

Southeastern Soil & Environmental Associates, Inc.

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

April 6, 2004

Mr. Joe West
Harnett County Health Department
PO Box 09
Lillington, N.C. 27546

Re: Hydraulic conductivity (Ksat) analysis for pretreatment, Lot 46, Highland Forest
Subdivision, Harnett County, North Carolina

Dear Mr. West,

An evaluation of soil and hydraulic conductivity (Ksat) has been conducted, at your request, on the aforementioned property. The purpose of the investigation was to determine if soils were acceptable for an increased long term acceptance rate (LTAR) of up to 0.9 gpd/sq. ft. [based on hydraulic conductivity measurements (and pretreatment)] for a proposed repair system (LPP) to serve 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 27 to 36 inches. The lowest Ksat measurement in the Bt horizon was 5.60 cm/hr. This equates to 32.8 gpd/sq.ft. Using 10% of the lowest Ksat measurement equates to 3.28 gpd/sq.ft.

Therefore, based on these measured rates, an increased LTAR of 0.90 gpd/sq.ft. should allow the system to function properly.

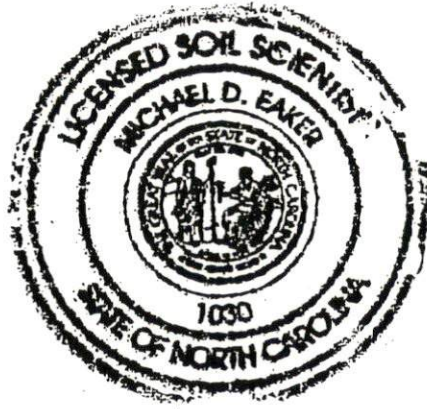
This report, of course, does not guarantee or represent approval or issuance of permit as issued by the Harnett County Health Department. Neither does this report guarantee that

any proposed system will function for any specific length of time. This report represents my opinion as a licensed soil scientist. Permits will only be granted if health department personnel concur with the findings of this report and space permits these installations.

Sincerely,



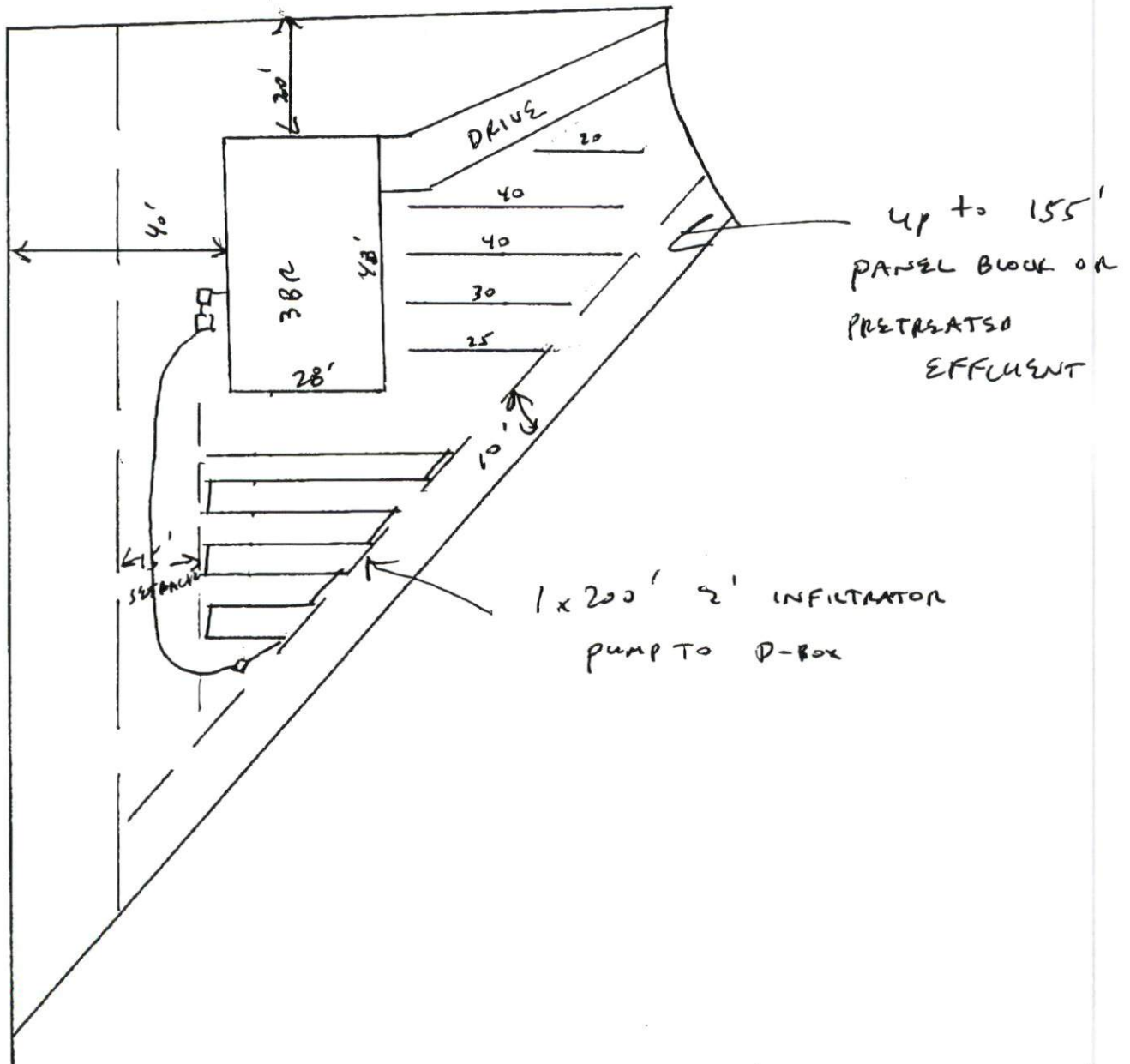
Mike Eaker
President



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Lot 46
Highland Forest



1" = 30'