Abstract: The EPA has identified porous concrete as a best management practice for stormwater treatment. Porous concrete has many advantages over traditional stormwater treatment methods allowing for environmentally and economically sustainable water treatment. Long-term performance of porous concrete is primarily dependent on two properties, compressive strength and permeability. Previous researchers have shown that results of these two parameters meet design criteria when created in the laboratory but do not when prepared in the field. As a result there is a need to better simulate field conditions in the laboratory for compressive strength and permeability. This research proposes to close that knowledge gap by two methods; (1) determine the effect of height to diameter ratio on the compressive strength of concrete and (2) to determine the relation between field methods for determining infiltration rate to laboratory methods for determining hydraulic conductivity.