

Rainwater Drainage

Proposed Cottages:-

$$\text{Drained Roof Area} = 172 \text{ sq.m.}$$

$$\text{modification factor (Table 1 - Approved Document H)} \\ = 1.4$$

$$\text{Max Run off} = 75 \text{ mm/hr.}$$

$$\therefore \text{Capacity of soakaways required} \\ = 172 \times 1.4 \times 0.075 = 18.37 \text{ cu.m.}$$

$\therefore$ Provide 3 no $1.8 \text{ m} \times 1.8 \times 1.8 \text{ m}$ hollow crate soakaways

$$\text{Volume provided} = 3 \times 1.8^3 = 17.5 \text{ cu.m.} \therefore \text{OK.}$$

(Two soakaways will have intercepting rainwater harvesting tanks).

Proposed American Barn.

$$\text{Drained Roof Area} = 242 \text{ sq.m.}$$

$$\text{Modification Factor (Table 1 - Approved Document H)} \\ = 1.15$$

Capacity of soakaways required

$$= 242 \times 1.15 \times 0.075 = 20.87 \text{ m}^3$$

$\therefore$ Provide 3 no $2.0 \times 2.0 \times 1.8 \text{ m}$ hollow crate soakaways.

$$\text{Volume Provided} = 3 \times 2.0 \times 2.0 \times 1.8 = 21.6 \text{ cu.m} \therefore \text{OK.}$$