

CATHEDRAL BUSINESS PARK

SITE F - MULTI-UNIT EMPLOYMENT

Surface Water Drainage

Prepared on Behalf of Seaward (Bognor Road) Limited

D1993/RMA5/DS1.0

26 March 2024



DOCUMENT CONTROL

Project: Cathedral Business Park

Site F - Multi-unit Employment

Document: Surface Water Drainage

Client: Seaward (Bognor Road) Limited

Reference: D1993/RMA5/DS1.0

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Sta tus:

Issue	Date	Status	Issued by
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Surface Water Drainage Design Summary and Calculations						
Project Name: Cathedral Business Park						
Project Number:	D1993					
Client:	Seaward (Bognor Road) Limited					
Prepared by and Date: LF 25/03/2024						

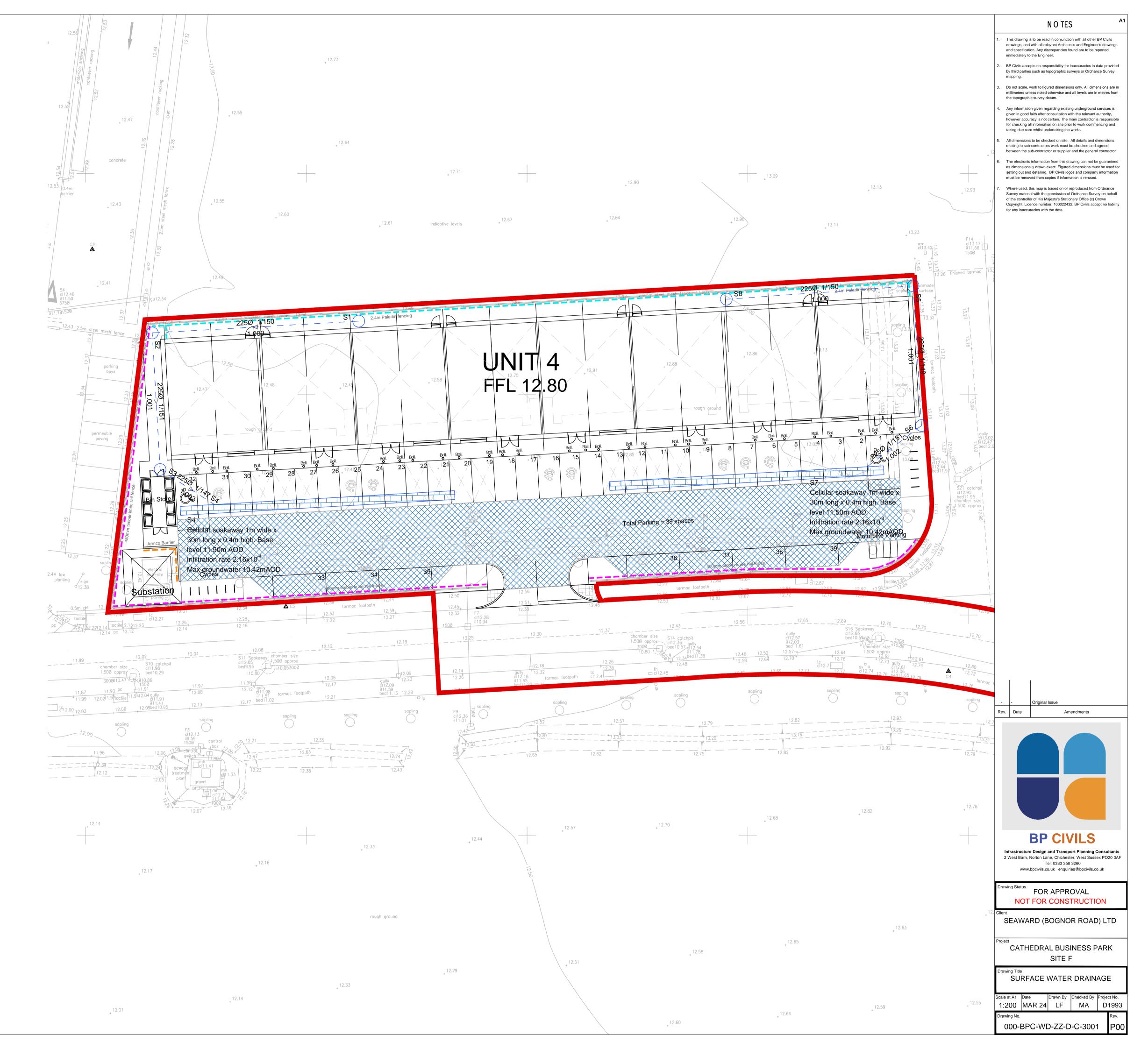


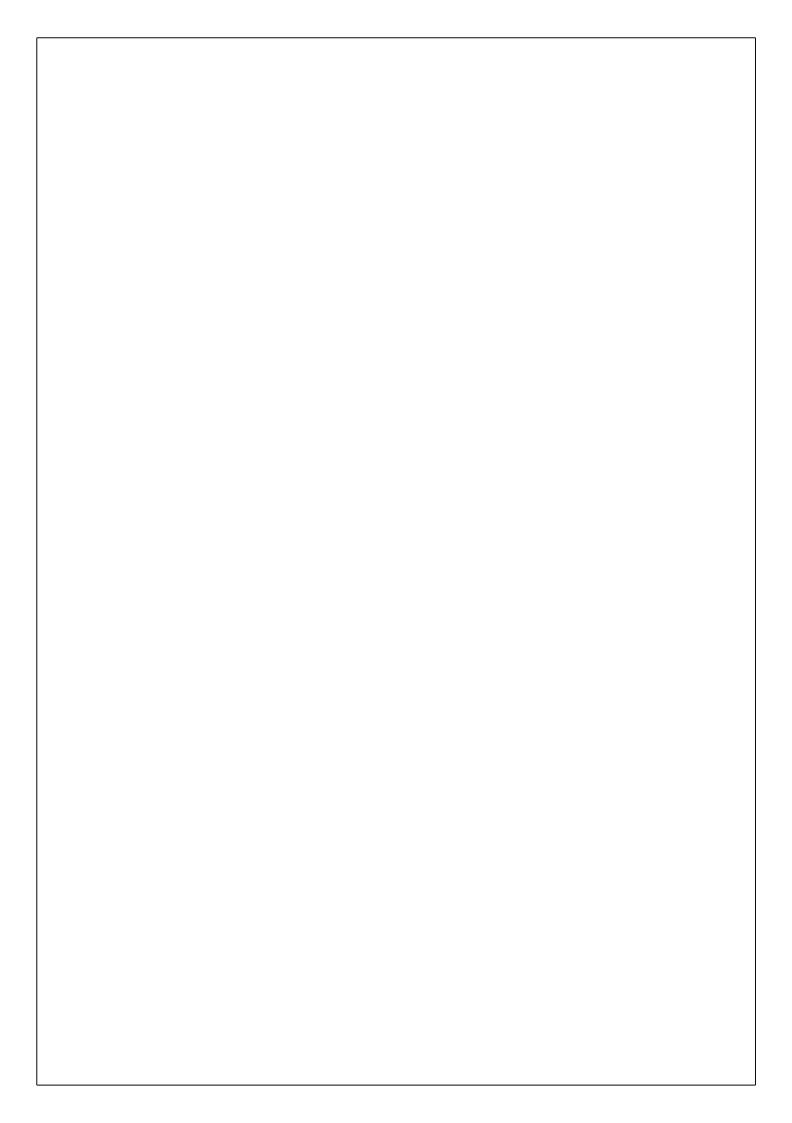
Site Address:	Land off Bognor Road, Chichester –Plot F, Multi-unit Employment
Local Authority:	Chichester District Council
Lead Local Flood Authority:	West Sussex County Council
Site Area:	Plot F 0.47Ha
Geology:	Geotechnical investigation found Silt, Gravel, Sand & Chalk up to 5.0mbgl across the site.
Ground Water Depth:	Groundwater monitoring found levels at 8.79-11.15mAOD. Max 10.42 for this area.
Soil Infiltration rate:	Design infiltration rates varied across the site between 3.25 x 10 ^s and 1.45 x 10 ^s m/s.
Nearby watercourse:	None close by.
Nearby surface water sewer:	None
Proposed method of disposal and reason:	Infiltration. This is the most suitable method.
Design storms considered:	1:100 year. FEH22
Climate change:	45%
Proposed Catchment Area:	0.11Ha roof, 0.11Ha, externals.
Proposed discharge Rate:	N/A
Flow control method	N/A
Volume of Storage Provided and method:	Permeable paving and cellular soakaways. 161.9m ³
Offsite works:	None
	The surface water drainage design follows the strategy set out in the Flood Risk Assessment prepared by GTA Civils and the subsequent addendum prepared by BP Civils, submitted under outline planning application.
Notes:	The proposal includes permeable paving to the car parking areas and cellular soakaways for the building roof. Ground water was found at a maximum level of 10.42mAOD, infiltration will take place above this level with an unsaturated zone of at least 1m.
	Building floor level set to 12.80 in line with the FRA and addendum.
	Infiltration rate used from test pit SA306 2.16x10-4m/s

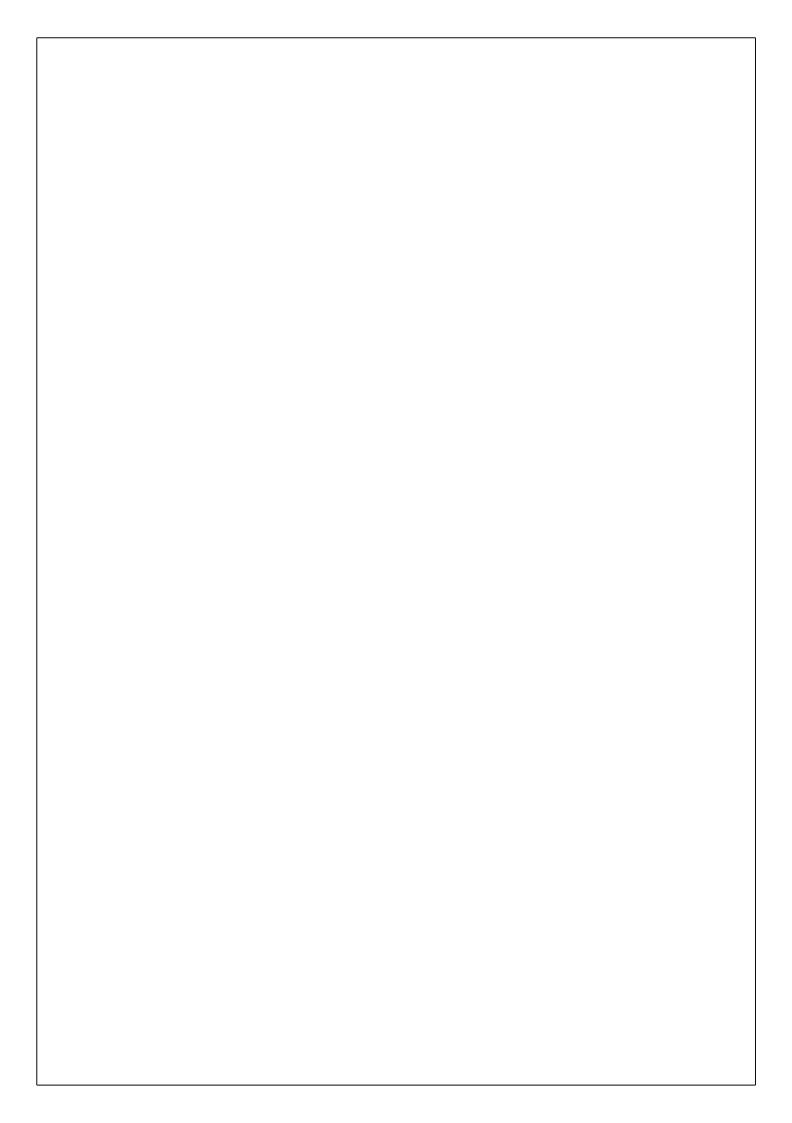


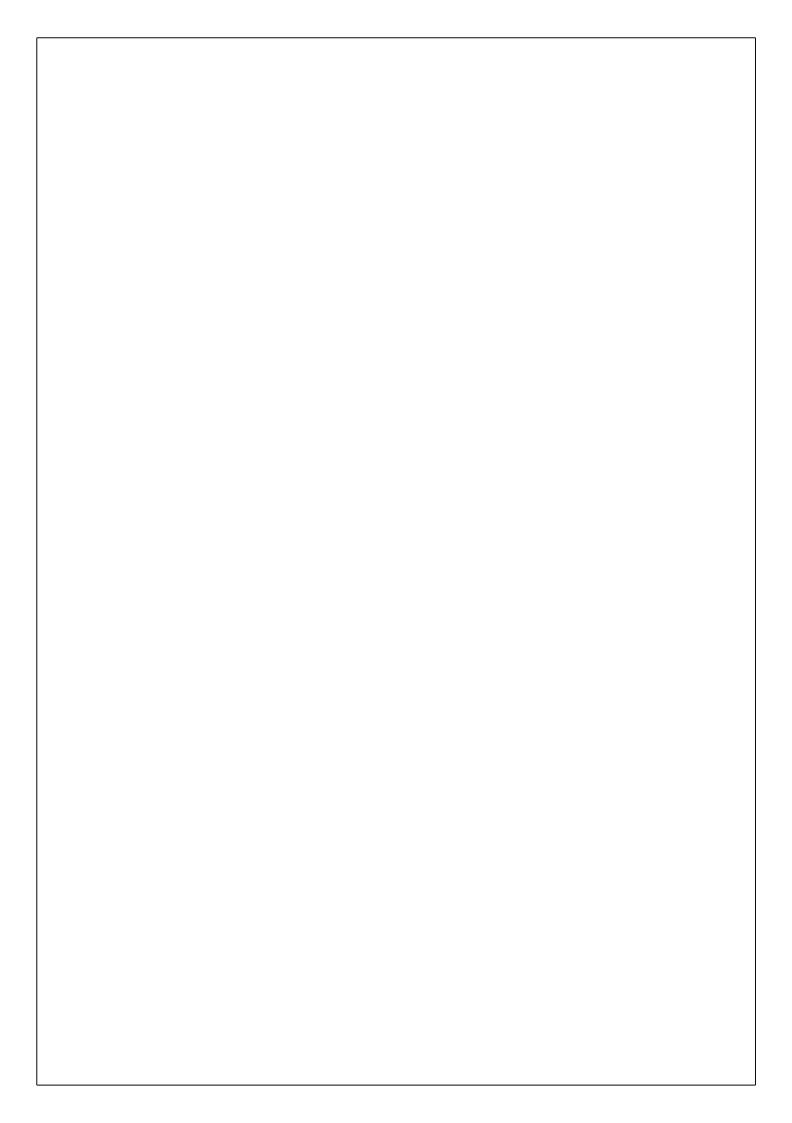
PHASE: 0									
MH No.	MANHOLE DIAMETER (mm)	MANHOLE TYPE	COVER LEVEL (m)	INVERT LEVEL (m)	DEPTH TO SOFFIT (m)	EASTING (m)	NORTHING (m)		
S1	1350	CATCHPIT	12.650	12.050	0.375	487930.941	104283.281		
S2	1350	CATCHPIT	12.650	11.894	0.531	487907.556	104281.945		
S3	1350	CATCHPIT	12.650	11.791	0.634	487908.445	104266.469		
S4		SOAKAWAY	12.500	11.734	0.541	487915.506	104261.918		
S5	1350	CATCHPIT	12.650	11.909	0.516	487993.713	104287.271		
S6	1350	CATCHPIT	12.650	11.803	0.622	487994.666	104271.454		
S7		SOAKAWAY	12.500	11.742	0.533	487987.317	104265.893		
S8	1350	CATCHPIT	12.650	12.050	0.375	487972.570	104285.765		

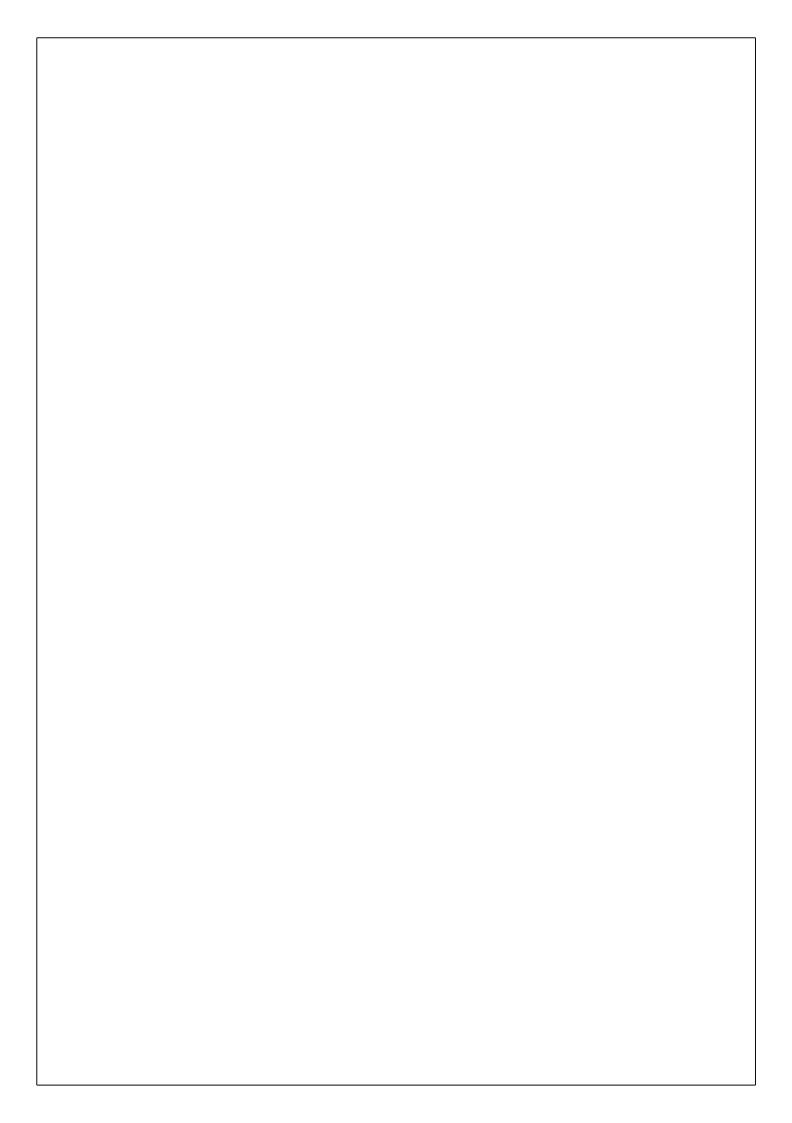
PRIVATE SURFACE WATER DRAINAGE							
S#	CATCHPIT						
	PRIVATE SURFACE WATER DRAINAGE						
	PERMEABLE PAVING (INFILTRATION WITH NO CONNECTION TO PIPED SYSTEM) 450mm subbase						













Hanbury Properties (Chichester) Ltd

Cathedral Park, Chichester Factual report on winter groundwater levels and infiltration testing

July, 2021



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CATHEDRAL PARK, CHICHESTER Factual report on winter groundwater levels and infiltration testing



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Figure 2 Site layout and exploratory hole location plan

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Appendix B Soakage test results



1. INTRODUCTION

1.1 General

Following discussions with Chichester District Council (CDC) in September 2019 on the preliminary drainage design for Phase 1 of Cathedral Park Business Park (Bognor Bridge Road), Chichester PO20 1EG, it was agreed that there would be a programme of groundwater monitoring of specifically installed standpipes through the winter months of November 2019 to February 2020. In addition, a series of BRE 365 infiltration tests would be undertaken within trial pits in the Phase 1 area at a level of 11.2mOD together with tests at deeper levels, circa 10.5mOD and falling head tests within the standpipe installations.

Following submission of the factual report specific to the Phase 1 area, Hanbury Properties instructed CGL to update the report to include groundwater monitoring data for the Phase 2 area of Cathedral Park Business Park

This report presents the factual information in connection with the testing and monitoring recently undertaken. A site location plan is provided in Figure 1.



2. WINTER GROUNDWATER LEVELS

2.1 Standpipe installations

A series of standpipes were installed across the site within windowless sampling boreholes, details of which are provided in Table 1 below. The monitoring response zones were such that groundwater levels at near surface relevant to a possible infiltration elevation of 11.2mOD could be achieved.

Table 1. Groundwater monitoring boreholes and corresponding ground levels

Phase 1 Area							
Borehole	GL (mOD)						
WS305	12.9						
WS307	11.83						
WS308	12.15						
WS309	11.8						
BH201	11.8						
BH2	11.95						
Phase	2 Area						
Borehole	GL (mOD)						
WS301	13.26						
WS302	13.24						
WS303	12.94						
WS304	12.5						
WS306	12.4						
WS310	12.49						
WS311	12.87						
WS312	12.9						
WS313	12.6						
WS204	12.4						
WS211	11.8						
BH1	12						

At the same time BH201 and BH2 from earlier stages of investigation were re activated.

The location of these monitoring points is shown on Figure 2. Borehole records are included in Appendix A.

2.2 Winter groundwater monitoring

It had been agreed that water level monitoring would occur at approximately 2 week intervals through the months of November and December, 2019 and January and February, 2020.

The tabulated readings in relation to Ordnance Datum are shown in Table 2 and Table 3 below.



Table 2. Winter groundwater monitoring records for Phase 1 Area

		23/10/2019	06/11/2019	20/11/2019	11/12/2019	23/12/2019	03/01/2020	16/01/2020	29/01/2020	12/02/2020	02/03/2020
Borehole	GL (mOD)	Level (mOD)									
WS305	12.9	9.63	9.64	9.67	9.65	10.2	10.13	10.14	10.07	10.02	10.23
WS307	11.83	9.77	9.54	9.56	9.77	10.46	10.31	10.32	10.23	10.12	10.31
WS308	12.15	DRY									
WS309	11.8	9.74	9.72	9.82	9.75	10.52	10.39	10.38	10.23	10.19	10.39
BH201	11.8	9.49	8.98	9.61	9.55	10.29	10.15	10.14	10.07	9.98	10.17
BH2	11.95	9.69	9.7	9.7	9.63	10.41	10.25	10.21	10.16	10.08	10.25

Table 3. Winter groundwater monitoring records for Phase 2 Area

		23/10/19	6/11/1 9	20/11/19	11/12/19	23/12/19	03/01/20	16/01/20	29/01/20	12/02/20	02/03/20
Borehol e	GL (mOD)	Level (mOD)	Level (mOD)	Level (mOD)	Level (mOD)	Level (mOD)	Level (mOD)	Level (mOD)	Level (mOD)	Level (mOD)	Level (mOD)
WS301	13.26	9.86	9.79	9.79	9.79	10.46	10.35	10.37	10.27	10.16	10.38
WS302	13.24	9.73	9.73	9.73	9.70	10.27	10.19	10.21	10.12	10.01	10.21
WS303	12.94	9.62	9.6	9.6	12.47 FLOODED	10.2	10.09	10.14	9.96	10.01	10.23
WS304	12.5	9.24	9.18	9.65	9.22	9.76	9.67	9.84	9.6	9.67	9.9
WS306	12.4	9.79	9.77	9.79	9.76	10.49	10.36	10.38	10.3	10.15	10.37
WS310	12.49	9.77	9.79	9.85	9.78	10.65	10.49	10.46	10.34	10.29	10.5
WS311	12.87	9.84	9.84	9.85	9.83	10.59	10.42	10.43	10.35	10.28	10.49
WS312	12.9	9.69	9.6	9.74	9.69	10.42	10.29	10.3	10.13	10.13	10.34
WS313	12.6	10.39	10.25	10.27	10.28	11.15	11.02	11.01	10.94	10.85	11.03
WS204	12.4	10.18	10.18	10.21	10.17	11.01	10.84	10.81	10.66	10.63	10.79
WS211	11.8	8.79	8.79	8.86	8.81	9.41	9.28	9.29	9.18	9.17	9.38
BH1	12	9.69	9.26	9.23	9.14	10.01	9.85	9.83	9.75	9.64	9.86

The water levels can be compared to the proposed development levels and the proposed infiltration level for the Phase 1 area of 11.2mOD as shown in Plate 1 below.



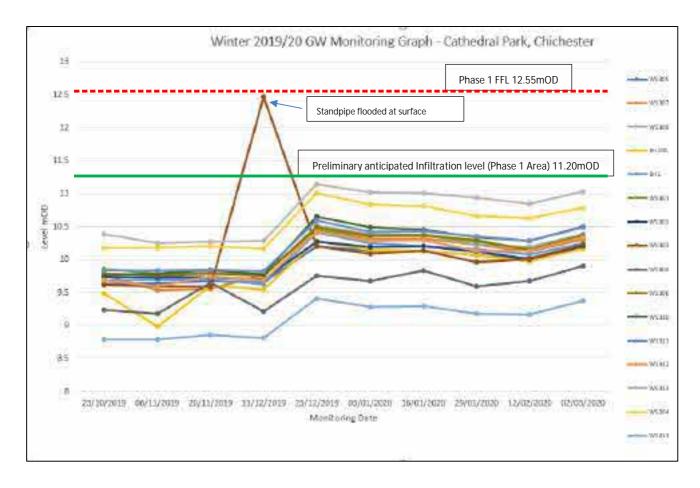


Plate 1. Winter groundwater levels compared to key development levels

2.3 Rainfall records for monitoring period

The winter of 2019/20 has seen a series of significant storms and greater than average monthly rainfall for the last decade as shown in Plate 2 below.



Plate 2. Rainfall data for Chichester - 2009 to 2020



3. INFILTRATION

3.1 Infiltration testing

Two series of infiltration tests were undertaken, broadly in line with BRE365 as conditions allowed in January and March 2020. Two levels for infiltration testing were targeted, approximately 11.2mOD and deeper at approximately 10.5mOD. The locations of the tests are shown on Figure 2.

Trial pit logs are provided in Appendix A. The records for each test are presented in Appendix B.

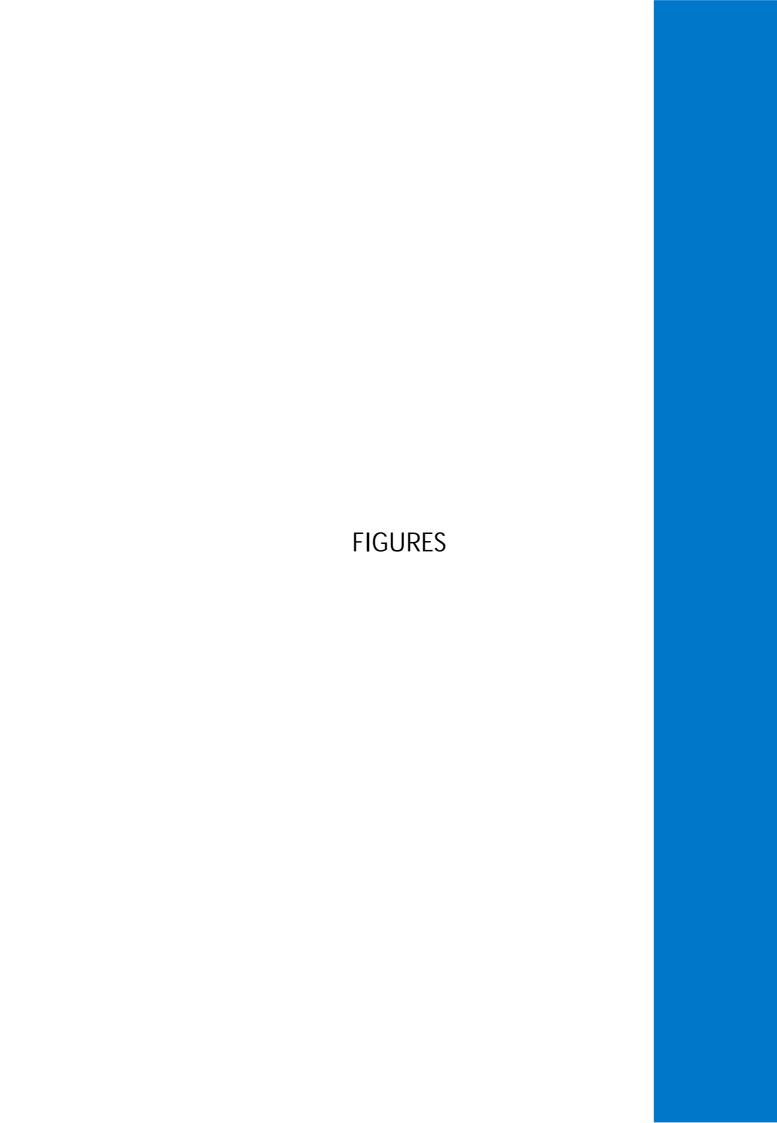
In summary, the infiltration permeability in m/s for those tests done at approximately 11.2mOD are tabulated below:

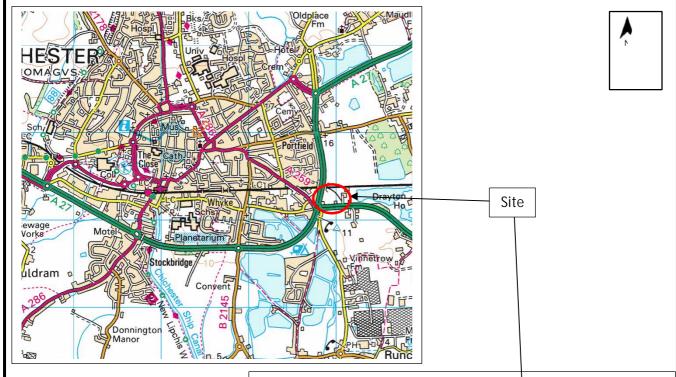
Location	Level of test	Run 1	Run 2	Run 3	Average
SA-401	11.30	3.25E-05			3.25E-05
SA-403	11.65	3.71E-05			3.71E-05
SA-404	11.20	1.76E-04	8.30E-05	1.65E-03	6.36E-04
SA-405	11.25	1.76E-03	1.47E-03	1.06E-03	1.43E-03
SA-406	10.85	3.50E-03	1.64E-03	1.38E-03	2.17E-03
SA-407	11.10	3.03E-04	1.45E-04	8.95E-05	1.79E-04
				Average	7.47E-04

Note: Results for SA402 have been omitted due to presence of void infilled with brick cobbles encountered below soakage test level.

The infiltration permeability for those tests done at approximately 10.5mOD are tabulated below:

Location	Level of test	Run 1	Run 2	Run 3	Average
SA_301	10.70	7.14E-04	3.66E-04	1.52E-04	4.11E-04
SA_302	10.75	1.94E-02	1.66E-03	1.45E-03	7.51E-03
SA_303	10.45	4.74E-03	1.29E-03	2.33E-03	2.79E-03
SA_304	10.65	1.44E-03	5.34E-04	2.32E-04	7.34E-04
SA_305	10.30	1.75E-03	1.38E-03	1.10E-03	1.41E-03
SA_306	11.05	4.23E-04	2.16E-04	7.89E-04	4.76E-04
SA_307	9.90	5.70E-04	4.57E-04	4.20E-04	4.82E-04
SA_308	10.35	2.88E-04	1.82E-04	2.34E-04	2.35E-04
SA_309	9.95	8.22E-05	6.14E-04	7.73E-04	4.90E-04
				Average	1.61E-03



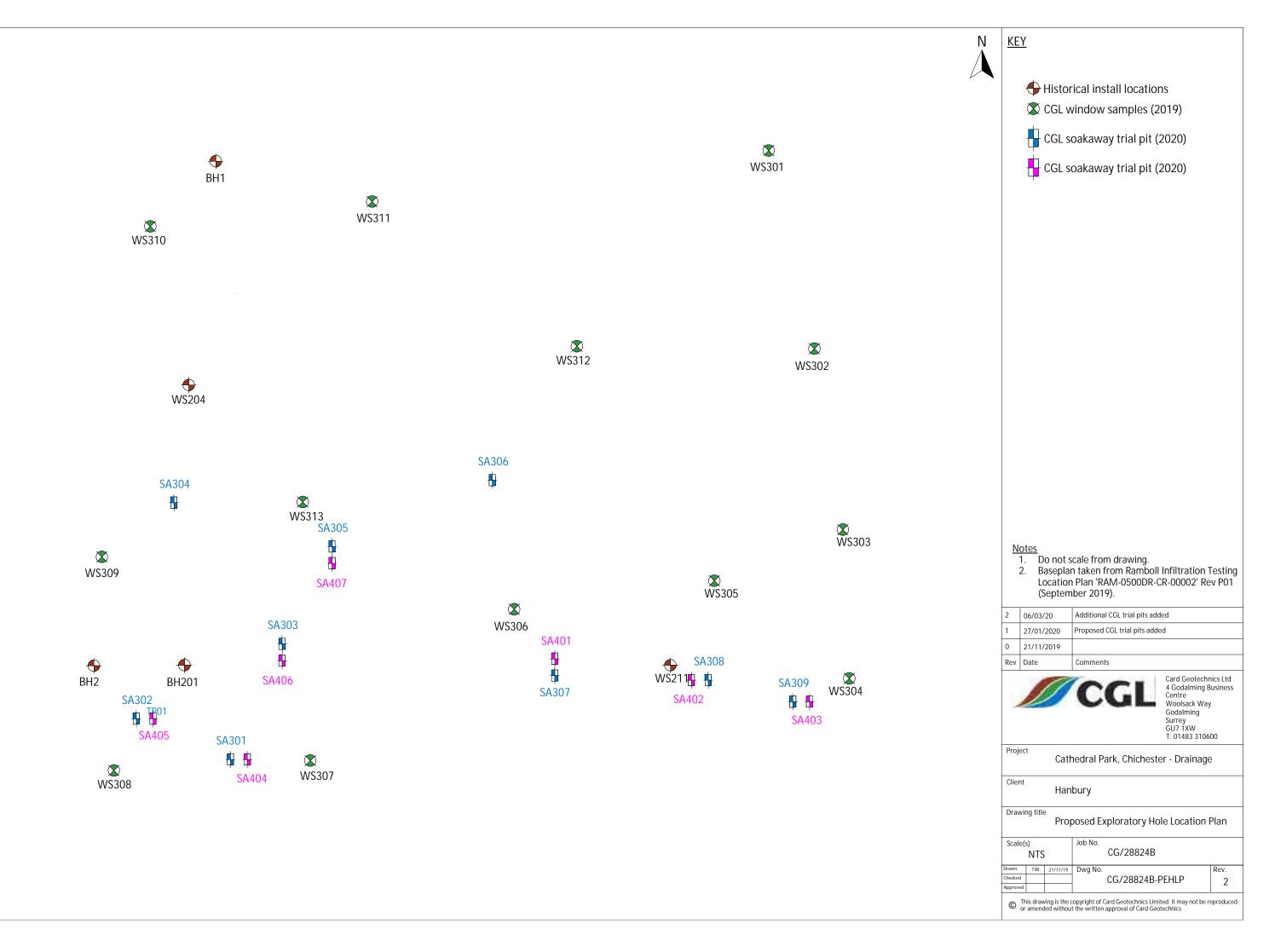




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Hanbury Properties (Chichester) Ltd	Cathedral Park, Chichester	Job No CG/28824B
CGL	Site Location Plan	Figure 1



APPENDIX A

CGL borehole and trial pit logs



Project				TRIAL PIT No
Cathedral Pa	C A 2 O 1			
Job No	Date 29-01-20	Ground Level (m)	Co-Ordinates (m)	- SA301
CG/28824	29-01-20	12.00	E 487,885.3 N 104,172.8	
Client	Sheet			
Hanbury Pro	perties (Chichester) l	imited		1 of 1

1. Trial excavated for BRE365 soakage test. 2. Coordinates and ground levels extracted from topographic survey. 3. Backfilled with arisings upon completion topographic survey. Stable	SHOTTE							011	001
Depth (m) Type Result (even dependence) Result	Hanbu	ry Prope	erties (0	Chichest	ter) Lin	nited			1 of 1
Grass over: Firm dark brown sandy gravelly silt TOPSOIL. Sand is fine to coarse Grave is time to medium, angular to subrounded of filmt. 11.00 10.70 Medium dense dark brown sandy very silty fine to coarse. Frequent cobbies of angular to rubrounded filmt. Medium dense dark brown sandy very silty fine to coarse. Frequent cobbies of angular to rubrounded filmt. Medium dense dark brown sandy very silty fine to coarse. Frequent cobbies of angular to rubrounded filmt. Medium dense dark brown sandy very silty fine to coarse. Frequent cobbies of angular to rubrounded filmt. 1.00 Becoming dense. Ceneral Remarks 1.71al excavated for BRE365 soakage test. 2. Coordinates and ground levels extracted from topographic survey. 3. Backfilled with arisings upon completion strated from topographic survey. 3. Backfilled with arisings upon completion to the firmth of the properties of the prope	SAMPLES								
11.70 1.00	Depth T	ype Res	est Sult Sult		Legend	(Thick-		ON	
1. Trial excavated for BRE365 soakage test. 2. Coordinates and ground levels extracted from topographic survey. 3. Backfilled with arisings upon completion topographic survey. Stable	Depth T I	Type Res	est sult water and a support of the sult o	11.70	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	(0.30) (0.30) (0.70)	Grass over: Firm dark brown sandy gravelly Gravel is fine to medium, angular to subrounded is fine to subrounded of flint. Sand is fine angular to rubrounded flint. Medium dense dark brown sandy very silty subrounded of flint. Sand is fine to coarse. rubrounded flint. 1.00 Becoming dense.	y silt TOPSOIL. Sar unded of flint. y SILT. Gravel is fir to coarse. Freque	ne to coarse, ent cobbles of
Method/ Field Crew Logged By Checked By	Stability:			-		-		. 2. Coordinates a filled with arising	nd ground levels s upon completior



Project				TRIAL PIT No				
Cathedral Pa	Cathedral Park, Drainage							
Job No	Date 29-01-20	Ground Level (m)	Co-Ordinates (m)	SA302				
CG/28824	29-01-20	12.05	E 487,857.3 N 104,184.9					
Client	Client							
Hanbury Pro	perties (Chichester)	Limited		1 of 1				

1									11001
Han	bury Pi	ropertie	es (C	Chichest	er) Lin	nited			1 of 1
SAMPLI	ES & TI	ESTS	je.				STRATA		
Depth (m)	Type No	Test Result (N/kPa/ppm)	Water	Reduced Level	Legend	Depth (m) (Thick- ness)	DESCRIPTION	ON	
				11.65	%Ω ' X	- (0.40) - 0.40	Grass over: Dark brown slighlty gravelly, sil Gravel is fine to medium, angular to subrou Firm dark brown very gravelly sandy cobbly angular to subrounded of flint. Sand is fine	unded of flint.	
					\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	(0.60)	angular to subrounded flint. 0.70 Becoming light brown and slightly sand		dent comples of
				11.05	*0 × 0 × 0 × 0 × 0 × 0 × 0 × 0 × 0 × 0 ×	}	Medium dense dark brown slightly silty sar rounded GRAVEL of flint. Sand is fine to coa subrounded flint.	ndy fine to coars arse. Frequent c	se, subangular to obbles of angular to
Plan O.8m Stability: Method/ Plant Used							(Pit terminated at 1.3m) General Remarks		
0.8m	Stab	ßm———	-				Trial excavated for BRE365 soakage test. extracted from topographic survey. 3. Back	2. Coordinates filled with arisir	and ground levels ngs upon completion
Method/ Plant Used	8 tor	nne tracl	ked	excavato	or		Field Crew BPH Plant Hire	Logged By ELD	Checked By DRAFT



Project				TRIAL PIT No				
Cathedral Pa	Cathedral Park, Drainage							
Job No	Date 29-01-20	Ground Level (m)	Co-Ordinates (m)	- SA303				
CG/28824	29-01-20	11.65	E 487,900.7 N 104,207.2					
Client	Client							
Hanbury Pro	perties (Chichester) L	imited		1 of 1				

l			,,					One	
		ropertie	es (C	hichest	ter) Lim	nited			1 of 1
SAMPLE	ES & TI		e.				STRATA		
Depth (m)	Type No	Test Result (N/kPa/ppm)	Wate	Reduced Level	Leaend	Depth (m) <u>(</u> Thick- ness)	DESCRIPTI		
Depth (m)		Test Result (N/kPa/ppm)	Water	11.25	Legend	- (0.40) - 0.40 - (0.60) - 1.00		ly silty fine to coar unded of flint. y SILT. Gravel is fin to coarse. Frequen	e to coarse, nt cobbles of ed GRAVEL of flint.
Plan Stability: Method/ Plant Used		.5m		-		-	General Remarks 1. Trial excavated for BRE365 soakage test. extracted from topographic survey. 3. Back	. 2. Coordinates an	d ground levels upon completion
Stability:	Stability: Stable								
Method/ Plant Used	8 to	nne trac	ked	excavato	or		Field Crew BPH Plant Hire	Logged By ELD	Checked By DRAFT



Project					TRIAL PIT No
Cathedral Parl	SA304				
Job No	Date 29-01-20	Ground Level (m)	Co-Ordinates (m)		3A3U4
CG/28824	29-01-20	11.85	E 487,868.4	N 104,249.2	
Client	Sheet				
Hanbury Prop	erties (Chichester) Lii	mited			1 of 1

Hanl	Hanbury Properties (Chichester) Limited						1 of 1	
SAMPLE	S & TE	STS	ŀ				STRATA	
Depth (m)	Type No	Test Result (N/kPa/ppm)	Water	Reduced Level	Legend	Depth (m) <u>(</u> Thick- ness)	DESCRIPTION	
Report ID: CGL TP LOG Project: CG_28824B CATHEDRAL PARK, CHICHETSTER. GPJ Library: CGL_AGS4_R1.GLB Date: 9 March 2020 Definition		Result (N/kPa/ppm)		11.25	%	- (0.60) - 0.60	Grass over: Dark brown slightly gravelly silty fine to coal is fine to medium, angular to subrounded of flint. Firm dark brown very gravelly sandy cobbly SILT. Gravel angular to subrounded of flint. Sand is fine to coarse. Frangular to rubrounded flint. Dense light brown slightly sandy fine to coarse, subange of flint. Sand is fine to coarse. Frequent cobbles of angular to rubrounded at 1.2m) General Remarks 1. Trial excavated for BRE365 soakage test. 2. Coordinal extracted from topographic survey. 3. Backfilled with an extracted from topographic survey.	is fine to coarse, equent cobbles of
Stability:	↓							
Ö							Elali Comment	Object 15
Method/ Plant Used	Method/ Plant Used 8 tonne tracked excavator				or		Field Crew BPH Plant Hire Logged By ELD	Checked By DRAFT



Project				TRIAL PIT No				
Cathedral Pa	Cathedral Park, Drainage							
Job No	Date 29-01-20	Ground Level (m)	Co-Ordinates (m)	SA305				
CG/28824	29-01-20	11.90	E 487,915.6 N 104,236.2					
Client	Sheet							
Hanbury Pro	perties (Chichester)	Limited		1 of 1				

Hanbury Propertie	es (C	Chichester) Limited		1 of 1
SAMPLES & TESTS	7		STRATA	
Depth Type Result (N/kPa/ppm)	Water	Reduced Level Legend (Thick- ness)	DESCRIPTION	
-		× × × × × × × × × × × × × × × × × × ×	Grass over: Firm dark brown slightly gravelly sandy silt TOPSOII coarse. Gravel is fine to coarse, angular to subrounded of flint. Firm dark brown very gravelly sandy cobbly SILT. Gravel is fine	
-		(0.72)	angular to subrounded of flint. Sand is fine to coarse. Frequent angular to rubrounded flint.	cobbles of
- - - :-	±	(0.48)	Structureless CHALK composed of light brown to cream slightly medium to coarse, subangular to rounded GRAVEL with many cobbles. Gravel is of flint and weak, low density, white chalk. N uncompact and light brown. (Grade Dc)	rounded flint
Plan Stability: Stable Method/ Plant Used 8 tonne trace	÷	-	(Pit terminated at 1.6m)	
Plan			General Remarks	
2.8m——		-	Trial excavated for BRE365 soakage test. 2. Coordinates and extracted from topographic survey. 3. Backfilled with arisings under the state of t	ground levels ipon completion
Stability: Stable				
Method/ Plant Used 8 tonne trac	ked	excavator	Field Crew BPH Plant Hire Logged By ELD	Checked By DRAFT



Project				TRIAL PIT No
Cathedral Pa	ark, Drainage			SA306
Job No	Date 30-01-20	Ground Level (m)	Co-Ordinates (m)	SA300
CG/28824	30-01-20	12.65	E 487,963.3 N 104,25	55.9
Client	Sheet			
Hanbury Pro	perties (Chichester)	Limited		1 of 1

Hanbury Propertie	s (C	Chichester) Limited	1		1 of 1
SAMPLES & TESTS			STRATA		
Depth Type Result (m) No (N/kPa/ppm)	Water	Reduced Legend (Thick- ness)	DESCRIPTIO	ON	
		(0.55)	Grass over: Firm dark brown to orange sligh TOPSOIL. Sand is fine to coarse. Gravel is fir subrounded of flint. Firm dark brown very clayey gravelly sandy angular to subrounded of flint. Sand is fine		
-		11.20 (2.2)	angular to rubrounded flint.		
-		(0.15) 11.05 (0.15) 1.60	Structureless CHALK composed of slightly g Gravel is fine to medium, angular to subrou white of chalk. Cobbles are angular to subro (Pit terminated at 1.6m)	ravelly SILT with oc nded of flint and w ounded flint. (Grade	casional cobbles. eak, low density e Dm)
Plan			General Remarks		
→ 2.45m— 0.7m ↓			Trial excavated for BRE365 soakage test. extracted from topographic survey. 3. Backi	2. Coordinates and filled with arisings u	ground levels upon completion
Stability: Stable					
Method/ Plant Used 8 tonne track	ced	excavator	Field Crew BPH Plant Hire	Logged By ELD	Checked By DRAFT



Project				TRIAL PIT No				
Cathedral Par	Cathedral Park, Drainage							
Job No	Date 30-01-20	Ground Level (m)	Co-Ordinates (m)	- SA307				
CG/28824	30-01-20	12.00	E 487,981.9 N 104,197.8					
Client	Client							
Hanbury Prop	erties (Chichester) L	imited		1 of 1				

Hanbury Propertie	s (C	Chichester) Limited			1 of 1
SAMPLES & TESTS			STRATA		
Depth Type Result (M) No (N/kPa/ppm)	Water	Reduced Legend (Thick- ness)	DESCRIPTION	N	
		X	Grass over: Dark brown slightly sandy slightly fine to coarse. Gravel is fine to medium, angu		
- - - -		(0.70)	Firm dark brown very gravelly sandy cobbly SI angular to subrounded of flint. Sand is fine to angular to rubrounded flint.	ilLT. Gravel is fine o coarse. Frequent	to coarse, cobbles of
- - -		(0.40)	Structureless CHALK composed of slightly grader of structureless CHALK composed of slightly grader of subrounce white of chalk. Cobbles are angular to subrounce of chalk.	ivelly SILT with oc ded of flint and w inded flint. (Grade	casional cobbles. eak, low density Dm)
Plan Stability: Stable Method/ Plant Used 8 tonne track		9.90 × × × 2.10	(Pit terminated at 2.1m)		
Plan			General Remarks		
2.5m——	-		Trial excavated for BRE365 soakage test. 2. extracted from topographic survey. 3. Backfill	. Coordinates and led with arisings u	ground levels upon completion
Stability: Stable					
Method/ Plant Used 8 tonne track	ked (excavator	Field Crew BPH Plant Hire Lc	ogged By ELD	Checked By DRAFT



Project				TRIAL PIT No				
Cathedral Pa	Cathedral Park, Drainage							
Job No	Date 30-01-20	Ground Level (m)	Co-Ordinates (m)	SA308				
CG/28824	30-01-20	12.10	E 488,027.6 N 104,196.4					
Client	Client							
Hanbury Pro	perties (Chichester)	Limited		1 of 1				

	Hanbury Properties (Chichester) Limited					nited		1 of 1
	SAMPLE	ES & TESTS					STRATA	
	Depth (m)	Type No	Test Result (N/kPa/ppm)	Water	Reduced Level Legend	Depth (m) (<u>T</u> hick- <u>nes</u> s)	DESCRIPTION	
					X	(1.00)	Grass over: Dark brown clayey silt TOPSOIL. Sand is fine fine to coarse, angular to subrounded of gravel flint.	to coarse. Occasional
LB Date: 9 March 2020					X	(0.55)	Medium dense light brown to cream silty gravelly fine to fine to medium, angular to subrounded of flint.	
AGS4_R1.G					10.35	(0.20)	Dense brown silty SAND and GRAVEL. Sand is fine to coangular to subrounded flint. Gravel is fine to coarse, and flint.	rse. Frequent cobbles of Jular to subrounded of
Report D. CGL TP LOG Project: CG_28824B CATHEDRAL PARK, CHICHETSTER.GPJ Library: CGL AGS4_R1.GLB Date: 9 March 2020						-	(Pit terminated at 1.75m)	
	Plan		1				General Remarks	
GL P LUG Project: CG_28824B (2.3m————————————————————————————————————						Trial excavated for BRE365 soakage test. 2. Coordinat extracted from topographic survey. 3. Backfilled with ar	es and ground levels isings upon completion
Keport ID: C	Method/ Plant Used	8 tor	nne tracl	ked	excavator		Field Crew Logged By BPH Plant Hire ELD	Checked By DRAFT



Project					TRIAL PIT No
Cathedral Pa	ark, Drainage				SA309
Job No	Date 30-01-20	Ground Level (m)	Co-Ordinates (m)		3A3U9
CG/28824	30-01-20	12.05	E 488,052.8	N 104,190.0	
Client	Sheet				
Hanbury Pro	perties (Chichester)	Limited			1 of 1

	Hanbury Properties (Chichester) Limited SAMPLES & TESTS					imited		1 of 1
SA							STRATA	
Dep (m	th)	Type No	Test Result (N/kPa/ppm)	Water	Reduced Level Leger	Depth (m) nd <u>(T</u> hick- <u>nes</u> s)	DESCRIPTION	
Report D. CGL TP LOG Project: CG_288248 CATHEDRAL PARK, CHICHETS TER. GPJ Library: CGL_AGS4_K1:GLB Date: 9 March 2020					X X X X X X X X X X	(1.10) (1.10) (1.10) (1.10) (1.10) (1.10) (1.10)	Firm dark brown very sandy slightly gravelly cobbly SIL angular to subrounded of flint. Sand is fine to coarse. Fangular to rubrounded flint. Structureless CHALK composed of slightly gravelly SILT Gravel is fine to medium, angular to subrounded of flir white of chalk. Cobbles are angular to subrounded flint (Pit terminated at 2.1m)	with occasional cobbles.
Plan	lan					General Remarks		
PLOG Project: CG_28824E	2.5m————————————————————————————————————						Trial excavated for BRE365 soakage test. 2. Coordinates extracted from topographic survey. 3. Backfilled with a survey. 3. Backfilled with a survey.	ites and ground levels risings upon completion
Stabil	od/	Stab					Field Crew Logged By	Checked By
Plant l	Jsed	8 tor	nne tracl	ked	excavator		BPH Plant Hire ELD	DRAFT



Project				TRIAL PIT No				
Cathedral Pa	Cathedral Park, Drainage							
Job No	Date 02-03-20	Ground Level (m)	Co-Ordinates (m)	─ SA401				
CG/28824	02-03-20	12.10	E 487,981.9 N 104,202.8					
Client	Client							
Hanbury Pro	perties (Chichester)	Limited		1 of 1				

Hanbury Propertie	es (C	Chichester) Limited		1 of 1
SAMPLES & TESTS	پ		STRATA	
Depth Type Result (N/kPa/ppm)	Water	Reduced Level Legend (Thick- ness)	DESCRIPTION	
of English your Acost in the library water a major to the library water and the library		11.30 0.80	Grass over: Firm dark brown slightly sandy slightly grave Sand is fine to coarse. Gravel is fine to medium, angular (Pit terminated at 0.8m)	lly silty clay TOPSOIL. to subrounded of flint.
Plan			General Remarks	
Plan 3.2m 0.65m Stability: Stable Method/ Plant Used 5 tonne track	-		Trial excavated for BRE365 soakage test. 2. Coordinate extracted from topographic survey. 3. Backfilled with ari	es and ground levels sings upon completion
Method/ Plant Used 5 tonne track	ked	excavator	Field Crew BPH Plant Hire Logged By SMS	Checked By DRAFT



Project				TRIAL PIT No				
Cathedral Pa	Cathedral Park, Drainage							
Job No	Date 02-03-20	Ground Level (m)	Co-Ordinates (m)	─ SA402				
CG/28824	02-03-20	12.30	E 488,022.6 N 104,196.4					
Client	Client							
Hanbury Pro	perties (Chichester)	Limited		1 of 1				

	Han	bury Pi	ropertie	es (C	Chichest	er) Lin	nited		1 of 1
	SAMPL	ES & TI	ESTS	يا				STRATA	
	Depth (m)	Type No	Test Result (N/kPa/ppm)	Water	Reduced Level	Legend	Depth (m) (Thick- ness)	DESCRIPTION	
DRAL PARK, CHICHETSTER.GPJ Library: CGL_AGS4_R1.GLB Date: 9 March 2020					11.40		(0.90) (0.45)	Grass over: Firm dark brown slightly sandy slightly grave Sand is fine to coarse. Gravel is fine to medium, angular Cobbles of red brick (Pit terminated at 0.8m)	lly silty clay TOPSOIL. to subrounded of flint.
CATH	Plan							General Remarks	
Report ID: CGL TP LOG Project: CG_28824B CATHEDRAL PARK, CHICHET	3m 0.7m ↓ Stability: Stable							Trial excavated for BRE365 soakage test. 2. Coordinate extracted from topographic survey. 3. Backfilled with ari	es and ground levels sings upon completion
Report ID: CC	Method/ Plant Used	5 tor	nne tracl	ked	excavato	or		Field Crew BPH Plant Hire Logged By SMS	Checked By DRAFT



Project				TRIA	L PIT No	
Cathedral Par	k, Drainage			C A	403	
Job No	Date 02-03-20	Ground Level (m)	Co-Ordinates (m)	3F	1403	
CG/28824	02-03-20	12.45	E 488,057.8 N 104	,190.0		
Client				Sheet		
Hanbury Prop	Hanbury Properties (Chichester) Limited					

Hanbury Propertie	es (C	Chichester) Limited		
SAMPLES & TESTS	ڀ		STRATA	
Depth Type Result (N/kPa/ppm)	Water	Reduced Legend (Thick-ness)) DESCRIPTION	
GCT_TPLOG Project: CG_28824B CAHEDRAL PARK, CHICHETSTER GPJ Library: CGL_A6824 R1 GtB Date: 9 March 2020 Plan Stabillity: Stable Method/ Plant Used Stabillity: Stable Method/ Plant Used 5 tonne trace		Timess T	Sand is fine to coarse. Gravel is fine to medium, angular	lly silty clay TOPSOIL. to subrounded of flint.
Flan			General Remarks	
O.6m Stability: Stable	•		Trial excavated for BRE365 soakage test. 2. Coordinat extracted from topographic survey. 3. Backfilled with ari	es and ground levels sings upon completion
Method/ Plant Used 5 tonne trac	ked	excavator	Field Crew BPH Plant Hire Logged By SMS	Checked By DRAFT



Project				TRIAL PIT No			
Cathedral Pa	SA404						
Job No	Date 02-03-20	Ground Level (m)	Co-Ordinates (m)	JA404			
CG/28824							
Client	Sheet						
Hanbury Pro	perties (Chichester) l	imited		1 of 1			

Hanbury Propertie	es (C	Chichester) Limited	1 of 1	
SAMPLES & TESTS	پ		STRATA	
Depth (m) Type Result (N/kPa/ppm)	Water	Reduced Level Legend (Thick- ness)	DESCRIPTION	
		11.70 10.50 11.20 10.80 11.2	Grass over: Firm dark brown slightly sandy slightly grave Sand is fine to coarse. Gravel is fine to medium, angular Firm brown slightly sandy very gravelly SILT.	lly silty clay TOPSOIL. to subrounded of flint.
Plan Stability: Stable Method/ Plant Used 5 tonne trac		-		
		-		
Plan			General Remarks	
-2.6m 0.6m ↓ Stability: Stable			Trial excavated for BRE365 soakage test. 2. Coordinat extracted from topographic survey. 3. Backfilled with an arrange of the state of the stat	es and ground levels sings upon completion
Method/ Plant Used 5 tonne trac	ked	excavator	Field Crew BPH Plant Hire Logged By SMS	Checked By DRAFT



Project					TRIAL PIT No	
Cathedral Par	Cathedral Park, Drainage					
Job No	Date 02-03-20	Ground Level (m)	Co-Ordinates (m)		SA405	
CG/28824	02-03-20	12.05	E 487,862.3	N 104,184.9		
Client	Sheet					
Hanbury Prop	Hanbury Properties (Chichester) Limited					

Hanbury Propertie	es (C	Chichester) Limited 1 of 1		
SAMPLES & TESTS	يا		STRATA	
Depth Type Result (N/kPa/ppm)	Wate	Reduced Level Legend (Thick- ness)) DESCRIPTION	
Donth Type Test	Water	Reduced Level Depth (m (Thick-ness)) Continue Cont	DESCRIPTION Grass over: Firm dark brown slightly sandy slightly grave Sand is fine to coarse. Gravel is fine to medium, angular Medium dense brown slightly sandy very silty GRAVEL	lly silty clay TOPSOIL. to subrounded of flint.
Plan O.7m Stability: Stable	•	-	General Remarks 1. Trial excavated for BRE365 soakage test. 2. Coordinat extracted from topographic survey. 3. Backfilled with ari	es and ground levels sings upon completion
Method/ Plant Used 5 tonne track	ked	excavator	Field Crew BPH Plant Hire Logged By SMS	Checked By DRAFT



Project				TRIAL PIT No
Cathedral Pa	ark, Drainage			SA406
Job No	Date 02-03-20	Ground Level (m)	Co-Ordinates (m)	3A400
CG/28824	02-03-20	11.65	E 487,900.7 N 104,202.2	
Client	Sheet			
Hanbury Pro	perties (Chichester)	Limited		1 of 1

Hanbury Prop	erties (0	Chichester) Li	nichester) Limited		
SAMPLES & TEST				STRATA	
Depth Type Re	est Water Water	Reduced Level Legen	Depth (m) d <u>(</u> Thick- ness)	DESCRIPTION	
-		Xo	(0.35)	Grass over: Firm dark brown slightly sandy slightly grave Sand is fine to coarse. Gravel is fine to medium, angular	lly silty clay TOPSOIL. to subrounded of flint.
-		10.85 5 8. 5	(0.45)	Medium dense brown slightly sandy very silty GRAVEL	
-		10.85	0.80	(Pit terminated at 0.8m)	
Plan Stability: Stable Method/ Plant Used 5 tonne					
Plan				General Remarks	
2.6m-				Trial excavated for BRE365 soakage test. 2. Coordinat extracted from topographic survey. 3. Backfilled with an arrange of the survey of the su	es and ground levels sings upon completion
Method/ Plant Used 5 tonne	tracked	excavator		Field Crew BPH Plant Hire Logged By SMS	Checked By DRAFT



Project				TRIAL PIT No
Cathedral Pa	ark, Drainage			SA407
Job No	Date 02-03-20	Ground Level (m)	Co-Ordinates (m)	3A407
CG/28824	02-03-20	11.90	E 487,915.6 N 104,231.2	
Client	Sheet			
Hanbury Pro	perties (Chichester)	Limited		1 of 1

	Han	bury Pr	opertie	es (C	Chichest	hichester) Limited			1 of 1
Ī	SAMPLES & TESTS							STRATA	
	Depth (m)	Type No	Test Result (N/kPa/ppm)	Water	Reduced Level	Legend	Depth (m) (Thick- ness)	DESCRIPTION	
						× × × × × × × × × × × × × × × × × × ×	(0.40)	Grass over: Firm dark brown slightly sandy slightly grave Sand is fine to coarse. Gravel is fine to medium, angular	lly silty clay TOPSOIL. to subrounded of flint.
-					11.50	xo · x	0.40	Firm brown slightly sandy very gravelly SILT.	
						× × × × × × × × × × ×	(0.40)	g,, g, g,	
					11.10	× · × ×	0.80	(Pit terminated at 0.8m)	
	-						_		
h 2020							_		
Date: 9 Marc							_		
S4_R1.GLB							_		
rary: CGL_AG							_		
TER.GPJ LIK	-						_		
, CHICHETS1							-		
EDRAL PAKK							-		
3	Plan		1					General Remarks	
Rebuilto: CGL IT LOG Tigled: CG_20024B CATHEDRAL TARK, CHICHETO IER. GFJ Library: CGL_AGS4_RT. GEB Date: 9 March 2020	0.75m	3.	3m	•				Trial excavated for BRE365 soakage test. 2. Coordinat extracted from topographic survey. 3. Backfilled with ar	es and ground levels isings upon completion
CGL IP LC	Stability:	Stab	le						
Keport	Method/ Plant Used	5 tor	nne trac	ked	excavato	or		Field Crew BPH Plant Hire Logged By SMS	Checked By DRAFT



Project				HOLE No
Cathedral Par	k, Drainage			WS301
Job No	W3301			
CG/28824	21-10-19	13.26	E 488,045.6 N 104,	354.1
Client	Sheet			
Hanbury Prop	erties (Chichester) Li	mited		1 of 1

	Паі	ibur y Pi	ropertie	S (C	nicnes	iter) Lin	ntea			1 of 1
	SAMPL	ES & TI	ESTS					STRATA		lent I
	Depth (m)	Type No	Test Result (N/kPa/ppm)	Water	Reduce Level	^U Leaend	Depth (m) (Thick- ness)	DESCRIPTION		Instrument /Backfill
Report ID: CGL WS LOG Project: CG_28824B CATHEDRAL PARK, CHICHETSTER.GPJ Library: CGL_AGS4_R1.GLB Date: 9 March 2020	1.40	B1.9		± dater Cor We	11.96 11.76 11.16 11.16		(1.20) - (1.20) - (1.30) - (0.30) - (0.30) - (2.10) - (2.90)	Grass over: Soft brown slightly gravely silt. Gr. flint. With abundant fine rootlets. Soft clayey SILT with rare subangular, fine to root clayey subangular to angular, fine to coarse of flint. Firm light brown gravelly CLAY. Gravel is subramedium of flint. Medium dense light brown slightly silty claye subrounded to angular, fine to medium of flint. Medium dense cream to beige very silty GRAV angular, fine to coarse of flint. 3.00 Dark brown silt infill. 4.70 Silt becoming orange brown. (Window sample terminated at 5m) General Remarks 1. Window sample terminated at 5.0m bgl. 2. Wet soil was noted from 3.8m. 3. No in-situ testing undertaken. 4. Hole installed with: Top hat cover concrete 0.3m Plain 38mm pipe with bentonite seal; 0. filter pack; 3.3m to base collapsed granular sc. 5. Densities based on engineers observation.	y GRAVEL. Gravel rounded to angula ey GRAVEL. Gravel it and chalk. VEL. Gravel is subsequent and chalk.	is r, fine to is angular to surface; 0.0m to ed with gravel
Report	Method/ Plant Used		Premier	Con	npact			Field Crew Oakland SI	ogged By CGH	Checked By DRAFT



Project				HOLE No
Cathedral Par	k, Drainage			WS302
Job No	VV33UZ			
CG/28824	21-10-19	13.24	E 488,059.2 N 104,295.1	
Client	Sheet			
Hanbury Prop	erties (Chichester) Li	mited		1 of 1

L	Han	bury Pi	opertie	s (C	niches	iter) Lim	nited	1 of 1		
	SAMPL	ES & TI	ESTS	ب				STRATA		ent
	Depth (m)	Type No	Test Result (N/kPa/ppm)	Water	Reduce Level	^u Leaend	Depth (m) (Thick- ness)	DESCRIPTION		Instrument Mackfill
İ					13.14	1 🖯	0.10	Grass over: Soft brown silt with abundant ro		
Report ID: CGL WS LOG Project: CG_2824B CATHEDRAL PARK, CHICHETSTER.GPJ Library: CGL_AGS4_R1.GLB Date: 9 March 2020	Boring Property Date 21-10-19	Ogress Strike depth 4		Cor	11.34 11.14 Obser		- (1.80) - (1.80) - 1.90 - 2.10 - (2.90) 	Soft brown slightly gravelly clayey SILT. Grav fine to medium of flint. Soft brown very gravelly CLAY. Gravel is subcoarse of flint. Medium dense to dense brown very clayey to very angular, fine to coarse of flint. 3.00 Becoming clayey. 3.50 Becoming slightly clayey. 4.00 Becoming light brown. (Window sample terminated at 5.0m bgl. 2. Wet soil was noted from 4.0m. 3. No in-situ testing undertaken. 4. Hole installed with: Top hat cover concret 0.5m Plain 38mm pipe with bentonite seal; tilter pack; 4.5m to base collapsed granular 5. Densities based on engineers observation	vel is subangular to angular to angular to angular to angular to angular GRAVEL. Gravel is solong to and bentonite at 0.5m to 4.5m Slott soil.	fine to subangular
ᇍ	Method/							Field Crew	Logged By	Checked By
Repo	Plant Used		Premier	Con	npact			Oakland SI	CGH	DRAFT



Project					HOLE No
Cathedral Par	k, Drainage				WS303
Job No		VV 3 3 U 3			
CG/28824	21-10-19	12.94	E 488,067.7	N 104,241.9	
Client		Sheet			
Hanbury Prop	erties (Chichester) Li	mited			1 of 1

12.84 Section Crass over: Soft brown slit with abundant rootlets. Soft brown dayey SILT. Rare subangular, fine to medium flint gravel.	напригу Ргорегие	es (C	nichester) Lim	iitea	101			
12.84 O.10 Grass over: Soft brown silt with abundant rootlets. X	SAMPLES & TESTS							ent
12.84	Depth Type Result (M)/kPa/ppm)	Wate	Reduced Level Legend	Depth (m) <u>(</u> Thick- ness)	DESCRIPTION			Instrume /Backfill
	Boring Progress and W Date Strike Casing depth	ater Cor	12.84	0.10	Grass over: Soft brown silt with abundant ro Soft brown clayey SILT. Rare subangular, fine Soft brown clayey SILT. Rare subangular, fine to coarse of flint subrounded to angular, fine to coarse of flint. Medium dense brown very clayey GRAVEL. Cangular, fine to coarse of SILT.	ty gravelly CLAY. Gott. Gravel is subangul y silty GRAVEL. Grafflint.	ar to very avel is	
5. Densities based on engineers observation.					5. Densities based on engineers observation.	l.		
Method/ Plant Used Premier Compact Field Crew Oakland SI Coged By DRAFT					Field Crew L	Logged By		



Project					HOLE No
Cathedral Par	k, Drainage				WS304
Job No	VV33U4				
CG/28824	21-10-19	12.50	E 488,069.6	N 104,196.9	
Client					Sheet
Hanbury Prop	erties (Chichester) Li	mited			1 of 1

Hanbury Properties	s (Chich	iester) Lim	ited			1 of 1
SAMPLES & TESTS	_			STRATA		ent
Depth Type Result (M)/kPa/ppm)	Mater Leve	Legend	Depth (m) (Thick- ness)	DESCRIPTION		Instrument Backfill
Boring Progress and Wa	10 10	2.40 2.00 2.00 2.00 2.00 2.00 2.00 2.00	(0.40) (0.50) (1.20) 1.70 (0.40) 2.10 (2.90)	Grass over: Soft brown silt with abundant roo Soft dark brown gravelly silt. Gravel is subrour coarse of flint, brick and tarmac. With subang Soft very silty slightly gravelly CLAY. Gravel is subangular to angular, fine Medium dense cream to beige clayey GRAVEL subangular, fine of flint. Medium dense to dense brown mottled beige Gravel is subangular to angular, fine to coarse (Window sample terminated at 5m) General Remarks	nded to angular, fular cobbles of ta subangular, fine of the cobbles of ta subangular, fine of the cobbles of t	of flint.
Date Strike Casing depth 21-10-19 3.6	Wet soil in sampler	measureu	Standing Depth	1. Window sample terminated at 5.0m bgl. 2. Wet soil was noted from 3.6m. 3. No in-situ testing undertaken. 4. Hole installed with: Top hat cover concrete 0.3m Plain 50mm pipe with bentonite seal; 0.filter pack; 3.3m to base collapsed granular so	and bentonite at 3m to 3.3m Slotte oil.	surface; 0.0m to ed with gravel
Method/ Plant Used Premier (Compact	t		5. Densities based on engineers observation.	ogged By CGH	Checked By DRAFT



Project				HOLE No
Cathedral Par	k, Drainage			WS305
Job No	W3303			
CG/28824	21-10-19	12.90	E 488,029.2 N 104,226	5.0
Client	Sheet			
Hanbury Prop	erties (Chichester) Li	mited		1 of 1

11.50 1.40 Soft to firm very gravelly CLAY. Gravel is subangular to very angular, fine to medium of flint. 10.95 1.95 Medium dense brown very clayey GRAVEL. Gravel is subangular to very angular, fine to coarse of flint.		Hai	nbury P	ropertie	s (C	chiche	ster) Lin	nited			1 of 1	
12.80	Ī	SAMPI	LES & T	ESTS					STRATA		2	ent
12.80		Depth (m)	Type No	Test Result (N/kPa/ppm)	Wate	Reduce Leve	≂u ₁	(Thick-	DESCRIPTION		1	Instrume /Backfill
Soft brown signtly gravely clayey SiL1. Gravel is subangular to angular, fine to medium of flint. 12.30 × × × × × × × × × × 0.60 Soft light brown very silty slightly gravely CLAY. Gravel is subrounded to subangular, fine to medium of flint. 11.50						12.8	30	,	Grass over: Soft brown slightly gravely silt. Gravel	l is subangula		ÌÌ
12.30 × × 0.60 Soft light brown very silty slightly gravely CLAY. Gravel is subrounded to subangular, fine to medium of flint. 11.50 - 0							× × ° ×	(0.50)	Soft brown slightly gravelly clayey SILT. Gravel is s	subangular to	angular,	
Soft light brown very silty slightly gravely CLAY. Gravel is subrounded to subangular, fine to medium of flint. 11.50	ŀ					12.3	1	0.60				
11.50 3 1.40 10.95 1.95 10.95 2.50 10.40 2.52 2.50 Medium dense brown very clayey GRAVEL. Gravel is subangular to very angular, fine to medium of filmt. Medium dense brown very clayey GRAVEL. Gravel is subangular to very angular, fine to coarse of filmt. Medium dense brown very clayey GRAVEL. Gravel is subangular to very angular, fine to coarse of filmt. Medium dense brown very clayey GRAVEL. Gravel is subangular to very angular, fine to coarse of filmt. Medium dense to dense cream to beige sitly GRAVEL. Gravel is subrounded to angular, fine to coarse of filmt. 2.60 Filmt cobble -100mm diameter. (Window sample terminated at 5 m) General Remarks 21-10-19 3.9 Wet soil in Standing of the measured of		· ·						-	Soft light brown very silty slightly gravely CLAY. G subangular, fine to medium of flint.	Gravel is subro	unded to	
Soft to firm very gravelly CLAY. Gravel is subangular to very angular, fine to medium of flint. 10.95 1.95 Medium dense brown very clayey GRAVEL. Gravel is subangular to very angular, fine to coarse of flint.		_						(0.80)				
10.95 1.95 10.95 1.95 Medium dense brown very clayey GRAVEL. Gravel is subangular to very angular, fine to coarse of flint.	ŀ					11.5	50	1.40				目::
1.95 1.95		•						(0.55)	Soft to firm very gravelly CLAY. Gravel is subangul to medium of flint.	llar to very an	gular, fine	
Medium dense brown very clayey GRAVEL. Gravel is subangular to very angular, fine to coarse of flint. 10.40 2.30 2.50	-							-				1
angular, fine to coarse of flint. 10.40 2.50 2.50	ļ	-				10.9	0 — 0	- 1.95 -	Medium dense brown very clayey GRAVEL. Grave	el is subangula	r to very	1
10.40 2.50 2.50 Medium dense to dense cream to beige silty GRAVEL. Gravel is subrounded to angular, fine to coarse of flint. 2.60 Flint cobbie -100mm diameter. 2.60 Flint cobbie -100mm d	ļ						0-00	(0.55)	angular, fine to coarse of flint.			
10.40 2 2.50 Medium dense to dense cream to beige silty GRAVEL. Gravel is subrounded to angular, fine to coarse of filint. 2.60 Filint cobbile -100mm diameter. 2							000					1
subrounded to angular, fine to coarse of flint. 2.60 Flint cobble –100mm diameter. (Vindow sample terminated at 5m) Sering Progress and Water Observations Date Strike depth depth depth depth depth Standing Depth Strike depth depth depth Strike depth depth Standing Depth Strike depth depth depth Strike depth depth Standing Depth Strike depth depth depth depth Standing Depth Strike depth depth depth depth depth depth depth Standing Depth Strike depth dep	h 202(10.4	101000	2.50	Medium dense to dense cream to beige silty GRA	VEL. Gravel is		
Boring Progress and Water Observations Boring Progress and Water Observations Date Strike depth depth depth depth depth with sampler Wet soil in sampler Wet soil in sampler Wet soil in sampler Wet soil in sampler Field Crew Oakland SI Coged By Checked By DRAFT Field Crew Oakland SI CogH CogH CogH CogH CogH CogH CogH CogH	Marc						8 Q 8 4	-	subrounded to angular, fine to coarse of flint. 2.60 Flint cobble ~100mm diameter.			目:
Total Companies Time Strike Casing Comment Time Standing Companies Compa	ate: 6							-				1
Section Progress and Water Observations Standing Depth		-					x0 0x0	_				1
Type	7. 1.G						0×0°	_				目 :
The control of the	GS4											1
Top Comment	킰						X	-				
Boring Progress and Water Observations Boring Progress and Water Observations Date Strike Casing depth Gepth Gep	rary:				1		\$0 5 × 0	(2.50)				
Boring Progress and Water Observations Boring Progress and Water Observations Date Strike depth Casing depth depth depth Genth sampler 21-10-19 3.9 Wet soil in sampler Wet soil was noted from 3.9m. 3. No in-situ testing undertaken. 4. Hole installed with: Top hat cover concrete and bentonite at surface; 0.0m to 0.6m Plain 3mm pipe with bentonite seal; 0.6m to 3.6m Slotted with gravel filter pack; 3.6m to base collapsed granular soil. 5. Densities based on engineers observation. Wethod/ Plant Used Premier Compact Field Crew Oakland S1 Logged By Checked By DRAFT	<u></u>				Ī		x0 -x0					
Topo	25.	-										
Soring Progress and Water Observations Standing depth Standing depth Standing land S	2						% ⊗ % ¢	-				
Boring Progress and Water Observations Date Strike depth depth depth Gepth Sampler Wet soil in sampler Wet soil in sampler Method/ Plant Used Premier Compact Touch Strike Casing depth depth Strike depth Sampler (Window sample terminated at 5.0m bgl. 2. Wet soil was noted from 3.9m. 3. No in-situ testing undertaken. 4. Hole installed with: Top hat cover concrete and bentonite at surface; 0.0m to 0.6m Plain 38mm pipe with bentonite seal; 0.6m to 0.6m to 3.6m Slotted with gravel filter pack; 3.6m to base collapsed granular soil. 5. Densities based on engineers observation. Field Crew Oakland SI Logged By Checked By DRAFT	뷥						8 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \					
Topic Topi	ج ا						18 - 8 -	_				
T.90 Solution Strike Casing depth Comment measured Depth Standing Depth Depth Standing depth Comment in sampler Standing sampler Standing Depth Standing University	L'AK	•					×0 × 0				\ <u>`</u>	
Boring Progress and Water Observations Date Strike Casing depth Comment Time measured Depth Depth	ÜRA	-				7.9	90 8 8 8 8 8	5.00	(Window completerminated at Em)			
Date Strike Casing depth	¥[Roring D	roaress	and Ma	ater	. Ohse	rvation	<u> </u>				
21-10-19 3.9 Wet soil in sampler Wet soil sampler Wet soil be with gravel filter pack; 3.6m to base collapsed granular soil. 5. Densities based on engineers observation. 2. Wet soil was noted from 3.9m. 3. No in-situ testing undertaken. 4. Hole installed with: Top hat cover concrete and bentonite at surface; 0.0m to 0.6m Plain 38mm pipe with bentonite seal; 0.6m to 3.6m Slotted with gravel filter pack; 3.6m to base collapsed granular soil. 5. Densities based on engineers observation. Wet soil was noted from 3.9m. 3. No in-situ testing undertaken. 4. Hole installed with: Top hat cover concrete and bentonite at surface; 0.0m to 0.6m Plain 38mm pipe with bentonite seal; 0.6m to 3.6m Slotted with gravel filter pack; 3.6m to base collapsed granular soil. 5. Densities based on engineers observation. Field Crew Oakland SI Checked By DRAFT	524B (Strike		_		Time					
in sampler 4. Hole installed with: Top hat cover concrete and bentonite at surface; 0.0m t 0.6m Plain 38mm pipe with bentonite seal; 0.6m to 3.6m Slotted with gravel filter pack; 3.6m to base collapsed granular soil. 5. Densities based on engineers observation. Method/ Plant Used Premier Compact Field Crew Oakland SI CGH DRAFT	2 782			aeptn	-		measurea	реріп	2. Wet soil was noted from 3.9m.			
5. Densities based on engineers observation.	roject: C				saı				II 4. Hole installed with: Top hat cover concrete and	d bentonite at to 3.6m Slott	surface; 0.0m ed with gravel	to
Method/ Field Crew Logged By Checked By Plant Used Premier Compact Oakland SI CGH DRAFT	50								5. Densities based on engineers observation.			
Method/ Field Crew Logged By Checked By Plant Used Premier Compact Oakland SI CGH DRAFT	WS L											
Method/ Field Crew Compact Checked By Oakland SI CGH DRAFT	CGL											
<u> </u>	Report ID:			Premier	Con	npact			Field Crew Logge Oakland SI	ed By CGH	Checked By DRAFT	



Project					HOLE No
Cathedral Par	k, Drainage				WS306
Job No		VV 3300			
CG/28824	22-10-19	12.40	E 487,969.8 N	l 104,217.5	
Client		Sheet			
Hanbury Prop	erties (Chichester) Li	mited			1 of 1

Hanbury Propertie	s (C	hichester) Limited			1 of 1
SAMPLES & TESTS	_		STRATA		ent
Depth Type Result	Water	Reduced Level Legend (Thick- ness)	DESCRIPTION		Instrument //Backfill
-		12.30 0.10	Grass over: Soft brown very clayey slightly c subrounded to subangular, fine to medium	gravelly silt. Gravel	is
		× × × × × × × × × × × × × × × × × × ×	Soft brown gravelly SILT. Gravel is subangul coarse of flint.		
_ 1.20 B2.1		11.10 × × 1.30			<u></u>
		(0.80)	Soft brown very gravelly CLAY. Gravel is sub to medium of flint.	angular to very ar	gular, fine
Boring Progress and Wardenth Strike depth 22-10-19 2.9 Method/ Plant Used Premier		10.30 2.10 × × × × × × × × × (0.70)	Soft cream to beige very gravelly SILT. Graviangular, fine to medium of flint.	el is subrounded to	o very
-		× × × × × × × × × ×			
	±	9.60 × × 2.80	Medium dense brown silty GRAVEL. Subrou coarse of flint. Gravel is subangular to angu	inded to angular, f	ne to
- - - - - -	=	8.70 % % 4 (0.90)			
3.80 ES			Medium dense to dense white mottled grey subangular to angular, fine to medium of fli	very silty GRAVEL nt.	. Gravel is
		8.40 0 4.00	3.80 Grey staining with mild hydrocarbon o (Window sample terminated at 4m)	uoui .	
Boring Progress and Wa	iter		General Remarks		•
Date Strike depth depth 22-10-19 2.9	Cor	mment Time Standing Depth et soil in mpler	Window sample terminated at 4.0m to prontamination pathway. Wet soil was noted from 2.9m. No in-situ testing undertaken. Hole installed with: Top hat cover concre 0.7m Plain 38mm pipe with bentonite seal; filter pack; 2.7m to base collapsed granular 5. Densities based on engineers observation	te and bentonite a 0.7m to 2.7m Slot soil.	
Method/ Plant Used Premier	Con	npact	Field Crew Oakland SI	Logged By CGH	Checked By DRAFT



Project					HOLE No
Cathedral Par	k, Drainage				WS307
Job No	Date	Ground Level (m)	Co-Ordinates (m)		VV3307
CG/28824	22-10-19	11.83	E 487,909.1	N 104,172.5	
Client					Sheet
Hanbury Prop	erties (Chichester) Li	mited			1 of 1

Hanbury Propertie	s (C	nicnester) Lii	nited			1 of 1
SAMPLES & TESTS	3F			STRATA		Jent II
Depth Type Result No (N/kPa/ppm)	Water	Reduced Level Legend	Depth (m) (Thick- ness)	DESCRIPTION		Instrument /Backfill
Boring Progress and Wa Date Strike depth 22-10-19 1.95 Method/ Plant Used Premier	→	11.53 10.43 10	(1.20)	Grass over: Soft brown gravely silt. Gravel is fine to medium of flint. Medium dense brown clayey silty GRAVEL. Gangular, fine to coarse of flint. With occasion cobbles of flint. Soft white to beige very gravelly SILT. Gravel to medium of flint. Medium dense light brown clayey GRAVEL. Gangular, fine to coarse of flint. Medium dense to dense cream silty GRAVEL. angular, fine to coarse of flint. (Window sample terminated at 4m)	Gravel is subrounded to	ngular, fine
Boring Progress and Wa		Time o		General Remarks		
Date Strike depth depth 22-10-19 1.95	We	mment Time measured et soil in mpler	Standing Depth	Window sample terminated at 4.0m due to 2. Wet soil was noted from 1.95m. No in-situ testing undertaken. Hole installed with: Top hat cover concrete 0.2m Plain 38mm pipe with bentonite seal; 0 filter pack; 2.2m to base collapsed granular s 5. Densities based on engineers observation.	e and bentonite at 0.2m to 2.2m Slotto soil.	surface; 0.0m to
Method/	_	l		Field Crew L	Logged By	Checked By
Plant Used Premier	Con	npact		Oakland SI	CGH	DRAFT



Project					HOLE No
Cathedral Par	k, Drainage				WS308
Job No	Date	Ground Level (m)	Co-Ordinates (m)		VV3300
CG/28824	22-10-19	12.15	E 487,850.7	N 104,169.8	
Client					Sheet
Hanbury Prop	erties (Chichester) Li	mited			1 of 1

Ha	nbury P	ropertie	es (C	chiches	ter) Lin	nited		1 of 1	
SAMP	LES & T	ESTS	_				STRATA		ent
Depth (m)	Type No	Test Result (N/kPa/ppm)	Water	Reduced Level	Legend	Depth (m) (Thick- ness)			Instrument /Backfill
-				11.75		(0.40)	Weeds and scrub over: Soft brown gravelly silt. Gravel is subangular, fine to coarse of flint and brick. With occasion		
-				11.75	* O × O × O × O × O × O × O × O × O × O	- (1.60)	Loose to medium dense brown silty GRAVEL. Gravel is si subangular, fine to coarse of flint. With frequent subrou subangular cobbles of flint.	Jbrounded to nded to	
-				10.15	* 0 x 0 x 0 x 0 x 0 x 0 x 0 x 0 x 0 x 0	1 I	1.50 Becoming slightly silty.		
ŀ						-	(Window sample terminated at 2m)		
CGL WS LOG Project: CG_28824B CATHEDRAL PARK, CHICHETSTER.GPJ Library: CGL_AGS4_R1.GLB Date: 9 March 2020									
胃 Boring P	rogross	and W	ator	Obsor	vations	<u> </u>	General Remarks		
Date	Strike	Casing depth	_		Time neasured		Window sample terminated at 2.0m due to repeated	collapse below 1 Or	m.
O: CGL WS LOG Project: CG_288	depth	depth		n n	neasured	Depth	Groundwater was not encountered during the excava 3. No in-situ testing undertaken. Hole installed with: Top hat cover concrete and bento 0.1m Plain 38mm pipe with bentonite seal; 0.1m to 1.1r filter pack; 1.1m to base collapsed granular soil. Densities based on engineers observation.	nite at surface; 0.0 n Slotted with grave	m to el
Method/ Plant Used		Premier	Con	npact			Field Crew Oakland SI Logged By CGH	Checked By DRAF	/ T



Project					HOLE No
Cathedral Parl	k, Drainage				WS309
Job No	Date	Ground Level (m)	Co-Ordinates (m)		VV3309
CG/28824	22-10-19	11.80	E 487,847.0	N 104,233.1	
Client					Sheet
Hanbury Prop	erties (Chichester) Li	mited			1 of 1

Hanbury Propertie	es (C	Chichester) Li	mited			1 of 1
SAMPLES & TESTS	_			STRATA		ent
Depth Type Result (N/kPa/ppm)	Water	Reduced Level Legen	Depth (m) (Thick- ness)	DESCRIPTION		Instrument //Backfill
Boring Progress and Ware Strike Casing depth 22-10-19 2.1	ater Co W	11.60	0.20 0.70 0.90 0.90 0.90 0.90 0.90 0.90 0.9	General Remarks 1. Window sample terminated at 4.0m due 2. Wet soil was noted from 2.1m. 3. No in-situ testing undertaken. 4. Hole instituted with: 2.1m due 2. Wet soil was noted from 2.1m. 5. No in-situ testing undertaken. 6. Hole institutes and in the properties of the properti	to dense granular rete and bentonite at soil.	EL. Gravel n to coarse.
Method/ Plant Used Premier	Cor	mpact		Field Crew Oakland SI	Logged By CGH	Checked By DRAFT
Tremier	001	праст		Oukland 51	0011	Divili



Project					HOLE No
Cathedral Par	k, Drainage				WS310
Job No	Date	Ground Level (m)	Co-Ordinates (m)		VV 33 TU
CG/28824	22-10-19	12.49	E 487,861.4	N 104,331.5	
Client					Sheet
Hanbury Prop	erties (Chichester) Li	mited			1 of 1

Hanbury Prop	perties (C	Chichester) Limited			1 of 1
SAMPLES & TEST	TS _		STRATA		ent
	Test tesult A	Reduced Legend (Thick- ness)	DESCRIPTION		nstrum /Backfill
Donth Type	Test $\frac{1}{2}$	Reduced Legend (Thick-ness) 12.29	Grass over: Soft brown gravelly silty clay. Grav subangular, fine to medium of flint and brick. Soft brown gravelly silty CLAY. Gravel is subrot coarse of flint. Medium dense to dense light brown/beige silt subangular to angular, fine to coarse of flint. S 2.20 Becoming light brown.	unded to angular,	fine to
Boring Progress an	Casing Cor	Observations mment Time Measured Standing Depth let soil in mpler Time Measured Standing Depth Time Measured Standing St	(Window sample terminated at 4m) General Remarks 1. Window sample terminated at 4.0m due to 2. Wet soil was noted from 3.0m. 3. No in-situ testing undertaken. 4. Hole installed with: Top hat cover concrete 0.5m Plain 38mm pipe with bentonite seal; 0.5 filter pack; 3.0m to base collapsed granular so 5. Densities based on engineers observation.	and bentonite at som to 3.0m Slotter il.	surface; 0.0m to
Method/ Plant Used Pre	emier Con	mpact	Field Crew Lo Oakland SI	gged By CGH	Checked By DRAFT



Project				HOLE No
Cathedral Parl	WS311			
Job No	Date	Ground Level (m)	Co-Ordinates (m)	VV3311
CG/28824	22-10-19	12.87	E 487,927.5 N 104,33	38.9
Client				Sheet
Hanbury Prop	erties (Chichester) Li	mited		1 of 1

Hanbury Propert	es (C	nicnest	ter) Lin	nited			1 of 1
SAMPLES & TESTS					STRATA		nent
Depth Type Resul (M/kPa/pp	Water	Reduced Level	Legend	Depth (m) (Thick- ness)	DESCRIPTION		Instrument /Backfill
-		12.47		- (0.40) - 0.40	Grass over: Soft brown silty slightly gravelly subangular, fine to medium of flint and rare	e brick.	ounded to
				(0.90)	Soft brown silty very gravelly CLAY. Gravel i to coarse of flint.	s subangular to ang	ular, fine
		11.57	0.00	1.30	Medium dense to dense light brown very cl subangular to very angular, fine to coarse o	ayey sandy GRAVEL	Gravel is
- - - - - - -				-	coarse.	n Hint. Sand is medi	
-				(2.70)	2.40 Becoming clayey.		
- - - - - - - -	<u>_</u>	8.87		4.00			
-				-	(Window sample terminated at 4m)		
Boring Progress and V Date Strike depth depth 22-10-19 3.5 Method/ Plant Used Premie				- - - - - -			
Boring Progress and V		Observ			General Remarks		
Date Strike Casing depth 22-10-19 3.5	Co	mmont	Time neasured	Standing Depth	Window sample terminated at 4.0m due 2. Wet soil was noted from 3.5m. No in-situ testing undertaken. Hole installed with: Top hat cover concre 0.1m Plain 38mm pipe with bentonite seal; filter pack; 3.1m to base collapsed granular 5. Densities based on engineers observation	ete and bentonite at 0.1m to 3.1m Slotto soil.	surface: 0.0m to
Method/ Plant Used Premie	r Car	nnact			Field Crew Cokland SI	Logged By	Checked By
Plant Used Premie	ı cor	прасі			Oakland SI	CGH	DRAFT



Project					HOLE No
Cathedral Par	k, Drainage				WS312
Job No	Date	Ground Level (m)	Co-Ordinates (m)		VV3312
CG/28824	22-10-19	12.90	E 487,988.5	N 104,295.8	
Client					Sheet
Hanbury Prop	erties (Chichester) Li	mited			1 of 1

Hanbury Properti	es (C	Chichester) Limited			1 of 1
SAMPLES & TESTS	_		STRATA		ent
Depth Type Result (N/KPa/ppm	Water	Reduced Legend (Thick- ness)	DESCRIPTION		Instrument //Backfill
Boring Progress and Warehold Barbara Strike depth dept	Co	11.90 1.00 11.90 1.00 11.30 1.00 11.30 1.00 11.30 1.00 10.00	Soft silty slightly gravelly CLAY. Gravel is submedium of flint. Medium dense light brown very clayey sand subangular to very angular, fine to coarse of coarse. 1.90 Becoming clayey.	to dense granular to dense granular is and bentonite at 0.1m to 3.1m Slott soil.	is ium to
Method/ Plant Used Premie	r Cor	mpact	Field Crew Oakland SI	Logged By CGH	Checked By DRAFT
. I TOTTILE	501	paot	Juniuriu Ji	3011	וואוע

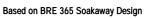


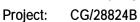
Project					HOLE No
Cathedral Parl	k, Drainage				WS313
Job No	Date	Ground Level (m)	Co-Ordinates (m)		VV3313
CG/28824	22-10-19	12.60	E 487,906.8	N 104,249.5	
Client					Sheet
Hanbury Properties (Chichester) Limited					1 of 1

Grass over soft brown gravelly sitt. Gravel is subrounded to subangular, fine to medium of fint. 100	Hanbury Propertie	3) Sŧ	Chichester) Lin	nited			1 of 1
Grass over: soft brown gravelly silt. Gravel is subrounded to subangular, fine to medium of flint. [TOPSOIL] Soft light brown very gravelly CLAY. Gravel is subangular to angular, fine to coarse of flint. [ALLUVIAL FAN DEPOSITS] 11.00 — 1.60 Medium dense to dense light brown to beige very clayey GRAVEL. Gravel is subangular to very angular, fine to medium of flint. [RIVER TERRACE DEPOSITS] 1.90 Becoming clayey.	SAMPLES & TESTS	_			STRATA		ent
Grass over: soft brown gravelly silt. Gravel is subrounded to subangular, fine to medium of flint. [TOPSOIL] Soft light brown very gravelly CLAY. Gravel is subangular to angular, fine to coarse of flint. [ALLUVIAL FAN DEPOSITS] 11.00 1.60 Medium dense to dense light brown to beige very clayey GRAVEL. Gravel is subangular to very angular, fine to medium of flint. [RIVER TERRACE DEPOSITS] 1.90 Becoming clayey.	Depth (m) Type Result (N/kPa/ppm)	Wate	Reduced Level Legend	Depth (m) (Thick- ness)	DESCRIPTION		Instrume //Backfill
Inter pack; 2.1m to base collapsed granular soll. 5. Densities based on engineers observation. 5. Densities based on engineers observation. 6. Densities based		ater Connumber	12.20	(0.40) 0.40 1.60 1.60 4.00	fine to medium of flint. [TOPSOIL] Soft light brown very gravelly CLAY. Gravel to coarse of flint. [ALLUVIAL FAN DEPOSITS] Medium dense to dense light brown to beig is subangular to very angular, fine to mediu [RIVER TERRACE DEPOSITS] 1.90 Becoming clayey. (Window sample terminated at 4.0m due 2. Wet soil was noted from 2.4m. 3. No in-situt testing undertaken. 4. Hole installed with: Top hat cover concret.	ge very clayey GRAV im of flint.	gular, fine /EL. Gravel material. t surface: 0.0m to
					filter pack; 2.1m to base collapsed granular 5. Densities based on engineers observation	soil. n.	5
Method/ Field Crew Logged By Checked By		<u>L</u>					I a
Begin Plant Used Premier Compact Oakland SI CGH DRAFT	Method/ Plant Used Premier	Con	npact			Logged By CGH	

APPENDIX B

Soakage test results

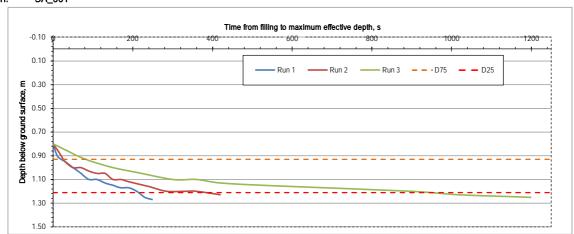




Client: Hanbury Eng: ELD/SM Checker NJL

Project: Cathedral Park, Chichester - Drainage Date: 29/01/20

Location: SA_301



	<u>Run i</u>
Pit Length (m	3.00
Pit Width (m):	0.60
Pit Depth (m):	1.30

	<u>Run 2</u>
Pit Length (rr	3.00
Pit Width (m):	0.60
Pit Depth (m):	1.35

	<u>Run 3</u>
Pit Length (rr	3.00
Pit Width (m):	0.60
Pit Depth (m):	1.35

CGL

Effective Dept	0.50	
D ₇₅ (m)		0.93
D ₂₅ (m)		1.18
V _{p75-25} (m ³)		0.45
* p75*25 (*** 7		

ET	Effective Depth		0.55
	₇₅ (m)		0.94
D ₂	₂₅ (m)		1.21
	₂₇₅₋₂₅ (m ³)		0.50

Effective Depth	0.55	
D ₇₅ (m)		0.94
D ₂₅ (m)		1.21
V _{p75-25} (m ³)		0.50

t ₇₅ (s)	18.333333
t ₂₅ (s)	193.33333
t _{p75-25} (s)	175
a _{p50} (m ²)	3.6
Infiltration Rate (m/s):	7.14E-0

t ₇₅ (s)	28
t ₂₅ (s)	385
t _{p75-25} (s)	357.5
a _{p50} (m ²)	3.78
Infiltration Rate (m/s)	: 3.66E-0

t ₇₅ (s)	88
t ₂₅ (s)	950
t _{p75-25} (s)	861.875
a _{p50} (m ²)	3.78
Infiltration Rate (m/s):	1.52E-0

Time (m)	Time (s)	Depth (m)
0.00	0	0.80
0.16	10	0.90
0.33	20	0.93
0.50	30	0.95
0.83	50	1.00
1.16	70	1.05
1.50	90	1.10
1.83	110	1.10
2.16	130	1.13
2.50	150	1.15
2.83	170	1.17
3.16	190	1.17
3.50	210	1.20
3.83	230	1.25
4.16	250	1.27

Time (m)	Time (s)	Depth (m)
0.00	0.00	0.80
0.16	10.00	0.85
0.33	20.00	0.90
0.50	30.00	0.95
0.83	50.00	1.00
1.16	70.00	1.00
1.50	90.00	1.03
1.83	110.00	1.05
2.16	130.00	1.05
2.50	150.00	1.10
2.83	170.00	1.10
3.16	190.00	1.12
4.00	240.00	1.16
4.75	285.00	1.20
5.50	330.00	1.20
6.00	360.00	1.20
7.00	420.00	1.23
9.0	940	1.27

Time (m)	Time (s)	Depth (m)
0.00	0.00	0.80
0.50	30.00	0.85
1.00	60.00	0.90
1.50	90.00	0.94
2.50	150.00	1.00
3.50	210.00	1.04
5.00	300.00	1.10
6.00	360.00	1.10
7.00	420.00	1.13
10.00	600.00	1.16
15.00	900.00	1.20
17.00	1020.00	1.23
20.00	1200.00	1.25

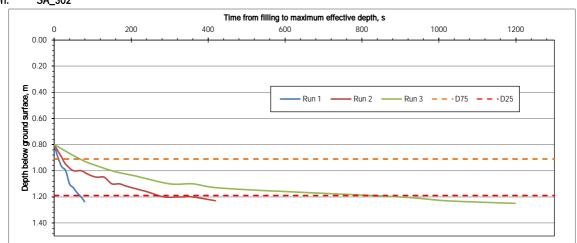
Based on BRE 365 Soakaway Design

Project: CG/28824B

Client: Hanbury Eng: ELD / SMS Checker NJI

Project: Cathedral Park, Chichester - Drainage Date: 29/01/20

Location: SA_302



	<u>kun i</u>
Pit Length (n	3.00
Pit Width (m):	0.80
Pit Depth (m):	1.30

	<u>Run 2</u>
Pit Length (n	3.00
Pit Width (m):	0.80
Pit Depth (m):	1.30

0.45 0.96

1.19

Effective Depth

D₇₅ (m) D₂₅ (m)

	<u>Run 3</u>
Pit Length (n	3.00
Pit Width (m):	0.80
Pit Depth (m):	1.25

CGL

Ellective Depth		0.50
D ₇₅ (m)		0.93
D ₂₅ (m)		1.18
V _{p75-25} (m ³)		0.60
t ₇₅ (s)		<i>68.785714</i>
t ₂₅ (s)		61.6

V _{p75-25} (m³)		0.54
t ₇₅ (s)		24
t ₂₅ (s)		103
t _{p75-25} (s)		79
a _{p50} (m ²)		4.11
Infiltration Rate (m/s)		1.66F-0

Effective Depth		0.45
D ₇₅ (m)		0.91
D ₂₅ (m)		1.14
V_{p75-25} (m ³)		0.54

₅ (s)		68.785714	t ₇₅ (s)
₅ (s)		61.6	t ₂₅ (s)
₇₅₋₂₅ (s)		<i>-7.185714</i>	t _{p75-25}
₅₅₀ (m ²)		4.3	a _{p50} (r
filtration Rat	e (m/s):	-1.94E-0	Infiltra

t ₇₅ (s)	18
t ₂₅ (s)	109
t _{p75-25} (s)	91
a _{p50} (m ²)	4.11
Infiltration Rate (m/s)	: <u>1.45E-0</u>

Time (m)	Time (s)	Depth (m)
0.00	0	0.80
0.16	9.6	0.90
0.33	19.8	0.97
0.50	30	1.00
0.66	39.6	1.10
0.83	49.8	1.13
1.00	60	1.17
1.16	69.6	1.20
1.33	79.8	1.24
1.50	90	1.28

Time (m)	Time (s)	Depth (m)
0.00	0	0.85
0.16	9.6	0.90
0.33	19.8	0.95
0.50	30	0.98
0.66	39.6	1.00
0.83	49.8	1.05
1.00	60	1.07
1.16	69.6	1.10
1.33	79.8	1.14
1.50	90	1.16
1.66	99.6	1.18
1.83	109.8	1.20
2.00	120	1.24
2.16	129.6	1.28

Time - (ma)	Time - (-)	Double (no)
Time (m)	Time (s)	Depth (m)
0.00	0	0.80
0.16	9.6	0.88
0.33	19.8	0.92
0.50	30	0.94
0.66	39.6	0.96
0.83	49.8	0.98
1.00	60	1.00
1.16	69.6	1.04
1.33	79.8	1.07
1.50	90	1.09
1.66	99.6	1.12
1.83	109.8	1.14
2.16	129.6	1.19
2.50	150	1.22
2.83	169.8	1.27



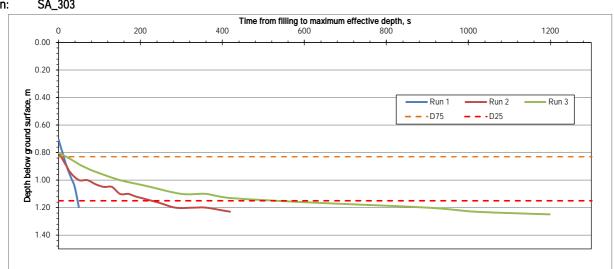
Based on BRE 365 Soakaway Design

Project: CG/28824B

Client: Hanbury Eng: ELD / SMS Checker: NJL

Project: Cathedral Park, Chichester - Drainage Date: 29/01/20

Location: SA_303



	Rulli
Pit Length (m):	3.50
Pit Width (m):	0.75
Pit Depth (m):	1.20

	<u>Run 2</u>
Pit Length (m):	3.50
Pit Width (m):	0.75
Pit Depth (m):	1.25

	Ruii 3
Pit Length (m):	3.50
Pit Width (m):	0.75
Pit Depth (m):	1.22

Effective Depth (0.50
D ₇₅ (m)		0.83
D ₂₅ (m)		1.08
V _{p75-25} (m ³)		0.66

t ₇₅ (s)		<i>12.15</i>
t ₇₅ (s) t ₂₅ (s)		41.30
t _{p75-25} (s)		<i>29.15</i>
a _{p50} (m ²)		<i>4.75</i>
Infiltration Rate (m/s):		4.74E-0

Effective Depth (0.40
D ₇₅ (m)	0.95
D ₂₅ (m)	1.15
V _{p75-25} (m ³)	0.53

t ₇₅ (s)		20
t ₂₅ (s)		114
t _{p75-25} (s)		94
a _{p50} (m ²)		4.325
Infiltration Rate (m/s):		<u>1.29E-0:</u>

Effective Depth (0.42
D ₇₅ (m)	0.91
D ₂₅ (m)	1.12
V _{p75-25} (m ³)	0.55

t ₇₅ (s)		21
t ₂₅ (s)		<i>75</i>
t _{p75-25} (s)		<i>54</i>
a _{p50} (m ²)		4.41
Infiltration Rate (m/s):		2.33E-0

Time (m)	Time (s)	Depth (m)
0.00	0	0.70
0.16	9.6	0.80
0.33	19.8	0.90
0.50	30	0.98
0.66	39.6	1.05
0.83	49.8	1.20

Time (m)	Time (s)	Depth (m)
0.00	0.00	0.85
0.16	9.60	0.90
0.33	19.80	0.95
0.50	30.00	0.98
0.66	39.60	1.00
0.83	49.80	1.04
1.00	60.00	1.05
1.16	69.60	1.07
1.33	79.80	1.09
1.66	99.60	1.10
2.00	120.00	1.17
2.33	139.80	1.20

Time (m)	Time (s)	Depth (m)
0.00	0.00	0.80
0.16	9.60	0.85
0.33	19.80	0.90
0.50	30.00	0.94
0.66	39.60	0.98
0.83	49.80	1.00
1.00	60.00	1.08
1.16	69.60	1.10
1.33	79.80	1.13
1.50	90.00	1.17
1.66	99.60	1.19
1.83	109.80	1.20
2.00	120.00	1.20

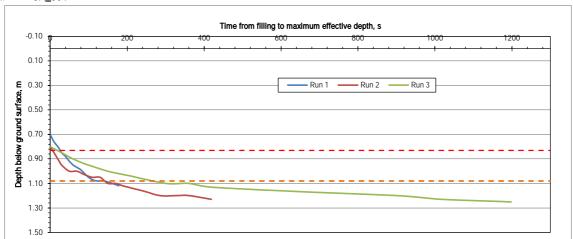


Project: CG/28824B

Client: Hanbury Eng: ELD / SMS Checker NJI

Project: Cathedral Park, Chichester - Drainage Date: 29/01/20

Location: SA_304



	<u>Ruii i</u>
Pit Length (n	2.70
Pit Width (m):	0.70
Pit Depth (m):	1.20

	<u>Run 2</u>
Pit Length (n	2.70
Pit Width (m):	0.70
Pit Depth (m):	1.20

0.40

0.90

1.10

Effective Depth

D₇₅ (m)

D₂₅ (m)

	<u>Run 3</u>
Pit Length (n	2.70
Pit Width (m):	0.70
Pit Depth (m):	1.20

CGL

Effective Depth		0.50
D ₇₅ (m)		0.83
D ₂₅ (m)		1.08
V_{p75-25} (m ³)		0.47
t ₇₅ (s)		24.9
t ₂₅ (s)		116.6

91.7 3.59

t_{p75-25} (s)

 a_{p50} (m²)

Infiltration Rate (m/s):

V _{p75-25} (m ³)	0.38
t ₇₅ (s)	22
t ₂₅ (s)	240
t _{p75-25} (s)	217.65
a _{p50} (m ²)	3.25

Effective Depth	0.40
D ₇₅ (m)	0.90
D ₂₅ (m)	1.10
V _{275, 25} (m ³)	0.38

t ₇₅ (s)		22
t ₂₅ (s)		240
t _{p75-25} (s)		217.65
a _{p50} (m ²)		<i>3.25</i>
Infiltration Rate (m/s):		5.34E-0

t ₇₅ (s)		40
t ₂₅ (s)		540
t _{p75-25} (s)		500.4
a _{p50} (m ²)		3.25
Infiltration R	ate (m/s):	2.32E-0

Time (m)	Time (s)	Depth (m)
0.00	0	0.70
0.16	9.6	0.76
0.33	19.8	0.80
0.50	30	0.85
0.66	39.6	0.88
0.83	49.8	0.92
1.00	60	0.95
1.16	69.6	0.97
1.33	79.8	0.99
1.66	99.6	1.05
2.00	120	1.08
2.33	139.8	1.08
3	180	1.12

Time (m)	Time (s)	Depth (m)
0.00	0	0.80
0.16	9.6	0.85
0.33	19.8	0.89
0.50	30	0.93
0.66	39.6	0.95
0.83	49.8	0.97
1.00	60	0.99
1.33	79.8	1.00
1.66	99.6	1.03
2.00	120	1.05
2.50	150	1.06
3.00	180	1.07
5.00	300	1.13

Time (m)	Time (s)	Depth (m)
0.00	0	0.80
0.16	9.6	0.83
0.33	19.8	0.86
0.50	30	0.88
0.66	39.6	0.90
0.83	49.8	0.92
1.00	60	0.94
1.50	90	0.96
2.00	120	0.98
3.00	180	1.03
4.00	240	1.03
6.00	360	1.05
8.00	480	1.08
9.00	540	1.10

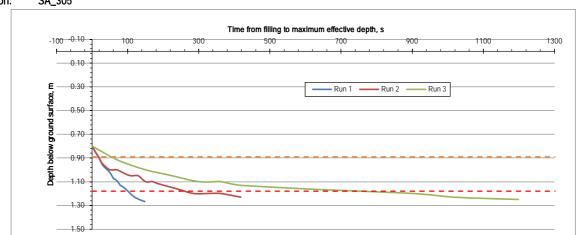
Based on BRE 365 Soakaway Design

Project: CG/28824B

Client: Hanbury Eng: ELD / SM Checker NJL

Project: Cathedral Park, Chichester - Drainage Date: 29/01/20

Location: SA_305



	<u>Run i</u>
Pit Length (rr	2.80
Pit Width (m):	0.70
Pit Depth (m):	1.30

	<u>Run 2</u>
Pit Length (rr	2.80
Pit Width (m):	0.70
Pit Depth (m):	1.25

0.91

1.14 0.44

	Run 3
Pit Length (m	2.80
Pit Width (m):	0.70
Pit Depth (m):	1.30

CGL

Effective Depti	h	0.50
D ₇₅ (m)		0.93
D ₂₅ (m)		1.18
V _{p75-25} (m ³)		0.49

 t_{75} (s) t_{25} (s) t_{p75-25} (s) a_{p50} (m²)

Infiltration Rate (m/s):

0.49	V _{p75-25} (m ⁻)		
24.05	t ₇₅ (s)		
99.375	t ₂₅ (s)		
75.325	t _{p75-25} (s)		
3.71	a _{p50} (m ²)		
1.75E-0	Infiltration F	Rate (m/s):	

Effective Depth D₇₅ (m)

D₂₅ (m)

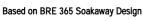
Effective Depth	0.55
D ₇₅ (m)	0.89
D ₂₅ (m)	1.16
V _{p75-25} (m ³)	0.54

	28.0875	t ₇₅ (s)	35.6
	<i>118.725</i>	t ₂₅ (s)	161.3
	90.6375	t _{p75-25} (s)	125.7
	<i>3.535</i>	a _{p50} (m ²)	3.885
(m/s):	1.38E-0;	Infiltration Rate (m/s):	<u>1.10E-0</u> ;

Time (m)	Time (s)	Depth (m)
0.00	0	0.80
0.16	9.6	0.85
0.33	19.8	0.90
0.50	30	0.96
0.66	39.6	0.99
0.83	49.8	1.02
1.00	60	1.07
1.16	69.6	1.09
1.33	79.8	1.13
1.50	90	1.15
2.00	120	1.23
2.50	150	1.27

Time (m)	Time (s)	Depth (m)
0.00	0	0.80
0.16	9.6	0.83
0.33	19.8	0.88
0.50	30	0.92
0.66	39.6	0.95
0.83	49.8	0.98
1.00	60	1.00
1.33	79.8	1.05
1.66	99.6	1.10
2.00	120.00	1.14
2.33	139.80	1.18
2.66	159.60	1.23

	•	
Time (m)	Time (s)	Depth (m)
0.00	0	0.75
0.16	9.6	0.80
0.33	19.8	0.84
0.50	30	0.87
0.66	39.6	0.90
0.83	49.8	0.94
1.00	60	0.97
1.33	79.8	1.00
1.66	99.6	1.05
2.00	120	1.08
2.33	139.8	1.13
2.66	159.6	1.16
3.00	180	1.19
3.33	199.8	1.23

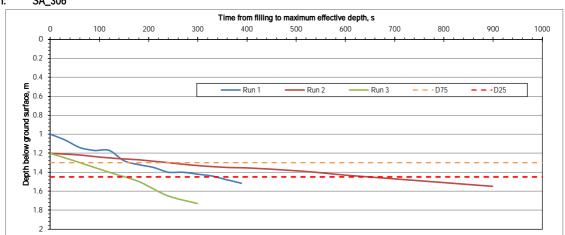


Project: CG/28824B

Client: Hanbury Eng: ELD/SM Checker NJL

Project: Cathedral Park, Chichester - Drainage Date: 30/01/20

Location: SA_306



	<u>Run i</u>
Pit Length (m	2.45
Pit Width (m):	0.70
Pit Depth (m):	1.60

	<u>Run 2</u>
Pit Length (m	2.45
Pit Width (m):	0.70
Pit Depth (m):	1.60

	<u>Run 3</u>
Pit Length (m	2.45
Pit Width (m):	0.70
Pit Depth (m):	2.05

CGL

Effective Depth	0.60
D ₇₅ (m)	1.15
D ₂₅ (m)	1.45
V _{p75-25} (m ³)	0.51

Effective Depth	0.40
D ₇₅ (m)	1.30
D ₂₅ (m)	1.50
V _{p75-25} (m ³)	0.34
•	

Effective Depth	0.85
D ₇₅ (m)	1.4125
D ₂₅ (m)	1.8375
V _{p75-25} (m ³)	0.728875

t ₇₅ (s)		217.5
t ₂₅ (s)		<i>555</i>
t _{p75-25} (s)		337.5
a _{p50} (m ²)		3.605
Infiltration Rat	e (m/s):	4.23E-0

t ₇₅ (s)	240
t ₂₅ (s)	775
t _{p75-25} (s)	535
a _{p50} (m ²)	2.975
Infiltration Rate (m/s):	2.16E-0

t ₇₅ (s)		128
t ₂₅ (s)		338
t _{p75-25} (s)		210.441176
a _{p50} (m ²)		4.3925
Infiltration Rat	e (m/s):	7.89E-0

Time (m)	Time (s)	Depth (m)
0.00	0	1
0.50	30	1.06
1.00	60	1.14
1.50	90	1.17
2.00	120	1.17
2.50	150	1.28
3.00	180	1.32
3.50	210	1.35
4.00	240	1.4
4.50	270	1.4
5.00	300	1.42
5.50	330	1.44
6.00	360	1.48
6.50	390	1.52

Time (m)	Time (s)	Depth (m)
0.00	0	1.20
1.00	60	1.22
2.00	120	1.25
3.00	180	1.27
4.00	240	1.30
5.00	300	1.33
6.00	360	1.35
7.00	420	1.36
9.00	540	1.40
10.00	600	1.43
15.00	900	1.55

Time (m)	Time (s)	Depth (m)
0.00	0	1.20
1.00	60	1.30
2.00	120	1.40
3.00	180	1.50
4.00	240	1.65
5.00	300	1.73
6.00	360	1.90
7.00	420	2.05

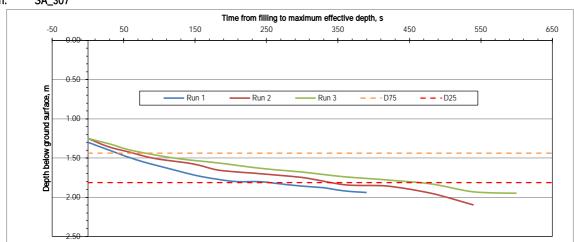


Project: CG/28824B

Client: Hanbury ELD / SMS Checker Eng: NJI

Project: Cathedral Park, Chichester - Drainage Date: 30/01/20

Location: SA_307



	Run1
Pit Length (n	2.50
Pit Width (m):	0.70
Pit Depth (m):	2.10

0.80

Effective Depth

	<u>Run 2</u>
Pit Length (n	2.50
Pit Width (m):	0.70
Pit Depth (m):	2.10

0.85

	<u>Run 3</u>
Pit Length (n	2.50
Pit Width (m):	0.70
Pit Depth (m):	2.00

CGL

D ₇₅ (m)	1.50
D ₂₅ (m)	1.90
V _{p75-25} (m ³)	0.70
t ₇₅ (s)	60
t ₂₅ (s)	345
t _{p75-25} (s)	285
a _{p50} (m ²)	4.31

D ₇₅ (m)	1.46
D ₂₅ (m)	1.89
V _{p75-25} (m ³)	0.74
t ₇₅ (s)	74
t ₂₅ (s)	438
t _{p75-25} (s)	364.40476
•	

Effective Depth

Effective Depth	0.75
D ₇₅ (m)	1.4375
D ₂₅ (m)	1.8125
V _{p75-25} (m ³)	0.65625

t ₇₅ (s)		60
t ₂₅ (s)		345
t _{p75-25} (s)		<i>285</i>
a _{p50} (m ²)		4.31
Infiltration Rate (m/s):		5.70E-0

t ₇₅ (s)		74
t ₂₅ (s)		438
t _{p75-25} (s)		364.40476
a _{p50} (m ²)		4.47
Infiltration F	Rate (m/s):	4.57E-0

t ₇₅ (s)		83
t ₂₅ (s)		459
t _{p75-25} (s)		376.5
a _{p50} (m ²)		4.15
Infiltration F	Rate (m/s):	4.20E-0

Time (m)	Time (s)	Depth (m)
0.00	0	1.30
0.50	30	1.40
1.00	60	1.50
1.50	90	1.58
2.00	120	1.65
2.50	150	1.72
3.00	180	1.77
3.50	210	1.80
4.00	240	1.80
4.50	270	1.83
5.00	300	1.86
5.50	330	1.88
6.00	360	1.92
6.50	390	1.94

Time (m)	Time (s)	Depth (m)
0.00	0	1.25
0.50	30	1.36
1.00	60	1.43
1.50	90	1.50
2.00	120	1.54
2.50	150	1.58
3.00	180	1.65
3.50	210	1.68
4.00	240	1.70
5.00	300	1.75
6.00	360	1.84
7.00	420	1.86
8.00	480	1.95
9.00	540	2.10

Time (m)	Time (s)	Depth (m)
0.00	0	1.25
0.50	30	1.32
1.00	60	1.40
2.00	120	1.50
3.00	180	1.56
4.00	240	1.63
5.00	300	1.68
6.00	360	1.74
7.00	420	1.78
8.00	480	1.83
9.00	540	1.93
10.00	600	1.95

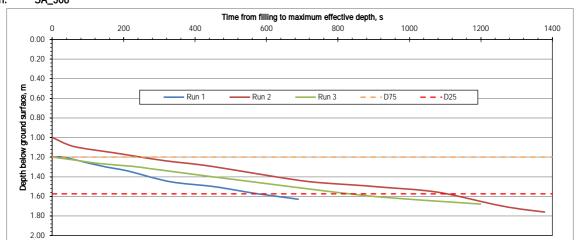
Based on BRE 365 Soakaway Design

Project: CG/28824B

Client: Hanbury ELD / SMS Checker Eng: NJI

Project: Cathedral Park, Chichester - Drainage Date: 30/01/20

Location: SA_308



	Run1
Pit Length (n	2.30
Pit Width (m):	0.70
Pit Depth (m):	1.70

	<u>Run 2</u>
Pit Length (n	2.30
Pit Width (m):	0.70
Pit Depth (m):	1.80

0.80 1.20

1.60

Effective Depth

D₇₅ (m) D₂₅ (m)

	<u>Run 3</u>
Pit Length (n	2.30
Pit Width (m):	0.70
Pit Depth (m):	1.70

CGL

Effective Depth	0.50
D ₇₅ (m)	1.33
D ₂₅ (m)	1.58
V _{p75-25} (m ³)	0.40
t ₇₅ (s)	206.25

t ₇₅ (s)		206.25
t ₂₅ (s)		<i>655</i>
t _{p75-25} (s)		448.75
a _{p50} (m ²)		3.11
Infiltration Rat	te (m/s):	2.88E-0

V _{p75-25} (m ³)	0.64
t ₇₅ (s)	249
t ₂₅ (s)	1131
t _{p75-25} (s)	882.85714
a _{p50} (m ²)	4.01
Infiltration Rate (r	n/s): <u>1.82E-0</u>

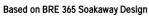
Effective Depth	0.5
D ₇₅ (m)	1.325
D ₂₅ (m)	<i>1.575</i>
V _{p75-25} (m ³)	0.4025
	-

t ₇₅ (s)		290
t ₂₅ (s)		842
t _{p75-25} (s)		552.30769
a _{p50} (m ²)		3.11
Infiltration F	Rate (m/s):	2.34E-0

Time (m)	Time (s)	Depth (m)
0.00	0	1.20
0.50	30	1.20
1.50	90	1.25
2.50	150	1.30
3.50	210	1.34
5.50	330	1.45
7.50	450	1.50
9.50	570	1.57
11.50	690	1.63

Time (m)	Time (s)	Depth (m)
0.00	0	1.00
1.00	60	1.09
3.00	180	1.16
5.00	300	1.23
7.00	420	1.28
9.00	540	1.35
12.00	720	1.45
15.00	900	1.50
18.00	1080	1.56
21.00	1260	1.70
23.00	1380	1.76

Time (m)	Time (s)	Depth (m)
0.00	0	1.20
1.00	60	1.23
2.00	120	1.26
3.00	180	1.28
4.00	240	1.30
5.00	300	1.33
10.00	600	1.47
15.00	900	1.60
20.00	1200	1.68

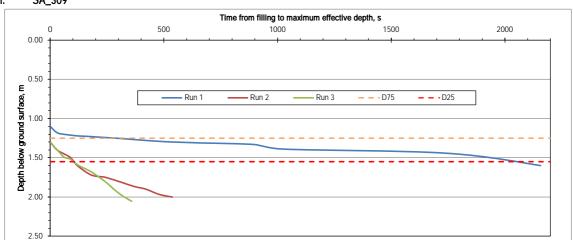


Project: CG/28824B

Client: Hanbury Eng: ELD / SMS Checker NJI

Project: Cathedral Park, Chichester - Drainage Date: 30/01/20

Location: SA_309



	<u>kun i</u>
Pit Length (n	2.50
Pit Width (m):	0.70
Pit Depth (m):	1.70

	<u>Run 2</u>
Pit Length (n	2.50
Pit Width (m):	0.70
Pit Depth (m):	2.00

	<u> Run 3</u>
Pit Length (n	2.50
Pit Width (m):	0.70
Pit Depth (m):	2.10

CGL

Effective Dept	h	0.60
D ₇₅ (m)		1.25
D ₂₅ (m)		<i>1.55</i>
V _{p75-25} (m ³)		0.53

t ₇₅ (s)	288
t ₂₅ (s)	2028.75
t _{p75-25} (s)	<i>1740.75</i>
a _{p50} (m ²)	3.67
Infiltration Rate (m/s):	8.22E-0

Effective Depth	0.70
D ₇₅ (m)	1.48
D ₂₅ (m)	1.83
V _{p75-25} (m ³)	0.61
t ₇₅ (S)	75

t ₇₅ (s)		<i>75</i>
t ₂₅ (s)		325
t _{p75-25} (s)		<i>250</i>
a _{p50} (m ²)		3.99
Infiltration Rate (m/s):		6.14E-0

Effective De	pth	0.8
D ₇₅ (m)		1.5
D ₂₅ (m)		1.9
V_{p75-25} (m ³)		0.7

t ₇₅ (s)		70
t ₂₅ (s)		280
t _{p75-25} (s)		210
a_{p50} (m ²)		4.31
Infiltration R	ate (m/s):	7.73E-0

Time (m)	Time (s)	Depth (m)
0.00	0	1.10
0.50	30	1.18
1.00	60	1.20
2.00	120	1.22
4.00	240	1.24
8.00	480	1.29
11.00	660	1.31
15.00	900	1.33
17.00	1020	1.39
29.00	1740	1.44
36.00	2160	1.60

Time (m)	Time (s)	Depth (m)
0.00	0	1.30
0.50	30	1.40
1.00	60	1.45
1.50	90	1.50
2.00	120	1.60
3.00	180	1.72
4.00	240	1.75
5.00	300	1.80
6.00	360	1.86
7.00	420	1.90
8.00	480	1.97
9.00	540	2.00

Time (m)	Time (s)	Depth (m)
0.00	0	1.30
0.50	30	1.40
1.00	60	1.49
1.50	90	1.52
2.00	120	1.59
3.00	180	1.68
4.00	240	1.80
5.00	300	1.95
6.00	360	2.06



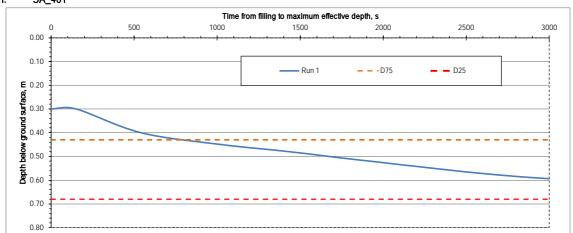
Based on BRE 365 Soakaway Design

Project: CG/28824B

Client: Hanbury Eng: SM S Checker NJL

Project: Cathedral Park, Chichester - Drainage Date: 02/03/20

Location: SA_401



	Run1
Pit Length (m	3.20
Pit Width (m):	0.65
Pit Depth (m):	0.80

	<u>Run 2</u>
Pit Length (rr	
Pit Width (m):	
Pit Depth (m):	

Effective Depth

D₇₅ (m)

D₂₅ (m)

	<u>Run 3</u>
Pit Length (m	
Pit Width (m):	
Pit Depth (m):	

Effective Depth

D₇₅ (m)

Effective Depth (m)	0.50
D ₇₅ (m)	0.43
D ₂₅ (m)	0.68
V _{p75-25} (m ³)	0.52

t ₇₅ (s)	780
t ₂₅ (s)	4776
t _{p75-25} (s)	3996
a _{p50} (m ²)	4.005
Infiltration Rate (m/s):	3.25E-0!

25 ()		
V_{p75-25} (m ³)		
t ₇₅ (s)		
t ₂₅ (s)		
t _{p75-25} (s)		
t _{p75-25} (s) a _{p50} (m ²)		
Infiltration F	Rate (m/s):	

D ₂₅ (m)		
V _{p75-25} (m ³)		
t ₇₅ (s)		
t ₂₅ (s)		
t _{p75-25} (s)		
t_{p75-25} (s) a_{p50} (m ²)		
Infiltration Rate	(m/s):	

Time (m)	Time (s)	Depth (m)
0.00	0	0.30
2.50	150	0.30
9.00	540	0.40
17.00	1020	0.45
24.00	1440	0.48
32.00	1920	0.52
48.50	2910	0.59
71.50	4290	0.63
80.50	4830	0.68
96.50	5790	0.70
106.50	6390	0.71

Time (m)	Time (s)	Depth (m)

Time (m)	Time (s)	Depth (m)
	(6)	Dopui (iii)



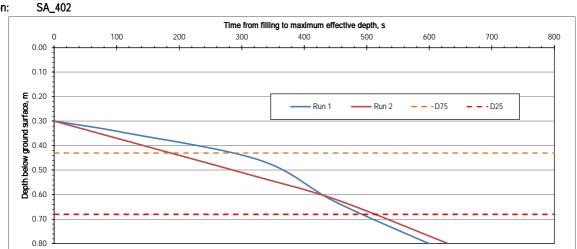
Based on BRE 365 Soakaway Design

Project: CG/28824B

Client: Hanbury Eng: SM S Checker NJI

Project: Cathedral Park, Chichester - Drainage Date: 02/03/20

Location:



	Run1
Pit Length (n	3.00
Pit Width (m):	0.70
Pit Depth (m):	0.80

	<u>Run 2</u>
Pit Length (n	3.00
Pit Width (m):	0.70
Pit Depth (m):	0.80

0.50

0.43

0.68

0.53

	<u>Run 3</u>
Pit Length (n	
Pit Width (m):	
Pit Depth (m):	

Effective Depth

D₇₅ (m)

D₂₅ (m)

 V_{p75-25} (m³)

Effective Depth (m)	0.50
D ₇₅ (m)	0.43
D ₂₅ (m)	0.68
V _{p75-25} (m ³)	0.53

t ₇₅ (s)		263.18182
t ₂₅ (s)		489.70588
t _{p75-25} (s)		226.52406
a _{p50} (m ²)		3.95
Infiltration Rat	e (m/s):	5.87E-0

	1			
5.87E-0		Infiltration F	Rate (m/s):	4.07E-0
<i>3.95</i>		a _{p50} (m ²)		<i>3.95</i>
<i>226.52406</i>		t _{p75-25} (s)		326
<i>489.70588</i>		t ₂₅ (s)		<i>505</i>
<i>263.18182</i>		t ₇₅ (s)		179

Effective Depth

D₇₅ (m)

D₂₅ (m)

 V_{p75-25} (m³)

t ₇₅ (s)	
t ₂₅ (s)	
t _{p75-25} (s)	
t _{p75-25} (s) a _{p50} (m ²)	
Infiltration I	

Time (m)	Time (s)	Depth (m)
0.00	0	0.30
2.00	120	0.35
5.50	330	0.46
7.50	450	0.63
10.00	600	0.80

Time (m)	Time (s)	Depth (m)
0.00	0	0.30
5.00	300	0.51
7.50	450	0.62
10.50	630	0.80

Time (m)	Time (s)	Depth (m)

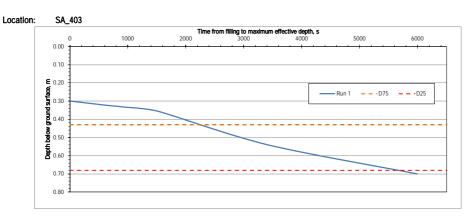


Based on BRE 365 Soakaway Design

Project: CG/28824B

Client: Hanbury SM S Checker Eng: NJL

Project: Cathedral Park, Chichester - Drainage Date: 02/02/20



	Run1
Pit Length (n	3.00
Pit Width (m):	0.60
Pit Depth (m):	0.80

	<u>Run 2</u>
Pit Length (n	
Pit Width (m):	
Pit Depth (m):	

	<u>Run 3</u>
Pit Length (n	
Pit Width (m):	
Pit Depth (m):	

Effective Depth (m)		0.50
D ₇₅ (m)		0.43
D ₂₅ (m)		0.68
V_{p75-25} (m ³)		0.45

D ₂₅ (m)	
V_{p75-25} (m ³)	
t ₇₅ (s)	
t ₂₅ (s)	
t _{p75-25} (s)	
2	

Effective Depth D₇₅ (m)

Effective Depth		
D ₇₅ (m)		
D ₂₅ (m)		
V_{n75-25} (m ³)		

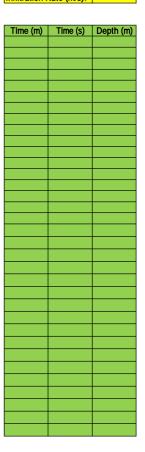
Infiltration Rate (m/s):	3.71E-0
a _{p50} (m ²)	3.6
t _{p75-25} (s)	3365.2083
t ₂₅ (s)	<i>5596.88</i>
t ₇₅ (s)	2231.6667

t ₇₅ (s)		
t ₂₅ (s)		
t _{p75-25} (s)		
a _{p50} (m ²)		
Infiltration Rate (m/s):		

t ₇₅ (s)		
t ₂₅ (s)		
t _{p75-25} (s)		
a _{p50} (m ²)		
Infiltration Rate (m/s):		

Time (m)	Time (s)	Depth (m)
0.00	0	0.30
14.00	840	0.33
20.00	1200	0.34
26.00	1560	0.36
57.00	3420	0.54
100.00	6000	0.70

Time (m)	Time (s)	Depth (m)



Notes:

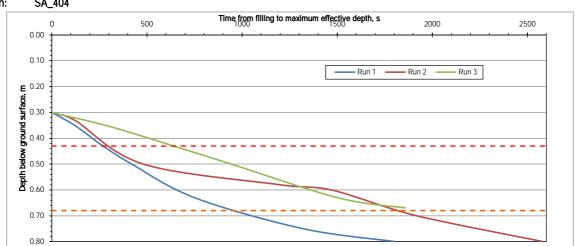
Based on BRE 365 Soakaway Design

Project: CG/28824B

Client: Hanbury Eng: SM S Checker NJI

Project: Cathedral Park, Chichester - Drainage Date: 02/03/20





	<u>Run I</u>
Pit Length (n	2.60
Pit Width (m):	0.60
Pit Depth (m):	0.80

	<u>Run 2</u>
Pit Length (n	2.60
Pit Width (m):	0.60
Pit Depth (m):	0.80

0.50

0.43

0.68

0.39

321

1808 1486.3235

Effective Depth

D₇₅ (m)

D₂₅ (m)

t₇₅ (s)

t₂₅ (s)

t_{p75-25} (s)

 $V_{p75-25} (m^3)$

	<u>Run 3</u>
Pit Length (n	2.60
Pit Width (m):	0.60
Pit Depth (m):	0.80

0.50

Effective Depth

Effective Depth		0.50
D ₇₅ (m)		0.43
D ₂₅ (m)		0.68
V _{p75-25} (m ³)		0.39

t ₇₅ (s)		260.625
t ₂₅ (s)		963.75
		703.125
t _{p75-25} (s)		7007720
a _{p50} (m ²)		3.16
Infiltration Rate (m/s):		1.76E-0

	a _{p50} (m ²)		3.16
1			
	Infiltration F	Rate (m/s):	8.30E-0
I	Time (m)	Time (s)	Depth (m)
	Time (m)	Time (s)	Depth (m) 0.30

Time (m)	Time (s)	Depth (m)
0.00	0	0.30
2.00	120	0.33
8.00	480	0.50
20.00	1200	0.58
24.50	1470	0.60
32.00	1920	0.70
43.00	2580	0.80

D ₇₅ (111)	0.43
D ₂₅ (m)	0.68
V _{p75-25} (m ³)	0.39
t ₇₅ (s)	615
t ₂₅ (s)	540
t _{p75-25} (s)	<i>-75</i>
a _{p50} (m ²)	3.16
Infiltration Rate (m/	s): <u>-1.65E-0</u>

Time (m)	Time (s)	Depth (m)
0.00	0	0.30
5.50	330	0.36
15.00	900	0.49
25.00	1500	0.63
31.00	1860	0.67

Time (m)	Time (s)	Depth (m)
0.00	0	0.30
2.00	120	0.35
4.50	270	0.43
7.00	420	0.50
12.50	750	0.63
22.00	1320	0.75
30.00	1800	0.8

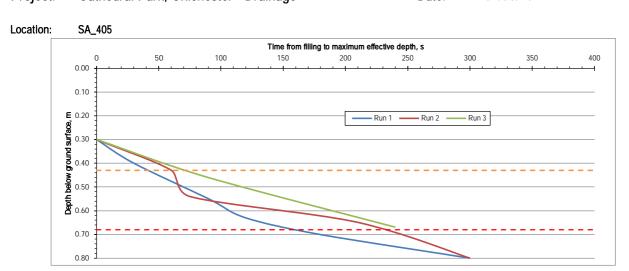


Based on BRE 365 Soakaway Design

Project: CG/28824B

Client: Hanbury Eng: SM S Checker NJL

Project: Cathedral Park, Chichester - Drainage Date: 02/03/20



	Run1
Pit Length (m	3.00
Pit Width (m):	0.70
Pit Depth (m):	0.80

	Run 2
Pit Length (rr	3.00
Pit Width (m):	0.70
Pit Depth (m):	0.80

	<u>Run 3</u>
Pit Length (m	3.00
Pit Width (m):	0.70
Pit Depth (m):	0.80

Effective Depth	0.50
D ₇₅ (m)	0.43
D ₂₅ (m)	0.68
V _{p75-25} (m ³)	0.53

Effective Depth	0.50	
D ₇₅ (m)	0.43	
D ₂₅ (m)	0.68	
V _{p75-25} (m ³)	0.53	
t (c)	57 602208	

Effective Depth		0.50
D ₇₅ (m)		0.43
D ₂₅ (m)		0.68
$V_{} = (m^3)$		0.53

t ₇₅ (s)		40
t ₂₅ (s)		<i>158.57143</i>
t _{p75-25} (s)		118.57143
a _{p50} (m ²)		<i>3.95</i>
Infiltration Rat	te (m/s):	1.12E-0

t ₇₅ (s)		<i>57.692308</i>
t ₂₅ (s)		225
t _{p75-25} (s)		167.30769
a _{p50} (m ²)		3.95
Infiltration Rate (m/s):		7.94E-04

t ₇₅ (s)		<i>70.3125</i>
t ₂₅ (s)		161.3
t _{p75-25} (s)		90.9875
a _{p50} (m ²)		<i>3.95</i>
Infiltration Rate	(m/s):	1.46E-0

Time (m)	Time (s)	Depth (m)
0.00	0	0.30
0.50	30	0.40
1.50	90	0.55
2.00	120	0.63
3.00	180	0.70
5.00	300	0.80

Time (m)	Time (s)	Depth (m)
0.00	0	0.30
1.00	60	0.43
1.25	75	0.54
3.50	210	0.65
5.00	300	0.80

Time (m)	Time (s)	Depth (m)
0.00	0	0.30
1.50	90	0.46
4.00	240	0.67

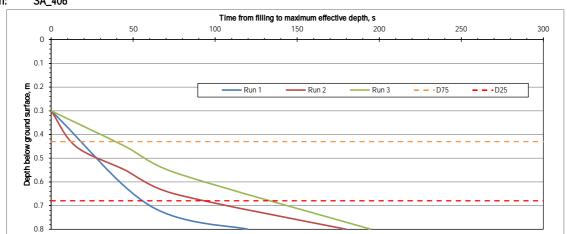
Based on BRE 365 Soakaway Design

Project: CG/28824B

Client: Hanbury Eng: SM S Checker NJL

Project: Cathedral Park, Chichester - Drainage Date: 02/03/20

Location: SA_406



	<u>Run1</u>
Pit Length (rr	2.60
Pit Width (m):	0.70
Pit Depth (m):	0.80

	<u>Ruii Z</u>
Pit Length (rr	2.60
Pit Width (m):	0.70
Pit Depth (m):	0.80

	<u>Run 3</u>
Pit Length (rr	2.60
Pit Width (m):	0.70
Pit Depth (m):	0.80

CGL

Effective Depth	0.50
D ₇₅ (m)	0.43
D ₂₅ (m)	0.68
V _{p75-25} (m ³)	0.46
	-

Infiltration Rat	e (m/s):	3.50E-0
,		
a _{p50} (m ²)		3.47
t _{p75-25} (s)		37.5
t ₂₅ (s)		<i>56.25</i>
t ₇₅ (s)		<i>18.75</i>

Time (m)	Time (s)	Depth (m)
0.00	0	0.3
1.00	60	0.7
2.00	120	0.8

Effective Depth	0.50
D ₇₅ (m)	0.43
D ₂₅ (m)	0.68
V _{p75-25} (m ³)	0.46

t ₇₅ (s)		13
t ₂₅ (s)		93
t _{p75-25} (s)		80
a _{p50} (m ²)		3.47
Infiltration F	Rate (m/s):	1.64E-0

Time (m)	Time (s)	Depth (m)
0.00	0	0.30
0.25	15	0.45
0.75	45	0.55
1.25	75	0.65
3.00	180	0.80

Effective Depth	0.5
D ₇₅ (m)	0.425
D ₂₅ (m)	0.675
V _{p75-25} (m ³)	0.455

t ₇₅ (s)		38
t ₂₅ (s)		133
t _{p75-25} (s)		<i>95</i>
a _{p50} (m ²)		3.47
Infiltration Rate (m/s):		1.38E-0

Time (m)	Time (s)	Depth (m)
0.00	0	0.30
0.75	45	0.45
1.25	75	0.56
3.25	195	0.80



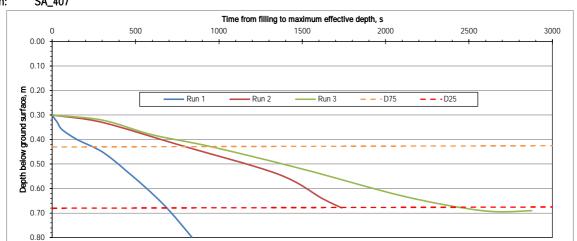
Based on BRE 365 Soakaway Design

Project: CG/28824B

Client: Hanbury Eng: SM S Checker NJI

Project: Cathedral Park, Chichester - Drainage Date: 02/03/20

Location: SA_407



	<u>kun i</u>
Pit Length (n	3.30
Pit Width (m):	0.75
Pit Depth (m):	0.80

	<u>Run 2</u>
Pit Length (n	3.30
Pit Width (m):	0.75
Pit Depth (m):	0.80

0.50

0.43

0.68

Effective Depth

D₇₅ (m)

D₂₅ (m)

	<u>Run 3</u>
Pit Length (n	3.30
Pit Width (m):	0.75
Pit Depth (m):	0.80

Effective Depth

Effective Depth	0.50
D ₇₅ (m)	0.43
D ₂₅ (m)	0.68
V _{p75-25} (m ³)	0.62
A (a)	225

t ₇₅ (s)		<i>225</i>
t ₂₅ (s)		<i>679.28571</i>
t _{p75-25} (s)		<i>454.28571</i>
a _{p50} (m ²)		4.5
Infiltration Rate (m/s):		3.03E-0

▼p75-25 (**** /		0.02
t ₇₅ (s)		<i>775</i>
t ₂₅ (s)		<i>1725</i>
t _{p75-25} (s)		950
a _{p50} (m ²)		4.5
Infiltration Rate	e (m/s):	1.45E-0

υ ₇₅ (m)	0.425
D ₂₅ (m)	0.675
V _{p75-25} (m ³)	0.61875
t ₇₅ (s)	924
t ₂₅ (s)	2460
t _{p75-25} (s)	<i>1536</i>
a _{p50} (m ²)	4.5
Infiltration Rate (m/s):	8.95E-0

Time (m)	Time (s)	Depth (m)
0.00	0	0.30
0.50	30	0.33
1.00	60	0.36
2.50	150	0.40
5.00	300	0.45
7.50	450	0.53
11.00	660	0.66
14.00	840	0.80

Time (m)	Time (s)	Depth (m)
0.00	0	0.30
5.00	300	0.33
12.50	750	0.42
22.50	1350	0.54
27.00	1620	0.64
29.00	1740	0.68

Time (m)	Time (s)	Depth (m)
0.00	0	0.30
5.00	300	0.32
10.00	600	0.38
16.00	960	0.43
25.00	1500	0.52
35.00	2100	0.63
43.00	2580	0.69
48.00	2880	0.69