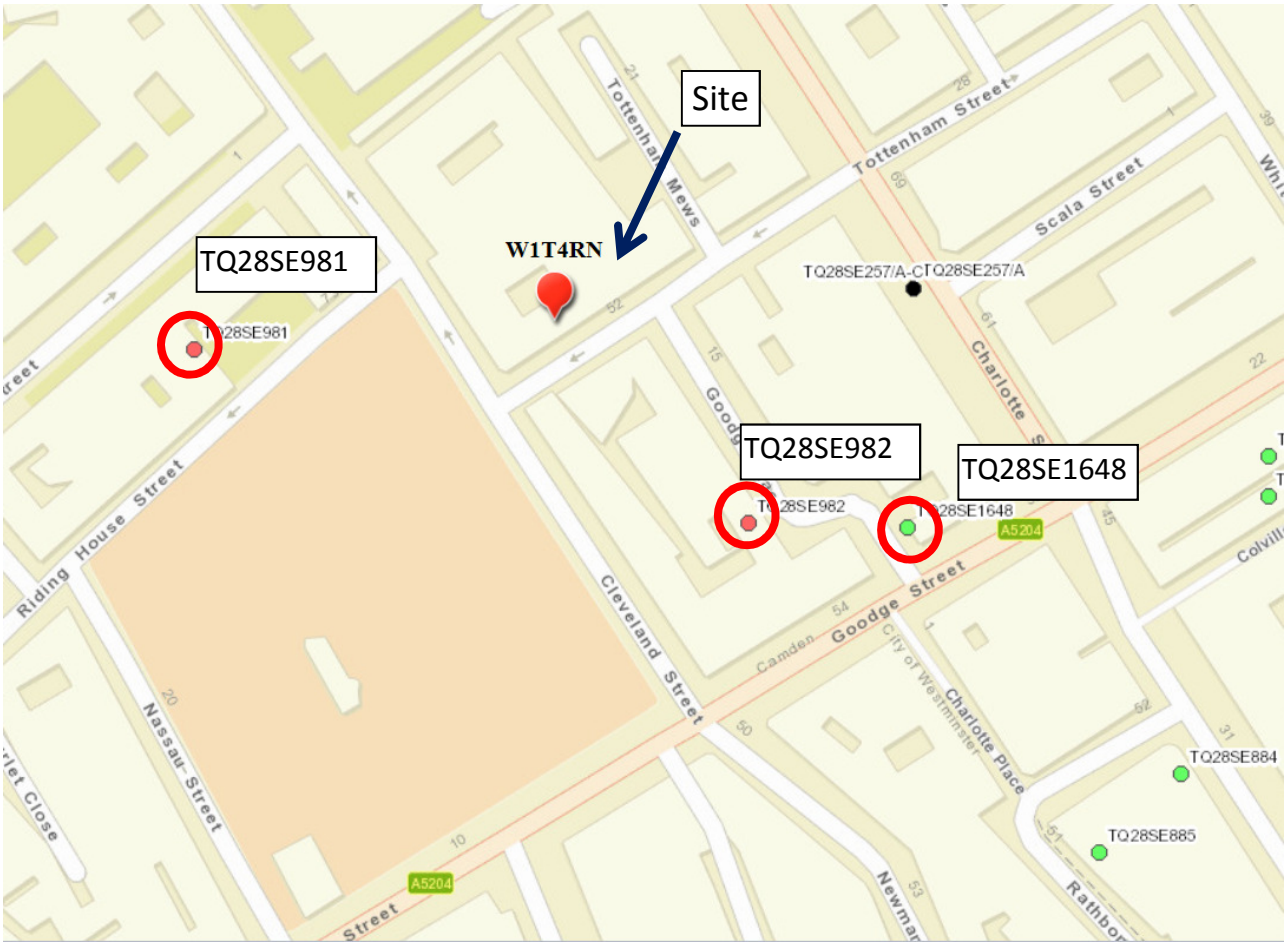
APPENDIX D

Historic BGS Borehole Logs



Not to scale.
Modified from www.bgs.ac.uk

Client	Project	Job No
1923 Mortimer Estates Limited	**Arthur Stanley House, Tottenham Street**	**CGL/09198a**
CGL	Title **BGS Historical Borehole Location Plan**	**Appendix D**

TQ 28SE 981
2923 8173

RECORD OF BOREHOLE NO. 3

Ground level : 88.0ft. (26.81m) above O.D. Newlyn

Dia. of boring : 16in. to 82ft.6in.
8in. to 91ft.
6in. to 160ft.
16in. to 82ft.6in.
8in. to 91ft.
6in. to 107ft.

Type of boring : Shell and Auger

Lining tubes :

Daily Progress	Samples Depth	Type	Change of Strata Legend	Depth	O.D. Level	Description of Strata
				1'0"	87.0	TARMACADAM and CINDERS
				7'0"	81.0	FILL (brick rubble, gravel and pockets of clay)
	9'0"	BD				
	10'0"	D		10'6"	77.5	Soft brown sandy CLAY with gravel
	11'0"	BD		1-20		
	16'0"	BD				
1.1.63	21'0"	D				
	26'0"	D				Brown fine to medium SAND and fine to coarse GRAVEL with occasional cobbles
	31'0"	BD				
	36'0"	BD		41'0"	47.0	
2.1.63	41'0"	BD				
3.1.63	42'6"	D		43'6"	44.5	Firm brown silty CLAY with occasional fine gravel
4.1.63	44'0"	D				
	49'0"	D				
	54'0"	D				
5.1.63	59'0"	D				
	61'0"	D				
	66'0"	D				
	71'0"	D				Stiff grey silty CLAY
	76'0"	D				
	81'0"	D				
	86'0"	D				
7.1.63	91'0"	D		2'6" 93'0"	-1.8 -6.0	
	95'0"	D				
	99'0"	D				
	104'0"	D				
	109'0"	D				
	114'0"	D				
	118'0"	D				
	123'0"	D				
	128'0"	D				Stiff to very stiff mottled red, brown, grey-blue and yellow silty CLAY with traces of grey silty sand below 154ft.
	133'0"	D				
	138'0"	D				
	140'0"	D				
	145'0"	D				
	148'0"	D				
	153'0"	D				
				6'6"		
8.1.63	158'0"	D		160'0"	-72.0	
	160'0"	D				

Key to type of sample :
U (4) — 4 in. dia. undisturbed sample.
U (1½) — 1½ in. dia. "
D — disturbed sample.
BD — bulk disturbed sample.
W — water sample.
S ( ) — standard penetration test.
C ( ) — dynamic cone penetration test.
No. in brackets gives No. of blows/12 in. penetration.

Remarks : (Observations on ground-water, etc.)

Ground-water was first encountered at depth of 20ft., rose to 18ft.6in. below ground level on evening of 1.1.63 and was subsequently sealed off by lining tubes.

Soils No : S/3868

LONDON G.P.O., SCHEME 155

FIG. 4

GEORGE WIMPEY & CO., LTD. CENTRAL LABORATORY HAYES

24.0 32.0

24.0 32.0

and grey

Soils No. S/3868

HAYES

TQ 28 SE 982
2937 817019

RECORD OF BOREHOLE NO. 5

Ground level: 88.0ft. above O.D. Newlyn (2682)

Dia. of boring: 10in. to 92ft. 8in. to 155ft.

Type of boring: Shell and Auger

Lining tubes: 10in. to 31ft.6in.

Daily Progress	Samples Depth	Samples Type	Legend	Change of Strata Depth	O.D. Level	Description of Strata
				0'7"	87.4	GRANITE SETS
	4'0"	D		1'2"	86.8	CONCRETE
12.1.63	9'0"	D				
	14'0"	BD				FILL (bricks, rubble, cinders, clay and gravel)
	20'0"	BD		24'0"	64.0	
	26'0"	BD		29'0" (8.84)	59.0	Brown fine to coarse GRAVEL
	29'6"	D		32'6"	55.5	Firm brown silty CLAY
14.1.63	34'0"	D				
	39'0"	D				
	44'0"	D				
	49'0"	D				
	54'0"	D				Stiff grey silty CLAY
	58'0"	D				
	63'0"	D				
	68'0"	D				
	73'0"	D				
	78'0"	D		84'0" (25.60)	4.0 (1.2)	
	83'0"	D				
	85'0"	D				
15.1.63	90'0"	D				
	93'0"	D				
	98'0"	D				
	103'0"	D				
	108'0"	D				
	110'0"	D				
	113'0"	D				Stiff to very stiff mottled brown, grey and blue silty CLAY
	118'0"	D				
	123'0"	D				
	124'0"–125'6"	U(4)				
	125'6"	D				
	129'0"	D				
16.1.63	134'0"	D				
	139'0"	D				
	144'0"	D		146'0" (44.50)	-58.0	
	149'0"	D				Grey sandy SILT
17.1.63	153'0"	D		155'0"	-67.0	
	155'0"	D				

Key to type of sample:
U (4) — 4 in. dia. undisturbed sample.
U (1½) — 1½ in. dia. " "
D — disturbed sample.
BD — bulk disturbed sample.
W — water sample.
S ( ) — standard penetration test.
C ( ) — dynamic cone penetration test.
No. in brackets gives No. of blows/12 in. penetration.

Remarks: (Observations on ground-water, etc.)
Ground-water was first encountered at depth of 22ft., rose to 19ft.6in. below ground level after ½ hour and was subsequently sealed off by lining tubes.

LONDON G.P.O. SCHEME 155

Soils No: S/3464

FIG. 5

GEORGE WIMPEY & CO., LTD. CENTRAL LABORATORY HAYES

Contract: Goodge Street

Client: R M Douglas Construction Limited

Borehole No. 1

Sheet No. 2 Of 2.
Depth 10 to 20 metres.

Equipment and Methods
Light Cable Percussion Boring
150mm diameter

Ground Level : (m O.D.)

Coordinates :

Job Number : S37/564

Location :

Dates : 27/10/87
2/11/87

Orientation : Vertical

Daily Prog.	Water Levels	Remarks	In Situ Tests	Samples Taken	Depth (Thick)	Reduced Level	Description	Legend
					10.00		Stiff to very stiff dark grey brown fissured and laminated silty CLAY becoming fine sandy clay	
				U 4639				
30/10			S 34	J 4640				
				U				
			S 24	J 4642	(8.70)			
				U 4643				
			S 39	J 4644				
2/11					15.00		End of Borehole	

General Remarks:

Operator AGT

Scale 10m/sheet

Appendix 1

Sheet No. 2

TQ23SE/1648

Contract: Goodge Street

Client: R M Douglas Construction Limited

Borehole No. 1
Sheet No. 1 Of 2.
Depth 0 to 10 metres.

Equipment and Methods
Light Cable Percussion Boring
150mm diameter

Ground Level : (m O.D.)

Coordinates :

Job Number : S37/564

Location :

Dates : 27/10/87
2/11/87

Orientation : Vertical

Daily Prog.	Water Levels	Remarks	In Situ Tests	Samples Taken	Depth (Thick)	Reduced Level	Description	Legend
			C 4		0.00		MADE GROUND (Fine to coarse subrounded to angular brick, gravel and sand)	
				B 4620				
			C 14		(1.50)			
				B 4621				
			C 15		1.50		MADE GROUND (Dark brown and red medium to coarse brick, concrete, charcoal and ash gravel becoming clayey with depth)	
				B 4622				
			C 19					
	▼ 26/10			J 4627				
			C 17	B 4623	(2.90)			
	▼ 27/10			B 4624				
	▼ 29/10	Water rose to 3.00m in 35 minutes.	C 17	J 4632				
27/10			S 27	J 4625				
				B 4626				
				B 4628	4.40			
							Medium dense slightly gravelly medium brown fine to coarse SAND	
			S 18	J 4629				
				B 4630	(1.40)			
			S 17	J 4631				
					5.80			
					(0.50)		Firm orange-brown CLAY with bands of medium fine to coarse sand	
28/10	▼ 30/10				6.30			
				J 4633			Stiff to very stiff dark grey brown fissured and laminated silty CLAY becoming fine sandy clay	
	▼ 2/11			J 4641				
				U 4634				
			S 28	J 4635				
		Traces of claystone at 7.5m.						
					(8.70)			
				U 4636				
29/10				U 4637				
		Traces of claystone at 9.50m.	S 32	J 4638				
					10.00		Continued	

Operator
AGT

Scale
10m/sheet

General Remarks:

Appendix
1

Sheet No.
1

APPENDIX E

CGL Exploratory Hole Records

Southern Testing
Environmental & Geotechnical

SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

Neil Burrows
Southern Testing Laboratories
Unit 11
Charlwoods Road
East Grinstead
RH19 2HU

SPT Hammer Ref:	GEH1
Test Date:	02/02/2018
Report Date:	02/02/2018
File Name:	GEH1.spt
Test Operator:	NPB

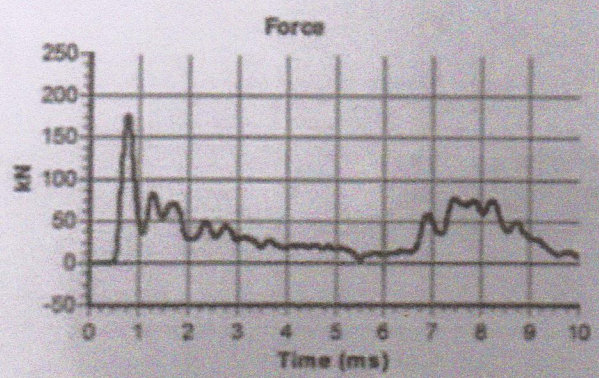
Instrumented Rod Data

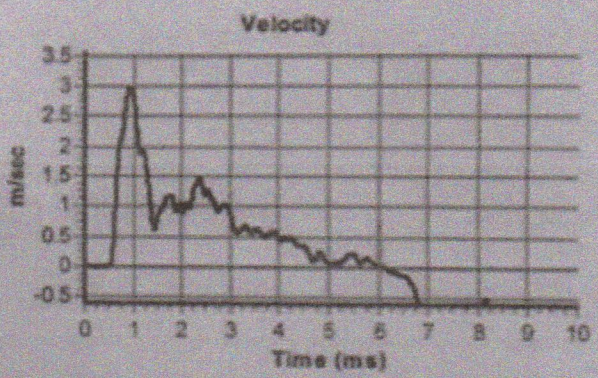
Diameter d_r (mm):	54
Wall Thickness t_r (mm):	6.0
Assumed Modulus E_a (GPa):	200
Accelerometer No.1:	
Accelerometer No.2:	

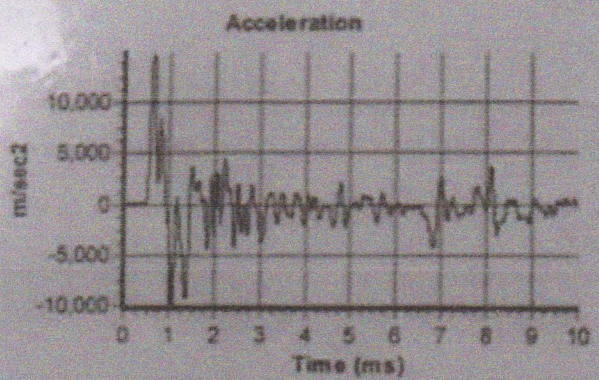
SPT Hammer Information

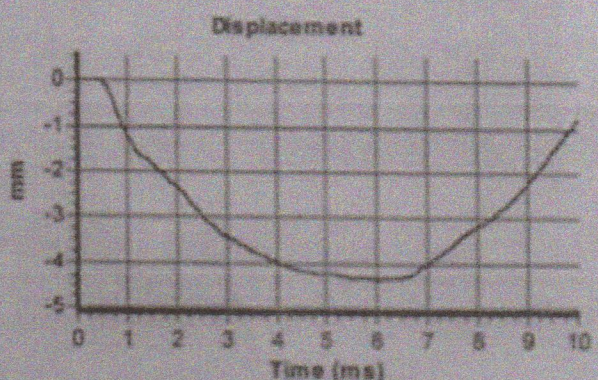
Hammer Mass m (kg):	64.5
Falling Height h (mm):	750
SPT String Length L (m):	14.5

Comments / Location









Calculations

Area of Rod A (mm2):	905
Theoretical Energy E_{theor} (J):	473
Measured Energy E_{meas} (J):	254

Energy Ratio E_r (%): **54**

Signed: N P Burrows
Title: Field Operations Manager

The recommended calibration interval is 12 months

BOREHOLE LOG

Project				BOREHOLE No
Arthur Stanley House, Tottenham Street, London, W1T 4RN				**BH1**
Job No	Date	Ground Level (m)	Co-Ordinates (m)	
CGL/09198a	02-01-18 08-01-18	27.47		
Client				Sheet
1923 Mortimer Estates Limited				1 of 4

SAMPLES & TESTS			Water	STRATA				Instrument /Backfill
Depth (m)	Type No	Test Result		Reduced Level	Legend	Depth (m) (Thick-ness)	DESCRIPTION	
				27.12		0.35	Reinforced concrete.	
						(6.15)	Basement void.	
				20.97		6.50		
						(1.20)	Reinforced concrete.	
7.50	B		1	19.77		7.70		
7.50		N56					Very dense dark orange brown very gravelly SAND. Gravel is fine to coarse sub-angular to sub-rounded flint. [LYNCH HILL GRAVEL MEMBER]	
7.80	ES							
8.50	B					(1.70)		
8.50	ES							
8.50		N66						
				18.07		9.40		
				17.97		9.50		
9.50	SPT						Stiff dark orange brown slightly sandy gravelly CLAY. Gravel is fine to coarse sub-rounded to rounded flint. [LYNCH HILL GRAVEL MEMBER]	
9.50		N22						

Boring Progress and Water Observations

Date	Comment	Strike Depth	Casing Depth	Casing Dia. mm	Standing Depth
04-01-18	Fast	7.70	8.00		

General Remarks

1. Borehole Terminated at 36m below ground level. (Target depth achieved)
2. No visual or olfactory evidence of contamination.
3. D=Disturbed Sample; ES=Environment Sample; B=Bulk sample; U=Undisturbed sample; N=Standard penetration test 'N' value
4. 15 mins of chiseling between 12.6m and 12.7m
5. Hole drilled from ground floor level through double storey height basement
6. Groundwater and gas standpipe installed with response zones between 7.7mbgl and 11.7mbgl
7. Water encountered beneath basement slab. Pumping of water from sumps was taking place during ground investigation to maintain water at basement level

Method/ Plant Used	Field Crew	Logged By	Checked By
Cut-down Cable Percussive	GEH	TJB	EJB

BOREHOLE LOG

Project				BOREHOLE No
Arthur Stanley House, Tottenham Street, London, W1T 4RN				**BH1**
Job No	Date	Ground Level (m)	Co-Ordinates (m)	
CGL/09198a	02-01-18 08-01-18	27.47		
Client				Sheet
1923 Mortimer Estates Limited				2 of 4

SAMPLES & TESTS			Water	STRATA				Instrument /Backfill
Depth (m)	Type No	Test Result		Reduced Level	Legend	Depth (m) (Thick-ness)	DESCRIPTION	
							Stiff light brownish grey becoming dark orange grey silty CLAY with occasional partings of fine silty sand. Rare selenite crystals throughout. [LONDON CLAY FORMATION] *(continued)*	
10.50	U100							
11.00	D					(3.10)		
11.50	SPT							
11.50		N29						
				14.87		12.60		
12.50	D			14.77		12.70	CLAYSTONE. [LONDON CLAY FORMATION]	
13.00	U100						Very stiff closely fissured dark grey silty CLAY with occasional partings of fine silty sand. [LONDON CLAY FORMATION]	
13.50	D							
14.50	SPT							
14.50		N36						
15.50	D							
16.00	U100							
16.50	D							
17.50	SPT							
17.50		N40						
18.50	D							
19.00	U100							
						(13.40)		
19.50	D							

Boring Progress and Water Observations

Date	Comment	Strike Depth	Casing Depth	Casing Dia. mm	Standing Depth

General Remarks

1. Borehole Terminated at 36m below ground level. (Target depth achieved)
2. No visual or olfactory evidence of contamination.
3. D=Disturbed Sample; ES=Environment Sample; B=Bulk sample; U=Undisturbed sample; N=Standard penetration test 'N' value
4. 15 mins of chiseling between 12.6m and 12.7m
5. Hole drilled from ground floor level through double storey height basement
6. Groundwater and gas standpipe installed with response zones between 7.7mbgl and 11.7mbgl
7. Water encountered beneath basement slab. Pumping of water from sumps was taking place during ground investigation to maintain water at basement level

Method/ Plant Used	Field Crew	Logged By	Checked By
Cut-down Cable Percussive	GEH	TJB	EJB

BOREHOLE LOG

Project				BOREHOLE No
Arthur Stanley House, Tottenham Street, London, W1T 4RN				**BH1**
Job No	Date	Ground Level (m)	Co-Ordinates (m)	
CGL/09198a	02-01-18 08-01-18	27.47		
Client				Sheet
1923 Mortimer Estates Limited				3 of 4

SAMPLES & TESTS			Water	STRATA				Instrument /Backfill
Depth (m)	Type No	Test Result		Reduced Level	Legend	Depth (m) (Thick-ness)	DESCRIPTION	
20.50	SPT						Very stiff closely fissured dark grey silty CLAY with occasional partings of fine silty sand. [LONDON CLAY FORMATION] *(continued)*	
20.50		N42						
							21.20 Rare gravel sized CLAYSTONES below 21.2m.	
21.50	D							
22.00	U100		2					
22.50	D							
23.50	SPT							
23.50		N42						
24.50	D							
25.00	U100							
25.50	D							
				1.37		26.10		
26.50	SPT						Hard dark blue grey mottled brownish red slightly sandy silty CLAY with occasional partings of fine sand. Rare shell fragments present above 27.4m. [LAMBETH GROUP]	
26.50		N64						
27.50	D							
						(4.20)		
28.50	D							
29.00	U100							
29.50	SPT							
29.50		N83						

Boring Progress and Water Observations

Date	Comment	Strike Depth	Casing Depth	Casing Dia. mm	Standing Depth
08-01-18	Slow	22.50	9.8		

General Remarks

1. Borehole Terminated at 36m below ground level. (Target depth achieved)
2. No visual or olfactory evidence of contamination.
3. D=Disturbed Sample; ES=Environment Sample; B=Bulk sample; U=Undisturbed sample; N=Standard penetration test 'N' value
4. 15 mins of chiseling between 12.6m and 12.7m
5. Hole drilled from ground floor level through double storey height basement
6. Groundwater and gas standpipe installed with response zones between 7.7mbgl and 11.7mbgl
7. Water encountered beneath basement slab. Pumping of water from sumps was taking place during ground investigation to maintain water at basement level

Method/ Plant Used	Field Crew	Logged By	Checked By
Cut-down Cable Percussive	GEH	TJB	EJB

BOREHOLE LOG

Project				BOREHOLE No
Arthur Stanley House, Tottenham Street, London, W1T 4RN				**BH1**
Job No	Date	Ground Level (m)	Co-Ordinates (m)	
CGL/09198a	02-01-18 08-01-18	27.47		
Client				Sheet
1923 Mortimer Estates Limited				4 of 4

SAMPLES & TESTS			Water	STRATA				Instrument /Backfill
Depth (m)	Type No	Test Result		Reduced Level	Legend	Depth (m) (Thick-ness)	DESCRIPTION	
				-2.83		30.30		
30.50	D						Hard dark grey mottled yellowish brown slightly sandy silty CLAY with rare calcareous horizons. [LAMBETH GROUP]	
31.00	U100							
31.50	D							
32.50	SPT							
32.50		N75				(5.70)		
33.50	D							
34.50	U100							
				-8.53		36.00		
							(Borehole terminated at 36m)	

Boring Progress and Water Observations

Date	Comment	Strike Depth	Casing Depth	Casing Dia. mm	Standing Depth

General Remarks

1. Borehole Terminated at 36m below ground level. (Target depth achieved)
2. No visual or olfactory evidence of contamination.
3. D=Disturbed Sample; ES=Environment Sample; B=Bulk sample; U=Undisturbed sample; N=Standard penetration test 'N' value
4. 15 mins of chiseling between 12.6m and 12.7m
5. Hole drilled from ground floor level through double storey height basement
6. Groundwater and gas standpipe installed with response zones between 7.7mbgl and 11.7mbgl
7. Water encountered beneath basement slab. Pumping of water from sumps was taking place during ground investigation to maintain water at basement level

Method/ Plant Used	Field Crew	Logged By	Checked By
Cut-down Cable Percussive	GEH	TJB	EJB

BOREHOLE LOG

Project				BOREHOLE No
Arthur Stanley House, Tottenham Street, London, W1T 4RN				BH3
Job No	Date	Ground Level (m)	Co-Ordinates (m)	
CGL/09198a	15-01-18 18-01-18	27.53		
Client				Sheet
1923 Mortimer Estates Limited				1 of 4

SAMPLES & TESTS			Water	STRATA				Instrument /Backfill
Depth (m)	Type No	Test Result		Reduced Level	Legend	Depth (m) (Thick-ness)	DESCRIPTION	
				27.23		0.30	Reinforced concrete.	
						(6.20)	Basement void.	
				21.03		6.50		
			1	20.63		6.90	Reinforced concrete.	
7.50	ES					(2.00)	Medium dense dark orange brown very sandy GRAVEL. Gravel is fine to coarse sub-angular to sub-rounded flint. [LYNCH HILL GRAVEL MEMBER]	
8.00	B							
8.00	ES							
8.00		N17						
				18.63		8.90		
8.90	D						Firm dark orange brown slightly gravelly silty CLAY with occasional partings of fine silty sand. Gravel is fine to coarse sub-angular to sub-rounded flint. [LYNCH HILL GRAVEL MEMBER]	
9.00	SPT			18.23		9.30		
9.00		N24						

Boring Progress and Water Observations

Date	Comment	Strike Depth	Casing Depth	Casing Dia. mm	Standing Depth
16-01-18	Fast	6.90	7		

General Remarks

1. Borehole Terminated at 31m below ground level. (Target depth achieved)
2. No visual or olfactory evidence of contamination.
3. D=Disturbed Sample; ES=Environment Sample; B=Bulk sample; U=Undisturbed sample; N=Standard penetration test 'N' value
4. 15 mins of chiseling between 14.4m and 14.6m
5. Hole drilled from ground floor level through double storey height basement
6. Groundwater and gas standpipe installed with response zones between 7.0mbgl and 9.5mbgl
7. Water encountered beneath basement slab. Pumping of water from sumps was taking place during ground investigation to maintain water at basement level

Method/ Plant Used	Field Crew	Logged By	Checked By
Cut-down Cable Percussive	GEH	TJB	EJB

BOREHOLE LOG

Project				BOREHOLE No
Arthur Stanley House, Tottenham Street, London, W1T 4RN				BH3
Job No	Date	Ground Level (m)	Co-Ordinates (m)	
CGL/09198a	15-01-18 18-01-18	27.53		
Client				Sheet
1923 Mortimer Estates Limited				2 of 4

SAMPLES & TESTS			Water	STRATA				Instrument /Backfill
Depth (m)	Type No	Test Result		Reduced Level	Legend	Depth (m) (Thick-ness)	DESCRIPTION	
10.00	U100						Stiff becoming very stiff closely fissured dark grey silty CLAY with occasional partings of fine silty sand. [LONDON CLAY FORMATION] *(continued)*	
11.00	SPT					(5.10)		
12.00	D							
12.00	U100							
13.00	D							
14.00	D							
14.00		N39		13.13		14.40		
14.40	D			12.93		14.60	CLAYSTONE. [LONDON CLAY FORMATION]	
15.00	D						Very stiff closely fissured dark grey silty CLAY with occasional partings of fine silty sand. Occasional selenite crystals throughout. [LONDON CLAY FORMATION]	
15.50	U100							
16.00	D							
17.00	D							
17.00		N36						
18.00	D							
18.50	U100							
19.00	D							

Boring Progress and Water Observations

Date	Comment	Strike Depth	Casing Depth	Casing Dia. mm	Standing Depth

General Remarks

1. Borehole Terminated at 31m below ground level. (Target depth achieved)
2. No visual or olfactory evidence of contamination.
3. D=Disturbed Sample; ES=Environment Sample; B=Bulk sample; U=Undisturbed sample; N=Standard penetration test 'N' value
4. 15 mins of chiseling between 14.4m and 14.6m
5. Hole drilled from ground floor level through double storey height basement
6. Groundwater and gas standpipe installed with response zones between 7.0mbgl and 9.5mbgl
7. Water encountered beneath basement slab. Pumping of water from sumps was taking place during ground investigation to maintain water at basement level

Method/ Plant Used	Field Crew	Logged By	Checked By
Cut-down Cable Percussive	GEH	TJB	EJB

BOREHOLE LOG

Project				BOREHOLE No
Arthur Stanley House, Tottenham Street, London, W1T 4RN				BH3
Job No	Date	Ground Level (m)	Co-Ordinates (m)	
CGL/09198a	15-01-18 18-01-18	27.53		
Client				Sheet
1923 Mortimer Estates Limited				3 of 4

SAMPLES & TESTS			Water	STRATA				Instrument /Backfill
Depth (m)	Type No	Test Result		Reduced Level	Legend	Depth (m) (Thick-ness)	DESCRIPTION	
20.00 20.00	SPT	N39				(12.20)	Very stiff closely fissured dark grey silty CLAY with occasional partings of fine silty sand. Occasional selenite crystals throughout. [LONDON CLAY FORMATION] *(continued)*	
21.00	D							
21.50	U100						21.50 - 22.40 Abundant silty sand lenses. Sand is fine.	
22.00	D		2					
23.00 23.00	SPT	N42						
24.00	D							
24.50	U100							
25.50	D							
26.00 26.00	SPT	N44						
				0.73		26.80		
27.00	D						Hard light blueish grey mottled red brown slightly sandy silty CLAY. Rare shell fragments above 28m. [LAMBETH GROUP]	
27.50	U100							
28.00	D					(3.70)		
29.00 29.00	SPT	N55/ 150 mm						

Boring Progress and Water Observations

Date	Comment	Strike Depth	Casing Depth	Casing Dia. mm	Standing Depth
17-01-18	Slow	22.80	9.5		

General Remarks

1. Borehole Terminated at 31m below ground level. (Target depth achieved)
2. No visual or olfactory evidence of contamination.
3. D=Disturbed Sample; ES=Environment Sample; B=Bulk sample; U=Undisturbed sample; N=Standard penetration test 'N' value
4. 15 mins of chiseling between 14.4m and 14.6m
5. Hole drilled from ground floor level through double storey height basement
6. Groundwater and gas standpipe installed with response zones between 7.0mbgl and 9.5mbgl
7. Water encountered beneath basement slab. Pumping of water from sumps was taking place during ground investigation to maintain water at basement level

Method/ Plant Used	Field Crew	Logged By	Checked By
Cut-down Cable Percussive	GEH	TJB	EJB

BOREHOLE LOG

Project				BOREHOLE No
Arthur Stanley House, Tottenham Street, London, W1T 4RN				**BH3**
Job No	Date	Ground Level (m)	Co-Ordinates (m)	
CGL/09198a	15-01-18 18-01-18	27.53		
Client				Sheet
1923 Mortimer Estates Limited				4 of 4

SAMPLES & TESTS			Water	STRATA				Instrument /Backfill
Depth (m)	Type No	Test Result		Reduced Level	Legend	Depth (m) (Thick-ness)	DESCRIPTION	
30.00	D			-2.97		30.50		
30.50	U100			-3.47		(0.50) 31.00	Hard dark grey mottled yellow brown slightly sandy silty CLAY. Rare calcareous horizons. [LAMBETH GROUP]	
31.00	D						*(Borehole terminated at 31m)*	

Boring Progress and Water Observations

Date	Comment	Strike Depth	Casing Depth	Casing Dia. mm	Standing Depth

General Remarks

1. Borehole Terminated at 31m below ground level. (Target depth achieved)
2. No visual or olfactory evidence of contamination.
3. D=Disturbed Sample; ES=Environment Sample; B=Bulk sample; U=Undisturbed sample; N=Standard penetration test 'N' value
4. 15 mins of chiseling between 14.4m and 14.6m
5. Hole drilled from ground floor level through double storey height basement
6. Groundwater and gas standpipe installed with response zones between 7.0mbgl and 9.5mbgl
7. Water encountered beneath basement slab. Pumping of water from sumps was taking place during ground investigation to maintain water at basement level

Method/ Plant Used	Field Crew	Logged By	Checked By
Cut-down Cable Percussive	GEH	TJB	EJB

BOREHOLE LOG

Project				BOREHOLE No
Arthur Stanley House, Tottenham Street, London, W1T 4RN				BH4
Job No	Date	Ground Level (m)	Co-Ordinates (m)	
CGL/09198a	09-01-18 12-01-18	27.52		
Client				Sheet
1923 Mortimer Estates Limited				1 of 3

SAMPLES & TESTS			Water	STRATA				Instrument /Backfill
Depth (m)	Type No	Test Result		Reduced Level	Legend	Depth (m) (Thick-ness)	DESCRIPTION	
				27.22		0.30	Reinforced concrete.	
							Basement void.	
						(6.20)		
				21.02		6.50		
			1	20.27		(0.75)	Reinforced concrete.	
						7.25		
7.50 7.50	B	N21					Medium dense to very dense pale yellowish brown very sandy GRAVEL. Gravel is fine to coarse sub-angular to sub-rounded flint. [LYNCH HILL GRAVEL MEMBER]	
8.00	ES					(1.75)		
8.50 8.50	B	N55						
				18.52		9.00		
				18.42		9.10	Stiff dark orange brown slightly gravelly silty CLAY. Gravel is fine to coarse sub-angular to sub-rounded flint. [LYNCH HILL GRAVEL MEMBER]	
				18.12		9.40		
9.50 9.50	D U100						Stiff closely fissured dark brownish grey silty CLAY with rare partings of fine silty sand.	

Boring Progress and Water Observations

Date	Comment	Strike Depth	Casing Depth	Casing Dia. mm	Standing Depth
10-01-18	Fast	7.25	7.5		

General Remarks

1. Borehole Terminated at 26m below ground level. (Target depth achieved)
2. No visual or olfactory evidence of contamination.
3. D=Disturbed Sample; ES=Environment Sample; B=Bulk sample; U=Undisturbed sample; N=Standard penetration test 'N' value
4. 15 mins of chiseling between 13.7m and 13.9m
5. Hole drilled from ground floor level through double storey height basement
6. Groundwater and gas standpipe installed with response zones between 10.7mbgl and 12.5mbgl
7. Water encountered beneath basement slab. Pumping of water from sumps was taking place during ground investigation to maintain water at basement level

Method/ Plant Used	Field Crew	Logged By	Checked By
Cut-down Cable Percussive	GEH	TJB	EJB

BOREHOLE LOG

Project				BOREHOLE No
Arthur Stanley House, Tottenham Street, London, W1T 4RN				BH4
Job No	Date	Ground Level (m)	Co-Ordinates (m)	
CGL/09198a	09-01-18 12-01-18	27.52		
Client				Sheet
1923 Mortimer Estates Limited				2 of 3

SAMPLES & TESTS			Water	STRATA				Instrument /Backfill
Depth (m)	Type No	Test Result		Reduced Level	Legend	Depth (m) (Thick-ness)	DESCRIPTION	
						(1.30)	[LONDON CLAY FORMATION] Stiff dark grey closely fissured silty CLAY with occasional partings of fine silty sand.	
10.50	SPT	N21	▼2	16.82		10.70	[LONDON CLAY FORMATION] *(continued)*	
10.50				16.32		(0.50) 11.20	Stiff dark brownish grey very sandy CLAY. Sand is fine. [LONDON CLAY FORMATION]	
12.00	U100						Very stiff dark grey closely fissured silty CLAY with occasional partings of fine silty sand. Rare selenite crystals throughout. [LONDON CLAY FORMATION]	
12.50	D					(2.50)		
13.00	SPT							
13.00		N31		13.82		13.70		
				13.62		13.90	CLAYSTONE. [LONDON CLAY FORMATION]	
14.00	D						Very stiff dark grey closely fissured silty CLAY with occasional partings of fine silty sand. Rare selenite crystals throughout. [LONDON CLAY FORMATION]	
14.50	U100							
15.00	D							
16.00	SPT							
16.00		N35						
17.00	D							
17.50	U100							
18.00	D							
19.00	SPT							
19.00		N40						

Boring Progress and Water Observations

Date	Comment	Strike Depth	Casing Depth	Casing Dia. mm	Standing Depth
10-01-18	Medium	10.70	9.5		

General Remarks

1. Borehole Terminated at 26m below ground level. (Target depth achieved)
2. No visual or olfactory evidence of contamination.
3. D=Disturbed Sample; ES=Environment Sample; B=Bulk sample; U=Undisturbed sample; N=Standard penetration test 'N' value
4. 15 mins of chiseling between 13.7m and 13.9m
5. Hole drilled from ground floor level through double storey height basement
6. Groundwater and gas standpipe installed with response zones between 10.7mbgl and 12.5mbgl
7. Water encountered beneath basement slab. Pumping of water from sumps was taking place during ground investigation to maintain water at basement level

Method/ Plant Used	Field Crew	Logged By	Checked By
Cut-down Cable Percussive	GEH	TJB	EJB

BOREHOLE LOG

Project				BOREHOLE No
Arthur Stanley House, Tottenham Street, London, W1T 4RN				BH4
Job No	Date	Ground Level (m)	Co-Ordinates (m)	
CGL/09198a	09-01-18 12-01-18	27.52		
Client				Sheet
1923 Mortimer Estates Limited				3 of 3

SAMPLES & TESTS			Water	STRATA				Instrument /Backfill
Depth (m)	Type No	Test Result		Reduced Level	Legend	Depth (m) (Thick-ness)	DESCRIPTION	
20.00	D					(12.10)	Very stiff dark grey closely fissured silty CLAY with occasional partings of fine silty sand. Rare selenite crystals throughout. [LONDON CLAY FORMATION] *(continued)*	
20.50	U100							
21.00	D							
			3					
22.00	SPT							
22.00		N43						
23.00	D							
23.50	U100							
24.00	D							
25.00	D							
25.55		N47		1.52		26.00		
							(Borehole terminated at 26m)	

Boring Progress and Water Observations

Date	Comment	Strike Depth	Casing Depth	Casing Dia. mm	Standing Depth
11-01-18	Slow	22.00	11.5		

General Remarks

1. Borehole Terminated at 26m below ground level. (Target depth achieved)
2. No visual or olfactory evidence of contamination.
3. D=Disturbed Sample; ES=Environment Sample; B=Bulk sample; U=Undisturbed sample; N=Standard penetration test 'N' value
4. 15 mins of chiseling between 13.7m and 13.9m
5. Hole drilled from ground floor level through double storey height basement
6. Groundwater and gas standpipe installed with response zones between 10.7mbgl and 12.5mbgl
7. Water encountered beneath basement slab. Pumping of water from sumps was taking place during ground investigation to maintain water at basement level

Method/ Plant Used	Field Crew	Logged By	Checked By
Cut-down Cable Percussive	GEH	TJB	EJB

BOREHOLE LOG

Project				BOREHOLE No
Arthur Stanley House, Tottenham Street, London, W1T 4RN				BH5
Job No	Date	Ground Level (m)	Co-Ordinates (m)	
CGL/09198a	19-01-18 22-01-18	27.53		
Client				Sheet
1923 Mortimer Estates Limited				1 of 3

SAMPLES & TESTS			Water	STRATA				Instrument /Backfill
Depth (m)	Type No	Test Result		Reduced Level	Legend	Depth (m) (Thick-ness)	DESCRIPTION	
				27.23		0.30	Reinforced conrete.	
							Basement void.	
						(6.20)		
				21.03		6.50		
				20.63		6.90	Reinforced concrete.	
6.90	D			20.53		7.00	Firm dark blackish brown gravelly clay. Gravel is fine to coarse angular to sub-angular of brick, concrete and flint. [MADE GROUND]	
7.50	B					(1.10)	Medium dense dark brown clayey gravel. Gravel is fine to coarse angular to sub-angular of brick, concrete and flint. [MADE GROUND]	
7.50	ES							
7.50	SPT	N19	1	19.43		8.10		
							Medium dense to very dense yellowish brown sandy GRAVEL. Gravel is fine to coarse sub-angular to rounded flint. [LYNCH HILL GRAVEL MEMBER]	
8.50	B							
8.50	SPT	N54					8.70 - 9.20 Common sub-rounded cobbles of flint.	
8.70	ES							
9.50	B							
9.50	SPT	N30						

Boring Progress and Water Observations

Date	Comment	Strike Depth	Casing Depth	Casing Dia. mm	Standing Depth
22-01-18	Fast	8.00	8		

General Remarks

1. Borehole Terminated at 26m below ground level. (Target depth achieved)
2. No visual or olfactory evidence of contamination.
3. D=Disturbed Sample; ES=Environment Sample; B=Bulk sample; U=Undisturbed sample; N=Standard penetration test 'N' value
4. Hole drilled from ground floor level through double storey height basement
5. Groundwater and gas standpipe installed with response zones between 6.9mbgl and 12.5mbgl
6. Water encountered beneath basement slab. Pumping of water from sumps was taking place during ground investigation to maintain water at basement level

Method/ Plant Used	Field Crew	Logged By	Checked By
Cut-down Cable Percussive	GEH	TJB	EJB

BOREHOLE LOG

Project				BOREHOLE No
Arthur Stanley House, Tottenham Street, London, W1T 4RN				**BH5**
Job No	Date	Ground Level (m)	Co-Ordinates (m)	
CGL/09198a	19-01-18 22-01-18	27.53		
Client				Sheet
1923 Mortimer Estates Limited				2 of 3

SAMPLES & TESTS			Water	STRATA				Instrument /Backfill
Depth (m)	Type No	Test Result		Reduced Level	Legend	Depth (m) (Thick-ness)	DESCRIPTION	
10.50	B					(4.60)	Medium dense to very dense yellowish brown sandy GRAVEL. Gravel is fine to coarse sub-angular to rounded flint. [LYNCH HILL GRAVEL MEMBER] *(continued)*	
10.50	SPT	N21						
11.50	B							
11.50	SPT	N19						
				14.83		12.70		
12.70	D			14.53		13.00	Stiff light orange brown slightly gravelly silty CLAY. Gravel is fine to coarse sub-angular to rounded flint. [LYNCH HILL GRAVEL MEMBER]	
13.00	U100						Very stiff dark grey closely fissured silty CLAY with occasional partings of fine silty sand. Occasional coarse selenite crystals throughout. [LONDON CLAY FORMATION]	
14.00	D							
14.50	SPT							
14.50	SPT	N34						
15.50	D							
16.00	U100							
17.00	D							
17.50	SPT							
17.50	SPT	N39	2					
18.50	D							
19.00	U100							
						(13.00)		

Boring Progress and Water Observations

Date	Comment	Strike Depth	Casing Depth	Casing Dia. mm	Standing Depth
23-01-18	Slow	18.00	13.3		

General Remarks

1. Borehole Terminated at 26m below ground level. (Target depth achieved)
2. No visual or olfactory evidence of contamination.
3. D=Disturbed Sample; ES=Environment Sample; B=Bulk sample; U=Undisturbed sample; N=Standard penetration test 'N' value
4. Hole drilled from ground floor level through double storey height basement
5. Groundwater and gas standpipe installed with response zones between 6.9mbgl and 12.5mbgl
6. Water encountered beneath basement slab. Pumping of water from sumps was taking place during ground investigation to maintain water at basement level

Method/ Plant Used	Field Crew	Logged By	Checked By
Cut-down Cable Percussive	GEH	TJB	EJB

BOREHOLE LOG

Project				BOREHOLE No
Arthur Stanley House, Tottenham Street, London, W1T 4RN				**BH5**
Job No	Date	Ground Level (m)	Co-Ordinates (m)	
CGL/09198a	19-01-18 22-01-18	27.53		
Client				Sheet
1923 Mortimer Estates Limited				3 of 3

SAMPLES & TESTS			Water	STRATA				Instrument /Backfill
Depth (m)	Type No	Test Result		Reduced Level	Legend	Depth (m) (Thick-ness)	DESCRIPTION	
20.00	D						Very stiff dark grey closely fissured silty CLAY with occasional partings of fine silty sand. Occasional coarse selenite crystals throughout. [LONDON CLAY FORMATION] *(continued)*	
20.50	SPT							
20.50	SPT	N44						
21.50	D						21.70 - 22.40 Abundant lenses of fine silty SAND.	
			3					
22.00	U100							
23.00	D							
23.50	SPT	N44						
23.55	SPT							
24.75	D							
25.55	U100							
				1.53		26.00		
							(Borehole terminated at 26m)	

Boring Progress and Water Observations

Date	Comment	Strike Depth	Casing Depth	Casing Dia. mm	Standing Depth
23-01-18	Slow	22.00	13.3		

General Remarks

1. Borehole Terminated at 26m below ground level. (Target depth achieved)
2. No visual or olfactory evidence of contamination.
3. D=Disturbed Sample; ES=Environment Sample; B=Bulk sample; U=Undisturbed sample; N=Standard penetration test 'N' value
4. Hole drilled from ground floor level through double storey height basement
5. Groundwater and gas standpipe installed with response zones between 6.9mbgl and 12.5mbgl
6. Water encountered beneath basement slab. Pumping of water from sumps was taking place during ground investigation to maintain water at basement level

Method/ Plant Used	Field Crew	Logged By	Checked By
Cut-down Cable Percussive	GEH	TJB	EJB