

PERCOLATION TEST REPORT FOR TREE HOUSE, CLOY
LANE, OVERTON ON DEE, WREXHAM LL13 0LU
Tuesday 15th./Wednesday 16th. November 2022.

Drainage contractor Ed Jones was engaged to carry out the test.

Two pits were dug as per regulation depths at the soakaway location shown on the site drawings submitted. After 24 hours the test pit areas were still one half and one third full respectively.

Result: Test failed. Reason: Heavy clay subsoil.

SuDs STRATEGY

We now propose to install a controlled Storm Attenuation System featuring a tank sunk in the area where the soakaway is shown on the plans with sufficient capacity and orifice size to ensure that the system discharges at the desired rate during a storm event.

CALCULATIONS

Roof area of 80 square metres with a 65 mm head of rainwater (1 in 100 year occurrence) will produce a discharge of 5,200 litres .

A Tank with the capacity of at least 6,000 litres will be installed with an orifice of 5mm which will discharge a 75mm head at a rate of 0.03 litres per second.

In addition rain harvesting systems will be incorporated to connect to the domestic toilet, clothes and dish washing water use. This will further reduce the discharge of stormwater and have the beneficial side effect of reducing mains water consumption by up to a half.

