


<b>Job No</b> 21/074/P1	<b>Date</b> Feb 24	<b>For</b> Lucy Hicks	 <b>GRIFFITHS &amp; TAYLOR</b> <b>STRUCTURAL ENGINEERS</b> 7 Cobbs Yard, St Nicholas Street, Diss, Norfolk, Ip22 4LB Tel: 01379 772902 mail@griffithsandtaylor.co.uk
<b>Subject</b> Gorrell Hall Farm, Trunch. New Dwellings Structural Calculations.			

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Calculations for:

**Plot 1 Soakaway**

1    0

I-O=S  
I=A x R  
O=a(s50) x f x D

Rainfall ratio                    0.40  
M5-60                                20.00 mm  
M5                                        7.46  
Z2                                        1.21

**2. Soakaway Design.**

Total roof area                    103.17 sqm  
No of down pipes                    5.00  
No soakaways                        1.00  
Inflow S A                            103.17 sqm  
Soakaway depth                    1.00 m (effective)  
Soakaway width                    1.50 m  
a(s50) =                                1.50 +                    1.00 x L

f                                        0.0003000 m/sec                    Estimation based on granular subsoil present (Client data provided)  
Sand/Gravel

Storm Duration	Z1	M5-D	Z2	M10-D	Inflow cu.m	Granular		Crate	x L cu.m
						Storage Vo	% free volu		
10.00	0.53	10.50	1.22	12.81	1.32	0.45	30.00	1.35	%
15.00	0.64	12.70	1.23	15.62	1.61			90.00	%
30.00	0.81	16.10	1.24	19.96	2.06				
60.00	1.00	20.00	1.24	24.80	2.56				
120.00	1.21	24.10	1.24	29.88	3.08				
240.00	1.45	28.90	1.22	35.26	3.64				
360.00	1.60	31.90	1.22	38.92	4.02				
600.00	1.77	35.40	1.21	42.66	4.40				
1440.00	2.22	44.40	1.18	52.39	5.41				
					Max L			1.68	0.74

**Soakaway options**

Granular fill                        1.70 m long x                    1.50 m wide x                    1.00 m deep (effective)  
Storm Crates                        1.00 m long x                    1.50 m wide x                    1.00 m deep (effective)  
Total No. of crates                    7.50 No.                    0.50 m x                    0.40 m                    1.00 m

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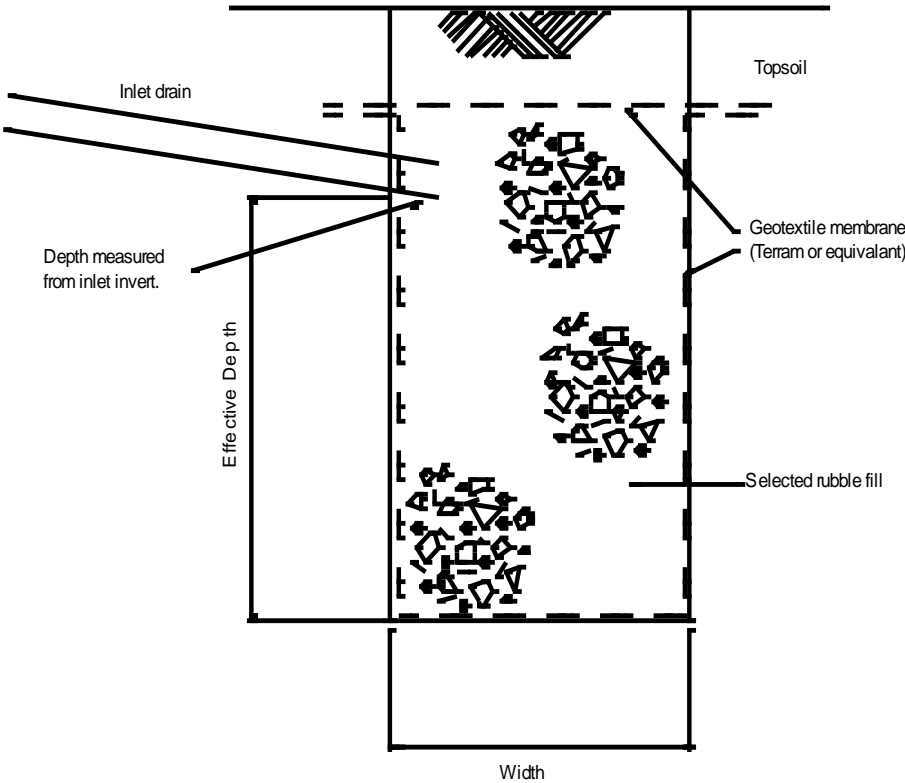
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**3. Soakaway Detail.**

Provide            1 No            soakaways as dimensioned above for building.



Section Through Granular Fill Soakaway  
(Storm Crate Arrangement Similar).