

November 4, 2021

Full-Service USA
818 NE 8th Street
Hallandale Beach, FL 33009

Attention: Ms. Debora Cusnir

Re: Report of Exfiltration Study
New Multi Family Residence
344 NW 6th St
Pompano Beach, FL
Arco Project No. B-2021.02P

Dear Ms. Cusnir,

As requested, Arco Engineering Consultants *LLC.* (*ARCO*) has completed a Constant Head Percolation Test in accordance with the South Florida Water Management District (SFWMD) procedures.

Drainage characteristics of the upper 10 feet of the stratigraphic profile was evaluated with two borehole permeability tests conducted in a borehole previously drilled to a depth of 10 feet below existing grade. The test was done at the location indicated in the attached Percolation Test Result Sheet.

The field tests performed for this study indicated an average hydraulic conductivity of **1.70 10^{-4}** c.f.s per square foot (of seepage area) per foot (of head). This translates to a permeability range of roughly **14.7** feet per day (per foot of head).

The hydraulic conductivity value discussed above is typically used assuming constant head and gradient conditions. The percolation capacity of the soils should be evaluated in view of the potentially diminishing head as a result of groundwater mounding during and following a rainfall. The analysis method would include a three-dimensional groundwater flow model (MODRET), with input consisting of pertinent soil and groundwater parameters obtained from the test data.

DRC

PZ21-12000047

01/03/2024


LIMITATIONS OF STUDY

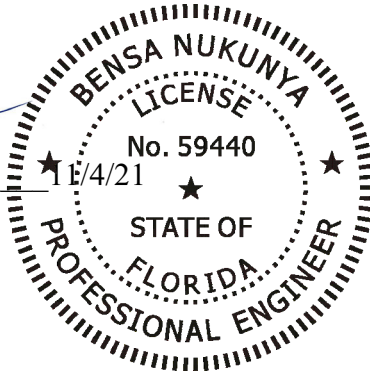
The soils engineer warrants that the findings, recommendations, specifications, or professional advice contained herein, have been promulgated after being prepared in accordance with the generally accepted professional engineering practice in the field of foundation engineering, soil mechanics and engineering geology. No other warranties are implied or expressed.

Arco appreciates the opportunity to be of service. If we may answer any additional questions or be of further service, please call.

Sincerely,

Arco Engineering Consultants, LLC


Bensa Nukunya P.E
Fl. Reg. No 59440



Attachments:

1: Percolation test log

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ARCO

HYDRAULIC CONDUCTIVITY/ BOREHOLE PERMEABILITY TEST

Date: November 1, 2021

Project # M-2021.02Perc

Address: New Multi Family Residence
344 NW 6th St
Pompano Beach, FL

Test No.	Location	Flow (gpm)	Flow (CFS)	Hole Diameter (Inches)	Hole Depth (Feet)	Depth To Watertable (Feet)	Hydraulic Conductivity (CFS/ft**2-ft)	Hydraulic Conductivity (ft/day-ft)
P-1	Center North Side Property	4.6	1.02E-02	6	10.0	5.5	1.61E-04	13.9
P-2	Center of the Property	5.0	1.11E-02	6	10.0	5.3	1.79E-04	15.5

Notes: 1. Test conducted in accordance with SFWMD's Usual Open-Hole Constant Head procedures.

DRC

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