

Septic Case: SEP 2015-01467

Well Case: WEL

PIN 9733-50-6646

AUTHORIZATION FOR WASTEWATER SYSTEM CONSTRUCTION ///WELL CONSTRUCTION

ENVIRONMENTAL HEALTH SERVICES

CODES: 54 58

30 VALLEY STREET, ASHEVILLE, NC 28801

828-250-5016 (fax: 250-6161)

Property Owner:

Ryan & Monica LeBlanc

Property Location:

10 East Rolling Acres

Application Date:

11/24/15

Directions:

25/70 toward Marshall, left on Monticello, right on Rolling Acres, right at fork

Subdivision:

Phase/section:

Lot#

Well Design:

☐ New☐ Repair☐ Abandonment

Water Supply:

☐ Private Well☐ Spring☐ Shared Well☒ Public/CommunityExisting Wells: ☐ Yes ☒ No

System Design:

☒ New System☐ Repair☐ Revision

Multiple Unit Dwelling: No. of Units

No. Bedrooms/per unit

Residential: ☒ House☐ Mobile Home (☐ single ☐ double)

Bedrooms 3

Basement: ☐ Yes ☒ NoBasement Plumbing: ☐ Yes ☒ No

Commercial/Other: (Describe)

Design Specifications

Total Design Flow: 360

LTAR: 0.45

Soil Group: III

Pump System Required: ☒ Yes ☐ No

Trenches: Length: 320

ft No. of Trenches 4

Width: 18

in Spacing: 7.5

ft Depth: 18

in (lower sidewall) Stone Depth: — in

Distribution:

☐ Equal Gravity☒ Pressure Manifold☐ Serial☐ Dams/Step Downs

Tank Size: Septic 1900

Pump Tank 1000

(gallons)

(gallons)

Minimum Separation Distance to Well (includes system and repair area): 100

ft System Classification: PS

System Type:

☐ Prefabricated Panel Block☐ Conventional☒ Large Diameter Pipe☐ Chamber☐ Expanded Polystyrene Aggregate☐ Other

Conditions: (1) No grading, filling or other site disturbance in the indicated septic area. (2) Install drainfield on contour of land. (3) Divert gutters and other surface water away from septic system. (4) System is to be installed in accordance with the conditions of this permit and NC sewage rules. (5) Modifications to the indicated design must be approved in advance by the department. (6) Contractor is to contact office immediately if problems are encountered.

*Not to scale

* Pump system required, use pressure manifold

* Supply line must be $\geq 36"$ under spring or in ductile iron

* 10" Large

Diameter pipe

* Install catch basin and culvert to divert spring

250' from initial drainfield

Neighbors well

pound

culvert

catch basin

supply line

existing spring

drainage

45' Repair Area

An aerobic drip

20'

15'

15'

15'

15'

15'

15'

15'

15'

15'

15'

Improvement Permit Date of Issuance:

☒ This document shall be considered issuance of an Improvement Permit with all required information.

This document authorizes the property owner to construct a TLEF (10" LDP) ground Absorption Sewage Disposal System. The owner MAY CONSIDER installing other types of systems listed above. Changes or modifications from the indicated design may result in revocation of the Authorization to Construct. The installer of this system must have a copy of this document on site during all phases of the installation and final inspection.

Issued By:

Date: 12/10/15

Owner/agent:

Date: 12/18/15

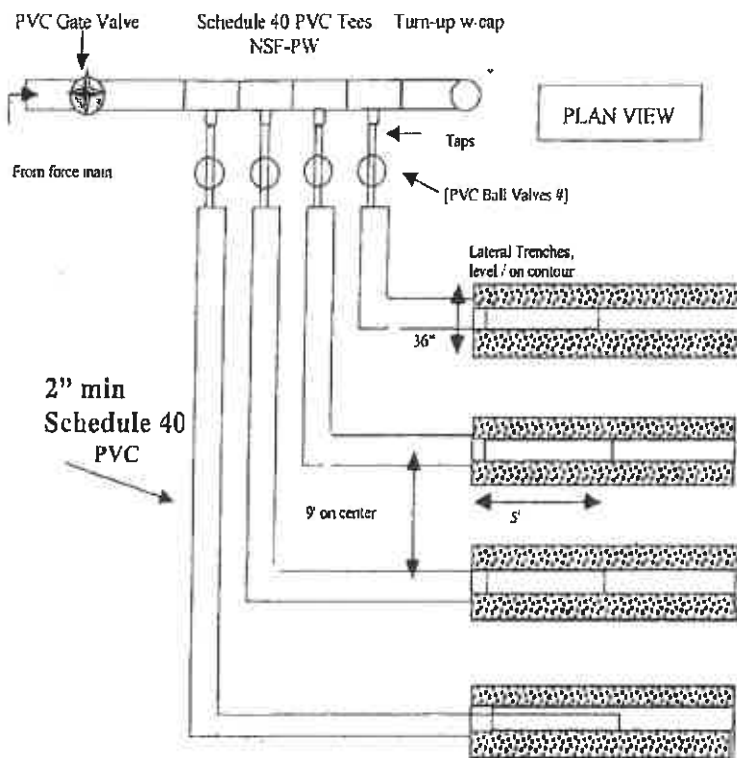
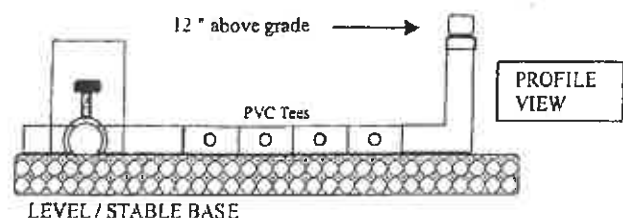
THIS CONSTRUCTION AUTHORIZATION IS VALID FOR 5 YEARS FROM THE DATE OF ISSUANCE

PENDER COUNTY ENVIRONMENTAL HEALTH MANIFOLD DESIGN SHEET

Address: 10 East Rolling Aves

Applicant: Reel Date: 12/11/15

CA: 2015-01467 PIN: 9733-50-6646 EHS: Dan



Manifold Design

Line #	Tap Top to Bottom	Tap Dia. In.	Tap Sch.	Tap Flow gpm	Line Length Ft.	Flow/Linear Ft.
1		1/2	40	7.1	80	0.34
2		1/2	40	7.1	80	0.34
3		1/2	40	7.1	80	0.34
4		1/2	40	7.1	80	0.34
5						
6						
7						
8						
9						
10						

Totals 28 320 1.36

Manifold sizing may need to be altered after installer layout. The installer must layout the system prior to the pre-construction conference

Manifold Size = 3 " Force Main Size = 2 " PVC

Dosing Volume = $\frac{320}{\text{Length of Drainfield}} \times 0.46 = \frac{147}{21} \text{ Gallons per Inch}^* = \frac{7}{1} \text{ " Drawdown}^*$

Total Dynamic Head = $\frac{\text{'}}{\text{Elevation Head}} + \frac{\text{'}}{\text{Friction Loss}} + \frac{\text{'}}{\text{Pressure Head}} = \text{' } \text{TDH}^* \quad \text{*To be determined at installation}$

Pump Requirement GPM @ ' Head

General Design Information

Pressure Head:	Flow per Tap					
	Flow Per Orifice					
Tap Size/Material	SCH 80	SCH 40 **	SCH 80	SCH 40 **	SCH 80	SCH 40 **
1/2"	5.5	7.1	6.7	8.7	7.7	10.1
3/4"	10.1	12.5	12.4	15.3	14.3	17.7

** When Schedule 40 taps are used, the ball valve must be increased by one size (1/2" Sch 40 tap → 3/4" valve
3/4" Sch 40 tap → 1" valve).

An approved* vault (open bottom) and lid extending 6" above grade is required for:

- any system not serving a single family dwelling.
- any drilled & tapped manifold. (taps exposed)
- any system between 600 GPD and 3000 GPD
- any manifold with more than 6 taps
- any off-site system

* Vaults and associated lids for manifolds and Manitees must be pre-

Manifold Size	Manifold Size / # Taps		
	Max No. Taps off one side (Reduce by 1/2 for tapping both sides)		
	1/2" taps	3/4" taps	1" taps
2" Manitee	4	2	
3" Manitee	9	5	3
4" Manifold	16	9	5
6" Manifold	40+	21	12

reasonable access without equipment or special tools. (75# - 150#)

Lightweight lids must be non-corrosive, secured or have a latching mechanism, and must support 150 lb live load. Pre-approval is required! A manifold consists of a Schedule 80 PVC barrel that is drilled and tapped to accept threaded nipples or adapters.

Other systems less than 1000 GPD may use a manitee that is buried on a level bed of gravel with rubberized sand. The manitee must be installed to finished grade. The manitee must be installed with a minimum of 12 inches of gravel above and below the manitee.