



Section

AN Richards Proposed Workshop and MOT Centre, Whitehurst, Chirk, Wrexham, LL14 5AN
Tests caried out using NRW test methodology by DJ Construction Shropshire Ltd 4th July 2023

Foul Drainage Soakaway Caculation sheet

Percolation Test

Test	Pit 1	Pit2	Pit3	Pit 4
1	3780	4080	3420	3540
2	4140	4560	3900	4080
3	4500	4860	4320	4440
Average	4140	4500	3880	4020

Av vP secs = 4135 Divided by 150 = 27.6 secs/mm

Drainage Field Area
 $P \times Vp \times 0.20 = A$
Where:-
P = Person Equivalents served by the re treatment plant
Vp from percolation test, time secs per mm fall
A = Area m2
 $6 \times 27.6 \times 0.20 = 33.08 \text{ m}^2$

For a trench width of 0.8 m the length required is A/TW (trench width)
 $33.08/0.8 = 41.35 \text{ m}$ Overall Length

Pipe spacing minimum 2m undisturbed ground
3 pipes of 12.5m long connected at each end to form a loop
End Connection 3m + 3m x 2= 12 m
3 pipes at 10m = 30
42 Total Pipework

All pipes perforated 110mm laid to a fall of less than 1 in 100.
Bedded in 350mm deep trench with 30-50mm granular material.
50mm of depth covering the discharge pipe and covered with a non woven geotextile and selected soils
All works to be carried out to the Standards set in Approved Document H Drainage and Waste Disposal



see also drawing 4A

scale 1 in 50 at A2

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HGV Workshop and MOT Centre