

APPENDIX A

Site Plans and Exploratory Hole Logs

Key to Exploratory Hole Logs


General

All soil & rock descriptions in general accordance with BS5930:1999+A2:2010, BS EN ISO 14688 & BS EN ISO 14689
The Geology Code only entered where positive identification of the sampled strata has been made



Sampling

ES	Environmental Sample (taken in appropriate sampling container)
D	Disturbed Sample
B	Bulk Sample
LB	Large Bulk for Earthworks testing
C	Core Sample
U	Undisturbed Sample (number of blows indicated in results column)
SPTLS	SPT Liner Sampler
P	Piston Sample
W	Water Sample







In situ Tests

SPT	Standard Penetration Test in accordance with BS EN ISO 22476-3:2005+A1:2011
SPT (C)	Cone Penetration Test in accordance with BS EN ISO 22476-3:2005+A1:2011
PT	Penetration Test - STL documented equivalent SPT N Value
PPT	Perth Penetration Test - STL in house documented method (N Value)
UCS ()	Unconfined Compressive Strength measure by hand penetrometer (kN/m ²)
IVN	Hand Vane (kPa)
PID	Photo Ionisation Detector Results (ppm)
MEXE	Mexecone CBR Result




Drilling Records

Depth to standing water level	
Depth to water strike	
TCR	Total Core Recovery (%)
SCR	Solid Core Recovery (%)
RQD	Rock Quality Index (%)
FI	Fracture Index








Backfill Symbols

Arisings	
Concrete	
Blacktop	
Bentonite Seal	
Gravel Filter	
Sand Filter	






Pipe Symbols

Plain Pipe	
Slotted Pipe	
Filter Tip	

Principal Soil Types

Topsoil	
Made Ground	
Clay	
Silt	
Sand	
Gravel	
Peat	

Principal Rock Types

Mudstone/Claystone	
Siltstone	
Sandstone	
Limestone	
Chalk	

Project Name: 465 - 467 Finchley Road (London NW3)

Remarks:

Co-ordinates:

Level (m AOD):



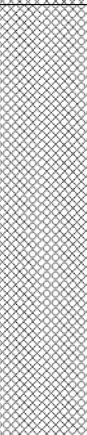

Logger:

SM/HC

Location: London NW3

1. Hole dry upon completion.

Client: A Govani

Samples and Insitu Testing			Level (m AOD)	Thickness (m)	Legend	Depth (m bgl)	Stratum Description
Depth (m)	Type	Results					
0.2	D			(0.23)		0.23	CONCRETE
				(0.09)		0.32	Grey brown, sandy CLAY, with frequent fragments of brick concrete and organic fragments (MADE GROUND).
0.5	D			(0.58)			Pale brown, reworked CLAY, with occasional brick fragments (MADE GROUND).
1.0	D			(0.20)		0.90	Firm, pale brown, CLAY.
						1.10	Pit terminated at 1.10m.

Pit Dimension (m)

Pit Stability:

Water Strikes:

Width: 0.53

1. Pit sides stable.

1. Hole dry upon completion.

Length: 0.62

Depth: 1.10

Project Name: 465 - 467 Finchley Road (London NW3)

Remarks:

Co-ordinates:

Level (m AOD):

Logger:

SM

Location: London NW3

1. Hole dry upon completion.

Client: A Govani

Samples and Insitu Testing			Level (m AOD)	Thickness (m)	Legend	Depth (m bgl)	Stratum Description
Depth (m)	Type	Results					
				(0.02)		0.03	Tile and screed Black CONCRETE Weak, black, CONCRETE, with fragments of brick, blacktop and wood Dark grey, sandy CLAY, with frequent brick fragments (MADE GROUND). Firm, pale brown, CLAY.
				(0.10)		0.04	
				(0.11)		0.14	
						0.25	
				(0.52)			
						0.77	Pit terminated at 0.77m.

1

2

Pit Dimension (m)

Pit Stability:

Water Strikes:

Width: 0.43

Length: 0.54

Depth: 0.77

1. Pit sides stable.

1. Hole dry upon completion.

Project Name: 465 - 467 Finchley Road (London NW3)

Remarks:

Co-ordinates:

Level (m AOD):

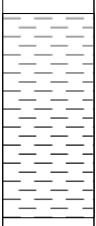
Logger:

SM/HC

Location: London NW3

1. Pit hand dug by others.
2. Hole dry upon completion.

Client: A Govani

Samples and Insitu Testing			Level (m AOD)	Thickness (m)	Legend	Depth (m bgl)	Stratum Description
Depth (m)	Type	Results					
0.6	HP	UCS(kPa)=170		(0.48)			Unknown, dug by others.
				(0.27)		0.48	Firm to stiff, high strength, light brown, CLAY
						0.75	Pit terminated at 0.75m.

1

2

Pit Dimension (m)

Pit Stability:

Water Strikes:

Width: 0.40

Length: 0.40

Depth: 0.75

1. Pit sides stable.

1. Hole dry upon completion.

Project Name: 465 - 467 Finchley Road (London NW3)

Remarks:

Co-ordinates:

Level (m AOD):

Logger:

SM/HC

Location: London NW3

1. Pit hand dug by others.
2. Hole dry upon completion.

Client: A Govani

Samples and Insitu Testing			Level (m AOD)	Thickness (m)	Legend	Depth (m bgl)	Stratum Description
Depth (m)	Type	Results					
				(0.53)			Unknown, hand dug by others
0.6	HP	UCS(kPa)=190				0.53	Firm to stiff, high strength, pale brown mottled blue grey CLAY, with occasional to frequent selenite, occasional orange brown silt patches/lenses and rare flint cobbles.
0.8	D			(1.10)			
							Flint cobbles
						1.63	Pit terminated at 1.63m.

Pit Dimension (m)

Pit Stability:

Water Strikes:

Width: 0.97
Length: 1.04
Depth: 1.63

1. Pit sides stable.

1. Hole dry upon completion.

Project Name: 465 - 467 Finchley Road (London NW3)

Remarks:

Co-ordinates:

Level (m AOD):

Logger:

SM

Location: London NW3

1. Hole dry upon completion.

Client: A Govani

Samples and Insitu Testing			Level (m AOD)	Thickness (m)	Legend	Depth (m bgl)	Stratum Description
Depth (m)	Type	Results					
0.5	D			(0.02)		0.03	Tile and screed
				(0.12)		0.04	Black CONCRETE
				(0.10)		0.16	Weak, black, CONCRETE with frequent fragments of brick, blacktop and wood.
				(0.54)		0.26	Dark grey, sandy CLAY, with occasional to frequent brick fragments (MADE GROUND).
						0.80	Firm, pale brown, CLAY.
							Pit terminated at 0.80m.

1

2

Pit Dimension (m)

Pit Stability:

Water Strikes:

Width: 0.44

Length: 0.60

Depth: 0.80

1. Pit sides stable.

1. Hole dry upon completion.

Project Name: 465 - 467 Finchley Road (London NW3)

Remarks:

Co-ordinates:

Level (m AOD):


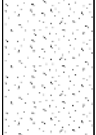
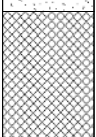
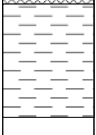
Logger:

HC

Location: London NW3

1. Hole dry upon completion.

Client: A Govani

Samples and Insitu Testing			Level (m AOD)	Thickness (m)	Legend	Depth (m bgl)	Stratum Description
Depth (m)	Type	Results					
0.4	D			(0.02)		0.02	Floor tile and screed
				(0.21)			Weak CONCRETE with frequent bricks, brick fragments and blacktop
				(0.17)		0.23	Dark grey brown sandy CLAY, with frequent brick fragments and blacktop (MADE GROUND).
				(0.15)		0.40	Firm, pale brown CLAY
						0.55	Pit terminated at 0.55m.

1

2

Pit Dimension (m)

Pit Stability:

Water Strikes:

Width: 0.40

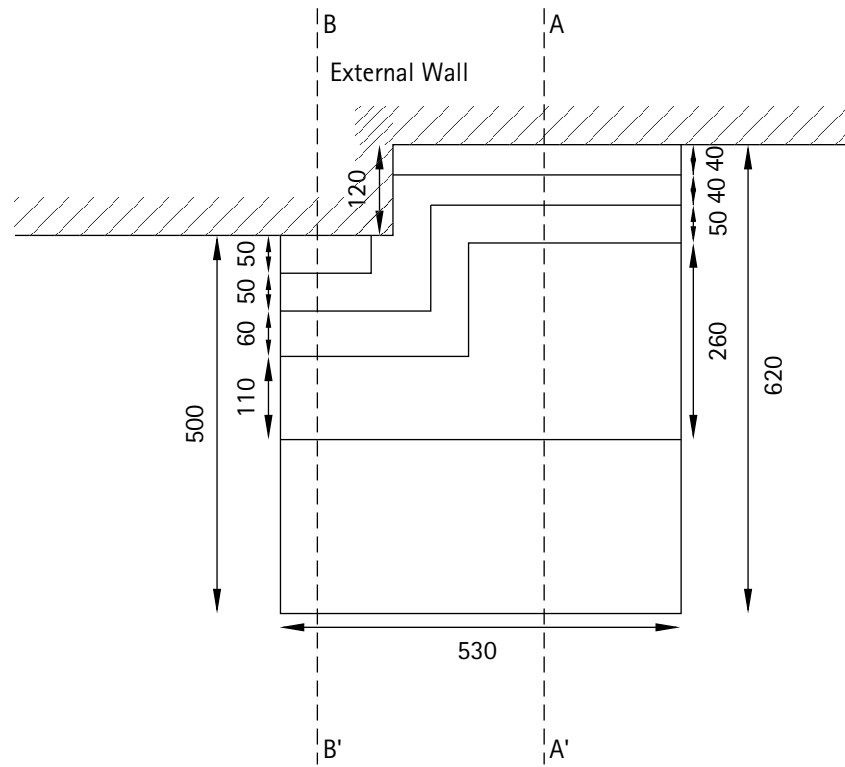
Length: 0.50

Depth: 0.55

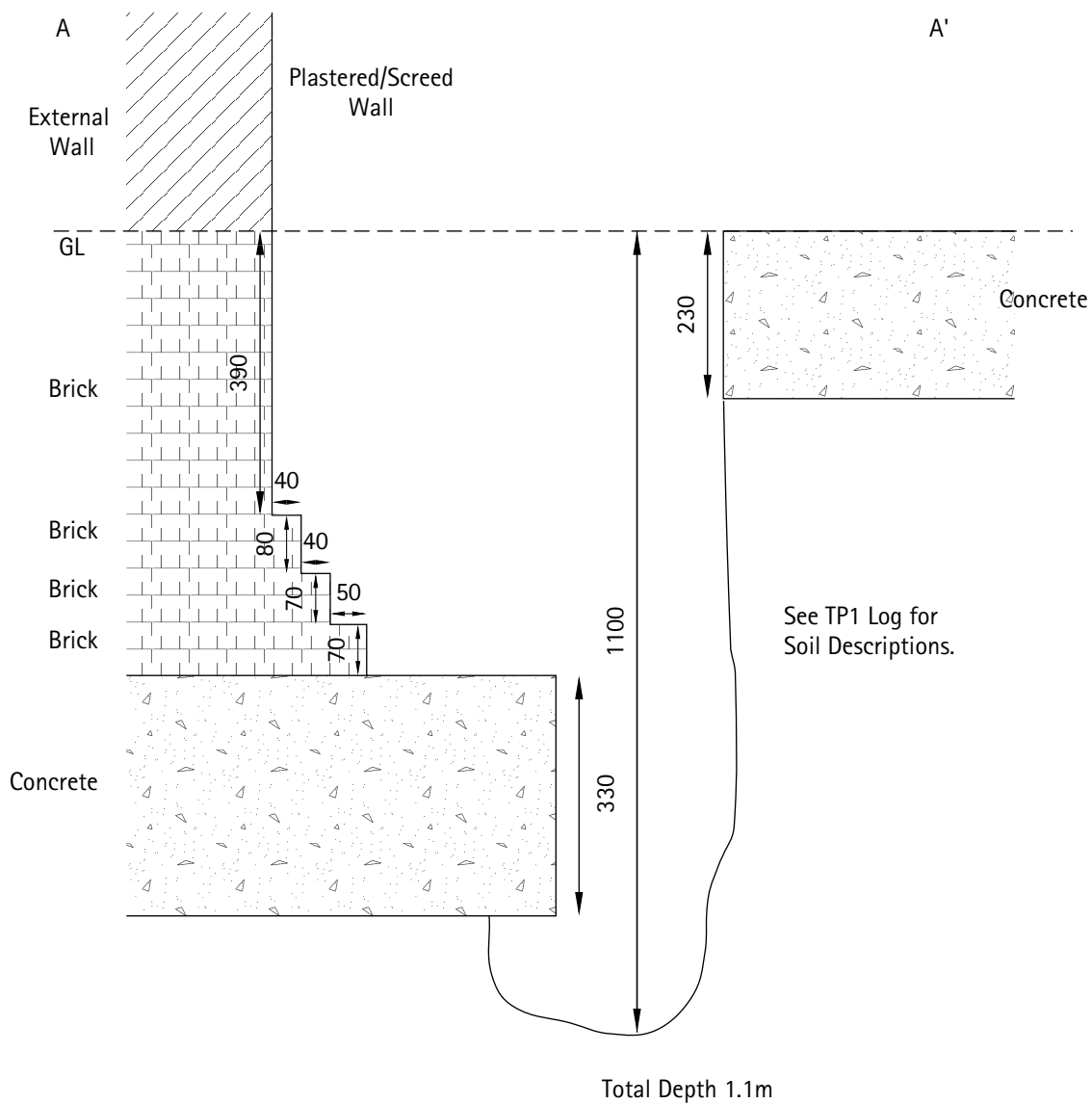
1. Pit sides stable.

1. Hole dry upon completion.

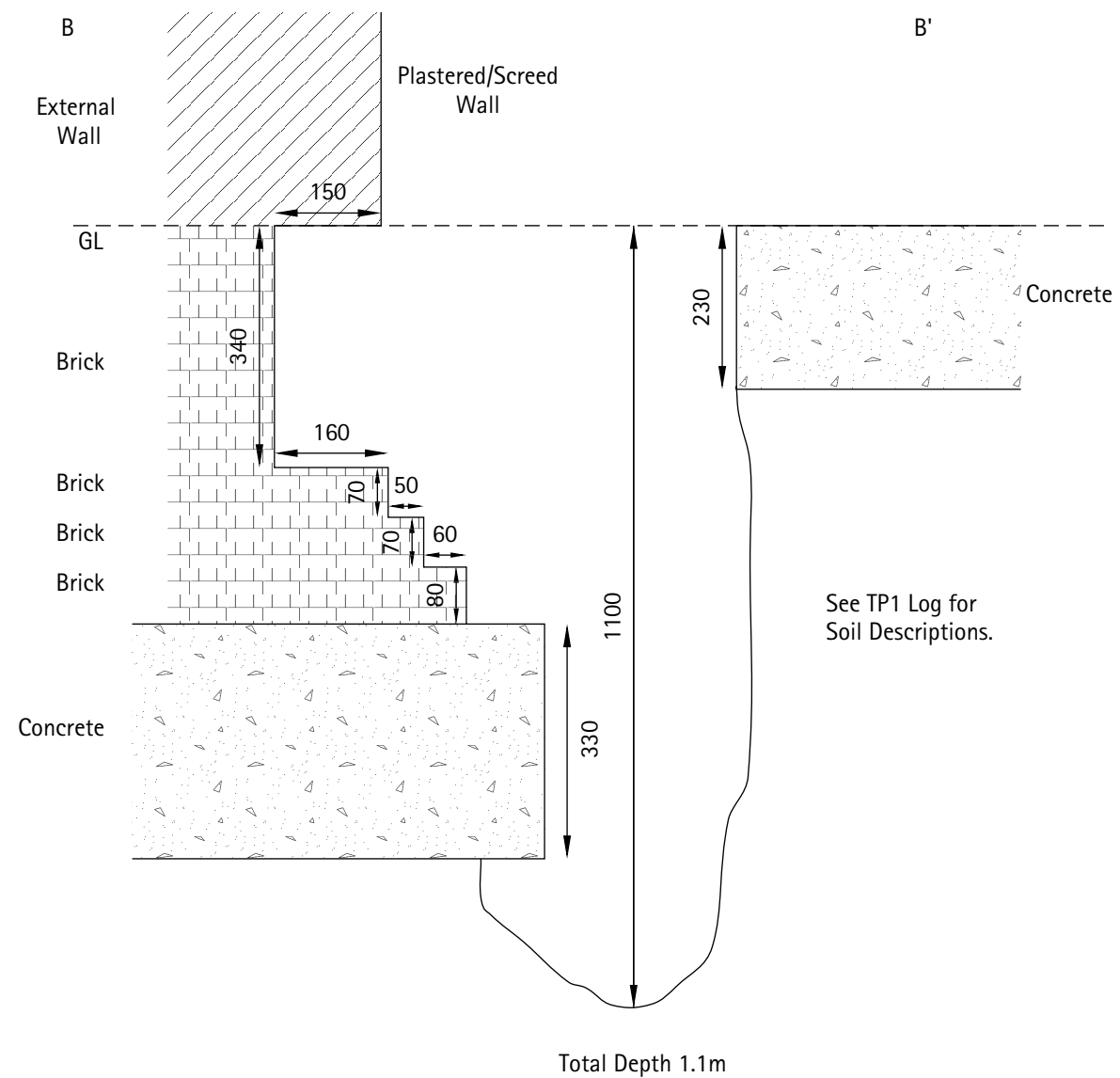
TP1 Plan View



TP1 Section A to A'



TP1 Section B to B'



Notes

1. All dimensions in mm unless stated otherwise.



Keeble House, Stuart Way, East Grinstead, West Sussex. RH19 4QA

Tel: 01342 333100 Fax: 01342 410321 www.southernesting.co.uk

Client: A Govani

Job Title: 465-467 Finchley Road (London NW3)

Description: Trial Pit Sections

Drawing No: TP1

Scale: 1:100

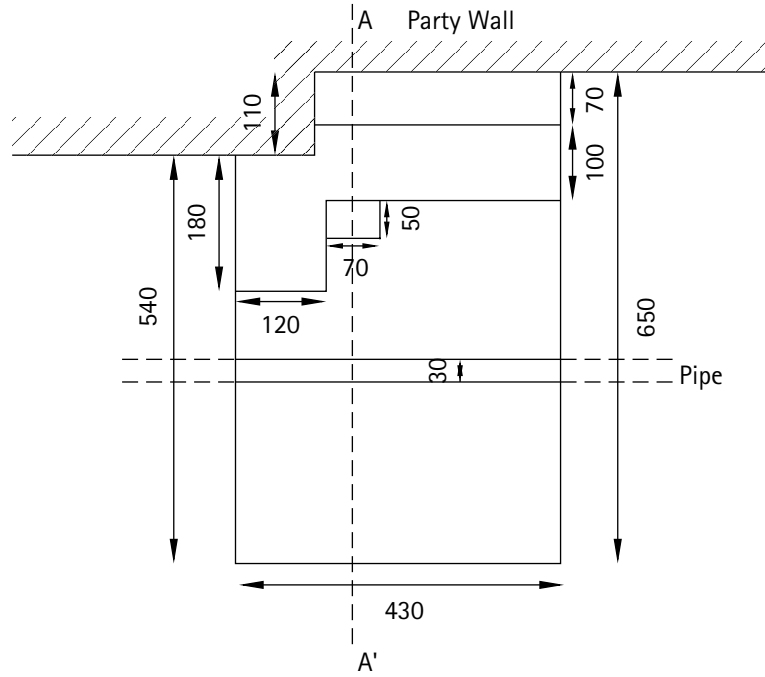
Paper Size: A3

Drawn by: SM

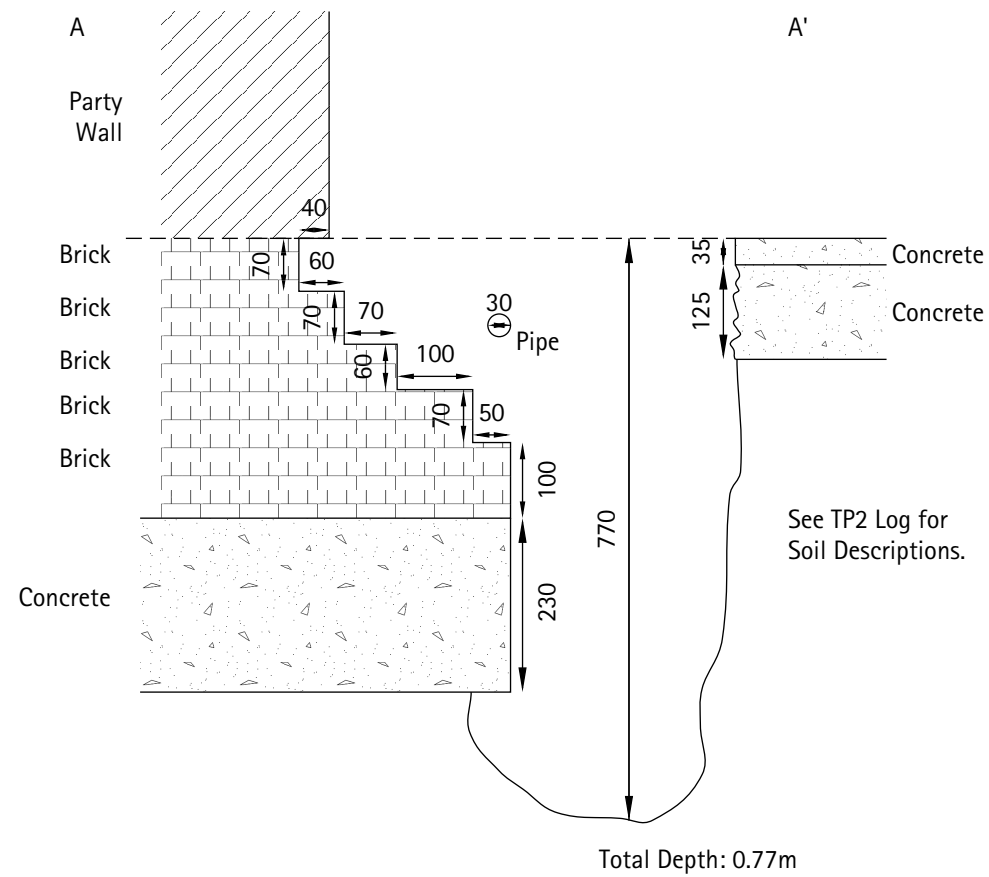
Checked by: DV

Date: 18/02/2015

TP2 Plan View



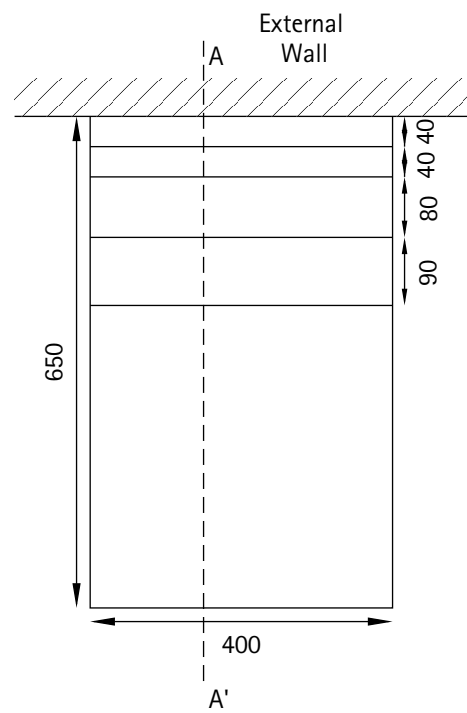
TP2 Section A to A'



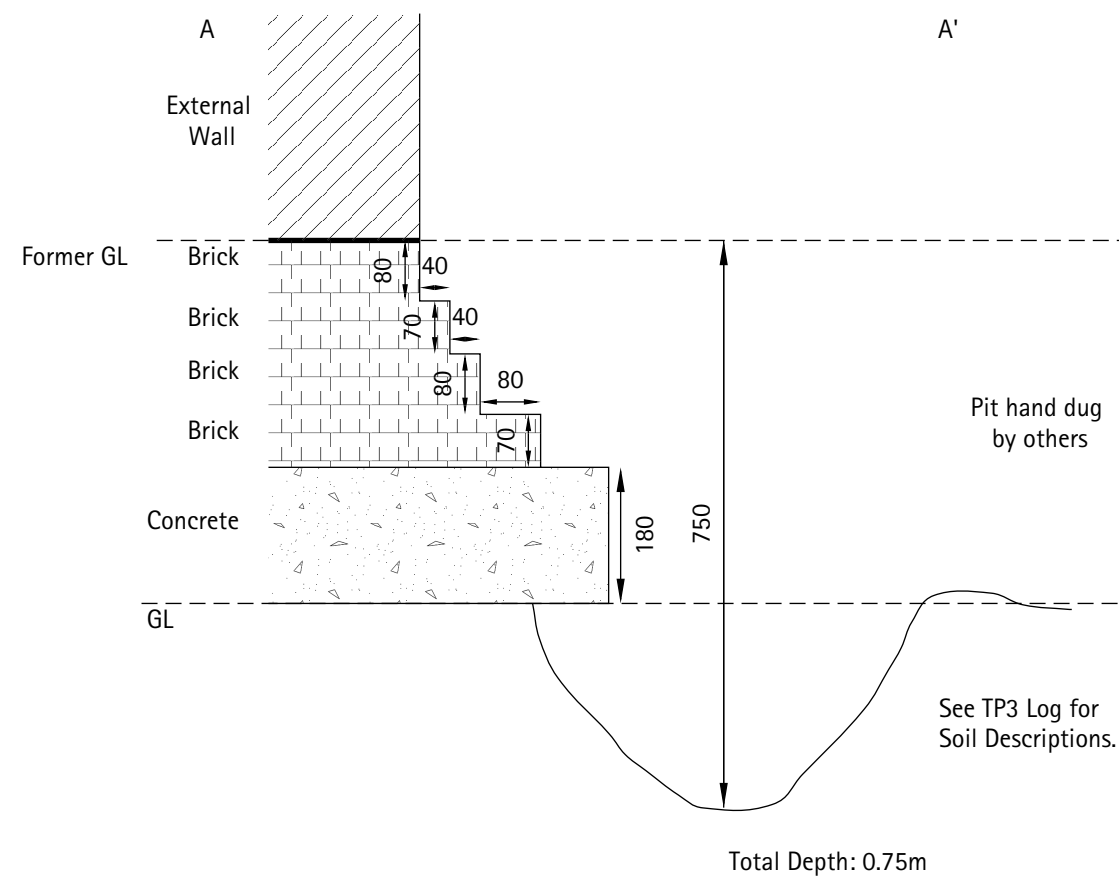
Notes

1. All dimensions in mm unless stated otherwise.

TP3 Plan View



TP3 Section A to A'



Keeble House, Stuart Way, East Grinstead,
West Sussex. RH19 4QA
Tel: 01342 333100 Fax: 01342 410321
www.southerntesting.co.uk

Client: A Govani

Job Title: 465-467 Finchley Road
(London NW3)

Description: Trial Pit Sections

Drawing No: TP2 & TP3

Scale: 1:100

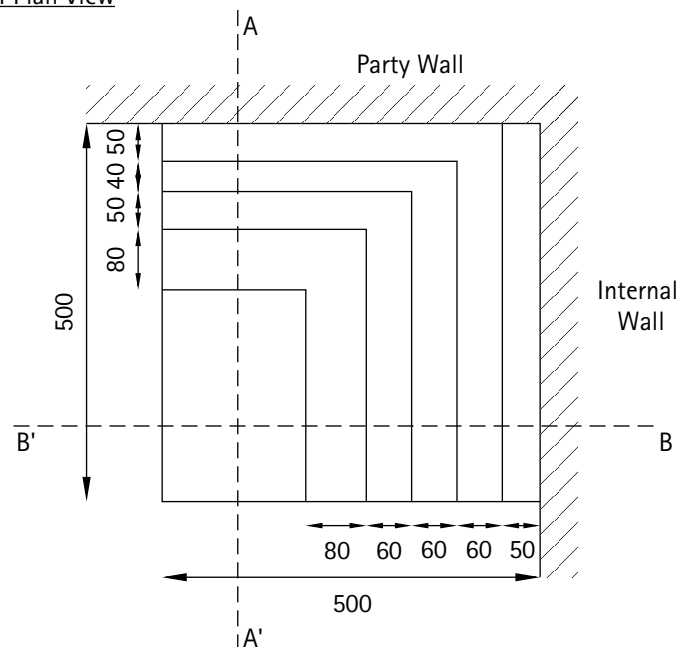
Paper Size: A3

Drawn by: SM

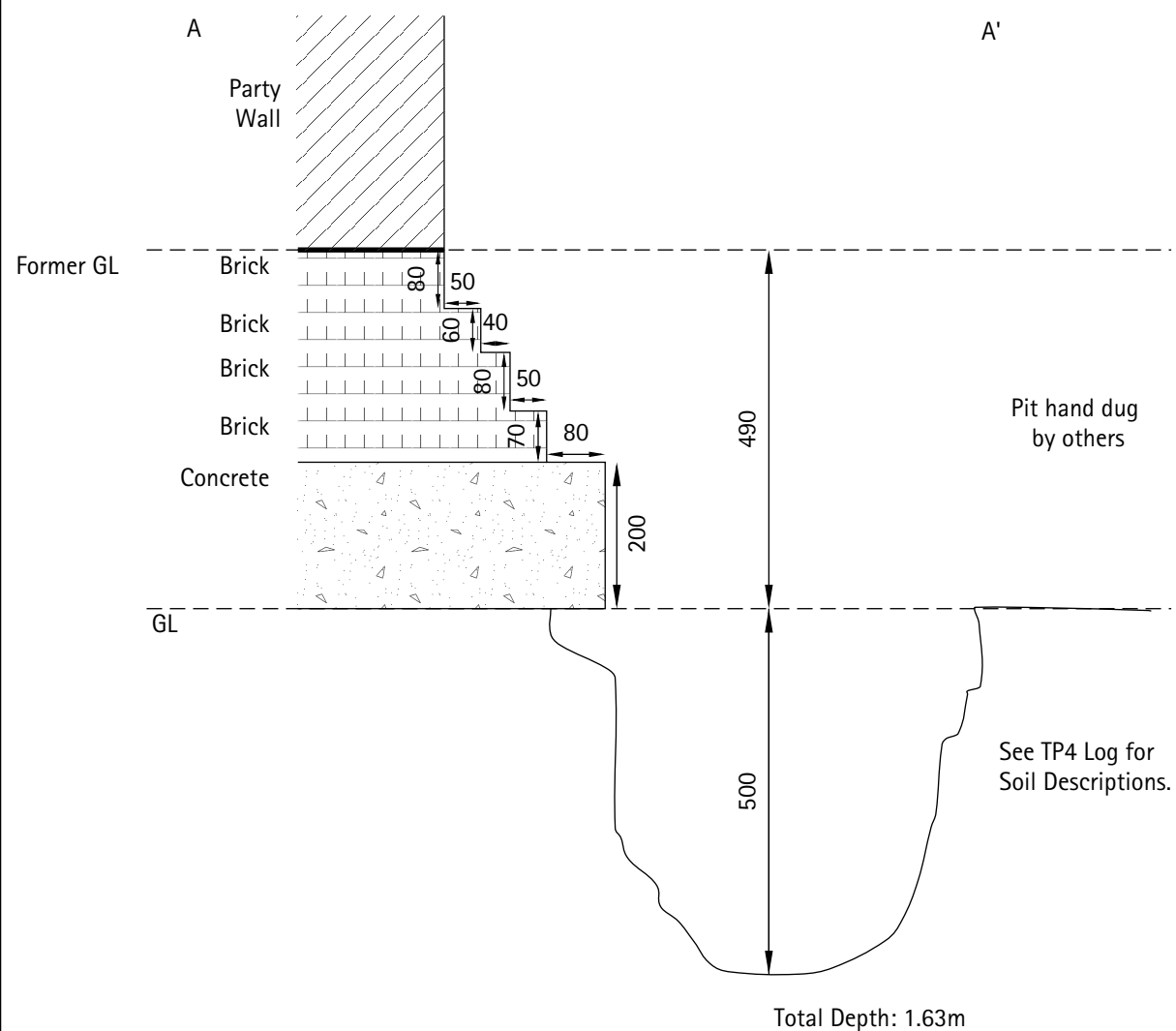
Checked by: DV

Date: 18/02/2015

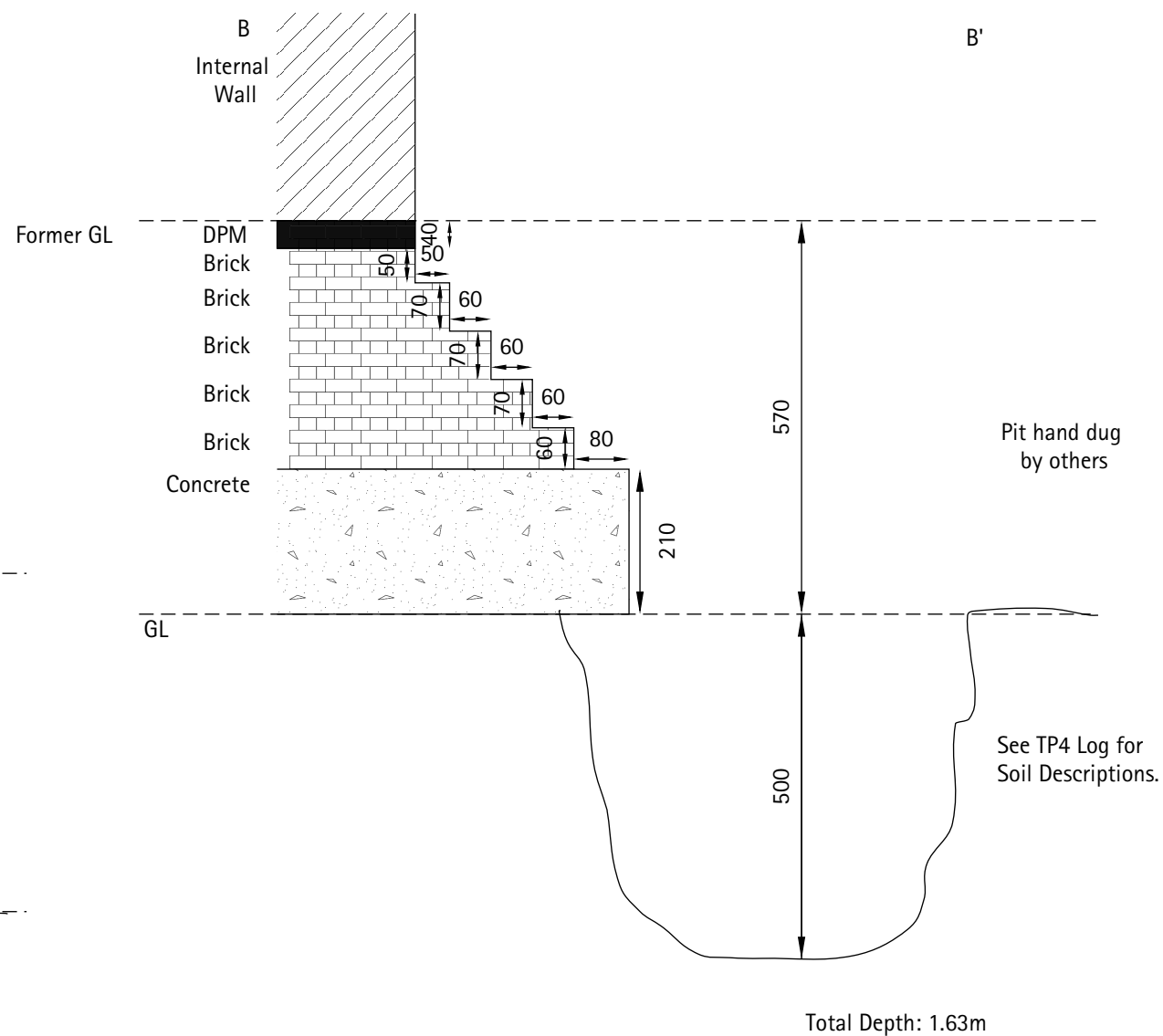
TP4 Plan View



TP4 Section A to A'



TP4 Section B to B'



Notes

1. All dimensions in mm unless stated otherwise.
2. Pit excavated 1.04m (L) x 0.97m (W) x 1.64m (D), dimensions reduced for ease of drawing.



Keeble House, Stuart Way, East Grinstead, West Sussex. RH19 4QA

Tel: 01342 333100 Fax: 01342 410321 www.southerntesting.co.uk

Client: A Govani

Job Title: 465-467 Finchley Road (London NW3)

Description: Trial Pit Sections

Drawing No: TP4

Scale: 1:100

Paper Size: A3

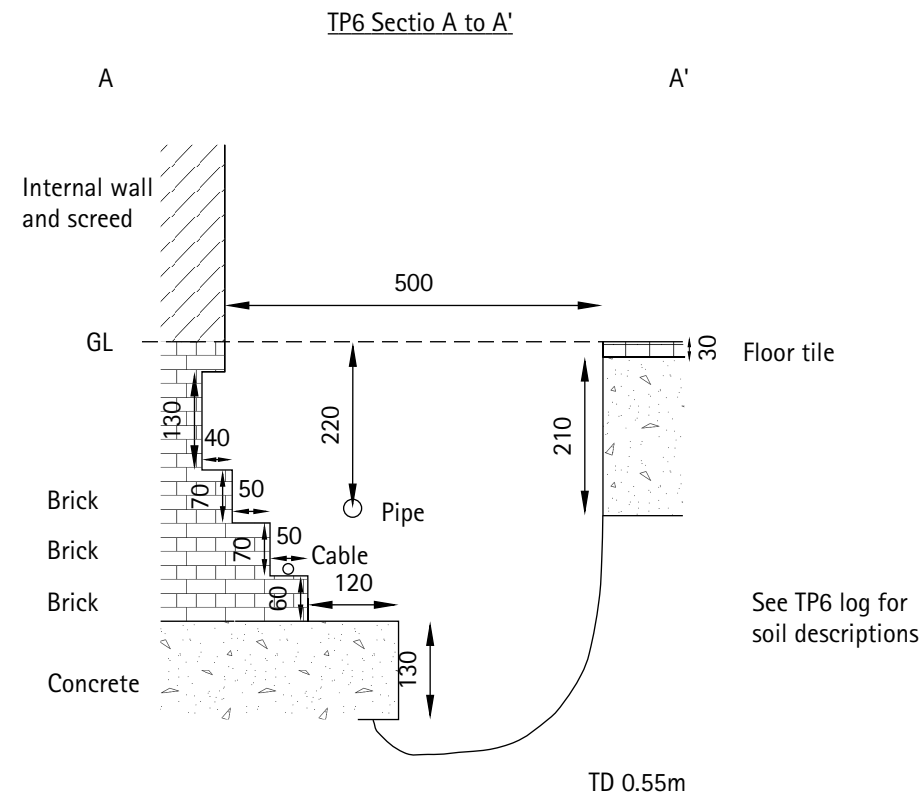
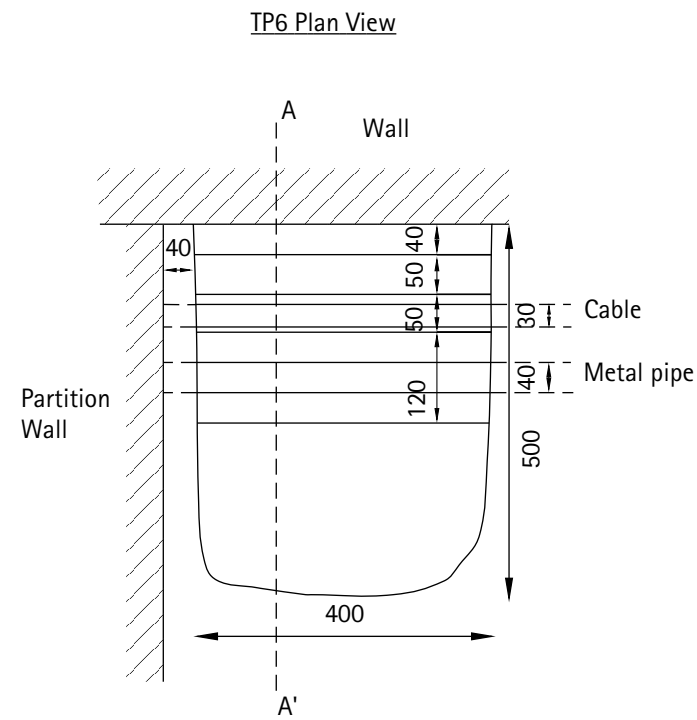
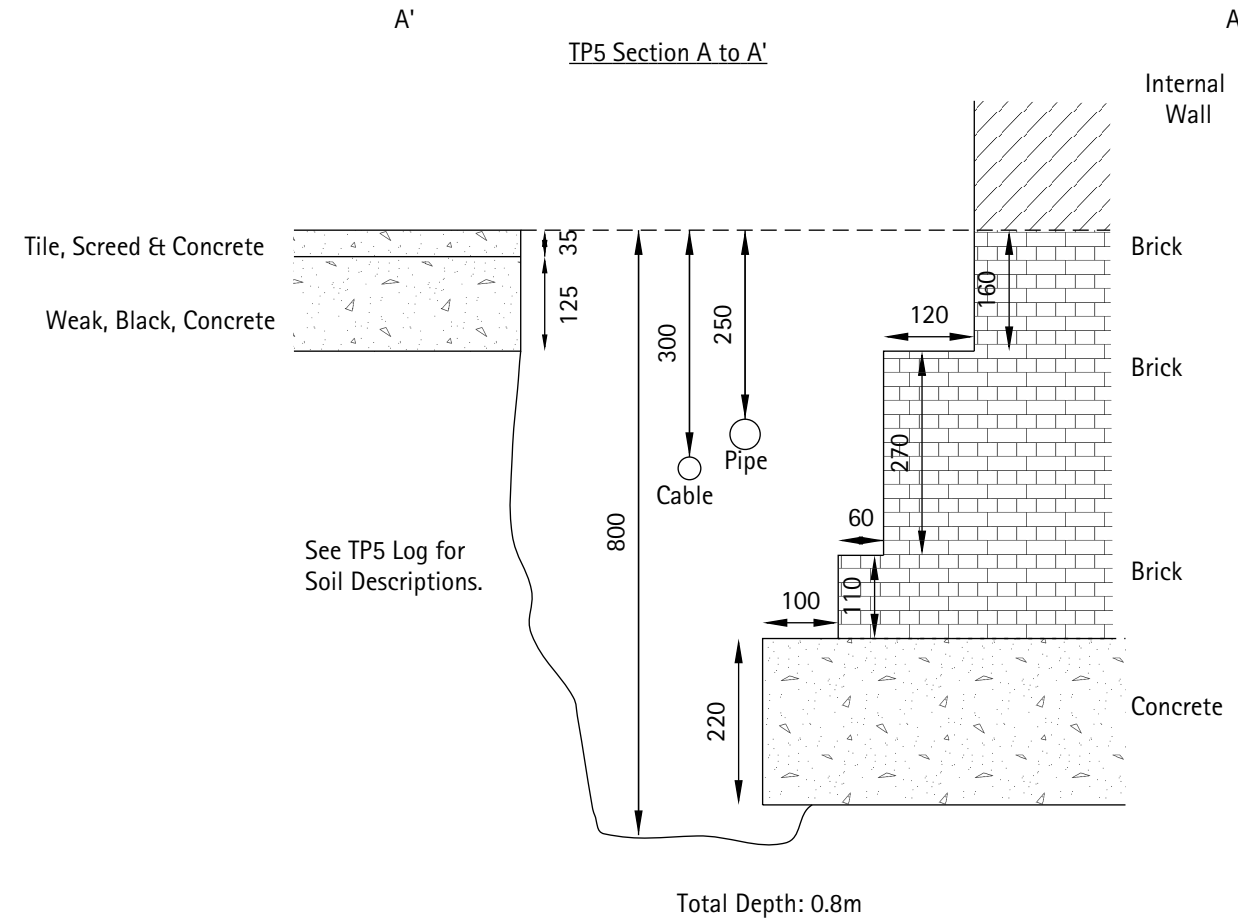
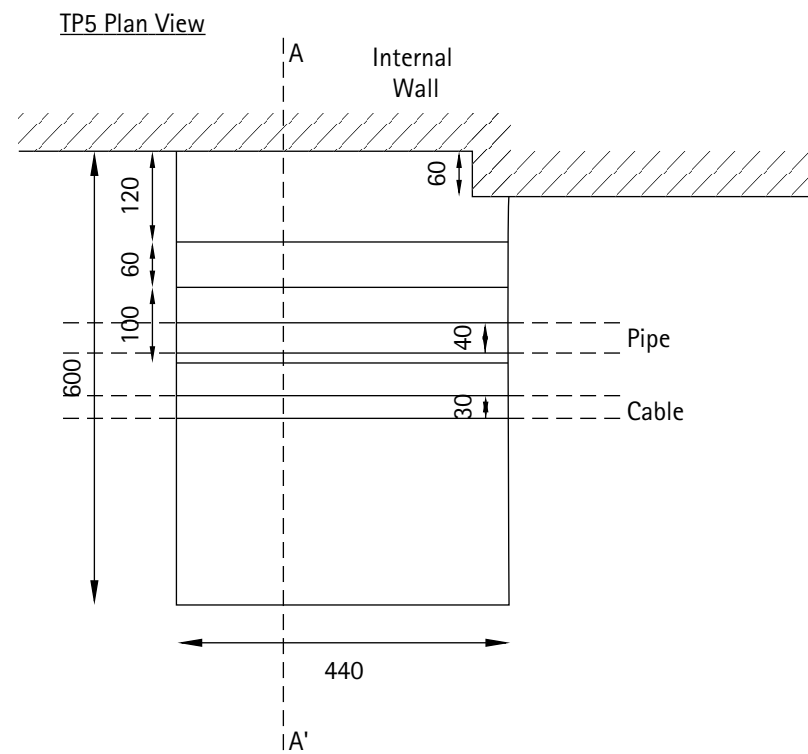
Drawn by: SM

Checked by: DV

Date: 18/02/2015

Notes

1. All dimensions in mm unless stated otherwise.



Keeble House, Stuart Way, East Grinstead, West Sussex. RH19 4QA

Tel: 01342 333100 Fax: 01342 410321
www.southernesting.co.uk

Client: A Govani

Job Title: 465-467 Finchley Road (London NW3)

Description: Trial Pit Sections

Drawing No: TP5 & TP6

Scale: 1:100

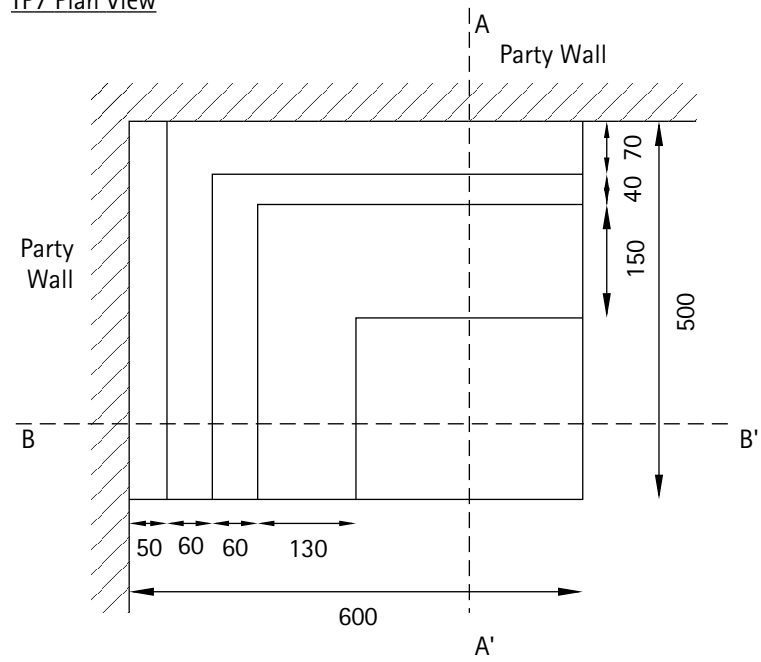
Paper Size: A3

Drawn by: SM

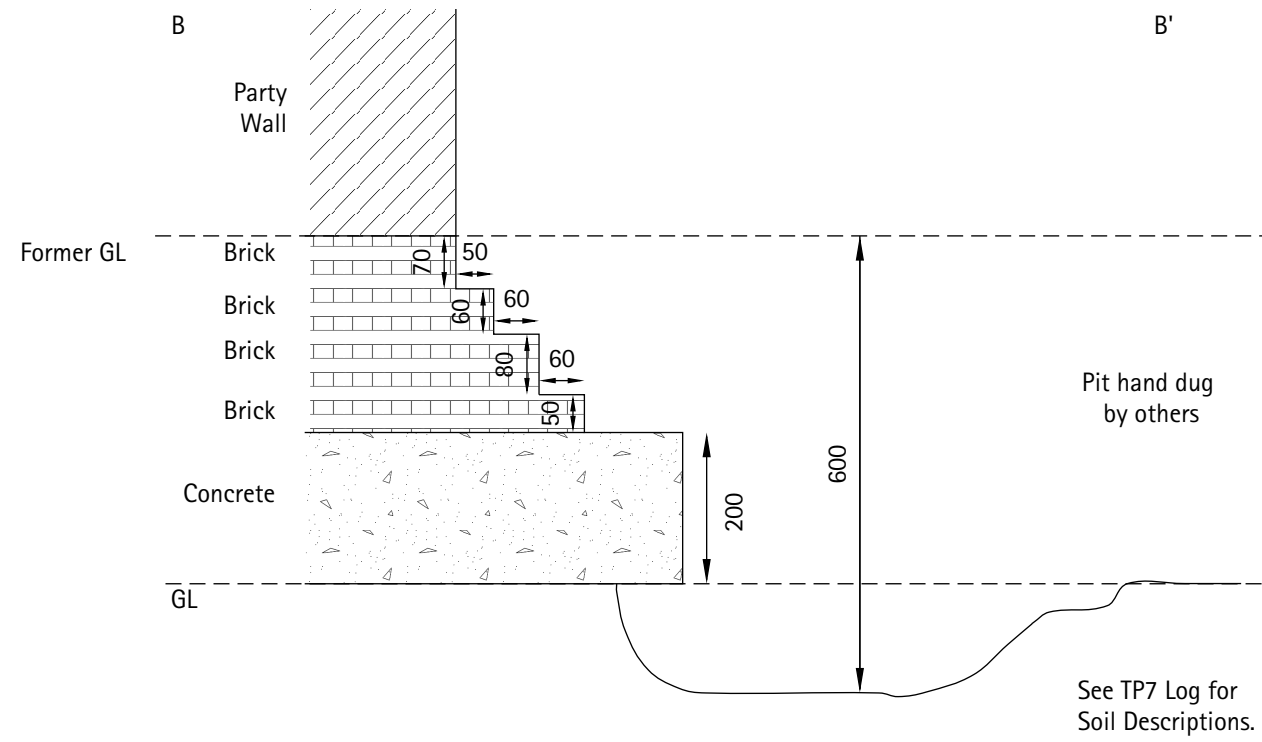
Checked by: DV

Date: 18/02/2015

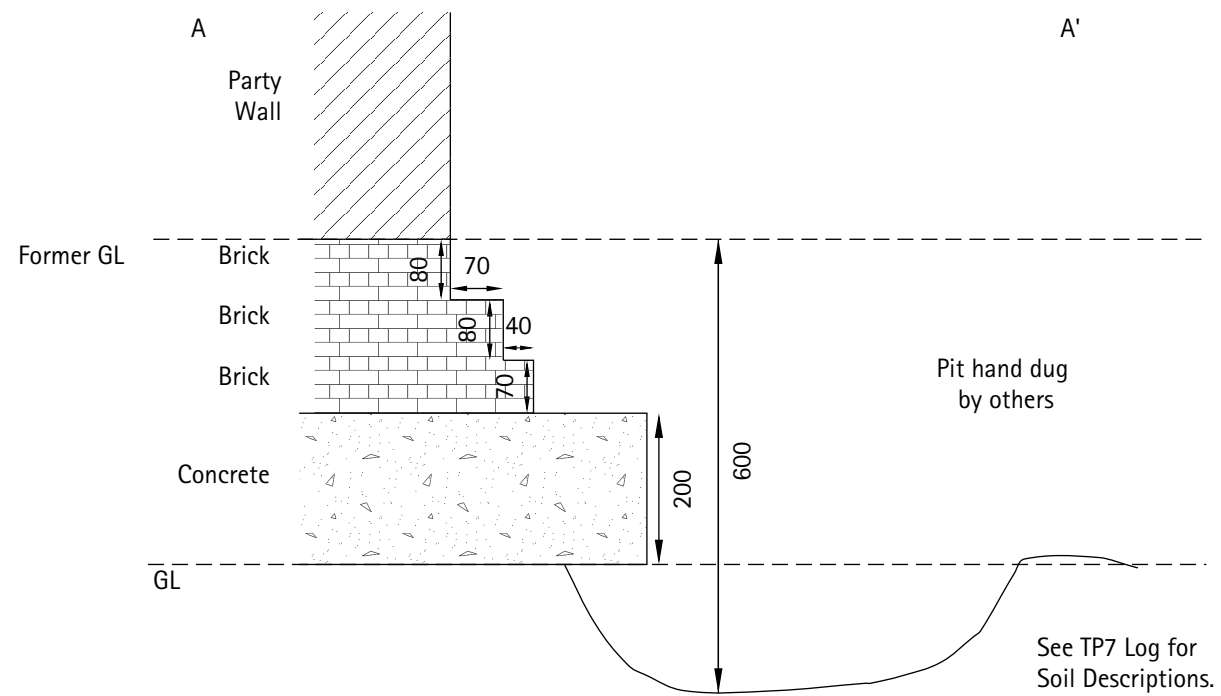
TP7 Plan View



TP7 Section B to B'



TP7 Section A to A'



Notes

1. All dimensions in mm unless stated otherwise.



Keeble House, Stuart Way, East Grinstead,
West Sussex. RH19 4QA
Tel: 01342 333100 Fax: 01342 410321
www.southerntesting.co.uk

Client: A Govani

Job Title: 465-467 Finchley Road
(London NW3)

Description: Trial Pit Sections

Drawing No: TP7

Scale: 1:100

Paper Size: A3

Drawn by: SM

Checked by: DV

Date: 18/02/2015



TP1



TP2



TP3



TP4



TP5



TP6



TP7

APPENDIX B

Field Sampling and in-situ Test Methods & Results

Field Sampling and in-situ Test Methods

Disturbed Samples

Disturbed samples were taken from the trial holes at intervals and stored in sealed glass jars and polythene bags, as appropriate.

Hand Penetrometer Test

The hand penetrometer consists of a spring loaded and calibrated plunger which is forced into the soil. A reading of unconfined compression strength (equal to twice cohesion) is given on a calibrated scale. In common with other hand methods of strength assessment (eg. the shear vane) it does not give an accurate indication of bearing capacity in stiff or fissured soils, because of the small test area. The figures are used for strength classification according to the table below.

Hand Penetrometer Value (kPa)	Undrained Shear Strength c_u (kPa)	Undrained Shear Strength of Clays
Less than 20	Less than 10	Extremely Low
20 to 40	10 to 20	Very Low
40 to 80	20 to 40	Low
80 to 150	40 to 75	Medium
150 to 300	75 to 150	High
300 to 600	150 to 300	Very High
More than 600	More than 300	Extremely High

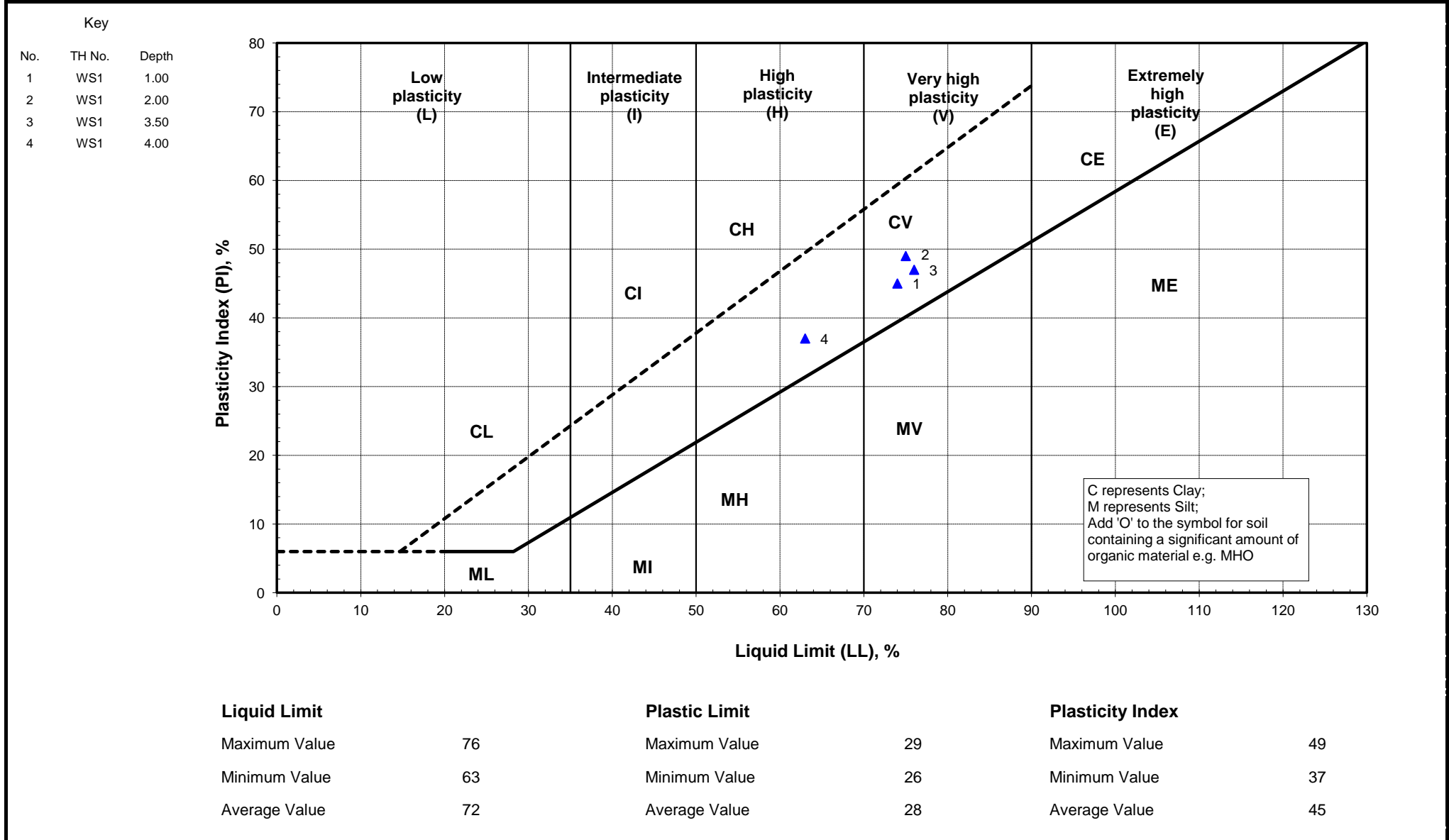
APPENDIX C

Geotechnical Laboratory Test References & Results

Plasticity Chart for Atterberg Limit Tests



Project Name	465-467 Finchley Road (London NW3)	Project Number	J12147
Client Name	A Govani	PE	DV
		Date Issued	04-Mar-15



Project Name		465-467 Finchley Road (London NW3)					Project Number		J12147		
Client		A Govani			PE	DV	Date Issued		04-Mar-15		
Location	Depth m	Sample Type	Visual Description	Comments	Natural MC %	Liquid Limit %	Plastic Limit %	Plasticity Index	Classi- fication	Passing 425 micron %	
WS1	1.00	D	<i>Stiff very high strength light brown CLAY.</i>		30	74	29	45	CV	100	
WS1	2.00	D	<i>Light brown CLAY.</i>		32	75	26	49	CV	100	
WS1	3.50	D	<i>Very stiff very high strength light brown CLAY.</i>		31	76	29	47	CV	100	
WS1	4.00	D	<i>Stiff high strength mid brown slightly sandy CLAY with frequent selenite crystals.</i>		30	63	26	37	CH	100	

Southern Testing Laboratories Limited, East Grinstead is registered under BS EN ISO 9001:2008 BSI ref: FS29280

Jun 13



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: 458895-1

Date of Report: 05-Mar-2015

Customer: Southern Testing Laboratories
Keeble House
Stuart Way
East Grinstead
West Sussex
RH19 4QA

Customer Contact: Mr David Vooght

Customer Job Reference: J12147

Customer Purchase Order: J12147_1

Customer Site Reference: 465-467 Finchley Road (London NW3)

Date Job Received at SAL: 26-Feb-2015

Date Analysis Started: 26-Feb-2015

Date Analysis Completed: 05-Mar-2015

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: 458895
 Project Site: 465-467 Finchley Road (London NW3)
 Customer Reference: J12147

Soil Analysed as Soil
 Miscellaneous

SAL Reference		458895 001	458895 002	458895 003	458895 004	458895 005			
Customer Sample Reference		TP1 @ 0.50m	TP1 @ 1.00m	WS1 @ 0.25m	WS1 @ 1.50m	WS1 @ 3.00m			
Date Sampled		18-FEB-2015	18-FEB-2015	18-FEB-2015	18-FEB-2015	18-FEB-2015			
Type		Clay	Clay	Clay	Clay	Clay			
Determinand	Method	Test Sample	LOD	Units					
(Water Soluble) SO4-- expressed as SO4	T242	A40	0.01	g/l	0.44	0.40	0.69	1.9	3.3
pH	T7	A40			7.6	7.5	7.7	7.9	7.9
Moisture @ 105 C	T162	AR	0.1	%	26	26	23	22	24
Retained on 2mm	T2	A40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1

Index to symbols used in 458895-1

Value	Description
A40	Assisted dried < 40C
AR	As Received
M	Analysis is MCERTS accredited
N	Analysis is not UKAS accredited

Notes

Retained on 2mm is removed before analysis

Method Index

Value	Description
T7	Probe
T242	2:1 Extraction/ICP/OES (TRL 447 T1)
T162	Grav (1 Dec) (105 C)
T2	Grav

Accreditation Summary



Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
(Water Soluble) SO4-- expressed as SO4	T242	A40	0.01	g/l	M	001-005
pH	T7	A40			M	001-005
Moisture @ 105 C	T162	AR	0.1	%	N	001-005
Retained on 2mm	T2	A40	0.1	%	N	001-005

APPENDIX D

Bomb Map

**Colour Key
References**
(for guidance only)

- Black**
Total destruction
- Purple**
Damaged beyond repair
- Dark Red**
Seriously damaged; doubtful if repairable
- Light Red**
Seriously damaged, but repairable at cost
- Orange**
General blast damage – not structural
- Yellow**
Blast damage; minor in nature
- Light Blue**
Clearance areas
- Light Green**
Clearance areas

-  V1 flying bomb
-  V2 long range rocket

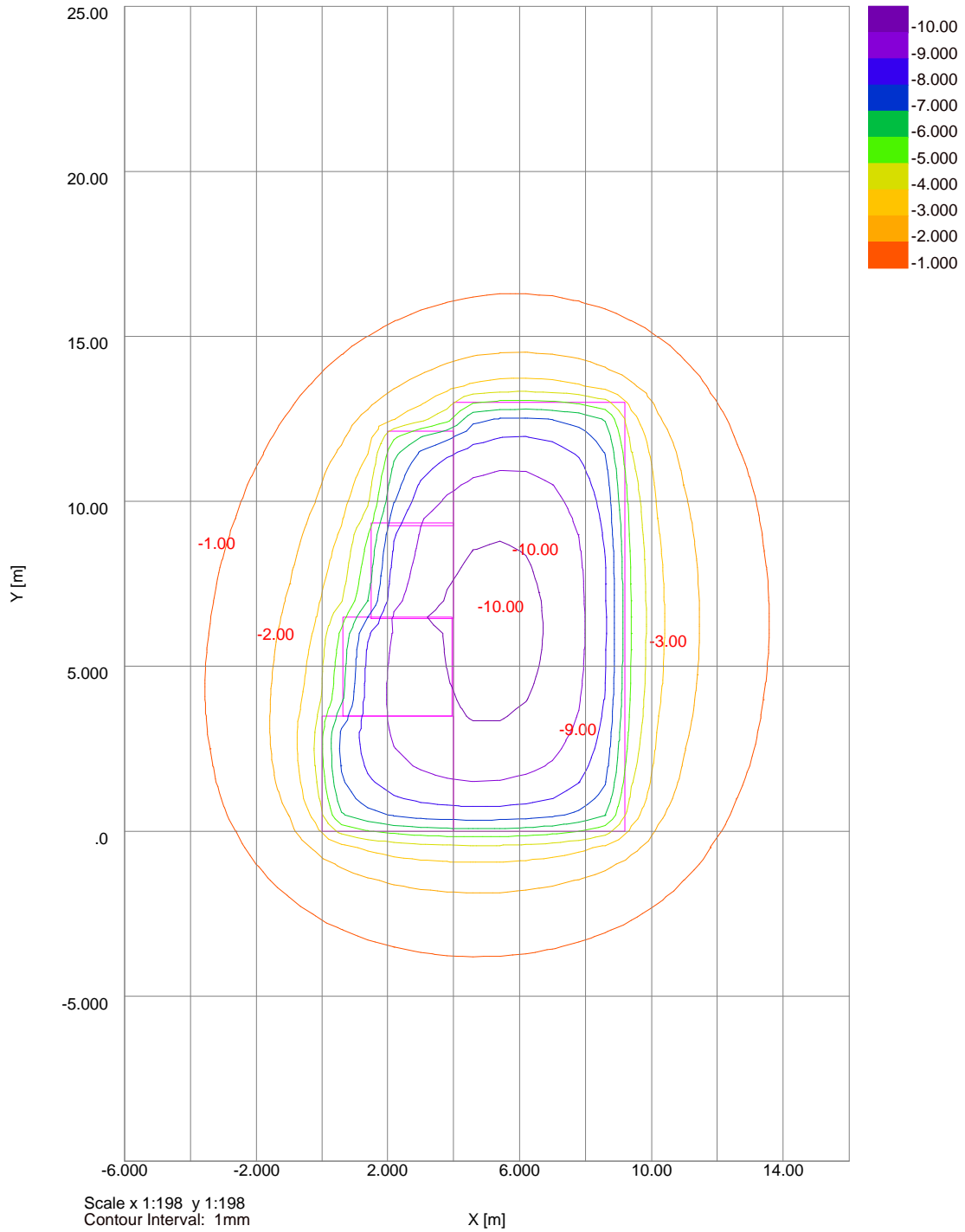


Site: 465-467 Finchley Road	STL: J12147	Fig No: A
Date: 06 March 2015	Bomb Map	

APPENDIX E

PDisp Analysis

Settlement Contours : Grid 1 at -3.7000m



Settlement Contours : Grid 1 at -3.7000m

