Jaxx Engineering Consultancy

The Old Rectory (17), Church Road
Bowers Gifford, Essex, SS13 2HG
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Factual Report

Client : WSPA (Peter Brownjohn)

Site Name : Land South Of Sandhill, Thatcham

Client Reference : 1265

Laboratory Reference : JEC3544

Date of Completion : 21-Aug

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Content Summary

Lab Reference : JEC3544
Client Reference : 1265
For the attention of : Peter Brownjohn
This report comprises of the following : 1 Site Plan
3 Material Log
2 Test Results
1 Limitations

Notes :

General

Please refer to report summary notes for details pertaining to methods undertaken and their subsequent accreditations

Samples were supplied by Customer

All tests performed in-house unless otherwise stated

Deviant Samples

Samples were received in suitable containers	Yes
A date and time of sampling was provided	Yes
Arrived damage/denaturing free	Yes

Do not scale from this drawing, except for planning purposes.
Any discrepancies are to be reported to WS Planning & Architecture.
Refer to Structural Engineers details for structural design criteria.
This drawing remains the copyright of WS Planning & Architecture.

Rev	Date	Description
E	08.05.24	Access Road Changes
D	31.01.24	Access Road Changes
C	19.12.23	Minor amendments
B	30.11.23	Landscape amendments
A	25.08.23	Amended Entrance

WS PLANNING & ARCHITECTURE

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www.wspa.co.uk
admin@wspa.co.uk

Date
August 2023

Drawn By
NWM

Scale
1:1000@A3

Checked
BW

Client
Randolph Black

Project
Sandhill, Hermitage,
Thatcham,
RG18 9XU

Title
As Proposed
Site Plan

Drawing. No.
J004472-DD-05

Rev.
F

As Proposed Site Plan

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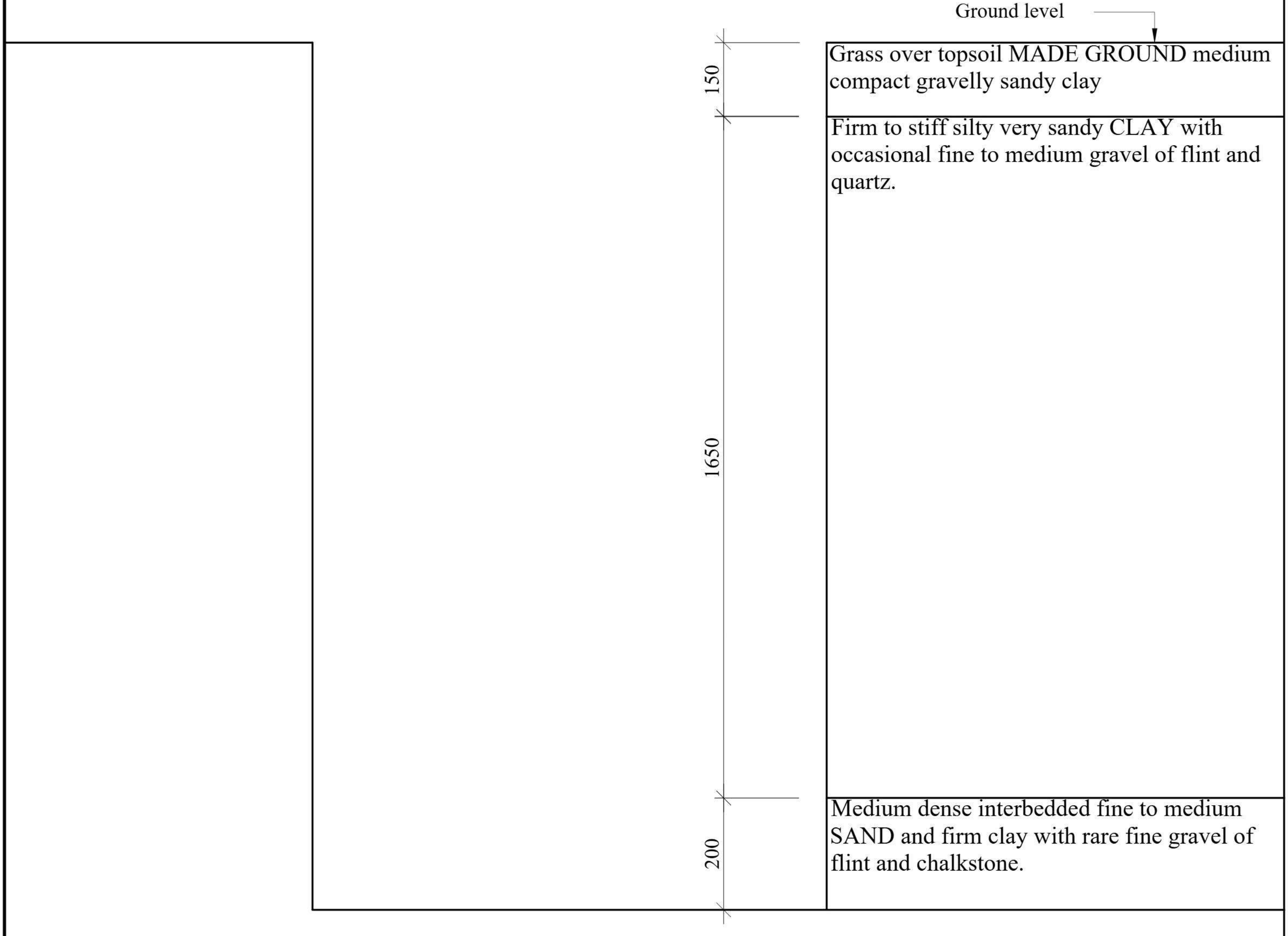
Client: WSPA (Peter Brownjohn)	**Scale:** N.T.S.	**Sheet No:** 1 of 1	**Date:** 15/08/24
Location: Land South Of Sandhill, Thatcham	**Job No:** 3527	**Trial Pit No:** BRE-TP1	**Weather:** Fine
Excavation Method: Mechanical & Hand		**Drawn by:** MB	**Checked by:** GW



Grass over topsoil MADE GROUND medium compact gravelly sandy clay

Firm to stiff silty very sandy CLAY with occasional fine to medium gravel of flint and quartz.

Medium dense interbedded fine to medium SAND and firm clay with rare fine gravel of flint and chalkstone.

TRIAL PIT ENDS AT 2000mm

Remarks: Trial Pit completed to 2.0m
BRE365 infiltration test carried out at 0.6m & 2.0m

Key:

D Small disturbed sample	**J** Jar sample
B Bulk disturbed sample	**V** Pilcon Vane (kPa)
U Undisturbed sample (U100)	**M** Mackintosh Probe
N Standard Penetration Test Blow Count	**W** Water Sample

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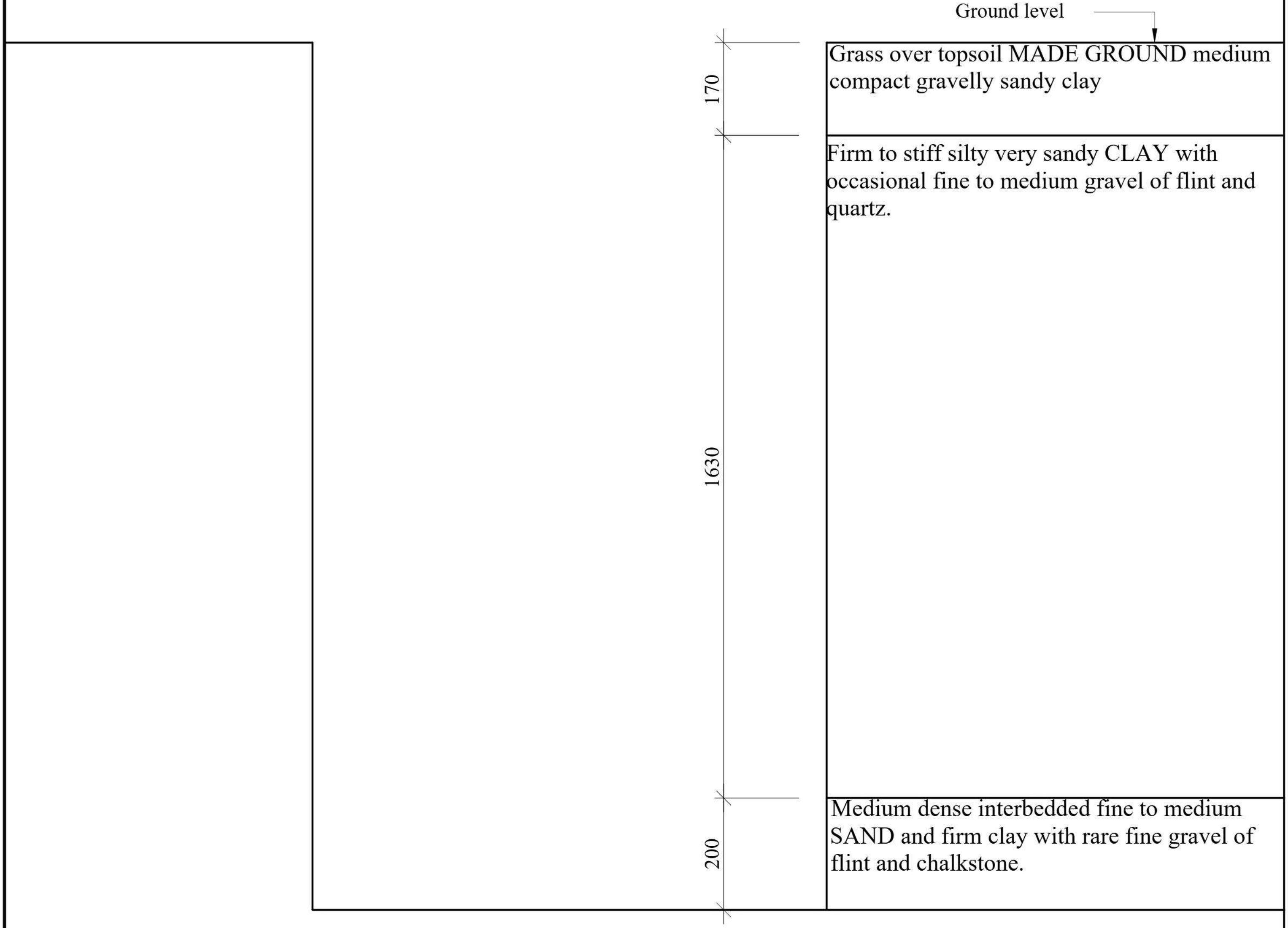
Client: WSPA (Peter Brownjohn)	**Scale:** N.T.S.	**Sheet No:** 1 of 1	**Date:** 15/08/24
Location: Land South Of Sandhill, Thatcham	**Job No:** 3527	**Trial Pit No:** BRE-TP2	**Weather:** Fine
Excavation Method: Mechanical & Hand		**Drawn by:** MB	**Checked by:** GW



Grass over topsoil MADE GROUND medium compact gravelly sandy clay

Firm to stiff silty very sandy CLAY with occasional fine to medium gravel of flint and quartz.

Medium dense interbedded fine to medium SAND and firm clay with rare fine gravel of flint and chalkstone.

TRIAL PIT ENDS AT 2000mm

Remarks: Trial Pit completed to 2.0m
BRE365 infiltration test carried out at 0.6m & 2.0m

Key:

D Small disturbed sample	**J** Jar sample
B Bulk disturbed sample	**V** Pilcon Vane (kPa)
U Undisturbed sample (U100)	**M** Mackintosh Probe
N Standard Penetration Test Blow Count	**W** Water Sample

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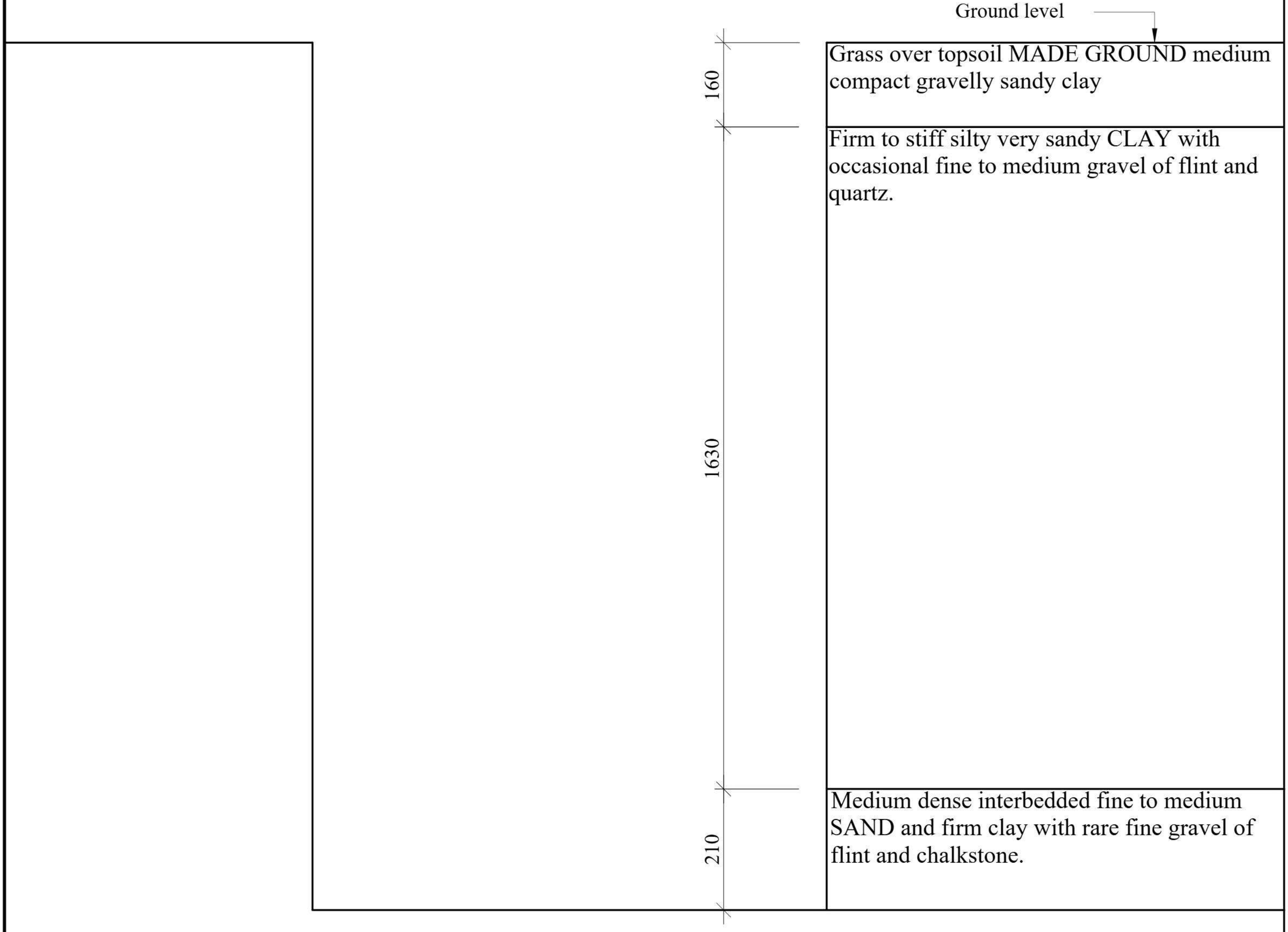
Client: WSPA (Peter Brownjohn)	**Scale:** N.T.S.	**Sheet No:** 1 of 1	**Date:** 15/08/24
Location: Land South Of Sandhill, Thatcham	**Job No:** 3527	**Trial Pit No:** BRE-TP3	**Weather:** Fine
Excavation Method: Mechanical & Hand		**Drawn by:** MB	**Checked by:** GW



Grass over topsoil MADE GROUND medium compact gravelly sandy clay

Firm to stiff silty very sandy CLAY with occasional fine to medium gravel of flint and quartz.

Medium dense interbedded fine to medium SAND and firm clay with rare fine gravel of flint and chalkstone.

TRIAL PIT ENDS AT 2000mm

Remarks: Trial Pit completed to 2.0m
BRE365 infiltration test carried out at 0.6m & 2.0m

Key:

D Small disturbed sample	**J** Jar sample
B Bulk disturbed sample	**V** Pilcon Vane (kPa)
U Undisturbed sample (U100)	**M** Mackintosh Probe
N Standard Penetration Test Blow Count	**W** Water Sample

JAXX ENGINEERING
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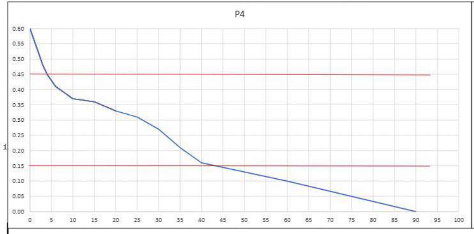
Infiltration Rate Testing - BIA BRE 365

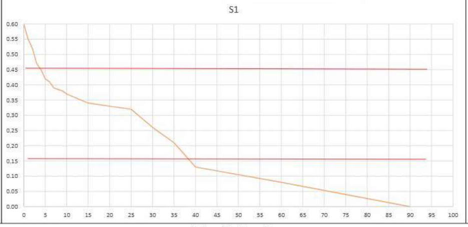
Project Name : Land South of Sandhill, Thatcham

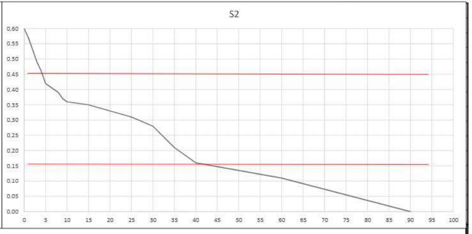
Job No : JEC3544
Performed By : CK
Date : 21/08/24
Checked By : GW

BRE TP1 - A				BRE TP2 - A				BRE TP3 - A			
Test Dimensions		H_0 =		Test Dimensions		H_0 =		Test Dimensions		H_0 =	
0.3m (w) x 0.3m (l) x 0.6m (d)		0.30		0.3m (w) x 0.3m (l) x 0.6m (d)		0.30		0.3m (w) x 0.3m (l) x 0.6m (d)		0.30	
Depth to Water (m)	Time (mins)	H	H/H_0	Depth to Water (m)	Time (mins)	H	H/H_0	Depth to Water (m)	Time (mins)	H	H/H_0
0.000	0	0.60	1.00	0.000	0	0.60	1.00	0.000	0	0.60	1.00
0.040	1	0.56	0.93	0.050	1	0.55	0.92	0.030	1	0.57	0.95
0.080	2	0.52	0.87	0.080	2	0.52	0.87	0.070	2	0.53	0.88
0.120	3	0.48	0.80	0.130	3	0.47	0.78	0.110	3	0.49	0.82
0.150	4	0.45	0.75	0.150	4	0.45	0.75	0.140	4	0.46	0.77
0.170	5	0.43	0.72	0.180	5	0.42	0.70	0.180	5	0.42	0.70
0.190	6	0.41	0.68	0.190	6	0.41	0.68	0.190	6	0.41	0.68
0.200	7	0.40	0.67	0.210	7	0.39	0.65	0.200	7	0.40	0.67
0.210	8	0.39	0.65	0.215	8	0.39	0.64	0.210	8	0.39	0.65
0.220	9	0.38	0.63	0.220	9	0.38	0.63	0.230	9	0.37	0.62
0.230	10	0.37	0.62	0.230	10	0.37	0.62	0.240	10	0.36	0.60
0.240	15	0.36	0.60	0.260	15	0.34	0.57	0.250	15	0.35	0.58
0.270	20	0.33	0.55	0.270	20	0.33	0.55	0.270	20	0.33	0.55
0.290	25	0.31	0.52	0.280	25	0.32	0.53	0.290	25	0.31	0.52
0.330	30	0.27	0.45	0.340	30	0.26	0.43	0.320	30	0.28	0.47
0.390	35	0.21	0.35	0.390	35	0.21	0.35	0.390	35	0.21	0.35
0.440	40	0.16	0.27	0.470	40	0.13	0.22	0.440	40	0.16	0.27
0.500	60	0.10	0.17	0.520	60	0.08	0.13	0.490	60	0.11	0.18
0.600	90	0.00	0.00	0.600	90	0.00	0.00	0.600	90	0.00	0.00

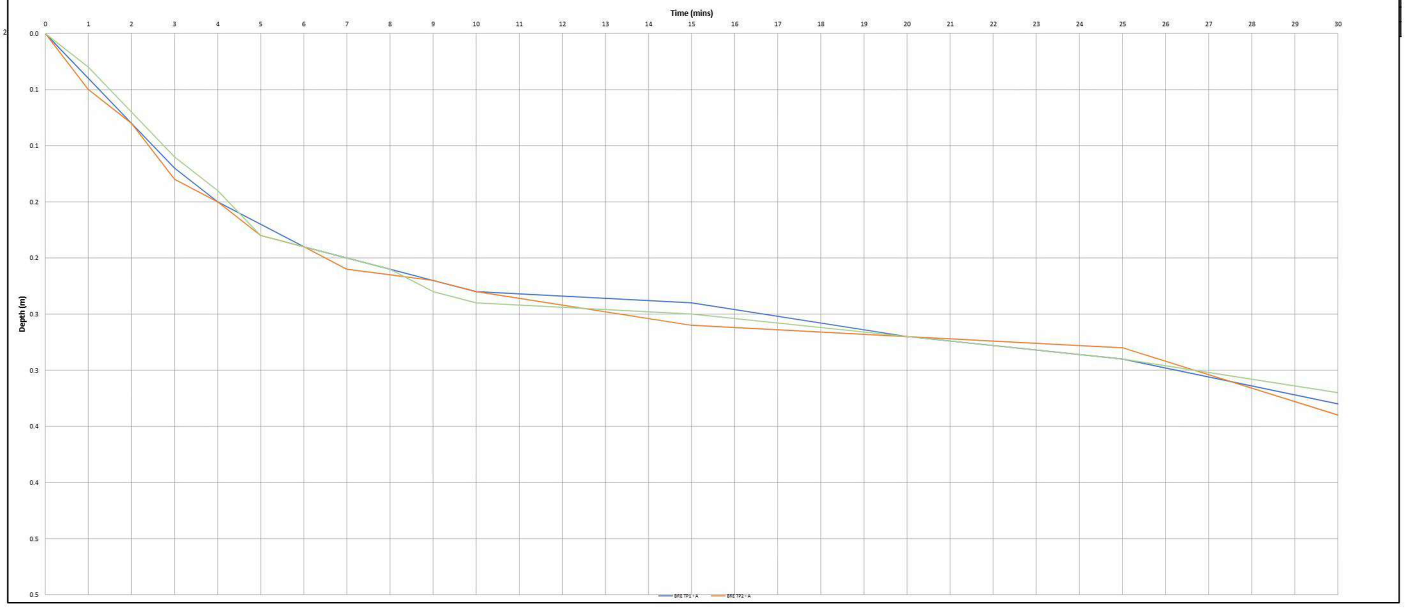
Volume of Excavation (m^3) =	0.06		Volume of Excavation (m^3) =	0.06		Volume of Excavation (m^3) =	0.06	
Storage volume between 75-25% 'Vp' [m^3] =	0.03		Storage volume between 75-25% 'Vp' [m^3] =	0.03		Storage volume between 75-25% 'Vp' [m^3] =	0.03	
Time for water to fall from 75-25% 'tp' [min] =	40		Time for water to fall from 75-25% 'tp' [min] =	34		Time for water to fall from 75-25% 'tp' [min] =	38	
50% Internal Surface Area (as50) =	0.45		50% Internal Surface Area (as50) =	0.45		50% Internal Surface Area (as50) =	0.45	
Soil infiltration rate 'f' [m/s] =	1.48E-04	Vp = 17	Soil infiltration rate 'f' [m/s] =	1.78E-04	Vp = 16	Soil infiltration rate 'f' [m/s] =	1.93E-04	Vp = 16







Time Vs Depth



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Infiltration Rate Testing - BIA BRE 365

JAXX ENGINEERING CONSULTANCY

Project Name : Land South of Sandhill, Thatcham

Job No : JEC3544

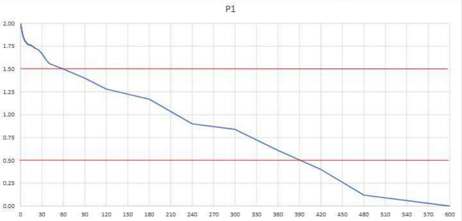
Performed By : CK

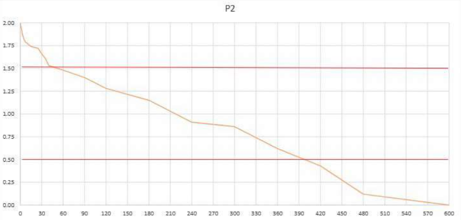
Date : 21/08/24

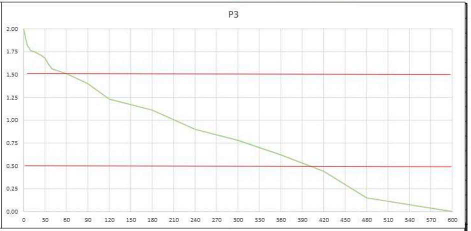
Checked By : GW

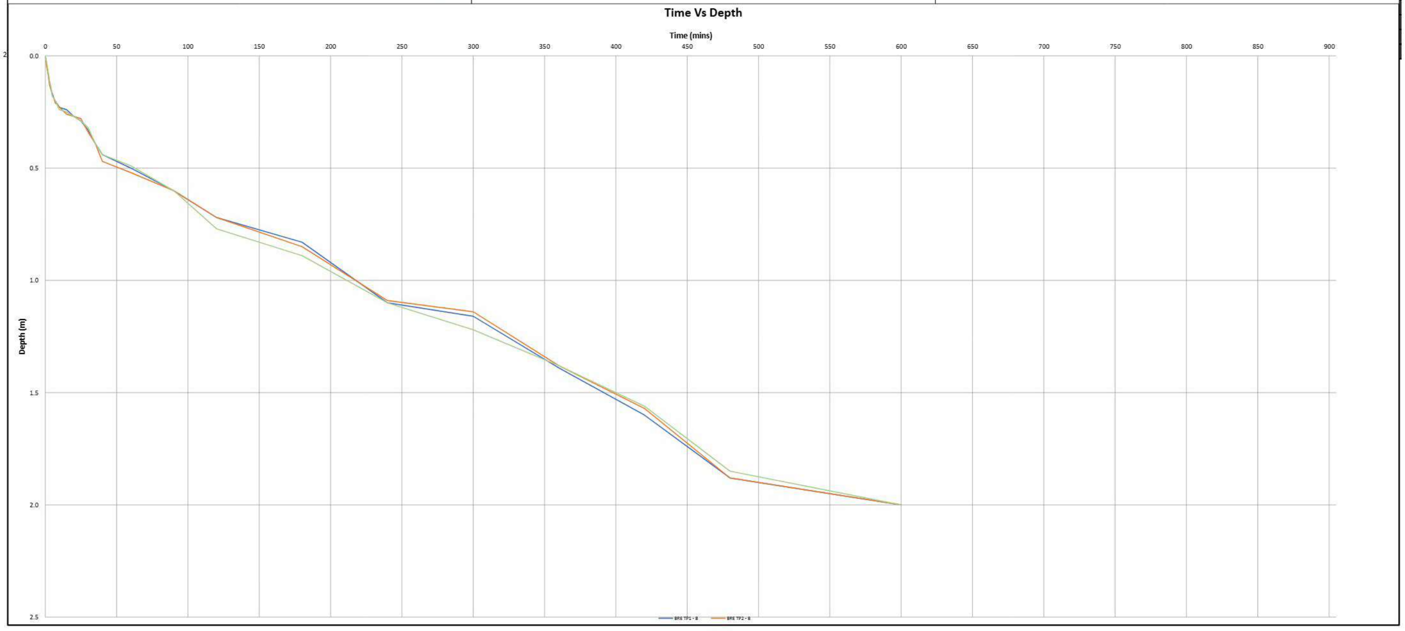
BRE TP1 - B				BRE TP2 - B				BRE TP3 - B			
Test Dimensions		H_0 =		Test Dimensions		H_0 =		Test Dimensions		H_0 =	
1.0m (w) x 1.0m (l) x 2.0m (d)		1.00		1.0m (w) x 1.0m (l) x 2.0m (d)		2.00		1.0m (w) x 1.0m (l) x 2.0m (d)		2.00	
Depth to Water (m)	Time (mins)	H	H/H_0	Depth to Water (m)	Time (mins)	H	H/H_0	Depth to Water (m)	Time (mins)	H	H/H_0
0.000	0	2.00	1.00	0.000	0	2.00	1.00	0.000	0	2.00	1.00
0.040	1	1.96	0.98	0.050	1	1.95	0.98	0.030	1	1.97	0.99
0.080	2	1.92	0.96	0.080	2	1.92	0.96	0.070	2	1.93	0.97
0.120	3	1.88	0.94	0.130	3	1.87	0.94	0.110	3	1.89	0.95
0.150	4	1.85	0.93	0.150	4	1.85	0.93	0.140	4	1.86	0.93
0.170	5	1.83	0.92	0.180	5	1.82	0.91	0.180	5	1.82	0.91
0.190	6	1.81	0.91	0.190	6	1.81	0.91	0.190	6	1.81	0.91
0.200	7	1.80	0.90	0.210	7	1.79	0.90	0.200	7	1.80	0.90
0.210	8	1.79	0.90	0.215	8	1.79	0.89	0.210	8	1.79	0.90
0.220	9	1.78	0.89	0.220	9	1.78	0.89	0.230	9	1.77	0.89
0.230	10	1.77	0.89	0.230	10	1.77	0.89	0.240	10	1.76	0.88
0.240	15	1.76	0.88	0.260	15	1.74	0.87	0.250	15	1.75	0.88
0.270	20	1.73	0.87	0.270	20	1.73	0.87	0.270	20	1.73	0.87
0.290	25	1.71	0.86	0.280	25	1.72	0.86	0.290	25	1.71	0.86
0.330	30	1.67	0.84	0.340	30	1.66	0.83	0.320	30	1.68	0.84
0.390	35	1.61	0.81	0.390	35	1.61	0.81	0.390	35	1.61	0.81
0.440	40	1.56	0.78	0.470	40	1.53	0.77	0.440	40	1.56	0.78
0.500	60	1.50	0.75	0.520	60	1.48	0.74	0.490	60	1.51	0.76
0.600	90	1.40	0.70	0.600	90	1.40	0.70	0.600	90	1.40	0.70
0.720	120	1.28	0.64	0.720	120	1.28	0.64	0.770	120	1.23	0.62
0.830	180	1.17	0.59	0.850	180	1.15	0.58	0.890	180	1.11	0.56
1.100	240	0.90	0.45	1.090	240	0.91	0.46	1.100	240	0.90	0.45
1.160	300	0.84	0.42	1.140	300	0.86	0.43	1.220	300	0.78	0.39
1.390	360	0.61	0.31	1.380	360	0.62	0.31	1.380	360	0.62	0.31
1.600	420	0.40	0.20	1.570	420	0.43	0.22	1.560	420	0.44	0.22
1.880	480	0.12	0.06	1.880	480	0.12	0.06	1.850	480	0.15	0.08
2.000	600	0.00	0.00	2.000	600	0.00	0.00	2.000	600	0.00	0.00

Volume of Excavation (m^3) =	2.00		Volume of Excavation (m^3) =	2.00		Volume of Excavation (m^3) =	2.00	
Storage volume between 75-25% 'Vp' [m^3] =	1.00	300	Storage volume between 75-25% 'Vp' [m^3] =	1.00		Storage volume between 75-25% 'Vp' [m^3] =	1.00	
Time for water to fall from 75-25% 'tp' [min] =	165		Time for water to fall from 75-25% 'tp' [min] =	150		Time for water to fall from 75-25% 'tp' [min] =	155	
50% Internal Surface Area (as50) =	5.00	33	50% Internal Surface Area (as50) =	5.00	30	50% Internal Surface Area (as50) =	5.00	
Soil infiltration rate 'f' [m/s] =	1.05E-05	Vp = 33s/mm	Soil infiltration rate 'f' [m/s] =	9.18E-04	Vp = 30s/mm	Soil infiltration rate 'f' [m/s] =	9.53E-04	Vp = 31s/mm









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