



Central Carolina Soil Consulting, PLLC
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September 19, 2019

Harnett County Staff
Harnett County Environmental Health Department
307 W Cornelius Harnett Blvd, Lillington, NC 27546
RE: Wastewater Daily Flow Calculations
Lot 62 Mason Point Subdivision
99 Rawls Meadow Ln, Fuquay-Varina, Harnett County, North Carolina
Project #: 2031

Dear Harnett County Staff:

Central Carolina Soil Consulting (CCSC) in conjunction with Bateman Civil Survey Company are proposing wastewater daily flow calculations for a single-family home located at Lot 62 Mason Point Subdivision pursuant to session law 2014-120 and 2013-413. The proposed home will have **5** bedrooms and under the current flow calculations provided in the state rules would have a daily flow of **600** gallons per day. That would be based on 120 gallons per bedroom.

Household flow rates from the 15 NCAC 18A section of the state rules relied on fixture flow rates from 1982, and calculated the flows for common fixtures to established average flows for the purpose of calculating household daily flows and septic system based on those flows. The data for the historic fixture flows was taken from the EPA 2002 Onsite Wastewater Treatment Systems Manual.

The attached spreadsheet contains the flow reducing fixtures for Lot 62 Mason Point Subdivision. The table includes flow rates for the flow reducing fixtures as well as flow rates from the state rules and the percentage of water savings. On average the proposed fixtures provide a 39% savings.

We are requesting a reduction of 20% for the use of low flow fixtures. This will provide an adjusted daily flow of 96 gallons per bedroom per day and a total flow of **480** gallons per day for the proposed 5-bedroom house. Based on the use of low flow fixtures the proposed drainfield shall be sized for 480 gallons per day. Septic and/or Pump tanks shall be 1250 gallons as required for a typical 5-bedroom house.

Should you have any questions or comments please contact Matt Burdette at 919-422-2827.

Sincerely,

CENTRAL CAROLINA SOIL CONSULTING PLLC

BATEMAN CIVIL SURVEY COMPANY



Matt Burdette
Environmental Specialist



Tom Speight, P.E.
(seal)



Attachments