C.J. ASSOCIATES GEOTECHNICAL LTD.

SOIL INFILTRATION RATE TEST

See B.R.E. Digest 365, 1991, Soakaway Design.

 Site
 Bodicote

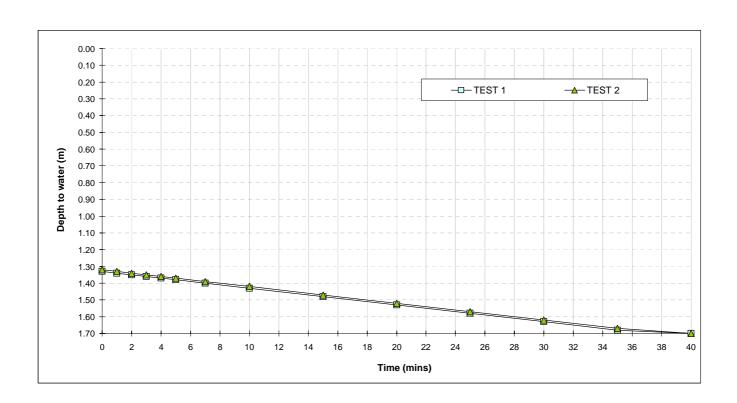
 Job Number
 Y0204

 Date of Test
 23/03/2010

Remarks -			TEST 1		TEST 2	TEST 3	
		Time(min)	Depth to Water (m)	Time(min)	Depth to Water (m)	Time(min)	Depth to Water (m)
		0.0	1.33	0.0	1.32		
		1.0	1.34	1.0	1.33		
		2.0	1.35	2.0	1.34		
		3.0	1.36	3.0	1.35		
		4.0	1.37	4.0	1.36		
		5.0	1.38	5.0	1.37		
		7.0	1.40	7.0	1.39		
		10.0	1.43	10.0	1.42		
		15	1.48	15	1.47		
		20	1.53	20	1.52		
		25	1.58	25	1.57		
		30	1.63	30	1.62		
		35	1.68	35	1.67		
		40	1.70	40	1.70		
Effective Storage Depth	m		0.37		0.38		
75% Effective Storage Depth	m		0.28		0.29		
(i.e. depth below GL)	m		1.42		1.42		
25% Effective Storage Depth	m		0.09		0.10		
(i.e. depth below GL)	m		1.61		1.61		
Effective Storage Depth 75%-25%	m		0.19		0.19		
Time to fall to 75% effective depth	mins		9.00		10.00		
Time to fall to 25% effective depth	mins		26.00		29.00		
V (75%-25%)	m3		0.26		0.27		
a (50%)	m2		2.40		2.43		
t (75%-25%)	mins		17.00		19.00		
SOIL INFILTRATION RATE	m/s		1.06E-04		9.62E-05		

DESIGN SOIL INFILTRATION RATE, f

9.62E-05



Bodicote Site:

Y0204 Job Number:

Client: **RPS**

JCB 3CX Machine Type:

TP No 5

Sheet 1 of 1

Date: 23/03/2010

Vertical Scale 1:25



C J Associates

(m)	Sample Ref.	Test / Sample Depth (m)	Test Results	Depth (m)	Thickness (m)	Legeno	Description of Strata	Level (m. O.D.
0.00	B1	0.30-1.00		0.30	(0.30)		TOPSOIL: Soft light brown CLAY, with occasional roots.	-
0.50	D 1	J.30-1.00		0.30	(2)		Light brown clayey gravelly angular to subangular COBBLES of siltstone and sandstone.	- - -
					(0.70)		**	- - -
1.00	B2	1.00-1.20		1.00	(0.20)		Firm to stiff light blue-grey CLAY	+
				1.20			END OF TRIAL PIT	<u> </u> -
1.50								-
2.00								-
2.50								-
3.00								- - -
3.50								-
4.00								-
								-
								-
Sample T	[vnes- D =	Small dietur	ped sample; B = Bulk disturbed sample; J = \$	Small dietu	hed sample (nlass iar\.	T = Small disturbed sample (plastic tub); W = Water sample.	
Co-ordir		oman uistull	oo sample, D – bulk disturbed sample, J = 3	ornan uistül	seu sample ((jiaus jai),		2.50
	Side Stat	oility :	All Sides Stable				Logged By: IC Checked By:	
		ervations:	Dry				Direction of Face A (degrees from N): - Excavator D	А В
	Remarks		TP terminated as clay strata encountered in A					С

Site: **Bodicote**

Y0204 Job Number:

RPS Client: Date: 23/03/2010

TP No 4

Sheet 1 of 1



Depth Sample Sample Sample Sample Red Sample Red Red Depth Red Red Depth Red Red	лепі. Iachir	ne Tyr		CB 3CX					e: 23/03/2010 tical Scale 1·25
Depth Depth Depth Depth Depth Depth Depth Depth Depth Depth Depth Depth Depth Depth Depth Depth Depth Depth Depth Depth Depth Dept	1001111	10 1)		JB OOK		1	I	ven	
Serole Types D Small disturbed samples B Balk disturbed samples J Small disturbed sample (place) label J Small disturbed samples (place)	(m)	Sample Ref.	Depth		Test Results	Depth (m)	Thickness (m)	Legend	Description of Strata Redu Lev (m. O
0.50 B2 0.50-1.7C	0.00						(0.30)		TOPSOIL: Soft light brown CLAY, with occasional roots.
amdistone. Light brown clayey gravelly angular to subangular to subangular COBILES of slitstone and sandstone. 1.70 END OF TRIAL PIT 2.50 3.50 4.00 Sarpele Types: D - Small disturbed sample: B - Bulk disturbed sample: J - Small disturbed sample (glass jar): T - Small disturbed s	0.50						(0.20)		Gravel is subangular to subrounded
1.70 Supple Types D Strad disturbed sample B Bulk disturbed sample J Smild disturbed sample (giass jar); T Small disturbed sample (piast hub) W Wilder sample Co-ordinates: Trial Pit Wildin (m) 0.70 Trial Pit Length (m) 2.50 Trial Pit Side Stability : All Sides Stabile	0.50	DZ .	0.50-1.70			0.50			sandstone.
1.50 1.70 END OF TRIAL PIT	1.00						(1.20)		subangular COBBLES of siltstone and
2.00 2.50 3.00 4.00 Sample Types: D = Small disturbed sample: B = Bulk disturbed sample: J = Small disturbed sample (glass jar): T = Small disturbed sample (glass tub): W = Water sample. Trial Pit Width (m) 0.70 Trial Pit Length (m) 2.50 Trial Pit Sides Stability: All Sides Stable Logged By: IC Checked By:							(1.20)		
2.50 2.50 3.00 4.00 Sample Types: D = Small disturbed sample; B = Bulk disturbed sample; J = Small disturbed sample (glass jar); T = Small disturbed sample (plastic tub); W = Water sample. Co-ordinates: Trial Pit Width (m) 0.70 Trial Pit Length (m) 2.50 Trial Pit Side Stability: All Sides Stable Logged By: IC Checked By:	1.50					1.70		0000000	
2.50 3.00 4.00 Sample Types: D = Small disturbed sample; B = Bulk disturbed sample; J = Small disturbed sample (plass jar); T = Small disturbed sample (plastic tub); W = Water sample. Co-ordinates: Trial Pit Width (m) 0.70 Trial Pit Length (m) 2.50 Trial Pit Side Stability: All Sides Stable Logged By: IC Checked By:	2.00								END OF TRIAL PIT
3.00 4.00 Sample Types: D = Small disturbed sample; B = Bulk disturbed sample; J = Small disturbed sample (glass jar); T = Small disturbed sample (plastic tub); W = Water sample. Co-ordinates: Trial Pit Width (m) 0.70 Trial Pit Length (m) 2.50 Trial Pit Side Stability: All Sides Stable Logged By: IC Checked By:									-
3.50 4.00 Sample Types: D = Small disturbed sample; B = Bulk disturbed sample; J = Small disturbed sample (glass jar); T = Small disturbed sample (plastic tub); W = Water sample. Co-ordinates: Trial Pit Width (m) 0.70 Trial Pit Length (m) 2.50 Trial Pit Side Stabile Logged By: IC Checked By:	2.50								-
3.50 4.00 Sample Types: D = Small disturbed sample; B = Bulk disturbed sample; J = Small disturbed sample (glass jar); T = Small disturbed sample (plastic tub); W = Water sample. Co-ordinates: Trial Pit Width (m) 0.70 Trial Pit Length (m) 2.50 Trial Pit Side Stabile Logged By: IC Checked By:									-
A.00 Sample Types: D = Small disturbed sample; B = Bulk disturbed sample; J = Small disturbed sample (glass jar); T = Small disturbed sample (plastic tub); W = Water sample. Co-ordinates: Trial Pit Width (m) 0.70 Trial Pit Length (m) 2.50 Trial Pit Side Stability: All Sides Stable Logged By: IC Checked By:	3.00								-
A.00 Sample Types: D = Small disturbed sample; B = Bulk disturbed sample; J = Small disturbed sample (glass jar); T = Small disturbed sample (plastic tub); W = Water sample. Co-ordinates: Trial Pit Width (m) 0.70 Trial Pit Length (m) 2.50 Trial Pit Side Stability: All Sides Stable Logged By: IC Checked By:	3.50								-
Sample Types: D = Small disturbed sample; B = Bulk disturbed sample; J = Small disturbed sample (glass jar); T = Small disturbed sample (plastic tub); W = Water sample. Co-ordinates: Trial Pit Width (m) 0.70 Trial Pit Length (m) 2.50 Trial Pit Side Stability: All Sides Stable Logged By: IC Checked By:									-
Co-ordinates: Trial Pit Width (m) 0.70 Trial Pit Length (m) 2.50 Trial Pit Side Stability: All Sides Stable Logged By: IC Checked By:	4.00								-
Co-ordinates: Trial Pit Width (m) 0.70 Trial Pit Length (m) 2.50 Trial Pit Side Stability: All Sides Stable Logged By: IC Checked By:									-
Co-ordinates: Trial Pit Width (m) 0.70 Trial Pit Length (m) 2.50 Trial Pit Side Stability: All Sides Stable Logged By: IC Checked By:									-
Co-ordinates: Trial Pit Width (m) 0.70 Trial Pit Length (m) 2.50 Trial Pit Side Stability: All Sides Stable Logged By: IC Checked By:									
Trial Pit Side Stability: All Sides Stable Logged By: IC Checked By:			Small disturb	oed sample; E	B = Bulk disturbed sample;	J = Small distur	bed sample (
A .			oility :	All Sides S	itable				
S. Sanianana, Sassa, Autono, Dily					nasie				A
General Remarks :				Di y					C C

Site: **Bodicote**

Job Number: Y0204

General Remarks

Client:

RPS



Sheet 1 of 1

Date: 23/03/2010



C J Associates JCB 3CX Machine Type: Vertical Scale 1:25 Reduced Test / Sample Level (m. O.D.) Depth Thickness Legend Description of Strata Sample Test Results Depth Depth Ref. (m) (m) 0.00 TOPSOIL: Soft light brown CLAY, with occasional roots. (0.30)B1 0.30-0.70 0.30 Soft to firm light yellow-grey SILT. 0.50 (0.40)0.70-2.20 0.70 Firm to stiff light grey and light orange SILT/CLAY. 1.00 (1.50)1.50 2.00 2.20-2.50 2.20 В3 Firm to stiff orange-brown very gravelly CLAY, with occasional (0.30)subangular cobbles of siltstone and 2.50 2.50 sandstone. Gravel is subangular to subrounded fine to coarse of siltstone. END OF TRIAL PIT 3.00 3.50 4.00 Sample Types: D = Small disturbed sample; B = Bulk disturbed sample; J = Small disturbed sample (glass jar); T = Small disturbed sample (plastic tub); W = Water sample Co-ordinates: Trial Pit Width (m) 0.70 Trial Pit Length (m) Trial Pit Side Stability: All Sides Stable Logged By: Checked By: Groundwater Observations: Direction of Face A (degrees from N): Dry

Site: **Bodicote**

Job Number: Y0204

Client: **RPS**

General Remarks

JCB 3CX Machine Type:

TP No

Sheet 1 of 1

Date: 23/03/2010

Vertical Scale 1:25



C J Associates Reduced Test / Sample Level (m. O.D.) Depth Thickness Legend Sample Test Results Description of Strata Depth Depth Ref. (m) (m) 0.00 MADE GROUND: Soft light brown slightly gravelly CLAY, with occasional (0.40)roots and occasional glass fragments. Gravel is subangular to subrounded fine to coarse of brick, siltstone and 0.40-1.60 0.40 sandstone. 0.50 Soft to firm light brown gravelly SILT/CLAY. (1.20)1.00 1.50 B2 1.60-2.40 1.60 Firm to stiff light grey and light orange slightly gravelly SILT/CLAY. Gravel is subangular to subrounded fine to coarse of siltstone and sandstone. 2.00 (0.80)2.40 **END OF TRIAL PIT** 2.50 3.00 3.50 4.00 Sample Types: D = Small disturbed sample; B = Bulk disturbed sample; J = Small disturbed sample (glass jar); T = Small disturbed sample (plastic tub); W = Water sample Co-ordinates: Trial Pit Width (m) 0.70 Trial Pit Length (m) Trial Pit Side Stability: All Sides Stable Logged By: Checked By: Groundwater Observations: Direction of Face A (degrees from N): Dry

Site: **Bodicote**

Y0204 Job Number:

RPS

Client: JCB 3CX Machine Type:

TP No 2

Sheet 1 of 1

Date: 23/03/2010

Vertical Scale 1:25



C J Associates

	71			_			tiodi Oddic 1.20	
Depth (m)	Sample Ref.	Test / Sample Depth (m)	Test Results	Depth (m)	Thickness (m)	Legeno	Description of Strata	Reduced Level (m. O.D.)
- 0.00 - - - -	B1	0.30-2.00			(0.40)		TOPSOIL: Soft light brown CLAY, with occasional roots.	-
0.50				0.40		×x ×x ×x ×x	Firm to stiff light yellow-grey SILT/CLAY.	-
1.00					(1.20)	X X X X X X X X X X X X X X X X X X X	xx	-
1.50				1.60		X X X X X X X X X X X X X X X X X X X	Stiff to very stiff light grey and light orange SILT/CLAY.	
-2.00	B2	2.00-2.20			(0.60)	X X X X X X X X X X X X X X X X X X X	orange SILT/CLAY.	-
- - - -2.50				2.20		<u>×— —</u> x	END OF TRIAL PIT	- - -
-								- - -
-3.00 - - - -								-
3.50								-
- -4.00								-
								-
-								-
		Small disturb	ped sample; B = Bulk disturbed sample; J = S	mall distur	bed sample (glass jar);	T = Small disturbed sample (plastic tub); W = Water sample.	
Co-ordi		L III.	All Cides Challs					2.50
Trial Pit Side Stability: All Sides Stable Logged By: IC Checked By: Groundwater Observations: Dry Direction of Face A (degrees from N): - Excavator D A B								
	water Obs		Dry				Direction of Face A (degrees from N): - Excavator D	C B
	ıı ivellidik	<i>J</i> .						

Site: Bodicote

Job Number: YO

Y0204

Client: RPS

DD9

Machine Type: JCB 3CX



CJA

Sheet 1 of 1

Date: 23/03/2010

Vertical Scale 1:25

C J Associates

71001111	71					V CI	Tilical Scale 1.25
Depth (m)	Sample Ref.	Test / Sample Depth (m)	Test Results	Depth (m)	Thickness (m)	Legeno	Description of Strata Reduced Level (m. O.D.)
0.00		0.00-0.30			(0.30)		TOPSOIL: Soft light brown CLAY, with occasional roots.
0.50	B2	0.30-0.70		0.30	(0.40)	XX XX	Firm light orange-brown SILT/CLAY.
- - - -	В3	0.70-2.20		0.70		XX XX XX	Firm light grey and light orange SILT/CLAY.
1.00						x— x x— x x— x	
- - - - - - - - - - - - - - - - - - -					(1.50)	X	
- - - - - -	D.4	2 2 2 2 5		0.00		X——X X———X	
- - - -2.50	B4	2.20-2.50		2.20	(0.30)		Firm to stiff orange-brown very gravelly CLAY, with occasional subangular cobbles of siltstone and sandstone. Gravel is subangular to subrounded fine to coarse of siltstone and sandstone.
3.00							END OF TRIAL PIT
3.50							- - - - - -
4.00							-
-							-
-							-
Sample	Types: D =	Small disturb	ped sample; $B = Bulk disturbed sample; J = Si$	mall distur	rbed sample (glass jar);	T = Small disturbed sample (plastic tub); W = Water sample.
Co-ordi	nates:						Trial Pit Width (m) 0.70 Trial Pit Length (m) 2.50
Trial Pi	t Side Stal	oility:	All Sides Stable				Logged By: IC Checked By:
		ervations:	Slight to moderate seepage at 2.2m, wa	ter rose	to 1.7m afte	er 5.5hrs.	Direction of Face A (degrees from N): - Excavator D A B
General Remarks :							

C.J. ASSOCIATES GEOTECHNICAL LTD.

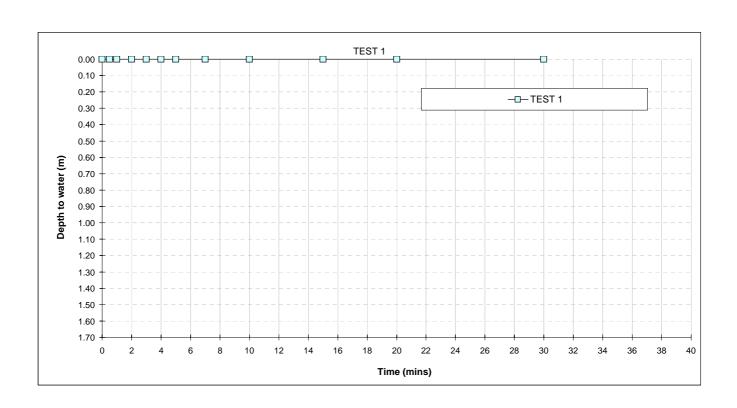
SOIL INFILTRATION RATE TEST

See B.R.E. Digest 365, 1991, Soakaway Design.

Remarks:-			TEST 1		TEST 2		TEST 3
		Time(min)	Depth to Water (m)	Time(min)	Depth to Water (m)	Time(min)	Depth to Water (m)
Emptied 250 Gallon bowser into pit.							
L		0.0					
Strata was highly permeable and water		0.5					
soaking away quicker than it could be t	niiea.	1.0					
		2.0					
		3.0					
		4.0					
		5.0					
		7.0					
		10.0					
		15					
		20					
		30					
		45					
		60					
		90					
		120					
		180					
Effective Storage Depth	m						
75% Effective Storage Depth	m						
(i.e. depth below GL)	m						
25% Effective Storage Depth	m						
(i.e. depth below GL)	m						
Effective Storage Depth 75%-25%	m						
Time to fall to 75% effective depth	mins						
Time to fall to 25% effective depth	mins						
V (75%-25%)	m3						
a (50%)	m2						
t (75%-25%)	mins						
SOIL INFILTRATION RATE	m/s		Highly Permeable				

DESIGN SOIL INFILTRATION RATE, f

Highly Permeable





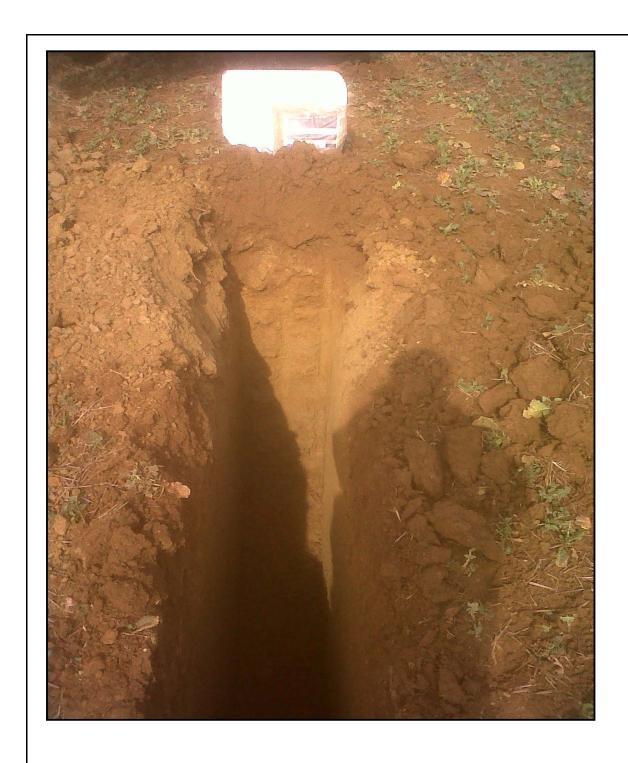
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Project	Drawing Title	
Bodicote	Trial Pit Ph	otographs
RPS	Project No. Y0204	TP1





Project	Drawing Title	
Bodicote	Trial Pit Ph	otographs
RPS	Project No. Y0204	TP1



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Project	Drawing Title	
Bodicote	Trial Pit Ph	otographs
RPS	Project No. Y0204	TP2





Project	Drawing Title	
Bodicote	Trial Pit Ph	otographs
RPS	Project No. Y0204	TP2





-	Toject	Drawing Title	
	Bodicote	Trial Pit Ph	otographs
	RPS	Project No. Y0204	TP2A





Project	Drawing Title	
Bodicote	Trial Pit Ph	otographs
RPS	Project No. Y0204	TP2A



	Project	Drawing Title	
cjassociat€s	Bodicote	Trial Pit Photographs	
		Project No.	TD1
	RPS	Y0204	TP3





Floject	Drawing Title	
Bodicote	Trial Pit Ph	otographs
RPS	Project No. Y0204	TP3



cjas	SOCI	otes
	3001	G1 C3

Project	Drawing Title	
Bodicote	Trial Pit Ph	otographs
RPS	Project No. Y0204	TP4





Project	Drawing Title	
Bodicote	Trial Pit Ph	otographs
RPS	Project No. Y0204	TP4



cjas	SOCI	ntes
	300	W1 C3

Project	Drawing Title	
Bodicote	Trial Pit Ph	otographs
RPS	Project No. Y0204	TP5





Project	Drawing Title	
Bodicote	Trial Pit Ph	otographs
	Project No.	
RPS	Y0204	TP5