

Subsurface Wastewater Disposal System Design Packet

PIN:

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PAC-ONE, PLLC

Subsurface Wastewater Disposal System Design Packet

Date:

Proposed for a:
-bedroom residential dwelling

Located at:

DESIGNED BY:

Steve Bristow

920 Garner Rd, Selma NC 27576

Email: stevebristow57@gmail.com

Phone: (919)906-4737

Session Law 2022-11 (S372) Introduction Letter

This information contained within this packet concerns a soils and subsurface wastewater evaluation conducted by:

Stephen W. Bristow (LSS#1167) of Permit Acquisition Company – One, PLLC

for the property hereafter described as:

at the behest of:	
Owner Print:	
Owner Signature:	
Owner's Representative (if any):	Natascha Clark
Date:	

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).

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

The LSS Evaluation is being submitted pursuant to, and meets the requirements, of G.S. 130A-335(a2).





ROY COOPER • Governor KODY H. KINSLEY • Secretary MARK BENTON • Chief Deputy Secretary for Health SUSAN KANSAGRA • Assistant Secretary for Public Health

Division of Public Health

Application for Services

This application, in conjunction with the common form established in G.S. 130A-335(a3) and (a5), is optional for local health departments to be used for applications submitted in accordance with G.S. 130A-335(a2), (a3), and (a5). [hereinafter, G.S. 130A-335(a3) and (a5) permits referred to as (a2) Improvement Permit and (a2) Construction Authorization]

Applying for: [(a2) Improvement Permit [(a2) Construction Author	rization (a2) Repair/Construction Authorization
If applying for a Construction Authorization, please indicate desire Accepted Conventional Innovative Other	
 New Construction □ Expansion □ System Relocation □ S-Year Expiration Requested (site plan provided) □ Non-Exp Requesting DHHS review? (systems >3000 GPD or IPWW) □ Yes 	iring Permit Requested (plat provided, defined in G.S.130A-334(7a)
Applicant:	Owner:
Mailing Address:	Mailing Address:
City:	City:
State: Zip:	State: Zip:
Phone #:	Phone #:
Email:	Email:
If the answer to any of the following questions is "yes", applican	· · · · · · · · · · · · · · · · · · ·
Yes No Does the site contain any jurisdictional	
	ed on the site other than domestic sewage?
Yes No Is the site subject to approval by any ot Yes No Are there any easements or right of wa	
res No Are there any easements of light of wa	ys on this property:
are to be used to issue an Improvement Permit and/or Construct I understand that authorized county and state officials are grant conduct necessary inspections to determine compliance with ap the application for an Improvements Permit and/or Construction then the Improvement Permit and Construction Authorization is	oplicable laws and rules. I understand that if the information in on Authorization is falsified, changed, or the site is altered, shall become invalid.
Applicant Signature:	Date:
Owner's Signature:	Date:

Permit/File #:	



ROY COOPER • Governor

KODY H. KINSLEY • Secretary

MARK BENTON • Chief Deputy Secretary for Health

SUSAN KANSAGRA • Assistant Secretary for Public Health

Division of Public Health

Submittal Includes:	(a2) Improvement Permit	(a2) Construction Authorization	☐ Fee \$
	IMPROVEN	MENT PERMIT FOR G.S. 130A-33	35(a2)
County:			
Subdivision (if applical	.ble)	Lot #:	Block: Section:
LSS Report Provided: `	Yes No No		
If yes, name and licens	se number of LSS:		
New 🗌	Expansion	System Relocation	Change of Use
Facility Type:			
Number of bedrooms:	: Number of Occupants:	Other:	
Design Wastewater St	trength: Domestic	High Strength Industr	rial Process Wastewater
Proposed Design Daily	y Flow: GPD	Proposed LTAR (Initial): P	Proposed LTAR (Repair):
Proposed Wastewater	r System Type*:	(Initial) Pump Re	equired: Yes No May be required
Proposed Wastewater	r System Type*:	(Repair) Pump Re-	equired: 🗌 Yes 🔲 No 🔲 May be required
*Please include systen	n classification for proposed wastev	water system types in accordance with Rule	e .1301 Table XXXII
Effluent Standard:	☐ DSE ☐ HSE ☐ NSF/ANSI 40	J ∏TS-I ∏TS-II ∏RCW	
Saprolite System (Initi	ial): 🗌 Yes 🔲 No Saprolite	e System (Repair): 🗌 Yes 🔲 No	
Fill System (Initial):	Yes No If yes, specify: Ne	ew Existing (when adding more than	6 inches of fill to system area provide a fill plan)
Fill System (Repair):	Yes No If yes, specify: No	ew Existing (when adding more than	n 6 inches of fill to system area provide a fill plan)
Usable Depth to LC (Ir	nitial) ^x :	Usable Depth to LC (Repair)x:	^x Limiting Condition
Max. Trench Depth (Ir	nitial)‡: Max. Tr	ench Depth (Repair) [‡] :	[‡] Measured on the downhill side of the trench
Artificial Drainage Rec	quired: Yes No If yes, pleas	se specify details:	
Type of Water Supply:	: Private well Public well	Shared well Municipal Supply	Spring Other:
Drainfield location me	ets requirements of Rule .0508: Ye	es No Drainfield location meets	s requirements of Rule .0601: Yes \to \to \to \to
Permit valid for: 🗌 Fi	íve years [site plan submitted pursu	ant to GS 130A-334(13a)] 🔲 No expirati	ion [plat submitted pursuant to GS 130A-334(7a)]
Permit conditions:			
1			

The LSS evaluation is being submitted pursuant to and meets the requirements of G.S. 130A-335(a2).

See attached site sketch



Licensed Soil Scientist Print Name:

Licensed Soil Scientist Signature: _ Alan Buter

Date: __



This Section for Local Health Department Use Only

initiai submittai received:		Dy	
_	Date	Initials	
G.S. 130A-335(a3) states the following:			
When an applicant for an Improvement Permit submits to a local health deport department, the common form developed by the Department, and a soil evaluation within five business days of receiving the application, conduct a completeness. Permit includes all of the required components. If the local health department shall notify the applicant of the components needed to complete the Improved department to cure the deficiencies in the Improvement Permit. The local health conducted is complete within five business days after the local health department receivance within any period set out in this subsection, the applicant may treat the focommon form for use as the Improvement Permit.	luation pursuant to su s review of the submit t determines that the ement Permit. The app alth department shall I res the additional infor	osection (a2) of this section, the local health depart tal. A determination of completeness means that the Improvement Permit is incomplete, the local health licant may submit additional information to the local make a final determination as to whether the Impro mation from the applicant. If the local health depa	ment shall, ne Improvement department al health ovement Permit rtment fails to
The review for completeness of this Improvement Permit was Permit is determined to be:	s conducted in acc	cordance with G.S. 130A-335(a3). This In	iprovement
☐ Incomplete (If box is checked, information in this section	is required.)		
The following items are missing:			
	ļ <u>, , , , , , , , , , , , , , , , , , ,</u>		
Copies of this were sent to the LSS and the Applicant on	Date		
State Authorized Agent:		Date:	
☐ Complete			
State Authorized Agent:	- V 38	Date:	
This Improvement Permit is issued pursuant to G.S. 130A-33 attached here. The issuance of this permit in no way guarant for checking with appropriate governing bodies in meeting t plat, or the intended use changes. The Improvement Permit permit is subject to compliance with the provisions of 15A N. The Department, the Department's authorized agents, and tany liabilities, duties, and responsibilities imposed by statute evaluations, submittals, or actions from a licensed soil scient	tees the issuance their requirement t shall not be affe ICAC 18E and to t the local health d e or in common l	e of other permits. The permit holder is so. This permit is subject to revocation if cted by a change in ownership of the sit the conditions of this permit. Experiments shall be discharged and release from any claim arising out of or attri	responsible the site plan, e. This ased from
Improvement Permit Expiration Date:			

See attached site sketch



Permit/File #:

Re-submittal of Improvement Permit

	LHD USE ONLY: This IP resultmittal receive	ed.	hv	
	LHD USE ONLY: This IP resubmittal receive	Date	Initials	
Γhe following i	items are being resubmitted pursuant to G.S. 13	0A-335(a3) for issuance	of the Improvement Permit	:
	THE .	SIAIF	<i>D</i>	
s accurate and	hereby atte Scientist (Print Name) complete to the best of my knowledge and tha laws, regulations, rules, and ordinances.		required to be included wit ment Permit meets all app	
Signatui	re of Licensed Soil Scientist		Date	
	The section below is for Local Health Departm	ent use after submittal of i	tems noted as missing above	
LHD Follow-	up Completeness Review of Improvem	ent Permit		
	completeness of this Improvement Permit re-s Permit is determined to be:	ubmittal was conducted	in accordance with G.S. 13	0A-335(a3). This
☐ Incomplete	e (If box is checked, information in this section i	is required.)		
Γhe following it	ems are missing:			
Copies of this w	vere sent to the LSS and the Applicant on	 Date		
State Authorize	ed Agent:		Date:	
☐ Complete				
State Authorize	ed Agent:		Date:	



Permit/File #:	
----------------	--

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

County:			Pre-Construction Conference Required: Yes No	
PIN/Lot Identifie	er:			
Issued To:				
Property Locatio	on:			
AOWE/PE Plans/	Evaluations Provided	d: Yes 🔲 No 🗌	If yes, name and license number of AOWE/PE:	
Facility Type:				
Number of bedro	ooms: Num	ber of Occupants:	Other:	
New	Expansion	Repair	System Relocation Change of Use	
Basement?	Yes	☐ No	Basement Fixtures?	
Crawl Space?	Yes	☐ No	Slab Foundation?	
Type of Wastewa	ater System*		(Initial)	(Repair)
*Please include s	system classification	for proposed waste	tewater system types in accordance with Rule .1301 Table XXXII	
Design Daily Flov	w:	_GPD Wa	astewater Strength: Domestic High Strength Industrial Pr	ocess WW
	4-120 Section 53, En ovide engineering do		Jtilizing Low-flow Fixtures and Low-flow Technologies?	
Effluent Standar	d: DSE H	SE NSF/ANSI	40 TS-I TS-II RCW	
Type of Water Su	upply: 🗌 Private we	ll Public well	I Shared well Municipal Supply Spring Other:	
Installation Requ	uirements/Condition	<u>15</u>		
Septic Tank Size:	: gallons	Total Trench/Be	ed Length:feet Trench/Bed Spacing:feet on center	
Trench/Bed Wid	th: inches	LTAR:	gpd/ft ² Usable Depth to LC (Initial) ^x : ^x Limitin	g condition
Soil Cover:	_ inches	orrected Maximum	m Trench/Bed Depth‡: inches * Measured on the downhill side of	the trench
Pump Tank Size ((if applicable):	gallons	Requires more than 1 pump?	
Pump Requireme	ents: ft. TDH	vs GPM	Grease Trap Size (if applicable): gallons	
Distribution Met	thod: Serial	D-Box or Parallel	Pressure Manifold(s) LPP Other:	
Artificial Drainag	ge Required: Yes	No 🗌 If yes, ple	ease specify details:	
Legal Agreemen	ts (If the answer is "	Yes" to any type of	f legal agreements, please attach a copy of the agreement.)	
Multi-party Agre	ement Required [.02	:04(g)]:	☐ No Declaration of Restrictive Covenants: ☐ Yes ☐ I	No
Easement, Right-	-of-Way, or Encroach	nment Agreement F	Required [.0301(b)]: Yes No	
Management En	tity Required: 🗌 Ye	es 🗌 No Minimu	num O&M Requirements:	
Permit conditi	ons:			
ho roquiromon	to of 1EA NCAC 19E	are incorporated b	ny reference into this permit and shall be met. Systems shall be installed in	accordance

with the attached site sketch. This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes. The Construction Authorization shall not be affected by a change in ownership of the site. This Construction Authorization is subject to compliance Certification Number 10012E with the provisions of 15A NCAC 18E, or 15A NCAC 18A .1900, as applicable, and to the conditions of this permit.

AOWE/PE Print Name: _ AOWE/PE Signature: _ Date: ___

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

See attached site sketch



Permit/File #:

This Section for Local Health Department Use Only

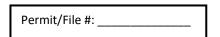
	Initial submittal received:	b	у
		Date	Initials
G.S. 130A-335(a5) states the follow	ving:		
Improvement Permit and Construction Authoperatment, and any necessary signed and sengineer or a person certified pursuant to Audiengineer or a person certified pursuant to Audiengartment shall, within five business days of the Construction Authorization or Improvement of the Construction Authorization and the Construction Authorization and the Local health department of the Information to the local health department of the Construction is complete within five busines department fails to act within any period seapply for the building permit for the project Authorization by the local health department licensed engineer submitting the evaluation Authorization or Improvement Permit and Construction is completed.	orization application together, the per sealed plans or evaluations conducted rticle 5 of Chapter 90A of the General of receiving the application, conduct a nent Permit and Construction Authorization or Improvement Permit and Construction or Improvement Permit and Construction Authorization of the Construction Authorization of shall make a final determination as to ss days after the local health department to cut in this subsection, the applicant if upon the decision of completeness of the or if the local health department fair, pursuant to this subsection may requirent to this subsection for cause. Ususpend or revoke the Construction Authorization for cause.	rmit fee charged by the lot by a person licensed pur Statutes as an Authorized acompleteness review of ation includes all of the ritruction Authorization is if or Improvement Permit at the Construction Authorization in the construction and the construction and the construction are the failure to a the Construction Authorical the Construction Authorical the Construction Authorical the Construction Authorical to act within five busing the that the local health of Jpon written request of the other than the request	ation together, submits a Construction Authorization, or an ocal health department, the common form developed by the resuant to Chapter 89C of the General Statutes as a licensed of On-Site Wastewater Evaluator, the local health the submittal. A determination of completeness means that equired components. If the local health department incomplete, the local health department shall notify the and Construction Authorization. The applicant may submit ation or Improvement Permit and Construction in Authorization or Improvement Permit and Construction al information from the applicant. If the local health act as a determination of completeness. The applicant may received as a determination of completeness. The applicant may received as a determination of completeness. The applicant may received as a determination of completeness. The applicant may received as a determination of completeness. The applicant may received as a determination of completeness. The applicant may received as a determination of completeness. The applicant may received as a determination of completeness. The applicant may received as a determination of completeness. The applicant may received as a determination of completeness. The applicant may received as a determination of completeness. The applicant may received as a determination of completeness. The applicant may received as a determination of completeness.
The review for completeness of thi	s Construction Authorization v	vas conducted in ac	cordance with G.S. 130A-335(a5). This
Construction Authorization is deter	mined to be:		
☐ Incomplete (If box is checked,	information in this section is re	equired.)	
The following items are missing:		1	
41 04			
Copies of this were sent to the AOV	WE/PE and the Applicant on		
		Date	
State Authorized Agent:			Date:
	C 122		
Complete			
State Authorized Agent:	VALUE OF THE SECOND SEC	- P	Date of Issuance:
attached here. This Construction A Construction Authorization shall n to compliance with the provisions The Department, the Department' any liabilities, duties, and responsiplans, evaluations, preconstruction the General Statutes as a licensed Authorized On-Site Wastewater Ev	Authorization is subject to revo ot be affected by a change in of the Laws and Rules for Sev is authorized agents, and the ibilities imposed by statute or n conference findings, submit engineer or a person certified valuator in GS 130A-335(a2), (tments shall be responsible and e, including the issuance of the	ocation if the site plownership of the sivage Treatment and local health department in common law frowtals, or actions from Japansuant to Article (a5), and (a7). The Dand bear liability for e operations permit	sing the signed and sealed plans or evaluations lan, plat, or the intended use changes. The te. This Construction Authorization is subject did Disposal and to the conditions of this permit. The ments shall be discharged and released from any claim arising out of or attributed to a person licensed pursuant to Chapter 89C of a 5 of Chapter 90A of the General Statutes as an epartment, the Department's authorized their actions and evaluations and other a pursuant to GS 130A-337.



Permit/File #:

Re-submittal of Construction Authorization

	LHD USE ONLY: This CA resubmittal received:	Date	by Initials	
The following it	L tems are being resubmitted pursuant to G.S. 130A-33	35(a5) for issuance of	the Construction Authoriz	zation:
is accurate and	hereby attest the native Wastewater Evaluator (Print Name) complete to the best of my knowledge and that the and local laws, regulations, rules, and ordinances.		quired to be included with on Authorization meets al	
Signatur	re of Authorized On-Site Wastewater Evaluator		Date	
	The section below is for Local Health Department us		ms noted as missing above.	
LHD Follow-ւ	up Completeness Review of Construction A	luthorization		
	completeness of this Construction Authorization reson Authorization is determined to be:	submittal was conduc	ted in accordance with G	S. 130A-335(a5).
☐ Incomplete ((If box is checked, information in this section is requ	ired.)		
The following it	ems are missing:			
	AND 35E ONY	M VIDER		
Copies of this w	vere sent to the AOWE/PE and the Applicant on	Date		
State Authorize	d Agent:		Date:	
☐ Complete				
State Authorize	d Agent:		Date:	





ADDENDUM TO G.S. 130A-335(a2) SUBMITTAL

County:	
PIN/Lot Identifier:	
Issued To:	
Additional Improvement Permit Conditions:	
	200
STATE STATE	
MAT DO 155	
9/23/03 9	
11 57 L AS 10	
	35 AB \ - V
Not In State of the State of th	
Additional Construction Authorization Conditions:	
1PRII 12 17	16/19
W Esse	DERIT /
QUAM V	



Permit #:	
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Re-submittal of Construction Authorization

	THD LISE ONLY:	This CA resultmittal resolved:		by	
	LHD OSE ONLY.	This CA resubmittal received:	Date	by Initials	
The following it	tems are being resub	omitted pursuant to G.S. 130A-33	35(a5) for issuance o	f the Construction Authoriz	cation:
		T	ATE	<i>y</i>	
l,			at the information re	equired to be included with	this re-submittal
is accurate and		tor (Print Name) st of my knowledge and that the ations, rules, and ordinances.	proposed Construct	cion Authorization meets all	applicable
Signatur	e of Authorized On-Site V	Vastewater Evaluator		Date	
		w is for Local Health Department us		ems noted as missing above.	
LHD Follow-เ	up Completeness	s Review of Construction A	uthorization		
	completeness of this on Authorization is c	s Construction Authorization re-s determined to be:	submittal was condu	icted in accordance with G.	S. 130A-335(a5).
☐ Incomplete (If box is checked, in	formation in this section is requi	ired.)		
The following it	ems are missing:				
		ALIO 3CO ALIA	M VIDERLY		
Copies of this w	ere sent to the AOV	VE/PE and the Applicant on	Date		
State Authorize	d Agent:			Date:	
☐ Complete					
State Authorize	d Agent:			Date:	

DEPARTMENT OF HEALTH AND HUMAN SERVICES DIVISION OF PUBLIC HEALTH, ENVIRONMENTAL HEALTH SECTION ON-SITE WATER PROTECTION BRANCH COUNTY:

Sheet	1	of	3	
PROPER	ΓΥ ID #:		9681-60-0071	
C	OLINITS.		TT 44	

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

(Complete all fields in full)

OWNER:	HARRINGTO	HARRINGTON PROPERTIES OF NC LLC				7/14/2024	
ADDRESS:	2659 SAN LE	EE DR SANFORD, NC 27330-	6446				
PROPOSED FACI	LITY:	DWELLING	PROPOSED DESIGN FLOW(.0400):	360gpd	PROPERTY SIZE:	0.459 Acres	
LOCATION OF SI	TE:	Lot 38, Harrington Place		PRO	PERTY RECORDED:		
WATER SUPPLY	:	Public		WATE	R SUPPLY SETBACK:		
EVALUATION M	ETHOD:	Auger Boring	TYPI	E OF WAST	TEWATER:	Sewage	

EVALUATION METHOD: Auger Boring TYPE OF WASTEWATER: Se							Sewage			
P R O F	.0502		SOIL MO	ORPHOLOGY	PROI					
I L E #	LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	.0503 STRUCTURE/ TEXTURE	.0503 CONSISTENCE/ MINERALOGY	.0504 SOIL WETNESS/ COLOR	.0505 SOIL DEPTH	.0506 SAPRO CLASS	.0507 RESTR HORIZ	.0509 PROFILE CLASS & LTAR	.0502(d) SLOPE CORRE CTION
Г		22	GR/SL	FR/NS/NP/SEXP	10YR 4/4				Suitable	
	Linear Slope	48	SBK/SCL	FR/SS/SP/SEXP	2.5YR 4/6				Suitable	2
						48in			0.350	2
	4%								gpd/sqft	inches
H		12	GR/SL	FR/NS/NP/SEXP	10YR 4/4					
	Linear Slope	40	SBK/SCL	FR/SS/SP/SEXP	2.5YR 4/6				Suitable	2
2			AUGER	REFUSAL		40in			0.350	2
	4%									
┝		20	GR/SL	FR/NS/NP/SEXP	107777 474				gpd/sqft	inches
	Linear Slope	36	SBK/SCL	FR/NS/NP/SEXP FR/SS/SP/SEXP	10YR 4/4 2.5YR 4/6				Suitable	
3	Linear Stope	48	SBK/C	FI/S/P/SEXP	10YR 4/6	48in				2
	407								0.300	
	4%				CASED SO				gpd/sqft	inches
Г			/	///			1			
1				-			/			
4					PAORIHO AORIHO	SOLAT!				
					SKIHO					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM	Jegina a lan ce
Available Space (.0508)	yes	yes	SITE CLASSIFICATION (.0509): Suitable
System Type(s)	IIIb	IIIb	EVALUATED BY: Stephen W Bristow
Site LTAR (gpd/sqft)	0.300	0.300	OTHER(S) PRESENT:
Maximum Trench Depth (in)	18	20	
COMMENTS:			

LEGEND

LANDSCAPE POSITION	SOIL GROUP	SOIL TEXTURE	CONVENTIONAL LTAR (gpd/ft²)	SAPROLITE LTAR (gpd/ft ²)	LPP LTAR (gpd/ft ²)	MINERALOGY/ CONSISTENCE		STRUCTURE
CC (Concave slope)		S (Sand)		0.6 - 0.8		MOIST	WET	SG (Single grain)
CV (Convex Slope)	,	LS (Loamy sand)	0.8 - 1.2	0.5 -0.7	0.4 -0.6	Lo (Loose)	NS (Non-sticky)	M (Massive)
D (Drainage way)		SL (Sandy loam)		0.4 -0.6		VFR (Very friable)	SS (Slightly sticky)	GR (Granular)
FP (Flood plain)	II	L (Loam)	0.6 - 0.8	0.2 - 0.4	0.3 - 0.4	FR (Friable)	S (Sticky)	SBK (Subangular blocky)
FS (Foot slope)		SiL (Silt loam)		0.1 - 0.3		FI (Firm)	VS (Very sticky)	ABK (Angular blocky)
H (Head slope)		SCL (Sandy clay loam)		0.05 - 0.15**		VFI (Very firm)	NP (Non-plastic)	PR (Prismatic)
L (Linear Slope)		CL (Clay loam)				EFI (Extremely firm)	SP (Slightly plastic)	PL (Platy)
N (Nose slope)		SiCL (Silty clay loam)					P (Plastic)	
R (Ridge/summit)	III	Si (Silt)	0.3 - 0.6		0.15 - 0.3		VP (Very plastic)	
S (Shoulder slope)		SC (Sandy clay)				SEXP (Slight	ly expansive)	
T (Terrace)		SiC (Silty clay)				EXP (Expansive)		
TS (Toe Slope)	IV	C (Clay)	0.1 - 0.4	None	0.05 - 0.2		_	-
		O (Organic)	None					

^{*} Adjust LTAR due to depth, consistence, structure, soil wetness, landscape, position, wastewater flow and quality.

HORIZON DEPTH In inches below natural soil surface

DEPTH OF FILL In inches from land surface

RESTRICTIVE HORIZON Thickness and depth from land surface

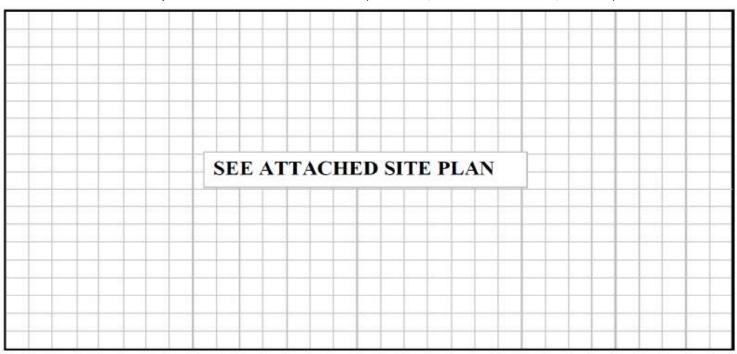
SAPROLITE S(suitable) or U(unsuitable); Evaluation of saprolite shall be by pits.

SOIL WETNESS Inches from land surface to free water or inches from land surface to soil colors with chroma 2 or less - record Munsell color

chip designation

CLASSIFICATION S (Suitable) or U (Unsuitable)

Show profile locations and other site features (dimensions, reference or benchmark, and North).



^{**}Sandy clay loam saprolite can only be used with advanced pretreatment in accordance with 15A NCAC 18E .1200.

Lot 38 :: Septic Layout Detail 35 34 010 SF 05 % N4°39'42"E 100.00 >12' Benchmark = 100' >12' PROFILE 3 LINE:1:ORANGE 80' LINE:2:BLUE 80' >10' -INE:3:PINK 80 94 LINE:4:ORANGE 80 LEGE PROFILE 2 PO = C SP = S CP = C -366 PRELIMINARY NOTIRECORDED NOT FOR FIELD STAKING WD = VSW = S 20,000 SF 0.459 AC DW = ⊗= CC >10'0 X= MA 0 = IR ST 200. >5' PROFILE 1 DF **Elevation Table** ш>10' P Ш 12.0' 37 Benchmark = 100' \$85°20'17" SE 39 Line 1 = 100.0' = E >5' C Line 2 = 99.8'LINE:10:LIME Line 3 = 99.6'Line 4 = 99.4'**PROPOSED** Line 5 = 99.2'**CRAWFORD B** Line 6 = 98.9'SLAB Line 7 = 98.7' 2 CAR - RIGHT AC Line 8 = 98.4' Line 9 = 98.2'Line 10 = 97.9' PO 12.0 50.0 System Details SW 35' FRONT SETBACK Initial System: DW 1000 gal tank 0 0.3 gpd/sqft Lines 1-4 (320') 15' PRIVATE 16.5 Accepted - Manifold UTILITY EASEMENT Product - EZ Flow 18" MTD N4°39'43"E 100.00 Repair System 0.3 gpd/sqft Lines 5-10 (240') VILI DRIVE Accepted - Manifold PUBLIC 60' R/W Product - PPBS 20" MTD Map provided by PAC-One LLC Legend |: | Locations are approximations and |: | |:| are provided for reference only |:| Parcel data provided by: Johnston County 1 inch = 30 feet System --- Repair Elevation data provided by: NCDOT

Lot 38 :: Septic Layout Detail 35 34 010 SF 05 % N4°39'42"E 100.00 >12' Benchmark = 100' >12' LINE:1:ORANGE 80' 25' REAR SETBAC >10' -INE:3:PINK 80' 94 LINE:4:ORANGE 80 LEGE PO = C SP = S CP = C -366 PRELIMINARY NOTIRECORDED NOT FOR FIELD STAKING WD = VSW = S 20,000 SF 0.459 AC DW = ⊗= CC >10'0 X= MA 200.002 0 = IR ST 200. >5' DR **Elevation Table** P Ш ш**≯10'** 12.0' 37 Benchmark = 100' \$85°20'17" \$85°20'17" SE (39)Line 1 = 100.0' = E >5' Line 2 = 99.8'C 10:LIME Line 3 = 99.6'Line 4 = 99.4'**PROPOSED** Line 5 = 99.2'**CRAWFORD B** Line 6 = 98.9'SLAB Line 7 = 98.7' 2 CAR - RIGHT AC Line 8 = 98.4' Line 9 = 98.2'Line 10 = 97.9' PO 12.0 50.0 System Details SW 35' FRONT SETBACK Initial System: DW 1000 gal tank 0 0.3 gpd/sqft Lines 1-4 (320') 15' PRIVATE 16.5 Accepted - Manifold UTILITY EASEMENT Product - EZ Flow 18" MTD N4°39'43"E 100.00 Repair System 0.3 gpd/sqft Lines 5-10 (240') VILI DRIVE Accepted - Manifold PUBLIC 60' R/W Product - PPBS 20" MTD Map provided by PAC-One LLC Legend |: | Locations are approximations and |: | |:| are provided for reference only |:| Parcel data provided by: Johnston County 1 inch = 30 feet System --- Repair

Elevation data provided by: NCDOT

Lot 38:: Septic Layout Detail 35 34 010 SF 05 % N4°39'42"E 100.00 >12' Benchmark = 100' >12' LINE:1:ORANGE 80' LINE:2:BLUE 80' 25' REAR SETBAC **>10'** LINE:3:PINK 80' 94 LINE:4:ORANGE 80' LEGE PO = C SP = SC CP = C WD = V -366 PRELIMINARY NOTIRECORDED 38 NOT FOR FIELD STAKING SW = S 20,000 SF DW = SIDE SETBACK 0.459 AC >10'0 ⊗= CC X= MA 200.00 0 = IR ST 200. >5' DR **Elevation Table** P S85°20'17"E 12.0' 37 Benchmark = 100' 50.0' \$85°20'17" SE (39)Line 1 = 100.0' = E C Line 2 = 99.8'Line 3 = 99.6'Line 4 = 99.4'**PROPOSED** Line 5 = 99.2'**CRAWFORD B** Line 6 = 98.9'SLAB Line 7 = 98.7' 2 CAR - RIGHT AC Line 8 = 98.4' Line 9 = 98.2'Line 10 = 97.9' PO 12.0 50.0 System Details SW 35' FRONT SETBACK Initial System: DW 1000 gal tank 0 0.3 gpd/sqft Lines 1-4 (320') 15' PRIVATE 16.5 Accepted - Manifold UTILITY EASEMENT Product - EZ Flow 18" MTD N4°39'43"E 100.00 Repair System 0.3 gpd/sqft Lines 5-10 (240') VILI DRIVE Accepted - Manifold PUBLIC 60' R/W Product - PPBS 20" MTD Map provided by PAC-One LLC Legend |: | Locations are approximations and |: | |:| are provided for reference only |:| Parcel data provided by: Johnston County 1 inch = 30 feet System Elevation data provided by: NCDOT

Lot 38 :: Septic Layout Detail 35 34 010 SF 05 % N4°39'42"E 100.00 Benchmark = 100' 25' REAR SETBACK 94 LEGE PO = C SP = S CP = C -366 PRELIMINARY NOTIRECORDED NOT FOR FIELD STAKING WD = 1 SW = 5 20,000 SF 0.459 AC DW = ᆸ >10'0 ⊗= CC X= MA ,200.00 ST 200. >5' DF **Elevation Table** P Ш S85°20'17"E 12.0' 37 Benchmark = 100' \$85°20'17" SE (39)Line 1 = 100.0' = E Line 2 = 99.8'Line 3 = 99.6'Line 4 = 99.4'**PROPOSED** Line 5 = 99.2'**CRAWFORD B** Line 6 = 98.9'SLAB Line 7 = 98.7' 2 CAR - RIGHT AC Line 8 = 98.4' Line 9 = 98.2'Line 10 = 97.9' PO 12.0 50.0 System Details SW 35' FRONT SETBACK Initial System: DW 1000 gal tank 0 0.3 gpd/sqft Lines 1-4 (320') 15' PRIVATE 16.5 Accepted - Manifold UTILITY EASEMENT Product - EZ Flow 18" MTD N4°39'43"E 100.00 Repair System 0.3 gpd/sqft Lines 5-10 (240') VILI DRIVE Accepted - Manifold PUBLIC 60' R/W Product - PPBS 20" MTD Map provided by PAC-One LLC Legend |: | Locations are approximations and |: | |:| are provided for reference only |:| Parcel data provided by: Johnston County 1 inch = 30 feet ■■■ Repair Elevation data provided by: NCDOT

Initial System Overview for

Lot 38, Harrington Place

Number of bedrooms	3	
Design Flow	360	gal/day
Soil L.T.A.R.	0.300	gal/day/sq ft

System Details

Trench Depth	18	inches
Total Trench Length	320	_ feet
Manifold Length	42	inches
Manifold Diameter	4in	sch 80pvc
Supply Line Length	80	feet
Design Head	2	feet
Elevation Head	7.00	_ feet
Total Design Head	11.84	feet
Dose Volume	146	gallons
% Pipe Volume	70	
Drawdown	7.28	in inches
Pump Run Time	12.66	minutes

System Components

Trench Product	EZ Flow	
Septic Tank	1000	gallons
Pump Tank	1000	gallons
Effluent Filter	Polylok PL	-68 (or approved equivalent)
Effluent Pump	Zoeller Do	se-Mate Model 151/152/153 (or approved equivalent)
Control Panel	SJE Rhoml	ous Model 112 panel (or approved equivalent)

Pressure Manifold Design Worksheet Initial System

			PROF	PERTY INF	ORMATION					
Address:	Lot 38, F	Harrington Place		P.I.N. #:	9	681-50-449	2	Bedrooms:	3	
			[DESIGN C	RITERIA					
Design Flow: 360	<u>gal/da</u>	ay	L.T.A.R.:	<u>0.300</u>	gal/day/sq.ft					
				SYSTEM D	DETAILS					
<u>Tanks</u>										
Septic Tank: 100	<u>0</u> gals	Pun	np Tank:	<u>1000</u>	gals					
<u>Trenchs</u>										
Tuonah Da		10 :		C F4.	060	D.,	a du at Danath.	12	•	
Trench De Length of Trenc		<u>18</u> in 320 ft (S		Sq. Feet: rt for Detail	960	– Pr	oduct Depth:	12	_in	
Manifold	iies.	520 11 (3	ee rap Ciia	it ioi beta	115)					
<u>iviaiiioia</u>										
# of Taps: 4		Manifo	old Length:	42	in	Manifo	ld Diameter:	4in sch 80pvc	:	
			_		in spacing		side(s) of man		•	
System			-							
Design Head: 2	ft		Elev	ation Head	: <u>7.00</u>	ft	Total Head:	11.84	ft	
Friction & Fitting L		2.84 ft (s		_	for fittings in p				_'	
Supply Line len	gth:	80 ft		Pipe Diam	eter and Type:	2	in sch 40pvc			
Pump to Deli	iver:2	8.44 gals	/min at	11.84	_ft head					
Dosing Volu		146 gals								
Drawdo	wn: <u> </u>	<u>146</u>	gals divid	led by	<u>20</u>	gals/in =	<u>7.3</u>	inches		
				TADCL	LADT					_

TAP CHART										
Bench Mark		is = 100.00	located at		Property Corner		Design Head:	2		
Pump tank elev.		99.00	Pump elev.	94.00	Manifol	d elev.	101.00			
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR	
1	ORANGE		100.00	80	1/2in SCH 40	7.11	90.00	240	0.375	
2	BLUE		99.80	80	1/2in SCH 40	7.11	90.00	240	0.375	
3	PINK		99.60	80	1/2in SCH 40	7.11	90.00	240	0.375	
4	ORANGE		99.40	80	1/2in SCH 40	7.11	90.00	240	0.375	
	·	·	·		·		·			

		total feet =	320	gal/min =	28.44	<u>LTAR =</u>	0.30	
% of Dose Vol. (66-75) _	70		Design Flow	360	_	(ltar + 5%)	0.32	
Dose Volume	146		Pump Run	12.66	_	(Itar W/ INOV)	0.40	
Dose Pump Time _	5.12		Tank gal/in	20.00	_	(ltar + 5%)	0.42	
Drawdown in Inches	7.3		Elev. Head	7.00	_			
Supply Line Length	80	Scour Ve	elocity (ft/sec)	2.90	_			
Comments:								
·								

Repair System Overview for

Lot 38, Harrington Place

רו	ACIAN	Crito	ria
	esign		114
_	C3.D		

Number of bedrooms	3	
Design Flow	360	gal/day
Soil L.T.A.R.	0.300	gal/day/sq ft

System Details

Trench Depth	20	inches
Total Trench Length	240	feet
Manifold Length	30	inches
Manifold Diameter	4in	sch 80pvc
Supply Line Length	50	feet
Design Head	2	feet
Elevation Head	6.20	feet
Total Design Head	9.60	feet
Dose Volume	109	_gallons
% Pipe Volume	70	_
Drawdown	5.46	in inches
Pump Run Time	16.42	_ minutes

System Components

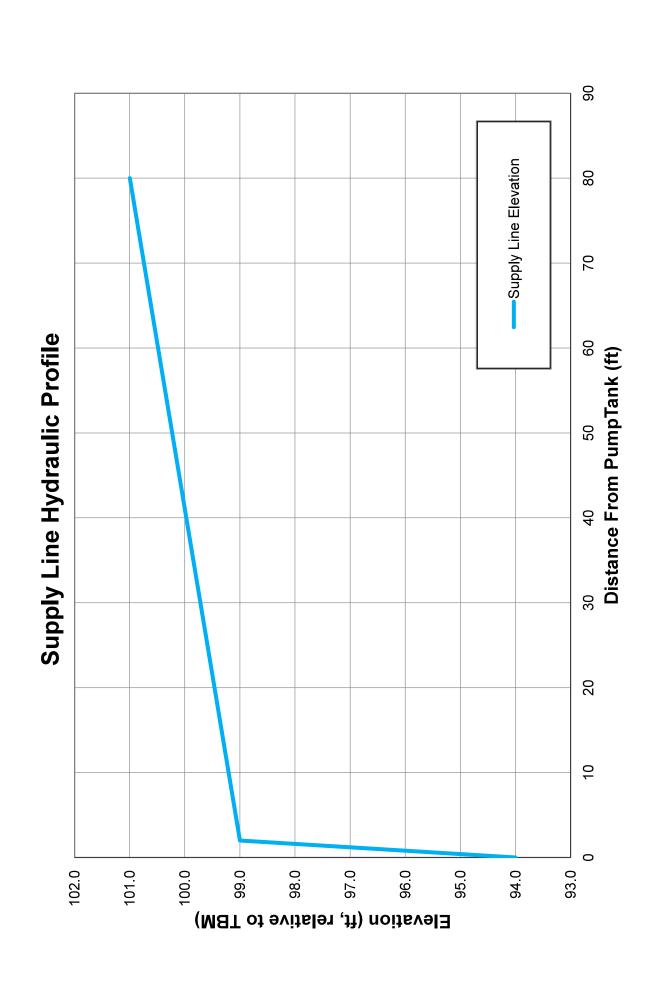
Trench Product	PPBS	
Septic Tank	1000	gallons
Pump Tank	1000	gallons
Effluent Filter	Polylok PL	-68 (or approved equivalent)
Effluent Pump	Zoeller Do	se-Mate Model 151/152/153 (or approved equivalent)
Control Panel	SJE Rhoml	ous Model 112 panel (or approved equivalent)

Pressure Manifold Design Worksheet Repair System

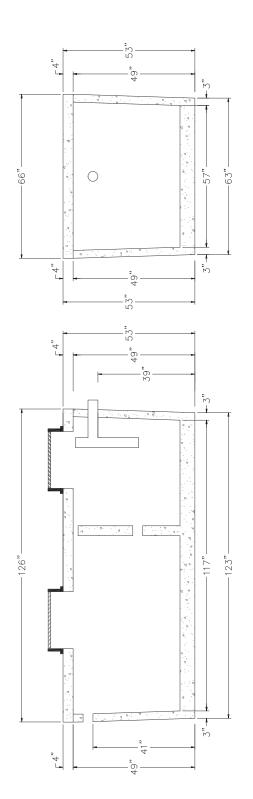
		PROI	PERTY INI	ORMATION			
Address:	Lot 38, Harring	ton Place	P.I.N. #:	9	9681-50-4492	Bedrooms:	3
			DESIGN C	RITERIA			
Design Flow: 360	gal/day	L.T.A.R.:	<u>0.300</u>	gal/day/sq.ft			
			SYSTEM I	DETAILS			
<u>Tanks</u>							
Septic Tank: 1000	gals	Pump Tank:	<u>1000</u>	gals			
<u>Trenchs</u>							
Trench Dept			Sq. Feet:	720	Product Dept	h: <u>14</u> in	
Length of Trenche	es: 240	ft (See Tap Cha	irt for Deta	ils)			
<u>Manifold</u>							
# of Tance 2		Manifold Length:	30	in	Manifold Diameter	r. Ain sch 20nus	
# of Taps: 2				''' in spacing	1 side(s) of m		
System		Tap Com	garation. c	in spacing	1 3140(3) 01 111	amola	
Design Head: 2	ft	Elev	ation Head	: 6.20	ft Total Hea	d: 9.60 ft	
Friction & Fitting Los		ft (supply line			_		
Supply Line lengt		_{ft} `	_	: 2	in sch 40pvc		
Pump to Delive		gals/min at	9.60	ft head	_		
Dosing Volum	e: 109	gals		_			
Drawdow	n: <u>109</u>	gals divid	led by	<u>20</u>	gals/in = 5.5	inches	

	TAP CHART										
Bench Mark		is = 100.00	located at		Property Corner		Design Head:	2			
Pump tank elev.	_		99.00	Pump elev.	94.00		Manifold elev.	100.20			
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR		
5	PINK		99.20	60	1/2in SCH 80	5.48	90.00	180	0.500		
6	RED		98.90	60	1/2in SCH 80	5.48	90.00	180	0.500		
7&8	BLUE/LIME		98.70	60	1/2in SCH 80	5.48	90.00	180	0.500		
9&10	BLUE/LIME		98.20	60	1/2in SCH 80	5.48	90.00	180	0.500		

		total feet = 240	gal/min =	21.92	<u>LTAR =</u>	0.30	
% of Dose Vol. (66-75) _	70	Design Flow	360	_	(Itar + 5%)	0.32	
Dose Volume	109	Pump Run	16.42	<u>_</u>	(Itar W/ INOV)	0.60	
Dose Pump Time _	4.98	Tank gal/in	20.00	_	(Itar + 5%)	0.63	
Drawdown in Inches _	5.5	Elev. Head	6.20	_			
Supply Line Length	50	Scour Velocity (ft/sec)	2.24	_			
Comments:							_
		•					-



E8x 316-2\3-0443 CORLYCE Sound Straight St	Ιίοί		Maeter Set		mozilamer•gmail.com
27 Pine Ridge Rid. 37 Pine Ridge Rid. 27 Pine Ridge Rid. 37 Pine Ridge Rid. 27 Pine Ridge Rid. 38 Pine Ridge Rid. 39 Pine Ridge Rid. 30 Pine Ridge Ridge Rid. 30 Pine Ridge	SHEET NUMBER		Revision 3		
664 TZ 000,11 hop. 101,11 hop.			Revision 2		
SNOS \$ 10.1 II. Not in the long to be feld of the long	664 10 000,1				
PREPARED FOR: DANG MONIE DE SANTOTE DE SANTOTE BRANCHE FOR: DANG BRONDEY & Sons		Aros , tt lingA	Original Submittal	37 Pine Ridge Rd.	
	BRANTLEY TANK MODEL	DATE	REVISION NO.	PREPARED FOR: David Brantley & Sons	SNOS & AMILIAVAA UINVU

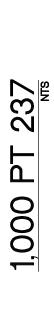


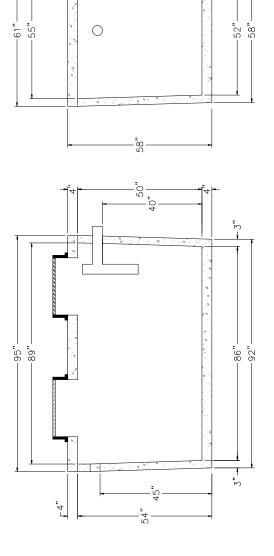
NON TRAFFIC BEARING

1,000 ST 499

l îo l		Master Set		finstaller•gmail.com
SHEET NUMBER		Revision 3	7.5 a da 7.000	€87-0-616 X8-3
		Revision 2	CONTACT:	Office 252-478-3721
/07 1 0001		Revision 1	Zebulon, NC 27597 DATE: April 11, 2014	37 Pine Ridge Rd. Zebulon, NC 27597
1,000 PT 237	April 11, 2014	Original Submittal	37 Pine Ridge Rd.	SNOS & XITINVHA AIAVA
BRANTI EY TAW MOTEI	DATE	REVISION NO.	PREPARED FOR: David Brantley & Sons	Shop (Malmhydd dmyd

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NON TRAFFIC BEARING

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



SECTION: 2.15.080 FM2784 1017 Supersedes 0315

TECHNICAL DATA SHEET **DOSE-MATE SERIES**

Models 151, 152, 153 Effluent Pumps

PRODUCT SPECIFICATIONS

		SPECIFICATIONS				
	Horse Power	1/3 (151), 4/10 (152), 1/2 (153)				
	Voltage	115 or 230				
R	Phase	1 Ph				
0	Hertz	60 Hz				
MOTOR	RPM	3450				
Σ	Туре	Permanent split capacitor				
	Insulation	Class B				
	Amps	3.0 - 10.5				
	Operation	Automatic or nonautomatic				
	Discharge Size	1-1/2" NPT				
	Solids Handling	1/2" (12 mm), 3/4" (19 mm) spherical solids				
0	Cord Length	20' (6 m)				
PUMP	Cord Type	UL listed power cord				
Ú	Max. Head	44' (13.4 m)				
	Max. Flow Rate	77 GPM (291 LPM)				
	Max. Operating Temp.	130 °F (54 °C)				
	Cooling	Oil filled				
	Motor Protection	Auto reset thermal overload				
	Cap	Cast iron				
	Motor Housing	Cast iron				
	Pump Housing	Cast iron				
S	Base	Plastic or cast iron				
MATERIALS	Upper Bearing	Sleeve bearing				
RI,	Lower Bearing	Ball bearing				
TE	Mechanical Seals	Carbon and ceramic				
IA.	Impeller Type	Non-clogging vortex				
2	Impeller	Engineered thermoplastic				
	Hardware	Stainless steel				
	Motor Shaft	AISI 1215 steel				
	Gasket	Neoprene				

NOTE: The sizing of effluent systems normally requires variable level float(s) controls and properly sized basins to achieve required pumping cycles or dosing timers with nonautomatic pumps.

NOTE: See model comparison chart for specific details.

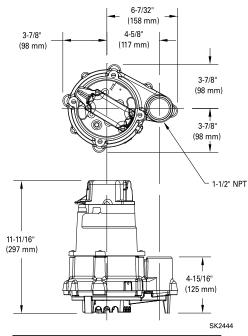
and Certified to CSA Standard CSA22.2 No. 108



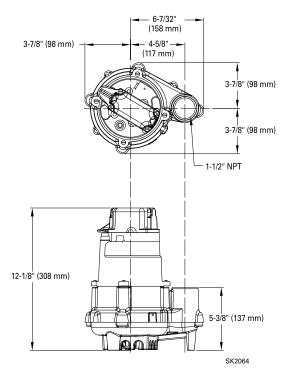




MODEL 151

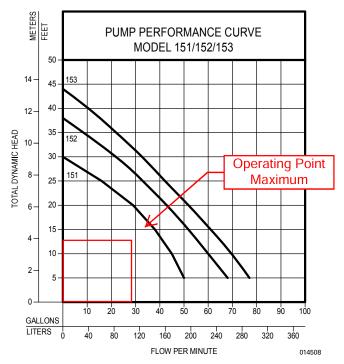


MODELS 152 & 153



TOTAL DYNAMIC HEAD FLOW PER MINUTE

МО	DEL	151		152		1:	53
Feet	Meters	Gal.	Liters	Gal.	Liters	Gal.	Liters
5	1.5	50	189	69	261	77	291
10	3.0	45	170	61	231	70	265
15	4.6	38	144	53	201	61	231
20	6.1	29	110	44	167	52	197
25	7.6	16	61	34	129	42	159
30	9.1			23	87	33	125
35	10.7					22	85
40	12.2					11	42
Shut-o	ff Head:	30 ft.	(9.1m)	38 ft. (11.6m)	44 ft. (1	13.4m)
			•		·		·



N.4l - l					МС	DEL CO	MPARIS	NC			
Model	Seal	Mode	Volts	Ph	Amps	HP	Hz	Lbs	Kg	Simplex	Duplex
N151	Single	Non	115	1	6.0	1/3	60	32	15	1	2 or 3
E151	Single	Non	230	1	3.0	1/3	60	32	15	1	2 or 3
BN151	Single	Auto	115	1	6.0	1/3	60	33	15	*	2 or 3
BE151	Single	Auto	230	1	3.0	1/3	60	33	15	*	2 or 3
N152	Single	Non	115	1	8.5	4/10	60	37	17	1	2 or 3
E152	Single	Non	230	1	4.3	4/10	60	37	17	1	2 or 3
BN152	Single	Auto	115	1	8.5	4/10	60	39	18	*	2 or 3
BE152	Single	Non	230	1	4.3	4/10	60	39	18	*	2 or 3
N153	Single	Non	115	1	10.5	1/2	60	37	17		
BN153	Single	Auto	115	1	10.5	1/2	60	39	18	*	2 or 3
E153	Single	Non	230	1	5.3	1/2	60	37	17	1	2 or 3
BE153	Single	Non	230	1	5.3	1/2	60	39	18	*	2 or 3

^{*}BN and BE models include a 20' (6 m) piggyback variable level pump switch. Additional cord lengths are available in 25' (8 m) and 35' (11 m). 50' (15 m) cords are available for 230 V units only.

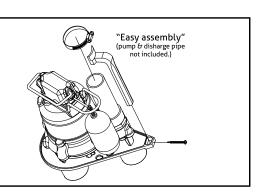
NOTE: Model 151 has a plastic base. Models 152 & 153 have a cast iron base.

SELECTION GUIDE

- For automatic, use single piggyback variable level float switch or double piggyback variable level float switch. Refer to FM0477.
- 2. See FM1228 for correct model of simplex control panel.
- 3. 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 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.



▲ 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).



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 & LokTM



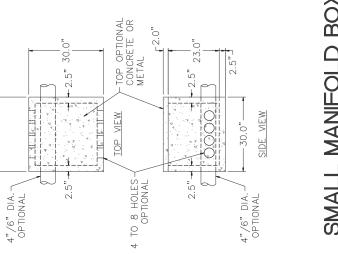
Extend & Lok™ Easily installs into existing tanks.



to 110mm Pipe

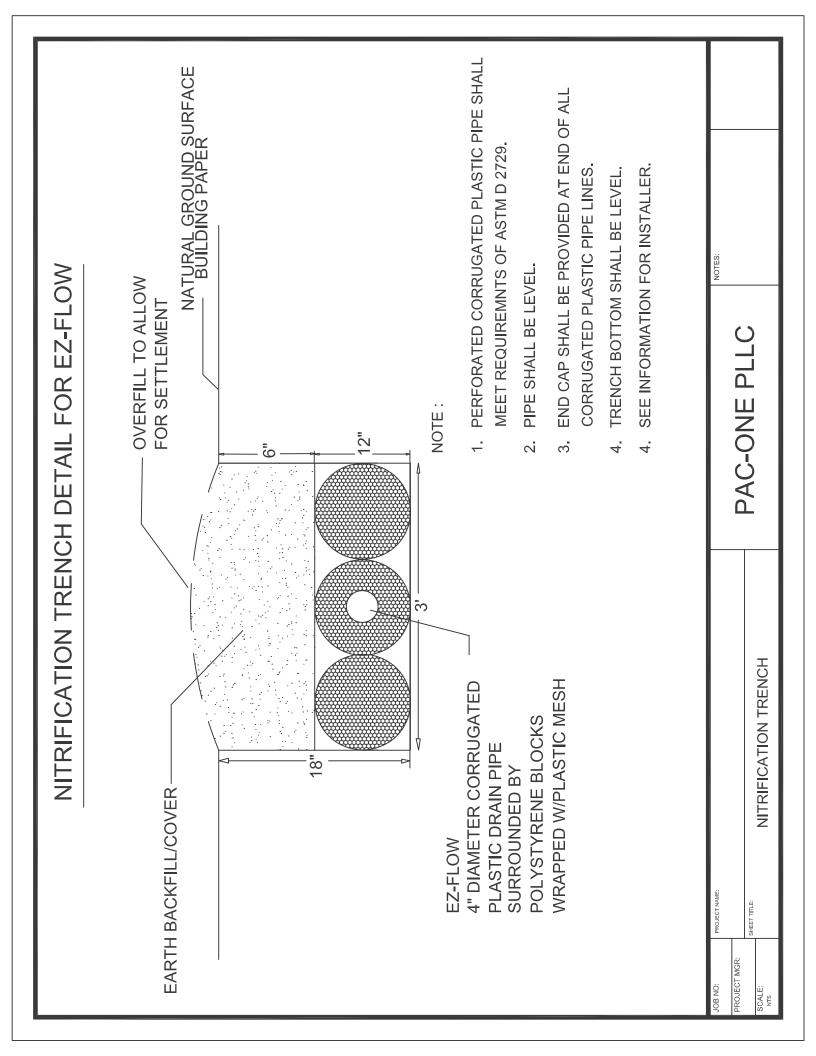
to SDR 35

				finstaller egmail.com
l lo l		Master Set		maa liamperallatarit
SHEET NUMBER		Revision 3	CORY BRANTLEY	Fat 919-573-0443
		Revision 2	CONTACT:	CTE-874-8350
WANIFOLD BOX		Revision 1	DATE: April 11, 2014	37 Pine Ridge Rd. Zebulon, NC 27597
SMALLEY YANK MODEL	April 11, 2014	Original Submittal	27 Pine Ridge Rd. Zebulon, NC 27597	DAVID BRANILLE & SONS
BEVIAL EXTENS HOUSE	DATE	REVISION NO.	PREPARED FOR: David Brantley & Sons	Sitos v Mil illitiva a amiva



-30.0"-

SMALL MANIFOLD BOX



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

- 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 mounting feet 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. Ground Lug
- Circuit Breaker (optional) provides pump disconnect and branch circuit protection.

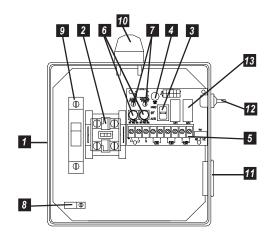
STANDARD ALARM PACKAGE

- Red Alarm Beacon provides 360° visual check of alarm condition.
 Note: NEMA 1 style utilizes a door mounted indicator in lieu of a beacon.
- **11. 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.
- 12. 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.
- 13. 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' SJE SignalMaster® control switches
- Complete with step-by-step installation instructions
- Three-year limited warranty



Model Shown 1121W914X



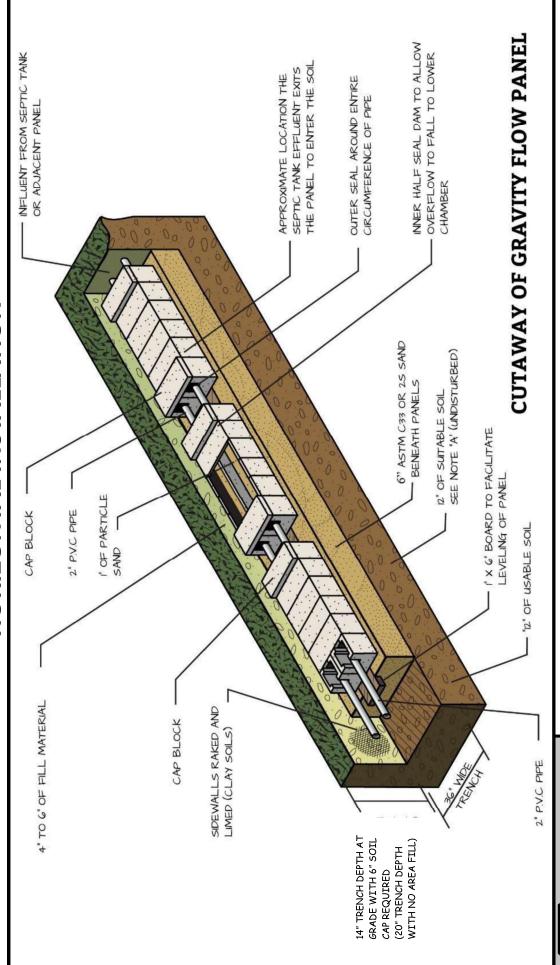


1-888-DIAL-SJE • 1-218-847-1317 1-218-847-4617 Fax

email: sje@sjerhombus.com **www.sjerhombus.com**

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ISOMETRIC DRAWING OF A SEGMENT OF T&J PANEL HORIZONTAL INSTALLATION





NITRIFICATION TRENCH DETAIL FOR PANEL BLOCK SYSTEM

INFORMATION FOR THE CONTRACTOR

The permit should be read very carefully prior to bidding. The following are details that must be considered by the contractor prior to and during installation:

- Tanks shall be approved by NCDHHS and certification supplied by the manufacturer.
- The installer shall be responsible to the owner for placement of the tanks and to ensure that final grades are returned to the original grade, with exception of added structural features.
- The supply trench shall be compacted to eliminate cavities left during initial fill placement without damage or displacement of pipe or fittings.
- Installation of the system shall be during dry conditions in order to protect the soil structure.
- All fittings shall be pressure rated fittings.
- All joints shall be cleaned with PVC pipe cleaner and a heavy-bodied PVC pipe glue applied to weld all joints.
- Where required by the regulating County Health Department, post installation inspections by the Engineer or his representative must be scheduled **5 week days** in advance.
- Trenches shall be carefully excavated so the bottom is level **for the entire length and width of the trench**. If the trench bottom level needs adjusting after excavation it **must** be done by removing high points rather than filling low points. It is extremely important to insure that trenches are not over-excavated during initial trenching. All fine grading within the trench will be done by hand with a shovel. No loose material will be left in the trench.
- All pipe openings in the tanks shall be properly filled with press boot seal. This also applies to the joints around the riser.
- All tanks shall be properly back filled and compacted to prevent settlement.
- Earth dams, constructed of relatively impervious material, shall be installed at the beginning and end of each lateral.
- No heavy equipment shall be used on the field during or after installation. The use of a small loader (i.e. Bobcat) or a trencher (i.e. Ditch Witch 2300/2310) may be used for installation.
- Elevations at pin flag locations should be checked by the contractor prior to beginning trench excavation.
- Pump tank riser shall be 6" above grade, control panel shall be 18" above grade.
- -Septic tank shall have specified effluent filter or approved equivalent.

System Specifics:

- System uses EZ-Flow drain line.
- Repair uses Panel Block drain line.

Miscellaneous errors and omissions

Markel has over 35 years of experience providing miscellaneous errors and omissions insurance. Our leadership has a wealth of knowledge and expertise in protecting small business owners from litigation stemming from actual or perceived negligence. Our underwriting team has crafted policies that fit your specific needs, while our seasoned, in-house claims professionals will help you successfully navigate a loss or claim should you need their assistance.

Reporting new professional liability claims

New Claims can be reported in writing by website, email, fax, or regular mail. Please refer to your specific policy for all relevant reporting requirements.

To report a new claim, visit markelinsurance.com/file-a-claim and select "BOP/Miscellaneous errors and omissions/Workers compensation" from the drop down. You can also email newclaims@markelcorp.com and include the following:

- Policy number
- Insured and claimant names with contact details
- · Date of loss
- Location and description of loss
- All pertinent documentation available (incident report, police report, witness information, photos, etc.)

General claims questions

For information about an already reported Professional Liability claim, email: markelclaims@markelcorp.com, or contact your assigned claim examiner directly.

Additional contact information:

(800) 362-7535 or (800) 3 MARKEL (855) 662-7535 or (855) 6 MARKEL

Markel Claims Department, P.O. Box 2009,

Glen Allen, VA 23058-2009

While your policy is primarily designed to protect against a variety of professional errors and omissions claims, it may also provide protection for other specific exposures such as pollution claims, disciplinary proceedings, third party discrimination claims, subpoena and public relations expenses, among others. Contact your agent for more information, or if you have reported a Claim, your assigned examiner.

Risk management and loss prevention

Policyholders have access to loss control and risk management resources that can assist in a better understanding of potential hazards within their operation and ways to reduce claims.

Here's a sample of the many services available:

- Exposure assessments
- Loss analysis tools
- Safety videos
- Safety training materials
- Regulatory program guidance

Designed Protection® for professional service providers and associations – professional service providers hotline

Our panel of Risk Management experts is available to discuss general risk management related concerns and questions. Please visit **markelcorp.com/riskmanagement** and under "Designed Protection®" click "Click here," enter your policy number, then select "Professional Service Providers Hotline" to access our panel of experts.

Visit our website at:

markelinsurance.com/risk-management-home.

For more information about any of Markel's loss control services, contact us at (888) 500-3344 or email losscontrol@markelcorp.com.

For more information about our programs, risk management articles, and FAQs, please visit **markelinsurance.com**. To pay your bill or view policy documents, please visit **portal.markelinsurance.com**.





DED

(Mandatory in NH)

WORKERS COMPENSATION

AND EMPLOYERS' LIABILITY
ANY PROPRIETOR/PARTNER/EXECUTIVE
OFFICER/MEMBER EXCLUDED?

Errors & Omissions

If yes, describe under DESCRIPTION OF OPERATIONS below

RETENTION \$

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 11/30/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s)

certificate holder in lieu	u of such endorsement(s).		
PRODUCER		CONTACT NAME: Angela Sensenig	
Wade Associates, LI	rc	PHONE (A/C, No, Ext): (252)631-5269 FAX (A/C, No): (252)64:	9-2443
250 Pollock St.		E-MAIL ADDRESS: asensenig@wadeict.com	
		INSURER(S) AFFORDING COVERAGE	NAIC #
New Bern	NC 28560	INSURER A: Auto-Owners	18988
INSURED		INSURER B: Builders Mutual	10844
Permit Acquistion (Company One, PLLC	INSURER C: Markel Insurance Company	38970
920 Garner Rd.		INSURER D:	
		INSURER E:	
Selma	NC 27576-7763	INSURER F:	
COVERAGES	CERTIFICATE NUMBER: 23-24	REVISION NUMBER:	
		VE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIO	
	, , , , , , , , , , , , , , , , , , , ,	OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS	5

CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS ADDL SUBR INSD WVD INSR LTR TYPE OF INSURANCE POLICY NUMBER (MM/DD/YYYY) (MM/DD/YYYY) X **COMMERCIAL GENERAL LIABILITY** 1,000,000 EACH OCCURRENCE \$ DAMAGE TO RENTED 300,000 CLAIMS-MADE X OCCUR Α \$ PREMISES (Ea occurrence) 35613487 11/22/2023 11/22/2024 10,000 MED EXP (Any one person) \$ Excluded PERSONAL & ADV INJURY \$ 2,000,000 GEN'L AGGREGATE LIMIT APPLIES PER: GENERAL AGGREGATE \$ PRO-JECT POLICY PRODUCTS - COMP/OP AGG 2,000,000 \$ \$ OTHER: COMBINED SINGLE LIMIT (Ea accident) \$ **AUTOMOBILE LIABILITY** BODILY INJURY (Per person) \$ ANY AUTO ALL OWNED AUTOS SCHEDULED BODILY INJURY (Per accident) \$ AUTOS NON-OWNED PROPERTY DAMAGE \$ HIRED AUTOS AUTOS (Per accident) \$ UMBRELLA LIAB EACH OCCURRENCE OCCUR \$ **EXCESS LIAB** CLAIMS-MADE AGGREGATE \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

MEO1642

69KOUB-5N24039-7-23

CERTIFICATE HOLDER	CANCELLATION

N/A

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

x | PER STATUTE

General Aggregate

Each Occurrence

E.L. EACH ACCIDENT

E.L. DISEASE - EA EMPLOYEE

E.L. DISEASE - POLICY LIMIT

AUTHORIZED REPRESENTATIVE

11/14/2023

11/22/2023

11/14/2024

11/22/2024

N Whitsett/RACHEL

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\$

\$

500,000

500,000

500,000

\$1,000,000 \$1,000,000



MARKEL INSURANCE COMPANY

10275 West Higgins Road, Suite 750 Rosemont, IL 60018 (800) 431-1270

INSURANCE POLICY

Coverage afforded by this policy is provided by the Company (Insurer) and named in the Declarations.

In **Witness Whereof**, the company (insurer) has caused this policy to be executed and attested and countersigned by a duly authorized representative of the company (insurer) identified in the Declarations.

Kathleen Anne Sturgeon By W. Sahres

Secretary

President

MJIL 1000 06 10 Page 1 of 1



MARKEL INSURANCE COMPANY

NOTICE TO POLICYHOLDERS CLAIM REPORTING

Please immediately report a new claim under this policy to:

newclaims@markel.com

For general claims inquiries after a claim has been reported, please email:

markelclaims@markel.com

In order for us to expedite the handling of your claim and quickly refer it to the appropriate party, please have the following information available:

- Claim number (or report as new)
- Your name, contact information and position with the Named Insured
- Date of loss
- Policy number and insured name
- Details of loss

Our address and additional contact information are as follows:

Markel Claims P.O. Box 2009 Glen Allen, VA 23058-2009 Phone: 800-362-7535 (800) 3MARKEL

Fax: 855-662-7535 (855) 6MARKEL

Markel understands the importance of having knowledgeable claims professionals prepared to answer your questions with personal attention and expertise. With claims professionals located across four times zones, you are sure to find the claims assistance you need -- when you need it.

PLEASE REFER TO THE POLICY FOR ANY NOTICE AND REPORTING PROVISIONS AND DUTIES IN THE EVENT OF LOSS OR DAMAGE TO COVERED PROPERTY.

MPIL 1074 07 14 Page 1 of 1



MARKEL INSURANCE COMPANY

U.S. TREASURY DEPARTMENT'S OFFICE OF FOREIGN ASSETS CONTROL ("OFAC") ADVISORY NOTICE TO POLICYHOLDERS

No coverage is provided by this Policyholder Notice nor can it be construed to replace any provisions of your policy. You should read your policy and review your Declarations page for complete information on the coverages you are provided.

This Notice provides information concerning possible impact on your insurance coverage due to directives issued by OFAC. Please read this Notice carefully.

The Office of Foreign Assets Control (OFAC) administers and enforces sanctions policy, based on Presidential declarations of "national emergency". OFAC has identified and listed numerous:

- · Foreign agents;
- Front organizations;
- Terrorists;
- · Terrorist organizations; and
- Narcotics traffickers;

as "Specially Designated Nationals and Blocked Persons". This list can be located on the United States Treasury's web site – https://www.treasury.gov/ofac.

In accordance with OFAC regulations, if it is determined that you or any other insured, or any person or entity claiming the benefits of this insurance has violated U.S. sanctions law or is a Specially Designated National and Blocked Person, as identified by OFAC, this insurance will be considered a blocked or frozen contract and all provisions of this insurance are immediately subject to OFAC. When an insurance policy is considered to be such a blocked or frozen contract, no payments nor premium refunds may be made without authorization from OFAC. Other limitations on the premiums and payments also apply.

Markel Insurance Company



PROFESSIONAL LIABILITY INSURANCE DECLARATIONS

Claims Made and Reported Coverage: The coverage afforded by this policy is limited to liability for only those Claims that are first made against the Insured during the Policy Period or the Extended Reporting Period, if exercised, and reported to Markel Insurance Company during the Policy Period or the Extended Reporting Period, if exercised, or within 60 days after the expiration of the Policy Period or the Extended Reporting Period, if exercised.

Notice: This policy contains provisions that reduce the Limits of Liability stated in the policy by the costs of legal defense and permit legal defense costs to be applied against the deductible, unless the policy is amended by endorsement. Please read the policy carefully.

POLICY NUMBER: MEO1642-05 RENEWAL OF POLICY: MEO1642-04

NAMED INSURED: Permit Acquisition Company-One LLC

BUSINESS ADDRESS: 920 Garner Road Selma, NC 27576

POLICY PERIOD: From 11/22/2023 to 11/22/2024

12:01 A.M. Standard Time at address of Insured stated above.

IN RETURN FOR THE PAYMENT OF THE PREMIUM, AND SUBJECT TO ALL THE TERMS OF THIS POLICY, THE COMPANY AGREES WITH THE NAMED INSURED TO PROVIDE THE INSURANCE AS STATED IN THIS POLICY.

1. PROFESSIONAL SERVICES: soil science

2. LIMITS OF LIABILITY

Professional Liability Coverage

Α.	Each Claim:	\$2,000,000
В.	Policy Aggregate:	\$2,000,000

Additional Payments

A.	Contingent Bodily Injury And Property Damage	\$100,000
B.	Pollution	\$10,000
C.	Pre-Claim Assistance Expenses	\$20,000
D.	Sexual Abuse	\$10,000
E.	Third Party Discrimination	\$25,000

Supplementary Payments

Α.	Disciplinary Proceeding	\$25,000	per Polic	y Period
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В.	Loss Of Earnings And Expense Reimbursement	\$10,000
C.	Public Relations Expenses	\$5,000
D.	Subpoena And Record Request Assistance	\$5.000

Producer Number, Name and Mailing Address

98496

Wade Associates, LLC. - New Bern

PO Box 1209

Davidson, NC, 28036

MDST 1000 07 17 Page 1 of 2

3. DEDUCTIBLE

 A. Each Claim:
 \$1,000

 B. Aggregate:
 \$3,000

4. RETROACTIVE DATE: 11/22/2019

5. PREMIUM RATE: Flat PREMIUM BASE: Flat

6. PREMIUM FOR POLICY PERIOD

Minimum: \$560
Deposit: \$560
Adjusted Annual Premium: \$560

- 7. PREMIUM PERCENTAGE FOR EXTENDED REPORTING PERIOD: ADDITIONAL PERIOD:
- 8. FORMS AND ENDORSEMENTS ATTACHED AT POLICY INCEPTION:

See MDIL 1001 attached.

These declarations, together with the Coverage Form and any Endorsement(s), complete the above numbered policy.

Countersigned: 08/30/2023 (Date)	By: John K Clark
	Authorized Representative Signature

MDST 1000 07 17 Page 2 of 2