ALBU	JRY S. I	. Ltd Pety	worth Road	Witley Sur	rey GU8 5LH	Trialpit	3a
Contra	ıct	Charlotte	e Street, Lo	ndon W1		Report No	14/10260/CVS
Client		UCL				Date	8/9/2014
Site Ad	dress	Charlotte	e Street, St	Ground Le	vel		
Type of	Excavator	Manual		Water l	evel after completion, m	none	
Water S	Strikes, m	Pit Dim	ensions, m	Ease of	f Excavation, m		
1 non 2	е	Length Breadth	0.40 0.40	Very ea		Difficult Very hard	0.80+
Remar	ks	Diedetii	0.40	TVIOGET	ate GL-0.00	v or y mara	0.00
Sample Type	Depth, m	Shear Strength	Scale 40n Depth	nm: 1m Legend	D	escription	
		kPa			Made ground (paving sl	ab over sand)	
D	0.25		0.25		Made ground (dark brov gravel fragments and roo	vn silty sand w	ith brick and
D 0.50			0.80		Obstruction		

Contrac Client Site Add Type of Ex		Charlotte	Street,	Lon	1 3371		Report			
Site Add	ress	UCL	Contract Charlotte Street, London W1							
Type of Ex	ress	140 90 7700		Date	8/9/2014					
		Charlotte	Street,	St P	ancras, I	London W1T 4QB	Ground Le	vel		
Water Str	xcavator	Window	Sample	r	Water le	evel after completion, m	none			
	ikes, m	Pit Dim	ensions,	m	Ease of	Excavation, m				
1 none 2		Length	0.40		Very ea		Difficult	1.00		
Remarks	<u> </u>	Breadth	0.40		Modera	ate GL-1.80	Very hard	1.80+		
Sample Type	Depth, m	Shear Strength	Scale Depth		m: 1m Legend	De	scription			
		kPa	0.20		\times	Made ground (paving sla	b over concre	ete)		
D	0.25		0.20		$\rightarrow \rightarrow$	Made ground (dark brow	n silty sand w	vith brick and		
D	0.50		0.40		\searrow	gravel fragments) Made ground (dark brown peaty silty sand with brick				
	0,00				$\langle \times \rangle$	particles)	in poacy siley .	Sulla Willi Silei		
				 	$\langle \times \rangle$					
D	1.00		0.90	>	$\langle \rangle \langle \rangle$	Made ground (brown silt	v sand with b	rick and grave		
					\times	fragments)	,	B		
					\times					
D	1.50		1.40		Made ground (brown silty sand with occasion					
	1.50					particles)	y sand with o	cousional offer		
					$\langle \times \rangle$					
			1.80			Obstruction				

Chemical Data E2



Scientific Analysis Laboratories Ltd Certificate of Analysis

3 Crittall Drive Springwood Industrial Estate Braintree Essex CM7 2RT

Tel: 01376 560120 Fax: 01376 552923

Scientific Analysis Laboratories is a limited company registered in England and Wales (No 2514788) whose address is at Hadfield House, Hadfield Street, Manchester M16 9FE

Report Number: 421953-1

Date of Report: 24-Sep-2014

Customer: Albury S.I. Ltd

Miltons Yard Petworth Road

Witley Godalming Surrey GU8 5LH

Customer Contact: Mr Nick McKeon

Customer Job Reference: 14/10260/KJC

Customer Purchase Order: 10827

Customer Site Reference: Charlotte St, W1
Date Job Received at SAL: 12-Sep-2014
Date Analysis Started: 15-Sep-2014
Date Analysis Completed: 24-Sep-2014

The results reported relate to samples received in the laboratory

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation

This report should not be reproduced except in full without the written approval of the laboratory

Tests covered by this certificate were conducted in accordance with SAL SOPs

All results have been reviewed in accordance with QP22



Report checked and authorised by : Miss Claire Brown Customer Service Manager Issued by : Miss Claire Brown Customer Service Manager SAL Reference: 421953
Project Site: Charlotte St, W1
Customer Reference: 14/10260/KJC

Analysed as Soil

Albury SI Suite 1

Soil

	421953 001	421953 002				
	BH1 @ 0.5m	BH4 @ 0.5m				
			Da	ate Sampled	11-SEP-2014	11-SEP-2014
				Туре	Fill	Fill
Determinand	Method	Test Sample	LOD	Units		
Arsenic	T257	A40	2.0	mg/kg	14	26
Beryllium	T245	A40	0.5	mg/kg	0.6	1.0
Boron (water-soluble)	T82	A40	1	mg/kg	<1	<1
Cadmium	T257	A40	0.1	mg/kg	0.2	0.3
Chromium	T257	A40	0.5	mg/kg	15	11
Copper	T257	A40	2	mg/kg	110	250
Lead	T257	A40	2	mg/kg	940	2100
Mercury	T245	A40	1.0	mg/kg	3.6	12
Nickel	T257	A40	0.5	mg/kg	17	23
Selenium	T257	A40	3	mg/kg	<3	<3
Vanadium	T257	A40	0.1	mg/kg	32	47
Zinc	T257	A40	2	mg/kg	250	150
Asbestos ID	T27	A40			Asbestos not detected	Asbestos not detected
Chromium (trivalent)	T85	A40	2	mg/kg	15	11
Chromium VI	T82	A40	1	mg/kg	<1	<1
pH	T7	A40	7		9.4	7.6
(Water Soluble) SO4 expressed as SO4	T242	A40	0.01	g/I	1.4	1.4
SO4(Total)	T102	A40	0.02	%	0.82	1.4
Sulphide	T4	A40	10	mg/kg	<10	<10
Sulphur (total)	T6	A40	0.01	%	0.31	0.52
Total Organic Carbon	T21	A40	0.1	%	3.3	8.4
Cyanide(Total)	T4	AR	1	mg/kg	<1	<1
Phenols(Mono)	T221	AR	0.5	mg/kg	(63) < 1.0	(63) <1.0
Moisture @ 105 C	T162	AR	0.1	%	15	23
Retained on 2mm	T2	AR	0.1	%	(32) < 0.1	(32) < 0.1

SAL Reference: 421953
Project Site: Charlotte St, W1
Customer Reference: 14/10260/KJC

Soil Analysed as Soil
Total and Speciated USEPA16 PAH (SE) (MCERTS)

	421953 001	421953 002				
	e Reference	BH1 @ 0.5m	BH4 @ 0.5m			
	11-SEP-2014	11-SEP-2014				
	Fill	Fill				
Determinand	Method	Test Sample	LOD	Units		
Naphthalene	T16	AR	0.1	mg/kg	<0.1	0.2
Acenaphthylene	T16	AR	0.1	mg/kg	<0.1	<0.1
Acenaphthene	T16	AR	0.1	mg/kg	<0.1	<0.1
Fluorene	T16	AR	0.1	mg/kg	<0.1	<0.1
Phenanthrene	T16	AR	0.1	mg/kg	0.3	0.6
Anthracene	T16	AR	0.1	mg/kg	<0.1	<0.1
Fluoranthene	T16	AR	0.1	mg/kg	0.7	<0.1
Pyrene	T16	AR	0.1	mg/kg	0.7	0.1
Benzo(a)Anthracene	T16	AR	0.1	mg/kg	0.4	0.1
Chrysene	T16	AR	0.1	mg/kg	0.5	0.2
Benzo(b/k)Fluoranthene	T16	AR	0.1	mg/kg	0.8	0.2
Benzo(a)Pyrene	T16	AR	0.1	mg/kg	0.4	<0.1
Indeno(123-cd)Pyrene	T16	AR	0.1	mg/kg	0.2	<0.1
Dibenzo(ah)Anthracene	T16	AR	0.1	mg/kg	<0.1	<0.1
Benzo(ghi)Perylene	T16	AR	0.1	mg/kg	0.2	<0.1
PAH(total)	T16	AR	0.1	mg/kg	4.3	1.5

SAL Reference: 421953 Project Site: Charlotte St, W1 Customer Reference: 14/10260/KJC Soil Analysed as Soil Miscellaneous SAL Reference 421953 001 421953 002 Customer Sample Reference BH1 @ 0.5m BH4 @ 0.5m Date Sampled 11-SEP-2014 11-SEP-2014 Fill Fill Type Method LOD Units Determinand TPH (C10-C12) T219 AR <2 <2 mg/kg TPH (C12-C16) T219 2 mg/kg <2 <2 TPH (C16-C21) T219 AR 2 <2 <2 mg/kg TPH (C21-C35) T219 AR 2 mg/kg 85 28 TPH (C35-C40) T219 AR 150 19 TPH (C10-C40) T219 AR 240 47 10 mg/kg

Index to symbols used in 421953-1

Value	Description								
AR	As Received								
A40	Assisted dried < 40C								
32	Whole sample was crushed								
63	LOD was raised because an alternative analytical procedure was used								
W	Analysis was performed at another SAL laboratory								
S	Analysis was subcontracted								
U	Analysis is UKAS accredited								
N	Analysis is not UKAS accredited								

Notes

	Sub contracted analysis performed by SAL Manchester & REC Asbestos Limited							
	Retained on 2mm is removed before analysis							
Rei	Reported results on as received samples are corrected to a 105 degree centigrade dry weight basis except TPH Banded							

Method Index

Value	Description
T245	ICP/OES(Aqua Regia Extraction)
T27	PLM
T7	Probe
T4	Colorimetry
T85	Calc
T242	2:1 Extraction/ICP/OES (TRL 447 T1)
T16	GC/MS
T162	Grav (1 Dec) (105 C)
T21	OX/IR
T2	Grav
Т6	ICP/OES
T82	ICP/OES (Sim)
T102	ICP/OES (HCI extract)
T219	GC/FID (SE)
T221	Colorimetry (CE)
T257	ICP/OES (SIM) (Aqua Regia Extraction)

Accreditation Summary

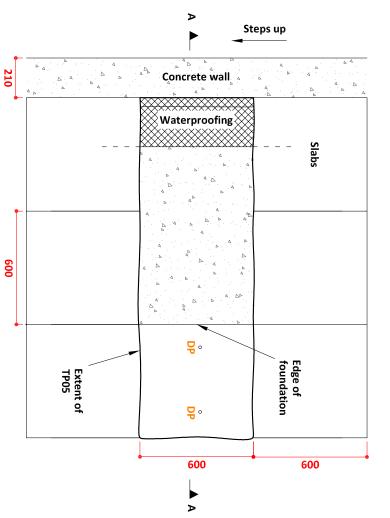
Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
TPH (C10-C12)	T219	AR	2	mg/kg	U	001-002
TPH (C12-C16)	T219	AR	2	mg/kg	U	001-002
TPH (C16-C21)	T219	AR	2	mg/kg	U	001-002
TPH (C21-C35)	T219	AR	2	mg/kg	U	001-002
TPH (C35-C40)	T219	AR	2	mg/kg	N	001-002
TPH (C10-C40)	T219	AR	10	mg/kg	U	001-002

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Arsenic	T257	A40	2.0	mg/kg	U	001-002
Beryllium	T245	A40	0.5	mg/kg	U	001-002
Boron (water-soluble)	T82	A40	1	mg/kg	N	001-002
Cadmium	T257	A40	0.1	mg/kg	U	001-002
Chromium	T257	A40	0.5	mg/kg	U	001-002
Copper	T257	A40	2	mg/kg	U	001-002
Lead	T257	A40	2	mg/kg	U	001-002
Mercury	T245	A40	1.0	mg/kg	U	001-002
Nickel	T257	A40	0.5	mg/kg	U	001-002
Selenium	T257	A40	3	mg/kg	U	001-002
Vanadium	T257	A40	0.1	mg/kg	U	001-002
Zinc	T257	A40	2	mg/kg	U	001-002
Asbestos ID	T27	A40			SU	001-002
Chromium (trivalent)	T85	A40	2	mg/kg	N	001-002
Chromium VI	T82	A40	1	mg/kg	N	001-002
рН	T7	A40			U	001-002
(Water Soluble) SO4 expressed as SO4	T242	A40	0.01	g/l	U	001-002
SO4(Total)	T102	A40	0.02	%	U	001-002
Sulphide	T4	A40	10	mg/kg	N	001-002
Sulphur (total)	T6	A40	0.01	%	U	001-002
Total Organic Carbon	T21	A40	0.1	%	WN	001-002
Cyanide(Total)	T4	AR	1	mg/kg	U	001-002
Phenols(Mono)	T221	AR	0.5	mg/kg	U	001-002
Moisture @ 105 C	T162	AR	0.1	%	N	001-002
Retained on 2mm	T2	AR	0.1	%	N	001-002
Naphthalene	T16	AR	0.1	mg/kg	U	001-002
Acenaphthylene	T16	AR	0.1	mg/kg	U	001-002
Acenaphthene	T16	AR	0.1	mg/kg	U	001-002
Fluorene	T16	AR	0.1	mg/kg	U	001-002
Phenanthrene	T16	AR	0.1	mg/kg	U	001-002
Anthracene	T16	AR	0.1	mg/kg	U	001-002
Fluoranthene	T16	AR	0.1	mg/kg	N	001-002
Pyrene	T16	AR	0.1	mg/kg	N	001-002
Benzo(a)Anthracene	T16	AR	0.1	mg/kg	U	001-002
Chrysene	T16	AR	0.1	mg/kg	U	001-002
Benzo(b/k)Fluoranthene	T16	AR	0.1	mg/kg	U	001-002
Benzo(a)Pyrene	T16	AR	0.1	mg/kg	U	001-002
Indeno(123-cd)Pyrene	T16	AR	0.1	mg/kg	U	001-002
Dibenzo(ah)Anthracene	T16	AR	0.1	mg/kg	U	001-002
Benzo(ghi)Perylene	T16	AR	0.1	mg/kg	U	001-002
PAH(total)	T16	AR	0.1	mg/kg	U	001-002

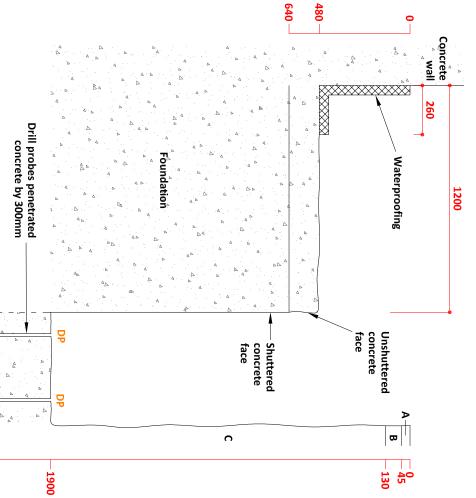
Appendix F

Soiltechnics Ground Investigation

F1 Logs







Photographic record





Key

Soiltechnical consultants

A. CONCRETE paving slab. (MADE GROUND)

B. Loose orange brown SAND. (MADE GROUND)

C. Loose brown SAND and GRAVEL with occasional cobbles of concrete up to 500x200x200mm in size. Gravel consists of concrete and brick. (MADE GROUND)

Observed featuresAssumed features









Notes

- All dimensions shown in millimetres
 Disturbed and environmental samples taken from 0.5m, 1.0m and 1.7m depths
 Unable to excavate further due to competent concrete.

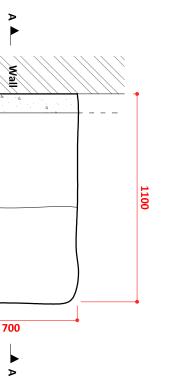
As shown
Groundwater observations
No groundwater encountered Method of excavation Hand tools Dimensions

Trial pit record
Date of works
13.07.2016 Title Location plan on drawing number
01
Appendix
C Location reference TP05

Report Ref: STN3652G-G01 Revision: 0 August 2016

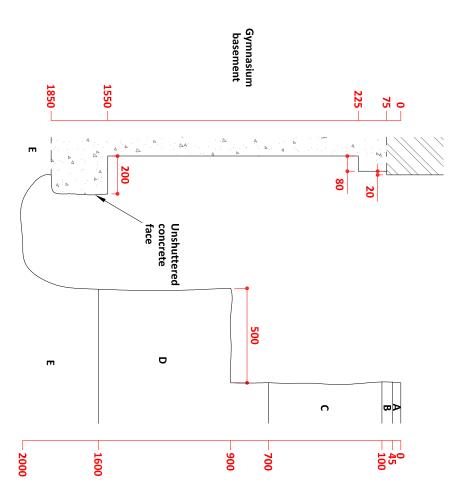
1:20 at A3

2200



Section A-A

Extent of TP06



Photographic record





Key

Soiltechnical consultants

A. CONCRETE paving slab. (MADE GROUND)

B. Orange brown SAND. (MADE GROUND)

C. Loose brown to dark brown silty gravelly SAND. Gravel consists of brick and concrete. (MADE GROUND)

D. Loose orange brown mottled dark brown clayey sandy GRAVEL. Gravel consists of concrete, brick and ash. (MADE GROUND)

E. Loose to medium dense orange brown slightly clayey silty gravelly SAND. Gravel consists of brick. (MADE GROUND)

Observed features
- - - Assumed features



Denotes concrete

Notes

All dimensions shown in millimetres
 Disturbed samples taken from 0.5m, 1.1m and 1.8m depths

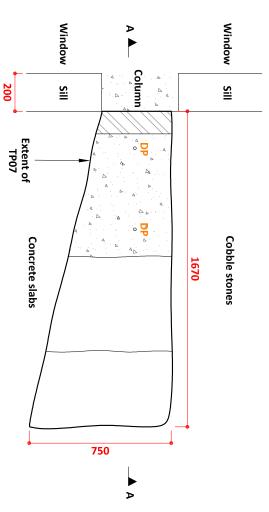
As shown Method of excavation Hand tools Groundwater observations

No groundwater encountered Dimensions

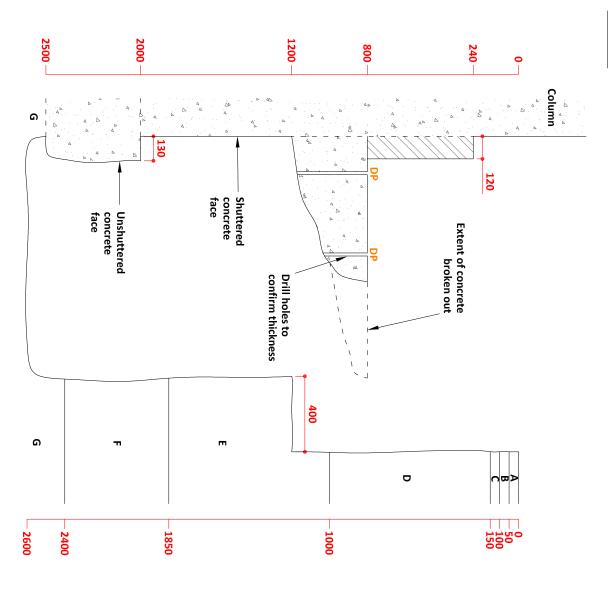
Trial pit record
Date of works
14.07.2016 Title 1:20 at A3

Location reference
TP06
Location plan on drawing number
01
Appendix
C

Report Ref: STN3652G-G01 Revision: 0



Section A-A



Photographic record





Key

SOITECHNICS
environmental and geotechnical consultants

A. CONCRETE paving slab. (MADE GROUND)

B. Orange brown SAND. (MADE GROUND)

C. Grey unreinforced CONCRETE. (MADE GROUND)

D. Loose brown slightly clayey sandy GRAVEL. Gravel consists of flint, concrete and brick. (MADE GROUND)

E. Loose orange brown slightly clayey SAND and GRAVEL. Gravel consists of flint and occasional brick. (MADE GROUND)

F. Medium dense orange brown SAND and GRAVEL with some cobbles of brick. Gravel consists of flint.
(MADE GROUND)

G. Medium dense light brown slightly clayey silty gravelly SAND. Gravel consists of flint.
(LYNCH HILL GRAVEL MEMBER)

Observed features
- - - Assumed features













Notes

- All dimensions shown in millimetres
 Disturbed and environmental samples taken from 0.4m, 0.9m and 1.3m depths
- 3. Disturbed samples taken from 2.0m and 2.5m depths

As shown Method of excavation Hand tools Groundwater observations

No groundwater encountered Dimensions

> Trial pit record
> Date of works
> 13-14.07.2016 Title

1:20 at A3

Location plan on drawing number
01
Appendix
C Location reference TP07

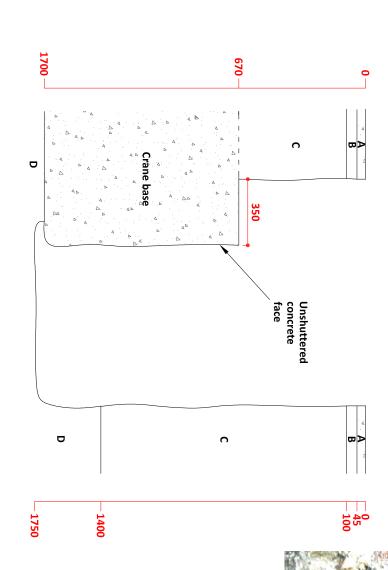
Change of slabs (hexagonal) 1200 Paving slabs A A (square) Crane base Extent of TP08 6000 to concrete wall 600 ► A





All dimensions shown in millimetres
 Disturbed and environmental samples taken from 0.4m, 0.9m and 1.5m depths

Section A-A



Method of excavation Hand tools Dimensions

Trial pit record
Date of works
13.07.2016 Location reference
TP08
Location plan on drawing number
01
Appendix
C

Title

Key

Photographic record

A. CONCRETE paving slab. (MADE GROUND)

B. Orange brown SAND. (MADE GROUND)

C. Loose brown slightly clayey sandy silty GRAVEL. Gravel consists of concrete, brick, plastic and glass.
(MADE GROUND)

D. Loose to medium dense dark brown silty SAND and GRAVEL. Gravel consists of brick fragments, concrete and ash. (MADE GROUND)

Observed features– Assumed features

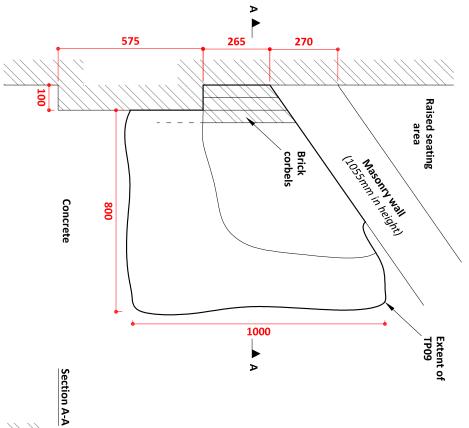
Denotes concrete

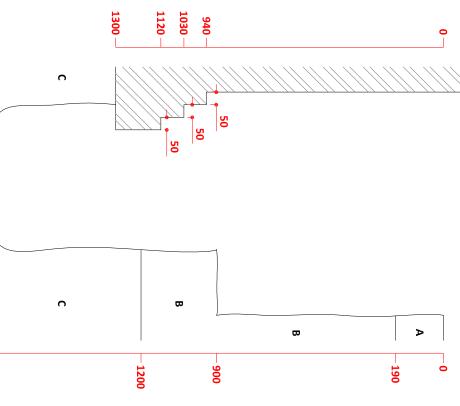
Notes

As shown
Groundwater observations
No groundwater encountered

1:20 at A3







Soitechnical consultants

Photographic record





Key

A. Grey unrienforced CONCRETE with aggregated comprising of flint up to 15mm in size. (MADE GROUND)

B. Loose orange brown to brown slightly clayey silty gravelly SAND. Gravel consists of brick and concrete. (MADE GROUND)

C. Loose brown slightly clayey slightly gravelly silty SAND. Gravel consists of flint and brick fragments.
(MADE GROUND)

Observed featuresAssumed features Denotes brickwork

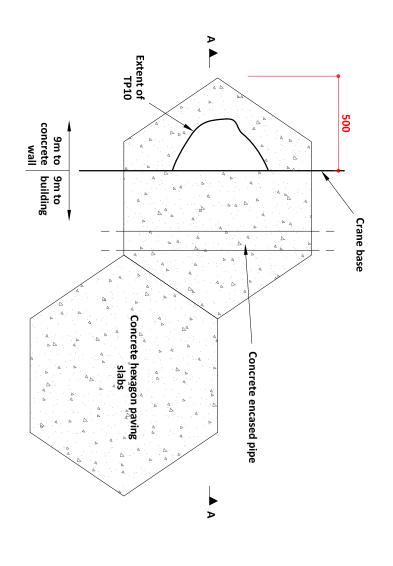
Notes

- All dimensions shown in millimetres
 Disturbed and environmental samples taken from 0.4m, 0.9m and
 1.6m depths

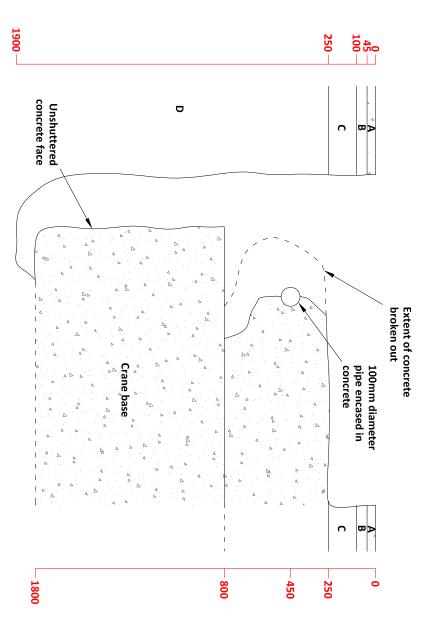
No groundwater encountered	Groundwater observations	As shown	Dimensions	Hand tools	Method of excavation
1:15 at A3	Scale	13.07.2016	Date of works	Trial pit record	Title

Location reference
TP09
Location plan on drawing number
01
Appendix
C

-1800



Section A-A



Photographic record





Key

SOITECHICS
environmental and geotechnical consultants

A. CONCRETE paving slab. (MADE GROUND)

B. Orange brown SAND. (MADE GROUND)

C. Grey unreinforced CONCRETE. (MADE GROUND)

D. Loose to medium dense brown slightly clayey SAND and GRAVEL. Gravel consists of concrete, flint and brick.
(MADE GROUND)

Observed featuresAssumed features

Denotes concrete

Notes

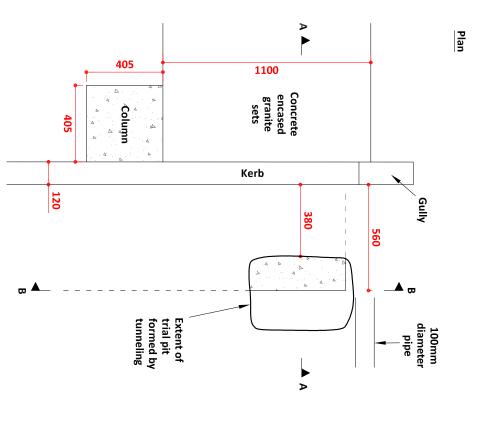
- All dimensions shown in millimetres
 Disturbed samples taken from 0.5m, 1.2m and 1.7m depths

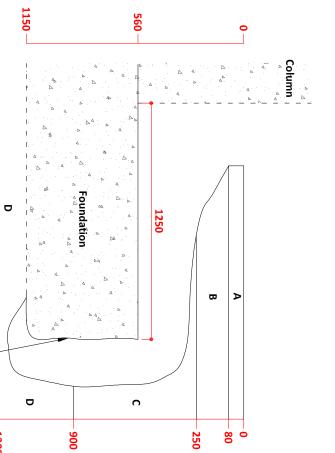
Groundwater observations No groundwater encountered As shown Method of excavation Hand tools Dimensions

Title
Trial pit record
Date of works
13.07.2016 1:20 at A3

Location reference
TP10
Location plan on drawing number
01
Appendix
C

SOITECHNICS environmental and geotechnical consultants





D. Loose orange brown slightly clayey SAND and GRAVEL. Gravel consists of flint and brick.
(MADE GROUND

Denotes concrete

Observed features
 Assumed features

C. Loose brown slightly clayey gravelly SAND. Gravel consists of concrete.
(MADE GROUND)

B. Grey unreinforced CONCRETE. (MADE GROUND)

A. BITUMINOUS BOUND MATERIAL. (MADE GROUND)

Key

Section B-B

Photographic record

Section A-A

Column

Kerb

Unshuttered concrete





Unshuttered concrete face

1300

All dimensions shown in millimetres
 Disturbed samples taken from 0.5m and 1.0m depths



As shown
Groundwater observations
No groundwater encountered Method of excavation Hand tools Dimensions

1150

D

D

-1300

Foudation

900

560

 \circ

0

В Þ

В

- 250

-80

Trial pit record
Date of works
15.07.2016

Title

Location reference
TP11
Location plan on drawing number
01
Appendix
C

1:20 at A3