



19/07/2026

Our ref: ICE0647/LD01/260719

Mr. Joseph Sheridan

Dear Joseph,

RE: Donna's Paddock, Wargrave Road, Twyford, RG10 9PN – BRE 365 Soakage Testing

We are pleased to present the results of the soakage testing undertaken at the above site. The soakage tests were undertaken in general accordance with BRE Digest 365 'Soakaway Design' BRE, 2016.

The intrusive investigation was undertaken between 13th and 15th July 2026, with the works supervised by an IBEX Engineer.

Background

Published geological records indicate that the ground conditions are likely to comprise the Kempton Park Gravel Member over the Chalk. A thickness of Topsoil or Made Ground is also anticipated over the natural deposits.

Scope of Site Works

One machine excavated trial pit was excavated to a maximum depth of 1.30m bgl and one soakage test in accordance with BRE Digest 365 was undertaken within SA01.

Ground Conditions

Although encountered ground conditions encountered were broadly consistent with those anticipated, namely a thickness of Made Ground overlying the Kempton Park Gravel Member, chalk was not encountered due to short depth of the pit.

For further details of the ground conditions, reference should be made to the exploratory hole logs presented in Appendix A.

Groundwater

Groundwater was not encountered during the investigation.

Soakaways

Table 1 summarises the soakage rates, which were calculated and extrapolated based on the results of the soakage testing:

Reference	Geology	Calculated Infiltration Rates (m/s)		
		1 st Cycle	2 nd Cycle	3 rd Cycle*
SA01	Kempton Park Gravel Member	4.4X10 ⁻⁶	2.7X10 ⁻⁶	4.0X10 ⁻⁶

Table 1 Summary of Soakage Test Results

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Geotechnical and Environmental Specialists | Site Investigations

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Closure

We trust that we have interpreted your instructions correctly; please do not hesitate to contact us should you have any queries.

Yours sincerely

For and on Behalf of IBEX Consulting Engineers Limited



**Levent Dogan BSc, MSc, PGDip, CEng MCIHT, AMICE, AMIEnvSc
Director**

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Enc.	Figure 1	Site Location Plan
	Figure 2	Exploratory Hole Logs Location Plan
	Appendix A	Exploratory Hole Logs
	Appendix B	BRE 365 Soakage Testing Results

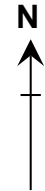


Figures





Project:	Donna's Paddock, Wargrave Road, Twyford, RG10 9PN			Title	Site Location Plan	
Client:	Mr. Joseph Sheridan			IBEX Consulting Engineers Limited Abbey House, 25 Clarendon Road Redhill, Surrey. RH1 1QZ +44(0)1737 452622 www.ibexconsultant.com		
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Drawn:	LD	Date:	19/07/2026			
Figure:	1	Scale:	Not To Scale			



Trial Pits to depths up to 1.30m bgl

Project:	Donna's Paddock, Wargrave Road, Twyford, RG10 9PN			Title	Exploratory Hole Logs Location Plan	
Client:	Mr. Joseph Sheridan			IBEX Consulting Engineers Limited Abbey House, 25 Clarendon Road Redhill, Surrey. RH1 1QZ +44(0)1737 452622 www.ibexconsultant.com		
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Figure:	2	Scale:	Not To Scale			



Appendix A

Exploratory Hole Logs



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Key to exploratory hole symbols and abbreviations

SAMPLE TYPES

ACM - Asbestos sample	AMAL - Amalgamated sample	B - Bulk disturbed sample
BLK - Block sample	C - Core sample	CBR - CBR test sample
D - Disturbed sample	ES - Environmental sample	EW - Environmental water sample
G - Gas sample	J - Jar sample	L - Liner sample
TW - Pushed thin wall sample	U - Undisturbed sample	UT - Undisturbed thin wall sample
W - Water sample		

IN-SITU TESTS

HV - Hand shear vane	HV(r) - Hand shear vane residual	PID - Photo ionisation detector
PP - Hand penetrometer	SPT - Standard penetration test	SPT(C) - SPT using cone

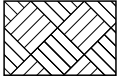
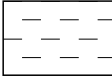
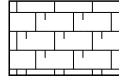
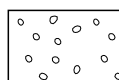
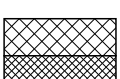
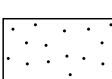
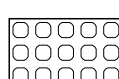
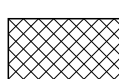
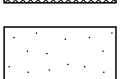
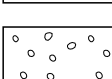
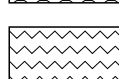
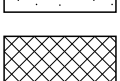
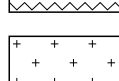
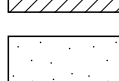
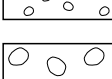
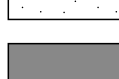
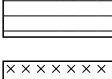
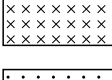
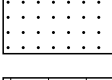
GROUNDWATER

 Groundwater strike	 Groundwater rest level
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ROTARY CORE DETAILS

TCR - Total core recovery (%)	SCR - Solid core recovery (%)	RQD - Rock quality designation (%)
FI - Fracture index	NI - Non-intact core	AZCL - Assumed zone of core loss

LEGEND

 Topsoil	 Clay	 Chalk	 Sand backfill
 Peat	 Silt	 Breccia	 Gravel backfill
 Made ground [cohesive]	 Sand	 Conglomerate	 Arisings
 Concrete	 Gravel	 Metamorphic	 Bentonite
 Wood	 Cobbles	 Igneous	 Concrete
 Brick	 Boulders		 Grout
 Bituminous material	 Mudstone		 Plain pipe
 Gypsum	 Siltstone		
 Coal	 Sandstone		 Slotted pipe
 Void	 Limestone		



Trial Pit

SA01

Sheet 1 of 1

Hole Type TP	Easting	Northing	Ground Level (m)	Scale 1:25
Project Name Donna's Paddock, Wargrave Road, Twyford	Project No. ICE0647	Start Date 2026-07-13	End Date 2026-07-16	

Client Mr. Joseph Sheridan	Consultant KOD	Contractor
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Inst/ Backfill	Water Levels	Samples and Tests			Level (m)	Depth (m) (thickness)	Strata		
		Depth (m)	Type/ Ref	Results			Legend	Description	
						(0.90)		Grass overlying brown gravelly slightly cobbly SAND with frequent brick, wood, metal, plastic and some wire and styrofoam. Sand is fine to coarse. Gravel is fine to coarse sub-angular flint, sandstone and granite. [Made Ground] Frequent paving slabs (0.05 - 0.10m)	0.5
						0.90 (0.40)		Firm orangish brown and some greyish brown very sandy slightly gravelly CLAY with black ferruginous fragments. Sand is fine to coarse. Gravel is fine to coarse sub-angular flint. [Kempton Park Gravel Member]	1.0
						1.30	End of Trial Pit at 1.30m		1.5
									2.0
									2.5
									3.0
									3.5
									4.0
									4.5
									5.0

Remarks Refusal at 1.30m bgl due to size of excavator. Original pit encountered plastic pipe at 1.10m bgl - pit relocated c. 1.5m east to avoid pipe	Method, Plant, Stability, Dimensions 0.00 - 1.30m TP JCB Micro Digger Stable L = 1.30m W = 0.22m	Logger KOD
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Appendix B

BRE 365 Soakage Testing Results



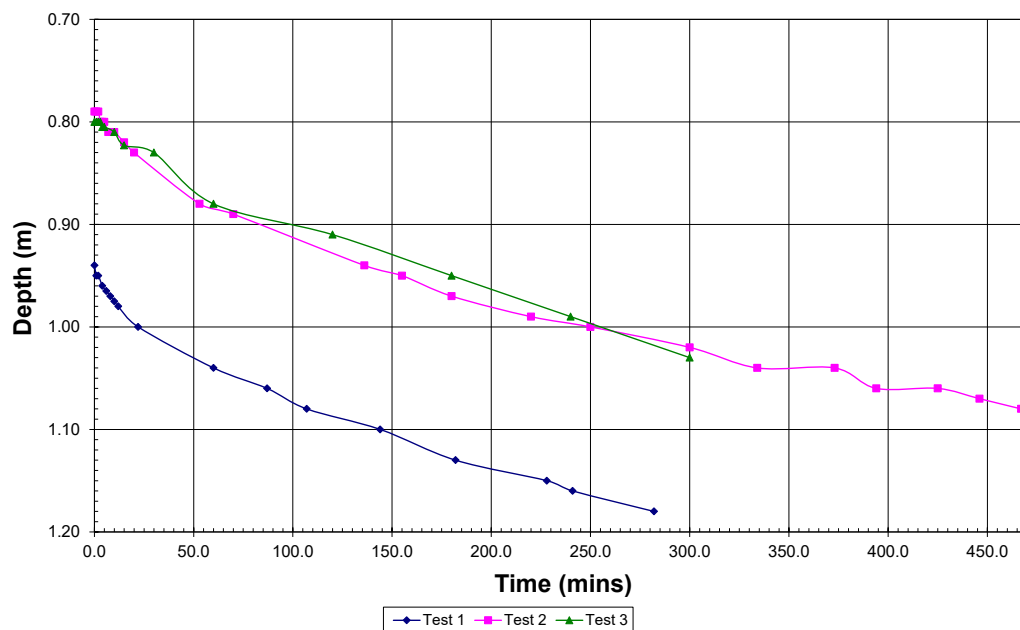
Project Name :	Donna's Paddock, Wargrave Road, Twyford, RG10 9PN
Client :	Mr. Joseph Sheridan

Job No. :	ICE0647
Date :	19/07/2026

Pit reference	SA01
Pit depth (m)	1.25
Pit width (m)	0.22
Pit length (m)	1.30
Depth to standing water (m)	

[illegible]

Test 2	
Time (min)	Depth (m)
0.0	0.79
1.0	0.79
2.0	0.79
3.0	0.80
4.0	0.80
5.0	0.80
7.0	0.81
10.0	0.81
15.0	0.82
20.0	0.83
53.0	0.88
70.0	0.89
136.0	0.94
155.0	0.95
180.0	0.97
220.0	0.99
250.0	1.00
300.0	1.02
334.0	1.04
373.0	1.04
394.0	1.06
425.0	1.06
446.0	1.07
467.0	1.08

[illegible]

Max. depth (m)	1.25	1.18	1.10
Effective depth (m)	0.31	0.39	0.30
75% effective depth (m)	1.02	0.89	0.88
50% effective depth (m)	1.10	0.99	0.95
25% effective depth (m)	1.17	1.08	1.03
t75 (min)	40.00	70.00	60.00
t50 (min)			
t25 (min)	260.00	467.00	300.00
Vp 75-25	0.04	0.06	0.04
ap 50	0.7572	0.8788	0.742
tp 75-25	220.00	397.00	240.00

Soil infiltration rate (m/s)	4.4E-06	2.7E-06	4.0E-06
Soil infiltration rate (mm/hr)	1.60E+01	9.59E+00	1.45E+01

Notes:

- | | |
|---|--|
| 1 | Orange cells require input data |
| 2 | Infiltration calculated to method in 'BRE Digest 365 (1991) - Soakaway Design' |
| 3 | First line of table must be depth at time = 0 |