

SOAKAGE TESTING
AT
BURNDILL ROAD (PAYNTERS CROFT) YAPTON
FOR
SALT EARTH LTD

G6623

19 February 2026



Ground Management Ltd
Civil and Geotechnical Engineering Services

DOCUMENT CONTROL

Report Title: Soakage Testing
Burndell Road (Paynters Croft) Yapton

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BP Civils

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1.0 INTRODUCTION

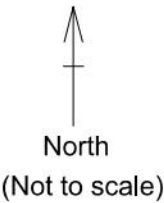
- 1.1 Ground Management Ltd have carried out soakage testing at Paynters Croft, Burndell Road, Yapton (site location indicated on Figure 1) to inform drainage design for a proposed residential development.
- 1.2 Test locations were agreed with the drainage designer BP Civils, and targeted areas of proposed permeable paving. Locations were as indicated on Figure 2.
- 1.3 Depth of testing was decided followed review of previous groundwater monitoring and preliminary drainage design.
- 1.4 Four trial pits, referenced as TP1 to TP4, were excavated by hand during a visit on 20 January 2026. The pits each extended to a depth of 0.6m and were used for soakage testing carried out in accordance with BRE365. Testing comprised three fills of each pit and was concluded on 21 January 2026 when pits were backfilled with compacted arisings. (Trial pit TP4 that recorded an initial high infiltration rate that slowed during subsequent tests received 4 fills)
- 1.5 Details of the soils encountered are presented on the appended exploratory hole logs together with soakage test results and groundwater monitoring carried out to date and includes the standpipe observations made during the period of soakage testing.
- 1.6 Tests were recorded by manual observation supplemented in some pits with continuous recording by dataloggers. A summary of the infiltration test results and the derived infiltration rates is presented below:

Trial Pit	Pit Dimensions LxWxD (metres)	Test No.	Water Level at start of test (mm below ground level)	Duration of test (mins)	Fall of water level during test (mm)	Infiltration Coefficient (m/s) (see note)
TP1	0.35 x 0.9 x 0.6	1	115	187	465	1.5×10^{-5}
		2	90	90	260	* 9.5×10^{-6}
		3	95	309	385	5.3×10^{-6}
TP2	0.3 x 0.93 x 0.6	1	110	108	500	2.7×10^{-5}
		2	100	205	500	1.4×10^{-5}
		3	95	235	505	1.3×10^{-5}
TP3	0.3 x 0.9 x 0.6	1	115	164	435	1.3×10^{-5}
		2	90	320	510	8.4×10^{-6}
		3	65	520	485	4.3×10^{-6}
TP4	0.3 x 0.93 x 0.6	1	100	23	470	1.1×10^{-4}
		2	95	50	485	6.6×10^{-5}
		3	75	70	495	3.2×10^{-5}
		4	90	68	400	2.9×10^{-5}

Note: Infiltration coefficients marked * were derived from projected results

- 1.7 The work was carried out for Salt Earth Ltd with instruction from BP Civils Ltd. Nothing in this report confers or purports to confer on any third party, any benefit or any right to enforce any term of this report pursuant to the Contract (Rights of Third Parties) Act 1999.

Ground Management Ltd Civil and Geotechnical Engineering Services		PROJECT NO: G6623
Robinson Hill Farm Clay Lane Fishbourne CHICHESTER West Sussex PO18 8AB		FIGURE REF: Figure 1
PROJECT: Burndell Road, Yapton		PREPARED: AJHT
SECTION: Soakage Testing		CHECKED: AJHT
TITLE: Site Location Plan		DATE: Jan 2026

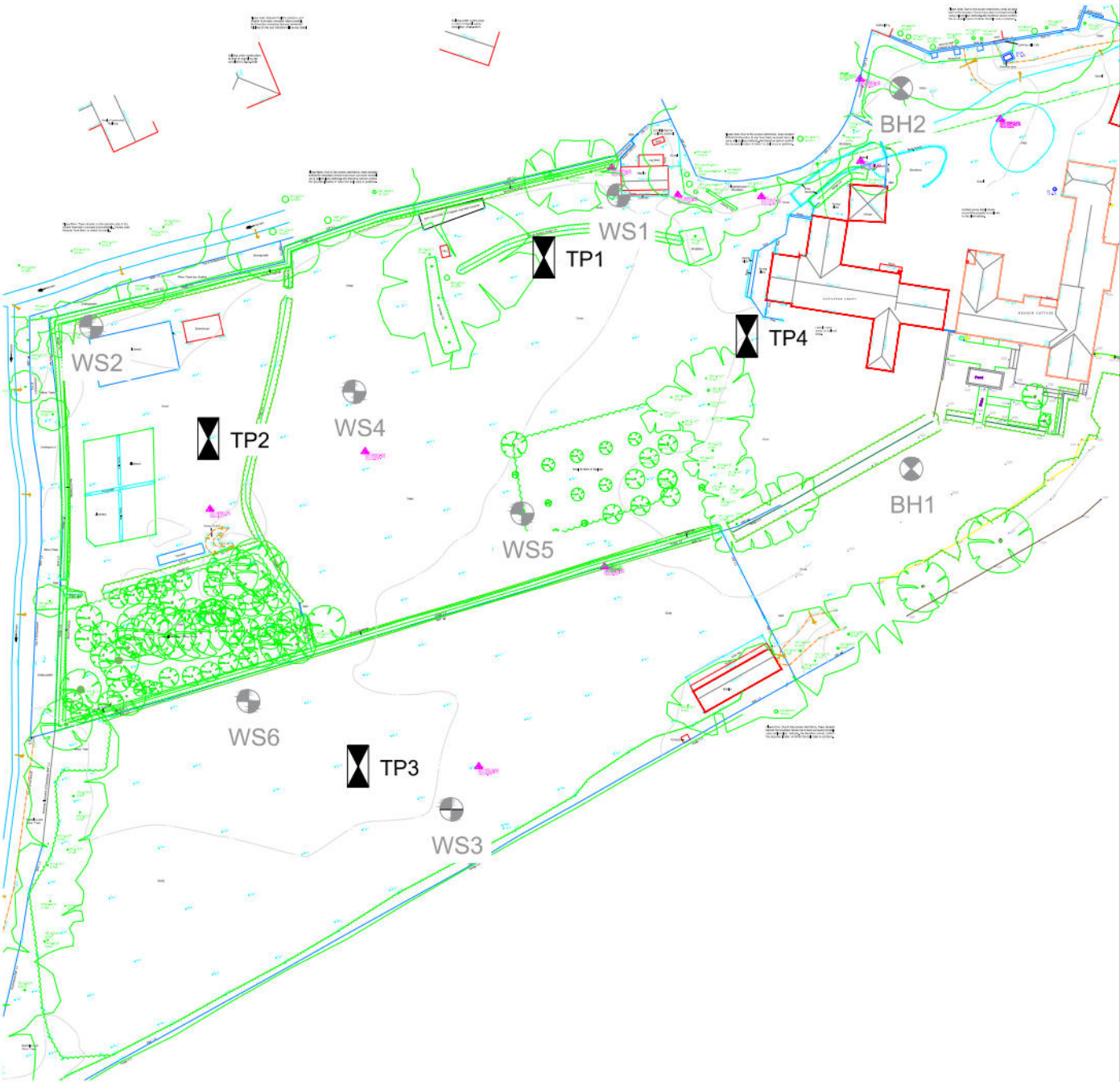


Ground Management Ltd Civil and Geotechnical Engineering Services	Robin Hill Farm Clay Lane Fishbourne CHICHESTER West Sussex PO18 8AB	PROJECT NO: G6623
		FIGURE REF: Figure 2
PROJECT: Burndell Road, Yapton		PREPARED: AJHT
SECTION: Soakage Testing		CHECKED: AJHT
TITLE: Exploratory Hole Location Plan		DATE: Jan 2026

HOLE LOCATIONS ARE INDICATIVE ONLY UNLESS DIMENSIONED

STANDPIPES WS1 TO WS6 PREVIOUSLY INSTALLED BY IMPACT GEOTECHNICAL

STANDPIPES BH1 AND BH2 PREVIOUSLY INSTALLED BY GROUND MANAGEMENT LTD



Ground Management Ltd Civil and Geotechnical Engineering Services				Robin Hill Farm Clay Lane Fishbourne CHICHESTER West Sussex PO18 8AB		Site Burndell Road (Paynters Croft), Yapton		Trial Pit Number TP1	
Excavation Method Hand dug		Dimensions 0.35 x 0.9		Ground Level (mOD) 6.27		Client Salt Earth Ltd		Job Number G6623	
		Location See location plan		Dates 20/01/2026		Engineer BP Civils		Sheet 1/1	
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	
						Grass over moist dark brown slightly clayey silt TOPSOIL with occasional coarse medium and fine subangular flint gravel . Some rootlets and roots up to 10mm dia. (0.30) ... locally cobble size brick flint and concrete at 0.2m			
				5.97	0.30	Soft to firm orange brown silty CLAY with occasional coarse medium and fine subangular flint gravel (0.30)			
				5.67	0.60	Complete at 0.60m			
Plan						Remarks Pit sides stable and vertical during excavation Groundwater was not encountered Ground level estimated by reference to D&H Surveys Ltd's Feb 2024 topographic survey			
						Scale (approx) 1:10	Logged By AT	Figure No. G6623.TP1	

Civil and Geotechnical Engineering Services

Site

Burndell Road (Paynters Croft), Yapton

**Trial Pit
Number**
TP2

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
						Grass over moist brown / orange brown slightly sandy slightly clayey silt TOPSOIL with rare medium and fine subangular flint gravel.		
				6.13	0.25 (0.25)	becoming ..		
					0.25 (0.35)	Soft to firm orange brown very silty CLAY with occasional coarse medium and fine subangular to subrounded flint gravel		
				5.78	0.60	Complete at 0.60m		

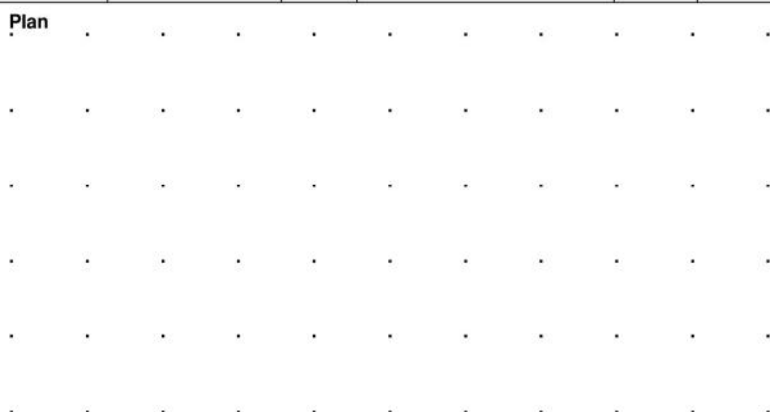
Plan 	Remarks Pit sides stable and vertical during excavation Groundwater was not encountered Ground level estimated by reference to D&H Surveys Ltd's Feb 2024 topographic survey		
	Scale (approx) 1:10	Logged By AT	Figure No. G6623.TP2

Civil and Geotechnical Engineering Services

Site

Burndell Road (Paynters Croft), Yapton

**Trial Pit
Number**
TP3

Plan 	Remarks Pit sides stable and vertical during excavation Groundwater was not encountered Ground level estimated by reference to D&H Surveys Ltd's Feb 2024 topographic survey		
	Scale (approx) 1:10	Logged By AT	Figure No. G6623.TP3

Civil and Geotechnical Engineering Services

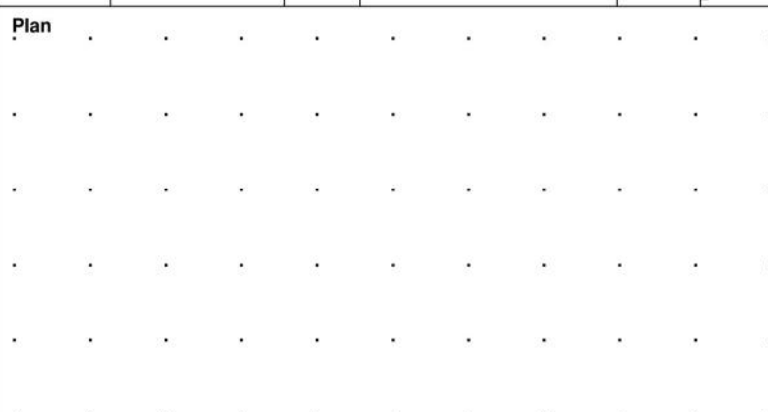
Robin Hill Farm Clay Lane Fishbourne
CHICHESTER West Sussex PO18 8AB

Site

Burndell Road (Paynters Croft), Yapton

**Trial Pit
Number**
TP4

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
						Grass over moist dark brown slightly sandy slightly clayey silt TOPSOIL / MADE GROUND with some coarse medium and fine subangular flint gravel.		
				6.22	0.25 (0.25)	... concrete cobble at 0.2m and locally much coarse rounded flint gravel at 0.25m		
					0.25 (0.33)	Soft to firm orange brown very silty CLAY with occasional coarse medium and fine subangular to subrounded flint gravel		
				5.89	0.58	Complete at 0.58m		

Plan 	Remarks Pit sides stable and vertical during excavation Groundwater was not encountered Ground level estimated by reference to D&H Surveys Ltd's Feb 2024 topographic survey		
	Scale (approx)	Logged By	Figure No.
	1:10	AT	G6623.TP3

TP2 Test 2

Dimensions (m):

width = 0.30

length = 0.93

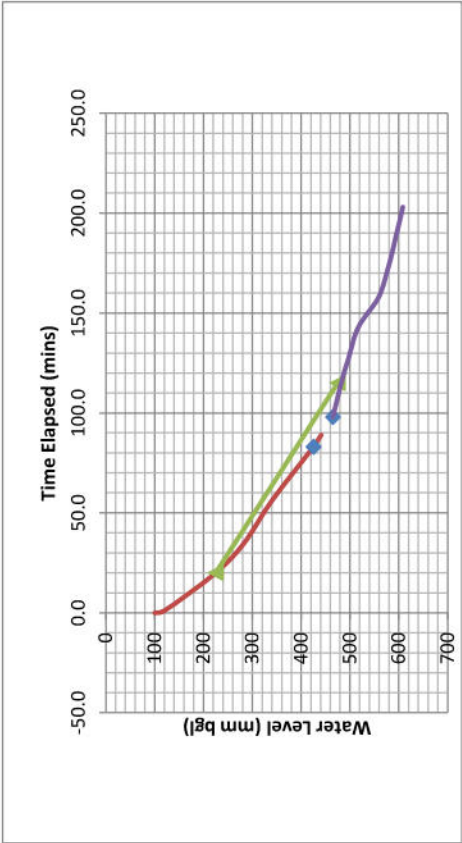
depth = 0.60

Date	Time	Date and time	Elapsed	Dip	End Fit
20/01/2026	15:51	20/01/2026 15:51	start		610
20/01/2026	15:52:00	20/01/2026 15:52		0.0	100
20/01/2026	15:53:00	20/01/2026 15:53		1.0	120
20/01/2026	16:11:00	20/01/2026 16:11		19.0	220
20/01/2026	16:26:00	20/01/2026 16:26		34.0	280
20/01/2026	16:48:00	20/01/2026 16:48		56.0	340
20/01/2026	17:15:00	20/01/2026 17:15		83.0	425
				98.0	

Weather
Mainly dry

425
465 Projected

some rain



t0	100	Time (mins)
t25	225	20
t50	350	
t75	475	115
t100	600	
fall		0.5
t25 - t75		0.25
Area t50		0.894

Infiltration Coefficient = 1.4E-05 m/s

Test monitored using datalogger - plotted as purple line

TP2 Test 3

Test Start Date: 21-Jan-26

Dimensions (m):

width = 0.30

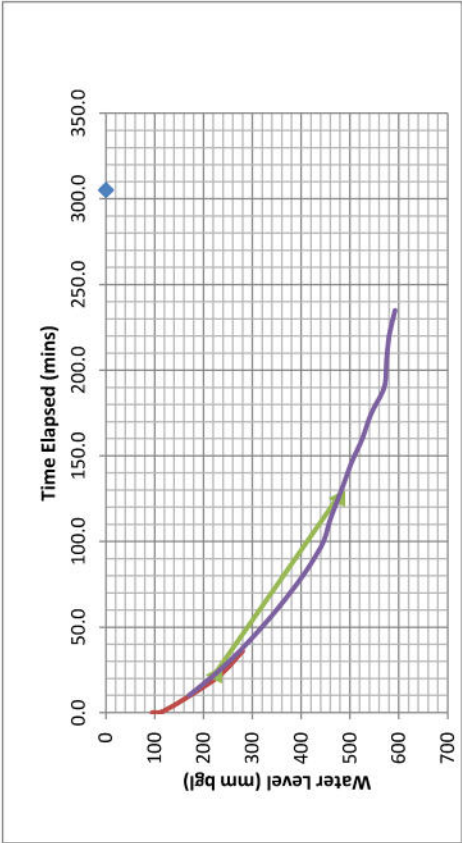
length = 0.93

depth = 0.60

Date	Time	Date and time	Elapsed	Dip	End Fit
21/01/2026	09:34	21/01/2026 09:34	start		620
21/01/2026	09:35:00	21/01/2026 09:35		0.0	95
21/01/2026	09:36:00	21/01/2026 09:36		1.0	120
21/01/2026	09:55:00	21/01/2026 09:55		20.0	225
21/01/2026	10:11:00	21/01/2026 10:11		36.0	280
21/01/2026	14:40:00	21/01/2026 14:40		305.0	600
Test monitored using datalogger - plotted as purple line					

Weather
Heavy
o'night
rain then
showers

0
0 Projected



t0	95	Time (mins)
t25	221.25	22
t50	347.5	
t75	473.75	125
t100	600	
	fall	0.505
	t25 - t75	0.2525
	Area t50	0.90015

Infiltration Coefficient = 1.3E-05 m/s

Dimensions (m):

width = 0.30

length = 0.93

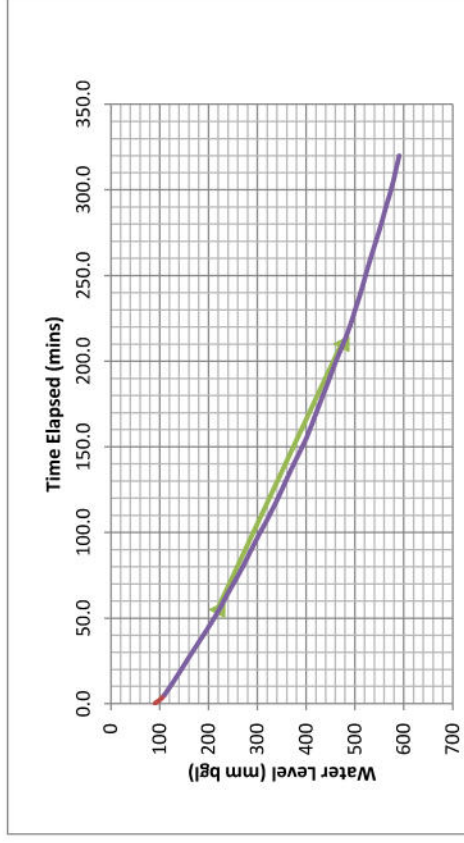
depth = 0.60

End Fit

[illegible]

Weather

Mainly
dry



0
0 Projected

	t0	t25	t50	t75	t100	Time (mins)
90		217.5	345	472.5	600	55
fall						0.51
t25 - t75						0.255
Area t50						0.9063

Infiltration Coefficient = 8.4E-06 m/s

Dimensions (m):

width = 0.30

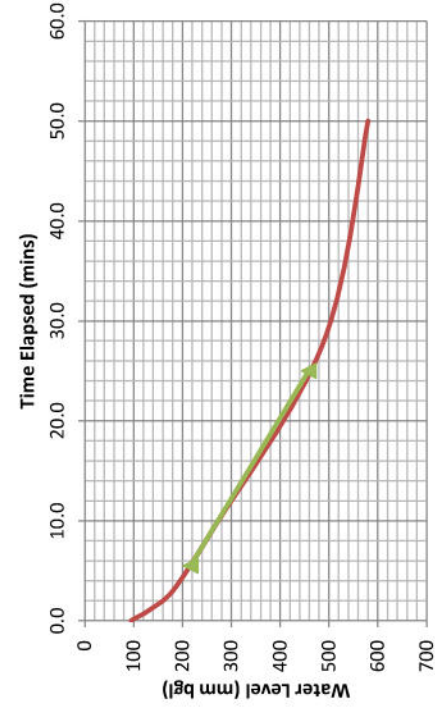
length = 0.90

depth = 0.58

[illegible]

Weather

Mainly dry



0
0 Projected

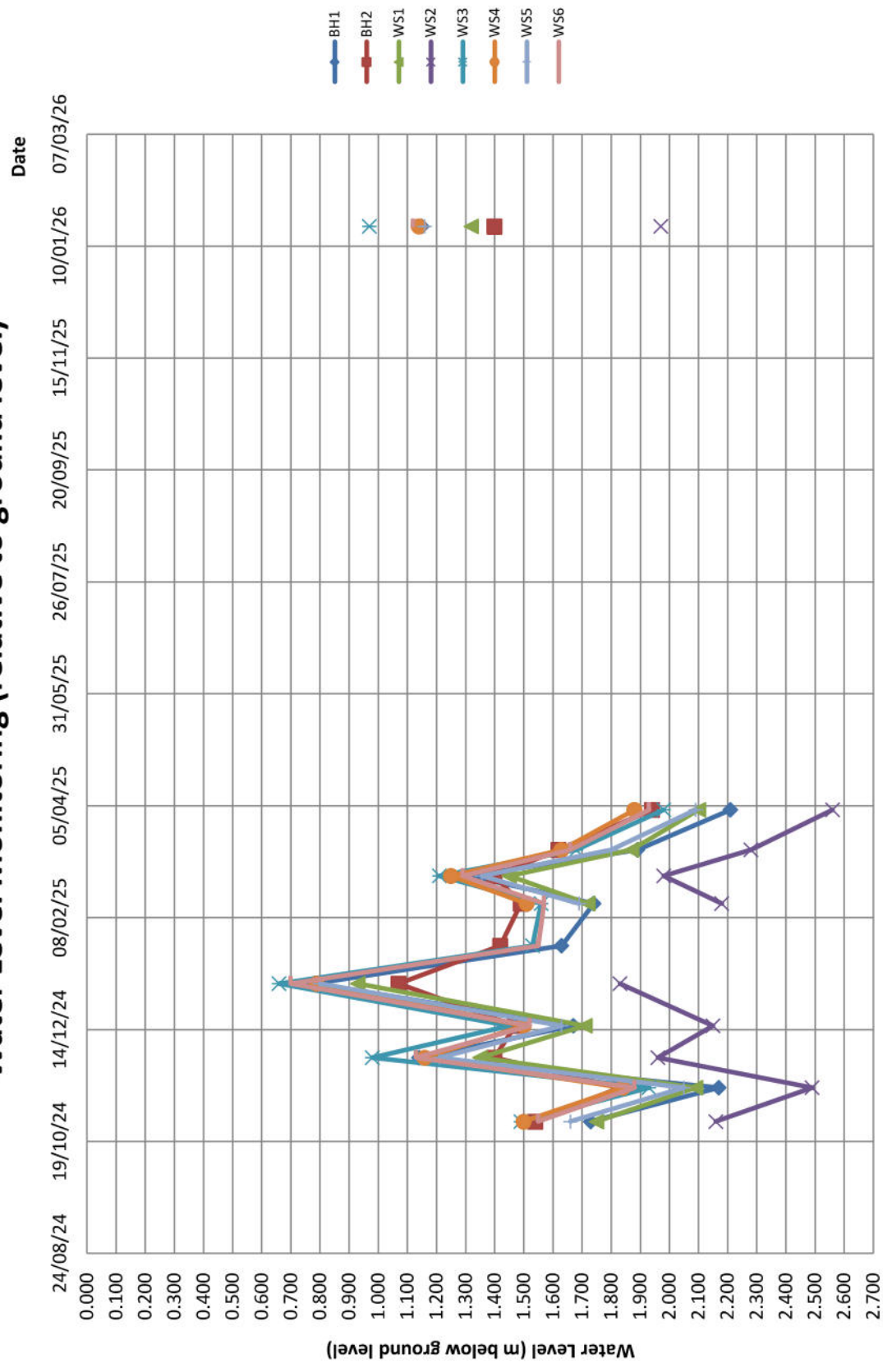
	Time (mins)
t0	95
t25	216.25
t50	337.5
t75	458.75
t100	580
fall	0.485
t25 - t75	0.2425
Area t50	0.852

Infiltration Coefficient =	6.6E-05 m/s
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	BS1	BS2	BS3	BS4	BS5	BS6
Upstand (m)	0.000	0.000	0.000	0.000	0.000	0.000
Ground Level (mAOD)	6.600	6.540	6.600	6.300	6.550	6.350
Cover level (mAOD)	6.600	6.400	6.750	6.600	6.300	6.550
Base dip (m)		4.000	3.499	2.776	2.776	3.005

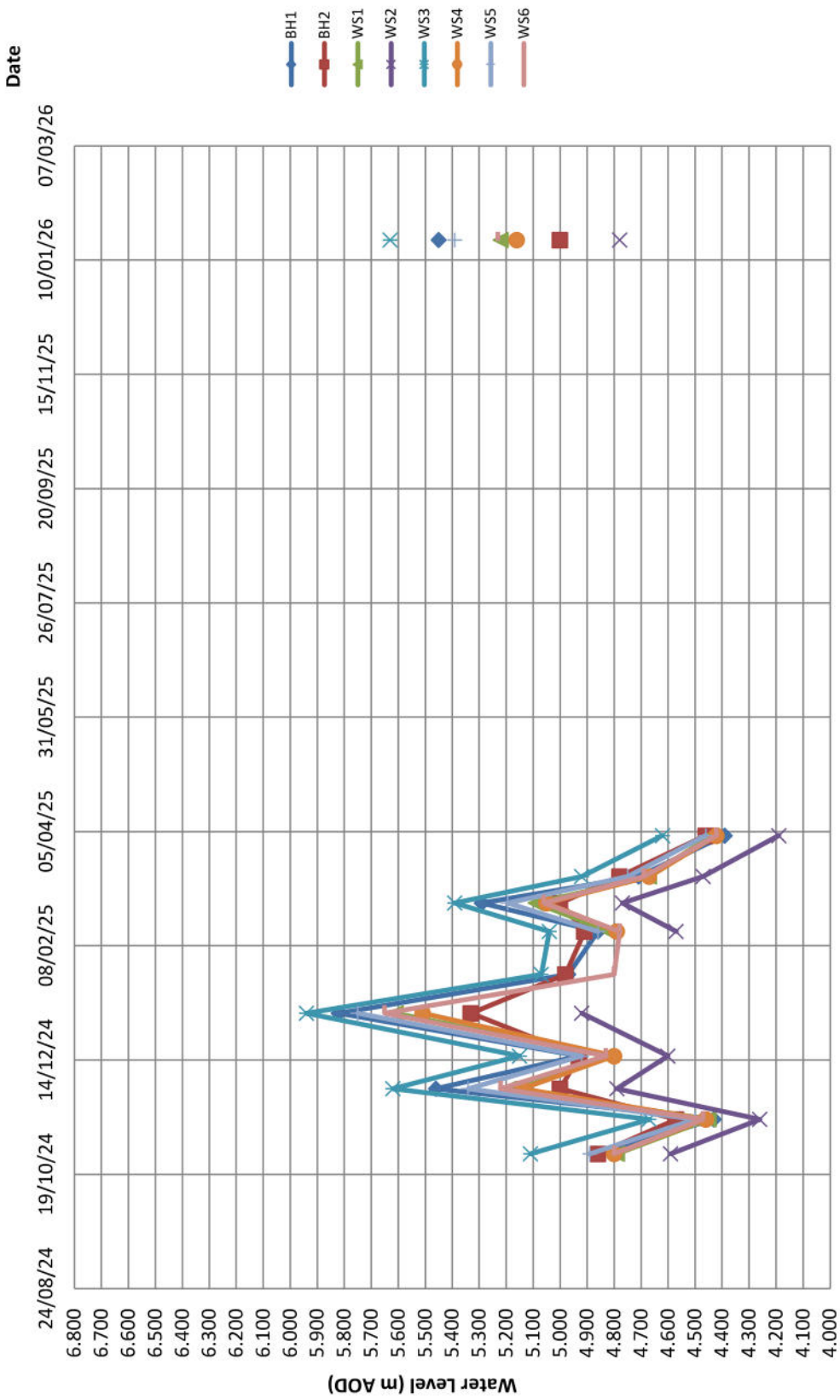
[illegible]

Water Level Monitoring (relative to ground level)



G6623 Burndell Road Yapton

Water Level Monitoring (relative to Ordnance Datum)





Photograph 1 : Trial Pit TP1 Location



Photograph 2 : Trial Pit TP1



Photograph 3 : Trial Pit TP2 Location



Photograph 4 : Trial Pit TP2 under test



Photograph 5 : Trial Pit TP3 Location



Photograph 6 : Trial Pit TP3



Photograph 7 : Trial Pit TP4 Location



Photograph 8 : Trial Pit TP4 after test