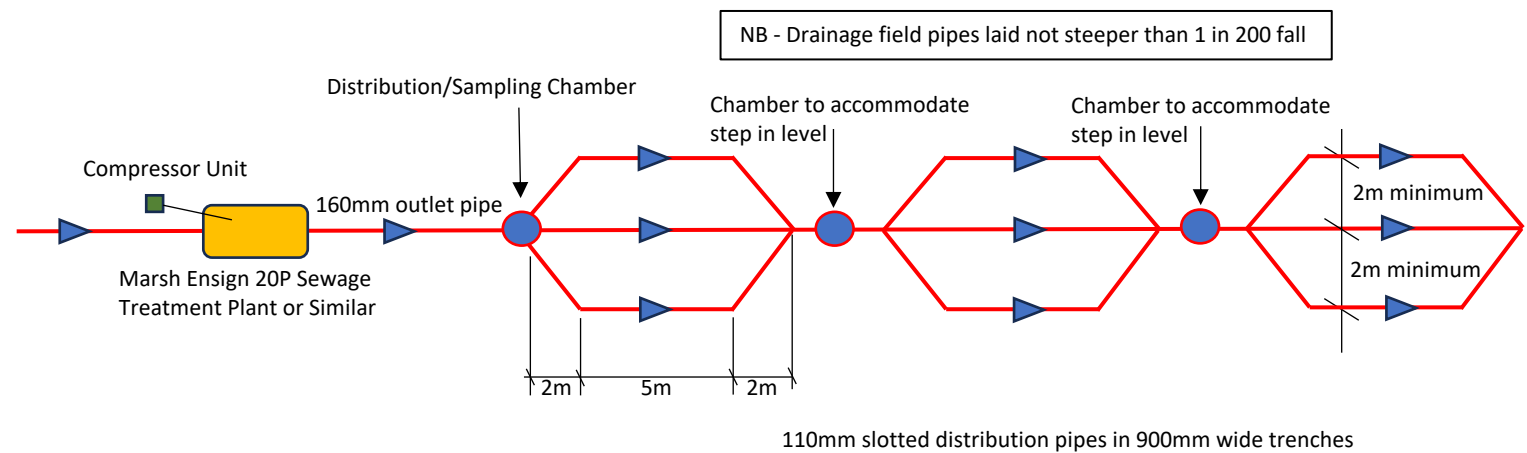
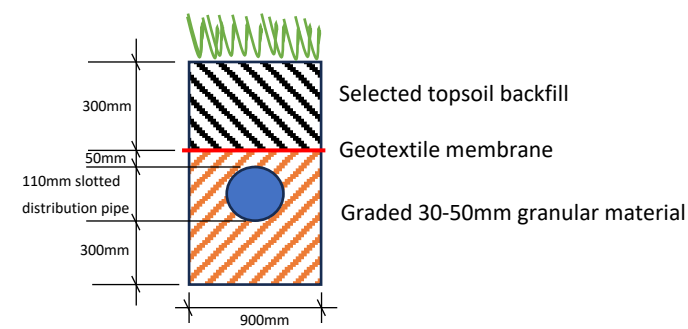


Sewage Treatment Plant and Drainage Field Layout



Section Through Trenches



Sizing of Drainage Field

Percolation test as per simple method in Approved Document H of The Building Regulations

Average time to drain from 75% to 25% over 3 tests was 3783 seconds or 25.22 seconds per mm (Vp)

Properties served are 2 No. 4 bed houses and 1 No. 3 bed house. From Flows & Loads (British Water) 4 bed house is 6P and 3 bed house is 5P

Total P = ((2x6)+(1x5))x0.9 = 15.3P - say 16P

Use 20P tank as 16P would be at maximum capacity

Area drainage field = Vp x P x 0.2 (sewage treatment plant factor is 0.2)

A = 25x22x16x0.2 = 80.704 m²

For a 900mm wide trench, length of trench = 80.704/0.9 = 89.67m

Use 3 sections of drainage pipes to dimensions indicated with steps between to accommodate fall in existing field and maintain 1 in 200 fall. Existing levels may need to be adjusted locally to accommodate levels required for drainage field. Number of sections used can be increased if levels require

Writtenstone Farm, Longridge, PR3 2ZL

Proposed Sewage Treatment Plant and Drainage Field To Farmhouse and Barn Conversions

Scale
Not to scale – print @ A3 min

Drawn
PAS

Checked
PAS

Approved
PAS

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Rev
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