power	3/4 - 1
	Voltage	115 or 230
	Phase	1 Ph
	Hertz	60 Hz
	RPM	3450
	Type	Permanent split capacitor
	Insulation	Class B
	Amps	6.0 - 13.0
PUMP	Operation	Automatic or nonautomatic
	Discharge Size	1-1/2" NPT
	Solids Handling	1/2" (12 mm), 3/4" (19 mm) spherical solids
	Cord Length	20' (6 m)
	Cord Type	UL listed, neoprene cord
	Max. Head	50' (15.2 m) or 74' (22.6 m)
	Max. Flow Rate	86 GPM (326 LPM) or 61 GPM (232 LPM)
	Max. Operating Temp.	130 °F (54 °C)
	Cooling	Oil filled
	Motor Protection	Auto reset thermal overload
MATERIALS	Cap	Cast iron
	Motor Housing	Cast iron
	Pump Housing	Cast iron
	Base	Cast iron
	Upper Bearing	Sleeve bearing
	Lower Bearing	Ball bearing
	Mechanical Seals	Carbon and ceramic
	Impeller Type	Single vane (145) or non-clogging vortex (140)
	Impeller	Engineered thermoplastic
	Hardware	Stainless steel
	Motor Shaft	JIS S45C steel
	Gasket	Neoprene

NOTE: See model comparison chart for specific details.

SINGLE SEAL



DOUBLE SEAL



SK1524

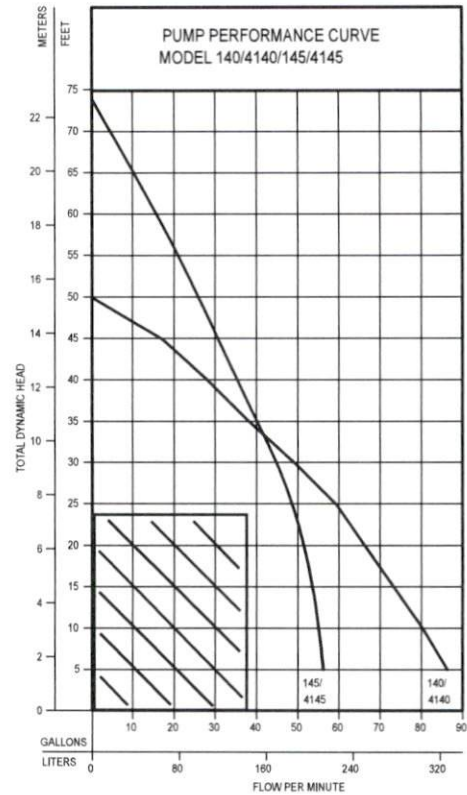


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TOTAL DYNAMIC HEAD FLOW PER MINUTE

MODEL		140/4140		145/4145	
Feet	Meters	Gal.	Liters	Gal.	Liters
5	1.5	86	326	56	212
10	3.0	80	303	55	208
15	4.6	73	276	53	200
20	6.1	66	250	51	193
25	7.6	59	223	48	182
30	9.1	49	185	45	170
40	12.2	28	106	35	132
50	15.2	--	--	26	98
60	18.3	--	--	16	61



Model	MODEL COMPARISON										
	Seal	Mode	Volts	Ph	Amps	HP	Hz	Lbs	Kg	Simplex	Duplex
N140	Single	Non	115	1	12.0	1	60	46	21	1 or 2	3
E140	Single	Non	230	1	6.0	1	60	46	21	1 or 2	3
BN140	Single	Auto	115	1	12.0	1	60	47	21	*	---
BE140	Single	Auto	230	1	6.0	1	60	47	21	*	---
E145	Single	Non	230	1	6.0	3/4	60	46	21	1 or 2	3
N145	Single	Non	115	1	13.0	3/4	60	46	21	1 or 2	3
BN145	Single	Auto	115	1	13.0	3/4	60	48	22	*	---
N4140	Double	Non	115	1	12.0	1	60	65	29	*	---
E4140	Double	Non	230	1	6.0	1	60	65	29	1 or 2	3
BN4140	Double	Auto	115	1	12.0	1	60	66	30	*	---
BE4140	Double	Auto	230	1	6.0	1	60	66	30	*	---
N4145	Double	Non	115	1	13.0	3/4	60	64	29	1 or 2	3
BN4145	Double	Auto	115	1	13.0	3/4	60	64	29	*	---

* Single piggyback switch included.

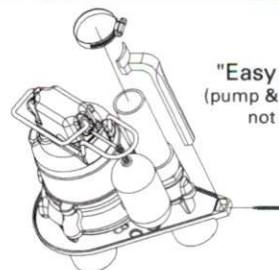
BN and BE models include a 20' (6 m) piggyback variable level pump switch. Additional cord lengths are available in 15' (5 m), 25' (8 m), 35' (11 m) and 50' (15 m). 50' (15 m) cord length is for 230 V only.

SELECTION GUIDE

- For automatic, use single piggyback variable level float switch or double piggyback variable level float switch. Refer to FM0477.
- See FM1228 for correct model of simplex control panel.
- See FM0712 for correct model of duplex control panel.

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 1-1/2" 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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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.

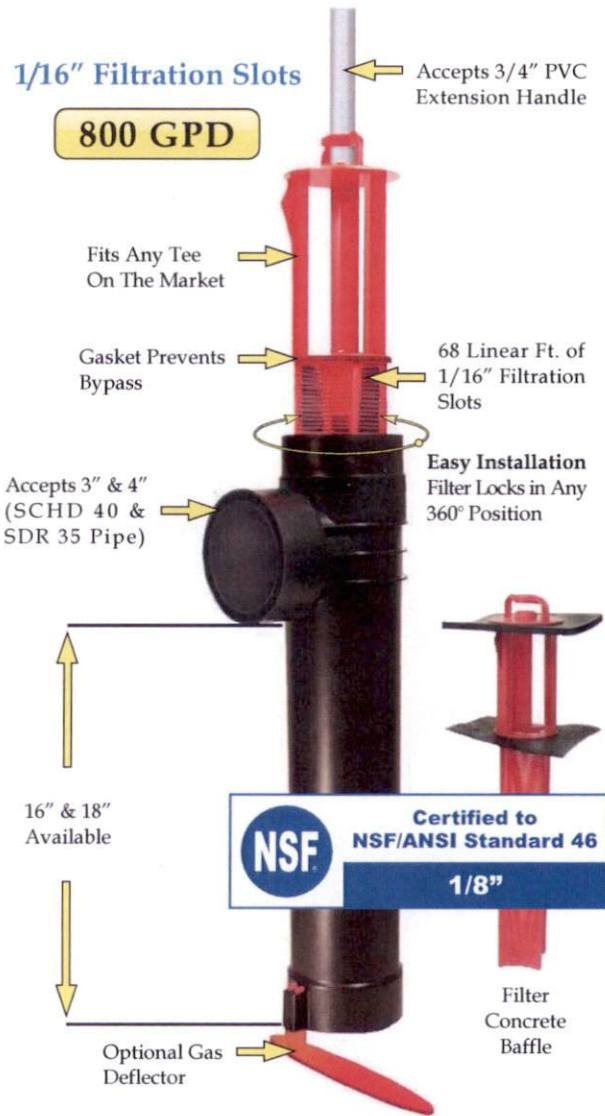
1. Do not use plumbing when filter is removed.
2. Pull PL-68 out of the tee.
3. Hose off filter over the septic tank. Make sure all solids fall back into septic tank.
4. Insert filter back into tee/housing.

Related Products:

PL-68 Filter Concrete Baffle
 Extend & Lok™



Extend & Lok™
 Easily installs into existing tanks.



Spacer Bushing
 4" SCHD 40 to SDR 35



Spacer Bushing
 4" SCHD 40 to 110mm Pipe



2" Extender



INFILTRATOR®
water technologies

Quick4^{PLUS}
CHAMBER SYSTEMS

The Quick4® Plus Standard Low Profile (LP) Chamber

Quick4 Plus™ Series

The Quick4 Plus Standard Low Profile (LP) offers maximum strength through its four center structural columns. This chamber can be installed in a 36-inch-wide trench. It is shorter in height than Infiltrator's other Standard model chambers, allowing for shallower installation. Like the original line of Quick4 chambers, it offers advanced contouring capability with its Contour Swivel Connection™, which permits turns up to 15°, right or left. The Quick4 Plus All-in-One 8 and Quick4 Plus Endcaps provide increased flexibility in system design and configurations.



Maximum Strength

Quick4 Plus Standard LP Chamber Specifications

Size
34"W x 53"L x 8"H
(864 mm x 1346 mm x 203 mm)

Effective Length
48" (1219 mm)

Louver Height
6.3" (160 mm)

Storage Capacity
32 gal (121 L)

Invert Height
3.3" (84 mm), 9.6" (244 mm)



Quick4 Plus Standard Low Profile (LP) Chamber Benefits:

- Low profile design makes this chamber ideal for shallow applications
- Reduces imported fill needed for cap and fill systems
- Four center structural columns offer superior strength
- Advanced contouring connections
- Latching mechanism allows for quick installation
- Four-foot chamber lengths are easy to handle and install
- Supports wheel loads of 16,000 lbs/axle with 12" of cover

Quick4 Plus All-in-One Periscope Benefits:

- Allows for raised invert installations
- 180° directional inletting
- 12" raised invert is ideal for serial applications



Quick4 Plus All-in-One 8 Endcap Benefits:

- May be used at the end of chamber row for an inlet/outlet or can be installed mid-trench
- Mid-trench connection feature allows center feed inletting of chamber rows
- Center-feed connection allows for easy installation of serial distribution systems
- Variable pipe connection options allow for side, end or top inletting
- Piping drill points are set for gravity or pressure pipe

Quick4 Plus Endcap Benefits:

- Simple, flat design
- Allows installation of a pipe from the end only
- Piping drill points are set for gravity or pressure pipe

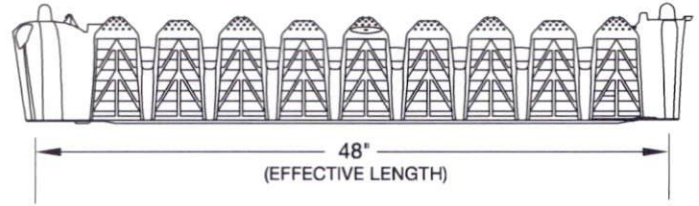
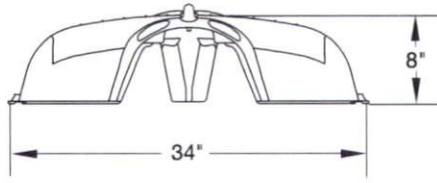


APPROVED in _____

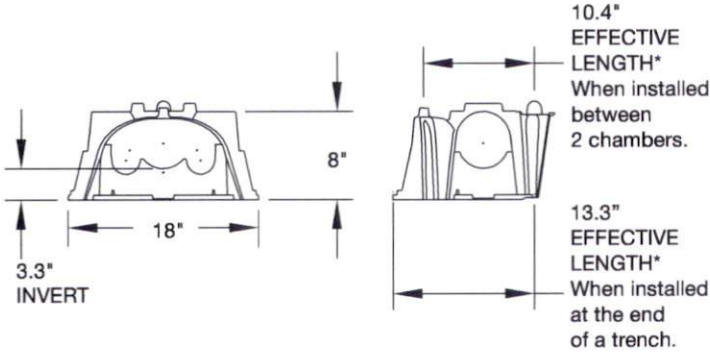
Certified by the International
Association of Plumbing
and Mechanical
Officials (IAPMO)



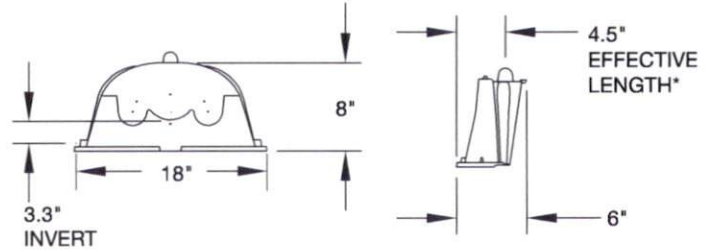
Quick4 Plus Standard Low Profile Chamber



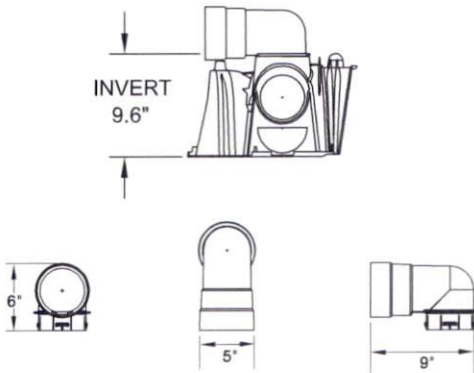
Quick4 Plus All-in-One 8 Endcap



Quick4 Plus Endcap



Quick4 Plus All-in-One Periscope



INFILTRATOR WATER TECHNOLOGIES, LLC ("INFILTRATOR")

Infiltrator Water Technologies, LLC STANDARD LIMITED Drainfield WARRANTY

(a) The structural integrity of each chamber, endcap, EZflow expanded polystyrene and/or other accessory manufactured 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 Infiltrator to be covered by this Limited Warranty. 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 chamber system is manufactured by anyone other than 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.



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P.O. Box 768
Old Saybrook, CT 06475
860-577-7000 • Fax 860-577-7001
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, Quick4, 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, QuickCut, 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 IPEX Inc.

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PLUS01 0816

Contact Infiltrator Water Technologies' Technical Services Department for assistance at 1-800-221-4436

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 Fax 919-573-0443
 info@brantley.com

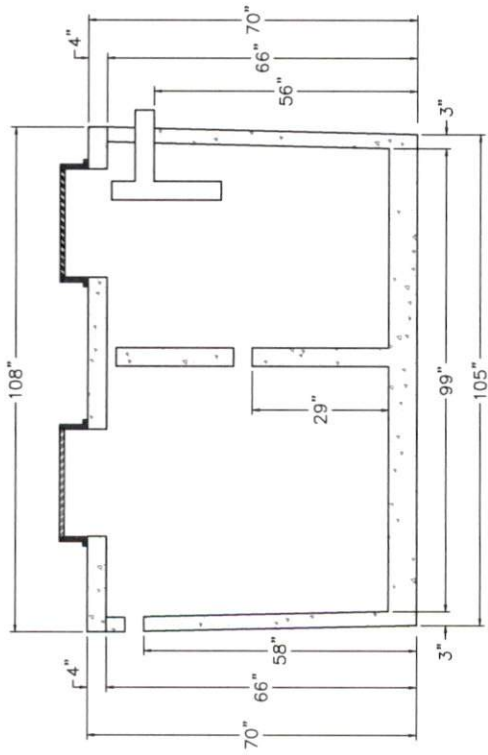
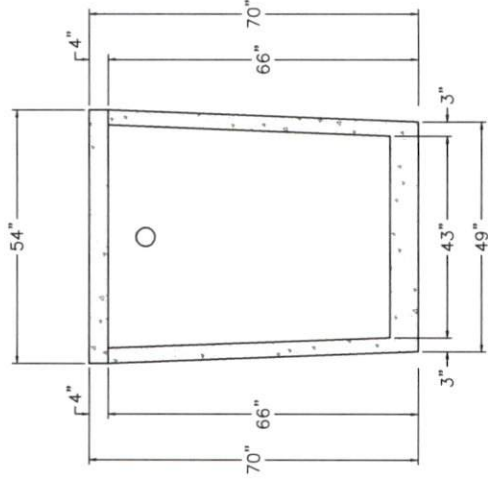
PREPARED FOR : David Brantley & Sons
 37 Pine Ridge Rd
 Zebulon, NC 27597

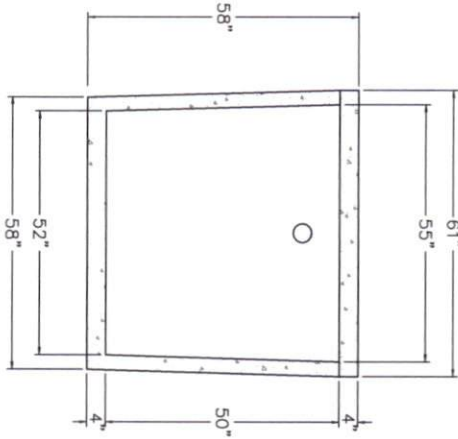
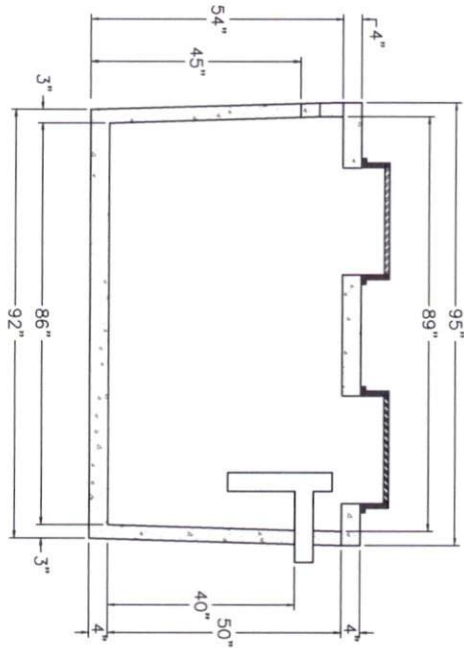
DATE : April 11, 2014	Revision 1	Original Submitted	DATE
CONTACT: CORY BRANTLEY	Revision 2		April 11, 2014
	Revision 3		
	Master Set		

SHEET NUMBER
1,000 ST 502
 BRANTLEY TRUCK WORKS
 1 of 1

NON TRAFFIC BEARING

1,000 ST 502
MTS





1,000 PT 237
NTS

NON TRAFFIC BEARING

DAVID BRANTLEY & SONS

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PREPARED FOR : David Brantley & Sons
37 Pine Ridge Rd.
Zebulon, NC 27597

DATE : April 11, 2014

CONTACT:
CORY BRANTLEY

REVISION NO.

Original Submitted
Revision 1
Revision 2
Revision 3
Master Set

DATE

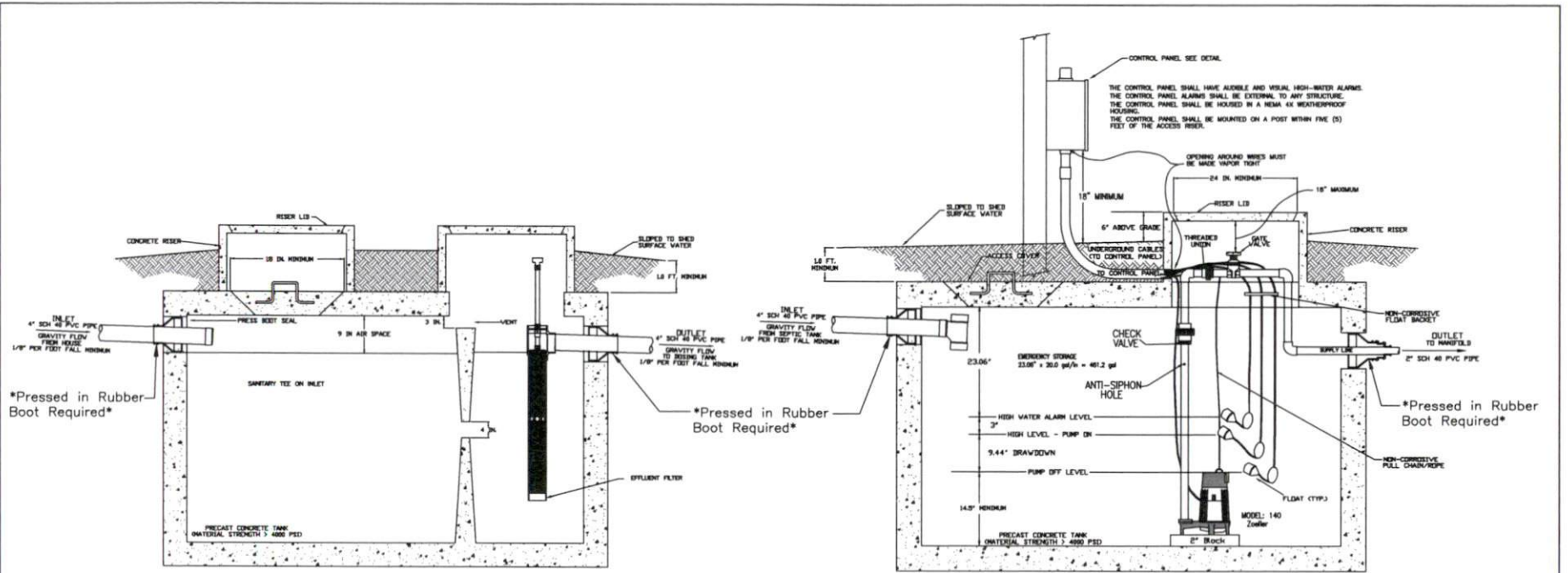
April 11, 2014

BRANTLEY TANK MODEL

1,000 PT 237

SHEET NUMBER

1 of 1



1000 GAL SEPTIC TANK SCHEMATIC
NOT TO SCALE

1000 GAL PUMP TANK SCHEMATIC
NOT TO SCALE

NOTES

1. ALL TANKS SHALL BE LEAK TESTED SUCH THAT EXFILTRATION OCCURS AT A RATE WHICH DOES NOT EXCEED TEN GALLONS PER TWENTY-FOUR HOURS PER 1,000 GALLONS OF TANK CAPACITY.
2. ALL TANKS SHALL REST ON A BED OF #87 WASHED GRAVEL. THE MINIMUM THICKNESS OF THE GRAVEL BED IS 6 INCHES.
3. ALL TANKS MUST BE APPROVED FOR USE BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL HEALTH (DEH).
4. INVERTS SHOWN ARE APPROXIMATE. THE INSTALLER SHALL FIELD VERIFY PRIOR TO CONSTRUCTION.
5. ALL HARDWARE INSTALLED INSIDE OF TANKS SHALL BE OF STAINLESS STEEL.
6. TANK DIMENSIONS VARY BY MANUFACTURER.
7. DRAINCOON WILL VARY WITH TANK DIMENSIONS.
8. NO ELECTRICAL SPICES SHALL BE MADE INSIDE THE PUMP TANK.

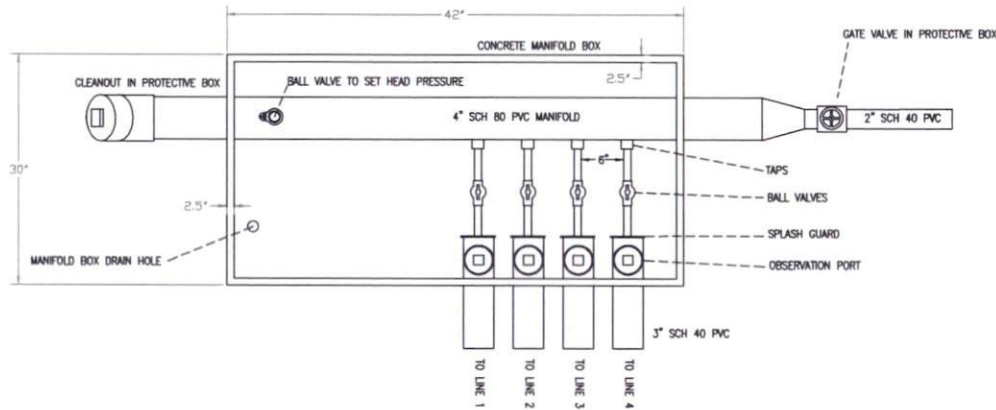


Central Carolina Soil Consulting, PLLC
1900 South Main Street, Suite 110
Wake Forest, North Carolina 27587
Phone (919)569-6704 Fax (919)569-6703

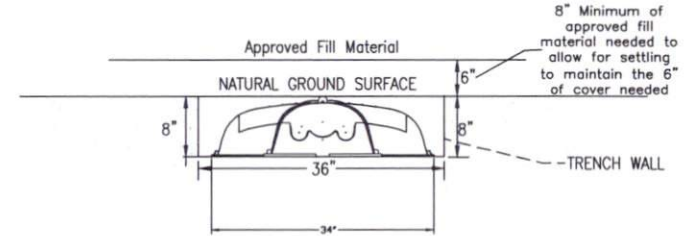
Septic and Pump Tank Details
Cotton Farms S/D, Lot 8
Harnett County, North Carolina

Job#: 4609
Drawn By: JR
Date: 07/11/2023

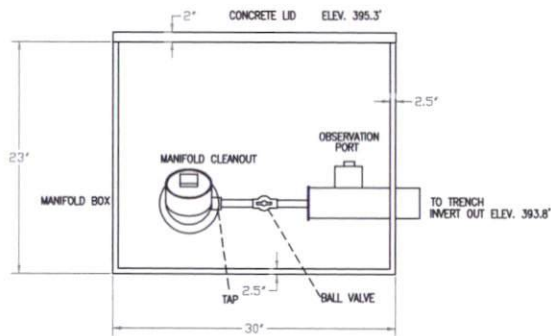
PRESSURE MANIFOLD DETAILS
TOP VIEW



At-Grade System
Quick4 Plus Standard Low Profile
Chambers DETAILS
Example only: Installed trench bottom should match design.



PRESSURE MANIFOLD DETAILS
END VIEW



TAP SCHEDULE	
LINE #	TAP
1	1/2" SCH 40
2	3/4" SCH 80
3	3/4" SCH 80
4	3/4" SCH 80

NOTE :

1. LOW PROFILE CHAMBERS INSTALLATION SHALL MEET THE REQUIREMENTS INCLUDED IN ITS INNOVATIVE APPROVAL
2. TRENCH BOTTOM SHALL BE AT LEAST 12" FROM ANY RESTRICTIVE SOIL LAYER
3. END CAP SHALL BE PROVIDED AT END OF ALL CORRUGATED PLASTIC PIPE LINES AND TRENCH BOTTOMS SHALL BE LEVEL
4. THIS IS A GENERIC TRENCH PROFILE FOR AN AT-GRADE TRENCH DEPTH.



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Manifold and Trench Details
Cotton Farms S/D, Lot 8
Harnett County, North Carolina

Job#: 4609
Drawn By: JR
Date: 07/11/2023