



SOAKAWAY TESTING @

**Meredith Barn
Meredith Lane
Tibberton
Gloucestershire
GL2 8DZ**

All in accordance with BRE DG365

Site Location

The site is located on the east side of Meredith Lane, Tibberton, at the end of the lane, and consists of a redundant barn with surrounding grassland. The building currently discharge's storm water onto the ground, with no positive drainage system.

Geology

The site lies within soilscape 8, and generally comprises of a surface finish of approx' 300mm of topsoil on a blue/red, marle/clay mix.

Testing

Five trial pit's were excavated at different depths, by mechanical excavator on 19th September 2023, and were tested in accordance with BRE DG365 (2016). The holes were filled to a depth of 400mm with a single discharge of water from an IBF, and the time to drop in level was checked regularly.

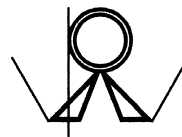
Soakaway Test Results

The water levels dropped approx' 40mm to 80mm over a 4 hour period at which point the tests were abandoned, the soakaway test results are appended

Conclusions

The results indicate that the subsoil encountered is of low-nil permeability, and is not suitable for soakaway drainage. It is, therefore, recommended that the storm-water from the converted building discharges to the local drainage network.

SOAKAWAY TEST



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LAND & BUILDING SURVEYS
INFRASTRUCTURE DESIGN & SETTING OUT

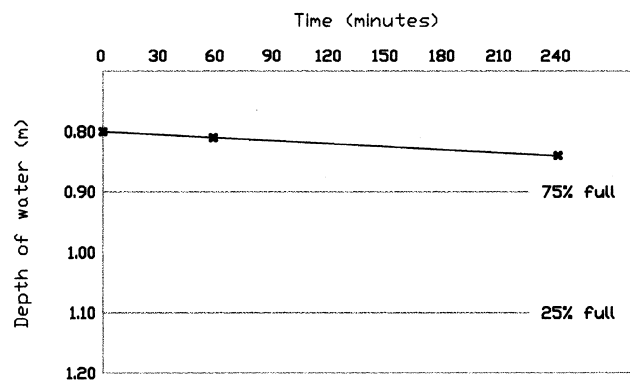
SITE :- MEREDITH BARN, MEREDITH LANE
TIBBERTON, GLOS, GL2 8DZ
CLIENT :- PAUL BAKER
PROJECT NO :- 23-08-02
DATE :- 19/09/23
TRIAL PIT NO :- TP-01

TESTS CARRIED OUT IN ACCORDANCE WITH BRE DG365 (2016)

TEST 1

LENGTH 0.90m
BREADTH 0.30m
DEPTH 1.20m
WATER LEVEL dry
FILL LEVEL 0.80m
75% Eff Depth 0.90m
25% Eff Depth 1.10m
Vp 75-25 0.054m³
as50 0.75m²
tp 75-25

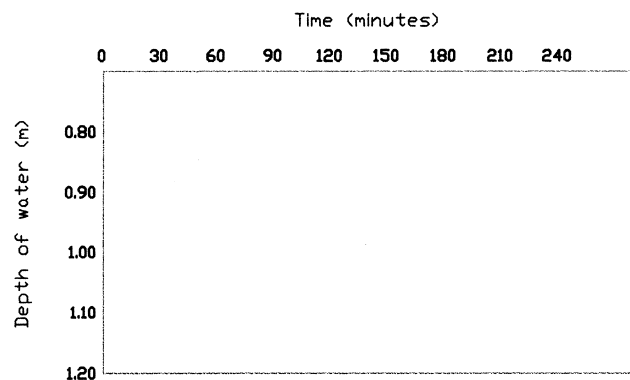
soil infiltration rate
INSUFFICIENT FALL TO CALCULATE



TEST 2

LENGTH
BREADTH
DEPTH
WATER LEVEL
FILL LEVEL
75% Eff Depth
25% Eff Depth
Vp 75-25
as50
tp 75-25

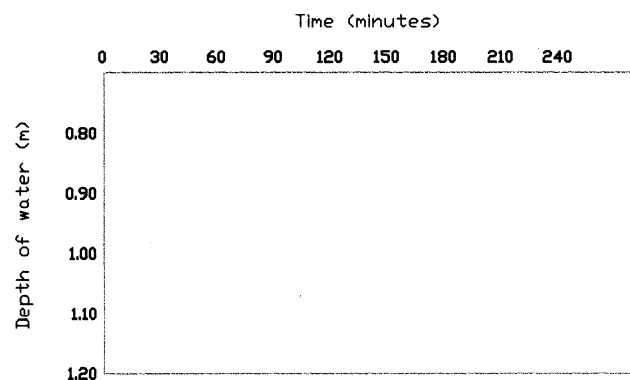
soil infiltration rate



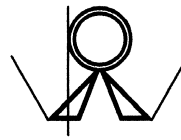
TEST 3

LENGTH
BREADTH
DEPTH
WATER LEVEL
FILL LEVEL
75% Eff Depth
25% Eff Depth
Vp 75-25
as50
tp 75-25

soil infiltration rate



SOAKAWAY TEST



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LAND & BUILDING SURVEYS
INFRASTRUCTURE DESIGN & SETTING OUT

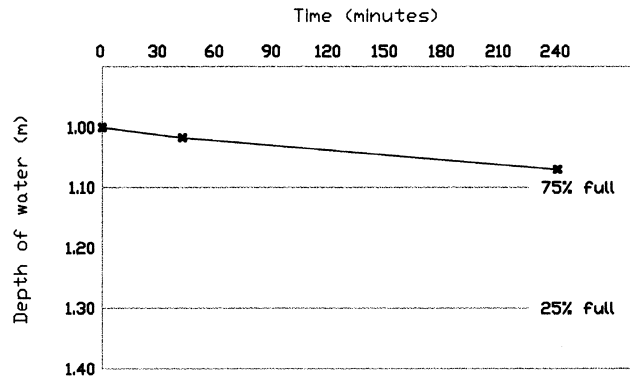
SITE :- MEREDITH BARN, MEREDITH LANE
TIBBERTON, GLOS, GL2 8DZ
CLIENT :- PAUL BAKER
PROJECT NO :- 23-08-02
DATE :- 19/09/23
TRIAL PIT NO :- TP-02

TESTS CARRIED OUT IN ACCORDANCE WITH BRE DG365 (2016)

TEST 1

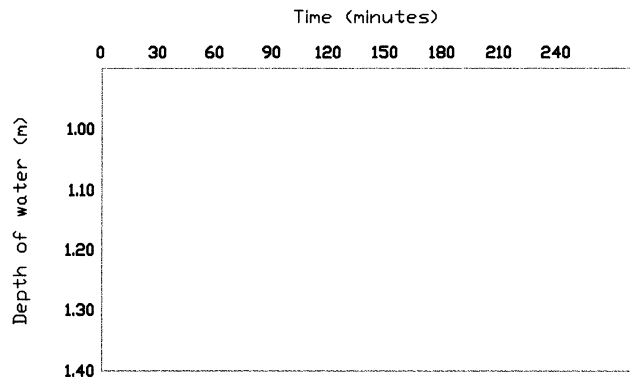
LENGTH 0.90m
BREADTH 0.30m
DEPTH 1.40m
WATER LEVEL dry
FILL LEVEL 1.00m
75% Eff Depth 1.10m
25% Eff Depth 1.30m
Vp 75-25 0.054m³
as50 0.75m²
tp 75-25

soil infiltration rate
INSUFFICIENT FALL TO CALCULATE



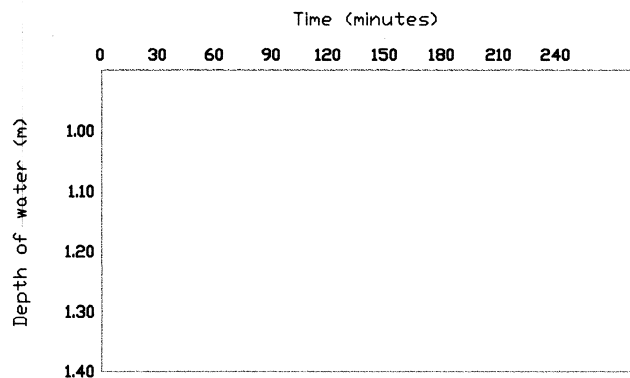
TEST 2

LENGTH
BREADTH
DEPTH
WATER LEVEL
FILL LEVEL
75% Eff Depth
25% Eff Depth
Vp 75-25
as50
tp 75-25
soil infiltration rate

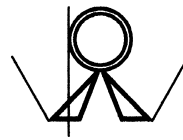


TEST 3

LENGTH
BREADTH
DEPTH
WATER LEVEL
FILL LEVEL
75% Eff Depth
25% Eff Depth
Vp 75-25
as50
tp 75-25
soil infiltration rate



SOAKAWAY TEST



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LAND & BUILDING SURVEYS
INFRASTRUCTURE DESIGN & SETTING OUT

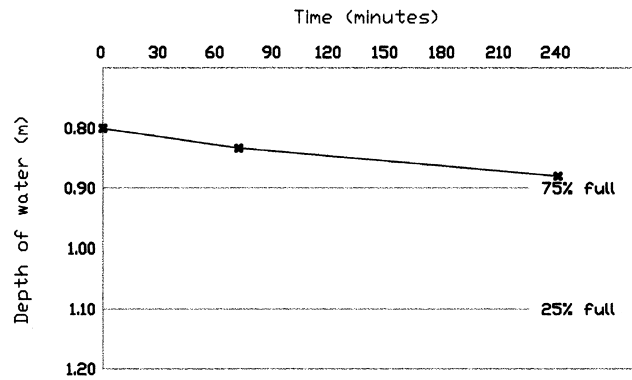
SITE :- MEREDITH BARN, MEREDITH LANE
TIBBERTON, GLOS, GL2 8DZ
CLIENT :- PAUL BAKER
PROJECT NO :- 23-08-02
DATE :- 19/09/23
TRIAL PIT NO :- TP-03

TESTS CARRIED OUT IN ACCORDANCE WITH BRE DG365 (2016)

TEST 1

LENGTH 0.90m
BREADTH 0.30m
DEPTH 1.20m
WATER LEVEL dry
FILL LEVEL 0.80m
75% Eff Depth 0.90m
25% Eff Depth 1.10m
Vp 75-25 0.054m³
as50 0.75m²
tp 75-25

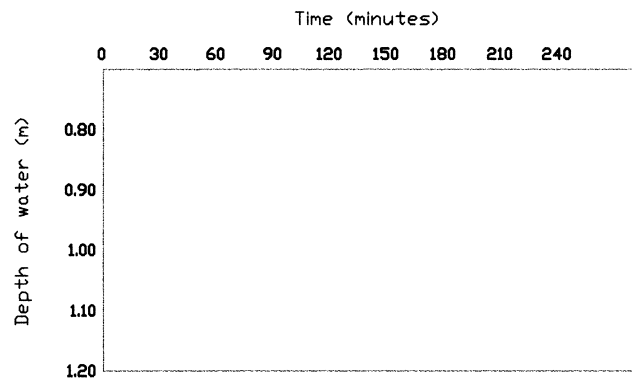
soil infiltration rate
INSUFFICIENT FALL TO CALCULATE



TEST 2

LENGTH
BREADTH
DEPTH
WATER LEVEL
FILL LEVEL
75% Eff Depth
25% Eff Depth
Vp 75-25
as50
tp 75-25

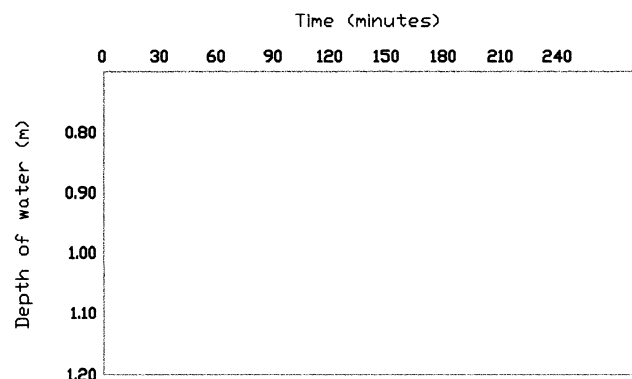
soil infiltration rate



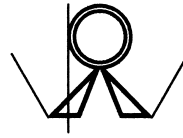
TEST 3

LENGTH
BREADTH
DEPTH
WATER LEVEL
FILL LEVEL
75% Eff Depth
25% Eff Depth
Vp 75-25
as50
tp 75-25

soil infiltration rate



SOAKAWAY TEST



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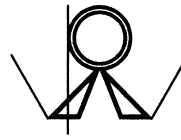
LAND & BUILDING SURVEYS
INFRASTRUCTURE DESIGN & SETTING OUT

SITE :- MEREDITH BARN, MEREDITH LANE
TIBBERTON, GLOS, GL2 8DZ
CLIENT :- PAUL BAKER
PROJECT NO :- 23-08-02
DATE :- 19/09/23
TRIAL PIT NO :- TP-04

TESTS CARRIED OUT IN ACCORDANCE WITH BRE DG365 (2016)

<p>TEST 1</p> <p>LENGTH 0.90m BREADTH 0.30m DEPTH 1.50m WATER LEVEL dry FILL LEVEL 1.10m 75% Eff Depth 1.20m 25% Eff Depth 1.40m Vp 75-25 0.054m³ as50 0.75m² tp 75-25 soil infiltration rate INSUFFICIENT FALL TO CALCULATE</p>	<p>Time (minutes)</p> <p>Depth of water (m)</p> <p>75% full</p> <p>25% full</p>
<p>TEST 2</p> <p>LENGTH BREADTH DEPTH WATER LEVEL FILL LEVEL 75% Eff Depth 25% Eff Depth Vp 75-25 as50 tp 75-25 soil infiltration rate</p>	<p>Time (minutes)</p> <p>Depth of water (m)</p>
<p>TEST 3</p> <p>LENGTH BREADTH DEPTH WATER LEVEL FILL LEVEL 75% Eff Depth 25% Eff Depth Vp 75-25 as50 tp 75-25 soil infiltration rate</p>	<p>Time (minutes)</p> <p>Depth of water (m)</p>

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LAND & BUILDING SURVEYS
INFRASTRUCTURE DESIGN & SETTING OUT

SITE :- MEREDITH BARN, MEREDITH LANE
TIBBERTON, GLOS, GL2 8DZ
CLIENT :- PAUL BAKER
PROJECT NO :- 23-08-02
DATE :- 19/09/23
TRIAL PIT NO :- TP-05

TESTS CARRIED OUT IN ACCORDANCE WITH BRE DG365 (2016)

<p>TEST 1</p> <p>LENGTH 0.90m BREADTH 0.30m DEPTH 1.70m WATER LEVEL dry FILL LEVEL 1.30m 75% Eff Depth 1.40m 25% Eff Depth 1.60m Vp 75-25 0.054m³ as50 0.75m² tp 75-25 soil infiltration rate INSUFFICIENT FALL TO CALCULATE</p>	<table border="1"> <caption>Data for Test 1 Graph</caption> <thead> <tr> <th>Time (minutes)</th> <th>Depth of water (m)</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>1.30</td> </tr> <tr> <td>60</td> <td>1.32</td> </tr> <tr> <td>240</td> <td>1.35</td> </tr> </tbody> </table>	Time (minutes)	Depth of water (m)	0	1.30	60	1.32	240	1.35
Time (minutes)	Depth of water (m)								
0	1.30								
60	1.32								
240	1.35								
<p>TEST 2</p> <p>LENGTH BREADTH DEPTH WATER LEVEL FILL LEVEL 75% Eff Depth 25% Eff Depth Vp 75-25 as50 tp 75-25 soil infiltration rate</p>									
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