Southeastern Soil & Environmental Associates, Inc.

P.O. Box 9321 Favetteville, NC 28311 Phone/Fax (910) 822-4540

December 15, 2005

Mr. Joe West Harnett County Health Dept. PO Box 09 Lillington, NC 27546

Re: Hydraulic conductivity (Ksat) analysis for pretreatment, Lot 75, Woodshire Subdivision, Harnett County, North Carolina

Dear Mr. West.

An evaluation of soil and hydraulic conductivity (Ksat) has been conducted on the aforementioned property. The purpose of the investigation was to determine soil absorption rates for a proposed pretreatment/low pressure pipe (LPP) septic system to serve as a repair area for a 3 bedroom single family residence. All ratings and determinations were made in accordance with "Laws and Rules for Sanitary Sewage Collection, Treatment, and Disposal, 15A NCAC 18A .1900".

Two compact constant head permeameter (CCHP) measurements were made to determine a Ksat rate at depths of 18 and 22 inches. The two Ksat measurement in the Bt horizon averaged 1.06 cm/hr. This equates to 6.22 gpd/sq.ft. Using 10% of this average (typical for systems without pretreatment), Ksat measurement equates to 0.622 gpd/sq.ft. (1/2 of which is 0.31 for LPP)

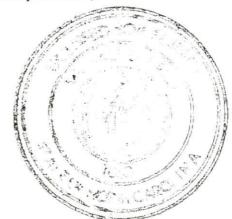
Using pretreatment, we are proposing a 0.225 gpd/sq. ft. which is less than 10 percent of the measured rate. Therefore, by using pretreatment, the LTAR can be increased to 0.225 and be expected to function hydraulically.

Sincerely,

Mike Eaker

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President



SOIL/SITE EVALUATION . SOIL PHYSICAL ANALYSIS . WETLANDS MAPPING . LAND USE/SUBDIVISION PLANNING GROUNDWATER DRAINAGE/MOUNDING . SURFACE/SUBSURFACE WASTE TREATMENT SYSTEMS, EVALUATION & DESIGN

SOUTHEASTERN SOIL & E	ENVIRONMENTAL ASSOC.	, INC.
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