

# HALLOWEN & ASSOCIATES, INC.

SOIL & ENVIRONMENTAL SCIENTISTS

P. O. Box 400, 266 Old Coats Road  
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E-mail: halowen@intrstar.net

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October 4, 2000

Harnett County Health Department  
Environmental Health  
P.O. Box 9  
Lillington, NC 27546

Attn: Mr. Graham Byrd

Reference: Northport Subdivision – Lot 1

Dear Mr. Byrd,

A site visit was conducted at the above referenced property on September 27, 2000 to design a septic system for the initial system and the repair system. The site is located on the south side Old US 210 Highway, Harnett County, North Carolina. The initial system was designed with a low-pressure pipe system utilizing 480ft of drain line on 5ft centers. The initial septic system is loaded on a 0.15gpd/sqft application rate. A 12in trench depth is suggested with an 18in trench width. Lot 1's repair area is also utilizing a low-pressure pipe system to equally distribute wastewater to each drain line. The repair system is proposed with a pretreatment system. A 50% reduction is utilized in the drain lines in the repair area due to limited useable soil area.

Attached are the system layouts and the supporting information for the system designs. The supporting information is in a table form that has each component needed for low-pressure pipe systems. I trust that this is all the information that you may need at this time. If you have questions, you may contact us at your convenience.

Sincerely,



Brianna Roberts

# HALLOWEN & ASSOCIATES, INC.

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November 2, 2000

Harnett County Health Department  
Environmental Health  
P.O. Box 9  
Lillington, NC 27546

Attn: Mr. Graham Byrd

Reference: Northport Subdivision – Lot 1

Dear Mr. Byrd,

A site visit was conducted at the above referenced property on October 31, 2000 to meet with you to discuss the design of a proposed septic system for the initial system and the repair system. The site is located on the south side Old US 210 Highway, Harnett County, North Carolina. The initial system was designed with a low-pressure pipe system utilizing 480ft of drain line on 5ft centers. The initial septic system is loaded on a 0.15gpd/sqft application rate. A 12in trench depth is suggested with an 18in trench width. Lot 1's repair area is also utilizing a low-pressure pipe system to equally distribute wastewater to each drain line. The repair system is proposed with **Puroflow's Peat filter biosystem** to pretreat this area. A 50% reduction is utilized in the drain lines in the repair area due to limited useable soil area. A schematic of the trench has been included as well to indicate the trench width and depth and lateral line placement.

The supporting information has been sent prior to this letter, please include this information in the design packet. I trust that this is all the information that you may need at this time. If you have questions, you may contact us at your convenience.

Sincerely,



Brianna Roberts

# Typical LPP Trench and Manifold Details

North part  
Lot 1

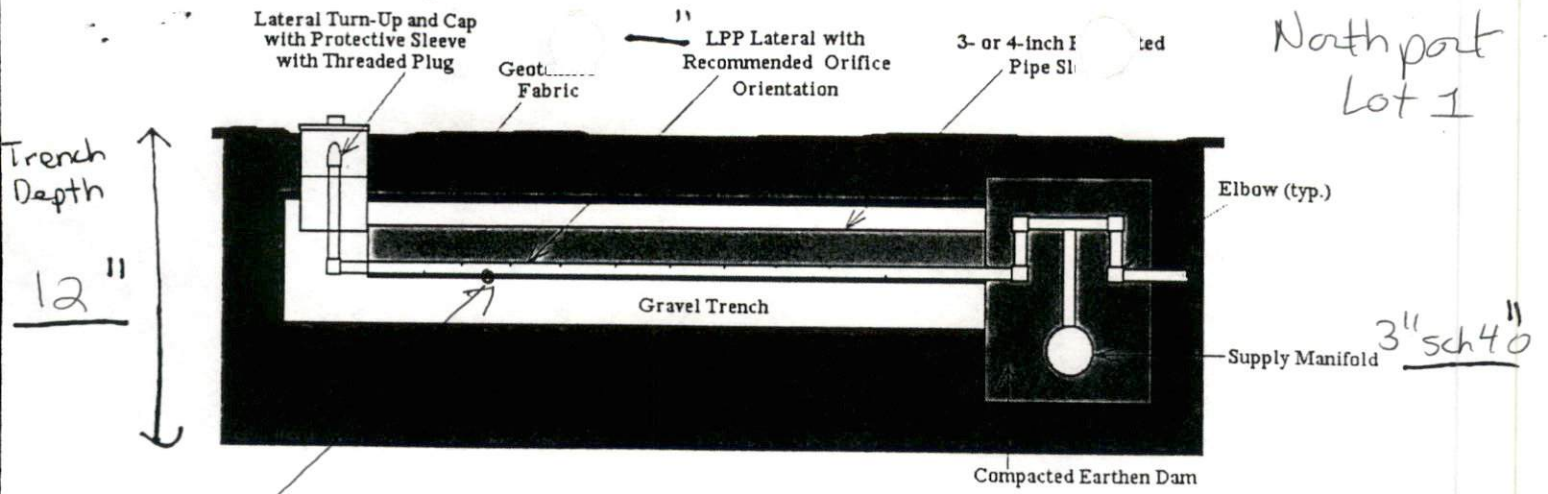


Figure 1: Manifold, Lateral & Trench

Downward Holes  
 $\frac{1}{3} + \frac{2}{3}$  example: 9 holes total - #3 & 6 would be drilled down, all others drilled up.

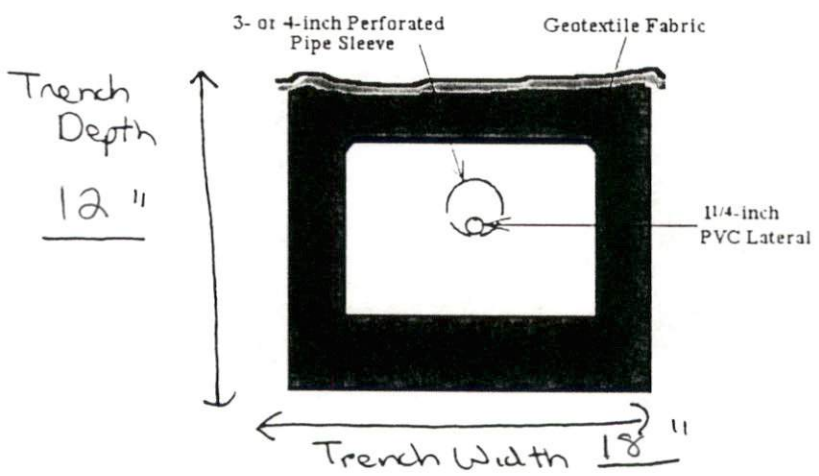


Figure 2: Cross Section of Trench Detail

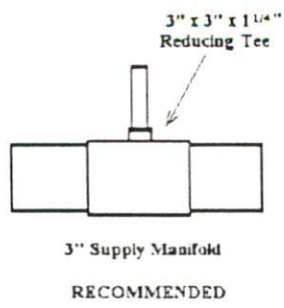


Figure 3: Manifold - Side Profile

# Low Pressure Pipe Materials List

Lot 1 Northport Subdivision

Supply Line 51 ft., 2 in diameter Sch 40 pvc (add extra to connect pump to supply In)

Manifold: 25 ft., 3 in diameter Sch 40 pvc

Lateral Lines: 480 total ft., 1 1/4 in diameter Sch 40 pvc (add extra for turn-ups)

Corrugated Pipe: 480 ft., 3 to 4 in diameter with perforated holes

Gate Valves: 2, 3 in

Clean-outs with Caps: 2, 3 in

Screw Caps and Adapters: 5, 1 1/4 in. diameter Sch 40 pvc for turn-up sleeves

Reducing Tees: 5, 3 in to 1 1/4 in Sch 40 pvc

Washed Gravel for trenches: Gravel Size more than or equal to 1 in

Value boxes = 7

