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FAO: Mike Heming, Gladman Developments Gladman House Alexandria Way Congleton Cheshire CW12 1LB Date: 6th August 2021 Your Ref: Our Ref: MAN.1132.260.GE.L.001 Email: <u>m.heming@gladman.co.uk</u>

Dear Mike,

SWANSTREE AVENUE, SITTINGBOURNE - INFILTRATION TESTING REPORT

Introduction

We are pleased to report the results of the infiltration testing undertaken at the above site.

Anticipated Geology

The British Geological Survey (BGS) Geology of Britain viewer indicates the site is underlain by the Head deposits [Clay and Silt] followed by the solid geology recorded as the Seaford Chalk Formation [Chalk].

Fieldwork

A Ground Investigation was undertaken at the above-named site between Monday 26th July and Wednesday 28th July 2021, comprising three soakaway pits [SA1 – SA3] and three boreholes [BH1 – BH3], with associated soakaway testing.

Trial Pit Soakaway Testing

Three soakaway test pits (SA1 – SA3) were established, and infiltration testing was undertaken in accordance with BRE 365 "Soakaway Design" guidance, 2016. The test pits were excavated to a depth deemed sufficient to 'represent' a section of the design soakaway. The soakaway pits were established to a maximum depth of 3.10m below existing ground level (begl) to represent infiltration for conventional soakaway assets inclusive of chambers and infiltration trenches. The soakaways were excavated using a JCB 3CX backhoe excavator with locations available in the drawings section. Weather was sunny with occasional heavy downpours, damp, with a light breeze. Once the soakaway test pits had been excavated, a tractor towed water bowser was used to rapidly fill the pits and the fall in water levels recorded.

Table 1: Pit Specifications

Dit Reference	Dimensions (m)								
Pit Reference	Width	Length	Depth						
SA1	0.60	2.20	3.10						
SA2	0.60	2.60	2.80						
SA3	0.60	3.00	3.00						



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All soakaways were filled with water to the depths indicated in the appended results, and the subsequent fall in water level was recorded against time.

Borehole Permeability Testing

Three cable percussive boreholes (BH1 to BH3) were advanced to a depth of 10m begl. Falling head tests were undertaken during the drilling works, between depths of approximately 5.00m and 10.00m begl. One cycle of testing was attempted at each test location depth. Groundwater was not encountered within any of the boreholes prior to commencement of the falling head tests. The results are summarised in Table 3 overleaf, with results, exploratory hole logs and a soakaway location plan are included within the appendices.

Ground Conditions

Ground conditions typically comprised [up to 400mm] Topsoil; typically overlying sandy gravelly Clay, fine to medium Sand or silty Sand and Gravel of flint [Head]; this in turn overlies the solid geology of the Seaford Chalk Formation encountered at depths between 4.50m [BH1] and 9.20m [BH2] begl. Groundwater was not encountered, however, all three boreholes were installed with a 50mm pipe to carry out future groundwater monitoring, should this be required.

Results and Conclusions

Infiltration rates were not shown to be favorable at the shallow soakaway locations [SA1 – SA3] as they did not achieve the required '25% effective depth' within an appropriate timescale and consequently results were required to be extrapolated.

Infiltration rates were shown to be more favourable within the deeper boreholes [BH1 - BH3] as they did achieve a 25% effective depth within an appropriate time scale. Infiltration rates are given in Table 2 & 3 below and included within the appendices.

	Soaka	Soakaway Infiltration Rate (m/s)								
Test Pit	Test 1	Test 2	Test 3	Infiltration rate (m/s)						
SA1	1.44E-06	1.30E-06	1.59E-06	1.30E-06						
SA2	Insufficient Uptake	Insufficient Uptake	Insufficient Uptake	N/A						
SA3	1.63E-06	1.36E-06	2.20E-06	1.36E-06						

Table 2: Soakaway Infiltration Rates



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Exploratory Hole	Depths (m begl)	Soakaway Infiltration Rate (m/s) Test 1	Worst case Infiltration rate (m/s)		
	4.00 - 5.00	2.92E-05	2.92E-05		
BH1	7.00 - 8.00	1.70E-04	1.70E-04		
	9.00 - 10.00	4.30E-04	4.30E-04		
рцр	5.00 - 7.00	3.07E-05	3.07E-05		
БПZ	7.50 – 9.50	2.97E-04	2.97E-04		
2112	5.50 - 7.50	2.30E-03	2.30E-03		
БПЗ	8.50 - 10.00	3.76E-03	3.76E-03		

Please note that borehole permeability testing is likely to give more conservative full scale soakage tests.

Recommendation

Based upon the available data, shallow soakaways did not yield good infiltration rates, however, deeper borehole permeability testing did. This indicates that a deep soakage solution should be feasible for the proposed development, with appropriate consents and permits from EA and / or other require regulatory bodies as required.

Yours sincerely,

Nigel Ramsumair Senior Engineer

Enc. Exploratory Hole Plan Soakaway Test Results





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Site										
Ich No.	ittingbo	ourne	Datas		Groun	d Laval (Co Ordinatas	BH1	
SHE	1132.2	260	Start 26	6-07-21	Gioui	u Level (111)	Co-Ordinates		
Client	.1132.2	.00	11111511 2	20-07-21					Sheet	
G	ladmar	n Develo	opments						1 of 1	
Well	Water	Samp	bles & In Situ Te	sting	Depth		Legend	Stratum Description		
	Levels	Depin	(m) No/Type	Results	(11)		<u>x 1/2</u>	Brown sandy TOPSOIL Sand is fine to coarse		÷0
					0.30			Very soft brown slightly silty sandy CLAY. Sand is fine to	medium. [Head]	Ē
										Ē
		1.20	SPT	N=6						<u>-</u> 1
							<u> </u>			Ē
		2 00	edt.	N-6						Ē
		2.00	551	IN-0			<u> </u>			- 2
		3.00	SPT	N=4						È.
		0.00		11-4						- 3
					3.50		× · · ×	Madium dance may and busympolity first to medium CANI		Ę
		4 00	SPT	N=13			· · · × · ·	Medium dense grey and brown slity fine to medium SANI	D. [Head]	Ê,
		1.00					· · · × · ·			E 4
					4.50			White Structureless CHALK compared of alightly condu-	ailthe angular ta	ŧ
		5.00	SPT	N=10				subrounded GRAVEL . Clasts are very weak and weak, I	ow to medium	Ē
								density, with occasional black specks. Cream matrix. Oc to subrounded, fine to coarse gravels of flint. (Dc) [Seafo	casional subangular rd Chalk Formation]	Ē
										Ē
										Ē
										Ę
		6.50	SPT	N=17						Ē
										E 7
										Ē
		8.00	SPT	N=11						- 8
										Ē
										Ē
										- 9
		0.50	0.57							Ē
		9.50	581	N=25						È
					10.00					<u>–</u> 1(
								Borenole completed at 10.00m.		
General	Dome	·lze			{10.50}					
1. Hand of 2. Densit 3. No vis 4. Groun 5. SPT - 6. Install gravel be	excavate ies and s ual or ol dwater v Standard details:	d inspecti soil consis factory ev vas not en l Penetrat 50mm pla 00m begl	ion pit from gro stencies are bass vidence of conta icoutered. ion Test; N - N iin pipe concret to 10.00m beg	und level ed on insit amination umber of e flush co l.	to 1.20m tu tests. observec blows. ver from	begl. l. 0.00m be	egl to 0.10r	n begl; Bentonite seal between 0.10m begl to 1.00m begl;	50mm slotted pipe v	with
Ground	lwater		Det		Strike D	epth	Са	sing Depth After		
			Date		(m)	r	Cu	(m) (m) (m)		
									1	
All dime	ensions i	n metres							Logged By	

1.0 ENZYGO WS LOG GINT STD AGS 3_1 ENZYGO.GPJ SHF.1132.260 - SITTINGBOURNE.GPJ 29/7/21



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Site	ittinghe	urne								
Job No SHF	.1132.2	260	Dates Start Finis	: 27-(sh 27	07-21 7-07-21	Groun	d Level (m)	Co-Ordinates BH2	
Client G	ladman	n Devel	opments			-			Sheet 1 of 1	
Well	Water Levels	Sam Depth	ples & In Situ n (m) No/T	Test	ting Results	Depth (m)	Level (mAD)	Legend	Stratum Description	
								$\frac{\underline{x}^{\underline{1}} \underline{1}_{\underline{y}}}{\underline{1}_{\underline{y}}} \cdot \underline{x}^{\underline{1}} \underline{1}_{\underline{y}} \cdot \underline{x}^{\underline{1}} \underline{1}_{\underline{y}} \cdot \underline{x}^{\underline{1}} \underline{1}_{\underline{y}}$	Brown sandy TOPSOIL. Sand is fine to coarse	
						0.80			Soft brown slightly silty sandy CLAY. Sand is fine to medium. [Head]	
		1.50	SP	т	N=20	1.50		0.0.0.0.0	Medium dense brown silty SAND and GRAVEL. Gravel is angular to subrounded, fine to coarse flint. Sand is fine to coarse. [Head]	
						2.50				
		3.00	SP	T	N=10			· · · × · · · · · · · · · · · · · · · ·	Medium dense grey and brown slity fine to medium SAND. [Head]	3
		4.50	SP	T	N=14			× · · × · · · × · · · · · · · · · · · ·		4
										5
		6.50	SP	т	N=15					- 6
		8.00	SP	T I	N=12					8
		9.50	SP	'т	N=8	9.20			White Structureless CHALK composed of slightly sandy silty, angular to	9
						10.00			density, with occasional black specks. Cream matrix. Occasional subangular to subrounded, fine to coarse gravels of flint. (Dc) [Seaford Chalk Formation] Borehole completed at 10.00m.	. E 10
General 1. Hand 2. Densit 3. No vis 4. Groun 5. SPT - 6. Install gravel be	Remar excavated ies and s ual or oli dwater w Standard details: 1 tween 1.	ks d inspect soil consi factory e vas not er l Penetra 50mm pl 00m beg	tion pit from stencies are b vidence of co ncoutered. tion Test; N - ain pipe conc l to 10.00m b	grour pased ontam - Nun prete f pegl.	nd level l on insit nination nber of l flush cov	{10.50} to 1.20m tu tests. observed blows. ver from	 begl. I. 0.00m be	gl to 0.10r	n begl; Bentonite seal between 0.10m begl to 1.00m begl; 50mm slotted pipe	F
Ground	water		Date			Strike De (m)	epth	Ca	sing Depth Depth After (m) (m) (m) (m)	

1.0 ENZYGO WS LOG GINT STD AGS 3_1 ENZYGO.GPJ SHF.1132.260 - SITTINGBOURNE.GPJ 29/7/21



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Site Sittingbourne BH3 Job No Dates Ground Level (m) Co-Ordinates Start 28-07-21 SHF.1132.260 Finish 28-07-21 Client Sheet 1 of 1 **Gladman** Developments Samples & In Situ Testing Water Depth Level Well Legend Stratum Description Levels (mAD) Depth (m) No/Type Results (m) 0 Brown sandy TOPSOIL. Sand is fine to coarse. 0.40 Firm brown slightly silty sandy CLAY. Sand is fine to medium. [Head] 1 1.50 SPT N=7 2 2.10 Brown slightly sandy gravelly CLAY. Gravel is subangular to subrounded, fine to coarse of flint. Sand is fine to coarse. [Head] 0 3.00 SPT N=32 3 3.80 Dense grey and brown silty fine to medium SAND. [Head] 4 4.50 SPT N=17 5 5.30 White Structureless CHALK composed of slightly sandy silty, angular to subrounded GRAVEL . Clasts are very weak and weak, low to medium density, with occasional black specks. Cream matrix. Occasional subangular 6 to subrounded, fine to coarse gravels of flint. (Dc) [Seaford Chalk Formation] 6.50 SPT N=9 7 8.00 SPT N=19 8 9 9.50 SPT N=21 Π 10.00 10 Borehole completed at 10.00m {10.50} General Remarks 1. Hand excavated inspection pit from ground level to 1.20m begl. 2. Densities and soil consistencies are based on insitu tests. 3. No visual or olfactory evidence of contamination observed. 4. Groundwater was not encoutered. 5. SPT - Standard Penetration Test; N - Number of blows. 6. Install details: 50mm plain pipe concrete flush cover from 0.00m begl to 0.10m begl; Bentonite seal between 0.10m begl to 1.00m begl; 50mm slotted pipe with gravel between 1.00m begl to 10.00m begl. Groundwater Depth After Strike Depth Casing Depth (m) Date Observation (m) (m)

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enzyg	\bigcirc	Site Job Number Date of Test SOIL INFILTRATION RATE See B.R.F. Direst 365, 199	Swanstree Av SHF.1132.260 28/07/2021 TEST	enue, Sittin) Design	Trial Pit Num Length Width Depth Groundwater	ber	SA1 2.20 m 0.60 m 3.10 m Dry m
Remarks -		TEST 1	l	TEST 2		1	TEST 3
10.00 - 0.40	Time(min)	Dopth to Water (m)	Timo(min)	Donth to	Water (m)	Timo(min)	Dopth to Water (m)
Brown silty sandy TOPSOIL Sand is fine to		Depth to Water (III)		Deptilito	water (III)	11110(11111)	
coarse	0.00	0.00	0.00		10	0.00	0.04
0.40 - 2.10	0.00	0.90	0.00	1	.10	0.00	0.84
Firm brown silty slightly sandy CLAY. Sand is	1.00	0.91	1.00	1	.10	1.00	0.85
fine. [Head]	2.00	0.91	2.00	1	.11	2.00	0.85
2.10 - 2.70	3.00	0.92	3.00	1	.11	3.00	0.86
Brown silty SAND & GRAVEL. Gravel is angular	4.00	0.93	4.00	1	.12	4.00	0.87
to subrounded, fine to coarse flint. Sand is fine to	5.00	0.94	5.00	1	.13	5.00	0.88
coarse. [Head]	7.00	0.96	10.00	1	.14	10.00	0.92
2.70 - 3.10	10.00	0.97	30.00	1	.18	30.00	0.98
Grey silty fine to medium SAND.	15.00	0.98	60.00	1	.22	60.00	1.02
Stable side walls.	37.00	1.01	90.00	1	.24	145.00	1.13
	60.00	1.05	120.00	1	.28	195.00	1.17
	120.00	1.15	200.00	1	.34	240.00	1.22
	180.00	1.23	240.00	1	.38	360.00	1.29
	360.00	1.35	380.00	1	.47		
	1270.00	1.80	1403.00	1	.87		
			0.00	0	.00		
Effective Storage Depth m		2.20		2	.00		2.26
75% Effective Storage Depth m		1.65		1	.50		1.70
(i.e. depth below GL) m		1.45		1	.60		1.41
25% Effective Storage Depth m		0.55		0	.50		0.57
(i.e. depth below GL) m		2.55		2	.60		2.54
Effective Storage Depth 75%-25% m		1.10		1	.00		1.13
Time to fall to 75% effective depth mins		550.00		70	0.00		600.00
Time to fall to 25% effective depth mins		2800.00		315	50.00		2650.00
V (75%-25%) m3		1.45		1	.32		1.49
a (50%) m2		7.48		6	.92		7.65
t (75%-25%) mins		2250.00		245	50.00		2050.00
SOIL INFILTRATION RATE m/s		1.44E-06		1.30E-06			1.59E-06

1.30E-06

m/s



enzyg	\bigcirc	Site Job Number Date of Test SOIL INFILTRATION RATE	Swanstree Ave SHF.1132.260 28/07/2021	enue, Sittin	Trial Pit Numl Length Width Depth Groundwater	ber	SA2 2.60 0.60 2.80 Dry	m m m
	1	See B.R.E. Digest 365, 1991	, Soakaway D	esign.		1	TEOTO	
Remarks -	Time of (and in)	IESI 1	Time of (see in)	IEST2	A <i>l</i> = h = <i>m l</i> = = k	Time (sector)	TEST 3	
Brown silty SAND & GRAVEL. Gravel is angular to subrounded, fine to coarse flint. Sand is fine to coarse. [Head] 2 10 - 2 80	0.00 1.00	0.80 0.80	0.00 1.00	0. 0.	56 56		Deptira	
Firm brown silty slightly sandy CLAY. Sand is	2.00	0.80	2.00	0.	56			
fine. [Head]	3.00	2.30	3.00	0.	57			
Stable side walls.	4.00	3.30	4.00	0.	57			
	5.00	4.30	5.00	0.	58			
	10.00	5.30	10.00	0.	59			
	30.00	6.30	30.00	0.	60			
	60.00	7.30	60.00	0.	63			
	90.00	8.30	90.00	0.	64			
	130.00	9.30	120.00	0.	65			
	180.00	10.30	180.00	0.	67			
	215.00	11.30	255.00	0.	70			
	360.00	12.30	360.00	0.	72			
	1272.00	13.30	1430.00	0.	86			
			1560.00	0.	89			
			1800.00	0.	92			
Effective Storage Depth m		2.00		2.	24			
75% Effective Storage Depth m		1.50		1.	68			
(i.e. depth below GL) m		1.30		1.	12			
25% Effective Storage Depth m		0.50		0.	56			
(i.e. depth below GL) m		2.30		2.	24			
Effective Storage Depth 75%-25% m		1.00		1.	12			
Time to fall to 75% effective depth mins		insufficient uptake		insufficie	nt uptake			
Time to fall to 25% effective depth mins		insufficient uptake		insufficie	nt uptake			
V (75%-25%) m3		1.56		1.	75			
a (50%) m2		7.96		8.	73			
t (75%-25%) mins		insufficient uptake		insufficie	nt uptake			
SOIL INFILTRATION RATE m/s		N/A		N	/A			

N/A

m/s



enzyg		SiteSwanstree Avenue Job NumberSHF.1132.260 Date of Test28/07/2021 SOIL INFILTRATION RATE TEST See B.R.F. Direst 365, 1991. Soakaway Desir			Trial Pit Num Length Width Depth Groundwater	SA3 3.00 m 0.60 m 3.00 m Dry m	
Remarks -	1	TEST 1		TEST 2		1	TEST 3
10.00 - 0.40	Time(min)	Depth to Water (m)	Time(min)	Depth to	Water (m)	Time(min)	Depth to Water (m)
Brown silty sandy TOPSOIL Sand is fine to		Depth to Water (iii)		Deptilito	water (III)	11116(11111)	
coarse.	0.00	0.89	0.00	4	01	0.00	0.05
0.40 - 2.20	0.00	0.88	0.00	1	.01	0.00	0.85
Firm brown silty slightly sandy CLAY. Sand is	1.00	0.90	1.00	1	.02	1.00	0.85
fine. [Head]	2.00	0.92	2.00	1	.03	2.00	0.86
2.20 - 3.00	3.00	2.30	3.00	1	.04	3.00	0.87
Brown silty slightly sandy slightly gravelly CLAY.	4.00	3.30	4.00	1	.04	4.00	0.87
Gravel is is angular to subrounded, fine to coarse	5.00	4.30	5.00	1	.05	5.00	0.88
flint and chalk. Sand is fine to medium. [Head]	10.00	5.30	10.00	1	.06	10.00	0.89
Stable side walls.	30.00	6.30	30.00	1	.08	30.00	0.92
	60.00	7.30	60.00	1	.10	60.00	0.99
	90.00	8.30	90.00	1	.15	120.00	1.06
	130.00	9.30	120.00	1	.19	195.00	1.15
	180.00	10.30	180.00	1	.26	240.00	1.18
	255.00	11.30	255.00	1	.34	360.00	1.26
	360.00	12.30	360.00	1	.44		
	1296.00	13.30	440.00	1	.51		
			1478.00	1	.92		
Effective Storage Depth m		2.12		1	.99		2.15
75% Effective Storage Depth m		1.59		1	.49		1.61
(i.e. depth below GL) m		1.41		1	.51		1.39
25% Effective Storage Depth m		0.53		0	.50		0.54
(i.e. depth below GL) m		2.47		2	.50		2.46
Effective Storage Depth 75%-25% m		1.06		1	.00		1.08
Time to fall to 75% effective depth mins		500.00		45	0.00		540.00
Time to fall to 25% effective depth mins		2570.00		290	00.00		2080.00
V (75%-25%) m3		1.91		1	.79		1.94
a (50%) m2		9.43		8	.96		9.54
t (75%-25%) mins		2070.00		245	50.00		1540.00
SOIL INFILTRATION RATE m/s		1.63E-06		1.36E-06			2.20E-06

1.36E-06 m/s



enzyg		Si Jc Di B	te bb Number ate of Test OREHOLE SOIL INFILTF	Swanstree Avenue SHF.1132.260 26/07/2021	Swanstree Avenue SHF.1132.260 26/07/2021			BH1-1 0.15 4.00 5.00 Dry	m m m
Remarks -			TEST 1		TEST 2			TEST 3	
Please refer to BH1 log for ground condi	itions.	Time(min)	Depth to Water (m)	Time(min)	Depth to W	Denth to Water (m)		Depth to	o Water (m)
		0.0 1.0 2.0 3.0 4.0 5.0 6.0 8.0 10.0 15.0 20.0 25.0 30.0 40.0 50.0 60.0	0.00 0.46 0.52 0.64 0.77 0.90 0.96 1.20 1.38 1.70 2.14 2.35 2.64 3.15 3.46 3.76						
Effective Storage Depth	m		5.00						
75% Effective Storage Depth	m		3.75						
(i.e. depth below GL)	m		1.25						
25% Effective Storage Depth	m		1.25						
(i.e. depth below GL)	m	1	3.75						
Effective Storage Depth 75%-25%	m	1	2.50						
Time to fall to 75% effective depth Time to fall to 25% effective depth	mins mins		8.50 60.00						
V (75%-25%)	m3		0.04						
a	m2		0.49						
t (75%-25%)	mins		51.50						
SOIL INFILTRATION RATE	m/s		2.92E-05						







enzyg•)	S J E	Site lob Number Date of Test 30REHOLE SOIL INFILTR	Swanstree Avenue SHF.1132.260 26/07/2021		Soakaway N Diameter Casing Dept Borehole De Groundwate	lumber h pth r Level	BH1-2 0.15 7.00 8.00 Dry	m m m
			See B.R.E. Digest 365, 199	1, Soakaway Design.			- F		
Remarks -			TEST 1		TEST 2			TEST 3	
Please refer to BH1 log for ground conc	ditions.	Time(min)	Depth to Water (m)	Time(min) Depth to		ater (m)	Time(min)	Depth to	o Water (m)
		$\begin{array}{c} 0.0\\ 1.0\\ 2.0\\ 3.0\\ 4.0\\ 5.0\\ 6.0\\ 8.0\\ 10.0\\ 15.0\\ 20.0\\ 25.0\\ 30.0\\ 40.0\\ 50.0\\ 60.0\\ \end{array}$	0.00 1.70 2.07 2.53 3.00 3.39 3.67 4.24 4.87 5.86 6.46 6.46 6.72 7.06 7.27 7.50 7.60						
Effective Storage Depth 75% Effective Storage Depth (i.e. depth below GL) 25% Effective Storage Depth (i.e. depth below GL) Effective Storage Depth 75%-25% Time to fall to 75% effective depth Time to fall to 25% effective depth V (75%-25%) a t (75%-25%)	m m m m mins mins m3 m2 mins		8.00 6.00 2.00 6.00 4.00 1.80 16.00 0.07 0.49 14.20						
SOIL INFILTRATION RATE	m/s		1.70E-04						







enzygo		S J E E	ite ob Number vate of Test BOREHOLE SOIL INFILTR	Swanstree Avenue SHF.1132.260 26/07/2021	Swanstree Avenue SHF.1132.260 26/07/2021			BH1-3 0.15 9.00 10.00 Dry	m m m	
Remarks -			TEST 1	T, Soukaway Design.	TEST 2	ł		TEST 3		
Please refer to BH1 log for ground condi	tions.	Time(min)	Depth to Water (m)	Time(min)	Depth to W	Vater (m) Time(mi		Depth to Water (m)		
		0.0 1.0 2.0 3.0 4.0 5.0 6.0 8.0 10.0 15.0	0.00 2.50 3.41 4.46 5.30 6.04 6.73 7.55 8.30 9.75							
Effective Storage Depth	m		10.00							
75% Effective Storage Depth	m		7.50							
(i.e. depth below GL)	m		2.50							
25% Effective Storage Depth	m		2.50							
(i.e. depth below GL)	m		7.50							
Effective Storage Depth 75%-25%	m		5.00							
Time to fall to 75% offective death	mine		1.00							
Time to fall to 25% effective depth	mine		8.00							
			0.00							
V (75%-25%)	m3		0.09							
a	m2		0.49							
t (75%-25%)	mins		7.00							
SOIL INFILTRATION RATE	m/s		4.30E-04							







enzyg•		s J E	Site ob Number Date of Test BOREHOLE SOIL INFILTR.	Swanstree Avenue SHF.1132.260 26/07/2021 ATION RATE TEST		Soakaway N Diameter Casing Depti Borehole De Groundwater	umber h pth ^r Level	BH2-1 0.15 5.00 7.00 Dry	m m m
		<u>ا</u>	See B.R.E. Digest 365, 1991, Soakaway Design.				1		
Remarks -			IESI 1 IESI 2		TEST 2			IEST3	
Please refer to BH2 log for ground conc	litions.	Time(min) 0.0 1.0 2.0 3.0 4.0 5.0 6.0 8.0 10.0 15.0 20.0 25.0 30.0 40.0 50.0 60.0	Depth to Water (m) 0.00 1.80 1.88 1.98 2.18 2.30 2.60 2.90 3.20 3.88 4.40 4.66 5.06 5.40 5.65 5.90	Time(min)	Depth to W	ater (m)	Time(min)	Depth t	o Water (m)
Effective Storage Depth 75% Effective Storage Depth (i.e. depth below GL) 25% Effective Storage Depth (i.e. depth below GL) Effective Storage Depth 75%-25% Time to fall to 75% effective depth Time to fall to 25% effective depth V (75%-25%) a t (75%-25%)	m m m m mins mins m3 m2 mins		7.00 5.25 1.75 1.75 5.25 3.50 1.00 36.00 0.06 0.96 35.00						
SOIL INFILTRATION RATE	m/s		3.07E-05						







enzyg			b Number b Number ate of Test DREHOLE SOIL INFIL	Swanstree Avenue SHF.1132.260 26/07/2021 IRATION RATE TEST	Swanstree Avenue SHF.1132.260 26/07/2021 TION RATE TEST		Soakaway Number Diameter Casing Depth Borehole Depth Groundwater Level		m m m
Remarks -			TEST 1	771, Soukaway Design.	TEST 2			TEST 3	
Please refer to BH3 log for ground cond	ditions.	Time(min)	Depth to Water (m)	Time(min)	Depth to Wa	Vater (m) Time(m		Depth to Water (
		0.0 0.5 1.0	0.00 5.00 10.00						
Effective Storage Depth 75% Effective Storage Depth (i.e. depth below GL) 25% Effective Storage Depth (i.e. depth below GL) Effective Storage Depth 75%-25% Time to fall to 75% effective depth Time to fall to 25% effective depth V (75%-25%) a t (75%-25%)	m m m m mins mins m3 m2 mins		9.50 7.13 2.38 2.38 7.13 4.75 2.30 7.20 0.08 0.96 4.90						
SOIL INFILTRATION RATE	m/s		2.97E-04						







enzyg			ite ob Number ate of Test OREHOLE SOIL INFILTF	Swanstree Avenue SHF.1132.260 26/07/2021		Soakaway Nu Diameter Casing Depth Borehole Dep Groundwater	umber o bth Level	BH3-1 0.15 5.50 7.50 Dry	m m m
Remarks -		! ³	TEST 1	T, SUAKAWAY DESIYIT.	TEST 2	ļ		TEST 3	
Please refer to BH3 log for ground cor	nditions.	Time(min)	Depth to Water (m)	Time(min)	Time(min) Depth to V		Time(min)	Depth to Water (m)	
		0.0 0.5 1.0	0.00 4.00 7.50						
Effective Storage Depth	m		7.50						
75% Effective Storage Depth	m		5.63						
(i.e. depth below GL)	m		1.88						
25% Effective Storage Depth	m		1.88						
(i.e. depth below GL)	m		5.63						
Effective Storage Depth 75%-25%	m		3.75						
Time to fall to 75% effective depth	mins		0.24						
Time to fall to 25% effective depth	mins		0.74						
V (75%-25%)	m3		0.07						
a	m2		0.96						
t (75%-25%)	mins		0.50						
SOIL INFILTRATION RATE	m/s		2.30E-03						







enzyg			e o Number te of Test DREHOLE SOIL INFILT	Swanstree Avenue 	Swanstree Avenue SHF.1132.260 26/07/2021 TION RATE TEST		Soakaway Number Diameter Casing Depth Borehole Depth Groundwater Level		m m m
Remarks -			TEST 1	771, Soakaway Design.	TEST 2			TEST 3	
Please refer to BH3 log for ground cor	nditions.	Time(min)	Depth to Water (m)	Time(min)	Depth to W	ater (m)	Time(min)) Depth to Water (
		0.0 0.5 1.0	0.00 4.00 9.00						
Effective Storage Depth 75% Effective Storage Depth (i.e. depth below GL) 25% Effective Storage Depth (i.e. depth below GL) Effective Storage Depth 75%-25% Time to fall to 75% effective depth Time to fall to 25% effective depth V (75%-25%) a	m m m m mins mins m3 m2		10.00 7.50 2.50 2.50 7.50 5.00 0.31 0.85 0.09 0.72						
t (75%-25%)	mins		0.54						
SOIL INFILTRATION RATE	m/s		3.76E-03						





