

Site Details:

34A, KING HENRYS ROAD,
LONDON, NW3 3RP

Client Ref: 7806_-_7366
Report Ref: GS-3437486
Grid Ref: 527773, 184258

Map Name: County Series

Map date: 1938

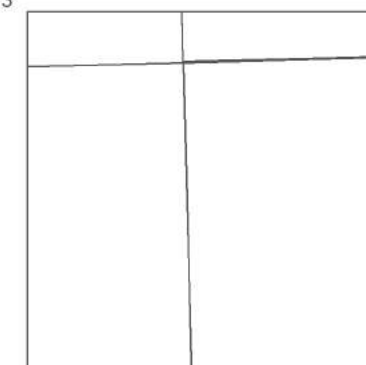
Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1865
Revised 1938
Edition N/A
Copyright N/A
Levelled 1913

Surveyed 1869
Revised 1938
Edition N/A
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Surveyed 1872
Revised 1938
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Site Details:

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Client Ref: 7806_-_7366
Report Ref: GS-3437486
Grid Ref: 527773, 184258

Map Name: Provisional

Map date: 1951

Scale: 1:10,560

Printed at: 1:10,560



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Revised 1949
Edition 1951
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Revised 1949
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Client Ref: 7806_-_7366
Report Ref: GS-3437486
Grid Ref: 527773, 184258

Map Name: Provisional

Map date: 1957-1958

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1958
Revised 1958
Edition N/A
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Surveyed 1957
Revised 1957
Edition N/A
Copyright N/A
Levelled N/A

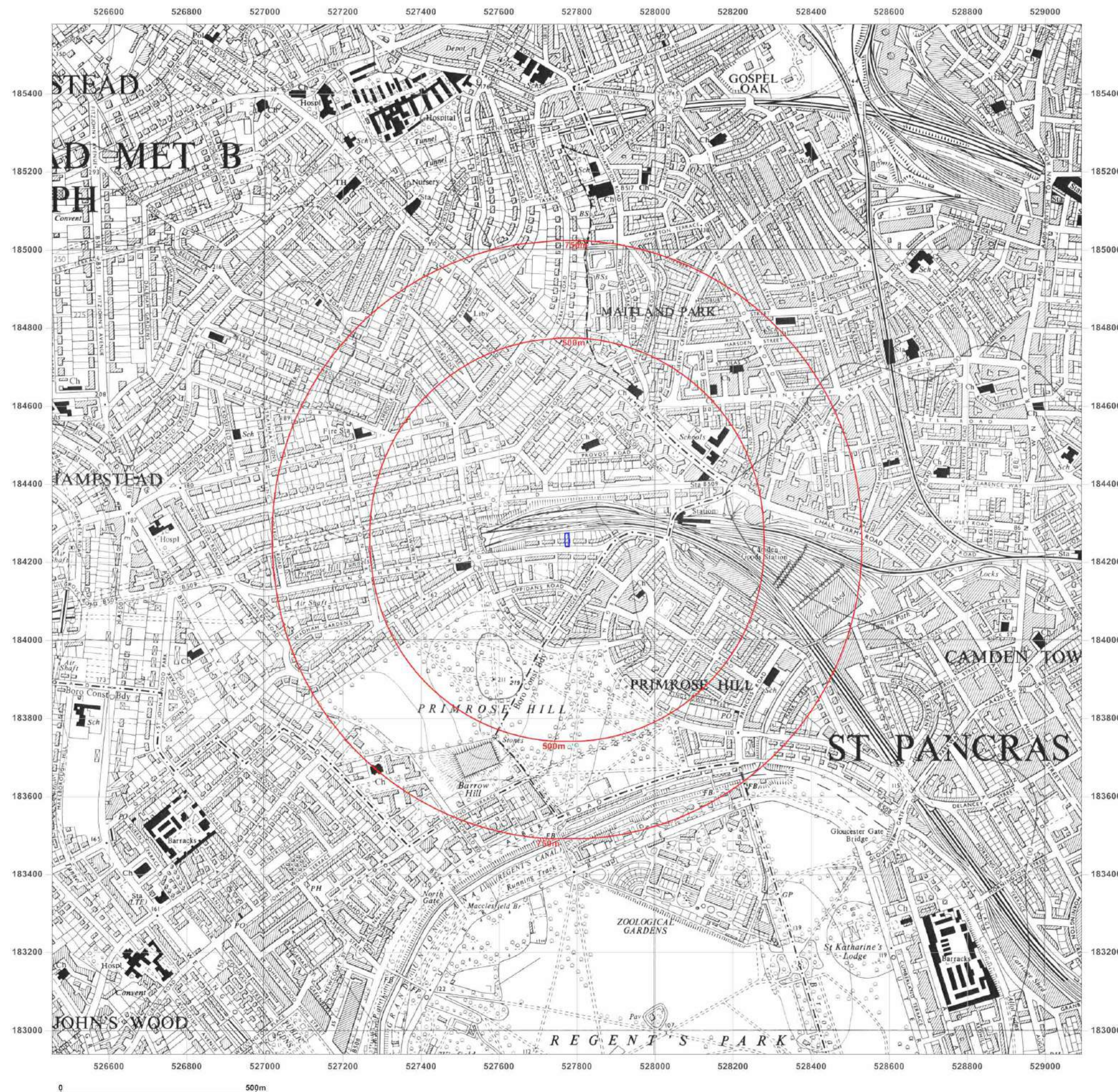


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Site Details:

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LONDON, NW3 3RP

Client Ref: 7806_-_7366
Report Ref: GS-3437486
Grid Ref: 527773, 184258

Map Name: Provisional

Map date: 1965-1968

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1965
Revised 1965
Edition N/A
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Surveyed 1968
Revised 1968
Edition N/A
Copyright N/A
Levelled N/A

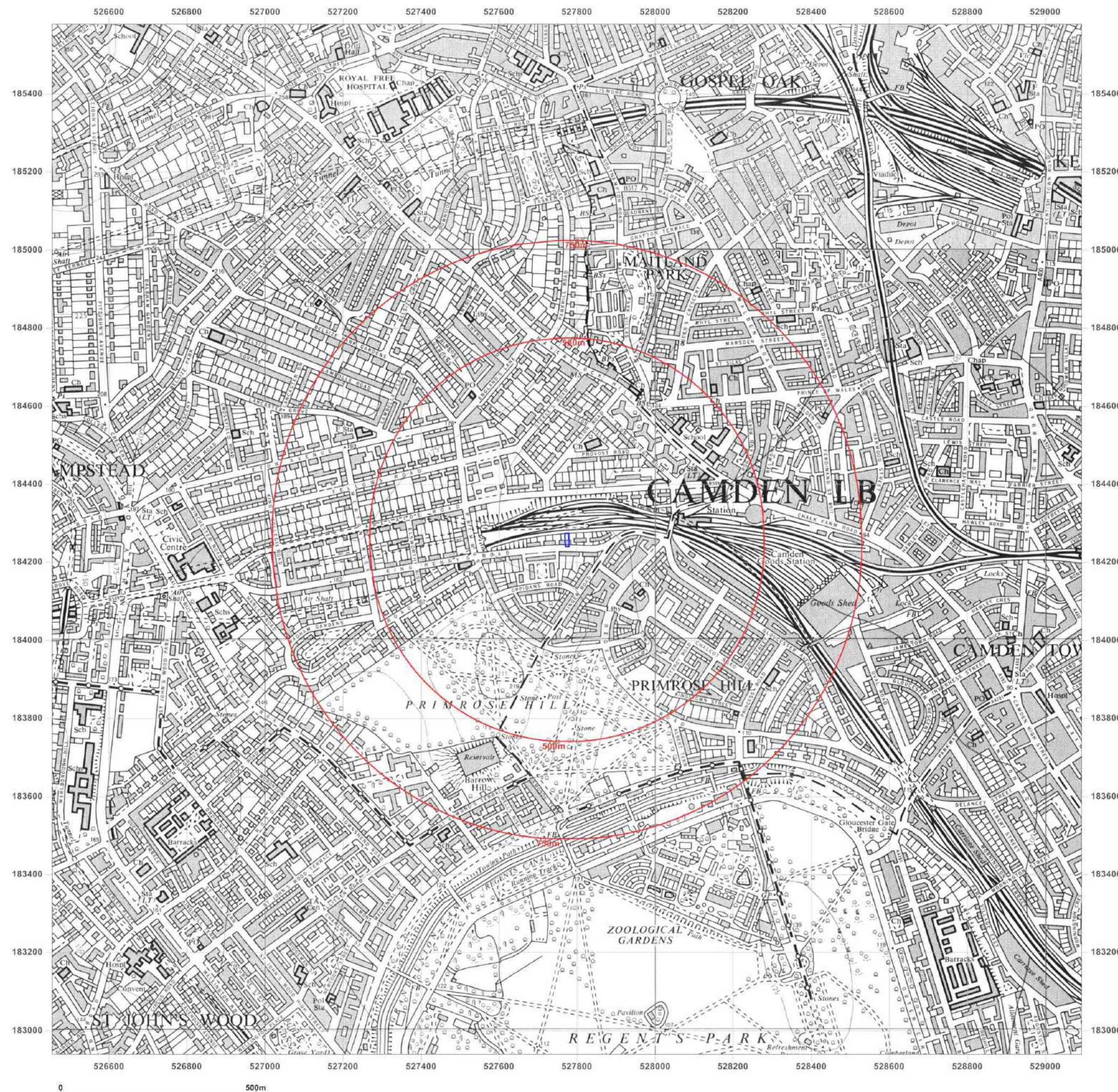


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Site Details:

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LONDON, NW3 3RP

Client Ref: 7806_-_7366
Report Ref: GS-3437486
Grid Ref: 527773, 184258

Map Name: National Grid

Map date: 1973-1974

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1974
Revised 1974
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1972
Revised 1973
Edition N/A
Copyright N/A
Levelled N/A

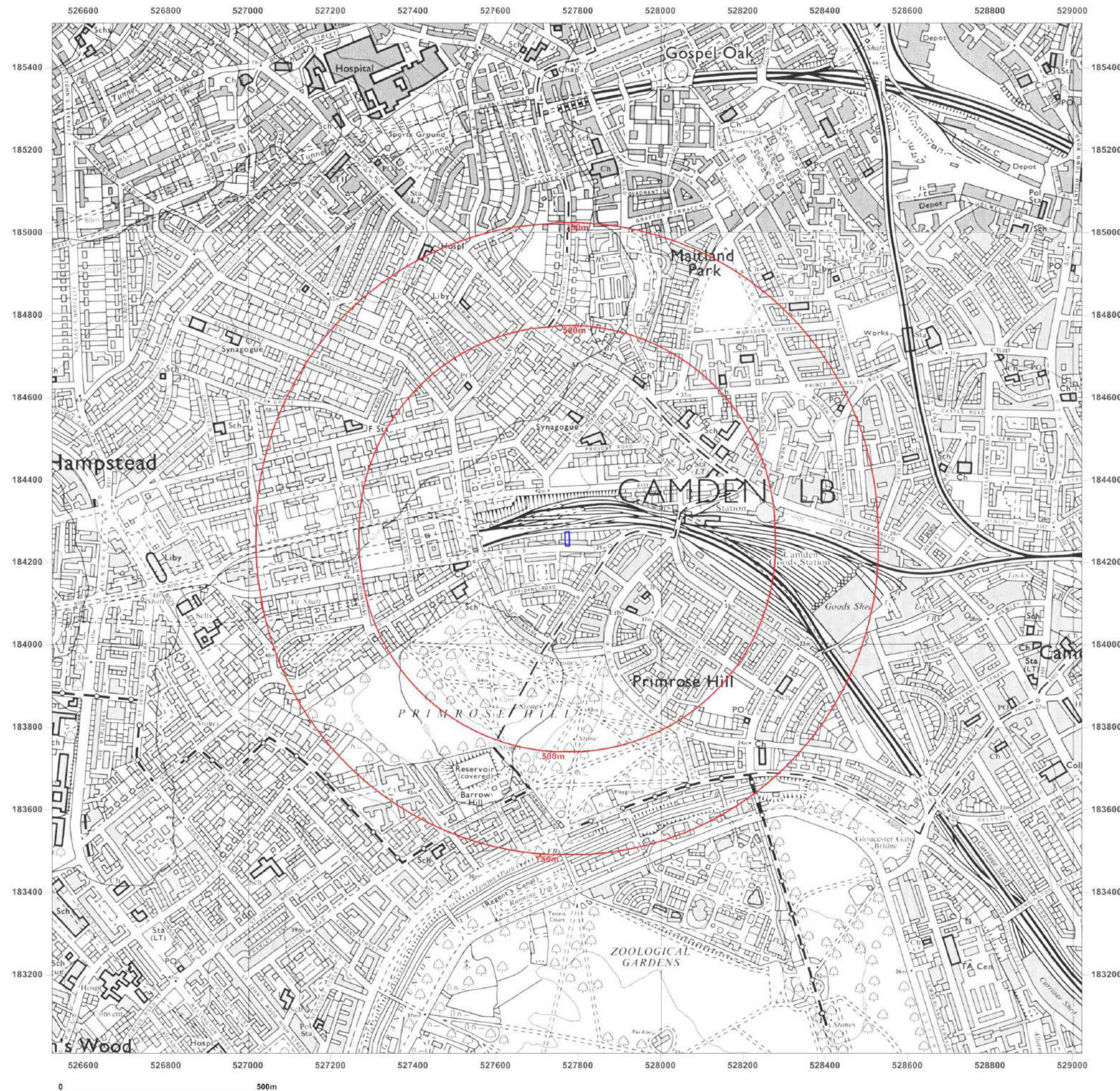


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Site Details:

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Client Ref: 7806_-_7366
Report Ref: GS-3437486
Grid Ref: 527773, 184258

Map Name: National Grid

Map date: 1989

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Printed at: 1:10,000



Surveyed 1987
Revised 1989
Edition N/A
Copyright N/A
Levelled N/A

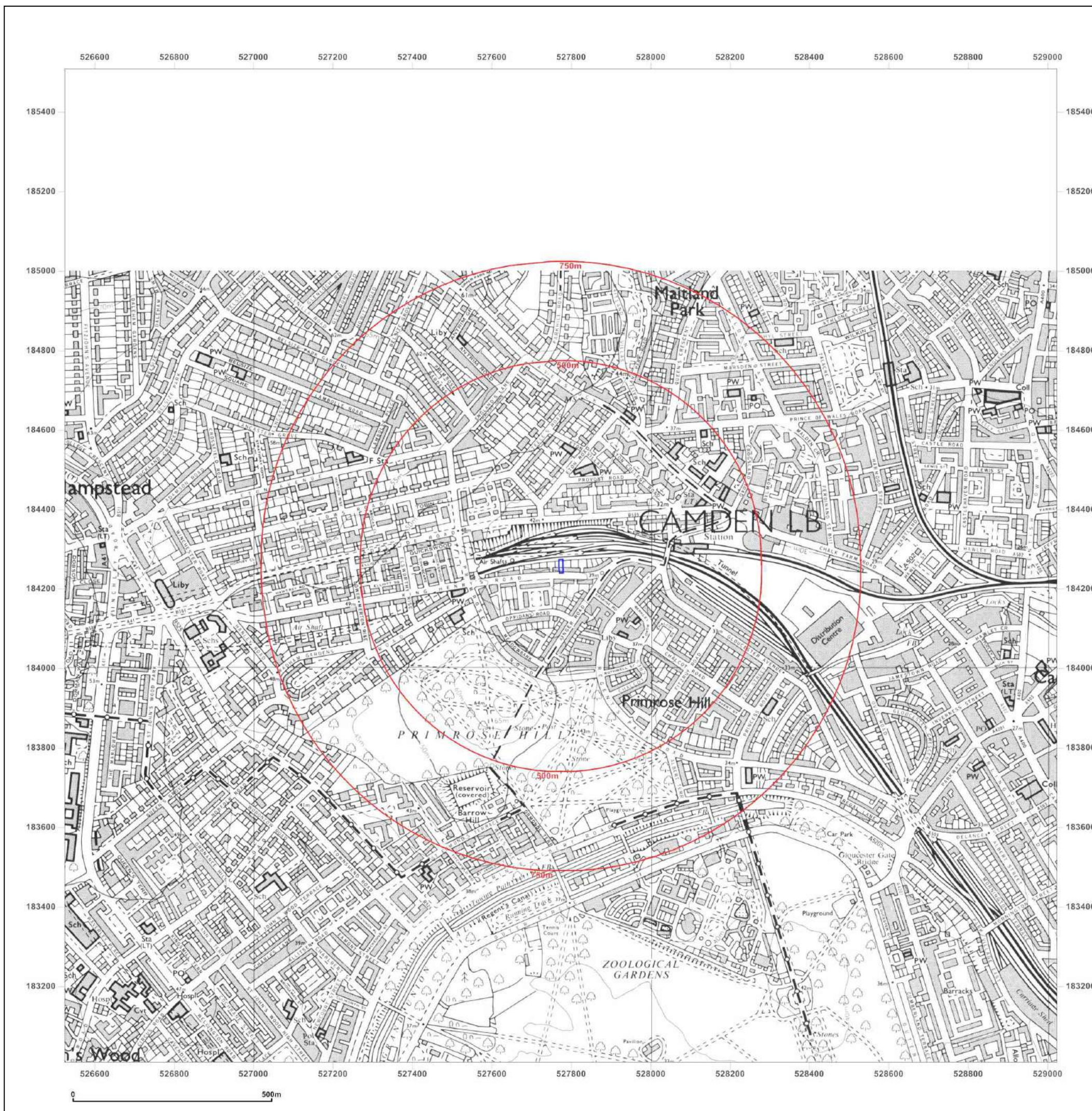


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Site Details:

34A, KING HENRYS ROAD,
LONDON, NW3 3RP

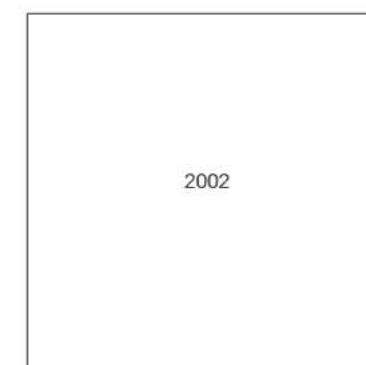
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Report Ref: GS-3437486
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Printed at: 1:10,000

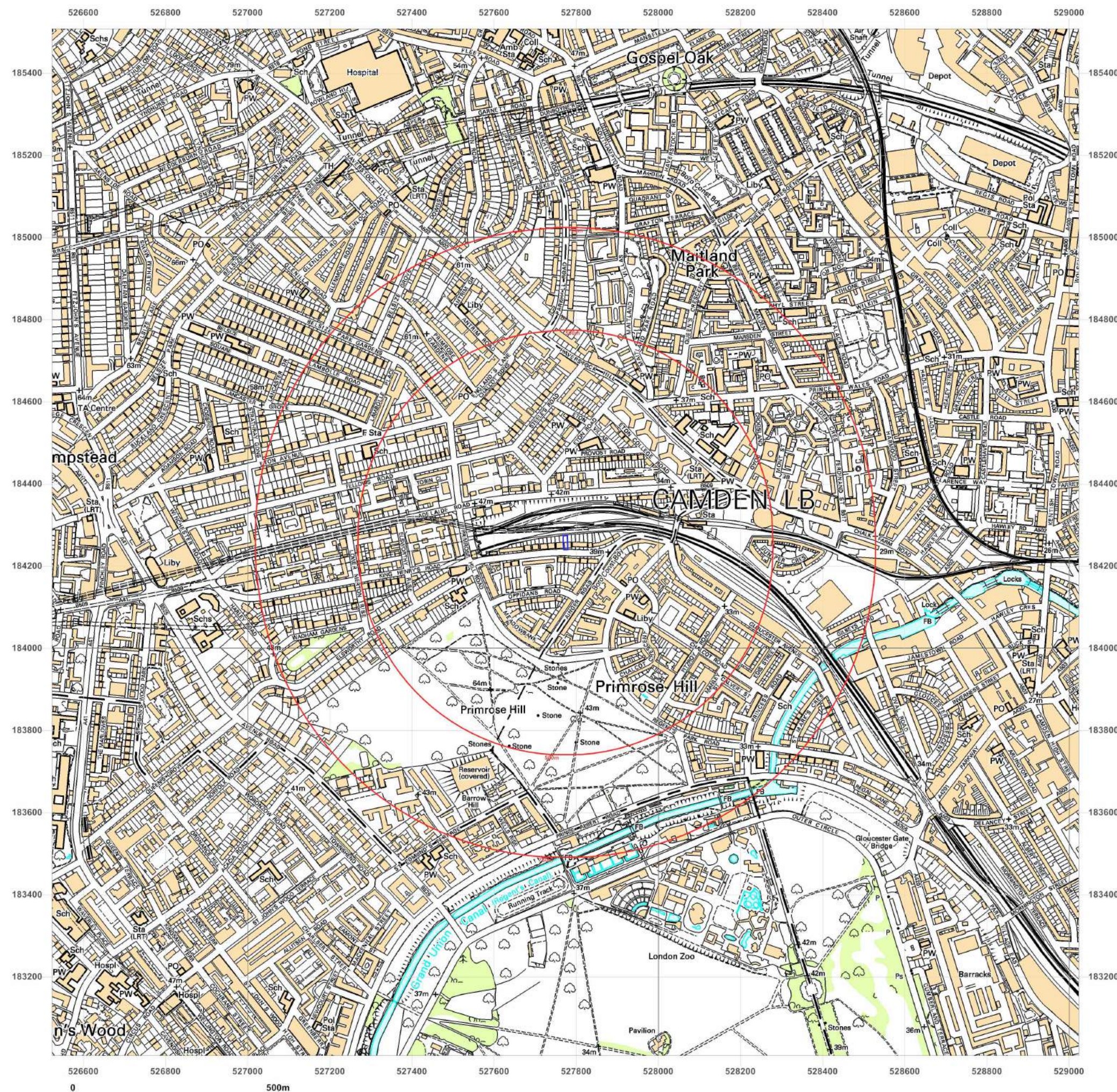


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Site Details:

34A, KING HENRYS ROAD,
LONDON, NW3 3RP

Client Ref: 7806_-7366
Report Ref: GS-3437486
Grid Ref: 527773, 184258

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000



2010

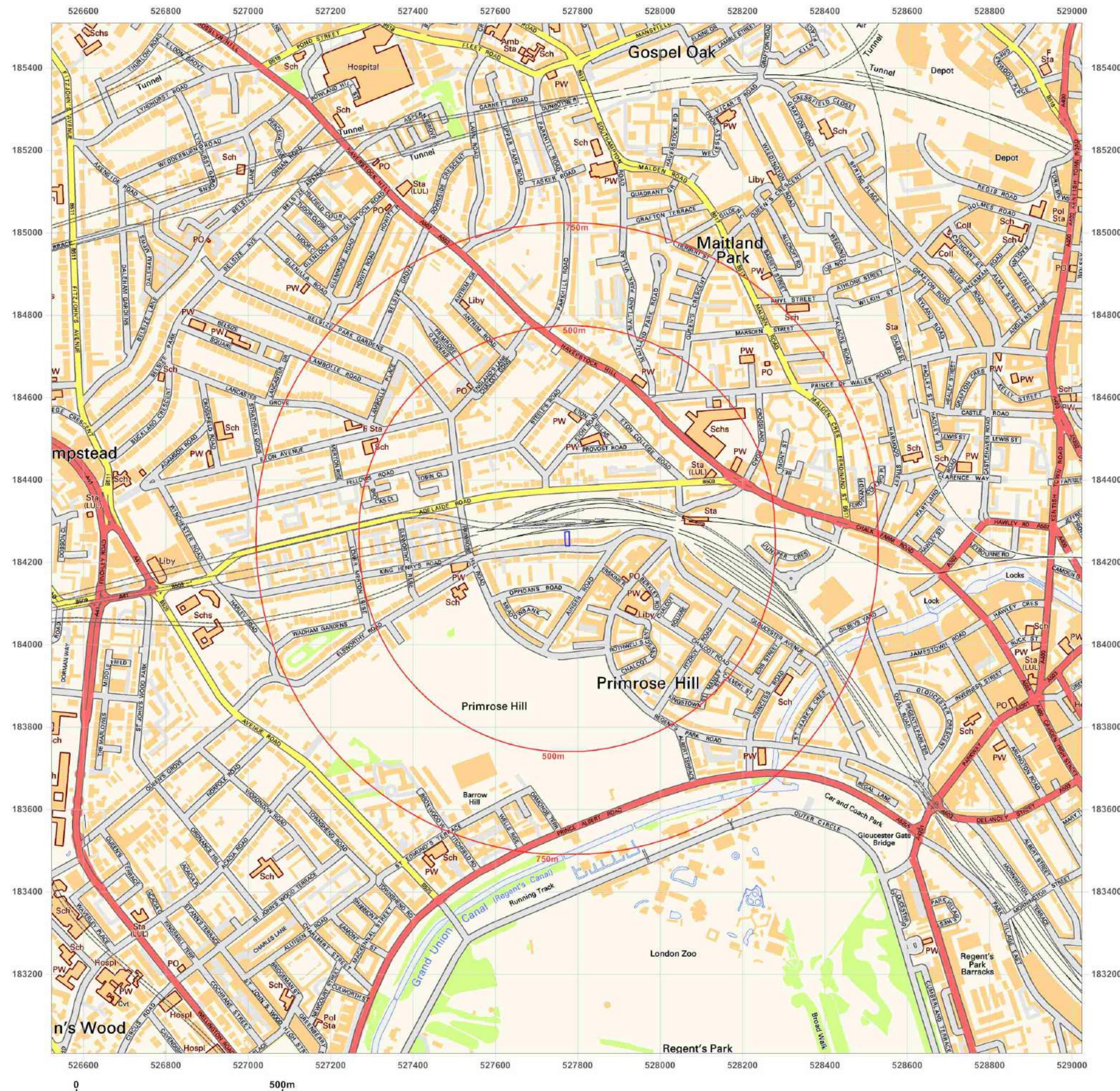


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Site Details:

34A, KING HENRYS ROAD,
LONDON, NW3 3RP

Client Ref: 7806_-7366
Report Ref: GS-3437486
Grid Ref: 527773, 184258

Map Name: National Grid

Map date: 2014

Scale: 1:10,000

Printed at: 1:10,000



2014

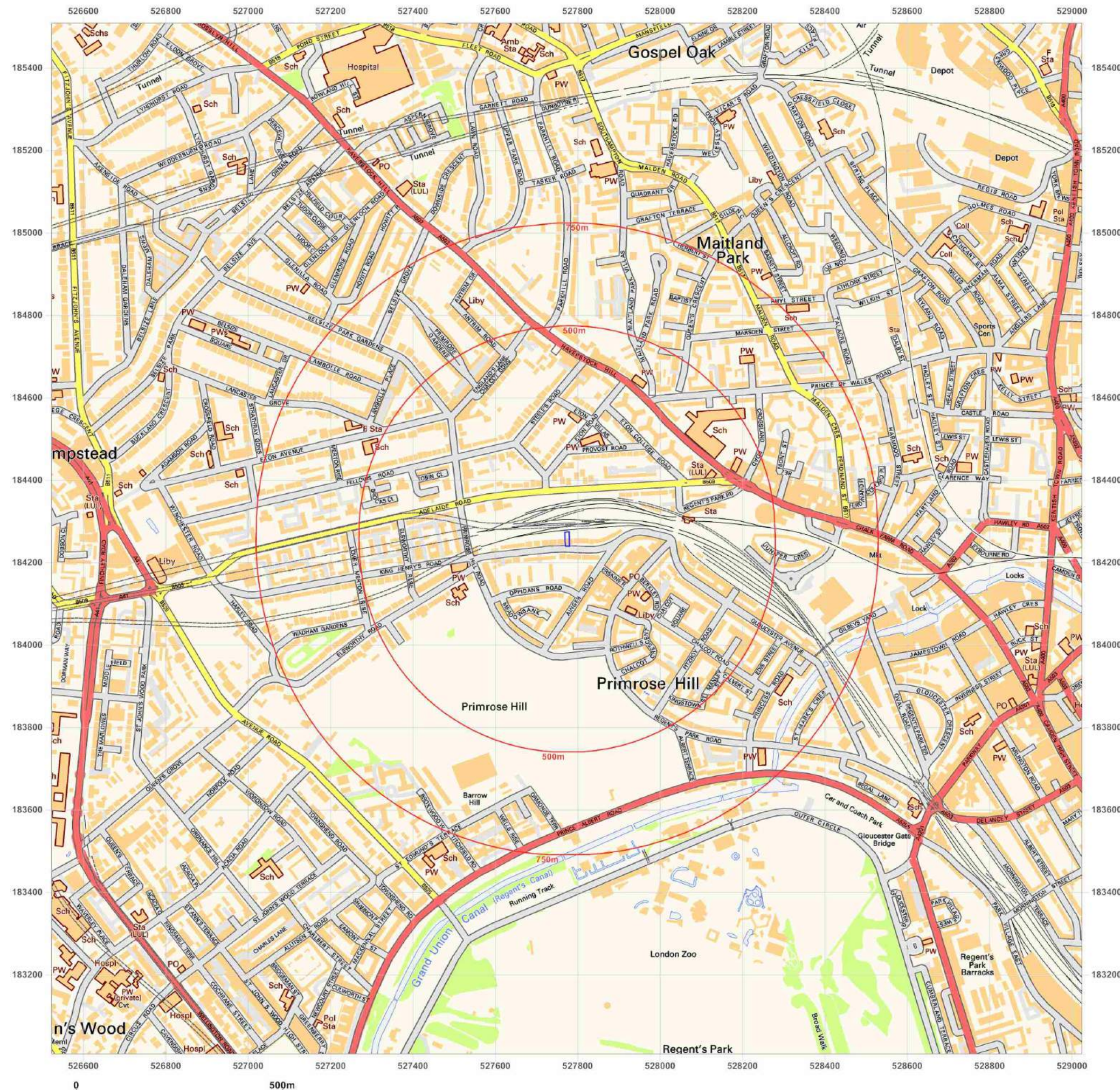


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APPENDIX F

Factual Report

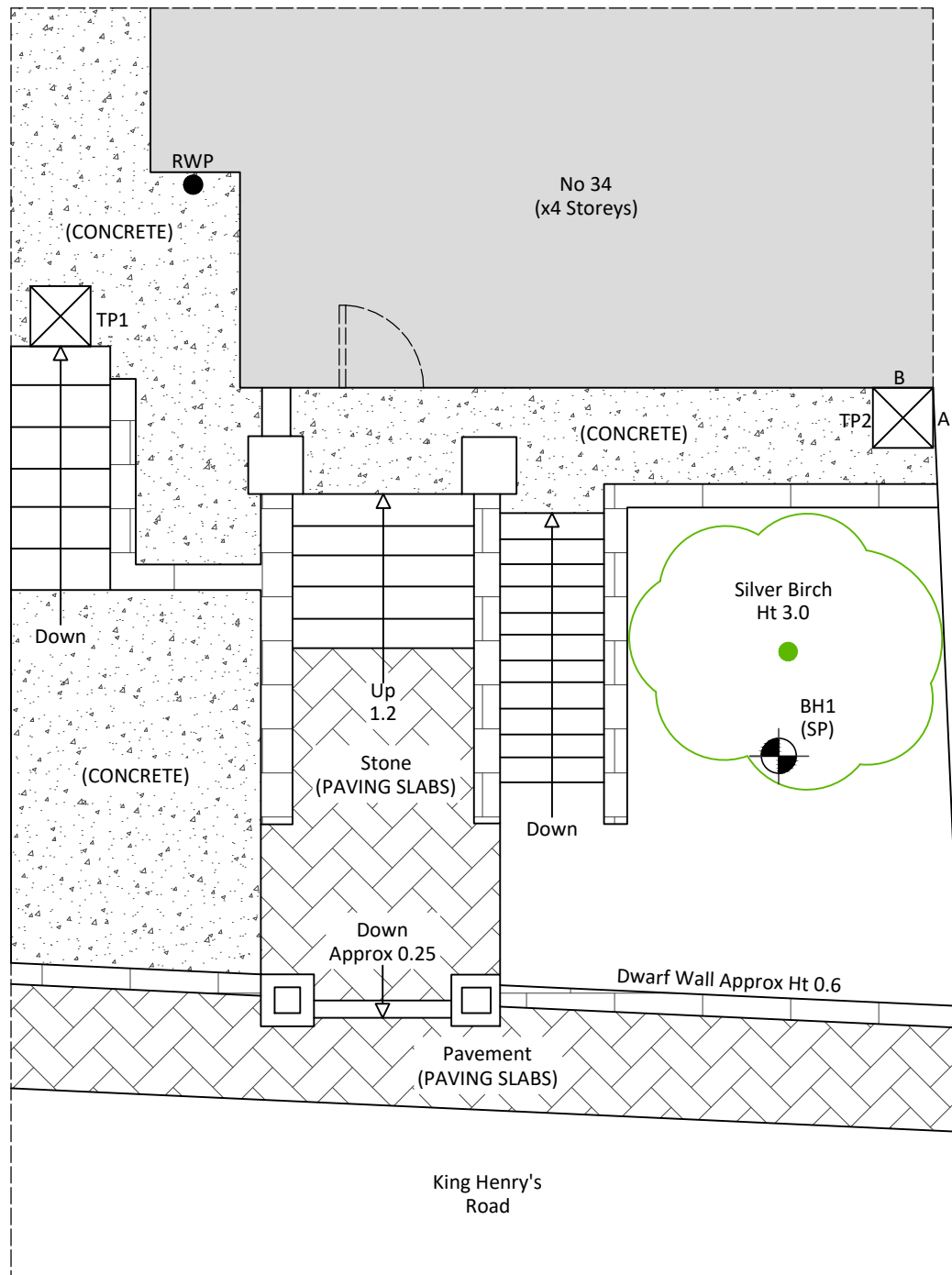


Site	34 Kings Henrys Road Camden NW3 3RF
Client	Rupert West
Date	11 th October 2016
Our Ref	FACT/7806

FACTUAL REPORT CONTENT

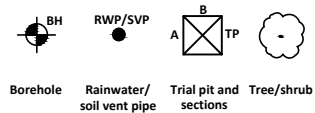
- 1.0 SITE PLAN
- 2.0 TRIAL PIT SECTION DRAWINGS / BOREHOLE LOGS
- 3.0 GEOTECHNICAL SOIL TESTING RESULTS
- 4.0 GROUNDWATER/GROUND GAS MONITORING RECORD SHEET
- 5.0 REPORT NOTES

Client: Rupert West	Scale: N.T.S	Sheet No: 1 of 1	Date: 11.10.16
Site: 34 King Henry's Road, Camden NW3 3RP	Job No: 7806	Weather: N/A	Drawn by: T.P. Checked by: J.H.

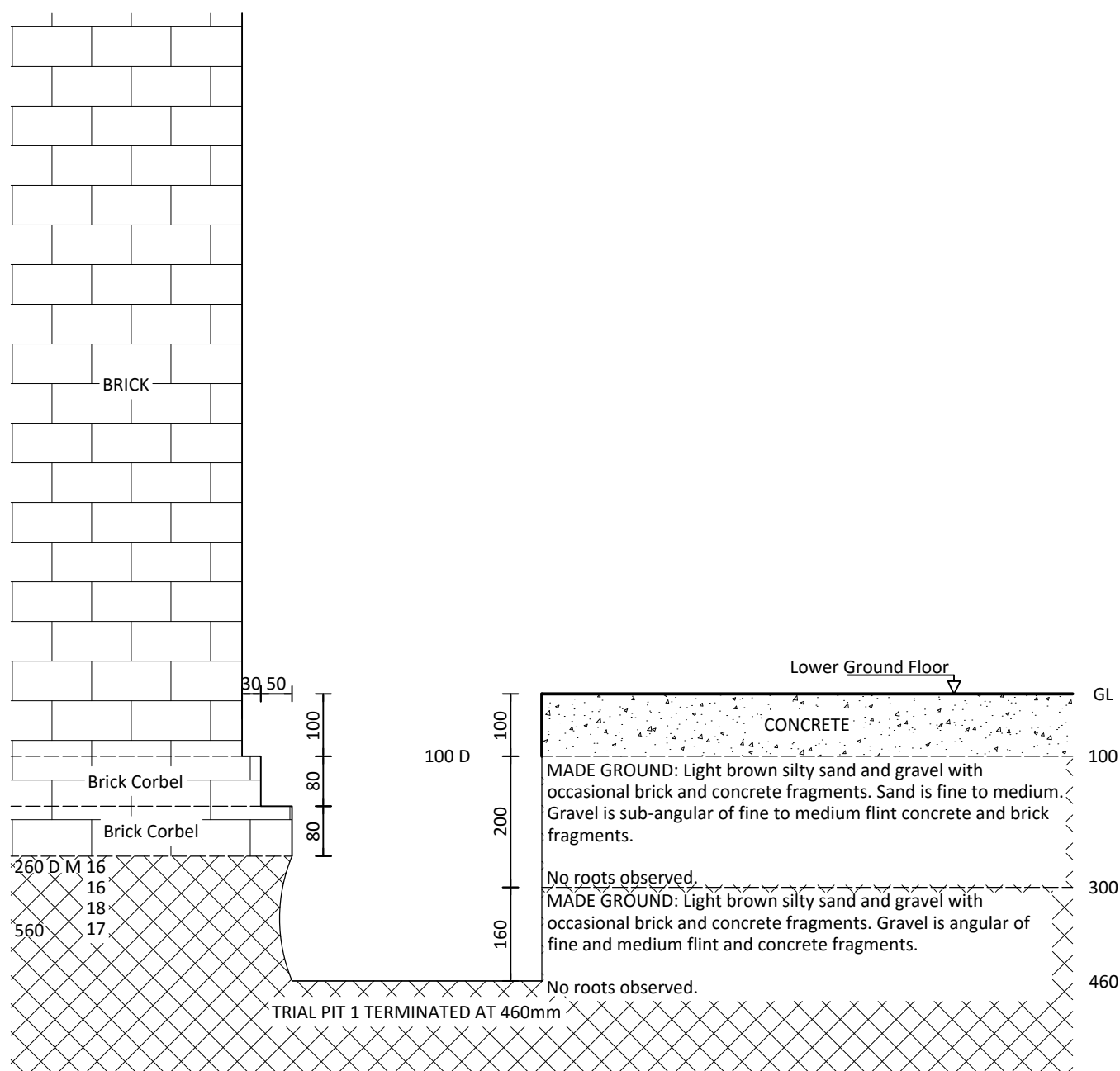


Remarks: All dimensions in metres.
On site tree identification for guidance only. Not authenticated.

Key:



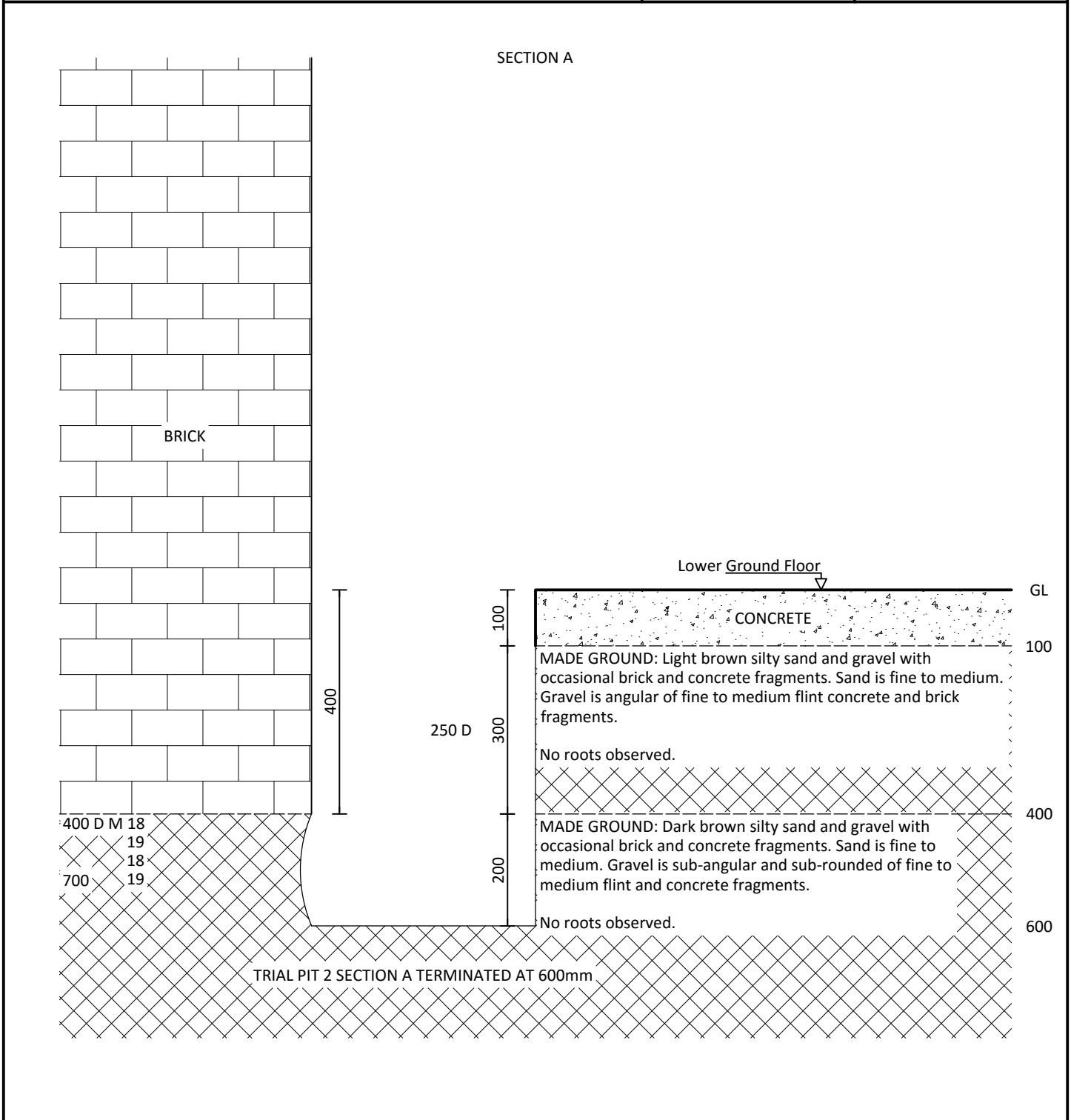
Client: Rupert West	Scale: N.T.S	Sheet No: 1 of 1	Date: 11.10.16
Site: 34 King Henry's Road, Camden NW3 3RP	Job No: 7806	Trial Pit No: 1	Weather: Dry
Excavation Method: N/A		Drawn by: T.P.	Checked by: J.H.



Remarks: All dimensions in millimetres.

Key: GL Ground Level
D Small Disturbed Sample
M Mackintosh Probe

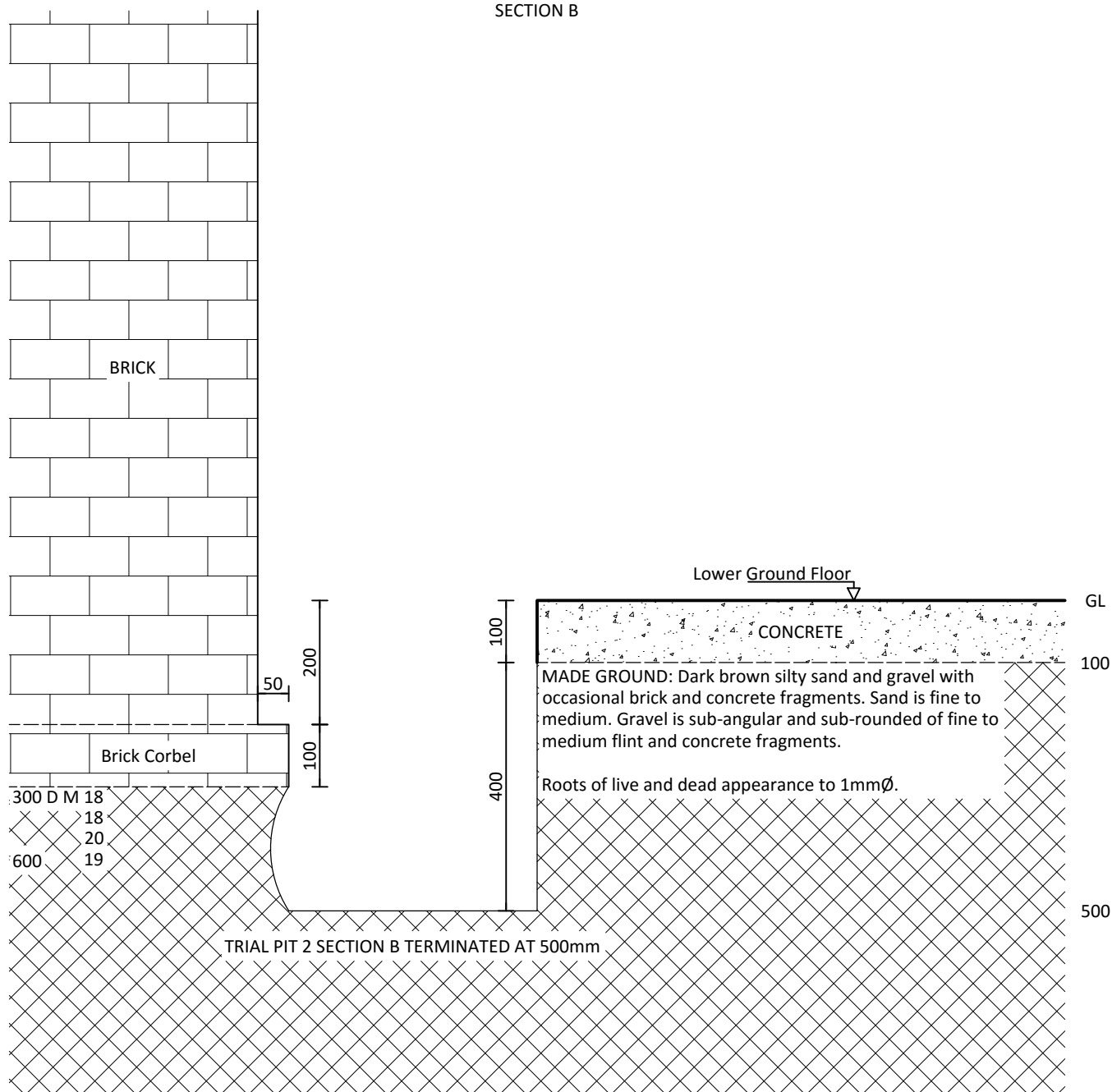
Client: Rupert West	Scale: N.T.S	Sheet No: 1 of 1	Date: 11.10.16
Site: 34 King Henry's Road, Camden NW3 3RP	Job No: 7806	Trial Pit No: 2	Weather: Dry
Excavation Method: N/A		Drawn by: T.P.	Checked by: J.H.



Remarks: All dimensions in millimetres.	Key: GL Ground Level D Small Disturbed Sample M Mackintosh Probe
--	--
















Client: Rupert West	Scale: N.T.S	Sheet No: 1 of 1	Date: 11.10.16
Site: 34 King Henry's Road, Camden NW3 3RP	Job No: 7806	Trial Pit No: 2	Weather: Dry
Excavation Method: N/A		Drawn by: T.P.	Checked by: J.H.

SECTION B



Remarks: All dimensions in millimetres.

Key: GL Ground Level
D Small Disturbed Sample
M Mackintosh Probe

Client: Rupert West			Scale: N.T.S		Sheet No: 1 of 1		Date: 11.10.16		
Site: 34 King Henry's Road, Camden NW3 3RP			Job No: 7806		Borehole No: 1		Weather: Dry		
Boring Method: 100mmØ CFA Secondman					Drawn by: T.P.		Checked by: J.H.		
Depth Mtrs.	Description of Strata	Thick-ness	Legend	Sample	Test Type Result	Root Information	Depth to Water	Depth Mtrs	
G.L.	Concrete Slab	0.1				Roots of live and dead appearance to 1mmØ to 1.7m. ↓ No roots observed below 1.7m.			
0.1	MADE GROUND: Brown slightly sandy gravelly clayey silt with occasional brick and concrete fragments. Sand is fine to medium. Gravel is sub-angular of flint brick and concrete fragments.	0.2		D			0.5		
0.3	MADE GROUND: Brown slightly sandy silty clay with occasional brick fragments. Sand is fine to medium.	0.5		D	V 66 66		1.0		
0.8	MADE GROUND: Orange-brown silty clay with occasional brick fragments.	1.2		D			1.5		
2.0	Stiff fissured brown silty CLAY. (Weathered LONDON CLAY FORMATION)	6.1		D	V 74 76			2.0	
				D				2.5	
				D	V 80 80			3.0	
				D				3.5	
				D	V 84 82			4.0	
				D				4.5	
				D	V 86 88			5.0	
				D				5.5	
				D	V 94 94			6.0	
				D				7.0	
becoming very stiff from 7.0m.			D	V 120+ 120+			7.0	
8.1	Borehole terminates at 8.1m			D	V 120+ 120+			8.0	
Remarks: Borehole dry and open on completion. 75mmØ plastic standpipe installed to 8.0m (1.0m plain pipe, 7.0m slotted pipe, 1.0m bentonite sealing, 7.0 shingle surrounding, bung, valve and square plastic cover).				Key: G.L. Ground Level D Small Disturbed Sample V Pilcon Vane (kPa)					



Laboratory Report



Site 34 Kings Henrys Road, Camden, NW3 3RF

Client Rupert West

Date 15-Nov-16

Our Ref CSI7806

CGL Ref CGL7806

Chelmer Site Investigation Laboratories Ltd

Unit 15 East Hanningfield Industrial Estate, Old Church Road, East Hanningfield, Essex CM3 8AB

Essex: 01245 400930 | London: 0203 6409136 | info@siteinvestigations.co.uk | www.siteinvestigations.com



Content Summary

This report contains all test results as indicated on the test instruction/summary.

CGL Reference : CGL7806

Client Reference : CSI7806

For the attention of : Rupert West

This report comprises of the following :

- 1 Cover Page

- 1 Inside Cover/Contents Page

- 1 Page of Results

- 1 Moisture/Shear Strength Chart

- 1 Plasticity Chart

- 2 Particle Size Distribution - Sieve & Sedimentation Charts

- 1 Limitations of Report Page

Notes :

General

Please refer to report summary notes for details pertaining to methods undertaken and their subsequent accreditations

Samples were supplied by Chelmer Site Investigations

All tests performed in-house unless otherwise stated

Deviant Samples

Samples were received in suitable containers Yes

A date and time of sampling was provided Yes

Arrived damaged and/or denatured No

Laboratory Testing Results

BS 1377 : 1990



Job Number : CGL7806 Client : Rupert West Client Reference : CSI7806 Site Name : 34 Kings Henrys Road, Camden, NW3 3RF	Date Received : 08/11/2016 Date Testing Started : 08/11/2016 Date Testing Completed : 15/11/2016 Laboratory Used : Chelmer Geotechnical, CM3 8AB
---	---

Sample Ref			Sample Type	*Moisture Content (%) [1]	*Soil Fraction > 0.425mm (%) [2]	*Liquid Limit (%) [3]	*Plastic Limit (%) [4]	*Plasticity Index (%) [5]	*Liquidity Index (%) [5]	*Modified Plasticity Index (%) [6]	*Soil Class [7]	Filter Paper Contact Time (h) [8]	*Soil Sample Suction (kPa)	Insitu Shear Vane Strength (kPa) [9]	Organic Content (%) [10]	*pH Value [11]	*Sulphate Content (g/l)		
BH/TP/WS	Depth (m)	UID															SO ₃ [12]	SO ₄ [13]	Class [14]
BH1	0.5	80788	D													7.6	0.07	0.08	DS-1
BH1	2.0	80789	D	33	<5	88	21	67	0.18	63	CV			75					
BH1	2.5	80790	D													7.5	2.58	3.10	DS-4(m)
BH1	3.0	80791	D	30	<5	81	21	60	0.15	57	CV			80					
BH1	4.0	80793	D	34	<5	78	22	56	0.21	53	CV			83					
BH1	7.0	80795	D											120+		7.6	1.92	2.30	DS-3
BH1	8.0	80796	D	32	<5	81	22	59	0.17	56	CV			120+					

<p>Notes :- *UKAS Accredited Tests</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <p>[1] BS 1377 : Part 2 : 1990, Test No 3.2</p> <p>[2] Estimated if <5%, otherwise measured</p> <p>[3] BS 1377 : Part 2 : 1990, Test No 4.4</p> <p>[4] BS 1377 : Part 2 : 1990, Test No 5.3</p> <p>[5] BS 1377 : Part 2 : 1990, Test No 5.4</p> <p>[6] BRE Digest 240 : 1993</p> </div> <div style="width: 30%;"> <p>[7] BS 5930 : 1981 : Figure 31 - Plasticity Chart for the classification of fine soils</p> <p>[8] In-house method S9a adapted from BRE IP 4/93</p> <p>[9] Values of shear strength were determined in situ by Chelmer Site Investigations using a Pilcon hand vane or Geonor vane (GV).</p> <p>[10] BS 1377 : Part 3 : 1990, Test No 4</p> <p>[11] BS 1377 : Part 2 : 1990, Test No 9</p> </div> <div style="width: 30%;"> <p>[12] BS 1377 : Part 3 : 1990, Test No 5.6</p> <p>[13] SO₄ = 1.2 x SO₃</p> <p>[14] BRE Special Digest One (Concrete in Aggressive Ground) 2005</p> <p>Note that if the SO₄ content falls into the DS-4 or DS-5 class, it would be prudent to consider the sample as falling into the DS-4m or DS-5m class respectively unless water soluble magnesium testing is undertaken to prove otherwise</p> </div> </div>	<table border="1" style="width: 100%; text-align: center;"> <tr><th colspan="2">Key</th></tr> <tr><td>D</td><td>Disturbed sample</td></tr> <tr><td>B</td><td>Bulk sample</td></tr> <tr><td>U</td><td>U100 (undisturbed sample)</td></tr> <tr><td>W</td><td>Water sample</td></tr> <tr><td>ENP</td><td>Essentially Non-Plastic</td></tr> <tr><td>U/S</td><td>Underside Foundation</td></tr> </table>	Key		D	Disturbed sample	B	Bulk sample	U	U100 (undisturbed sample)	W	Water sample	ENP	Essentially Non-Plastic	U/S	Underside Foundation	
Key																
D	Disturbed sample															
B	Bulk sample															
U	U100 (undisturbed sample)															
W	Water sample															
ENP	Essentially Non-Plastic															
U/S	Underside Foundation															
Comments :-																
<table border="0" style="width: 100%;"> <tr> <td style="width: 33%;">Technician :- CE</td> <td style="width: 33%; text-align: center;">Checked By :- MC</td> <td style="width: 33%; text-align: right;">Date Checked :- 15-Nov-16</td> </tr> </table>			Technician :- CE	Checked By :- MC	Date Checked :- 15-Nov-16											
Technician :- CE	Checked By :- MC	Date Checked :- 15-Nov-16														

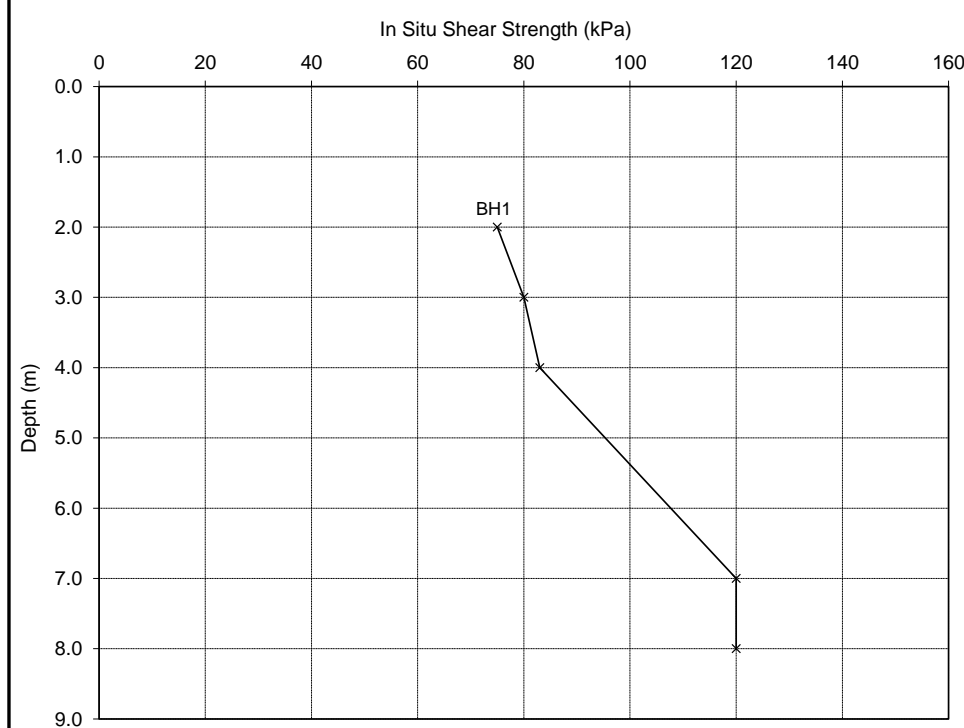
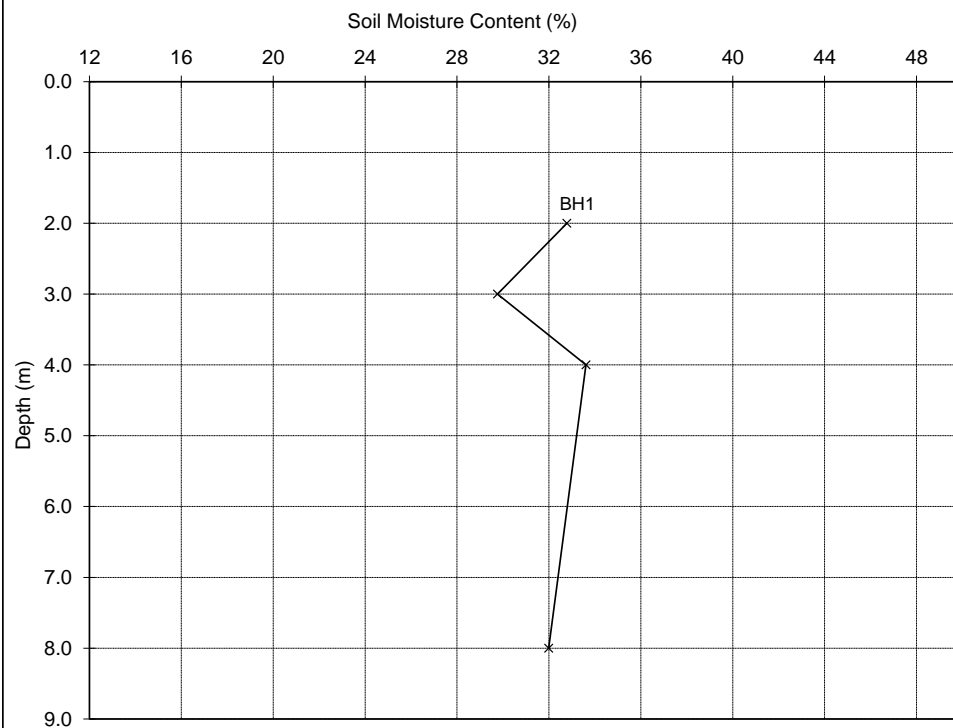
Laboratory Testing Results

Moisture Content/Shear Strength Profile



Job Number : CGL7806
 Client : Rupert West
 Client Reference : CSI7806
 Site Name : 34 Kings Henrys Road, Camden, NW3 3RF

Date Received : 08/11/2016
 Date Testing Started : 08/11/2016
 Date Testing Completed : 15/11/2016
 Laboratory : Chelmer Geotechnical Laboratories, CM3 8AB



Notes :-

1. If the Soil Fraction > 0.425mm exceeds 5% the Equivalent Moisture Content of the remainder (calculated in accordance with BS 1377: Part 2 : 1990, cl.3.2.4 note 1) is also plotted and the alternative profile additionally shown as an appropriately coloured broken line.
2. If plotted, 0.4 LL and PL+2 (after Driscoll, 1983) should only be applied to London Clay (and similarly over consolidated clays) at shallow depths.

Comments :-

Unless otherwise stated, values of Shear Strength were determined in situ by Chelmer Site Investigations using a Pilcon Hand Vane the calibration of which is limited to a maximum reading of 140 kPa. (Not UKAS accredited)



Checked By :- MC

Date Checked :- 15-Nov-16

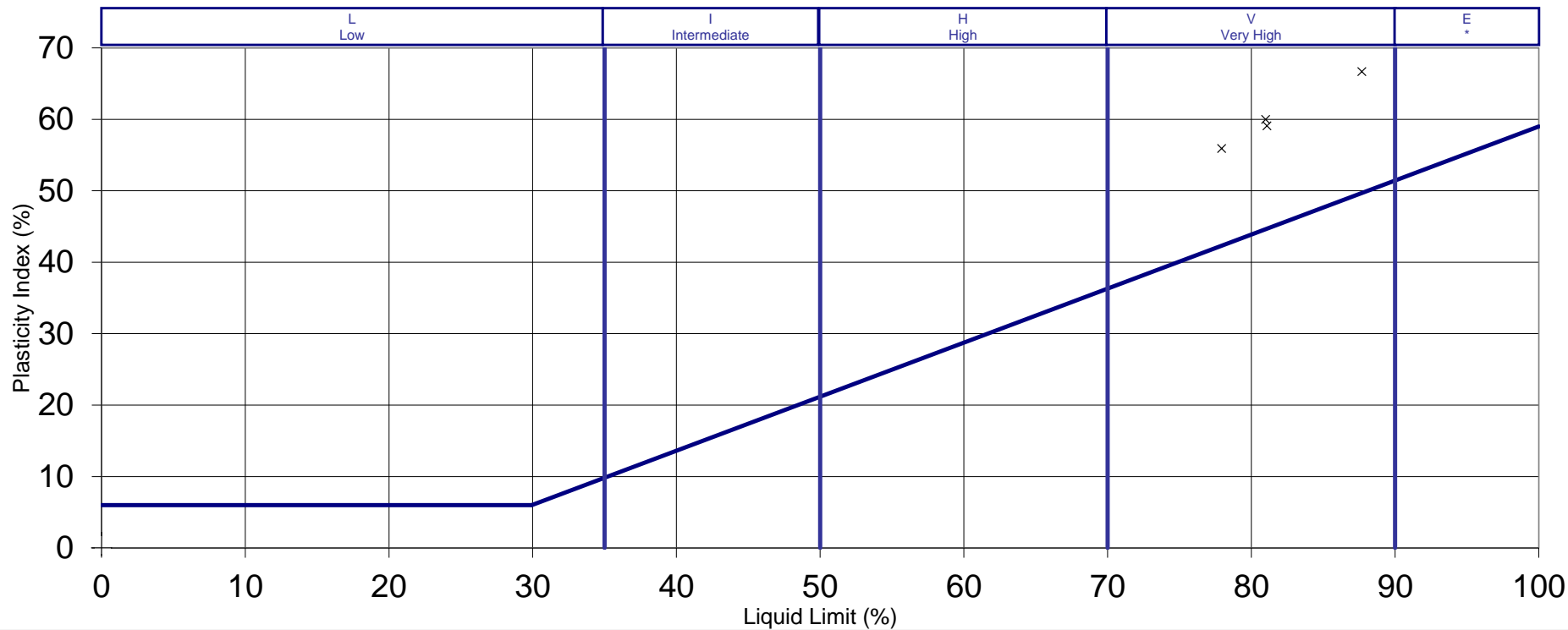
Laboratory Testing Results

Plasticity Chart for the classification of fine soils and the finer part of coarse soils
In Compliance with BS5930 : 1999



Job Number : CGL7806
Client : Rupert West
Client Reference : CSI7806
Site Name : 34 Kings Henrys Road, Camden, NW3 3RF

Date Received : 08/11/2016
Date Testing Started : 08/11/2016
Date Testing Completed : 15/11/2016
Laboratory : Chelmer Geotechnical Laboratories, CM3 8AB



Notes :-

SILT (M-SOIL), M, plots below A-Line
CLAY, C, plots above A-Line ; M and C may be combined as FINE SOIL, F.

Key :- BH1



Comments :-

Checked By :- MC

Date Checked :- 15-Nov-16

PARTICLE SIZE DISTRIBUTION

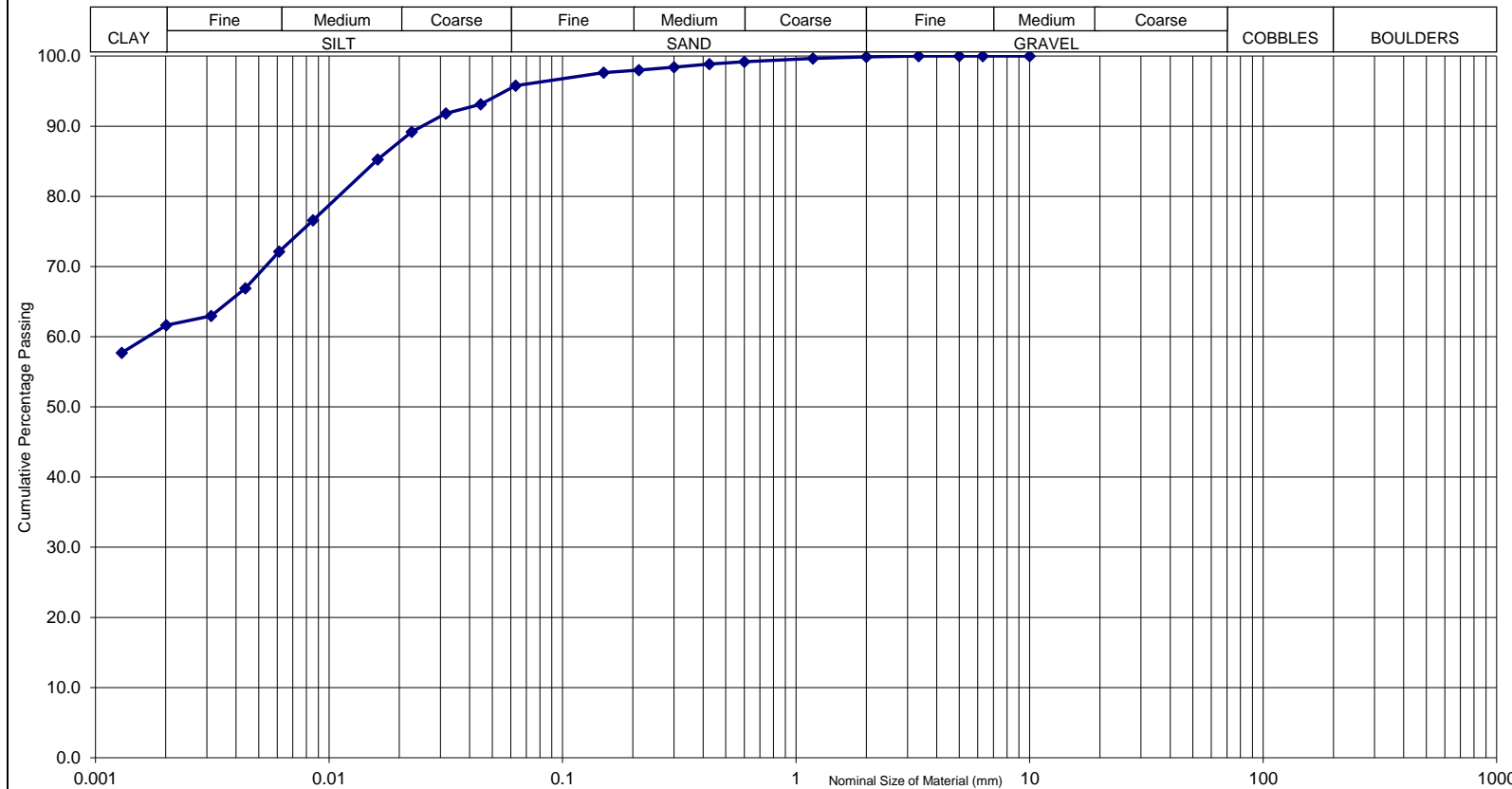
BS 1377-2:1990



Job Number : CGL7806
 Sample Number : BH1
 Depth (m) : 3.50
 Sample UID : 80792

Site Name : 34 Kings Henrys Road, Camden, NW3 3RF
 Soil Description : Brown Silty CLAY

Type of Sieving : Hydrometer
 Date : 08-Nov-16
 Tested By : SG
 Laboratory : Chelmer Geotechnical CM3 8AB



Sieve Size (mm)	% Passing
90.0	100.0
75.0	100.0
63.0	100.0
50.0	100.0
37.5	100.0
28.0	100.0
20.0	100.0
14.0	100.0
10.0	100.0
6.3	100.0
5.0	100.0
3.35	100.0
2.00	99.9
1.18	99.7
0.600	99.2
0.425	98.9
0.300	98.4
0.212	98.0
0.150	97.6
0.063	95.8
0.045	93.1
0.032	91.8
0.023	89.2
0.016	85.3
0.009	76.6
0.006	72.1
0.004	66.9
0.003	63.0
0.002	61.6
0.001	57.7

Calculations :-

$$f = \frac{(M_1 - M_2) + P}{M_1} \times 100$$

$$f = 100P/M_1 \text{ (dry sieving)}$$

f = Percentage of fines passing 0.063mm
 M₁ = Mass of dried test sample before washing (kg)
 M₂ = Mass of dried residue retained on the 0.063m (kg)
 P = Mass of screened material remaining in the pan (kg)

Comments :-
 Results Passing 63µm Sieve NOT UKAS accredited.



Checked By :- MC
 Date Checked :- 16-Nov-16

PARTICLE SIZE DISTRIBUTION

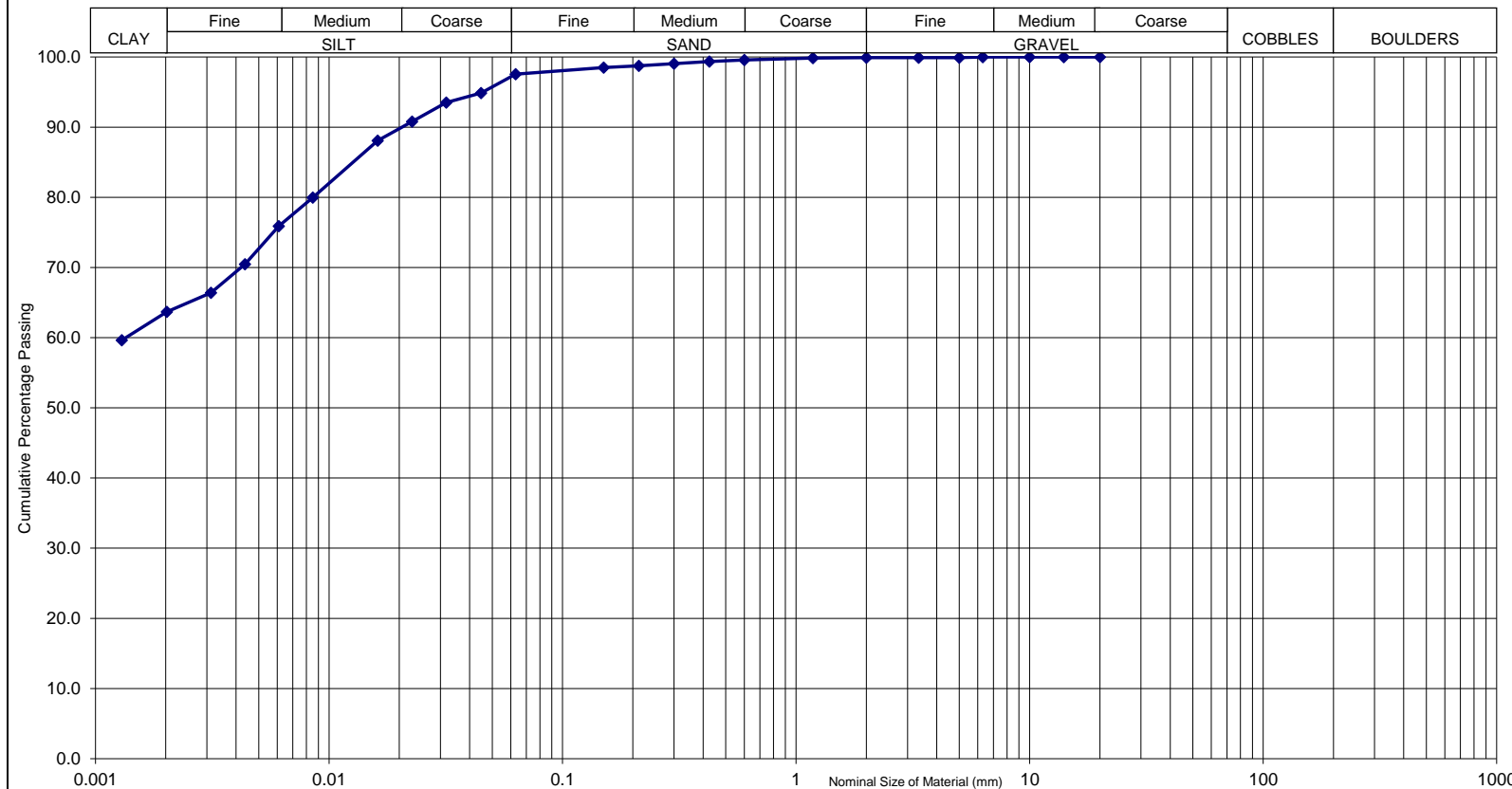
BS 1377-2:1990



Job Number : CGL7806
 Sample Number : BH1
 Depth (m) : 4.50
 Sample UID : 80794

Site Name : 34 Kings Henrys Road, Camden, NW3 3RF
 Soil Description : Brown Silty CLAY

Type of Sieving : Hydrometer
 Date : 08-Nov-16
 Tested By : SG
 Laboratory : Chelmer Geotechnical CM3 8AB



Sieve Size (mm)	% Passing
90.0	100.0
75.0	100.0
63.0	100.0
50.0	100.0
37.5	100.0
28.0	100.0
20.0	100.0
14.0	100.0
10.0	100.0
6.3	100.0
5.0	99.9
3.35	99.9
2.00	99.9
1.18	99.9
0.600	99.6
0.425	99.4
0.300	99.0
0.212	98.7
0.150	98.5
0.063	97.6
0.045	94.9
0.032	93.5
0.023	90.8
0.016	88.1
0.009	80.0
0.006	75.9
0.004	70.5
0.003	66.4
0.002	63.7
0.001	59.6

Calculations :-

$$f = \frac{(M_1 - M_2) + P}{M_1} \times 100$$

$$f = 100P/M_1 \text{ (dry sieving)}$$

f = Percentage of fines passing 0.063mm
 M₁ = Mass of dried test sample before washing (kg)
 M₂ = Mass of dried residue retained on the 0.063m (kg)
 P = Mass of screened material remaining in the pan (kg)

Comments :-
 Results Passing 63µm Sieve NOT UKAS accredited.



Checked By :- MC

Date Checked :- 16-Nov-16



8284



This report is personal to the client, confidential and non assignable. It is issued with no admission of liability to any third party.

This report shall not be reproduced, except in full, without the written approval of Chelmer Site Investigations Laboratories Ltd.

Where our involvement consists exclusively of testing samples, the results and comments (if provided) relate only to the samples tested.

Any samples that are deemed to be subject to deviation will be recorded as such within the test summary.

Groundwater/Ground Gas Monitoring Record Sheet



Site Ref: 7806

Site Name: 34 King Henry's Road, Camden NW3 3RF

Well	Date	Methane Peak	Methane Steady	Methane GSV	Carbon Dioxide Peak	Carbon Dioxide Steady	Carbon Dioxide GSV	Oxygen	Atmos.	Flow	Response Zone	Depth to Water	CO	H2S	VOC
		%v/v	%v/v	l/hr	%v/v	%v/v	l/hr	%v/v	mbar	l/hr	m bgl	m bgl	ppm	ppm	ppm
BH1	28-10-16	0.2	0.1	-0.0002	0.7	0.5	-0.0007	20.9	1028	-0.1		6.29	0	0	0
	10-11-16	0.2	0.1	0.0000	1.5	0.8	0.0000	21.0	1000	0.0		5.16	0	0	0

Notes

NR = Not recorded

Values in Red exceed CIRIA 665 criteria (CO₂ >5.0% and CH₄ >1.0%)

REPORT NOTES

Equipment Used

Hand tools, Mechanical Concrete Breaker and Spade, Hand Augers, 100mm/150mm diameter Mechanical Flight Auger Rig, GEO205 Flight Auger Rig, Window Sampling Rig, and Large or Limited Access Shell & Auger Rig upon request and/or access permitting.

On Site Tests

By Pilcon Shear-Vane Tester (kN/m²) in clay soils, and/or Mackintosh Probe in granular soils or made ground and/or upon request Continuous Dynamic Probe Testing and Standard Penetration Testing.

Note:

Details reported in trial-pits and boreholes relate to positions investigated only as instructed by the client or engineer on the date shown.

We are therefore unable to accept any responsibility for changes in soil conditions not investigated i.e. variations due to climate, season, vegetation and varying ground water levels.

Full terms and conditions are available upon request.

APPENDIX G

Net bearing pressure for PDISP			
ZONE	Net change in vertical pressure (kPa)		
#	Stage 1	Stage 2	Stage 3 & 4
W1	-10.64	-10.64	-4.71
W2	-24.89	-24.89	-13.87
W3	-10.64	-10.64	-4.71
W4	29.26	29.26	35.19
W5	-24.89	-24.89	-13.87
W6	-10.64	-10.64	-4.71
W7	29.26	29.26	35.19
F1	60.78	60.78	75.23
F2	36.66	36.66	68.75
F3	57.32	57.32	69.15
F4	22.52	22.52	24.77
F5	51.41	51.41	64.74
F6	29.10	29.10	43.50
S1	0.00	-62.70	-62.70
S2	0.00	-22.80	-22.80
S3	0.00	-17.10	-17.10
S4	0.00	-24.70	-24.70
S5	0.00	-24.70	-24.70
S6	0.00	-22.80	-22.80
U1	54.89	54.89	57.68

APPENDIX H

Classification of visible damage to walls (after Burland et al, 1977, Boscardin and Cording, 1989; and Burland, 2001)

Category of damage	Description of typical damage (ease of repair is underlined)	Approximate crack width (mm)	Limiting tensile strain ϵ_{lim} (per cent)
0 Negligible	Hairline cracks of less than about 0.1 mm are classed as negligible.	< 0.1	0.0–0.05
1 Very slight	<u>Fine cracks that can easily be treated during normal decoration.</u> Perhaps isolated slight fracture in building. Cracks in external brickwork visible on inspection.	< 1	0.05–0.075
2 Slight	<u>Cracks easily filled. Redecoration probably required.</u> Several slight fractures showing inside of building. Cracks are visible externally and <u>some repointing may be required externally</u> to ensure weathertightness. Doors and windows may stick slightly.	< 5	0.075–0.15
3 Moderate	<u>The cracks require some opening up and can be patched by a mason. Recurrent cracks can be masked by suitable linings. Repointing of external brickwork and possibly a small amount of brickwork to be replaced.</u> Doors and windows sticking. Service pipes may fracture. Weathertightness often impaired.	5–15 or a number of cracks > 3	0.15–0.3
4 Severe	<u>Extensive repair work involving breaking-out and replacing sections of walls, especially over doors and windows.</u> Windows and frames distorted, floor sloping noticeably. Walls leaning or bulging noticeably, some loss of bearing in beams. Service pipes disrupted.	15–25 but also depends on number of cracks	> 0.3
5 Very severe	<u>This requires a major repair involving partial or complete rebuilding.</u> Beams lose bearings, walls lean badly and require shoring. Windows broken with distortion. Danger of instability.	usually > 25 but depends on number of cracks.	