



Land South of Banbury Rise, Banbury Sustainable Drainage Statement July 2022 WFB-BWB-ZZ-XX-RP-CD-0001_SDS



Appendix 3: Site Investigation Data

Int Géotech	tegrar	Intégral House, 7 Beddau W. Castlegate Business Park Caerphilly CF83 2AX Tel. 029 20807991 Fax. 029 20862176 mail@integralgeotec.com	ay	Project Bretc		Banbury	Project No.: 12692	Trial Pit No.: TP01 Sheet 1 of 1
Location: Banbury				Client	: Bloc	or Homes Western	Logged By: GNS	Scale 1:25
Equipment:	JCB 3	сх		Coordin	nates:		Dimensions	1.70m
Date Excava		27/09/2021		Level:			Depth : E	
Sam Depth (m)	ples & Ir Type	n-situ Testing Results	Depth (m)	Level (m AOD)	Legend	Stratum D	escription	
0.10	ES		0.20			Loose brown slightly clayey sandy slightly grave sub-angular and sub-rounded calcareous sands Loose to medium dense orange brown slightly of fine to coarse sub-angular calcareous sandston	stone. Frequent roots and re	ootlets. (TOPSOIL)
0.50	ES		0.70			Medium dense to dense orange brown and grey COBBLES and BOULDERS of blocky and sub- coarse sub-angular and sub-rounded sandstone	angular ferruginous limesto	
			2.40			Extremely weak light grey and light brown very MUDSTONE. (Recovered as fine to coarse gray mudstone and limestone) End of Trialp	rels and cobbles of sub-ano	icareous gular tabular 2
								-3
								-4
Remarks: 1. Soil infiltrati	ion test at	tempted in pit		Groundwa		No groundwater encountered	Key: D - Small disturbed sample B - Bulk disturbed sample ES - Environmental soil s W - Water sample	VCC

Int Géotech	Intégral House, 7 Beddau Way Castlegate Business Park Caerphilly CF83 2AX Tel. 029 20807991 Fax. 029 20862176 mail@integralgeotec.com					Banbury	Project No.: 12692	Trial Pit No.: TP02 Sheet 1 of 1
Location: Banbury				Client	: Bloo	or Homes Western	Logged By: GNS	Scale 1:25
Equipment:	JCB 3	CX		Coordir	nates:		Dimensions	1.70m
Date Excava		27/09/2021		Level:			Depth : E 2.00m 9.	
Sam Depth (m)	ples & Ir Type	n-situ Testing Results	Depth (m)	Level (m AOD)	Legend	Stratum D		
0.10	ES		0.30			Soft brown silty sandy slightly gravelly organic r ferruginous sandstone. (TOPSOIL) Medium dense becoming dense prange brown		-
1.00	B B		2.00		\\ \tau \cdot\ \	Medium dense becoming dense orange brown and BOULDERS (0.25m x 0.4m) of sub-angular fine to coarse angular and sub-angular ferruging -Slow progress of excavation at base of pit.	and blocky ferruginous lim ous limestone.	o sandy COBBLES lestone. Gravel is
								-3
Remarks: 1. Soil infiltrati	tempted in pit		Groundwa Stability:		No groundwater encountered e in the short term.	Key: D - Small disturbed sample B - Bulk disturbed sample ES - Environmental soil s W - Water sample	A C C	

Int Géotech	tégral inique	Intégral House, 7 Beddau W Castlegate Business Park Caerphilly CF83 2AX Tel. 029 20807991 Fax. 029 20862176 mail@integralgeotec.com	/ay	Project Bretc		Banbury	Project No.: 12692	Trial Pit No.: TP03 Sheet 1 of 1		
Location: Banbury				Client	: Blo	or Homes Western	Logged By: GNS	Scale 1:25		
Equipment:	JCB 3	BCX		Coordin	nates:		Dimensions	1.70m		
Date Excava	ated:	27/09/2021		Level:			Depth : 59 1.00m 99			
Sam Depth (m)	ples & I	n-situ Testing Results	Depth (m)	Level (m AOD)	Legend	Stratum D	escription			
0.10	ES		0.15			Loose brown and mid brown clayey slightly silty fine to coarse sub-angular sandstone. (TOPSO Loose to medium dense orange brown slightly coarse sub-angular and angular ferruginous lim	IL) silghtly gravelly SAND.	ŀ		
0.40	ES		0.60 0.85 1.00		Medium dense to dense slightly silty very slightly sandy GRAVEL. Gravel is fine to coar blocky and sub-angular sandstone and ferruginous limestone. Dense orange brown and grey slightly silty slightly sandy slightly gravelly COBBLES at BOULDERS of blocky and sub-angular ferruginous limestone. Gravel is fine to coarse sangular ferruginous limestone.					
						L-Unable to excavate further due to suspected b End of Triair	edrock. it at 1.00 m			
									. 2	
									- 3	
									- 4	
Remarks:			G	Groundwa	ter:	No groundwater encountered	Key:		· 5	
1. Soil infiltrati	ion test at	ttempted in pit	S	Stability:	Stab	le in the short term	D - Small disturbed sampl B - Bulk disturbed sampl ES - Environmental soil s W - Water sample	VCC		

Int Géotech	Intégral House, 7 Beddau Way Castlegate Business Park Caerphilly CF83 2AX Tel. 029 20807991 Fax. 029 20862176 mail@integralgeotec.com			Project Bretc		Banbury	Project No.: 12692	Trial Pit No.: TP04 Sheet 1 of 1
Location: Banbury				Client	: Blo	or Homes Western	Logged By: GNS	Scale 1:25
Equipment:	JCB 3	BCX		Coordir	nates:		Dimensions	1.70m
Date Excava		27/09/2021		Level:			Depth : E 9 9 0	
		n-situ Testing	Depth (m)	Level (m AOD)	Legend	Stratum De	escription	
Depth (m) 0.05	Type ES	Results	0.20			Loose brown orange brown slightly silty very slig sub-angular ferruginous sandstone and limestor Medium dense orange brown slightly clayey slig sub-angular ferruginous sandstone and limestor	ne. (TOPSOIL) htly gravelly SAND. Gravel	-
0.50 ES 1.10 Dense orange brown and grey slightly sandy very slightly gravelly COBBLES and							-1	
			1.35			Dense orange brown and grey slightly sandy ve BOULDERS (0.25m x 0.3m) of angular and sub limestone. Gravel is fine to coarse sub-angular to -Slow progress of excavation due to suspected	-angular and blocky ferrugin erruginous limestone.	S and
						End of Trialp	t at 1.35 m	-2
								- 3
								- 4
Remarks:	<u> </u>	I	[0	- Groundwa	ter:	No groundwater encountered	Key:	
· - -	demarks:					le in the short term	D - Small disturbed sample B - Bulk disturbed sample ES - Environmental soil si W - Water sample	ACC

In t Géotech	tégral inique	Intégral House, 7 Beddau V Castlegate Business Park Caerphilly CF83 2AX Tel. 029 20807991 Fax. 029 20862176 mail@integralgeotec.com	/ay	Project Bretc		Banbury	Project No.: 12692	TI	Pit No.: P05 et 1 of 1
Location: Banbury				Client	: Blo	or Homes Western	Logged By: GNS	S	cale :25
Equipment:	JCB 3	всх		Coordir	nates:		Dimensions	1.70n	1
Date Excava	ated:	27/09/2021		Level:			Depth : E		
Sam Depth (m)	ples & II Type	n-situ Testing Results	Depth (m)	Level (m AOD)	Legend	Stratum D			
0.20	ES		0.25			Loose brown and orange brown slightly silty ver coarse sub-angular ferruginous sandstone and Medium dense orange brown and light brown lo gravelly SAND. Gravel is fine to coarse sub-ang	limestone. (TOPSOIL)	very slightly	
0.50	ES				*				- - -
0.70	В		0.65			Medium dense becoming dense orange brown slightly gravelly COBBLES and BOULDERS of limestone. Gravel is fine to coarse angular and -Unable to excavate further due to suspected be	blocky and sub-angular ferr sub-angular ferruginous lim	uginous she	andy
			1.40			End of Trialp	it at 1.40 m		-2
									-4
									- 5
Remarks:		1		l Groundwa	ter:	No groundwater encountered	Key: D - Small disturbed samp	le	
			S	Stability:	Stabl	e in the short term	B - Bulk disturbed sample ES - Environmental soil s W - Water sample	•	AGS

In t Géotech	tégral nnique	Intégral House, 7 Beddau V Castlegate Business Park Caerphilly CF83 2AX Tel. 029 20807991 Fax. 029 20862176 mail@integralgeotec.com	Vay	Project Bretc		Banbury	Project No.: 12692	Т Т	Pit No.: P06 eet 1 of 1
Location: Banbury				Client	: Blo	or Homes Western	Logged By: GNS		Scale 1:25
Equipment:	JCB 3	BCX		Coordin	nates:		Dimensions	2.10	m
Date Excava	ated:	27/09/2021		Level:			Depth : E 09 1.40m 9:		
Sam Depth (m)	rples & II	n-situ Testing Results	Depth (m)	Level (m AOD)	Legend	Stratum D	escription		
0.10	ES		0.30		××	Soft brown silty slightly sandy slightly gravelly o angular ferruginous limestone and rare brick. (T Stiff brown slightly silty slightly gravelly CLAY. G ferruginous sandstone.	OPSOIL)		Ė
0.50	ES B				× - × - × - × - × - × - × - × - × - × -				-
			1.10			Dense grey and orange brown slightly clayey sl (0.2m x 0.2m) of blocky and sub-rounded ferrug angular and sub-rounded ferruginous limestone -Very slow progress of excavation	inous limestone. Gravel is	ND BOULE fine to coar	DERS . se sub-
						End of Trials	if at 1.40 m		-2
									-4
									- 5
Remarks:				Groundwa		No groundwater encountered le in the short term	Key: D - Small disturbed sample B - Bulk disturbed sample ES - Environmental soil s	9	AGS
				•			W - Water sample	-ampit	AGC

Int Géotech	tégral inique	Intégral House, 7 Beddau V Castlegate Business Park Caerphilly CF83 2AX Tel. 029 20807991 Fax. 029 20862176 mail@integralgeotec.com	Vay	Project Bretc		Banbury	Project No.: 12692	Trial Pit No.: TP07 Sheet 1 of 1	
Location: Banbury				Client	:: Blo	or Homes Western	Logged By: GNS	Scale 1:25	
Equipment:	JCB 3	всх		Coordin	nates:		Dimensions	2.10m	
Date Excava	ated:	27/09/2021		Level:			Depth : 59 1.40m 99		
Sam Depth (m)	ples & II	n-situ Testing Results	Depth (m)	Level (m AOD)	Legend	Stratum D	escription		
0.10	ES					Loose orange brown sandy organic rich slightly angular ferruginous limestone and occasional c			-
			0.30		XX.XX	Loose orange brown slightly gravelly SAND. Gr sandstone and limestone.	avel is fine to coarse sub-a	ngular ferruginous	
0.50	ES		0.50			Medium dense to dense orange brown and ligh GRAVEL. Gravel is fine to coarse angular and s	t brown and grey slightly sil subangular ferruginous lime	ty slightly sandy stone.	-
1.00	В		0.80			Dense orange brown and grey slightly silty sand (0.2m x 0.2m) of blocky and sub-angular ferrugi sub-angular ferruginous limestone.	dy slightly gravelly COBBLE inous shelly limestone. Gra	S and BOULDERS vel is fine to coarse	- - - - 1
1.00	В					-Very slow progress of excavation.			-
			1.40		0.0.	End of Trials	oit at 1.40 m		
									-2
									4
Remarks:				- Groundwa	ter:	No groundwater encountered	Key:		٥
			s	Stability:	Stabl	le in the short term	D - Small disturbed sample B - Bulk disturbed sample ES - Environmental soil s W - Water sample	ACC	

Intégral House, 7 Beddau Way Castlegate Business Park Caerphilly CF83 2AX Tel. 029 20807991 Fax. 029 20862176 mail@integralgeotec.com		ау	Project Bretc		Banbury	Project No.: 12692	Trial Pit No.: TP08 Sheet 1 of 1				
Location: Banbury				Client	: Bloo	or Homes Western	Logged By: GNS	Scale 1:25			
Equipment:	JCB 3	СХ		Coordir	nates:		Dimensions	2.00m			
Date Excava		27/09/2021		Level:			Depth : 69 0 0				
		n-situ Testing	Depth (m)	Level (m AOD)	Legend	Stratum De	escription				
0.10	ES	Results	0.20 1.50			Loose orange brown sandy slightly gravelly organic rich SILT. Gravel is fine to coarse subangular ferruginous limestone and occasional ceramic and earthenware. (TOPSOIL) Medium dense orange brown silty sandy GRAVEL. with occasional cobbles of sub-angular ferruginous sandstone. Gravel is fine to coarse sub-angular ferruginous sandstone. Dense orange brown and light brown slightly silty very slightly sandy slightly gravelly COBBLES and BOULDERS (0.3m x 0.4m) of sub-angular and angular ferruginous shelly and crystalline limestone. Gravel is fine to coarse sub-angular ferruginous crystalline limestone. -Unable to excavate deeper due to suspected bedrock End of Trialpit at 2.00 m					
								-4			
Remarks:			Groundwater: No groundwater encountered Key:								
Remarks:				D - Small disturbed sample				ACC			

Intégral House, 7 Beddau Way Castlegate Business Park Caerphilly CF83 2AX Tel. 029 20807991 Fax. 029 20862176 mail@integralgeotec.com		ay	Project Bretc		Banbury	Project No.: 12692	Trial Pit No.: TP09 Sheet 1 of 1				
Location: Banbury				Client	: Blo	or Homes Western	Logged By: GNS	Scale 1:25			
Equipment:	JCB 3	СХ		Coordir	nates:		Dimensions	1.70m			
Date Excava		27/09/2021		Level:			Depth : E 99 0				
		n-situ Testing	Depth (m)	Level (m AOD)	Legend	Stratum De	escription				
Depth (m)	Туре	Results	1.80 2.10			Loose orange brown slightly silty slightly gravelly SAND. Gravel is fine to coarse rounded to sub-angular ferruginous sandstone and limestone. (TOPSOIL) Medium dense orange brown slightly silty sandy GRAVEL. Gravel is fine to coarse blocky and angular and sub-angular ferruginous sandstone. -Frequent cobbles of blocky sub-angular ferruginous sandstone below 1.50m Dense orange brown and light brown and grey slightly sandy slightly gravelly COBBLES and BOULDERS (0.2m x 0.3m) of blocky sub-angular ferruginous limestone and sandstone. -Slow progress of excavation End of Trialpit at 2.10 m					
								-3			
								-4			
Remarks:				Groundwa	ter:	No groundwater encountered	Key:				
	Remarks:				Stability: Stable in the short term Stable						

In Géotech	tegrai	Intégral House, 7 Beddau W Castlegate Business Park Caerphilly CF83 2AX Tel. 029 20807991 Fax. 029 20862176 mail@integralgeotec.com	ay	Project Bretc		Banbury	Project No.: 12692	Trial Pit No.: TP10 Sheet 1 of 1	
Location: Banbury				Client	: Blo	or Homes Western	Logged By: GNS	Scale 1:25	
Equipment:	JCB 3	CX		Coordir	nates:		Dimensions	2.00m	
Date Excava		28/07/2021		Level:			Depth : 6 2.20m 0		
Sam Depth (m)	nples & Ir Type	n-situ Testing Results	Depth (m)	Level (m AOD)	Legend	Stratum Do	escription		
0.10	ES		0.30		X - X - X - X - X - X - X - X - X - X -	Soft brown silty slightly sandy slightly gravelly or rounded and sub-rounded sandstone and rare a Firm orange brown slightly silty very slightly san angular sandstone. Stiff light brown and mottled grey slightly silty fis	ngular brick and ceramic. ((TOPSOIL)	-
1.00	В				X	Sun light brown and modeo grey slightly sity his	Suled CLAT.		- 1
			2.10 2.20		X	Stiff blue grey and mottled orange brown slightly dense brown silty SAND. Weak orange brown thinly bedded and fissile fo MUDSTONE and LIMESTONE.			-2
						End of Trialp	t at 2.20 m		-3
									4
Remarks: 1. Soil infiltrat	tion test at	tempted in pit		Groundwa	ter:	No groundwater encountered	Key: D - Small disturbed samp	ole I	- 5
			s	Stability:	Stabl	e in the short term	B - Bulk disturbed sample ES - Environmental soil s W - Water sample		3

Int Géotech	Intégral House, 7 Beddau Wi Castlegate Business Park Caerphilly CF83 2AX Tel. 029 20807991 Fax. 029 20862176 mail@integralgeotec.com	ау	Project Bretc		Banbury	Project No.: 12692	Trial Pit No.: TP11 Sheet 1 of 1		
Location: Banbury				Client	: Blo	or Homes Western	Logged By: FG	Scale 1:25	
Equipment:	JCB 3	CX		Coordir	nates:		Dimensions	2.50m	
Date Excava	ited: 2	28/07/2021		Level:			Depth : 50 3.40m 99		
Samp Depth (m)	ples & In Type	r-situ Testing Results	Depth (m)	Level (m AOD)	Legend	Stratum D	escription		
0.20	ES		0.40			Soft dark brown silty sandy slightly gravelly orgato sub-angular flint, and ferruginous crystalline left of sub-angular flint, and ferruginous crystalline left frim grey blue and mottled orange brown slight fine to medium sub-angular ferruginous limeston	mestone. (TOPSOIL) y silty sandy slightly gravell		-
			4.00						- 1
			1.80			Firm grey dark blue and mottled orange brown s fine sub-angular ferruginous limestone and mud	slightly silty slightly gravelly stone.	CLAY. Gravel is	2
			3.40		* · · · · · · · · · · · · · · · · · · ·	End of Trialp	it at 3.40 m		-
									- 4
									- 5
Remarks:			G	Groundwa	ter:	No groundwater encountered	Key:		
				Stability:	Stabl	e in the short term	D - Small disturbed sampl B - Bulk disturbed sample ES - Environmental soil sa W - Water sample	ACC	

Intégral House, 7 Beddau Way Castlegate Busienses Park Caerphilly CF83 2AX Géotechnique Tel. 029 20807991 Fax. 029 20862176 mail@integralgeotec.com			ly	Project Bretc		Banbury	Project No.: 12692	Trial Pit No.: TP12 Sheet 1 of 1
Location: Banbury				Client	: Blo	or Homes Western	Logged By: GNS	Scale 1:25
Equipment:	JCB 3	cx		Coordir	nates:		Dimensions	2.20m
Date Excava	ated:	28/07/2021		Level:			Depth : 59 3.20m 69	
		n-situ Testing	Depth (m)	Level (m AOD)	Legend	Stratum De	escription	
Depth (m) 0.60	ES	Results	0.30 1.90	Level (m AOD)	Legend	Soft brown silty slightly sandy slightly gravelly or angular and sub-rounded limestone. (TOPSOIL) MADE GROUND: Medium dense brown slightly medium sub-angular sandstone, limestone and Medium dense light grey beige and orange brown and medium angular and sub-angular extremely -Grading into poorly cemented sandstone below. End of Trialp	ganic rich CLAY. Gravel is silty slightly gravelly SAND rare brick and ash.	o. Gravel is fine and
								-5
				Groundwa	ter:	No groundwater encountered	Key:	
Remarks: 1. Soil infiltration test attempted in pit				Stability:	Stabl	e in the short term	D - Small disturbed sample B - Bulk disturbed sample ES - Environmental soil si W - Water sample	ACC

Intégral House, 7 Beddau Way Castlegate Business Park Caeprhilly CF83 2AX Tel. 029 20807991 Tel. 029 20807991 mail@integralgeotec.com				Project Bretc		Banbury	Project No.: 12692	Trial Pit No.: TP13 Sheet 1 of 1	
Location: Banbury				Client	: Bloo	or Homes Western	Logged By: GNS	Scale 1:25	
Equipment:	JCB 3	CX		Coordir	nates:		Dimensions	2.20m	
Date Excavated: 28/07/2021				Level:			Depth : E 1.45m 9.		
Sam Depth (m)	ples & Ir Type	r-situ Testing Results	Depth (m)	Level (m AOD)	Legend	Stratum Description			
0.10	ES		0.05			Loose brown silty slightly gravelly organic rich S and sub-rounded ferruginous limestone. (TOPS	SAND. Gravel is fine to coar OIL)	se sub-angular .	
			0.25		*	Loose orange brown slightly silty gravelly SANE limestone.			
			0.50		, , ,	Medium dense to dense orange brown slightly s sub-angular ferruginous limestone.	silty slightly sandy GRAVEL	and COBBLES of	
					9 9 9	-Becoming dense			
						-Very slow progress of excavation below 1.4m E	3GL	-1	
			1.45		, d , d , d , d , d , d , d , d , d , d	End of Trialp	it at 1.45 m		
								-2	
								- 3 - - - -	
								- 4	
								- - - - -	
								- 5	
Remarks:			G	Groundwa	ter:	No groundwater encountered	Key:		
			S	Stability:	Stabl	e in the short term	D - Small disturbed sample B - Bulk disturbed sample ES - Environmental soil s W - Water sample	ACC	

Int o	égral nique	Intégral House, 7 Beddau Wa Castlegate Business Park Caerphilly CF83 2AX Tel. 029 20807991 Fax. 029 20862176	Bretch Hill, Banbury 12692		Trial Pit No.: TP14 Sheet 1 of 1			
Location:		mail@integralgeotec.com					Logged By:	Scale
Banbury				Client	: Blo	or Homes Western	FG	1:25
Equipment:	JCB 3	cx		Coordir	nates:		Dimensions	2.60m
Date Excavated: 28/07/2021				Level:			Depth: 50 00 00 00 00 00 00 00 00 00 00 00 00	
Samples & In-situ Testing Depth (m) Type Results (m)				Level	Legend	Stratum De	escription	
Depth (m)	Type	Results	0.50 2.55	Level (m AOD)	Legend	Stratum Do Loose brown and orange brown slightly clayey's sub-angular and sub-rounded ferruginous crystal Stiff blue grey mottled yellow brown silty CLAY. Stiff dark blue grey silty CLAY with fine gravel si -Grading into an extremely weak clayey mudsto	zed selenite crystals. ne below 3.0m BGL.	is fine to coarse ne. (TOPSOIL) -1 -1 -1 -3 -3 -3
Remarks:			G	Groundwa	ter:	No groundwater encountered	Key: D - Small disturbed sample	
			S	tability:	Stabl	e in the short term	B - Bulk disturbed sample ES - Environmental soil sa W - Water sample	ACC

Intégral House, 7 Beddau Way Castlegate Business Park Caerphilly CF83 2AX Tel. 029 20807991 Fax. 029 20862176 mail@integralgeotec.com		ау	Project Bretc		Banbury	Project No.: 12692	Trial Pit No.: TP15 Sheet 1 of 1			
Location: Banbury				Client	: Blo	or Homes Western	Logged By: FG	Scale 1:25		
Equipment:	JCB 3	сх		Coordir	nates:		Dimensions	2.60m		
Date Excava		28/07/2021		Level:			Depth : 50			
Sam Depth (m)	ples & In Type	n-situ Testing Results	Depth (m)	Level (m AOD)	Legend	Stratum De	escription			
Sopul (III)	·›he		0.40			Soft brown and orange brown silty sandy CLAY. (TOPSOIL) Firm to stiff orange brown slightly silty sandy slightly gravelly CLAY. Gravel is fine and medium sub-angular ferruginous limestone and mudstone. Stiff blue grey and mottled orange brown silty CLAY.				
			2.30		× × × × × × × × × × × × × × × × × × ×	Dense light brown and orange brown and grey s Gravel is fine to coarse angular and sub-angular limestone.	r calcareous shell fragment	sandy GRAVEL		
								-3		
								-4		
Remarks:			C	Groundwa	ter:	No groundwater encountered	Key:			
			S	Stability:	Gene and b	erally stable with local instability associated with coboulder removal	D - Small disturbed samp	ACC		

Intégral House, 7 Beddau Way Castlegate Business Park Caerphilly CF83 2AX Tel. 029 20807991 Fax. 029 20862176 mail@integralgeotec.com			'ay	Project Bretc		Banbury	Project No.: 12692	Trial Pit No.: TP16 Sheet 1 of 1	
Location: Banbury				Client	: Bloo	or Homes Western	Logged By: GNS	Scale 1:25	
Equipment:	JCB 3	CX		Coordir	nates:		Dimensions	2.00m	
Date Excavated: 28/07/2021				Level:			Depth : E		
Sam Depth (m)	ples & Ir Type	n-situ Testing Results	Depth (m)	Level (m AOD)	Legend	Stratum De	Description		
,	,		0.20			Loose brown silty slightly gravelly organic rich S Medium dense orange brown slightly silty sandy ferruginous sandstone. Gravel is fine to coarse sandstone.	GRAVEL with frequent co	bbles of ed ferruginous	
			3.50			Medium dense to dense orange brown slightly s BOULDERS (0.25m x 0.4m) of ferruginous sand and sub-rounded ferruginous sandstone.	istone. Gravel is fine to coa	COBBLES and arse sub-angular - 1	
								-4	
Remarks:			l G	Groundwa	ter:	No groundwater encountered	Key:		
				tability:	Stable	e in the short term	D - Small disturbed samp B - Bulk disturbed sampl ES - Environmental soil s W - Water sample	• \\CC	

Intégral House, 7 Beddau Way Castlegate Business Park Caerphilly CF83 2AX Tel. 029 20807991 Fax. 029 20862176 mail@integralgeotec.com		Project Bretc		Banbury	Project No.: 12692	Trial Pit No.: TP17 Sheet 1 of 1			
Location: Banbury				Client	: Blo	or Homes Western	Logged By: GNS	Scale 1:25	
Equipment:	JCB 3	СХ		Coordir	nates:		Dimensions	2.80m	
Date Excava		28/07/2021		Level:			Depth : E		
Sam Depth (m)	ples & Ir Type	n-situ Testing Results	Depth (m)	Level (m AOD)	Legend	Stratum De	escription		
Deput (III)	Туре	Nesulis	0.20	(Loose brown slightly clayey silty organic rich SAND. (TOPSOIL) Loose orange brown slightly silty SAND.			
0.50	ES		0.60		× × × × × × × × × × × × × × × × × × ×	Firm to stiff light brown and mottled grey slightly	silty CLAY with localised s	ubordinate thin	
						bands (<50mm) of ferruginous limestone.		-1	
			2.50		x x x x x x x x x x x x x x x x x x x	Extremely weak very thinly bedded and thinly la MUDSTONE / SILTSTONE. (Recovered as fine sub-angular MUDSTONE / SILTSTONE) -Locally Calcareous	minated light grey and orar to coarse gravel and cobbl	les of tabular and	
			3.50			End of Trialp	it at 3.50 m		
								- 4	
Remarks:				Groundwa	ter:	No groundwater encountered	Key:		
-				Stability:		e in the short term	D - Small disturbed sample B - Bulk disturbed sample ES - Environmental soil s W - Water sample	• ACC	

Int Géotech	Intégral House, 7 Beddau Way Castlegate Business Park Caeprbilly CF83 2AX Tel. 029 20862776 Fax. 029 20862776 maii@integralgeotec.com			Project Bretc		Banbury	Project No.: 12692	Trial Pit No.: TP18 Sheet 1 of 1	
Location: Banbury				Client	: Blo	or Homes Western	Logged By: GNS	Scale 1:25	
Equipment:	JCB 3	СХ		Coordin	nates:		Dimensions	2.30m	\neg
Date Excavated: 28/07/2021				Level:			Depth : 69 1.20m 69		
Sam Depth (m)	ples & In Type	n-situ Testing Results	Depth (m)	Level (m AOD)	Legend	Stratum De	escription		
Doput (III)	.,,,,	rocano	0.15			Loose orange brown silty slightly gravelly SAND angular limestone. (TOPSOIL) Weak orange brown and grey thin to medium su	ıb-horizontally bedded fissil	e slightly	
						weathered, close to medium sub-vertical, open fossiliferous LIMESTONE.		actured ferruginous - - - -	
						-Local instability associated with boulder and co -Very slow progress of excavation	bble removal.		
								-	
								<u>.</u>	- 1
			1.20			End of Trialp	ıt at 1.20 m		
								- - - - - - - - - - - - - - - - - - -	- 2
								- - - - - - - - - - - - - - - - - - -	
									- 3
									- 4
									- 5
Remarks:			G	 Groundwat	ter:	No groundwater encountered	Key:		\dashv
1. Soil infiltrati	on test att	tempted in pit		4-1-104	0: ::	le in the colorest terms	D - Small disturbed sample B - Bulk disturbed sample		
			S	tability:	Stabl	le in the short term	ES - Environmental soil sa W - Water sample	ample AUS	

BRE365 SOIL INFILTRATION RATE TEST - TP1

12692 Bretch Hill, Banbury

Trial Pit Information	T		cle 1		le 2		le 3
Length (m)	1.70	Time (min)	Depth (m)	Time (min)	Depth (m)	Time (min)	Depth (n
Width (m)	0.60	0	1.02				
Depth (m)	2.40	1	1.07				
Groundwater	Dry	6	1.10				
Weather Conditions	Clear	9	1.15				
Date	27-Sep-21	46	1.35				
		105	1.60				
		155	1.70				
Remarks		189	1.75				
		225	1.81				
		262	1.86				
		301	1.90				
				1			
				-			
				1			
 Line of best fit extrapolated 				1			
100% outflo	w			1			-
			L .				L
Final Excavation Depth (m)		Сус	cle 1		le 2	Cyc	le 3
At end of testing cycle			2.40				
Water Depths (m)							
Water depth at start of test			1.02				
Water depth at end of test			1.90			1	
Effective depth (measured)			0.88				
% Effective storage depth			0.64				
Effective Storage Depths (m)	<u> </u>		<u>-</u>				
Effective storage depth (100%)			1.38		-		
Effective storage depth (75%)			1.04			1	
Effective storage depth (50%)			0.69				
Effective storage depth (25%)			0.35				
Outflow Time (min)							
Time for measured outflow			301				
Time for 100% outflow			660				
Time for 75-25% outflow			360				
Volume of Outflow (m ³)			300				
Over measured effective depth			0.90				
Over 100% effective depth			1.41				
	h.		0.70				
From 75% - 25% effective depti	n		0.70				
Surface Area (m²)							
For 100% offortive storage			7 27				

7.37 4.19

5.07

4.8E-06 9.8E-06

7.8E-06

Cycle 2

Cycle 3

Cycle 1

For 100% effective storage

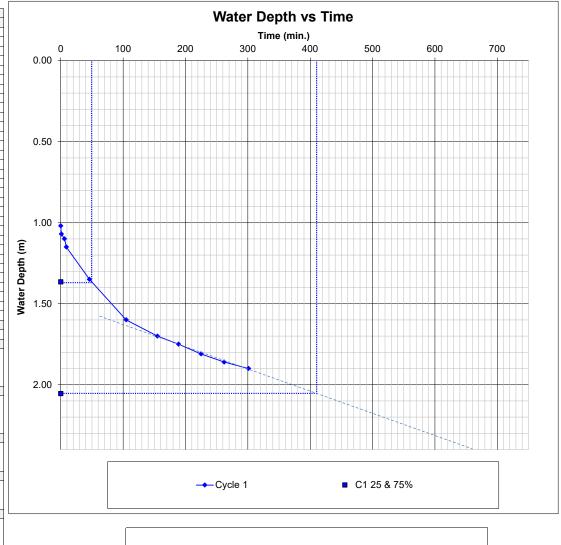
For 50% effective storage

Over 100% effective depth

Over measured depth

Soil Infiltration Rate (m/s)

Over measured depth
Over 75% - 25% effective depth





BRE365 SOIL INFILTRATION RATE TEST - TP2

12692 Bretch Hill, Banbury

Trial Pit Information	
Length (m)	1.70
Width (m)	0.60
Depth (m)	2.00
Groundwater	Dry
Weather Conditions	Clear
Date	27-Sep-21

D								
Remarks								

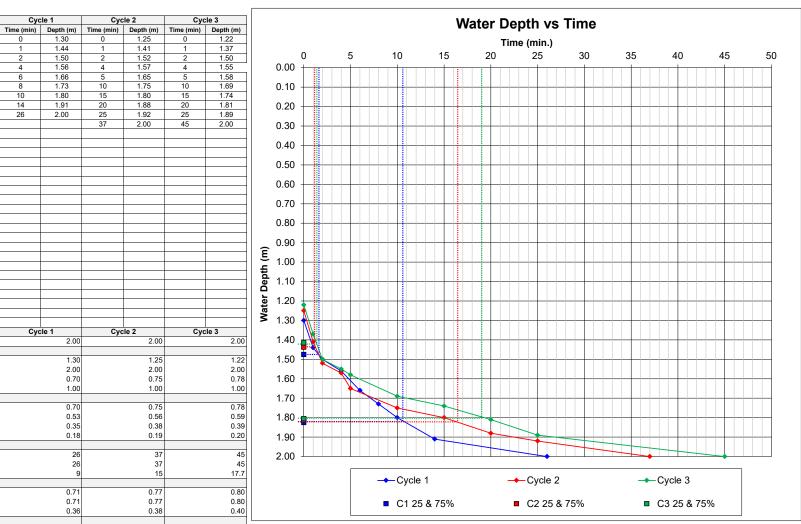
0	1.30	0	1.25	0	1.22
1	1.44	1	1.41	1	1.37
2	1.50	2	1.52	2	1.50
4	1.56	4	1.57	4	1.55
6	1.66	5	1.65	5	1.58
8	1.73	10	1.75	10	1.69
10	1.80	15	1.80	15	1.74
14	1.91	20	1.88	20	1.81
26	2.00	25	1.92	25	1.89
		37	2.00	45	2.00

Cycle 2

Cycle 3

Final Excavation Depth (m)	Cycle 1	Cycle 2	Cycle 3
At end of testing cycle	2.00	2.00	2.00
Water Depths (m)			
Water depth at start of test	1.30	1.25	1.22
Water depth at end of test	2.00	2.00	2.00
Effective depth (measured)	0.70	0.75	0.78
% Effective storage depth	1.00	1.00	1.00
Effective Storage Depths (m)			
Effective storage depth (100%)	0.70	0.75	0.78
Effective storage depth (75%)	0.53	0.56	0.59
Effective storage depth (50%)	0.35	0.38	0.39
Effective storage depth (25%)	0.18	0.19	0.20
Outflow Time (min)			
Time for measured outflow	26	37	45
Time for 100% outflow	26	37	45
Time for 75-25% outflow	9	15	17.7
Volume of Outflow (m ³)			
Over measured effective depth	0.71	0.77	0.80
Over 100% effective depth	0.71	0.77	0.80
From 75% - 25% effective depth	0.36	0.38	0.40
Surface Area (m²)			
For 100% effective storage	4.24	4.47	4.61
For 50% effective storage	2.63		
Over measured depth	4.24	4.47	4.61
Soil Infiltration Rate (m/s)	Cycle 1	Cycle 2	Cycle 3
Over 100% effective depth	1.1E-04		
Over measured depth	1.1E-04		
Over 75% - 25% effective depth	2.5E-04	1.5E-04	1.3E-04

Cycle 1



Design Soil Infiltration Rate: 1.3E-04 m/s

